State of Ohio Bureau of Workers' Compensation

Unpaid Loss & LAE as of June 30, 2013
(Based on Data Evaluated as of June 30, 2013)

Volume VI – Detailed Analysis Exhibits
Coal-Workers Pneumoconiosis Fund

August 23, 2013

Deloitte Consulting LLP

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Detailed Analysis Exhibit Descriptions

The following documents the detailed exhibits that display Deloitte Consulting's actuarial analysis of the SIF and other Funds of the BWC. The exhibits are segregated into the following Sections:

- Section 1 – Private Employers in the State Insurance Fund;
- Section 2 – Public Employer Taxing Districts in the State Insurance Fund;
- Section 3 – Public Employer State Agencies in the State Insurance Fund;
- Section 4 – Disabled Workers' Relief Fund;
- Section 5 – Self-Insuring Employers Guaranty Fund;
- Section 6 – Public Work-Relief Employees' Compensation Fund;
- Section 7 – Marine Industry Fund; and
- Section 8 – Coal-Workers Pneumoconiosis Fund.

Please note that the Administrative Cost Fund and Health Partnership Program exhibits are included in the Summary Exhibits.

Section 1-3 (PA, PEC, and PES) Exhibits

Within each Section for PA, PEC, and PES there exists 9 Exhibits that display separate analyses for each type of loss. Each type of loss corresponds to the Exhibits as follows:

- Exhibit 1 – Medical Only
- Exhibit 2 – Medical On Lost Time
- Exhibit 3 – Compensation – Permanent Total Disability
- Exhibit 4 – Compensation – Death
- Exhibit 5 – Compensation – Temporary Total, Temporary Partial, Change of Occupation, Wage Loss, Living Maintenance Wage Loss, Living Maintenance
- Exhibit 6 – Compensation – % Permanent Partial & Permanent Partial
- Exhibit 7 – Compensation – Lump Sum Settlements
- Exhibit 8 – Compensation – Lump Sum Advancements
- Exhibit 9 – Compensation – Additional Awards

Within each Exhibit exists multiple Sheets. These Sheets are described below.

Section, Exhibit, Sheet 1: Summary of Unpaid Loss
This sheet displays the calculation of the undiscounted and discounted unpaid losses.

Section, Exhibit, Sheet 2: Fiscal Year Payment Projections
This sheet displays future annual loss payments for fiscal years ending 2014 and subsequent by accident year associated with claims occurring on June 30, 2013 and prior. The future annual payments are determined by applying an estimated payout pattern, based on Deloitte Consulting's selected paid loss development factors, to the unpaid loss estimates as of June 30, 2013 for each accident year.

Section, Exhibit, Sheet 3: Selection of Ultimate Loss & ALAE
This sheet displays Deloitte Consulting's selected ultimate loss for each accident year based on projected ultimate losses from Sheets 4-12.

Section, Exhibit, Sheets 4-12: Projected Ultimate Losses
These sheets project limited ultimate losses using different actuarial methodologies by accident year:

- Sheet 4 – Paid Loss Development Method;
- Sheet 5 – Incurred Loss Development Method;
- Sheet 6 – Paid Bornhuetter-Ferguson Method;
- Sheet 7 – Incurred Bornhuetter-Ferguson Method;
- Sheet 8 – Cumulative Paid Frequency Severity Method;
- Sheet 9 – Paid Incremental Frequency Severity Accident Year Development Method;
- Sheet 10 – Paid Incremental Trended Frequency Severity Development Method;
- Sheet 11 – Paid Incremental Frequency Severity Calendar Year Development Method; and
- Sheet 12 – Incremental Index Payment Method (Compensation only).

A description of these methodologies can be found under "Actuarial Methodologies" under the "Overview of Actuarial Analysis" section in the Report.

Section, Exhibit, Sheet 13: Selection of Ultimate Claim Counts
This sheet projects ultimate claim counts by accident year.

Section, Exhibit, Sheet 14: Diagnostic Exhibit
This sheet displays ultimate claim counts, ultimate frequency, ultimate severity, and loss rate diagnostics by accident year.

Section, Exhibit, Sheet 15: Actual Versus Expected Loss Payments
This sheet compares actual paid loss with expected paid loss emergence since the prior fiscal year-end.

Section, Exhibit, Sheet 16: Actual Versus Expected Reported Losses
Similar to the previous exhibit, this sheet compares actual incurred loss with expected incurred loss emergence since the prior fiscal year-end.

Section, Exhibit, Sheet 17: Actual Versus Expected Reported Claim Counts
Similar to the previous exhibit, this sheet compares actual reported claim counts with expected claim count emergence since the prior fiscal year-end.

Section, Exhibit, Sheet 18: Discount Factors
This sheet displays the calculation of the discount factor used to determine the discounted unpaid loss in Sheet 1.

Section, Exhibit, Sheet 19: Initial Expected Loss Rate Selection
This sheet displays the selection of the initial expected loss rates used in the Bornhuetter Ferguson methods.

Section, Exhibit, Sheet 20: Interpolated Accident Year Development Factors
The accident year development factors selected on Sheets 23 – 38 are interpolated to the current evaluation age on this sheet.

Section, Exhibit, Sheet 21: Interpolated Accident Year Index Factors
For compensation analyses, the accident year index factors selected on Sheet 38 are interpolated to the current evaluation age on this sheet.

Section, Exhibit, Sheet 22: Estimated Payments
This sheet displays the determination of estimated payments for the remaining portion of the current fiscal year by applying an estimated payout pattern to the unpaid loss estimate as of the evaluation date.

Section, Exhibit, Sheets 23-38: Triangles and Various Diagnostics
These sheets display various diagnostic exhibits and the loss and claim count triangles supporting the projected ultimate losses from the various methodologies.

Section, Exhibit, Sheet 39: Unpaid Loss Estimate for Accident Years 1976 and Prior
This sheet displays Deloitte Consulting's selected unpaid loss estimate for accident years 1976 and prior based on projected unpaid losses using several methodologies determined on Sheets 40 and 41.

Section, Exhibit, Sheet 40: Exponential Curve Fit of Unpaid Loss for Accident Years 1976 and Prior
This sheet calculates estimates of unpaid loss for accident years 1976 and prior using exponential curve fits of calendar year paid losses for all accident years 1976 and prior combined.

Section, Exhibit, Sheets 41 and 42: Incremental Development Method
These sheets calculate an estimate of unpaid loss for accident years 1976 and prior using an incremental development method, which relies on historical incremental development factors selected in Sheet 46.

Section, Exhibit, Sheet 43: Paid Tail Factor Selection
This sheet supports the selected paid tail development factor used to determine ultimate loss estimates for accident years 1977 and subsequent based on various curve fits and BWC's incremental data back to 1954.

Section, Exhibit, Sheet 44: Fitted Paid Loss Development Factors
This sheet fits age-to-age paid loss development factors to Weibull and inverse power curves to assist in the selection of the paid tail development factor found in Sheet 43.

Section, Exhibit, Sheet 45: Incremental Decay Method
This sheet determines paid tail development factors at various ages using incremental development factors selected based on historical development data from June 30, 2002 through June 30, 2013 for accident years back to 1954 found in Sheet 46. These tail factors are used to support the selected paid tail development factors found in Sheet 43.

Section, Exhibit, Sheet 46: Incremental Paid Loss Triangle
This sheet displays the historical incremental paid loss development for accident years 1954 and subsequent as well as the selected incremental development factors used in Sheets 42, 45, and 48.

Section, Exhibit, Sheet 47: Fitted Incurred Loss Development Factors
This sheet fits age-to-age incurred loss development factors to Weibull and inverse power curves to assist in the selection of the incurred tail development factor.

Section, Exhibit, Sheet 48: Fitted Incremental Decay Loss Development Factors
This sheet fits age-to-age incremental development factors to Weibull and inverse power curves to assist in the selection of the paid tail development factor found in Sheet 43.

Section 4 (DWRF) Exhibits

Within the DWRF Section there exists three Exhibits that display separate analyses for each type of loss. Each type of loss corresponds to the Exhibits as follows:

- Exhibit 1 – Private Employers
- Exhibit 2 – Public Employers – Taxing Districts
- Exhibit 3 – Public Employers – State Agencies

Within each Exhibit exists multiple Sheets. These Sheets are described below.

Section 4, Exhibit, Sheet 1: Summary of Unpaid Loss
This sheet displays the calculation of the undiscounted and discounted unpaid losses.

Section 4, Exhibit, Sheet 2: Fiscal Year Payment Projections
This sheet displays future annual loss payments for fiscal years ending 2014 and subsequent by accident year associated with claims occurring on June 30, 2013 and prior. The future annual payments are determined by applying an estimated payout pattern, based on Deloitte Consulting's selected paid loss development factors, to the unpaid loss estimates as of June 30, 2013 for each accident year.

Section 4, Exhibit, Sheet 3: Selection of Ultimate Loss & ALAE
This sheet displays Deloitte Consulting's selected ultimate loss for each accident year based on projected ultimate losses from Sheets 4-11.

Section 4, Exhibit, Sheets 4-9: Projected Ultimate Losses
These sheets project limited ultimate losses using different actuarial methodologies by accident year:

- Sheet 4 – Paid Loss Development Method;
- Sheet 5 – Incurred Loss Development Method;
- Sheet 6 – Paid Bornhuetter-Ferguson Method;
- Sheet 7 – Incurred Bornhuetter-Ferguson Method;
- Sheet 8 – Cumulative Paid Frequency Severity Method;
- Sheet 9 – Paid Incremental Frequency Severity Accident Year Development Method;

A description of these methodologies can be found under "Actuarial Methodologies" under the "Overview of Actuarial Analysis" section in the Report.

Section 4, Exhibit, Sheet 10: Selection of Ultimate Claim Counts
This sheet projects ultimate claim counts by accident year.

Section 4, Exhibit, Sheet 11: Diagnostic Exhibit
This sheet displays ultimate claim counts, ultimate frequency, ultimate severity, and loss rate diagnostics by accident year.

Section 4, Exhibit, Sheet 12: Actual Versus Expected Loss Payments
This sheet compares actual paid loss with expected paid loss emergence since the prior fiscal year-end.

Section 4, Exhibit, Sheet 13: Discount Factors
This sheet displays the calculation of the discount factor used to determine the discounted unpaid loss in Sheet 1.

Section 4, Exhibit, Sheet 14: Initial Expected Loss Rate Selection
This sheet displays the selection of the initial expected loss rates used in the Bornhuetter Ferguson methods.

Section 4, Exhibit, Sheet 15: Interpolated Accident Year Development Factors
The accident year development factors selected on Sheets 17 – 24 are interpolated to the current evaluation age on this sheet.

Section 4, Exhibit, Sheet 16: Estimated Payments
This sheet displays the determination of estimated payments for the remaining portion of the current fiscal year by applying an estimated payout pattern to the unpaid loss estimate as of the evaluation date.

Section 4, Exhibit, Sheets 17-24: Triangles and Various Diagnostics
These sheets display various diagnostic exhibits and the loss and claim count triangles supporting the projected ultimate losses from the various methodologies.

Section 4, Exhibit, Sheet 25: Unpaid Loss Estimate for Accident Years 1976 and Prior
This sheet displays Deloitte Consulting's selected unpaid loss estimate for accident years 1976 and prior based on projected unpaid losses using several methodologies determined on Sheets 26 and 27.

Section 4, Exhibit, Sheet 26: Exponential Curve Fit of Unpaid Loss for Accident Years 1976 and Prior
This sheet calculates estimates of unpaid loss for accident years 1976 and prior using exponential curve fits of calendar year paid losses for all accident years 1976 and prior combined.

Section 4, Exhibit, Sheets 27 and 28: Incremental Development Method
These sheets calculate an estimate of unpaid loss for accident years 1976 and prior using an incremental development method, which relies on historical incremental development factors selected in Sheet 31.

Section 4, Exhibit, Sheet 29: Paid Tail Factor Selection
This sheet supports the selected paid tail development factor used to determine ultimate loss estimates for accident years 1977 and subsequent based on various curve fits and BWC's incremental data back to 1954.

Section 4, Exhibit, Sheet 30: Fitted Paid Loss Development Factors
This sheet fits age-to-age paid loss development factors to Weibull and inverse power curves to assist in the selection of the paid tail development factor found in Sheet 29.

Section 4, Exhibit, Sheet 31: Incremental Decay Method
This sheet determines paid tail development factors at various ages using incremental development factors selected based on historical development data from June 30, 2002 through June 30, 2013 for accident years back to 1954 found in Sheet 32. These tail factors are used to support the selected paid tail development factors found in Sheet 29.

Section 4, Exhibit, Sheet 32: Incremental Paid Loss Triangle
This sheet displays the historical incremental paid loss development for accident years 1954 and subsequent as well as the selected incremental development factors used in Sheets 28 and 31.

Section 4, Exhibit, Sheet 33: Fitted Incremental Decay Loss Development Factors
This sheet fits age-to-age incremental development factors to Weibull and inverse power curves to assist in the selection of the paid tail development factor found in Sheet 29.

Section 5 (SIS and SIEGF) Exhibits

The SIS and SIEGF unpaid loss estimates are determined together in Section 5. The following describes each Exhibit and Sheet within Section 5.

Section 5, Exhibit 1, Sheet 1: Summary of Self-Insured Unpaid Loss
This sheet displays a summary of the SIS and SIEGF unpaid loss estimates, as well as SIEGF unpaid DWRF estimates.

Section 5, Exhibits 2 and 3, Sheet 1: Summary of Unpaid Loss
This sheet displays the calculation of the undiscounted and discounted unpaid losses, respectively for SIS and SIEGF.

Section 5, Exhibits 2 and 3, Sheet 2: Selection of Ultimate Loss
This sheet displays Deloitte Consulting's selected ultimate loss for each accident year based on projected ultimate losses, respectively for SIS and SIEGF.

Section 5, Exhibits 2 and 3, Sheet 3: Paid Loss Development Method
These sheets project ultimate losses using the Paid Loss Development Method, respectively for SIS and SIEGF.

Section 5, Exhibits 2 and 3, Sheet 4: Paid Bornhuetter-Ferguson Method
These sheets project ultimate losses using the Paid Bornhuetter-Ferguson Method, respectively for SIS and SIEGF.

Section 5, Exhibits 2 and 3, Sheet 5: Estimated Payments
This sheet displays the determination of estimated payments for the remaining portion of the current fiscal year by applying an estimated payout pattern to the unpaid loss estimate as of the evaluation date, respectively for SIS and SIEGF.

Section 5, Exhibits 2 and 3, Sheet 6: Calculation of Initial Expected Loss Rates
This sheet displays the selection of the initial expected loss rates used in the Bornhuetter Ferguson method, respectively for SIS and SIEGF.

Section 5, Exhibit 4, Sheets 1 and 2: Estimate of Unpaid SIEGF DWRF
These sheets display the determination of the SIEGF DWRF associated with known defaults.

Section 5, Exhibit 5, Sheet 1: Discount Factors
This sheet displays the calculation of the discount factor used to determine the discounted unpaid loss in Exhibits 2 and 3, Sheet 1.

Section 5, Exhibit 5, Sheet 2: Interpolated Accident Year Development Factors
The accident year development factors selected on Exhibit 6, Sheet 3 are interpolated to the current evaluation age on this sheet.

Section 5, Exhibit 5, Sheet 3: Paid Loss Triangles
This sheet displays the default year paid loss triangle for SIS and SIEGF combined.

Section 6-7 (PWRE and MIF) Exhibits

For both PWRE and MIF there exists 4 Exhibits that display separate analyses for each type of loss. Each type of loss corresponds to the Exhibits as follows:

- Exhibit 1 – Total
- Exhibit 2 – Medical
- Exhibit 3 – Compensation – Permanent Total Disability
- Exhibit 4 – Compensation – Death
- Exhibit 5 – Compensation – Other

Within each Exhibit exists multiple Sheets. These Sheets are described below.

Section, Exhibit, Sheet 1: Summary of Unpaid Loss
This sheet displays the calculation of the undiscounted and discounted unpaid losses.

Section, Exhibit, Sheet 2: Fiscal Year Payment Projections
This sheet displays future annual loss payments for fiscal years ending 2014 and subsequent by accident year associated with claims occurring on June 30, 2013 and prior. The future annual payments are determined by applying an estimated payout pattern, based on Deloitte Consulting's selected paid loss development factors, to the unpaid loss estimates as of June 30, 2013 for each accident year.

Section, Exhibit, Sheet 3: Selection of Ultimate Loss
This sheet displays Deloitte Consulting's selected ultimate loss for each accident year based on projected ultimate losses from Sheets 4-7.

Section, Exhibit, Sheets 4-7: Projected Ultimate Losses
These sheets project limited ultimate losses using different actuarial methodologies by accident year:

- Sheet 4 – Paid Loss Development Method;
- Sheet 5 – Incurred Loss Development Method;
- Sheet 6 – Paid Bornhuetter-Ferguson Method;
- Sheet 7 – Incurred Bornhuetter-Ferguson Method;

A description of these methodologies can be found under "Actuarial Methodologies" under the "Overview of Actuarial Analysis" section in the Report.

Section, Exhibit, Sheet 8: Actual Versus Expected Loss Payments
This sheet compares actual paid loss with expected paid loss emergence since the prior fiscal year-end.

Section, Exhibit, Sheet 9: Actual Versus Expected Reported Losses
Similar to the previous exhibit, this sheet compares actual incurred loss with expected incurred loss emergence since the prior fiscal year-end.

Section, Exhibit, Sheet 10: Discount Factors
This sheet displays the calculation of the discount factor used to determine the discounted unpaid loss in Sheet 1.

Section, Exhibit, Sheet 11: Initial Expected Loss Rate Selection
This sheet displays the selection of the initial expected loss rates used in the Bornhuetter Ferguson methods.

Section, Exhibit, Sheet 12: Interpolated Accident Year Development Factors
The accident year development factors selected on Sheets 14 – 16 are interpolated to the current evaluation age on this sheet.

Section, Exhibit, Sheet 13: Estimated Payments
This sheet displays the determination of estimated payments for the remaining portion of the current fiscal year by applying an estimated payout pattern to the unpaid loss estimate as of the evaluation date.

Section, Exhibit, Sheets 14-16: Triangles and Various Diagnostics
These sheets display paid loss, incurred loss, and case reserve triangles supporting the projected ultimate losses from the various methodologies.

Section, Exhibit, Sheet 17: Unpaid Loss Estimate for Accident Years 1976 and Prior
This sheet displays Deloitte Consulting's selected unpaid loss estimate for accident years 1976 and prior based on projected unpaid losses.

Section, Exhibit, Sheet 18: Exponential Curve Fit of Unpaid Loss for Accident Years 1976 and Prior
This sheet calculates estimates of unpaid loss for accident years 1976 and prior using exponential curve fits of calendar year paid losses for all accident years 1976 and prior combined.

Section 8 (CWPF) Exhibits

The following describes each of the Sheets found in Section 8 for CWPF:

Section 8, Roll Forward: Projected Unpaid Loss
The Roll Forward sheets show the projected CWPF unpaid loss liability as of June 30, 2013 on a nominal and discounted basis.

Section 8, Exhibit 1: Summary of Unpaid Loss
This exhibit displays the estimated unpaid loss liability as of December 31, 2012 on a nominal and discounted basis.

Section 8, Exhibit 2: Summary of claims currently receiving benefits
This exhibit displays the calculation of the indemnity and medical unpaid losses for miner claimants and their dependents and survivors of coal miners that are currently receiving federal benefits. The nominal indemnity unpaid losses are calculated on a claim by claim basis based on the claimant's age, estimated monthly benefit, and mortality assumptions. The discounted indemnity unpaid losses are calculated by applying the discount factor using a 4.0% annual rate to the nominal unpaid losses.

Section 8, Exhibit 3, Sheet 1: Summary of Unpaid Losses for Pending & IBNR Claims, Claim Development Method using Department of Labor Data for Ohio
This sheet displays the calculation of the unpaid losses for pending and IBNR claims for Living Miners and Living Widow claims. Projected pending and IBNR claims are based on the projected ultimate claims filings and the ultimate entitlement ratios from the U.S. DOL claim data for Ohio. The average cost per entitled claim is based on the average cost per entitled claim as calculated in the method using Ohio Employee Survey data in Exhibits 4 and 5.

Section 8, Exhibit 3, Sheet 2: Ohio Data from U.S. Department of Labor Living Miner Filings, Insured Only
This sheet displays the cumulative Living Miner filings by date of last exposure at annual evaluations and the associated development factors. Ultimate claim filings are projected using an assumed cumulative development pattern which is selected based on historical development.

Section 8, Exhibit 3, Sheet 3: Ohio Data from U.S. Department of Labor Living Miner Entitlements, Insured Only
This sheet displays the cumulative Living Miner entitled claims by date of last exposure at annual evaluations.

Section 8, Exhibit 3, Sheet 4: Cumulative Living Miner Entitlement Ratios
This sheet displays the cumulative Living Miner entitled ratios by date of last exposure and annual evaluations. These ratios are calculated as the cumulative Living Miner entitlements from Exhibit 3, Sheet 3 divided by the selected ultimate filings from Exhibit 3, Sheet 2 by date of last exposure. This sheet also shows the incremental, additive, Living Miner entitlement ratios. Ultimate entitlement ratios, the ultimate percentage of entitlements awarded based on the number of claims filed, are projected using the selected incremental entitlement ratios based on historical incremental ratios.

Section 8, Exhibit 3, Sheets 5-7: Ohio Data from U.S. Department of Labor Living Widow Filings and Entitlements Only
These sheets display the calculations described in sheets 2-4 for Living Widow filings and entitled claims.

Section 8, Exhibit 4, Sheets 1A and 1B: Calculation of Liability for Terminated Miners, Method using Ohio Employee Survey Data
These sheets use the Ohio Employee Survey Data to project pending and IBNR claims. Projected pending and IBNR claims are based on the historical employee terminations and assumptions around the percentage of terminated employees who will be entitled to FBL benefits, and a factor to reflect the estimated number of claims

filed by survivors. The average cost per entitled claim is based on a benefits calculation using specific entitlement ages and reflecting the percentage of miners who will live to each entitlement age from their current average age. The benefit calculation details are provided in the exhibit.

Section 8, Exhibit 4, Sheets 2A-2H: Calculation of Current Severity of Terminated Miner Claims
These sheets display the nominal and discounted average medical and indemnity cost per entitled claim based on a benefits calculation using a specific entitlement age and current average age of a terminated miner. An indemnity survivor cost per entitled claim is also contemplated. The assumed entitlement ages are based on the entitled claim history from the U.S. DOL data for Ohio.

Section 8, Exhibit 4, Sheets 3A-3H: Benefit Calculation Detail for Terminated Miner Claims at Specified Entitlement Ages
This sheets display the actuarial present values of indemnity and medical benefits for a miner, a miner plus one dependent and a survivor. The actuarial present value of benefits is calculated for each assumed age of entitlement (i.e. the age benefits would start), and takes into account a benefit escalation factor, medical trend factor, and mortality.

Section 8, Exhibit 4, Sheets 4-4A: Calculation of Weighted Nominal Benefits per Claim for Terminated Miners
These sheets display the weighted, nominal and discounted, indemnity and medical benefits by age group for each targeted age of entitlement. The assumed entitlement ages are based on the entitled claim history from the U.S. DOL data for Ohio. The weights are the percentage of claims by miners that are entitled at the selected entitlement ages for a specific age group. The weights are presented on Exhibit 5, Sheet 5.

Section 8, Exhibit 5, Sheets 1-4: Calculation of Liability for Active Miners, Method using Ohio Employee Survey Data Method
These sheets are identical to Exhibit 4, Sheets 1-4, except they use the Ohio Employee Survey Data to project the active miner liability. Projected active miner claims are based on the current employee data and assumptions around the percentage of terminated employees who will be entitled to FBL benefits, and a factor to reflect the estimated number of claims filed by survivors. The average cost per entitled claim is based on a benefits calculation using specific entitlement ages and reflecting the percentage of miners who will live to each entitlement age from their current average age. The benefit calculation details are provided.

Section 8, Exhibit 5, Sheets 5: Weights for Deferred Annuity Values
This sheet displays the conditional probability a certain age group receiving an entitlement by a specified entitlement age. The selected entitlement ages and probabilities were selected based on Deloitte Consulting's review of the U.S. DOL data for Ohio.

Section 8, Exhibit 6, Sheet 1: Table of Monthly Black Lung Benefit Rates
This sheet displays the historical FBL indemnity benefit rates from the U.S. Department of Labor.

Section 8, Exhibit 6, Sheet 2: Average Annual Medical Costs per Entitled Claim
This sheet displays the historical medical costs per entitled claim.

Section 8, Exhibit 7, Sheets 1-88: Benefit calculation detail for claims currently receiving benefits
These sheets display the calculations of the nominal and discounted, medical and indemnity unpaid losses on a claim by claim basis based on the claimant's age, estimated monthly benefit, and mortality assumptions. The discounted indemnity and medical unpaid losses are calculated by applying the discount factor using a 4.0% annual rate to the nominal unpaid losses.

Section 8, Exhibit 8: Mortality Tables

This exhibit displays the mortality tables used in our review. The mortality rates are based on the Deloitte Consulting study titled "Ohio Bureau of Workers' Compensation, Documentation of 2010 Mortality Study" dated September 10, 2010.

Section 8A

The exhibits for Section 8A are identical to the exhibits for Section 8 but pertain to the unpaid loss liability as of December 31, 2013.

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
PROJECTED UNPAID LOSS AS OF JUNE 30, 2013

		LOW	POINT	HIGH
	NOMINAL UNPAID LOSSES AS OF 12/31/12			
(1)	AWARDED		18,384,361	
(2)	PENDING, IBNR AND ACTIVE MINERS	309,749,619	503,162,829	696,576,038
	AWARDED CLAIM PAYMENTS FROM 12/31/12 TO 6/30/13			
(3)	ACTUAL		(205,209)	
	LOSS TREND AND MORTALITY ADJUSTMENTS			
(4)	PENDING, IBNR AND ACTIVE MINERS	1,098,086	1,841,574	2,585,061
	PROJECTED NOMINAL UNPAID LOSSES AS OF JUNE 30, 2013			
(5)	AWARDED		18,179,151	
(6)	PENDING, IBNR AND ACTIVE MINERS	310,847,705	505,004,402	699,161,100
	DISCOUNT FACTOR			
(7)	AWARDED		64.9%	
(8)	PENDING, IBNR AND ACTIVE MINERS		27.5%	
	PROJECTED DISCOUNTED UNPAID LOSSES AS OF 6/30/13			
(9)	AWARDED		11,804,927	
(10)	PENDING, IBNR AND ACTIVE MINERS	85,589,223	139,048,588	192,507,953
(11)	**TOTAL (FULL YEAR DISCOUNT)**	**97,394,150**	**150,853,515**	**204,312,880**
(12)	HALF YEAR DISCOUNT ADJUSTMENT		1.02	
(13)	**TOTAL**	**99,322,935**	**153,841,004**	**208,359,072**

Note: Active miner is 100% of the liability (e.g. not pro-rated for years of service)

(1) SECTION 8, EXHIBIT 1, SHEET 1, ROW (1)
(2) SECTION 8, EXHIBIT 1, SHEET 1, ROW (4) + ROW (5)
(3) DIFFERENCE FROM 12/31/12 TO 12/31/13 OF NOMINAL UNPAID LOSS ESTIMATE FOR AWARDED CLAIMS MULTIPLIED BY .5; SECTION 8, EXHIBIT 1, SHEET 1
(4) DIFFERENCE FROM 12/31/12 TO 12/31/13 OF NOMINAL UNPAID LOSS ESTIMATE FOR PENDING, IBNR, AND ACTIVE CLAIMS MULTIPLIED BY .5; SECTION 8, EXHIBIT 1, SHEET 1
(5) (1) + (3)
(6) (2) + (4)
(7) BASED ON THE RATIO OF DISCOUNTED TO NOMINAL AWARDED UNPAID LOSS AS OF 12/31/11; SECTION 8, EXHIBIT 1, SHEET 1
(8) BASED ON THE RATIO OF DISCOUNTED TO NOMINAL PRENDING, IBNR AND ACTIVE MINER UNPAID LOSS AS OF 12/31/11; SECTION 8, EXHIBIT 1, SHEET 1
(9) (5) * (7)
(10) (6) * (8)
(11) (9) + (10)
(12) PAYMENTS ASSUMED TO BE MADE AT THE MIDDLE OF EACH YEAR; =1.04^.5
(13) = (12) * (13)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SUMMARY OF UNPAID LOSSES

		NOMINAL			DISCOUNTED		
		LOW	POINT	HIGH	LOW	POINT	HIGH
(1)	**AWARDED CLAIMS**		**18,384,361**			**11,938,183**	
	PENDING & IBNR CLAIMS						
(2)	DEPT. OF LABOR OH DATA METHOD	10,276,466	17,648,975	25,021,483	2,737,384	4,698,742	6,660,100
(3)	OH EMPLOYEE SURVEY DATA METHOD	322,695,535	402,301,032	481,906,529	93,269,065	116,458,684	139,648,303
(4)	**SELECTED PENDING & IBNR CLAIM**	**88,381,233**	**228,033,250**	**367,685,267**	**25,370,305**	**65,885,778**	**106,401,252**
	ACTIVE MINERS						
(5)	**BASED ON OH EMPLOYEE SURVEY DATA**	**221,368,386**	**275,129,578**	**328,890,771**	**58,361,360**	**72,655,748**	**86,950,136**
(6)	**TOTAL UNPAID LOSSES (FULL YEAR DISCOUNT)**	**328,133,980**	**521,547,189**	**714,960,399**	**95,669,848**	**150,479,710**	**205,289,571**
(7)	**HALF YEAR DISCOUNT ADJUSTMENT**					1.02	
(8)	**TOTAL UNPAID LOSSES**				**97,564,484**	**153,459,795**	**209,355,106**

Note: Active miner is 100% of the liability (e.g. not pro-rated for years of service)

(1) SECTION 8, EXHIBIT 2, SHEET 1, COL. (9) & (10)
(2) SECTION 8, EXHIBIT 3, SHEET 1, SUM OF ROW (J) FOR NOMINAL & SUM OF ROW (K) FOR DISCOUNTED
(3) LOW ESTIMATE FROM SECTION 8, EXHIBIT 4, SHEET 1A, COL. (14) & (14A)
HIGH ESTIMATE FROM SECTION 8, EXHIBIT 4, SHEET 1B, COL. (14) & (14A)
(4) SELECTED BY DELOITTE; LOW = 75% * (2) + 25% * (3); HIGH = 25% * (2) + 75% * (3)
(5) LOW ESTIMATES FROM SECTION 8, EXHIBIT 5, SHEET 1A, COL. (14) & (14A)
HIGH ESTIMATE FROM SECTION 8, EXHIBIT 5, SHEET 1B, COL. (14) & (14A)
(6) = (1) + (4) + (5)
(7) PAYMENTS ASSUMED TO BE MADE AT THE MIDDLE OF EACH YEAR; =1.04^.5
(8) = (6) * (7)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

ACTIVE CLAIM SUMMARY

INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	ESTIMATED LIABILITY - INDEMNITY		ESTIMATED LIABILITY - MEDICAL		ESTIMATED LIABILITY - TOTAL	
				NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	IW	10/1/2000	10/16/2000	92,582	71,057	92,622	68,619	185,203	139,677
2	IW	1/9/2004	1/15/2004	53,620	45,434	49,086	40,907	102,707	86,341
3	IW	1/31/2008	2/4/2008	110,173	81,394	114,183	80,740	224,356	162,134
4	IW	11/4/2008	11/10/2008	110,173	81,394	114,183	80,740	224,356	162,134
5	IW	12/17/2010	12/23/2010	155,976	105,835	175,149	111,440	331,125	217,275
6	IW	9/1/1997	10/28/1997	92,582	71,057	92,622	68,619	185,203	139,677
7	IW	11/1/1979	12/4/1979	15,294	14,763	12,562	12,106	27,856	26,869
8	IW	7/1/1987	8/18/1987	50,379	43,093	45,740	38,539	96,118	81,631
9	IW	3/1/1989	3/9/1989	82,456	64,822	80,703	61,548	163,159	126,370
10	IW	11/1/1992	11/30/1992	47,349	40,874	42,648	36,316	89,996	77,190
11	IW	4/1/1993	3/23/1995	87,390	67,891	86,461	65,003	173,850	132,894
12	IW	9/1/2009	3/30/2010	82,456	64,822	80,703	61,548	163,159	126,370
13	IW + Dep 1	2/1/2001	3/5/2001	92,241	76,957	37,088	32,227	129,329	109,184
14	IW + Dep 1	4/26/2002	4/30/2002	289,459	183,753	106,419	76,463	395,878	260,216
15	IW + Dep 1	9/13/2002	9/26/2002	585,057	285,518	247,943	142,756	832,999	428,273
16	IW + Dep 1	1/24/2003	2/10/2003	367,420	217,029	163,159	105,774	530,579	322,803
17	IW + Dep 1	2/26/2003	3/3/2003	474,294	239,203	75,291	58,225	549,585	297,428
18	IW + Dep 1	11/14/2003	11/17/2003	368,721	212,425	106,419	76,463	475,141	288,887
19	IW + Dep 1	12/8/2003	12/9/2003	400,239	226,235	141,446	95,071	541,685	321,306
20	IW + Dep 1	10/20/2005	10/21/2005	302,636	190,916	131,670	90,052	434,306	280,968
21	IW + Dep 1	8/22/2006	8/30/2006	347,895	206,991	122,590	85,271	470,485	292,262
22	IW + Dep 1	5/8/2007	5/11/2007	256,540	168,483	86,461	65,003	343,000	233,486
23	IW + Dep 1	10/30/2007	10/30/2007	216,827	149,315	70,189	55,018	287,017	204,332
24	IW + Dep 1	4/1/2009	4/7/2009	192,732	136,826	60,860	48,952	253,591	185,777
25	IW + Dep 1	4/9/2009	4/15/2009	166,659	124,504	80,703	61,548	247,361	186,052
26	IW + Dep 1	4/30/2012	6/21/2012	310,827	188,475	75,291	58,225	386,118	246,700
27	IW + Dep 1	1/1/1986	11/5/1996	369,091	208,499	75,291	58,225	444,383	266,724
28	IW + Dep 1	5/1/1998	6/3/1998	176,805	127,541	49,086	40,907	225,891	168,447
29	IW + Dep 1	5/1/1998	6/16/1998	251,608	168,452	114,183	80,740	365,791	249,192
30	IW + Dep 1	6/1/1979	8/17/1979	45,972	41,540	12,562	12,106	58,534	53,646

INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	ESTIMATED LIABILITY - INDEMNITY		ESTIMATED LIABILITY - MEDICAL		ESTIMATED LIABILITY - TOTAL	
				NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31	IW + Dep 1	12/1/1975	4/18/1980	148,449	107,758	16,953	16,000	165,402	123,758
32	IW + Dep 1	4/4/1975	6/24/1980	145,008	109,210	37,088	32,227	182,096	141,437
33	IW + Dep 1	11/14/1979	7/28/1980	206,675	142,570	52,714	43,432	259,389	186,002
34	IW + Dep 1	10/1/1976	10/2/1976	152,775	114,808	49,086	40,907	201,861	155,715
35	IW + Dep 1	2/1/1987	3/2/1987	112,101	89,878	37,088	32,227	149,189	122,105
36	IW + Dep 1	11/1/1990	1/22/1991	202,613	139,712	45,740	38,539	248,352	178,251
37	IW + Dep 1	1/1/1991	4/2/1991	163,398	121,963	65,379	51,924	228,777	173,887
38	IW + Dep 1	5/1/1992	8/30/1994	175,752	128,215	60,860	48,952	236,612	177,167
39	IW + Dep 1	3/29/1994	9/27/1994	91,468	74,217	15,623	14,835	107,092	89,052
40	IW + Dep 1	1/1/1995	1/31/1995	504,774	250,883	99,252	72,429	604,027	323,313
41	IW + Dep 1	10/1/1993	1/21/1995	199,362	139,590	56,637	46,116	255,999	185,706
42	IW + Dep 1	8/1/1994	11/22/1995	173,107	126,444	56,637	46,116	229,744	172,560
43	IW + Dep 1	4/1/1996	4/16/1996	256,540	168,483	86,461	65,003	343,000	233,486
44	IW + Dep 2	10/11/2001	11/29/2001	819,840	374,837	912,622	323,153	1,732,462	697,990
45	Survivor	12/1/1999	9/6/2000	99,886	76,247	-	-	99,886	76,247
46	Survivor	12/1/2000	1/23/2001	165,337	111,798	-	-	165,337	111,798
47	Survivor	10/26/2005	11/22/2005	52,921	45,057	-	-	52,921	45,057
48	Survivor	11/30/2008	5/26/2009	269,195	155,777	-	-	269,195	155,777
49	Survivor	7/1/1976	8/1/1976	30,452	27,723	-	-	30,452	27,723
50	Survivor	10/1/1981	3/22/1982	81,362	64,642	-	-	81,362	64,642
51	Survivor	3/1/1981	3/2/1981	49,242	42,343	-	-	49,242	42,343
52	Survivor	11/1/1978	6/8/1979	61,192	51,001	-	-	61,192	51,001
53	Survivor	4/1/1978	4/8/1978	517,446	228,178	-	-	517,446	228,178
54	Survivor	5/1/1979	5/18/1979	75,865	61,038	-	-	75,865	61,038
55	Survivor	6/1/1980	11/23/1980	49,242	42,343	-	-	49,242	42,343
56	Survivor	2/1/1980	12/4/1980	70,677	57,561	-	-	70,677	57,561
57	Survivor	2/1/1979	12/11/1979	49,242	42,343	-	-	49,242	42,343
58	Survivor	1/1/1979	1/25/1980	81,362	64,642	-	-	81,362	64,642
59	Survivor	11/1/1978	2/18/1980	37,204	33,137	-	-	37,204	33,137
60	Survivor	2/1/1977	2/25/1980	155,805	107,071	-	-	155,805	107,071
61	Survivor	4/1/1981	5/26/1981	52,921	45,057	-	-	52,921	45,057
62	Survivor	8/15/1972	5/7/1980	70,677	57,561	-	-	70,677	57,561
63	Survivor	4/17/1973	5/21/1980	61,192	51,001	-	-	61,192	51,001
64	Survivor	5/1/1976	1/4/1980	37,204	33,137	-	-	37,204	33,137
65	Survivor	10/1/1975	6/17/1980	70,677	57,561	-	-	70,677	57,561

INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	ESTIMATED LIABILITY - INDEMNITY NOMINAL	ESTIMATED LIABILITY - INDEMNITY DISCOUNTED	ESTIMATED LIABILITY - MEDICAL NOMINAL	ESTIMATED LIABILITY - MEDICAL DISCOUNTED	ESTIMATED LIABILITY - TOTAL NOMINAL	ESTIMATED LIABILITY - TOTAL DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
66	Survivor	5/29/1977	8/19/1980	61,192	51,001	-	-	61,192	51,001
67	Survivor	4/1/1980	12/4/1980	61,192	51,001	-	-	61,192	51,001
68	Survivor	10/20/1980	12/12/1980	81,362	64,642	-	-	81,362	64,642
69	Survivor	9/8/1980	1/6/1981	137,919	97,817	-	-	137,919	97,817
70	Survivor	6/1/1978	1/29/1981	30,452	27,723	-	-	30,452	27,723
71	Survivor	2/2/1981	3/2/1981	70,677	57,561	-	-	70,677	57,561
72	Survivor	2/21/1978	3/26/1981	61,192	51,001	-	-	61,192	51,001
73	Survivor	2/1/1980	3/24/1981	49,242	42,343	-	-	49,242	42,343
74	Survivor	7/12/1977	4/8/1981	45,850	39,801	-	-	45,850	39,801
75	Survivor	7/1/1976	4/3/1981	39,852	35,208	-	-	39,852	35,208
76	Survivor	1/1/1974	4/30/1981	474,686	218,003	-	-	474,686	218,003
77	Survivor	9/1/1981	9/2/1981	121,569	88,880	-	-	121,569	88,880
78	Survivor	3/1/1980	2/10/1982	61,192	51,001	-	-	61,192	51,001
79	Survivor	9/1/1983	9/2/1983	65,786	54,212	-	-	65,786	54,212
80	Survivor	3/1/1984	4/12/1984	113,973	84,561	-	-	113,973	84,561
81	Survivor	3/1/1976	4/8/1985	39,852	35,208	-	-	39,852	35,208
82	Survivor	11/1/1985	11/25/1985	129,553	93,303	-	-	129,553	93,303
83	Survivor	12/1/1987	2/16/1988	129,553	93,303	-	-	129,553	93,303
84	Survivor	4/1/1989	5/11/1989	185,545	121,376	-	-	185,545	121,376
85	Survivor	3/27/1991	11/15/1991	113,973	84,561	-	-	113,973	84,561
86	Survivor	4/23/1993	6/28/1993	45,850	39,801	-	-	45,850	39,801
87	Survivor	6/1/1993	6/28/1993	196,189	126,188	-	-	196,189	126,188
88	Survivor	4/1/1995	5/16/1995	45,850	39,801	-	-	45,850	39,801
TOTAL LIABILITY FOR CLAIMS CURRENTLY RECEIVING BENEFIT				**14,048,911**	**9,097,175**	**4,335,449**	**2,841,008**	**18,384,361**	**11,938,183**

(1)	CLAIM INDEX NUMBER	(5)	SECTION 8, EXHIBIT 7
(2)	PROVIDED BY BWC	(6)	SECTION 8, EXHIBIT 7
(3)	PROVIDED BY BWC	(7)	SECTION 8, EXHIBIT 7
(4)	PROVIDED BY BWC	(8)	SECTION 8, EXHIBIT 7
		(9)	= (5) + (7)
		(10)	= (6) + (8)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
SHEET 1

UNPAID LOSSES FOR PENDING & IBNR CLAIMS BASED ON OH DEPT. OF LABOR DATA

		PENDING AND IBNR CLAIMS			
		LIVING MINER		LIVING WIDOW	
NUMBER OF CLAIMS		**LOW**	**HIGH**	**LOW**	**HIGH**
(A)	BASED ON DEPT. OF LABOR DATA FOR OHIO	14	34	1	3
INDEMNITY BENEFIT PER CLAIM					
(B)	NOMINAL	314,536	314,536	112,614	112,614
(C)	DISCOUNTED	94,055	94,055	21,291	21,291
MEDICAL BENEFIT PER CLAIM					
(D)	NOMINAL	411,453	411,453		
(E)	DISCOUNTED	99,952	99,952		
PENDING + IBNR RESERVE FOR CLAIMS - INDEMNITY					
(F)	NOMINAL	4,403,508	10,694,233	112,614	337,842
(G)	DISCOUNTED	1,316,764	3,197,855	21,291	63,874
PENDING + IBNR RESERVE FOR CLAIMS - MEDICAL					
(H)	NOMINAL	5,760,345	13,989,409		
(I)	DISCOUNTED	1,399,329	3,398,371		
PENDING + IBNR RESERVE FOR CLAIMS - TOTAL					
(J)	NOMINAL	10,163,852	24,683,641	112,614	337,842
(K)	DISCOUNTED	2,716,093	6,596,226	21,291	63,874

(A)	LIVING MINER FROM SECTION 8, EXHIBIT 3, SHEET 4.2	(G)	= (A) * (C)
	LIVING WIDOW FROM SECTION 8, EXHIBIT 3, SHEET 7.2	(H)	= (A) * (D)
(B)	AVERAGE OF SECTION 8, EXHIBIT 5, SHEET 1A, COL. (7) AND C	(I)	= (A) * (E)
(C)	AVERAGE OF SECTION 8, EXHIBIT 5, SHEET 1A, COL. (7A) AND	(J)	= (F) + (H)
(D)	AVERAGE SECTION 8, EXHIBIT 5, SHEET 1A, COL. (9)	(K)	= (G) + (I)
(E)	AVERAGE SECTION 8, EXHIBIT 5, SHEET 1A, COL. (9A)		
(F)	= (A) * (B)		

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
SHEET 2.1

Ohio Data from U.S. Department of Labor Living Miner Filings, Insured Only

Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	0	0	0	3	4	4	4	8	14	16	20	20	20	20	20	21	21	21	21	21	22	22	22	22
1971	0	0	0	0	2	2	2	9	13	18	18	18	18	18	18	18	19	19	19	19	19	19	19	20
1972	0	6	8	9	9	19	35	48	56	56	56	56	57	57	57	58	58	59	60	61	61	61	62	63
1973	15	17	20	22	26	35	41	44	44	44	44	44	44	45	45	45	45	46	46	46	47	47	49	49
1974	24	27	28	29	32	32	33	34	34	34	35	35	36	37	37	37	37	37	37	37	37	37	37	37
1975	16	19	20	23	23	23	23	23	23	24	24	24	24	26	26	26	27	27	28	29	30	30	30	31
1976	34	38	40	41	42	42	44	44	44	45	47	47	47	49	49	50	50	50	51	51	51	52	52	52
1977	22	23	24	24	25	26	26	26	27	28	28	29	29	30	31	33	33	33	34	34	34	34	34	34
1978	24	26	28	28	28	28	29	30	32	32	33	33	35	36	36	39	42	45	45	45	45	45	46	47
1979	32	34	34	34	34	34	35	40	40	41	41	41	43	43	43	45	45	45	45	45	46	46	48	48
1980	25	25	27	27	29	33	35	35	37	39	40	40	40	40	40	42	42	42	42	42	45	46	46	47
1981	10	12	14	14	15	16	17	17	18	18	18	18	19	19	20	21	21	22	22	22	22	22	22	23
1982	7	9	9	9	10	11	12	13	14	15	15	16	17	18	20	21	22	22	25	26	27	27	27	27
1983	8	8	9	10	10	11	11	12	13	14	14	14	15	15	15	15	15	17	18	20	21	21	21	21
1984	10	10	11	14	15	15	16	16	21	22	23	25	26	26	26	28	29	29	30	32	33	33	33	33
1985	12	16	17	19	23	23	23	23	23	27	29	29	30	30	30	30	30	31	32	32	33	33	33	33
1986	22	26	30	31	32	32	36	37	37	40	40	41	43	43	43	43	43	44	44	45	45	45	45	45
1987	19	21	23	27	28	32	35	38	39	40	41	41	43	44	47	50	50	50	51	52	54	57	58	58
1988	9	15	18	20	20	20	23	25	25	26	27	28	28	29	29	30	31	32	32	32	32	32	32	32
1989	5	7	10	11	11	13	13	14	15	15	15	15	16	16	18	19	19	19	19	19	19	20	20	20
1990	9	10	12	12	16	19	19	20	21	22	25	25	26	27	29	32	33	34	35	47	48	49	49	
1991	10	15	18	19	20	21	21	21	21	23	26	26	27	29	31	32	32	33	33	35	36	36		
1992	7	10	15	17	19	22	24	27	27	30	30	31	32	33	35	36	37	37	39	41	41			
1993	4	5	7	8	9	9	9	12	13	14	16	16	17	18	19	19	20	20	21	21				
1994	8	10	11	13	15	16	19	20	21	22	22	24	24	25	25	26	27	27	28					
1995	1	1	1	4	5	7	8	8	8	8	8	8	9	9	9	9	9	9						
1996	1	1	3	3	3	4	5	5	5	5	5	5	5	6	7	8	8							
1997	2	3	3	3	3	3	3	3	4	4	6	7	7	7	7	7								
1998	2	2	3	5	6	6	6	6	8	8	8	9	10	10	10									
1999	2	2	5	7	8	9	9	9	9	9	9	9	9	9										
2000	2	2	2	6	6	6	7	7	8	8	8	9	9											
2001	7	13	21	24	25	28	30	33	35	39	50	53												
2002	4	10	14	16	18	19	20	21	25	28	30													
2003	2	2	2	2	2	2	3	4	5	5														
2004	0	1	1	1	3	3	3	3	3															
2005	2	3	3	3	3	5	5	5																
2006	0	0	0	1	2	2	2																	
2007	4	5	5	6	6	6																		
2008	1	2	2	2	2																			
2009	3	6	8	9																				
2010	3	3	3																					
2011	1	4																						
2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
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SECTION 8
EXHIBIT 3
SHEET 2.2

Ohio Data from U.S. Department of Labor Living Miner Filings, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) CDF	(3) Indicated Ultimate Filings	(4) Selected Ultimate Filings
1970	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	1.000	22	22
1971	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21		21	1.000	21	21
1972	63	65	65	66	66	66	66	66	66	66	66	66	66	66	66	66	66			66	1.000	66	66
1973	49	49	49	49	49	49	50	50	50	50	50	50	50	50	50	50				50	1.000	50	50
1974	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37					37	1.000	37	37
1975	31	31	31	31	31	31	31	31	31	31	31	31	31	31						31	1.000	31	31
1976	52	53	53	53	53	53	53	53	53	53	53	53	53							53	1.000	53	53
1977	34	34	34	35	36	37	37	37	37	37	37	37								37	1.000	37	37
1978	47	48	48	48	48	48	48	48	48	48	49									49	1.000	49	49
1979	48	48	48	49	50	50	51	51	51	51										51	1.003	51	51
1980	48	48	48	48	49	49	49	49	49											49	1.003	49	49
1981	23	23	23	23	24	24	24	24												24	1.003	24	24
1982	28	29	29	29	29	29	29													29	1.003	29	29
1983	21	21	21	21	21	21														21	1.007	21	21
1984	34	34	35	35	35															35	1.009	35	35
1985	33	33	33	33																33	1.016	34	34
1986	45	46	46																	46	1.021	47	47
1987	59	60																		60	1.024	61	61
1988	33																			33	1.034	34	34
1989																				20	1.041	21	21
1990																				49	1.050	51	51
1991																				36	1.059	38	38
1992																				41	1.069	44	44
1993																				21	1.088	23	23
1994																				28	1.121	31	31
1995																				9	1.142	10	10
1996																				8	1.160	9	9
1997																				7	1.176	8	8
1998																				10	1.217	12	12
1999																				9	1.243	11	11
2000																				9	1.271	11	11
2001																				53	1.306	69	69
2002																				30	1.330	40	40
2003																				5	1.391	7	7
2004																				3	1.462	4	4
2005																				5	1.556	8	8
2006																				2	1.683	3	25
2007																				6	1.827	11	25
2008																				2	1.986	4	25
2009																				9	2.138	19	25
2010																				3	2.349	7	25
2011																				4	2.687	11	25
2012																				0	3.270	-	25
																			TOTAL	1,116			1,326

(2) From SECTION 8, EXHIBITS 2.3 AND 2.4
(3) = (1) * (2)
(4) SELECTED BY DEL0ITTE

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
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SECTION 8
EXHIBIT 3
SHEET 2.3

Ohio Data from the U.S. Department of Labor Living Miner Filings, Insured Only - Development Factors

Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970				1.333	1.000	1.000	2.000	1.750	1.143	1.250	1.000	1.000	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.048	1.000	1.000	1.000	1.000
1971					1.000	1.000	4.500	1.444	1.385	1.000	1.000	1.000	1.000	1.000	1.000	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.053	1.000
1972		1.333	1.125	1.000	2.111	1.842	1.371	1.167	1.000	1.000	1.000	1.018	1.000	1.000	1.018	1.000	1.017	1.017	1.017	1.000	1.000	1.016	1.016	1.000
1973	1.133	1.176	1.100	1.182	1.346	1.171	1.073	1.000	1.000	1.000	1.000	1.000	1.023	1.000	1.000	1.000	1.022	1.000	1.000	1.022	1.000	1.043	1.000	1.000
1974	1.125	1.037	1.036	1.103	1.000	1.031	1.030	1.000	1.000	1.029	1.000	1.029	1.028	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1975	1.188	1.053	1.150	1.000	1.000	1.000	1.000	1.000	1.043	1.000	1.000	1.000	1.083	1.000	1.000	1.038	1.000	1.037	1.036	1.034	1.000	1.000	1.033	1.000
1976	1.118	1.053	1.025	1.024	1.000	1.048	1.000	1.000	1.023	1.044	1.000	1.000	1.043	1.000	1.020	1.000	1.000	1.020	1.000	1.000	1.020	1.000	1.000	1.000
1977	1.045	1.043	1.000	1.042	1.040	1.000	1.000	1.038	1.037	1.000	1.036	1.000	1.034	1.033	1.065	1.000	1.000	1.030	1.000	1.000	1.000	1.000	1.000	1.000
1978	1.083	1.077	1.000	1.000	1.000	1.036	1.034	1.067	1.000	1.031	1.000	1.061	1.029	1.000	1.083	1.077	1.071	1.000	1.000	1.000	1.000	1.022	1.022	1.000
1979	1.063	1.000	1.000	1.000	1.000	1.029	1.143	1.000	1.025	1.000	1.000	1.049	1.000	1.000	1.047	1.000	1.000	1.000	1.000	1.022	1.000	1.043	1.000	1.000
1980	1.000	1.080	1.000	1.074	1.138	1.061	1.000	1.057	1.054	1.026	1.000	1.000	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.071	1.022	1.000	1.022	1.021
1981	1.200	1.167	1.000	1.071	1.067	1.063	1.000	1.059	1.000	1.000	1.000	1.056	1.000	1.053	1.050	1.000	1.048	1.000	1.000	1.000	1.000	1.000	1.045	1.000
1982	1.286	1.000	1.000	1.111	1.100	1.091	1.083	1.077	1.071	1.000	1.067	1.063	1.059	1.111	1.050	1.048	1.000	1.136	1.040	1.038	1.000	1.000	1.000	1.037
1983	1.000	1.125	1.111	1.000	1.100	1.000	1.091	1.083	1.077	1.000	1.000	1.071	1.000	1.000	1.000	1.000	1.133	1.059	1.111	1.050	1.000	1.000	1.000	1.000
1984	1.000	1.100	1.273	1.071	1.000	1.067	1.000	1.313	1.048	1.045	1.087	1.040	1.000	1.000	1.077	1.036	1.000	1.034	1.067	1.031	1.000	1.000	1.000	1.030
1985	1.333	1.063	1.118	1.211	1.000	1.000	1.000	1.000	1.174	1.074	1.000	1.034	1.000	1.000	1.000	1.000	1.033	1.032	1.000	1.031	1.000	1.000	1.000	1.000
1986	1.182	1.154	1.033	1.032	1.000	1.125	1.028	1.000	1.081	1.000	1.025	1.049	1.000	1.000	1.000	1.000	1.023	1.000	1.023	1.000	1.000	1.000	1.000	1.000
1987	1.105	1.095	1.174	1.037	1.143	1.094	1.086	1.026	1.026	1.025	1.000	1.049	1.023	1.068	1.064	1.000	1.000	1.020	1.020	1.038	1.056	1.018	1.000	1.017
1988	1.667	1.200	1.111	1.000	1.000	1.150	1.087	1.000	1.040	1.038	1.037	1.000	1.036	1.000	1.034	1.033	1.032	1.000	1.000	1.000	1.000	1.000	1.000	1.031
1989	1.400	1.429	1.100	1.000	1.182	1.000	1.077	1.071	1.000	1.000	1.000	1.067	1.000	1.125	1.056	1.000	1.000	1.000	1.000	1.000	1.053	1.000	1.000	
1990	1.111	1.200	1.000	1.333	1.188	1.000	1.053	1.050	1.048	1.136	1.000	1.040	1.038	1.074	1.103	1.031	1.030	1.029	1.343	1.021	1.021	1.000		
1991	1.500	1.200	1.056	1.053	1.050	1.000	1.000	1.000	1.095	1.130	1.000	1.038	1.074	1.069	1.032	1.000	1.031	1.000	1.061	1.029	1.000			
1992	1.429	1.500	1.133	1.118	1.158	1.091	1.125	1.000	1.111	1.000	1.033	1.032	1.031	1.061	1.029	1.028	1.000	1.054	1.051	1.000				
1993	1.250	1.400	1.143	1.125	1.000	1.000	1.333	1.083	1.077	1.143	1.000	1.063	1.059	1.056	1.000	1.053	1.000	1.050	1.000					
1994	1.250	1.100	1.182	1.154	1.067	1.188	1.053	1.050	1.048	1.000	1.091	1.000	1.042	1.000	1.040	1.038	1.000	1.037						
1995	1.000	1.000	4.000	1.250	1.400	1.143	1.000	1.000	1.000	1.000	1.000	1.125	1.000	1.000	1.000	1.000	1.000							
1996	1.000	3.000	1.000	1.000	1.333	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.200	1.167	1.143	1.000								
1997	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.333	1.000	1.500	1.167	1.000	1.000	1.000	1.000									
1998	1.000	1.500	1.667	1.200	1.000	1.000	1.000	1.333	1.000	1.000	1.125	1.111	1.000	1.000										
1999	1.000	2.500	1.400	1.143	1.125	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
2000	1.000	1.000	3.000	1.000	1.000	1.167	1.000	1.143	1.000	1.000	1.125	1.000												
2001	1.857	1.615	1.143	1.042	1.120	1.071	1.100	1.061	1.114	1.282	1.060													
2002	2.500	1.400	1.143	1.125	1.056	1.053	1.050	1.190	1.120	1.071														
2003	1.000	1.000	1.000	1.000	1.000	1.500	1.333	1.250	1.000															
2004		1.000	1.000	3.000	1.000	1.000	1.000	1.000																
2005	1.500	1.000	1.000	1.000	1.667	1.000	1.000																	
2006				2.000	1.000	1.000																		
2007	1.250	1.000	1.200	1.000	1.000																			
2008	2.000	1.000	1.000	1.000																				
2009	2.000	1.333	1.125																					
2010	1.000	1.000																						
2011	4.000																							
All Yr Wtd Avg	1.217	1.144	1.099	1.077	1.087	1.085	1.082	1.064	1.051	1.045	1.018	1.028	1.023	1.021	1.034	1.014	1.016	1.019	1.030	1.018	1.009	1.009	1.008	1.007
10 yr Wgt Avg	1.800	1.311	1.207	1.103	1.089	1.060	1.055	1.111	1.063	1.117	1.056	1.035	1.042	1.056	1.043	1.019	1.013	1.021	1.060	1.020	1.014	1.003	1.006	1.014
5 yr Wgt Avg	1.667	1.125	1.167	1.231	1.125	1.065	1.082	1.118	1.085	1.141	1.074	1.026	1.025	1.018	1.030	1.031	1.008	1.033	1.109	1.011	1.026	1.005	1.000	1.015
Prior Selected	1.215	1.135	1.099	1.069	1.088	1.081	1.085	1.060	1.048	1.034	1.015	1.023	1.019	1.019	1.036	1.012	1.012	1.020	1.025	1.019	1.010	1.007	1.008	1.006
Selected A-A	1.217	1.144	1.099	1.077	1.087	1.085	1.082	1.064	1.051	1.045	1.018	1.028	1.023	1.021	1.034	1.014	1.016	1.019	1.030	1.018	1.009	1.009	1.008	1.007
Cumulative	3.270	2.687	2.349	2.138	1.986	1.827	1.683	1.556	1.462	1.391	1.330	1.306	1.271	1.243	1.217	1.176	1.160	1.142	1.121	1.088	1.069	1.059	1.050	1.041

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Ohio Data from the U.S. Department of Labor Living Miner Filings, Insured Only - Development Factors

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1971	1.000	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1972	1.032	1.000	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1973	1.000	1.000	1.000	1.000	1.000	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1976	1.019	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1977	1.000	1.000	1.029	1.029	1.028	1.000	1.000	1.000	1.000	1.000	1.000								
1978	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.021									
1979	1.000	1.000	1.021	1.020	1.000	1.020	1.000	1.000	1.000										
1980	1.000	1.000	1.000	1.021	1.000	1.000	1.000	1.000											
1981	1.000	1.000	1.000	1.043	1.000	1.000	1.000												
1982	1.036	1.000	1.000	1.000	1.000	1.000													
1983	1.000	1.000	1.000	1.000	1.000														
1984	1.000	1.029	1.000	1.000															
1985	1.000	1.000	1.000																
1986	1.022	1.000																	
1987	1.017																		
1988																			
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2007																			
2008																			
2009																			
2010																			
2011																			
All Yr Wtd Avg	1.010	1.003	1.005	1.007	1.002	1.004	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
10 yr Wgt Avg	1.010	1.003	1.005	1.011	1.003	1.005	1.000	1.000	1.000										
5 yr Wgt Avg	1.010	1.006	1.000	1.013	1.000	1.005	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000					
Prior Selected	1.007	1.004	1.004	1.006	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Selected A-A	1.010	1.003	1.005	1.007	1.002	1.004	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.034	1.024	1.021	1.016	1.009	1.007	1.003	1.003	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
SHEET 3.1

Ohio Data from the U.S. Department of Labor Living Miner Entitlements, Insured Only

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0	0	0	10	15	15	16	16	17	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19
1971	1971	0	0	11	15	16	16	16	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
1972	1972	0	40	50	50	50	51	52	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
1973	1973	29	31	34	36	38	39	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	43	43
1974	1974	21	25	26	27	28	28	28	28	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
1975	1975	16	18	20	21	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24
1976	1976	30	35	36	38	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
1977	1977	17	18	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	23	23	23	23
1978	1978	24	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
1979	1979	25	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
1980	1980	22	22	22	22	22	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24
1981	1981	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11
1982	1982	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4
1983	1983	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1984	1984	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4
1985	1985	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	4	4	4	4
1986	1986	1	2	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	6	7	7	7	7
1987	1987	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	5	5	6	6	7	7	7	7	7
1988	1988	0	0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	5	7	7
1989	1989	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
1990	1990	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	6	6	6	6	6	
1991	1991	0	1	1	1	1	2	2	2	2	4	4	4	4	5	6	7	7	7	7	7	7	7		
1992	1992	0	0	0	0	0	0	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3			
1993	1993	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3				
1994	1994	2	2	2	2	3	3	5	6	6	6	6	6	6	6	6	7	8	8	8					
1995	1995	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1						
1996	1996	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1							
1997	1997	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1								
1998	1998	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3									
1999	1999	0	0	1	1	1	1	1	1	1	1	1	1	1	1										
2000	2000	0	0	0	0	0	0	0	1	1	1	1	1	1											
2001	2001	0	1	1	1	2	2	2	2	4	4	6	6												
2002	2002	0	1	1	1	1	1	1	2	3	5	5													
2003	2003	0	0	0	0	0	0	0	0	0	0														
2004	2004	0	0	0	0	1	1	1	1	1															
2005	2005	0	0	0	0	0	0	0	0																
2006	2006	0	0	0	0	0	0	0																	
2007	2007	0	0	0	1	1	1																		
2008	2008	0	0	0	0	0																			
2009	2009	1	1	1	1																				
2010	2010	0	0	0																					
2011	2011	0	0																						
2012	2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 3.2

Ohio Data from the U.S. Department of Labor Living Miner Entitlements, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516
1970	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
1971	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
1972	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55		
1973	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44			
1974	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30				
1975	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
1976	40	40	40	40	40	40	40	40	40	40	40	40	40						
1977	23	23	23	23	23	23	23	23	23	23	23	23							
1978	29	29	29	29	29	29	29	29	29	29	29								
1979	28	28	28	28	28	28	28	28	28	28									
1980	24	24	24	24	24	24	24	24	24										
1981	11	11	11	11	11	11	11	11											
1982	5	5	5	5	5	5	5												
1983	7	7	7	7	7	7													
1984	4	4	4	4	4														
1985	4	4	4	4															
1986	8	8	8																
1987	7	7																	
1988	7																		
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 4.1

Cumulative Living Miner Entitlement Ratios (= EXHIBIT 3, SHEET 3 / EXHIBIT 3, SHEET 2 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0.0%	0.0%	0.0%	45.5%	68.2%	68.2%	72.7%	72.7%	77.3%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%
1971	1971	0.0%	0.0%	52.4%	71.4%	76.2%	76.2%	76.2%	81.0%	81.0%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%
1972	1972	0.0%	60.6%	75.8%	75.8%	75.8%	77.3%	78.8%	80.3%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%
1973	1973	58.0%	62.0%	68.0%	72.0%	76.0%	78.0%	82.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	86.0%	86.0%
1974	1974	56.8%	67.6%	70.3%	73.0%	75.7%	75.7%	75.7%	75.7%	78.4%	78.4%	78.4%	78.4%	78.4%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%
1975	1975	51.6%	58.1%	64.5%	67.7%	71.0%	71.0%	71.0%	71.0%	71.0%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	77.4%	77.4%	77.4%	77.4%	77.4%
1976	1976	56.6%	66.0%	67.9%	71.7%	73.6%	73.6%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
1977	1977	45.9%	48.6%	54.1%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	59.5%	59.5%	62.2%	62.2%	62.2%	62.2%
1978	1978	49.0%	57.1%	57.1%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%
1979	1979	48.9%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%
1980	1980	44.8%	44.8%	44.8%	44.8%	44.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%
1981	1981	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%
1982	1982	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
1983	1983	23.7%	23.7%	23.7%	28.4%	28.4%	28.4%	28.4%	28.4%	28.4%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%
1984	1984	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
1985	1985	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	9.0%	9.0%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%
1986	1986	2.1%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	6.4%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	12.8%	14.9%	14.9%	14.9%	14.9%
1987	1987	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	4.9%	6.5%	8.1%	8.1%	9.8%	9.8%	11.4%	11.4%	11.4%	11.4%	11.4%
1988	1988	0.0%	0.0%	0.0%	2.9%	2.9%	2.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	11.7%	11.7%	11.7%	11.7%	14.6%	20.5%	20.5%
1989	1989	0.0%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
1990	1990	3.9%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	9.7%	9.7%	11.7%	11.7%	11.7%	11.7%	11.7%	
1991	1991	0.0%	2.6%	2.6%	2.6%	2.6%	5.2%	5.2%	5.2%	5.2%	10.5%	10.5%	10.5%	10.5%	13.1%	15.7%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%		
1992	1992	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	4.6%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%			
1993	1993	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	8.8%	8.8%	8.8%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%				
1994	1994	6.4%	6.4%	6.4%	6.4%	9.6%	9.6%	15.9%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	22.3%	25.5%	25.5%	25.5%					
1995	1995	0.0%	0.0%	0.0%	0.0%	0.0%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%						
1996	1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%							
1997	1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	12.1%	12.1%	12.1%	12.1%	12.1%								
1998	1998	16.4%	16.4%	16.4%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%									
1999	1999	0.0%	0.0%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%										
2000	2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%											
2001	2001	0.0%	1.4%	1.4%	1.4%	2.9%	2.9%	2.9%	2.9%	5.8%	5.8%	8.7%	8.7%												
2002	2002	0.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	5.0%	7.5%	12.5%	12.5%													
2003	2003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														
2004	2004	0.0%	0.0%	0.0%	0.0%	22.8%	22.8%	22.8%	22.8%	22.8%															
2005	2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																
2006	2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																	
2007	2007	0.0%	0.0%	0.0%	4.0%	4.0%	4.0%																		
2008	2008	0.0%	0.0%	0.0%	0.0%	0.0%																			
2009	2009	4.0%	4.0%	4.0%	4.0%																				
2010	2010	0.0%	0.0%	0.0%																					
2011	2011	0.0%	0.0%																						
2012	2012	0.0%																							

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SECTION 8
EXHIBIT 3
SHEET 4.2

Cumulative Living Miner Entitlement Ratios (= EXHIBIT 3, SHEET 3 / EXHIBIT 3, SHEET 2 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) Addl % Add	(3) Indicated Ultimate Entl Ratio	(4) Selected Ultimate Entl Ratio Low	(5) Selected Ultimate Entl Ratio High	(6) # Additional Entitlements Low	(7) # Additional Entitlements High
1970	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	0.0%	86.4%	86.4%	86.4%	-	-
1971	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%		85.7%	0.0%	85.7%	85.7%	85.7%	-	-
1972	81.8%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%			83.3%	0.0%	83.3%	83.3%	83.3%	-	-
1973	86.0%	86.0%	86.0%	86.0%	86.0%	86.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%				88.0%	0.0%	88.0%	88.0%	88.0%	-	-
1974	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%					81.1%	0.0%	81.1%	81.1%	81.1%	-	-
1975	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%						77.4%	0.0%	77.4%	77.4%	77.4%	-	-
1976	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%							75.5%	0.0%	75.5%	75.5%	75.5%	-	-
1977	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%								62.2%	0.0%	62.2%	62.2%	62.2%	-	-
1978	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%									59.2%	0.0%	59.2%	59.2%	59.2%	-	-
1979	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%										54.8%	0.0%	54.8%	54.8%	54.8%	-	-
1980	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%											48.8%	0.0%	48.8%	48.8%	48.8%	-	-
1981	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%												45.7%	0.0%	45.7%	45.7%	45.7%	-	-
1982	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%													17.2%	0.0%	17.2%	17.2%	17.2%	-	-
1983	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%														33.1%	0.2%	33.3%	33.3%	33.3%	0.0	0.0
1984	11.3%	11.3%	11.3%	11.3%	11.3%															11.3%	0.2%	11.5%	11.5%	11.5%	0.1	0.1
1985	11.9%	11.9%	11.9%	11.9%																11.9%	0.2%	12.1%	12.1%	12.1%	0.1	0.1
1986	17.0%	17.0%	17.0%																	17.0%	0.2%	17.2%	17.2%	17.2%	0.1	0.1
1987	11.4%	11.4%																		11.4%	0.2%	11.5%	11.5%	11.5%	0.1	0.1
1988	20.5%																			20.5%	0.2%	20.7%	20.7%	20.7%	0.1	0.1
1989																				9.6%	0.5%	10.1%	10.1%	10.1%	0.1	0.1
1990																				11.7%	0.5%	12.2%	12.2%	12.2%	0.3	0.3
1991																				18.4%	0.9%	19.3%	19.3%	19.3%	0.3	0.3
1992																				6.8%	1.0%	7.9%	7.9%	7.9%	0.5	0.5
1993																				13.1%	1.2%	14.4%	14.4%	14.4%	0.3	0.3
1994																				25.5%	1.6%	27.1%	27.1%	27.1%	0.5	0.5
1995																				9.7%	2.3%	12.0%	12.0%	12.0%	0.2	0.2
1996																				10.8%	2.7%	13.5%	13.5%	13.5%	0.3	0.3
1997																				12.1%	3.0%	15.2%	15.2%	15.2%	0.2	0.2
1998																				24.7%	3.4%	28.1%	28.1%	28.1%	0.4	0.4
1999																				8.9%	3.7%	12.6%	12.6%	12.6%	0.4	0.4
2000																				8.7%	3.9%	12.7%	12.7%	12.7%	0.5	0.5
2001																				8.7%	3.9%	12.6%	12.6%	12.6%	2.7	2.7
2002																				12.5%	4.0%	16.6%	16.6%	16.6%	1.6	1.6
2003																				0.0%	4.7%	4.7%	4.7%	4.7%	0.3	0.3
2004																				22.8%	5.6%	28.4%	28.4%	28.4%	0.2	0.2
2005																				0.0%	6.3%	6.3%	6.3%	6.3%	0.5	0.5
2006																				0.0%	7.4%	7.4%	10.0%	15.0%	0.3	3.8
2007																				4.0%	8.0%	12.0%	10.0%	15.0%	0.7	2.8
2008																				0.0%	8.4%	8.4%	10.0%	15.0%	0.4	3.8
2009																				4.0%	10.1%	14.1%	10.0%	15.0%	1.2	2.8
2010																				0.0%	12.7%	12.7%	10.0%	15.0%	0.7	3.8
2011																				0.0%	15.1%	15.1%	10.0%	15.0%	1.1	3.8
2012																				0.0%	18.1%	18.1%	10.0%	15.0%	-	3.8
																								TOTAL	14.1	34.0

(2) From SECTION 8, EXHIBITS 4.3 AND 4.4
(3) = (1) + (2)
(4), (5) SELECTED BY DEL0ITTE
(6) = [(4) - (1)]* SECTION 8, EXHIBIT 3, SHEET 2.2, COL (4)
(7) = [(5) - (1)]* SECTION 8, EXHIBIT 3, SHEET 2.2, COL (4)

OHIO BUREAU OF WORKERS COMPENSATION
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SECTION 8
EXHIBIT 3
Sheet 4.3

Incremental Living Miner Entitlement Ratios

Date of Last Exposure	Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970	**1970**	-	-	0.455	0.227	-	0.045	-	0.045	0.045	-	-	-	-	-	0.045	-	-	-	-	-	-	-	-	-
1971	**1971**	-	0.524	0.190	0.048	-	-	0.048	-	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	**1972**	0.606	0.152	-	-	0.015	0.015	0.015	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	**1973**	0.040	0.060	0.040	0.040	0.020	0.040	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.020	-	-
1974	**1974**	0.108	0.027	0.027	0.027	-	-	-	0.027	-	-	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-
1975	**1975**	0.065	0.065	0.032	0.032	-	-	-	-	0.032	-	-	-	-	-	-	-	-	-	0.032	-	-	-	-	-
1976	**1976**	0.094	0.019	0.038	0.019	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	**1977**	0.027	0.054	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.027	-	0.027	-	-	-	-
1978	**1978**	0.082	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	**1979**	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	**1980**	-	-	-	-	0.020	-	-	-	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-	-
1981	**1981**	-	-	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-	0.042	-	-	-	-	-	-	-
1982	**1982**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.034	-	-	-	-	-	0.034
1983	**1983**	-	-	0.047	-	-	-	-	-	0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	**1984**	-	-	-	-	-	-	-	-	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	**1985**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.030	-	0.030	-	-	-	-	-	-
1986	**1986**	0.021	-	-	-	-	-	-	0.021	0.021	-	-	-	-	-	-	-	-	-	0.043	0.021	-	-	-	0.021
1987	**1987**	-	-	-	-	-	-	-	-	-	-	-	-	0.033	0.016	0.016	-	0.016	-	0.016	-	-	-	-	-
1988	**1988**	-	-	0.029	-	-	0.029	-	-	-	-	-	-	-	-	-	-	0.059	-	-	-	0.029	0.059	-	-
1989	**1989**	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.048	-	-	-	-	-	-
1990	**1990**	0.019	-	-	-	-	-	0.019	-	-	-	-	-	-	-	-	0.019	-	0.019	-	-	-	-	-	
1991	**1991**	0.026	-	-	-	0.026	-	-	-	0.052	-	-	-	0.026	0.026	0.026	-	-	-	-	-	-			
1992	**1992**	-	-	-	-	-	-	-	0.023	0.023	0.023	-	-	-	-	-	-	-	-	-	-				
1993	**1993**	-	-	-	-	-	-	0.044	-	-	0.044	-	-	-	-	-	-	-	-	-					
1994	**1994**	-	-	-	0.032	-	0.064	0.032	-	-	-	-	-	-	-	0.032	0.032	-	-						
1995	**1995**	-	-	-	-	0.097	-	-	-	-	-	-	-	-	-	-	-	-							
1996	**1996**	-	-	-	-	-	-	0.108	-	-	-	-	-	-	-	-	-								
1997	**1997**	-	-	-	-	-	-	-	-	-	0.121	-	-	-	-	-									
1998	**1998**	-	-	0.082	-	-	-	-	-	-	-	-	-	-	-										
1999	**1999**	-	0.089	-	-	-	-	-	-	-	-	-	-	-											
2000	**2000**	-	-	-	-	-	-	0.087	-	-	-	-	-												
2001	**2001**	0.014	-	-	0.014	-	-	-	0.029	-	0.029	-													
2002	**2002**	0.025	-	-	-	-	-	0.025	0.025	0.050	-														
2003	**2003**	-	-	-	-	-	-	-	-	-															
2004	**2004**	-	-	-	0.228	-	-	-	-																
2005	**2005**	-	-	-	-	-	-	-																	
2006	**2006**	-	-	-	-	-	-																		
2007	**2007**	-	-	0.040	-	-																			
2008	**2008**	-	-	-	-																				
2009	**2009**	-	-	-																					
2010	**2010**	-	-																						
2011	**2011**	-																							
All Yr Wtd Avg	All Yr Avg	0.029	0.024	0.026	0.017	0.005	0.006	0.011	0.006	0.009	0.007	0.001	-	0.003	0.002	0.004	0.003	0.004	0.006	0.004	0.002	0.001	0.004	-	0.003
10 yr Wgt Avg	10 yr Avg	0.003	-	0.004	0.024	-	-	0.022	0.005	0.005	0.019	-	-	0.003	0.003	0.006	0.005	0.007	0.010	0.006	0.002	0.003	0.006	-	0.006
5 yr Wgt Avg	5 yr Avg	-	-	0.008	0.046	-	-	0.005	0.011	0.010	0.006	-	-	-	-	0.006	0.006	-	0.004	-	-	0.006	0.012	-	0.004
Prior Selected	Prior Selected	0.010	0.013	0.013	0.008	0.005	0.006	0.010	0.008	0.009	0.007	0.001	-	0.003	0.004	0.004	0.002	0.006	0.007	0.004	0.004	0.002	0.004	-	0.005
Selected A-A	Selected Incr	0.029	0.024	0.026	0.017	0.005	0.006	0.011	0.006	0.009	0.007	0.001	-	0.003	0.002	0.004	0.003	0.004	0.006	0.004	0.002	0.001	0.004	-	0.003
Cumulative	Cumulative	0.181	0.151	0.127	0.101	0.084	0.080	0.074	0.063	0.056	0.047	0.040	0.039	0.039	0.037	0.034	0.030	0.027	0.023	0.016	0.012	0.010	0.009	0.005	0.005

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Incremental Living Miner Entitlement Ratios

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1972	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1973	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-				
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
1975	-	-	-	-	-	-	-	-	-	-	-	-	-						
1976	-	-	-	-	-	-	-	-	-	-	-	-							
1977	-	-	-	-	-	-	-	-	-	-	-								
1978	-	-	-	-	-	-	-	-	-	-									
1979	-	-	-	-	-	-	-	-	-										
1980	-	-	-	-	-	-	-	-											
1981	-	-	-	-	-	-	-												
1982	-	-	-	-	-	-													
1983	-	-	-	-	-														
1984	-	-	-	-															
1985	-	-	-																
1986	-	-																	
1987	-																		
1988																			
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2008																			
2009																			
2010																			
2011																			
All Yr Wtd Avg	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	
10 yr Wgt Avg	-	-	-	-	-	0.002	-	-	-										
5 yr Wgt Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Prior Selected	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-		
Selected A-A	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative	0.002	0.002	0.002	0.002	0.002	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 5.1

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
1972	0	0	0	0	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1973	0	1	1	1	2	4	4	4	4	4	4	4	4	4	5	5	5	6	6	6	6	6	6	6
1974	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3
1975	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
1976	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3
1977	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5
1978	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1979	1	1	1	2	2	2	2	2	2	3	4	4	4	5	5	5	5	5	5	6	7	7	7	7
1980	3	3	4	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
1982	0	0	1	1	2	2	2	3	3	4	5	5	5	6	6	6	7	7	7	7	7	7	7	7
1983	0	0	1	1	1	2	2	3	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
1984	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1985	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
1986	2	2	2	2	2	3	3	3	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
1987	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2		
1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1994	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2					
1995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
2000	0	0	0	0	0	0	0	0	0	0	0	0	0											
2001	0	0	0	0	1	1	1	1	1	1	1	1												
2002	0	0	1	1	1	1	1	1	1	1	1													
2003	0	0	0	0	1	1	1	1	1	1														
2004	0	0	0	0	0	0	0	0	0															
2005	0	0	0	0	0	0	0	0																
2006	0	0	0	0	0	0	0																	
2007	0	0	0	0	0	0																		
2008	0	0	1	1	1																			
2009	0	0	0	0																				
2010	0	0	0																					
2011	1	1																						
2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 5.2

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) CDF	(3) Indicated Ultimate Filings	(4) Selected Ultimate Filings
1970	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.000	1	1
1971	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1.000	1	1
1972	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			3	1.000	3	3
1973	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				6	1.000	6	6
1974	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					3	1.000	3	3
1975	2	2	2	2	2	2	2	2	2	2	2	2	2	2						2	1.000	2	2
1976	3	3	3	3	3	3	3	3	3	3	3	3	3							3	1.000	3	3
1977	5	5	5	5	5	5	5	5	5	5	5	5								5	1.000	5	5
1978	3	3	3	3	3	3	3	3	3	3	3									3	1.000	3	3
1979	7	7	7	7	7	7	7	7	7	7										7	1.000	7	7
1980	7	7	7	7	7	7	7	7	7											7	1.000	7	7
1981	2	2	2	2	2	2	2	2												2	1.000	2	2
1982	7	7	7	7	7	7	7													7	1.000	7	7
1983	5	5	5	5	5	5														5	1.000	5	5
1984	4	4	4	4	4															4	1.000	4	4
1985	5	5	5	5																5	1.000	5	5
1986	5	5	5																	5	1.000	5	5
1987	1	1																		1	1.000	1	1
1988	0																			0	1.000	-	-
1989																				1	1.014	1	1
1990																				0	1.029	-	-
1991																				2	1.044	2	2
1992																				0	1.059	-	-
1993																				0	1.091	-	-
1994																				2	1.125	2	2
1995																				0	1.125	-	-
1996																				0	1.177	-	-
1997																				0	1.235	-	-
1998																				0	1.235	-	-
1999																				0	1.277	-	-
2000																				0	1.395	-	-
2001																				1	1.449	1	1
2002																				1	1.477	1	1
2003																				1	1.598	2	2
2004																				0	1.699	-	-
2005																				0	1.815	-	-
2006																				0	1.902	-	2
2007																				0	1.997	-	2
2008																				1	2.349	2	2
2009																				0	2.741	-	2
2010																				0	3.045	-	2
2011																				1	4.111	4	2
2012																				0	5.079	-	2
																			TOTAL	80			94

(2) From SECTION 8, EXHIBITS 5.3 AND 5.4
(3) = (1) * (2)
(4) SELECTED BY DELOITTE

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 5.3

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970													1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1971																						1.000	1.000	1.000
1972					3.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1973		1.000	1.000	2.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.200	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1976	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000
1977	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1978	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1979	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.500	1.333	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.200	1.167	1.000	1.000	1.000	1.000
1980	1.000	1.333	1.250	1.000	1.000	1.400	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1981																					1.000	1.000	1.000	2.000
1982			1.000	2.000	1.000	1.000	1.500	1.000	1.333	1.250	1.000	1.000	1.200	1.000	1.000	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1983			1.000	1.000	2.000	1.000	1.500	1.333	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1984	1.500	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1985	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000
1986	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.333	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1987														1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1988																								
1989													1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1990																								
1991																	2.000	1.000	1.000	1.000	1.000			
1992																								
1993																								
1994		1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995																								
1996																								
1997																								
1998																								
1999																								
2000																								
2001					1.000	1.000	1.000	1.000	1.000	1.000	1.000													
2002			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
2003					1.000	1.000	1.000	1.000	1.000															
2004																								
2005																								
2006																								
2007																								
2008			1.000	1.000																				
2009																								
2010																								
2011	1.000																							
All Yr Wtd Avg	1.235	1.350	1.111	1.167	1.176	1.050	1.048	1.068	1.064	1.082	1.019	1.038	1.093	1.034	1.000	1.049	1.047	1.000	1.031	1.030	1.014	1.015	1.014	1.014
10 yr Wgt Avg	1.000		1.000	2.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.100	1.000	1.000	1.000	1.000	1.000	1.029	1.024
5 yr Wgt Avg	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			1.000	1.000	1.000	1.333	1.000	1.000	1.000	1.000	1.000	1.091	1.000
Prior Selected	1.214	1.294	1.091	1.174	1.185	1.063	1.029	1.086	1.054	1.079	1.000	1.050	1.071	1.000	1.000	1.067	1.021	1.000	1.043	1.000	1.021	1.020	1.021	1.020
Selected A-A	1.235	1.350	1.111	1.167	1.176	1.050	1.048	1.068	1.064	1.082	1.019	1.038	1.093	1.034	1.000	1.049	1.047	1.000	1.031	1.030	1.014	1.015	1.014	1.014
Cumulative	5.079	4.111	3.045	2.741	2.349	1.997	1.902	1.815	1.699	1.598	1.477	1.449	1.395	1.277	1.235	1.235	1.177	1.125	1.125	1.091	1.059	1.044	1.029	1.014

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1971	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1973	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1976	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
1978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
1979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
1980	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
1981	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
1982	1.000	1.000	1.000	1.000	1.000	1.000													
1983	1.000	1.000	1.000	1.000	1.000														
1984	1.000	1.000	1.000	1.000															
1985	1.000	1.000	1.000																
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All Yr Wtd Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
10 yr Wgt Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
5 yr Wgt Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Prior Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Selected A-A	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Ohio Department of Labor Living Widow Entitlements, Insured Only

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
1972	1972	0	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1973	1973	1	1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
1974	1974	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
1975	1975	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1976	1976	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
1977	1977	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5
1978	1978	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1979	1979	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1980	1980	3	4	4	4	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1981	1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	1982	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1983	1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	1984	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1985	1985	0	0	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3
1986	1986	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1987	1987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	1989	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1991	1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1992	1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1993	1993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1994	1994	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1995	1995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1996	1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
1997	1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
1998	1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
1999	1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
2000	2000	0	0	0	0	0	0	0	0	0	0	0	0	0											
2001	2001	0	0	0	0	0	0	0	0	0	0	0	0												
2002	2002	0	0	0	0	0	0	0	0	0	0	0													
2003	2003	0	0	0	0	0	0	0	0	0	0														
2004	2004	0	0	0	0	0	0	0	0	0															
2005	2005	0	0	0	0	0	0	0	0																
2006	2006	0	0	0	0	0	0	0																	
2007	2007	0	0	0	0	0	0																		
2008	2008	0	0	0	0	0																			
2009	2009	0	0	0	0																				
2010	2010	0	0	0																					
2011	2011	0	0																						
2012	2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
Sheet 6.2

Ohio Department of Labor Living Widow Entitlements, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516
1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1972	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
1973	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
1974	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
1975	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
1976	2	2	2	2	2	2	2	2	2	2	2	2	2						
1977	5	5	5	5	5	5	5	5	5	5	5	5							
1978	3	3	3	3	3	3	3	3	3	3	3								
1979	1	1	1	1	1	1	1	1	1	1									
1980	6	6	6	6	6	6	6	6	6										
1981	0	0	0	0	0	0	0	0											
1982	1	1	1	1	1	1	1												
1983	0	0	0	0	0	0													
1984	2	2	2	2	2														
1985	3	3	3	3															
1986	1	1	1																
1987	0	0																	
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Cumulative Living Widow Entitlement Ratios (= EXHIBIT 3, SHEET 6 / EXHIBIT 3, SHEET 5 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1971	1971	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%
1972	1972	0.0%	33.3%	66.7%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1973	1973	16.7%	16.7%	16.7%	16.7%	33.3%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
1974	1974	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%
1975	1975	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
1976	1976	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
1977	1977	60.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1978	1978	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1979	1979	0.0%	0.0%	0.0%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%
1980	1980	42.9%	57.1%	57.1%	57.1%	57.1%	71.4%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%
1981	1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	1982	0.0%	0.0%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%
1983	1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	1984	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
1985	1985	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%
1986	1986	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
1987	1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1991	1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
1992	1992	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
1993	1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
1994	1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					
1995	1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
1996	1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%							
1997	1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								
1998	1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%									
1999	1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%										
2000	2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%											
2001	2001	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												
2002	2002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%													
2003	2003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														
2004	2004	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%															
2005	2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																
2006	2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																	
2007	2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																		
2008	2008	0.0%	0.0%	0.0%	0.0%	0.0%																			
2009	2009	0.0%	0.0%	0.0%	0.0%																				
2010	2010	0.0%	0.0%	0.0%																					
2011	2011	0.0%	0.0%																						
2012	2012	0.0%																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 3
SHEET 7.2

Cumulative Living Widow Entitlement Ratios (= EXHIBIT 3, SHEET 6 / EXHIBIT 3, SHEET 5 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) Addl % Add	(3) Indicated Ultimate Entl Ratio	(4) Selected Ultimate Entl Ratio Low	(5) Selected Ultimate Entl Ratio High	(6) # Additional Entitlements Low	(7) # Additional Entitlements High
1970	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1971	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1972	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1973	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%				66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1974	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%					66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1975	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%						50.0%	0.0%	50.0%	50.0%	50.0%	-	-
1976	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%							66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1977	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%								100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1978	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1979	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%										14.3%	0.0%	14.3%	14.3%	14.3%	-	-
1980	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%											85.7%	0.0%	85.7%	85.7%	85.7%	-	-
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1982	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%													14.3%	0.0%	14.3%	14.3%	14.3%	-	-
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1984	50.0%	50.0%	50.0%	50.0%	50.0%															50.0%	0.0%	50.0%	50.0%	50.0%	-	-
1985	60.0%	60.0%	60.0%	60.0%																60.0%	0.0%	60.0%	60.0%	60.0%	-	-
1986	20.0%	20.0%	20.0%																	20.0%	0.0%	20.0%	20.0%	20.0%	-	-
1987	0.0%	0.0%																		0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1988	0.0%																			0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1989																				0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1990																				0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1991																				0.0%	1.0%	1.0%	1.0%	1.0%	0.0	0.0
1992																				0.0%	5.5%	5.5%	5.5%	5.5%	-	-
1993																				0.0%	5.5%	5.5%	5.5%	5.5%	-	-
1994																				0.0%	6.9%	6.9%	6.9%	6.9%	0.2	0.2
1995																				0.0%	6.9%	6.9%	6.9%	6.9%	-	-
1996																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1997																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1998																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1999																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
2000																				0.0%	9.5%	9.5%	9.5%	9.5%	-	-
2001																				0.0%	9.5%	9.5%	9.5%	9.5%	0.1	0.1
2002																				0.0%	9.5%	9.5%	9.5%	9.5%	0.1	0.1
2003																				0.0%	10.5%	10.5%	10.5%	10.5%	0.2	0.2
2004																				0.0%	10.5%	10.5%	10.5%	10.5%	-	-
2005																				0.0%	10.5%	10.5%	10.5%	10.5%	-	-
2006																				0.0%	11.0%	11.0%	10.0%	15.0%	-	0.3
2007																				0.0%	11.4%	11.4%	10.0%	15.0%	-	0.3
2008																				0.0%	13.6%	13.6%	10.0%	15.0%	0.2	0.3
2009																				0.0%	14.1%	14.1%	10.0%	15.0%	-	0.3
2010																				0.0%	14.4%	14.4%	10.0%	15.0%	-	0.3
2011																				0.0%	16.9%	16.9%	10.0%	15.0%	0.4	0.3
2012																				0.0%	18.5%	18.5%	10.0%	15.0%	-	0.3
																							TOTAL		1.3	2.7

(2) From SECTION 8, EXHIBITS 7.3 AND 7.4
(3) = (1) + (2)
(4), (5) SELECTED BY DEL0ITTE
(6) = [(4) - (1)]* SECTION 8, EXHIBIT 3, SHEET 5.2, COL (4)
(7) = [(5) - (1)]* SECTION 8, EXHIBIT 3, SHEET 5.2, COL (4)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Incremental Living Widow Entitlement Ratios

Date of Last Exposure	Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970	1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-
1972	1972	0.333	0.333	-	-	0.333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	1973	-	-	-	0.167	0.167	-	-	-	-	-	-	-	-	-	-	-	0.167	-	-	-	-	-	-	-
1974	1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.333	-	-	-	-	-
1975	1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.333	-	-	-	-	-	-	-
1977	1977	0.200	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-
1978	1978	-	0.333	-	-	-	-	-	-	-	0.333	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	1979	-	-	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	1980	0.143	-	-	-	0.143	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1982	-	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1985	-	0.200	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-
1986	1986	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1991	1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1992	1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1993	1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
1994	1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1995	1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
1996	1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
1997	1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
1998	1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
1999	1999	-	-	-	-	-	-	-	-	-	-	-	-	-											
2000	2000	-	-	-	-	-	-	-	-	-	-	-	-												
2001	2001	-	-	-	-	-	-	-	-	-	-	-													
2002	2002	-	-	-	-	-	-	-	-	-	-														
2003	2003	-	-	-	-	-	-	-	-	-															
2004	2004	-	-	-	-	-	-	-	-																
2005	2005	-	-	-	-	-	-	-																	
2006	2006	-	-	-	-	-	-																		
2007	2007	-	-	-	-	-																			
2008	2008	-	-	-	-																				
2009	2009	-	-	-																					
2010	2010	-	-																						
2011	2011	-																							
All Yr Wtd Avg	All Yr Avg	0.016	0.025	0.004	0.004	0.022	0.004	0.006	-	-	0.010	-	-	0.007	-	-	-	0.019	-	0.014	-	0.045	0.010	-	-
10 yr Wgt Avg	10 yr Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.020	-	-
5 yr Wgt Avg	5 yr Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prior Selected	Prior Selected	0.013	0.022	-	0.005	0.019	0.005	0.006	-	-	0.010	-	-	0.007	-	-	-	0.008	-	0.043	-	0.048	0.010	-	-
Selected A-A	Selected Incr	0.016	0.025	0.004	0.004	0.022	0.004	0.006	-	-	0.010	-	-	0.007	-	-	-	0.019	-	0.014	-	0.045	0.010	-	-
Cumulative	Cumulative	0.185	0.169	0.144	0.141	0.136	0.114	0.110	0.105	0.105	0.105	0.095	0.095	0.095	0.088	0.088	0.088	0.088	0.069	0.069	0.055	0.055	0.010	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

Incremental Living Widow Entitlement Ratios

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516
1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1975	-	-	-	-	-	-	-	-	-	-	-	-	-					
1976	-	-	-	-	-	-	-	-	-	-	-	-						
1977	-	-	-	-	-	-	-	-	-	-	-							
1978	-	-	-	-	-	-	-	-	-	-								
1979	-	-	-	-	-	-	-	-	-									
1980	-	-	-	-	-	-	-	-										
1981	-	-	-	-	-	-	-											
1982	-	-	-	-	-	-												
1983	-	-	-	-	-													
1984	-	-	-	-														
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2010																		
2011																		
All Yr Wtd Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 yr Wgt Avg	-	-	-	-	-	-	-	-	-									
5 yr Wgt Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Prior Selected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selected A-A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

UNPAID LOSSES FOR PENDING AND IBNR CLAIMS BASED ON OHIO EMPLOYEE SURVEY DATA, TERMINATED MINERS - LOW ESTIMATE

	LOW
(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	10%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF TERMINATED MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER CLAIMS	NUMBER OF SURVIVOR CLAIMS	MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	18	0.1%	6	1	-	696,753	325,531	1,465,049	696,753	1,465,049	2,161,802	100%	2,161,802
20 - 24	23	5.2%	226	23	1	606,397	273,535	1,104,554	14,220,673	25,404,746	39,625,419	100%	39,625,419
25 - 29	27	8.6%	370	37	2	543,461	236,691	882,518	20,581,434	32,653,159	53,234,593	100%	53,234,593
30 - 34	32	11.8%	507	51	3	474,642	196,255	667,696	24,795,527	34,052,476	58,848,003	100%	58,848,003
35 - 39	37	11.3%	486	49	3	414,690	162,173	505,350	20,806,315	24,762,139	45,568,453	100%	45,568,453
40 - 44	42	10.4%	449	45	3	363,359	132,251	383,585	16,747,919	17,261,331	34,009,251	100%	34,009,251
45 - 49	47	8.8%	381	38	2	312,832	107,288	288,211	12,102,194	10,952,003	23,054,197	100%	23,054,197
50 - 54	52	9.1%	393	39	2	271,895	82,894	218,674	10,769,677	8,528,269	19,297,946	100%	19,297,946
55 - 59	57	10.2%	439	44	3	240,190	56,614	168,859	10,738,216	7,429,806	18,168,022	100%	18,168,022
60 - 64	62	10.3%	446	45	3	211,901	31,218	131,348	9,629,187	5,910,671	15,539,858	100%	15,539,858
65 - 69	67	6.3%	271	27	2	171,872	18,987	96,319	4,678,521	2,600,609	7,279,131	100%	7,279,131
70 - 74	72	4.2%	180	18	1	146,812	-	75,291	2,642,617	1,355,245	3,997,862	100%	3,997,862
75 - 79	77	1.8%	79	8	-	69,681	42,277	35,625	557,451	284,999	842,450	100%	842,450
80 - 84	82	1.5%	64	6	-	90,921	-	42,648	545,526	255,885	801,411	100%	801,411
85 - 89	87	0.4%	17	2	-	90,921	-	42,648	181,842	85,295	267,137	100%	267,137
TOTAL			**4,314**	**433**	**25**				**149,693,853**	**173,001,683**	**322,695,535**		**322,695,535**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
80,006	29,625	180,229	80,006	180,229	260,235	100%	260,235
84,716	30,215	165,320	1,978,688	3,802,367	5,781,055	100%	5,781,055
88,820	30,511	154,524	3,347,363	5,717,389	9,064,752	100%	9,064,752
94,379	30,662	142,239	4,905,321	7,254,173	12,159,494	100%	12,159,494
100,323	30,693	130,978	5,007,892	6,417,917	11,425,809	100%	11,425,809
106,950	30,270	120,958	4,903,541	5,443,108	10,346,649	100%	10,346,649
109,174	29,493	108,499	4,207,610	4,122,960	8,330,570	100%	8,330,570
112,807	27,236	98,335	4,453,959	3,835,076	8,289,035	100%	8,289,035
118,283	21,893	90,494	5,270,139	3,981,735	9,251,874	100%	9,251,874
121,376	13,950	82,330	5,503,786	3,704,838	9,208,624	100%	9,208,624
109,274	9,554	67,372	2,969,518	1,819,044	4,788,562	100%	4,788,562
102,996	-	58,225	1,853,921	1,048,050	2,901,971	100%	2,901,971
48,331	27,068	26,969	386,652	215,751	602,402	100%	602,402
70,938	-	36,316	425,626	217,899	643,525	100%	643,525
70,938	-	36,316	141,875	72,633	214,508	100%	214,508
	TOTAL		**45,435,898**	**47,833,167**	**93,269,065**		**93,269,065**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8, EXHIBIT 4, SHEET 4, COL. (26)
(7A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. (26)
(8) SECTION 8, EXHIBIT 4, SHEET 4, COL. (28)
(8A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. (28)

(9) SECTION 8, EXHIBIT 4, SHEET 4, COL. (27)
(9A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) TERMINATED MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

UNPAID LOSSES FOR PENDING AND IBNR CLAIMS BASED ON OHIO EMPLOYEE SURVEY DATA, TERMINATED MINERS - HIGH ESTIMATE

	HIGH
(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	15%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF TERMINATED MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER CLAIMS	NUMBER OF SURVIVOR CLAIMS	MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	18	0.1%	6	1	-	696,753	325,531	1,465,049	696,753	1,465,049	2,161,802	100%	2,161,802
20 - 24	23	5.2%	226	34	2	606,397	273,535	1,104,554	21,164,578	37,554,842	58,719,420	100%	58,719,420
25 - 29	27	8.6%	370	56	3	543,461	236,691	882,518	31,143,882	49,420,998	80,564,879	100%	80,564,879
30 - 34	32	11.8%	507	76	5	474,642	196,255	667,696	37,054,098	50,744,866	87,798,963	100%	87,798,963
35 - 39	37	11.3%	486	73	4	414,690	162,173	505,350	30,921,041	36,890,533	67,811,574	100%	67,811,574
40 - 44	42	10.4%	449	67	4	363,359	132,251	383,585	24,874,073	25,700,205	50,574,278	100%	50,574,278
45 - 49	47	8.8%	381	57	3	312,832	107,288	288,211	18,153,291	16,428,004	34,581,295	100%	34,581,295
50 - 54	52	9.1%	393	59	4	271,895	82,894	218,674	16,373,356	12,901,741	29,275,097	100%	29,275,097
55 - 59	57	10.2%	439	66	4	240,190	56,614	168,859	16,079,017	11,144,709	27,223,726	100%	27,223,726
60 - 64	62	10.3%	446	67	4	211,901	31,218	131,348	14,322,221	8,800,332	23,122,553	100%	23,122,553
65 - 69	67	6.3%	271	41	2	171,872	18,987	96,319	7,084,731	3,949,074	11,033,804	100%	11,033,804
70 - 74	72	4.2%	180	27	2	146,812	-	75,291	3,963,925	2,032,867	5,996,792	100%	5,996,792
75 - 79	77	1.8%	79	12	1	69,681	42,277	35,625	878,454	427,498	1,305,952	100%	1,305,952
80 - 84	82	1.5%	64	10	1	90,921	-	42,648	909,210	426,476	1,335,686	100%	1,335,686
85 - 89	87	0.4%	17	3	-	90,921	-	42,648	272,763	127,943	400,706	100%	400,706
TOTAL			**4,314**	**649**	**39**				**223,891,393**	**258,015,136**	**481,906,529**		**481,906,529**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
80,006	29,625	180,229	80,006	180,229	260,235	100%	260,235
84,716	30,215	165,320	2,940,781	5,620,890	8,561,672	100%	8,561,672
88,820	30,511	154,524	5,065,455	8,653,345	13,718,800	100%	13,718,800
94,379	30,662	142,239	7,326,123	10,810,140	18,136,263	100%	18,136,263
100,323	30,693	130,978	7,446,331	9,561,386	17,007,717	100%	17,007,717
106,950	30,270	120,958	7,286,702	8,104,182	15,390,884	100%	15,390,884
109,174	29,493	108,499	6,311,415	6,184,440	12,495,855	100%	12,495,855
112,807	27,236	98,335	6,764,578	5,801,781	12,566,359	100%	12,566,359
118,283	21,893	90,494	7,894,262	5,972,603	13,866,865	100%	13,866,865
121,376	13,950	82,330	8,188,016	5,516,092	13,704,108	100%	13,704,108
109,274	9,554	67,372	4,499,360	2,762,251	7,261,612	100%	7,261,612
102,996	-	58,225	2,780,882	1,572,075	4,352,957	100%	4,352,957
48,331	27,068	26,969	607,046	323,626	930,671	100%	930,671
70,938	-	36,316	709,377	363,164	1,072,542	100%	1,072,542
70,938	-	36,316	212,813	108,949	321,763	100%	321,763
	TOTAL		**68,113,147**	**71,535,156**	**139,648,303**		**139,648,303**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8, EXHIBIT 4, SHEET 4, COL. (26)
(7A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. 26)
(8) SECTION 8, EXHIBIT 4, SHEET 4, COL. (28)
(8A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. (28)

(9) SECTION 8, EXHIBIT 4, SHEET 4, COL. (27)
(9A) SECTION 8, EXHIBIT 4, SHEET 4A, COL. 27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) TERMINATED MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 42

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	383,803	991,197	786,810	585,774
DISCOUNTED	190,974	378,924	279,974	249,312

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.033	4.049	0.390	40.0%	0.943	0.057	591,223	251,063	44,613	15,875	1,201,834	2,237,281	90,688	199,102	371,479	12,589
23	1.754	3.026	0.475	40.0%	0.952	0.048	596,507	253,307	37,979	13,514	1,045,978	1,686,768	66,597	210,824	340,750	11,248
27	1.558	2.397	0.555	40.0%	0.960	0.040	601,693	255,509	31,468	11,197	937,419	1,347,696	49,026	221,037	318,497	9,687
32	1.344	1.791	0.676	40.0%	0.972	0.028	609,200	258,697	22,045	7,844	818,713	1,019,640	29,627	234,871	293,175	7,122
37	1.159	1.338	0.822	40.0%	0.984	0.016	617,025	262,020	12,222	4,349	715,301	771,721	14,168	249,662	269,965	4,144
42	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
47	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
52	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
57	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
62	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
67	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
72	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
77	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
82	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
87	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-

(1) SECTION 8, EXHIBIT 4, SHEET 3A, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3A, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3A, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3A, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 47

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	305,355	822,711	659,482	424,276
DISCOUNTED	166,695	344,383	257,601	204,163

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.357	5.418	0.321	40.0%	0.918	0.082	470,087	218,179	54,338	21,225	1,107,791	2,109,477	128,051	164,864	325,489	16,038
23	2.033	4.049	0.390	40.0%	0.926	0.074	474,288	220,129	48,929	19,112	964,131	1,590,412	99,463	174,571	298,564	15,157
27	1.806	3.207	0.456	40.0%	0.934	0.066	478,412	222,043	43,621	17,039	864,066	1,270,709	78,784	183,027	279,066	14,045
32	1.558	2.397	0.555	40.0%	0.946	0.054	484,381	224,814	35,938	14,038	754,649	961,394	55,990	194,483	256,879	12,144
37	1.344	1.791	0.676	40.0%	0.958	0.042	490,602	227,701	27,928	10,909	659,329	727,637	37,533	206,730	236,543	9,904
42	1.159	1.338	0.822	40.0%	0.973	0.027	498,343	231,294	17,963	7,017	577,716	552,312	20,825	220,386	218,447	6,686
47	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
52	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
57	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
62	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
67	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
72	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
77	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
82	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
87	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-

(1) SECTION 8, EXHIBIT 4, SHEET 3B, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3B, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3B, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3B, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 52

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	238,843	667,903	539,582	304,005
DISCOUNTED	142,407	307,787	233,195	164,085

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.732	7.251	0.264	40.0%	0.882	0.118	361,970	183,918	63,751	27,552	988,869	1,943,903	174,163	132,421	276,522	19,837
23	2.357	5.418	0.321	40.0%	0.890	0.110	365,206	185,562	59,499	25,714	860,631	1,465,580	140,213	140,217	253,648	19,430
27	2.094	4.292	0.375	40.0%	0.897	0.103	368,381	187,175	55,324	23,910	771,308	1,170,970	115,837	147,009	237,083	18,779
32	1.806	3.207	0.456	40.0%	0.909	0.091	372,977	189,510	49,283	21,299	673,637	885,933	89,011	156,210	218,234	17,557
37	1.558	2.397	0.555	40.0%	0.920	0.080	377,767	191,944	42,985	18,577	588,549	670,524	66,970	166,048	200,957	16,071
42	1.344	1.791	0.676	40.0%	0.935	0.065	383,728	194,973	35,150	15,191	515,698	508,961	47,239	177,016	185,583	13,792
47	1.159	1.338	0.822	40.0%	0.961	0.039	394,473	200,432	21,025	9,087	457,302	390,975	24,374	190,980	173,448	8,658
52	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
57	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
62	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
67	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
72	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
77	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
82	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
87	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-

(1) SECTION 8, EXHIBIT 4, SHEET 3C, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3C, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3C, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3C, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 57

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	184,009	534,051	434,507	216,071
DISCOUNTED	119,170	270,646	207,719	129,634

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	3.167	9.704	0.217	40.0%	0.827	0.173	267,811	148,574	75,382	36,037	848,165	1,732,906	238,736	101,928	225,214	24,723
23	2.732	7.251	0.264	40.0%	0.834	0.166	270,205	149,902	72,172	34,502	738,174	1,306,501	197,167	107,929	206,585	24,842
27	2.427	5.743	0.308	40.0%	0.841	0.159	272,554	151,205	69,022	32,996	661,560	1,043,870	167,533	113,158	193,093	24,693
32	2.094	4.292	0.375	40.0%	0.852	0.148	275,954	153,092	64,462	30,817	577,787	789,771	134,969	120,240	177,742	24,204
37	1.806	3.207	0.456	40.0%	0.863	0.137	279,499	155,058	59,709	28,544	504,806	597,744	107,841	127,812	163,670	23,529
42	1.558	2.397	0.555	40.0%	0.876	0.124	283,909	157,505	53,795	25,717	442,321	453,717	83,811	136,255	151,149	22,247
47	1.344	1.791	0.676	40.0%	0.901	0.099	291,859	161,915	43,135	20,621	392,234	348,537	57,969	147,003	141,266	18,722
52	1.159	1.338	0.822	40.0%	0.937	0.063	303,692	168,480	27,266	13,035	352,063	271,007	31,609	160,534	133,640	12,420
57	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
62	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
67	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
72	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
77	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
82	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
87	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-

(1) SECTION 8, EXHIBIT 4, SHEET 3D, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3D, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3D, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3D, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 62

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	139,164	420,596	344,622	151,934
DISCOUNTED	97,268	233,557	181,646	100,315

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	3.671	12.985	0.178	40.0%	0.746	0.254	187,825	113,248	87,494	46,117	689,590	1,472,039	321,231	74,029	173,047	30,146
23	3.167	9.704	0.217	40.0%	0.753	0.247	189,503	114,260	85,196	44,906	600,162	1,109,824	269,819	78,388	158,732	30,807
27	2.814	7.686	0.253	40.0%	0.759	0.241	191,151	115,254	82,941	43,717	537,873	886,728	233,383	82,185	148,366	31,173
32	2.427	5.743	0.308	40.0%	0.769	0.231	193,536	116,692	79,676	41,996	469,762	670,881	193,395	87,329	136,571	31,429
37	2.094	4.292	0.375	40.0%	0.779	0.221	196,022	118,190	76,273	40,202	410,426	507,761	159,698	92,828	125,759	31,575
42	1.806	3.207	0.456	40.0%	0.791	0.209	199,115	120,055	72,039	37,971	359,623	385,415	130,110	98,960	116,138	31,299
47	1.558	2.397	0.555	40.0%	0.813	0.187	204,690	123,417	64,406	33,948	318,901	296,069	100,342	106,766	108,544	29,367
52	1.344	1.791	0.676	40.0%	0.846	0.154	212,989	128,421	53,045	27,959	286,240	230,210	71,287	116,594	102,684	25,384
57	1.159	1.338	0.822	40.0%	0.903	0.097	227,250	137,019	33,522	17,669	263,445	183,544	38,862	130,557	99,606	16,836
62	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
67	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
72	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
77	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
82	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
87	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-

(1) SECTION 8, EXHIBIT 4, SHEET 3E, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3E, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3E, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3E, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
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(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
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(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 67

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	103,933	326,510	269,195	106,419
DISCOUNTED	77,791	197,793	155,777	76,463

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	4.256	17.378	0.146	40.0%	0.630	0.370	121,499	79,204	99,698	57,693	517,126	1,164,407	424,335	49,333	122,433	35,934
23	3.671	12.985	0.178	40.0%	0.635	0.365	122,585	79,912	98,183	56,816	450,064	877,889	360,473	52,238	112,306	37,140
27	3.262	10.286	0.208	40.0%	0.641	0.359	123,651	80,607	96,696	55,955	403,353	701,417	315,425	54,768	104,971	38,019
32	2.814	7.686	0.253	40.0%	0.649	0.351	125,193	81,613	94,544	54,710	352,276	530,678	266,033	58,196	96,626	39,013
37	2.427	5.743	0.308	40.0%	0.657	0.343	126,801	82,661	92,300	53,412	307,780	401,647	224,037	61,861	88,976	39,972
42	2.094	4.292	0.375	40.0%	0.667	0.333	128,802	83,965	89,509	51,797	269,683	304,870	187,412	65,947	82,169	40,682
47	1.806	3.207	0.456	40.0%	0.686	0.314	132,409	86,316	84,478	48,885	239,145	234,196	152,576	71,149	76,796	40,295
52	1.558	2.397	0.555	40.0%	0.714	0.286	137,777	89,816	76,988	44,551	214,652	182,100	119,945	77,699	72,651	38,541
57	1.344	1.791	0.676	40.0%	0.762	0.238	147,002	95,830	64,119	37,104	197,558	145,187	86,171	87,004	70,473	33,687
62	1.159	1.338	0.822	40.0%	0.844	0.156	162,842	106,156	42,022	24,317	188,778	120,182	48,715	101,149	70,975	23,170
67	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
72	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
77	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
82	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
87	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-

(1) SECTION 8, EXHIBIT 4, SHEET 3F, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3F, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3F, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3F, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
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(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
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(16) = (6) * (12)
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(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 72

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	77,740	250,420	207,205	75,291
DISCOUNTED	61,827	164,748	131,012	58,225

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	4.934	23.255	0.120	40.0%	0.475	0.525	69,734	48,922	108,784	68,782	344,079	831,664	536,756	29,035	77,359	40,821
23	4.256	17.378	0.146	40.0%	0.479	0.521	70,358	49,359	107,905	68,226	299,458	627,022	459,267	30,744	70,960	42,495
27	3.782	13.765	0.171	40.0%	0.483	0.517	70,969	49,788	107,041	67,680	268,378	500,978	404,787	32,233	66,326	43,816
32	3.262	10.286	0.208	40.0%	0.489	0.511	71,855	50,410	105,792	66,890	234,393	379,030	345,097	34,251	61,053	45,448
37	2.814	7.686	0.253	40.0%	0.496	0.504	72,778	51,057	104,489	66,067	204,787	286,872	294,018	36,408	56,219	47,111
42	2.427	5.743	0.308	40.0%	0.504	0.496	73,926	51,863	102,868	65,042	179,438	217,750	249,689	38,812	51,918	48,675
47	2.094	4.292	0.375	40.0%	0.518	0.482	75,996	53,315	99,947	63,195	159,119	167,271	209,267	41,874	48,524	49,634
52	1.806	3.207	0.456	40.0%	0.539	0.461	79,077	55,477	95,598	60,445	142,823	130,063	172,661	45,729	45,904	49,824
57	1.558	2.397	0.555	40.0%	0.575	0.425	84,372	59,191	88,126	55,720	131,449	103,698	137,297	51,205	44,528	48,203
62	1.344	1.791	0.676	40.0%	0.637	0.363	93,463	65,569	75,294	47,607	125,607	85,839	101,189	59,530	44,845	43,223
67	1.159	1.338	0.822	40.0%	0.754	0.246	110,752	77,698	50,894	32,179	128,392	76,009	59,000	74,033	48,313	30,662
72	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-
77	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-
82	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-
87	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-

(1) SECTION 8, EXHIBIT 4, SHEET 3G, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3G, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3G, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3G, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 80

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	47,349	156,280	129,553	42,648
DISCOUNTED	40,874	116,033	93,303	36,316

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	6.250	37.065	0.088	40.0%	0.219	0.781	19,916	15,539	101,175	72,865	124,481	346,250	632,383	8,536	25,914	40,028
23	5.392	27.697	0.107	40.0%	0.221	0.779	20,094	15,677	100,921	72,683	108,338	261,051	544,132	9,038	23,770	41,904
27	4.790	21.939	0.125	40.0%	0.223	0.777	20,268	15,814	100,672	72,503	97,094	208,575	482,262	9,476	22,218	43,447
32	4.132	16.394	0.152	40.0%	0.226	0.774	20,521	16,011	100,312	72,244	84,799	157,803	414,514	10,069	20,451	45,435
37	3.565	12.250	0.185	40.0%	0.229	0.771	20,785	16,217	99,936	71,973	74,088	119,435	356,225	10,704	18,832	47,505
42	3.075	9.154	0.225	40.0%	0.232	0.768	21,113	16,473	99,469	71,637	64,917	90,657	305,846	11,411	17,392	49,623
47	2.652	6.841	0.274	40.0%	0.239	0.761	21,704	16,934	98,627	71,030	57,566	69,641	261,591	12,311	16,254	51,638
52	2.288	5.112	0.333	40.0%	0.248	0.752	22,584	17,620	97,373	70,127	51,671	54,150	222,782	13,444	15,377	53,505
57	1.974	3.820	0.406	40.0%	0.265	0.735	24,096	18,800	95,218	68,576	47,556	43,173	187,921	15,054	14,916	54,911
62	1.702	2.854	0.494	40.0%	0.294	0.706	26,693	20,826	91,519	65,911	45,442	35,738	155,804	17,501	15,022	55,390
67	1.469	2.133	0.601	40.0%	0.348	0.652	31,630	24,678	84,483	60,844	46,450	31,645	124,066	21,765	16,184	53,662
72	1.267	1.594	0.731	40.0%	0.461	0.539	41,929	32,713	69,809	50,276	53,114	31,346	88,432	30,280	19,504	46,536
77	1.093	1.191	0.889	40.0%	0.701	0.299	63,768	49,753	38,690	27,864	69,681	35,625	42,277	48,331	26,969	27,068
82	1.000	1.000	1.000	40.0%	1.000	-	90,921	70,938	-	-	90,921	42,648	-	70,938	36,316	-
87	1.000	1.000	1.000	40.0%	1.000	-	90,921	70,938	-	-	90,921	42,648	-	70,938	36,316	-

(1) SECTION 8, EXHIBIT 4, SHEET 3H, ROW 17
(2) SECTION 8, EXHIBIT 4, SHEET 3H, ROW 18
(3) SECTION 8, EXHIBIT 4, SHEET 3H, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 4, SHEET 3H, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 42

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	42.00	M		
	CLAIMANT 2 (y)	38.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			51.12	25.44
(12)	APV FOR CLAIMANT 2			104.81	37.29
(13)	APV FOR BOTH CLAIMANTS ALIVE			47.78	24.51
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			60.37	13.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			383,803	190,974
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			991,197	378,924
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			97.629	41.552
(23)	APV OF MEDICAL BENEFIT			585,774	249,312

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.004	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.005	0.001	0.996	0.999	0.995	0.005	0.962	1.030	1.060
2	0.006	0.001	0.991	0.999	0.990	0.010	0.925	1.061	1.124
3	0.006	0.001	0.985	0.998	0.984	0.016	0.889	1.093	1.191
4	0.007	0.001	0.979	0.997	0.977	0.023	0.855	1.126	1.262
5	0.007	0.001	0.973	0.996	0.969	0.031	0.822	1.159	1.338
6	0.007	0.001	0.966	0.996	0.962	0.038	0.790	1.194	1.419
7	0.008	0.001	0.959	0.995	0.954	0.046	0.760	1.230	1.504
8	0.008	0.001	0.952	0.994	0.946	0.054	0.731	1.267	1.594
9	0.009	0.001	0.944	0.993	0.937	0.063	0.703	1.305	1.689
10	0.010	0.001	0.935	0.992	0.927	0.072	0.676	1.344	1.791
11	0.012	0.001	0.925	0.990	0.916	0.083	0.650	1.384	1.898
12	0.013	0.001	0.914	0.989	0.904	0.095	0.625	1.426	2.012
13	0.014	0.002	0.903	0.988	0.891	0.107	0.601	1.469	2.133
14	0.015	0.002	0.890	0.986	0.878	0.121	0.577	1.513	2.261
15	0.017	0.002	0.876	0.984	0.863	0.136	0.555	1.558	2.397
16	0.018	0.002	0.861	0.983	0.846	0.151	0.534	1.605	2.540
17	0.020	0.002	0.846	0.980	0.829	0.168	0.513	1.653	2.693
18	0.022	0.003	0.829	0.978	0.811	0.186	0.494	1.702	2.854
19	0.024	0.003	0.811	0.976	0.791	0.205	0.475	1.754	3.026
20	0.027	0.003	0.791	0.973	0.770	0.225	0.456	1.806	3.207
21	0.030	0.004	0.770	0.970	0.746	0.247	0.439	1.860	3.400
22	0.033	0.004	0.747	0.966	0.722	0.270	0.422	1.916	3.604
23	0.037	0.005	0.723	0.962	0.695	0.295	0.406	1.974	3.820
24	0.041	0.006	0.696	0.957	0.666	0.321	0.390	2.033	4.049
25	0.046	0.007	0.667	0.951	0.635	0.349	0.375	2.094	4.292
26	0.050	0.008	0.637	0.945	0.602	0.378	0.361	2.157	4.549
27	0.055	0.009	0.605	0.938	0.567	0.408	0.347	2.221	4.822
28	0.059	0.010	0.572	0.929	0.532	0.438	0.333	2.288	5.112
29	0.064	0.011	0.538	0.920	0.495	0.468	0.321	2.357	5.418
30	0.069	0.012	0.504	0.911	0.458	0.497	0.308	2.427	5.743
31	0.074	0.013	0.469	0.900	0.422	0.525	0.296	2.500	6.088
32	0.080	0.014	0.434	0.888	0.386	0.551	0.285	2.575	6.453
33	0.086	0.015	0.400	0.876	0.350	0.575	0.274	2.652	6.841
34	0.094	0.017	0.365	0.863	0.315	0.598	0.264	2.732	7.251
35	0.102	0.018	0.331	0.849	0.281	0.618	0.253	2.814	7.686
36	0.111	0.020	0.297	0.833	0.248	0.635	0.244	2.898	8.147
37	0.121	0.023	0.264	0.816	0.216	0.649	0.234	2.985	8.636
38	0.131	0.025	0.232	0.798	0.185	0.659	0.225	3.075	9.154
39	0.141	0.028	0.202	0.778	0.157	0.666	0.217	3.167	9.704
40	0.151	0.032	0.173	0.756	0.131	0.667	0.208	3.262	10.286
41	0.162	0.035	0.147	0.732	0.108	0.663	0.200	3.360	10.903
42	0.173	0.039	0.123	0.706	0.087	0.655	0.193	3.461	11.557
43	0.186	0.044	0.102	0.678	0.069	0.642	0.185	3.565	12.250
44	0.201	0.049	0.083	0.648	0.054	0.624	0.178	3.671	12.985
45	0.218	0.055	0.066	0.616	0.041	0.601	0.171	3.782	13.765
46	0.237	0.061	0.052	0.582	0.030	0.574	0.165	3.895	14.590
47	0.258	0.068	0.040	0.547	0.022	0.543	0.158	4.012	15.466
48	0.282	0.075	0.029	0.510	0.015	0.509	0.152	4.132	16.394
49	0.309	0.084	0.021	0.471	0.010	0.473	0.146	4.256	17.378
50	0.339	0.094	0.015	0.432	0.006	0.434	0.141	4.384	18.420
51	0.371	0.105	0.010	0.391	0.004	0.393	0.135	4.515	19.525
52	0.406	0.116	0.006	0.350	0.002	0.352	0.130	4.651	20.697
53	0.444	0.129	0.004	0.310	0.001	0.311	0.125	4.790	21.939
54	0.475	0.142	0.002	0.270	0.001	0.271	0.120	4.934	23.255
55	0.506	0.156	0.001	0.231	0.000	0.232	0.116	5.082	24.650
56	0.539	0.171	0.001	0.195	0.000	0.196	0.111	5.235	26.129
57	0.575	0.186	0.000	0.162	0.000	0.162	0.107	5.392	27.697
58	0.616	0.203	0.000	0.132	0.000	0.132	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
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AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 47

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	47.00	M		
	CLAIMANT 2 (y)	43.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			40.68	22.20
(12)	APV FOR CLAIMANT 2			87.85	34.31
(13)	APV FOR BOTH CLAIMANTS ALIVE			37.85	21.28
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			52.82	13.95
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			305,355	166,695
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			822,711	344,383
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			70.713	34.027
(23)	APV OF MEDICAL BENEFIT			424,276	204,163

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.007	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.007	0.001	0.993	0.999	0.992	0.008	0.962	1.030	1.060
2	0.008	0.001	0.986	0.998	0.984	0.016	0.925	1.061	1.124
3	0.008	0.001	0.978	0.997	0.976	0.024	0.889	1.093	1.191
4	0.009	0.001	0.970	0.996	0.966	0.033	0.855	1.126	1.262
5	0.010	0.001	0.961	0.995	0.956	0.043	0.822	1.159	1.338
6	0.012	0.001	0.951	0.994	0.945	0.054	0.790	1.194	1.419
7	0.013	0.001	0.940	0.993	0.933	0.067	0.760	1.230	1.504
8	0.014	0.002	0.928	0.991	0.920	0.080	0.731	1.267	1.594
9	0.015	0.002	0.915	0.990	0.905	0.094	0.703	1.305	1.689
10	0.017	0.002	0.901	0.988	0.890	0.109	0.676	1.344	1.791
11	0.018	0.002	0.886	0.986	0.873	0.125	0.650	1.384	1.898
12	0.020	0.002	0.869	0.984	0.855	0.142	0.625	1.426	2.012
13	0.022	0.003	0.852	0.982	0.836	0.161	0.601	1.469	2.133
14	0.024	0.003	0.833	0.979	0.816	0.181	0.577	1.513	2.261
15	0.027	0.003	0.813	0.976	0.794	0.202	0.555	1.558	2.397
16	0.030	0.004	0.791	0.973	0.770	0.224	0.534	1.605	2.540
17	0.033	0.004	0.768	0.969	0.744	0.248	0.513	1.653	2.693
18	0.037	0.005	0.743	0.965	0.717	0.274	0.494	1.702	2.854
19	0.041	0.006	0.715	0.960	0.687	0.302	0.475	1.754	3.026
20	0.046	0.007	0.686	0.954	0.655	0.331	0.456	1.806	3.207
21	0.050	0.008	0.655	0.948	0.621	0.361	0.439	1.860	3.400
22	0.055	0.009	0.622	0.941	0.585	0.392	0.422	1.916	3.604
23	0.059	0.010	0.588	0.933	0.548	0.424	0.406	1.974	3.820
24	0.064	0.011	0.553	0.924	0.511	0.455	0.390	2.033	4.049
25	0.069	0.012	0.518	0.914	0.473	0.485	0.375	2.094	4.292
26	0.074	0.013	0.482	0.903	0.435	0.514	0.361	2.157	4.549
27	0.080	0.014	0.447	0.892	0.398	0.542	0.347	2.221	4.822
28	0.086	0.015	0.411	0.879	0.361	0.568	0.333	2.288	5.112
29	0.094	0.017	0.376	0.866	0.325	0.591	0.321	2.357	5.418
30	0.102	0.018	0.340	0.852	0.290	0.612	0.308	2.427	5.743
31	0.111	0.020	0.306	0.836	0.256	0.631	0.296	2.500	6.088
32	0.121	0.023	0.272	0.819	0.222	0.646	0.285	2.575	6.453
33	0.131	0.025	0.239	0.801	0.191	0.657	0.274	2.652	6.841
34	0.141	0.028	0.207	0.780	0.162	0.664	0.264	2.732	7.251
35	0.151	0.032	0.178	0.758	0.135	0.666	0.253	2.814	7.686
36	0.162	0.035	0.151	0.734	0.111	0.663	0.244	2.898	8.147
37	0.173	0.039	0.127	0.708	0.090	0.655	0.234	2.985	8.636
38	0.186	0.044	0.105	0.680	0.071	0.642	0.225	3.075	9.154
39	0.201	0.049	0.085	0.650	0.055	0.625	0.217	3.167	9.704
40	0.218	0.055	0.068	0.618	0.042	0.602	0.208	3.262	10.286
41	0.237	0.061	0.053	0.584	0.031	0.575	0.200	3.360	10.903
42	0.258	0.068	0.041	0.549	0.022	0.545	0.193	3.461	11.557
43	0.282	0.075	0.030	0.512	0.015	0.511	0.185	3.565	12.250
44	0.309	0.084	0.022	0.473	0.010	0.474	0.178	3.671	12.985
45	0.339	0.094	0.015	0.433	0.006	0.435	0.171	3.782	13.765
46	0.371	0.105	0.010	0.393	0.004	0.395	0.165	3.895	14.590
47	0.406	0.116	0.006	0.352	0.002	0.353	0.158	4.012	15.466
48	0.444	0.129	0.004	0.311	0.001	0.312	0.152	4.132	16.394
49	0.475	0.142	0.002	0.271	0.001	0.272	0.146	4.256	17.378
50	0.506	0.156	0.001	0.232	0.000	0.233	0.141	4.384	18.420
51	0.539	0.171	0.001	0.196	0.000	0.196	0.135	4.515	19.525
52	0.575	0.186	0.000	0.163	0.000	0.163	0.130	4.651	20.697
53	0.616	0.203	0.000	0.132	0.000	0.132	0.125	4.790	21.939
54	0.661	0.220	0.000	0.106	0.000	0.106	0.120	4.934	23.255
55	0.713	0.238	0.000	0.082	0.000	0.082	0.116	5.082	24.650
56	0.773	0.257	0.000	0.063	0.000	0.063	0.111	5.235	26.129
57	0.841	0.276	0.000	0.047	0.000	0.047	0.107	5.392	27.697
58	0.918	0.297	0.000	0.034	0.000	0.034	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 52

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	52.00	M		
	CLAIMANT 2 (y)	48.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			31.82	18.97
(12)	APV FOR CLAIMANT 2			71.88	31.06
(13)	APV FOR BOTH CLAIMANTS ALIVE			29.43	18.06
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			44.82	13.91
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			238,843	142,407
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			667,903	307,787
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			50.667	27.347
(23)	APV OF MEDICAL BENEFIT			304,005	164,085

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.010	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.012	0.001	0.990	0.999	0.988	0.012	0.962	1.030	1.060
2	0.013	0.001	0.978	0.997	0.976	0.024	0.925	1.061	1.124
3	0.014	0.002	0.966	0.996	0.962	0.038	0.889	1.093	1.191
4	0.015	0.002	0.952	0.994	0.947	0.053	0.855	1.126	1.262
5	0.017	0.002	0.937	0.993	0.930	0.069	0.822	1.159	1.338
6	0.018	0.002	0.922	0.991	0.913	0.086	0.790	1.194	1.419
7	0.020	0.002	0.905	0.989	0.895	0.104	0.760	1.230	1.504
8	0.022	0.003	0.887	0.987	0.875	0.124	0.731	1.267	1.594
9	0.024	0.003	0.867	0.984	0.853	0.145	0.703	1.305	1.689
10	0.027	0.003	0.846	0.981	0.830	0.167	0.676	1.344	1.791
11	0.030	0.004	0.824	0.978	0.805	0.191	0.650	1.384	1.898
12	0.033	0.004	0.799	0.974	0.778	0.216	0.625	1.426	2.012
13	0.037	0.005	0.773	0.970	0.750	0.244	0.601	1.469	2.133
14	0.041	0.006	0.745	0.965	0.718	0.273	0.577	1.513	2.261
15	0.046	0.007	0.714	0.959	0.685	0.303	0.555	1.558	2.397
16	0.050	0.008	0.682	0.953	0.649	0.336	0.534	1.605	2.540
17	0.055	0.009	0.647	0.946	0.612	0.369	0.513	1.653	2.693
18	0.059	0.010	0.612	0.937	0.573	0.402	0.494	1.702	2.854
19	0.064	0.011	0.575	0.928	0.534	0.435	0.475	1.754	3.026
20	0.069	0.012	0.539	0.918	0.495	0.468	0.456	1.806	3.207
21	0.074	0.013	0.502	0.907	0.455	0.499	0.439	1.860	3.400
22	0.080	0.014	0.465	0.896	0.416	0.528	0.422	1.916	3.604
23	0.086	0.015	0.428	0.884	0.378	0.555	0.406	1.974	3.820
24	0.094	0.017	0.391	0.870	0.340	0.581	0.390	2.033	4.049
25	0.102	0.018	0.354	0.856	0.303	0.604	0.375	2.094	4.292
26	0.111	0.020	0.318	0.840	0.267	0.624	0.361	2.157	4.549
27	0.121	0.023	0.283	0.823	0.233	0.641	0.347	2.221	4.822
28	0.131	0.025	0.248	0.805	0.200	0.653	0.333	2.288	5.112
29	0.141	0.028	0.216	0.784	0.169	0.661	0.321	2.357	5.418
30	0.151	0.032	0.185	0.762	0.141	0.665	0.308	2.427	5.743
31	0.162	0.035	0.157	0.738	0.116	0.663	0.296	2.500	6.088
32	0.173	0.039	0.132	0.712	0.094	0.656	0.285	2.575	6.453
33	0.186	0.044	0.109	0.684	0.075	0.644	0.274	2.652	6.841
34	0.201	0.049	0.089	0.654	0.058	0.626	0.264	2.732	7.251
35	0.218	0.055	0.071	0.621	0.044	0.604	0.253	2.814	7.686
36	0.237	0.061	0.055	0.587	0.033	0.578	0.244	2.898	8.147
37	0.258	0.068	0.042	0.552	0.023	0.547	0.234	2.985	8.636
38	0.282	0.075	0.031	0.514	0.016	0.513	0.225	3.075	9.154
39	0.309	0.084	0.023	0.475	0.011	0.477	0.217	3.167	9.704
40	0.339	0.094	0.016	0.435	0.007	0.438	0.208	3.262	10.286
41	0.371	0.105	0.010	0.395	0.004	0.397	0.200	3.360	10.903
42	0.406	0.116	0.006	0.353	0.002	0.355	0.193	3.461	11.557
43	0.444	0.129	0.004	0.312	0.001	0.314	0.185	3.565	12.250
44	0.475	0.142	0.002	0.272	0.001	0.273	0.178	3.671	12.985
45	0.506	0.156	0.001	0.233	0.000	0.234	0.171	3.782	13.765
46	0.539	0.171	0.001	0.197	0.000	0.197	0.165	3.895	14.590
47	0.575	0.186	0.000	0.163	0.000	0.164	0.158	4.012	15.466
48	0.616	0.203	0.000	0.133	0.000	0.133	0.152	4.132	16.394
49	0.661	0.220	0.000	0.106	0.000	0.106	0.146	4.256	17.378
50	0.713	0.238	0.000	0.083	0.000	0.083	0.141	4.384	18.420
51	0.773	0.257	0.000	0.063	0.000	0.063	0.135	4.515	19.525
52	0.841	0.276	0.000	0.047	0.000	0.047	0.130	4.651	20.697
53	0.918	0.297	0.000	0.034	0.000	0.034	0.125	4.790	21.939
54	1.000	0.317	0.000	0.024	0.000	0.024	0.120	4.934	23.255
55	-	0.339	-	0.016	-	0.016	0.116	5.082	24.650
56	-	0.361	-	0.011	-	0.011	0.111	5.235	26.129
57	-	0.384	-	0.007	-	0.007	0.107	5.392	27.697
58	-	0.405	-	0.004	-	0.004	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 57

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	57.00	M		
	CLAIMANT 2 (y)	53.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			24.51	15.87
(12)	APV FOR CLAIMANT 2			57.88	27.67
(13)	APV FOR BOTH CLAIMANTS ALIVE			22.50	14.98
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			37.40	13.59
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			184,009	119,170
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			534,051	270,646
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			36.012	21.606
(23)	APV OF MEDICAL BENEFIT			216,071	129,634

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.017	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.018	0.002	0.983	0.998	0.981	0.019	0.962	1.030	1.060
2	0.020	0.002	0.965	0.996	0.961	0.039	0.925	1.061	1.124
3	0.022	0.003	0.946	0.994	0.940	0.060	0.889	1.093	1.191
4	0.024	0.003	0.925	0.991	0.917	0.082	0.855	1.126	1.262
5	0.027	0.003	0.903	0.988	0.892	0.107	0.822	1.159	1.338
6	0.030	0.004	0.879	0.985	0.865	0.133	0.790	1.194	1.419
7	0.033	0.004	0.853	0.981	0.837	0.161	0.760	1.230	1.504
8	0.037	0.005	0.825	0.977	0.806	0.190	0.731	1.267	1.594
9	0.041	0.006	0.794	0.972	0.772	0.222	0.703	1.305	1.689
10	0.046	0.007	0.762	0.966	0.736	0.256	0.676	1.344	1.791
11	0.050	0.008	0.727	0.960	0.698	0.291	0.650	1.384	1.898
12	0.055	0.009	0.691	0.952	0.658	0.327	0.625	1.426	2.012
13	0.059	0.010	0.653	0.944	0.616	0.364	0.601	1.469	2.133
14	0.064	0.011	0.614	0.935	0.574	0.401	0.577	1.513	2.261
15	0.069	0.012	0.575	0.925	0.532	0.437	0.555	1.558	2.397
16	0.074	0.013	0.535	0.914	0.489	0.471	0.534	1.605	2.540
17	0.080	0.014	0.496	0.902	0.447	0.503	0.513	1.653	2.693
18	0.086	0.015	0.456	0.890	0.406	0.534	0.494	1.702	2.854
19	0.094	0.017	0.417	0.877	0.366	0.563	0.475	1.754	3.026
20	0.102	0.018	0.378	0.862	0.326	0.588	0.456	1.806	3.207
21	0.111	0.020	0.339	0.846	0.287	0.611	0.439	1.860	3.400
22	0.121	0.023	0.301	0.829	0.250	0.631	0.422	1.916	3.604
23	0.131	0.025	0.265	0.810	0.215	0.646	0.406	1.974	3.820
24	0.141	0.028	0.230	0.790	0.182	0.656	0.390	2.033	4.049
25	0.151	0.032	0.198	0.767	0.152	0.662	0.375	2.094	4.292
26	0.162	0.035	0.168	0.743	0.125	0.661	0.361	2.157	4.549
27	0.173	0.039	0.141	0.717	0.101	0.656	0.347	2.221	4.822
28	0.186	0.044	0.116	0.689	0.080	0.645	0.333	2.288	5.112
29	0.201	0.049	0.095	0.658	0.062	0.628	0.321	2.357	5.418
30	0.218	0.055	0.076	0.626	0.047	0.607	0.308	2.427	5.743
31	0.237	0.061	0.059	0.592	0.035	0.581	0.296	2.500	6.088
32	0.258	0.068	0.045	0.556	0.025	0.551	0.285	2.575	6.453
33	0.282	0.075	0.033	0.518	0.017	0.517	0.274	2.652	6.841
34	0.309	0.084	0.024	0.479	0.012	0.480	0.264	2.732	7.251
35	0.339	0.094	0.017	0.439	0.007	0.441	0.253	2.814	7.686
36	0.371	0.105	0.011	0.398	0.004	0.400	0.244	2.898	8.147
37	0.406	0.116	0.007	0.356	0.002	0.358	0.234	2.985	8.636
38	0.444	0.129	0.004	0.315	0.001	0.316	0.225	3.075	9.154
39	0.475	0.142	0.002	0.274	0.001	0.275	0.217	3.167	9.704
40	0.506	0.156	0.001	0.235	0.000	0.236	0.208	3.262	10.286
41	0.539	0.171	0.001	0.198	0.000	0.199	0.200	3.360	10.903
42	0.575	0.186	0.000	0.165	0.000	0.165	0.193	3.461	11.557
43	0.616	0.203	0.000	0.134	0.000	0.134	0.185	3.565	12.250
44	0.661	0.220	0.000	0.107	0.000	0.107	0.178	3.671	12.985
45	0.713	0.238	0.000	0.083	0.000	0.083	0.171	3.782	13.765
46	0.773	0.257	0.000	0.064	0.000	0.064	0.165	3.895	14.590
47	0.841	0.276	0.000	0.047	0.000	0.047	0.158	4.012	15.466
48	0.918	0.297	0.000	0.034	0.000	0.034	0.152	4.132	16.394
49	1.000	0.317	0.000	0.024	0.000	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 62

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	62.00	M		
	CLAIMANT 2 (y)	58.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			18.54	12.96
(12)	APV FOR CLAIMANT 2			45.91	24.20
(13)	APV FOR BOTH CLAIMANTS ALIVE			16.83	12.08
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			30.78	12.99
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			139,164	97,268
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			420,596	233,557
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			25.322	16.719
(23)	APV OF MEDICAL BENEFIT			151,934	100,315

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.027	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.030	0.004	0.973	0.997	0.970	0.030	0.962	1.030	1.060
2	0.033	0.004	0.945	0.993	0.938	0.062	0.925	1.061	1.124
3	0.037	0.005	0.913	0.988	0.903	0.096	0.889	1.093	1.191
4	0.041	0.006	0.880	0.983	0.865	0.133	0.855	1.126	1.262
5	0.046	0.007	0.844	0.978	0.825	0.171	0.822	1.159	1.338
6	0.050	0.008	0.805	0.971	0.782	0.212	0.790	1.194	1.419
7	0.055	0.009	0.765	0.964	0.737	0.254	0.760	1.230	1.504
8	0.059	0.010	0.723	0.955	0.691	0.297	0.731	1.267	1.594
9	0.064	0.011	0.680	0.946	0.643	0.339	0.703	1.305	1.689
10	0.069	0.012	0.637	0.936	0.596	0.381	0.676	1.344	1.791
11	0.074	0.013	0.593	0.925	0.548	0.421	0.650	1.384	1.898
12	0.080	0.014	0.549	0.913	0.501	0.459	0.625	1.426	2.012
13	0.086	0.015	0.505	0.901	0.455	0.496	0.601	1.469	2.133
14	0.094	0.017	0.462	0.887	0.410	0.530	0.577	1.513	2.261
15	0.102	0.018	0.419	0.873	0.365	0.561	0.555	1.558	2.397
16	0.111	0.020	0.376	0.857	0.322	0.589	0.534	1.605	2.540
17	0.121	0.023	0.334	0.839	0.280	0.613	0.513	1.653	2.693
18	0.131	0.025	0.294	0.820	0.241	0.632	0.494	1.702	2.854
19	0.141	0.028	0.255	0.799	0.204	0.647	0.475	1.754	3.026
20	0.151	0.032	0.219	0.777	0.170	0.655	0.456	1.806	3.207
21	0.162	0.035	0.186	0.752	0.140	0.658	0.439	1.860	3.400
22	0.173	0.039	0.156	0.725	0.113	0.655	0.422	1.916	3.604
23	0.186	0.044	0.129	0.697	0.090	0.646	0.406	1.974	3.820
24	0.201	0.049	0.105	0.666	0.070	0.631	0.390	2.033	4.049
25	0.218	0.055	0.084	0.633	0.053	0.611	0.375	2.094	4.292
26	0.237	0.061	0.066	0.599	0.039	0.586	0.361	2.157	4.549
27	0.258	0.068	0.050	0.562	0.028	0.556	0.347	2.221	4.822
28	0.282	0.075	0.037	0.524	0.019	0.522	0.333	2.288	5.112
29	0.309	0.084	0.027	0.485	0.013	0.485	0.321	2.357	5.418
30	0.339	0.094	0.018	0.444	0.008	0.446	0.308	2.427	5.743
31	0.371	0.105	0.012	0.402	0.005	0.405	0.296	2.500	6.088
32	0.406	0.116	0.008	0.360	0.003	0.362	0.285	2.575	6.453
33	0.444	0.129	0.005	0.318	0.001	0.320	0.274	2.652	6.841
34	0.475	0.142	0.003	0.277	0.001	0.278	0.264	2.732	7.251
35	0.506	0.156	0.001	0.238	0.000	0.239	0.253	2.814	7.686
36	0.539	0.171	0.001	0.201	0.000	0.201	0.244	2.898	8.147
37	0.575	0.186	0.000	0.167	0.000	0.167	0.234	2.985	8.636
38	0.616	0.203	0.000	0.136	0.000	0.136	0.225	3.075	9.154
39	0.661	0.220	0.000	0.108	0.000	0.108	0.217	3.167	9.704
40	0.713	0.238	0.000	0.084	0.000	0.084	0.208	3.262	10.286
41	0.773	0.257	0.000	0.064	0.000	0.064	0.200	3.360	10.903
42	0.841	0.276	0.000	0.048	0.000	0.048	0.193	3.461	11.557
43	0.918	0.297	0.000	0.035	0.000	0.035	0.185	3.565	12.250
44	1.000	0.317	0.000	0.024	0.000	0.024	0.178	3.671	12.985
45	-	0.339	-	0.017	-	0.017	0.171	3.782	13.765
46	-	0.361	-	0.011	-	0.011	0.165	3.895	14.590
47	-	0.384	-	0.007	-	0.007	0.158	4.012	15.466
48	-	0.405	-	0.004	-	0.004	0.152	4.132	16.394
49	-	0.425	-	0.003	-	0.003	0.146	4.256	17.378
50	-	0.444	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.464	-	0.001	-	0.001	0.135	4.515	19.525
52	-	0.482	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.495	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 67

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	67.00	M		
	CLAIMANT 2 (y)	63.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			13.84	10.36
(12)	APV FOR CLAIMANT 2			35.86	20.75
(13)	APV FOR BOTH CLAIMANTS ALIVE			12.42	9.53
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			24.87	12.06
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			103,933	77,791
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			326,510	197,793
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			17.737	12.744
(23)	APV OF MEDICAL BENEFIT			106,419	76,463

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.008	0.954	0.993	0.948	0.052	0.962	1.030	1.060
2	0.055	0.009	0.907	0.986	0.894	0.105	0.925	1.061	1.124
3	0.059	0.010	0.857	0.977	0.837	0.159	0.889	1.093	1.191
4	0.064	0.011	0.806	0.968	0.780	0.214	0.855	1.126	1.262
5	0.069	0.012	0.754	0.957	0.722	0.267	0.822	1.159	1.338
6	0.074	0.013	0.703	0.946	0.665	0.319	0.790	1.194	1.419
7	0.080	0.014	0.651	0.934	0.608	0.369	0.760	1.230	1.504
8	0.086	0.015	0.599	0.921	0.552	0.417	0.731	1.267	1.594
9	0.094	0.017	0.547	0.907	0.497	0.461	0.703	1.305	1.689
10	0.102	0.018	0.496	0.892	0.443	0.503	0.676	1.344	1.791
11	0.111	0.020	0.445	0.876	0.390	0.541	0.650	1.384	1.898
12	0.121	0.023	0.396	0.858	0.340	0.575	0.625	1.426	2.012
13	0.131	0.025	0.348	0.839	0.292	0.603	0.601	1.469	2.133
14	0.141	0.028	0.302	0.818	0.247	0.626	0.577	1.513	2.261
15	0.151	0.032	0.260	0.794	0.206	0.641	0.555	1.558	2.397
16	0.162	0.035	0.221	0.769	0.170	0.650	0.534	1.605	2.540
17	0.173	0.039	0.185	0.742	0.137	0.653	0.513	1.653	2.693
18	0.186	0.044	0.153	0.713	0.109	0.648	0.494	1.702	2.854
19	0.201	0.049	0.124	0.681	0.085	0.636	0.475	1.754	3.026
20	0.218	0.055	0.099	0.648	0.064	0.619	0.456	1.806	3.207
21	0.237	0.061	0.078	0.612	0.048	0.595	0.439	1.860	3.400
22	0.258	0.068	0.059	0.575	0.034	0.566	0.422	1.916	3.604
23	0.282	0.075	0.044	0.536	0.024	0.533	0.406	1.974	3.820
24	0.309	0.084	0.032	0.496	0.016	0.496	0.390	2.033	4.049
25	0.339	0.094	0.022	0.454	0.010	0.456	0.375	2.094	4.292
26	0.371	0.105	0.014	0.411	0.006	0.414	0.361	2.157	4.549
27	0.406	0.116	0.009	0.368	0.003	0.371	0.347	2.221	4.822
28	0.444	0.129	0.005	0.326	0.002	0.327	0.333	2.288	5.112
29	0.475	0.142	0.003	0.284	0.001	0.285	0.321	2.357	5.418
30	0.506	0.156	0.002	0.243	0.000	0.244	0.308	2.427	5.743
31	0.539	0.171	0.001	0.205	0.000	0.206	0.296	2.500	6.088
32	0.575	0.186	0.000	0.170	0.000	0.171	0.285	2.575	6.453
33	0.616	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	0.661	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	0.713	0.238	0.000	0.086	0.000	0.086	0.253	2.814	7.686
36	0.773	0.257	0.000	0.066	0.000	0.066	0.244	2.898	8.147
37	0.841	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.918	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	1.000	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	-	0.339	-	0.017	-	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 72

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	72.00	M		
	CLAIMANT 2 (y)	68.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			10.36	8.24
(12)	APV FOR CLAIMANT 2			27.60	17.45
(13)	APV FOR BOTH CLAIMANTS ALIVE			9.19	7.48
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			19.57	10.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			77,740	61,827
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			250,420	164,748
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			12.549	9.704
(23)	APV OF MEDICAL BENEFIT			75,291	58,225

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.013	0.931	0.988	0.920	0.079	0.962	1.030	1.060
2	0.080	0.014	0.863	0.976	0.842	0.155	0.925	1.061	1.124
3	0.086	0.015	0.794	0.962	0.764	0.228	0.889	1.093	1.191
4	0.094	0.017	0.726	0.948	0.688	0.298	0.855	1.126	1.262
5	0.102	0.018	0.658	0.932	0.613	0.364	0.822	1.159	1.338
6	0.111	0.020	0.590	0.915	0.540	0.425	0.790	1.194	1.419
7	0.121	0.023	0.525	0.896	0.470	0.480	0.760	1.230	1.504
8	0.131	0.025	0.461	0.876	0.404	0.529	0.731	1.267	1.594
9	0.141	0.028	0.401	0.854	0.342	0.570	0.703	1.305	1.689
10	0.151	0.032	0.344	0.830	0.286	0.603	0.676	1.344	1.791
11	0.162	0.035	0.292	0.803	0.235	0.626	0.650	1.384	1.898
12	0.173	0.039	0.245	0.775	0.190	0.640	0.625	1.426	2.012
13	0.186	0.044	0.203	0.744	0.151	0.645	0.601	1.469	2.133
14	0.201	0.049	0.165	0.712	0.117	0.642	0.577	1.513	2.261
15	0.218	0.055	0.132	0.677	0.089	0.630	0.555	1.558	2.397
16	0.237	0.061	0.103	0.640	0.066	0.611	0.534	1.605	2.540
17	0.258	0.068	0.079	0.601	0.047	0.585	0.513	1.653	2.693
18	0.282	0.075	0.058	0.560	0.033	0.553	0.494	1.702	2.854
19	0.309	0.084	0.042	0.518	0.022	0.516	0.475	1.754	3.026
20	0.339	0.094	0.029	0.474	0.014	0.476	0.456	1.806	3.207
21	0.371	0.105	0.019	0.430	0.008	0.432	0.439	1.860	3.400
22	0.406	0.116	0.012	0.385	0.005	0.388	0.422	1.916	3.604
23	0.444	0.129	0.007	0.340	0.002	0.342	0.406	1.974	3.820
24	0.475	0.142	0.004	0.296	0.001	0.298	0.390	2.033	4.049
25	0.506	0.156	0.002	0.254	0.001	0.255	0.375	2.094	4.292
26	0.539	0.171	0.001	0.215	0.000	0.215	0.361	2.157	4.549
27	0.575	0.186	0.000	0.178	0.000	0.178	0.347	2.221	4.822
28	0.616	0.203	0.000	0.145	0.000	0.145	0.333	2.288	5.112
29	0.661	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.713	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.773	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.841	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.918	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	1.000	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	-	0.339	-	0.018	-	0.018	0.253	2.814	7.686
36	-	0.361	-	0.012	-	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 80

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	80.00	M		
	CLAIMANT 2 (y)	76.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			6.31	5.44
(12)	APV FOR CLAIMANT 2			17.26	12.43
(13)	APV FOR BOTH CLAIMANTS ALIVE			5.49	4.83
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			12.58	8.21
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			47,349	40,874
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			156,280	116,033
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			7.108	6.053
(23)	APV OF MEDICAL BENEFIT			42,648	36,316

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	0.028	0.869	0.975	0.847	0.150	0.962	1.030	1.060
2	0.151	0.032	0.747	0.947	0.707	0.279	0.925	1.061	1.124
3	0.162	0.035	0.634	0.917	0.581	0.388	0.889	1.093	1.191
4	0.173	0.039	0.531	0.885	0.470	0.476	0.855	1.126	1.262
5	0.186	0.044	0.439	0.850	0.373	0.543	0.822	1.159	1.338
6	0.201	0.049	0.357	0.812	0.290	0.589	0.790	1.194	1.419
7	0.218	0.055	0.285	0.772	0.220	0.617	0.760	1.230	1.504
8	0.237	0.061	0.223	0.730	0.163	0.627	0.731	1.267	1.594
9	0.258	0.068	0.170	0.686	0.117	0.622	0.703	1.305	1.689
10	0.282	0.075	0.126	0.639	0.081	0.604	0.676	1.344	1.791
11	0.309	0.084	0.091	0.591	0.054	0.574	0.650	1.384	1.898
12	0.339	0.094	0.063	0.541	0.034	0.536	0.625	1.426	2.012
13	0.371	0.105	0.041	0.491	0.020	0.491	0.601	1.469	2.133
14	0.406	0.116	0.026	0.439	0.011	0.442	0.577	1.513	2.261
15	0.444	0.129	0.015	0.388	0.006	0.392	0.555	1.558	2.397
16	0.475	0.142	0.009	0.338	0.003	0.341	0.534	1.605	2.540
17	0.506	0.156	0.005	0.290	0.001	0.292	0.513	1.653	2.693
18	0.539	0.171	0.002	0.245	0.001	0.246	0.494	1.702	2.854
19	0.575	0.186	0.001	0.203	0.000	0.204	0.475	1.754	3.026
20	0.616	0.203	0.000	0.165	0.000	0.166	0.456	1.806	3.207
21	0.661	0.220	0.000	0.132	0.000	0.132	0.439	1.860	3.400
22	0.713	0.238	0.000	0.103	0.000	0.103	0.422	1.916	3.604
23	0.773	0.257	0.000	0.078	0.000	0.078	0.406	1.974	3.820
24	0.841	0.276	0.000	0.058	0.000	0.058	0.390	2.033	4.049
25	0.918	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	1.000	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	-	0.339	-	0.020	-	0.020	0.347	2.221	4.822
28	-	0.361	-	0.013	-	0.013	0.333	2.288	5.112
29	-	0.384	-	0.009	-	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF WEIGHTED NOMINAL BENEFITS PER CLAIM FOR TERMINATED MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 42			NOMINAL ESTIMATES AT ENTITLEMENT AGE 47			NOMINAL ESTIMATES AT ENTITLEMENT AGE 52			NOMINAL ESTIMATES AT ENTITLEMENT AGE 57			NOMINAL ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	1,201,834	2,237,281	90,688	1,107,791	2,109,477	128,051	988,869	1,943,903	174,163	848,165	1,732,906	238,736	689,590	1,472,039	321,231
20 - 24	1,045,978	1,686,768	66,597	964,131	1,590,412	99,463	860,631	1,465,580	140,213	738,174	1,306,501	197,167	600,162	1,109,824	269,819
25 - 29	937,419	1,347,696	49,026	864,066	1,270,709	78,784	771,308	1,170,970	115,837	661,560	1,043,870	167,533	537,873	886,728	233,383
30 - 34	818,713	1,019,640	29,627	754,649	961,394	55,990	673,637	885,933	89,011	577,787	789,771	134,969	469,762	670,881	193,395
35 - 39	715,301	771,721	14,168	659,329	727,637	37,533	588,549	670,524	66,970	504,806	597,744	107,841	410,426	507,761	159,698
40 - 44	626,760	585,774	-	577,716	552,312	20,825	515,698	508,961	47,239	442,321	453,717	83,811	359,623	385,415	130,110
45 - 49	626,760	585,774	-	512,298	424,276	-	457,302	390,975	24,374	392,234	348,537	57,969	318,901	296,069	100,342
50 - 54	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	352,063	271,007	31,609	286,240	230,210	71,287
55 - 59	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	263,445	183,544	38,862
60 - 64	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
65 - 69	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
70 - 74	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
75 - 79	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
80 - 84	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
85 - 89	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 67			NOMINAL ESTIMATES AT ENTITLEMENT AGE 72			NOMINAL ESTIMATES AT ENTITLEMENT AGE 80			NOMINAL ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	517,126	1,164,407	424,335	344,079	831,664	536,756	124,481	346,250	632,383	696,753	1,465,049	325,531
20 - 24	450,064	877,889	360,473	299,458	627,022	459,267	108,338	261,051	544,132	606,397	1,104,554	273,535
25 - 29	403,353	701,417	315,425	268,378	500,978	404,787	97,094	208,575	482,262	543,461	882,518	236,691
30 - 34	352,276	530,678	266,033	234,393	379,030	345,097	84,799	157,803	414,514	474,642	667,696	196,255
35 - 39	307,780	401,647	224,037	204,787	286,872	294,018	74,088	119,435	356,225	414,690	505,350	162,173
40 - 44	269,683	304,870	187,412	179,438	217,750	249,689	64,917	90,657	305,846	363,359	383,585	132,251
45 - 49	239,145	234,196	152,576	159,119	167,271	209,267	57,566	69,641	261,591	312,832	288,211	107,288
50 - 54	214,652	182,100	119,945	142,823	130,063	172,661	51,671	54,150	222,782	271,895	218,674	82,894
55 - 59	197,558	145,187	86,171	131,449	103,698	137,297	47,556	43,173	187,921	240,190	168,859	56,614
60 - 64	188,778	120,182	48,715	125,607	85,839	101,189	45,442	35,738	155,804	211,901	131,348	31,218
65 - 69	192,964	106,419	-	128,392	76,009	59,000	46,450	31,645	124,066	171,872	96,319	18,987
70 - 74	192,964	106,419	-	146,812	75,291	-	53,114	31,346	88,432	146,812	75,291	-
75 - 79	192,964	106,419	-	146,812	75,291	-	69,681	35,625	42,277	69,681	35,625	42,277
80 - 84	192,964	106,419	-	146,812	75,291	-	90,921	42,648	-	90,921	42,648	-
85 - 89	192,964	106,419	-	146,812	75,291	-	90,921	42,648	-	90,921	42,648	-

(1)	OHIO COAL SURVEY DATA
(2)-(4)	SECTION 8, EXHIBIT 4, SHEET 2A, COL. (16), (17), (18)
(5)-(7)	SECTION 8, EXHIBIT 4, SHEET 2B, COL. (16), (17), (18)
(8)-(10)	SECTION 8, EXHIBIT 4, SHEET 2C, COL. (16), (17), (18)
(11)-(13)	SECTION 8, EXHIBIT 4, SHEET 2D, COL. (16), (17), (18)
(14)-(16)	SECTION 8, EXHIBIT 4, SHEET 2E, COL. (16), (17), (18)
(17)-(19)	SECTION 8, EXHIBIT 4, SHEET 2F, COL. (16), (17), (18)
(20) - (22)	SECTION 8, EXHIBIT 4, SHEET 2G, COL. (16), (17), (18)
(23) - (25)	SECTION 8, EXHIBIT 4, SHEET 2H, COL. (16), (17), (18)
(26) - (28)	WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF WEIGHTED DISCOUNTED BENEFITS PER CLAIM FOR TERMINATED MINERS

	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 42			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 47			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 52			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 57			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 62		
CURRENT AGE GROUP OF ACTIVE MINERS	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	199,102	371,479	12,589	164,864	325,489	16,038	132,421	276,522	19,837	101,928	225,214	24,723	74,029	173,047	30,146
20 - 24	210,824	340,750	11,248	174,571	298,564	15,157	140,217	253,648	19,430	107,929	206,585	24,842	78,388	158,732	30,807
25 - 29	221,037	318,497	9,687	183,027	279,066	14,045	147,009	237,083	18,779	113,158	193,093	24,693	82,185	148,366	31,173
30 - 34	234,871	293,175	7,122	194,483	256,879	12,144	156,210	218,234	17,557	120,240	177,742	24,204	87,329	136,571	31,429
35 - 39	249,662	269,965	4,144	206,730	236,543	9,904	166,048	200,957	16,071	127,812	163,670	23,529	92,828	125,759	31,575
40 - 44	266,154	249,312	-	220,386	218,447	6,686	177,016	185,583	13,792	136,255	151,149	22,247	98,960	116,138	31,299
45 - 49	266,154	249,312	-	237,771	204,163	-	190,980	173,448	8,658	147,003	141,266	18,722	106,766	108,544	29,367
50 - 54	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	160,534	133,640	12,420	116,594	102,684	25,384
55 - 59	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	130,557	99,606	16,836
60 - 64	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
65 - 69	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
70 - 74	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
75 - 79	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
80 - 84	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
85 - 89	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-

	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 67			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 72			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 80			DISCOUNTED ESTIMATES WEIGHTED BENEFITS		
CURRENT AGE GROUP OF ACTIVE MINERS	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	49,333	122,433	35,934	29,035	77,359	40,821	8,536	25,914	40,028	80,006	180,229	29,625
20 - 24	52,238	112,306	37,140	30,744	70,960	42,495	9,038	23,770	41,904	84,716	165,320	30,215
25 - 29	54,768	104,971	38,019	32,233	66,326	43,816	9,476	22,218	43,447	88,820	154,524	30,511
30 - 34	58,196	96,626	39,013	34,251	61,053	45,448	10,069	20,451	45,435	94,379	142,239	30,662
35 - 39	61,861	88,976	39,972	36,408	56,219	47,111	10,704	18,832	47,505	100,323	130,978	30,693
40 - 44	65,947	82,169	40,682	38,812	51,918	48,675	11,411	17,392	49,623	106,950	120,958	30,270
45 - 49	71,149	76,796	40,295	41,874	48,524	49,634	12,311	16,254	51,638	109,174	108,499	29,493
50 - 54	77,699	72,651	38,541	45,729	45,904	49,824	13,444	15,377	53,505	112,807	98,335	27,236
55 - 59	87,004	70,473	33,687	51,205	44,528	48,203	15,054	14,916	54,911	118,283	90,494	21,893
60 - 64	101,149	70,975	23,170	59,530	44,845	43,223	17,501	15,022	55,390	121,376	82,330	13,950
65 - 69	125,792	76,463	-	74,033	48,313	30,662	21,765	16,184	53,662	109,274	67,372	9,554
70 - 74	125,792	76,463	-	102,996	58,225	-	30,280	19,504	46,536	102,996	58,225	-
75 - 79	125,792	76,463	-	102,996	58,225	-	48,331	26,969	27,068	48,331	26,969	27,068
80 - 84	125,792	76,463	-	102,996	58,225	-	70,938	36,316	-	70,938	36,316	-
85 - 89	125,792	76,463	-	102,996	58,225	-	70,938	36,316	-	70,938	36,316	-

(1)	OHIO COAL SURVEY DATA
(2)-(4)	SECTION 8, EXHIBIT 4, SHEET 2A, COL. (19), (20), (21)
(5)-(7)	SECTION 8, EXHIBIT 4, SHEET 2B, COL. (19), (20), (21)
(8)-(10)	SECTION 8, EXHIBIT 4, SHEET 2C, COL. (19), (20), (21)
(11)-(13)	SECTION 8, EXHIBIT 4, SHEET 2D, COL. (19), (20), (21)
(14)-(16)	SECTION 8, EXHIBIT 4, SHEET 2E, COL. (19), (20), (21)
(17)-(19)	SECTION 8, EXHIBIT 4, SHEET 2F, COL. (19), (20), (21)
(20) - (22)	SECTION 8, EXHIBIT 4, SHEET 2G, COL. (19), (20), (21)
(23) - (25)	SECTION 8, EXHIBIT 4, SHEET 2H, COL. (19), (20), (21)
(26) - (28)	WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
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CALCULATION OF LIABILITY FOR ACTIVE MINERS - LOW ESTIMATE

LOW

(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	10%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF ACTIVE MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER ENTITLEMENTS	NUMBER OF SURVIVOR ENTITLEMENTS	MINER INDEMNITY PER ENTITLEMENT	SURVIVOR INDEMNITY PER ENTITLEMENT	MINER MEDICAL PER ENTITLEMENT	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	18	0.6%	15	2	-	696,753	325,531	1,465,049	1,393,507	2,930,098	4,323,605	100%	4,323,605
20 - 24	22	9.2%	239	24	1	623,384	283,373	1,168,568	15,244,583	28,045,624	43,290,207	100%	43,290,207
25 - 29	27	10.4%	269	27	2	543,461	236,691	882,518	15,146,825	23,827,981	38,974,806	100%	38,974,806
30 - 34	32	11.4%	296	30	2	474,642	196,255	667,696	14,631,782	20,030,868	34,662,650	100%	34,662,650
35 - 39	37	10.2%	264	26	2	414,690	162,173	505,350	11,106,278	13,139,094	24,245,372	100%	24,245,372
40 - 44	42	11.7%	304	30	2	363,359	132,251	383,585	11,165,279	11,507,554	22,672,834	100%	22,672,834
45 - 49	47	9.4%	243	24	1	312,832	107,288	288,211	7,615,257	6,917,054	14,532,312	100%	14,532,312
50 - 54	52	10.5%	272	27	2	271,895	82,894	218,674	7,506,942	5,904,186	13,411,128	100%	13,411,128
55 - 59	57	13.4%	347	35	2	240,190	56,614	168,859	8,519,889	5,910,073	14,429,962	100%	14,429,962
60 - 64	62	8.8%	229	23	1	211,901	31,218	131,348	4,904,935	3,021,010	7,925,945	100%	7,925,945
65 - 69	67	2.9%	75	8	-	171,872	18,987	96,319	1,374,977	770,551	2,145,528	100%	2,145,528
70 - 74	71	1.0%	27	3	-	141,541	13,655	74,703	424,624	224,108	648,731	100%	648,731
75 - 79	77	0.3%	8	1	-	69,681	42,277	35,625	69,681	35,625	105,306	100%	105,306
80 - 84	84	0.1%	2	-	-	90,921	-	42,648	-	-	-	100%	-
85 - 89	86	0.1%	2	-	-	90,921	-	42,648	-	-	-	100%	-
TOTAL			**2,592**	**260**	**15**				**99,104,559**	**122,263,826**	**221,368,386**		**221,368,386**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
80,006	29,625	180,229	160,012	360,458	520,470	100%	520,470
83,740	30,114	168,174	2,039,867	4,036,184	6,076,051	100%	6,076,051
88,820	30,511	154,524	2,459,163	4,172,149	6,631,311	100%	6,631,311
94,379	30,662	142,239	2,892,697	4,267,161	7,159,858	100%	7,159,858
100,323	30,693	130,978	2,669,777	3,405,425	6,075,202	100%	6,075,202
106,950	30,270	120,958	3,269,028	3,628,738	6,897,766	100%	6,897,766
109,174	29,493	108,499	2,649,676	2,603,975	5,253,651	100%	5,253,651
112,807	27,236	98,335	3,100,271	2,655,052	5,755,323	100%	5,755,323
118,283	21,893	90,494	4,183,697	3,167,289	7,350,987	100%	7,350,987
121,376	13,950	82,330	2,805,606	1,893,584	4,699,190	100%	4,699,190
109,274	9,554	67,372	874,196	538,976	1,413,171	100%	1,413,171
95,479	8,302	55,548	286,436	166,643	453,080	100%	453,079.51
48,331	27,068	26,969	48,331	26,969	75,300	100%	75,300
70,938	-	36,316	-	-	-	100%	-
70,938	-	36,316	-	-	-	100%	-
	TOTAL		**27,438,757**	**30,922,603**	**58,361,360**		**58,361,360**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8, EXHIBIT 5, SHEET 4, COL. (26)
(7A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (26)
(8) SECTION 8, EXHIBIT 5, SHEET 4, COL. (28)
(8A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (28)

(9) SECTION 8, EXHIBIT 5, SHEET 4, COL. (27)
(9A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) ACTIVE MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF LIABILITY FOR ACTIVE MINERS - HIGH ESTIMATE

HIGH

(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	15%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF ACTIVE MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER ENTITLEMENTS	NUMBER OF SURVIVOR ENTITLEMENTS	MINER INDEMNITY PER ENTITLEMENT	SURVIVOR INDEMNITY PER ENTITLEMENT	MINER MEDICAL PER ENTITLEMENT	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	18	0.6%	15	2	-	696,753	325,531	1,465,049	1,393,507	2,930,098	4,323,605	100%	4,323,605
20 - 24	22	9.2%	239	36	2	623,384	283,373	1,168,568	23,008,560	42,068,436	65,076,997	100%	65,076,997
25 - 29	27	10.4%	269	40	2	543,461	236,691	882,518	22,211,817	35,300,713	57,512,529	100%	57,512,529
30 - 34	32	11.4%	296	44	3	474,642	196,255	667,696	21,473,031	29,378,606	50,851,637	100%	50,851,637
35 - 39	37	10.2%	264	40	2	414,690	162,173	505,350	16,911,935	20,213,991	37,125,925	100%	37,125,925
40 - 44	42	11.7%	304	46	3	363,359	132,251	383,585	17,111,278	17,644,917	34,756,195	100%	34,756,195
45 - 49	47	9.4%	243	36	2	312,832	107,288	288,211	11,476,530	10,375,582	21,852,111	100%	21,852,111
50 - 54	52	10.5%	272	41	2	271,895	82,894	218,674	11,313,466	8,965,616	20,279,082	100%	20,279,082
55 - 59	57	13.4%	347	52	3	240,190	56,614	168,859	12,659,738	8,780,680	21,440,419	100%	21,440,419
60 - 64	62	8.8%	229	34	2	211,901	31,218	131,348	7,267,061	4,465,840	11,732,901	100%	11,732,901
65 - 69	67	2.9%	75	11	1	171,872	18,987	96,319	1,909,581	1,059,508	2,969,088	100%	2,969,088
70 - 74	71	1.0%	27	4	-	141,541	13,655	74,703	566,165	298,810	864,975	100%	864,975
75 - 79	77	0.3%	8	1	-	69,681	42,277	35,625	69,681	35,625	105,306	100%	105,306
80 - 84	84	0.1%	2	-	-	90,921	-	42,648	-	-	-	100%	-
85 - 89	86	0.1%	2	-	-	90,921	-	42,648	-	-	-	100%	-
TOTAL			**2,592**	**387**	**22**				**147,372,349**	**181,518,421**	**328,890,771**		**328,890,771**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
80,006	29,625	180,229	160,012	360,458	520,470	100%	520,470
83,740	30,114	168,174	3,074,857	6,054,276	9,129,133	100%	9,129,133
88,820	30,511	154,524	3,613,823	6,180,961	9,794,784	100%	9,794,784
94,379	30,662	142,239	4,244,667	6,258,502	10,503,169	100%	10,503,169
100,323	30,693	130,978	4,074,295	5,239,116	9,313,411	100%	9,313,411
106,950	30,270	120,958	5,010,491	5,564,065	10,574,556	100%	10,574,556
109,174	29,493	108,499	3,989,261	3,905,962	7,895,223	100%	7,895,223
112,807	27,236	98,335	4,679,573	4,031,746	8,711,320	100%	8,711,320
118,283	21,893	90,494	6,216,405	4,705,687	10,922,092	100%	10,922,092
121,376	13,950	82,330	4,154,696	2,799,211	6,953,907	100%	6,953,907
109,274	9,554	67,372	1,211,573	741,092	1,952,665	100%	1,952,665
95,479	8,302	55,548	381,915	222,191	604,106	100%	604,106
48,331	27,068	26,969	48,331	26,969	75,300	100%	75,300
70,938	-	36,316	-	-	-	100%	-
70,938	-	36,316	-	-	-	100%	-
	TOTAL		**40,859,900**	**46,090,236**	**86,950,136**		**86,950,136**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8, EXHIBIT 5, SHEET 4, COL. (26)
(7A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (26)
(8) SECTION 8, EXHIBIT 5, SHEET 4, COL. (28)
(8A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (28)

(9) SECTION 8, EXHIBIT 5, SHEET 4, COL. (27)
(9A) SECTION 8, EXHIBIT 5, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) ACTIVE MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 42

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	383,803	991,197	786,810	585,774
DISCOUNTED	190,974	378,924	279,974	249,312

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.033	4.049	0.390	40.0%	0.943	0.057	591,223	251,063	44,613	15,875	1,201,834	2,237,281	90,688	199,102	371,479	12,589
22	1.806	3.207	0.456	40.0%	0.950	0.050	595,355	252,818	39,425	14,029	1,075,278	1,784,523	71,205	208,394	346,632	11,564
27	1.558	2.397	0.555	40.0%	0.960	0.040	601,693	255,509	31,468	11,197	937,419	1,347,696	49,026	221,037	318,497	9,687
32	1.344	1.791	0.676	40.0%	0.972	0.028	609,200	258,697	22,045	7,844	818,713	1,019,640	29,627	234,871	293,175	7,122
37	1.159	1.338	0.822	40.0%	0.984	0.016	617,025	262,020	12,222	4,349	715,301	771,721	14,168	249,662	269,965	4,144
42	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
47	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
52	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
57	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
62	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
67	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
71	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
77	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
84	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-
86	1.000	1.000	1.000	40.0%	1.000	-	626,760	266,154	-	-	626,760	585,774	-	266,154	249,312	-

(1) SECTION 8, EXHIBIT 5, SHEET 3A, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3A, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3A, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 5, SHEET 3A, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 47

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	305,355	822,711	659,482	424,276
DISCOUNTED	166,695	344,383	257,601	204,163

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.357	5.418	0.321	40.0%	0.918	0.082	470,087	218,179	54,338	21,225	1,107,791	2,109,477	128,051	164,864	325,489	16,038
22	2.094	4.292	0.375	40.0%	0.924	0.076	473,373	219,705	50,108	19,573	991,138	1,682,583	104,915	172,558	303,718	15,373
27	1.806	3.207	0.456	40.0%	0.934	0.066	478,412	222,043	43,621	17,039	864,066	1,270,709	78,784	183,027	279,066	14,045
32	1.558	2.397	0.555	40.0%	0.946	0.054	484,381	224,814	35,938	14,038	754,649	961,394	55,990	194,483	256,879	12,144
37	1.344	1.791	0.676	40.0%	0.958	0.042	490,602	227,701	27,928	10,909	659,329	727,637	37,533	206,730	236,543	9,904
42	1.159	1.338	0.822	40.0%	0.973	0.027	498,343	231,294	17,963	7,017	577,716	552,312	20,825	220,386	218,447	6,686
47	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
52	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
57	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
62	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
67	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
71	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
77	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
84	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-
86	1.000	1.000	1.000	40.0%	1.000	-	512,298	237,771	-	-	512,298	424,276	-	237,771	204,163	-

(1) SECTION 8, EXHIBIT 5, SHEET 3B, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3B, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3B, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 5, SHEET 3B, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 52

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	238,843	667,903	539,582	304,005
DISCOUNTED	142,407	307,787	233,195	164,085

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	2.732	7.251	0.264	40.0%	0.882	0.118	361,970	183,918	63,751	27,552	988,869	1,943,903	174,163	132,421	276,522	19,837
22	2.427	5.743	0.308	40.0%	0.888	0.112	364,501	185,203	60,425	26,114	884,739	1,550,516	146,668	138,601	258,027	19,543
27	2.094	4.292	0.375	40.0%	0.897	0.103	368,381	187,175	55,324	23,910	771,308	1,170,970	115,837	147,009	237,083	18,779
32	1.806	3.207	0.456	40.0%	0.909	0.091	372,977	189,510	49,283	21,299	673,637	885,933	89,011	156,210	218,234	17,557
37	1.558	2.397	0.555	40.0%	0.920	0.080	377,767	191,944	42,985	18,577	588,549	670,524	66,970	166,048	200,957	16,071
42	1.344	1.791	0.676	40.0%	0.935	0.065	383,728	194,973	35,150	15,191	515,698	508,961	47,239	177,016	185,583	13,792
47	1.159	1.338	0.822	40.0%	0.961	0.039	394,473	200,432	21,025	9,087	457,302	390,975	24,374	190,980	173,448	8,658
52	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
57	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
62	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
67	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
71	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
77	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
84	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-
86	1.000	1.000	1.000	40.0%	1.000	-	410,467	208,559	-	-	410,467	304,005	-	208,559	164,085	-

(1) SECTION 8, EXHIBIT 5, SHEET 3C, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3C, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3C, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 5, SHEET 3C, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 57

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	184,009	534,051	434,507	216,071
DISCOUNTED	119,170	270,646	207,719	129,634

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	3.167	9.704	0.217	40.0%	0.827	0.173	267,811	148,574	75,382	36,037	848,165	1,732,906	238,736	101,928	225,214	24,723
22	2.814	7.686	0.253	40.0%	0.832	0.168	269,683	149,613	72,871	34,837	758,851	1,382,218	205,050	106,685	210,151	24,841
27	2.427	5.743	0.308	40.0%	0.841	0.159	272,554	151,205	69,022	32,996	661,560	1,043,870	167,533	113,158	193,093	24,693
32	2.094	4.292	0.375	40.0%	0.852	0.148	275,954	153,092	64,462	30,817	577,787	789,771	134,969	120,240	177,742	24,204
37	1.806	3.207	0.456	40.0%	0.863	0.137	279,499	155,058	59,709	28,544	504,806	597,744	107,841	127,812	163,670	23,529
42	1.558	2.397	0.555	40.0%	0.876	0.124	283,909	157,505	53,795	25,717	442,321	453,717	83,811	136,255	151,149	22,247
47	1.344	1.791	0.676	40.0%	0.901	0.099	291,859	161,915	43,135	20,621	392,234	348,537	57,969	147,003	141,266	18,722
52	1.159	1.338	0.822	40.0%	0.937	0.063	303,692	168,480	27,266	13,035	352,063	271,007	31,609	160,534	133,640	12,420
57	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
62	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
67	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
71	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
77	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
84	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-
86	1.000	1.000	1.000	40.0%	1.000	-	324,026	179,760	-	-	324,026	216,071	-	179,760	129,634	-

(1) SECTION 8, EXHIBIT 5, SHEET 3D, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3D, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3D, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 5, SHEET 3D, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 62

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	139,164	420,596	344,622	151,934
DISCOUNTED	97,268	233,557	181,646	100,315

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	3.671	12.985	0.178	40.0%	0.746	0.254	187,825	113,248	87,494	46,117	689,590	1,472,039	321,231	74,029	173,047	30,146
22	3.262	10.286	0.208	40.0%	0.751	0.249	189,138	114,040	85,697	45,170	616,974	1,174,143	279,547	77,484	161,473	30,690
27	2.814	7.686	0.253	40.0%	0.759	0.241	191,151	115,254	82,941	43,717	537,873	886,728	233,383	82,185	148,366	31,173
32	2.427	5.743	0.308	40.0%	0.769	0.231	193,536	116,692	79,676	41,996	469,762	670,881	193,395	87,329	136,571	31,429
37	2.094	4.292	0.375	40.0%	0.779	0.221	196,022	118,190	76,273	40,202	410,426	507,761	159,698	92,828	125,759	31,575
42	1.806	3.207	0.456	40.0%	0.791	0.209	199,115	120,055	72,039	37,971	359,623	385,415	130,110	98,960	116,138	31,299
47	1.558	2.397	0.555	40.0%	0.813	0.187	204,690	123,417	64,406	33,948	318,901	296,069	100,342	106,766	108,544	29,367
52	1.344	1.791	0.676	40.0%	0.846	0.154	212,989	128,421	53,045	27,959	286,240	230,210	71,287	116,594	102,684	25,384
57	1.159	1.338	0.822	40.0%	0.903	0.097	227,250	137,019	33,522	17,669	263,445	183,544	38,862	130,557	99,606	16,836
62	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
67	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
71	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
77	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
84	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-
86	1.000	1.000	1.000	40.0%	1.000	-	251,737	151,784	-	-	251,737	151,934	-	151,784	100,315	-

(1) SECTION 8, EXHIBIT 5, SHEET 3E, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3E, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3E, ROW 12 * ROW 16
(4) SECTION 8, EXHIBIT 5, SHEET 3E, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 67

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	103,933	326,510	269,195	106,419
DISCOUNTED	77,791	197,793	155,777	76,463

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	4.256	17.378	0.146	40.0%	0.630	0.370	121,499	79,204	99,698	57,693	517,126	1,164,407	424,335	49,333	122,433	35,934
22	3.782	13.765	0.171	40.0%	0.634	0.366	122,348	79,758	98,513	57,007	462,671	928,767	372,535	51,636	114,244	36,906
27	3.262	10.286	0.208	40.0%	0.641	0.359	123,651	80,607	96,696	55,955	403,353	701,417	315,425	54,768	104,971	38,019
32	2.814	7.686	0.253	40.0%	0.649	0.351	125,193	81,613	94,544	54,710	352,276	530,678	266,033	58,196	96,626	39,013
37	2.427	5.743	0.308	40.0%	0.657	0.343	126,801	82,661	92,300	53,412	307,780	401,647	224,037	61,861	88,976	39,972
42	2.094	4.292	0.375	40.0%	0.667	0.333	128,802	83,965	89,509	51,797	269,683	304,870	187,412	65,947	82,169	40,682
47	1.806	3.207	0.456	40.0%	0.686	0.314	132,409	86,316	84,478	48,885	239,145	234,196	152,576	71,149	76,796	40,295
52	1.558	2.397	0.555	40.0%	0.714	0.286	137,777	89,816	76,988	44,551	214,652	182,100	119,945	77,699	72,651	38,541
57	1.344	1.791	0.676	40.0%	0.762	0.238	147,002	95,830	64,119	37,104	197,558	145,187	86,171	87,004	70,473	33,687
62	1.159	1.338	0.822	40.0%	0.844	0.156	162,842	106,156	42,022	24,317	188,778	120,182	48,715	101,149	70,975	23,170
67	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
71	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
77	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
84	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-
86	1.000	1.000	1.000	40.0%	1.000	-	192,964	125,792	-	-	192,964	106,419	-	125,792	76,463	-

(1) SECTION 8, EXHIBIT 5, SHEET 3F, ROW 17
(2) SECTION 8, EXHIBIT 5, SHEET 3F, ROW 18
(3) SECTION 8, EXHIBIT 5, SHEET 3F, ROW 12 * ROW 16
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 72

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	77,740	250,420	207,205	75,291
DISCOUNTED	61,827	164,748	131,012	58,225

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	4.934	23.255	0.120	40.0%	0.475	0.525	69,734	48,922	108,784	68,782	344,079	831,664	536,756	29,035	77,359	40,821
22	4.384	18.420	0.141	40.0%	0.478	0.522	70,222	49,264	108,096	68,347	307,846	663,360	473,885	30,390	72,185	42,162
27	3.782	13.765	0.171	40.0%	0.483	0.517	70,969	49,788	107,041	67,680	268,378	500,978	404,787	32,233	66,326	43,816
32	3.262	10.286	0.208	40.0%	0.489	0.511	71,855	50,410	105,792	66,890	234,393	379,030	345,097	34,251	61,053	45,448
37	2.814	7.686	0.253	40.0%	0.496	0.504	72,778	51,057	104,489	66,067	204,787	286,872	294,018	36,408	56,219	47,111
42	2.427	5.743	0.308	40.0%	0.504	0.496	73,926	51,863	102,868	65,042	179,438	217,750	249,689	38,812	51,918	48,675
47	2.094	4.292	0.375	40.0%	0.518	0.482	75,996	53,315	99,947	63,195	159,119	167,271	209,267	41,874	48,524	49,634
52	1.806	3.207	0.456	40.0%	0.539	0.461	79,077	55,477	95,598	60,445	142,823	130,063	172,661	45,729	45,904	49,824
57	1.558	2.397	0.555	40.0%	0.575	0.425	84,372	59,191	88,126	55,720	131,449	103,698	137,297	51,205	44,528	48,203
62	1.344	1.791	0.676	40.0%	0.637	0.363	93,463	65,569	75,294	47,607	125,607	85,839	101,189	59,530	44,845	43,223
67	1.159	1.338	0.822	40.0%	0.754	0.246	110,752	77,698	50,894	32,179	128,392	76,009	59,000	74,033	48,313	30,662
71	1.030	1.060	0.962	40.0%	0.936	0.064	137,419	96,406	13,257	8,382	141,541	74,703	13,655	95,479	55,548	8,302
77	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-
84	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-
86	1.000	1.000	1.000	40.0%	1.000	-	146,812	102,996	-	-	146,812	75,291	-	102,996	58,225	-

(1) SECTION 8, EXHIBIT 5, SHEET 3G, ROW 17
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 80

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	47,349	156,280	129,553	42,648
DISCOUNTED	40,874	116,033	93,303	36,316

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
18	6.250	37.065	0.088	40.0%	0.219	0.781	19,916	15,539	101,175	72,865	124,481	346,250	632,383	8,536	25,914	40,028
22	5.553	29.359	0.103	40.0%	0.221	0.779	20,055	15,647	100,976	72,723	111,373	276,180	560,763	8,934	24,181	41,524
27	4.790	21.939	0.125	40.0%	0.223	0.777	20,268	15,814	100,672	72,503	97,094	208,575	482,262	9,476	22,218	43,447
32	4.132	16.394	0.152	40.0%	0.226	0.774	20,521	16,011	100,312	72,244	84,799	157,803	414,514	10,069	20,451	45,435
37	3.565	12.250	0.185	40.0%	0.229	0.771	20,785	16,217	99,936	71,973	74,088	119,435	356,225	10,704	18,832	47,505
42	3.075	9.154	0.225	40.0%	0.232	0.768	21,113	16,473	99,469	71,637	64,917	90,657	305,846	11,411	17,392	49,623
47	2.652	6.841	0.274	40.0%	0.239	0.761	21,704	16,934	98,627	71,030	57,566	69,641	261,591	12,311	16,254	51,638
52	2.288	5.112	0.333	40.0%	0.248	0.752	22,584	17,620	97,373	70,127	51,671	54,150	222,782	13,444	15,377	53,505
57	1.974	3.820	0.406	40.0%	0.265	0.735	24,096	18,800	95,218	68,576	47,556	43,173	187,921	15,054	14,916	54,911
62	1.702	2.854	0.494	40.0%	0.294	0.706	26,693	20,826	91,519	65,911	45,442	35,738	155,804	17,501	15,022	55,390
67	1.469	2.133	0.601	40.0%	0.348	0.652	31,630	24,678	84,483	60,844	46,450	31,645	124,066	21,765	16,184	53,662
71	1.305	1.689	0.703	40.0%	0.432	0.568	39,246	30,620	73,631	53,029	51,207	31,101	96,072	28,070	18,607	48,612
77	1.093	1.191	0.889	40.0%	0.701	0.299	63,768	49,753	38,690	27,864	69,681	35,625	42,277	48,331	26,969	27,068
84	1.000	1.000	1.000	40.0%	1.000	-	90,921	70,938	-	-	90,921	42,648	-	70,938	36,316	-
86	1.000	1.000	1.000	40.0%	1.000	-	90,921	70,938	-	-	90,921	42,648	-	70,938	36,316	-

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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 42

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	42.00	M		
	CLAIMANT 2 (y)	38.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			51.12	25.44
(12)	APV FOR CLAIMANT 2			104.81	37.29
(13)	APV FOR BOTH CLAIMANTS ALIVE			47.78	24.51
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			60.37	13.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			383,803	190,974
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			991,197	378,924
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			97.629	41.552
(23)	APV OF MEDICAL BENEFIT			585,774	249,312

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.004	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.005	0.001	0.996	0.999	0.995	0.005	0.962	1.030	1.060
2	0.006	0.001	0.991	0.999	0.990	0.010	0.925	1.061	1.124
3	0.006	0.001	0.985	0.998	0.984	0.016	0.889	1.093	1.191
4	0.007	0.001	0.979	0.997	0.977	0.023	0.855	1.126	1.262
5	0.007	0.001	0.973	0.996	0.969	0.031	0.822	1.159	1.338
6	0.007	0.001	0.966	0.996	0.962	0.038	0.790	1.194	1.419
7	0.008	0.001	0.959	0.995	0.954	0.046	0.760	1.230	1.504
8	0.008	0.001	0.952	0.994	0.946	0.054	0.731	1.267	1.594
9	0.009	0.001	0.944	0.993	0.937	0.063	0.703	1.305	1.689
10	0.010	0.001	0.935	0.992	0.927	0.072	0.676	1.344	1.791
11	0.012	0.001	0.925	0.990	0.916	0.083	0.650	1.384	1.898
12	0.013	0.001	0.914	0.989	0.904	0.095	0.625	1.426	2.012
13	0.014	0.002	0.903	0.988	0.891	0.107	0.601	1.469	2.133
14	0.015	0.002	0.890	0.986	0.878	0.121	0.577	1.513	2.261
15	0.017	0.002	0.876	0.984	0.863	0.136	0.555	1.558	2.397
16	0.018	0.002	0.861	0.983	0.846	0.151	0.534	1.605	2.540
17	0.020	0.002	0.846	0.980	0.829	0.168	0.513	1.653	2.693
18	0.022	0.003	0.829	0.978	0.811	0.186	0.494	1.702	2.854
19	0.024	0.003	0.811	0.976	0.791	0.205	0.475	1.754	3.026
20	0.027	0.003	0.791	0.973	0.770	0.225	0.456	1.806	3.207
21	0.030	0.004	0.770	0.970	0.746	0.247	0.439	1.860	3.400
22	0.033	0.004	0.747	0.966	0.722	0.270	0.422	1.916	3.604
23	0.037	0.005	0.723	0.962	0.695	0.295	0.406	1.974	3.820
24	0.041	0.006	0.696	0.957	0.666	0.321	0.390	2.033	4.049
25	0.046	0.007	0.667	0.951	0.635	0.349	0.375	2.094	4.292
26	0.050	0.008	0.637	0.945	0.602	0.378	0.361	2.157	4.549
27	0.055	0.009	0.605	0.938	0.567	0.408	0.347	2.221	4.822
28	0.059	0.010	0.572	0.929	0.532	0.438	0.333	2.288	5.112
29	0.064	0.011	0.538	0.920	0.495	0.468	0.321	2.357	5.418
30	0.069	0.012	0.504	0.911	0.458	0.497	0.308	2.427	5.743
31	0.074	0.013	0.469	0.900	0.422	0.525	0.296	2.500	6.088
32	0.080	0.014	0.434	0.888	0.386	0.551	0.285	2.575	6.453
33	0.086	0.015	0.400	0.876	0.350	0.575	0.274	2.652	6.841
34	0.094	0.017	0.365	0.863	0.315	0.598	0.264	2.732	7.251
35	0.102	0.018	0.331	0.849	0.281	0.618	0.253	2.814	7.686
36	0.111	0.020	0.297	0.833	0.248	0.635	0.244	2.898	8.147
37	0.121	0.023	0.264	0.816	0.216	0.649	0.234	2.985	8.636
38	0.131	0.025	0.232	0.798	0.185	0.659	0.225	3.075	9.154
39	0.141	0.028	0.202	0.778	0.157	0.666	0.217	3.167	9.704
40	0.151	0.032	0.173	0.756	0.131	0.667	0.208	3.262	10.286
41	0.162	0.035	0.147	0.732	0.108	0.663	0.200	3.360	10.903
42	0.173	0.039	0.123	0.706	0.087	0.655	0.193	3.461	11.557
43	0.186	0.044	0.102	0.678	0.069	0.642	0.185	3.565	12.250
44	0.201	0.049	0.083	0.648	0.054	0.624	0.178	3.671	12.985
45	0.218	0.055	0.066	0.616	0.041	0.601	0.171	3.782	13.765
46	0.237	0.061	0.052	0.582	0.030	0.574	0.165	3.895	14.590
47	0.258	0.068	0.040	0.547	0.022	0.543	0.158	4.012	15.466
48	0.282	0.075	0.029	0.510	0.015	0.509	0.152	4.132	16.394
49	0.309	0.084	0.021	0.471	0.010	0.473	0.146	4.256	17.378
50	0.339	0.094	0.015	0.432	0.006	0.434	0.141	4.384	18.420
51	0.371	0.105	0.010	0.391	0.004	0.393	0.135	4.515	19.525
52	0.406	0.116	0.006	0.350	0.002	0.352	0.130	4.651	20.697
53	0.444	0.129	0.004	0.310	0.001	0.311	0.125	4.790	21.939
54	0.475	0.142	0.002	0.270	0.001	0.271	0.120	4.934	23.255
55	0.506	0.156	0.001	0.231	0.000	0.232	0.116	5.082	24.650
56	0.539	0.171	0.001	0.195	0.000	0.196	0.111	5.235	26.129
57	0.575	0.186	0.000	0.162	0.000	0.162	0.107	5.392	27.697
58	0.616	0.203	0.000	0.132	0.000	0.132	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 47

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	47.00	M		
	CLAIMANT 2 (y)	43.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			40.68	22.20
(12)	APV FOR CLAIMANT 2			87.85	34.31
(13)	APV FOR BOTH CLAIMANTS ALIVE			37.85	21.28
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			52.82	13.95
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			305,355	166,695
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			822,711	344,383
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			70.713	34.027
(23)	APV OF MEDICAL BENEFIT			424,276	204,163

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.007	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.007	0.001	0.993	0.999	0.992	0.008	0.962	1.030	1.060
2	0.008	0.001	0.986	0.998	0.984	0.016	0.925	1.061	1.124
3	0.008	0.001	0.978	0.997	0.976	0.024	0.889	1.093	1.191
4	0.009	0.001	0.970	0.996	0.966	0.033	0.855	1.126	1.262
5	0.010	0.001	0.961	0.995	0.956	0.043	0.822	1.159	1.338
6	0.012	0.001	0.951	0.994	0.945	0.054	0.790	1.194	1.419
7	0.013	0.001	0.940	0.993	0.933	0.067	0.760	1.230	1.504
8	0.014	0.002	0.928	0.991	0.920	0.080	0.731	1.267	1.594
9	0.015	0.002	0.915	0.990	0.905	0.094	0.703	1.305	1.689
10	0.017	0.002	0.901	0.988	0.890	0.109	0.676	1.344	1.791
11	0.018	0.002	0.886	0.986	0.873	0.125	0.650	1.384	1.898
12	0.020	0.002	0.869	0.984	0.855	0.142	0.625	1.426	2.012
13	0.022	0.003	0.852	0.982	0.836	0.161	0.601	1.469	2.133
14	0.024	0.003	0.833	0.979	0.816	0.181	0.577	1.513	2.261
15	0.027	0.003	0.813	0.976	0.794	0.202	0.555	1.558	2.397
16	0.030	0.004	0.791	0.973	0.770	0.224	0.534	1.605	2.540
17	0.033	0.004	0.768	0.969	0.744	0.248	0.513	1.653	2.693
18	0.037	0.005	0.743	0.965	0.717	0.274	0.494	1.702	2.854
19	0.041	0.006	0.715	0.960	0.687	0.302	0.475	1.754	3.026
20	0.046	0.007	0.686	0.954	0.655	0.331	0.456	1.806	3.207
21	0.050	0.008	0.655	0.948	0.621	0.361	0.439	1.860	3.400
22	0.055	0.009	0.622	0.941	0.585	0.392	0.422	1.916	3.604
23	0.059	0.010	0.588	0.933	0.548	0.424	0.406	1.974	3.820
24	0.064	0.011	0.553	0.924	0.511	0.455	0.390	2.033	4.049
25	0.069	0.012	0.518	0.914	0.473	0.485	0.375	2.094	4.292
26	0.074	0.013	0.482	0.903	0.435	0.514	0.361	2.157	4.549
27	0.080	0.014	0.447	0.892	0.398	0.542	0.347	2.221	4.822
28	0.086	0.015	0.411	0.879	0.361	0.568	0.333	2.288	5.112
29	0.094	0.017	0.376	0.866	0.325	0.591	0.321	2.357	5.418
30	0.102	0.018	0.340	0.852	0.290	0.612	0.308	2.427	5.743
31	0.111	0.020	0.306	0.836	0.256	0.631	0.296	2.500	6.088
32	0.121	0.023	0.272	0.819	0.222	0.646	0.285	2.575	6.453
33	0.131	0.025	0.239	0.801	0.191	0.657	0.274	2.652	6.841
34	0.141	0.028	0.207	0.780	0.162	0.664	0.264	2.732	7.251
35	0.151	0.032	0.178	0.758	0.135	0.666	0.253	2.814	7.686
36	0.162	0.035	0.151	0.734	0.111	0.663	0.244	2.898	8.147
37	0.173	0.039	0.127	0.708	0.090	0.655	0.234	2.985	8.636
38	0.186	0.044	0.105	0.680	0.071	0.642	0.225	3.075	9.154
39	0.201	0.049	0.085	0.650	0.055	0.625	0.217	3.167	9.704
40	0.218	0.055	0.068	0.618	0.042	0.602	0.208	3.262	10.286
41	0.237	0.061	0.053	0.584	0.031	0.575	0.200	3.360	10.903
42	0.258	0.068	0.041	0.549	0.022	0.545	0.193	3.461	11.557
43	0.282	0.075	0.030	0.512	0.015	0.511	0.185	3.565	12.250
44	0.309	0.084	0.022	0.473	0.010	0.474	0.178	3.671	12.985
45	0.339	0.094	0.015	0.433	0.006	0.435	0.171	3.782	13.765
46	0.371	0.105	0.010	0.393	0.004	0.395	0.165	3.895	14.590
47	0.406	0.116	0.006	0.352	0.002	0.353	0.158	4.012	15.466
48	0.444	0.129	0.004	0.311	0.001	0.312	0.152	4.132	16.394
49	0.475	0.142	0.002	0.271	0.001	0.272	0.146	4.256	17.378
50	0.506	0.156	0.001	0.232	0.000	0.233	0.141	4.384	18.420
51	0.539	0.171	0.001	0.196	0.000	0.196	0.135	4.515	19.525
52	0.575	0.186	0.000	0.163	0.000	0.163	0.130	4.651	20.697
53	0.616	0.203	0.000	0.132	0.000	0.132	0.125	4.790	21.939
54	0.661	0.220	0.000	0.106	0.000	0.106	0.120	4.934	23.255
55	0.713	0.238	0.000	0.082	0.000	0.082	0.116	5.082	24.650
56	0.773	0.257	0.000	0.063	0.000	0.063	0.111	5.235	26.129
57	0.841	0.276	0.000	0.047	0.000	0.047	0.107	5.392	27.697
58	0.918	0.297	0.000	0.034	0.000	0.034	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 52

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	52.00	M		
	CLAIMANT 2 (y)	48.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			31.82	18.97
(12)	APV FOR CLAIMANT 2			71.88	31.06
(13)	APV FOR BOTH CLAIMANTS ALIVE			29.43	18.06
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			44.82	13.91
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			238,843	142,407
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			667,903	307,787
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			50.667	27.347
(23)	APV OF MEDICAL BENEFIT			304,005	164,085

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.010	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.012	0.001	0.990	0.999	0.988	0.012	0.962	1.030	1.060
2	0.013	0.001	0.978	0.997	0.976	0.024	0.925	1.061	1.124
3	0.014	0.002	0.966	0.996	0.962	0.038	0.889	1.093	1.191
4	0.015	0.002	0.952	0.994	0.947	0.053	0.855	1.126	1.262
5	0.017	0.002	0.937	0.993	0.930	0.069	0.822	1.159	1.338
6	0.018	0.002	0.922	0.991	0.913	0.086	0.790	1.194	1.419
7	0.020	0.002	0.905	0.989	0.895	0.104	0.760	1.230	1.504
8	0.022	0.003	0.887	0.987	0.875	0.124	0.731	1.267	1.594
9	0.024	0.003	0.867	0.984	0.853	0.145	0.703	1.305	1.689
10	0.027	0.003	0.846	0.981	0.830	0.167	0.676	1.344	1.791
11	0.030	0.004	0.824	0.978	0.805	0.191	0.650	1.384	1.898
12	0.033	0.004	0.799	0.974	0.778	0.216	0.625	1.426	2.012
13	0.037	0.005	0.773	0.970	0.750	0.244	0.601	1.469	2.133
14	0.041	0.006	0.745	0.965	0.718	0.273	0.577	1.513	2.261
15	0.046	0.007	0.714	0.959	0.685	0.303	0.555	1.558	2.397
16	0.050	0.008	0.682	0.953	0.649	0.336	0.534	1.605	2.540
17	0.055	0.009	0.647	0.946	0.612	0.369	0.513	1.653	2.693
18	0.059	0.010	0.612	0.937	0.573	0.402	0.494	1.702	2.854
19	0.064	0.011	0.575	0.928	0.534	0.435	0.475	1.754	3.026
20	0.069	0.012	0.539	0.918	0.495	0.468	0.456	1.806	3.207
21	0.074	0.013	0.502	0.907	0.455	0.499	0.439	1.860	3.400
22	0.080	0.014	0.465	0.896	0.416	0.528	0.422	1.916	3.604
23	0.086	0.015	0.428	0.884	0.378	0.555	0.406	1.974	3.820
24	0.094	0.017	0.391	0.870	0.340	0.581	0.390	2.033	4.049
25	0.102	0.018	0.354	0.856	0.303	0.604	0.375	2.094	4.292
26	0.111	0.020	0.318	0.840	0.267	0.624	0.361	2.157	4.549
27	0.121	0.023	0.283	0.823	0.233	0.641	0.347	2.221	4.822
28	0.131	0.025	0.248	0.805	0.200	0.653	0.333	2.288	5.112
29	0.141	0.028	0.216	0.784	0.169	0.661	0.321	2.357	5.418
30	0.151	0.032	0.185	0.762	0.141	0.665	0.308	2.427	5.743
31	0.162	0.035	0.157	0.738	0.116	0.663	0.296	2.500	6.088
32	0.173	0.039	0.132	0.712	0.094	0.656	0.285	2.575	6.453
33	0.186	0.044	0.109	0.684	0.075	0.644	0.274	2.652	6.841
34	0.201	0.049	0.089	0.654	0.058	0.626	0.264	2.732	7.251
35	0.218	0.055	0.071	0.621	0.044	0.604	0.253	2.814	7.686
36	0.237	0.061	0.055	0.587	0.033	0.578	0.244	2.898	8.147
37	0.258	0.068	0.042	0.552	0.023	0.547	0.234	2.985	8.636
38	0.282	0.075	0.031	0.514	0.016	0.513	0.225	3.075	9.154
39	0.309	0.084	0.023	0.475	0.011	0.477	0.217	3.167	9.704
40	0.339	0.094	0.016	0.435	0.007	0.438	0.208	3.262	10.286
41	0.371	0.105	0.010	0.395	0.004	0.397	0.200	3.360	10.903
42	0.406	0.116	0.006	0.353	0.002	0.355	0.193	3.461	11.557
43	0.444	0.129	0.004	0.312	0.001	0.314	0.185	3.565	12.250
44	0.475	0.142	0.002	0.272	0.001	0.273	0.178	3.671	12.985
45	0.506	0.156	0.001	0.233	0.000	0.234	0.171	3.782	13.765
46	0.539	0.171	0.001	0.197	0.000	0.197	0.165	3.895	14.590
47	0.575	0.186	0.000	0.163	0.000	0.164	0.158	4.012	15.466
48	0.616	0.203	0.000	0.133	0.000	0.133	0.152	4.132	16.394
49	0.661	0.220	0.000	0.106	0.000	0.106	0.146	4.256	17.378
50	0.713	0.238	0.000	0.083	0.000	0.083	0.141	4.384	18.420
51	0.773	0.257	0.000	0.063	0.000	0.063	0.135	4.515	19.525
52	0.841	0.276	0.000	0.047	0.000	0.047	0.130	4.651	20.697
53	0.918	0.297	0.000	0.034	0.000	0.034	0.125	4.790	21.939
54	1.000	0.317	0.000	0.024	0.000	0.024	0.120	4.934	23.255
55	-	0.339	-	0.016	-	0.016	0.116	5.082	24.650
56	-	0.361	-	0.011	-	0.011	0.111	5.235	26.129
57	-	0.384	-	0.007	-	0.007	0.107	5.392	27.697
58	-	0.405	-	0.004	-	0.004	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 57

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	57.00	M		
	CLAIMANT 2 (y)	53.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			24.51	15.87
(12)	APV FOR CLAIMANT 2			57.88	27.67
(13)	APV FOR BOTH CLAIMANTS ALIVE			22.50	14.98
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			37.40	13.59
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			184,009	119,170
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			534,051	270,646
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			36.012	21.606
(23)	APV OF MEDICAL BENEFIT			216,071	129,634

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.017	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.018	0.002	0.983	0.998	0.981	0.019	0.962	1.030	1.060
2	0.020	0.002	0.965	0.996	0.961	0.039	0.925	1.061	1.124
3	0.022	0.003	0.946	0.994	0.940	0.060	0.889	1.093	1.191
4	0.024	0.003	0.925	0.991	0.917	0.082	0.855	1.126	1.262
5	0.027	0.003	0.903	0.988	0.892	0.107	0.822	1.159	1.338
6	0.030	0.004	0.879	0.985	0.865	0.133	0.790	1.194	1.419
7	0.033	0.004	0.853	0.981	0.837	0.161	0.760	1.230	1.504
8	0.037	0.005	0.825	0.977	0.806	0.190	0.731	1.267	1.594
9	0.041	0.006	0.794	0.972	0.772	0.222	0.703	1.305	1.689
10	0.046	0.007	0.762	0.966	0.736	0.256	0.676	1.344	1.791
11	0.050	0.008	0.727	0.960	0.698	0.291	0.650	1.384	1.898
12	0.055	0.009	0.691	0.952	0.658	0.327	0.625	1.426	2.012
13	0.059	0.010	0.653	0.944	0.616	0.364	0.601	1.469	2.133
14	0.064	0.011	0.614	0.935	0.574	0.401	0.577	1.513	2.261
15	0.069	0.012	0.575	0.925	0.532	0.437	0.555	1.558	2.397
16	0.074	0.013	0.535	0.914	0.489	0.471	0.534	1.605	2.540
17	0.080	0.014	0.496	0.902	0.447	0.503	0.513	1.653	2.693
18	0.086	0.015	0.456	0.890	0.406	0.534	0.494	1.702	2.854
19	0.094	0.017	0.417	0.877	0.366	0.563	0.475	1.754	3.026
20	0.102	0.018	0.378	0.862	0.326	0.588	0.456	1.806	3.207
21	0.111	0.020	0.339	0.846	0.287	0.611	0.439	1.860	3.400
22	0.121	0.023	0.301	0.829	0.250	0.631	0.422	1.916	3.604
23	0.131	0.025	0.265	0.810	0.215	0.646	0.406	1.974	3.820
24	0.141	0.028	0.230	0.790	0.182	0.656	0.390	2.033	4.049
25	0.151	0.032	0.198	0.767	0.152	0.662	0.375	2.094	4.292
26	0.162	0.035	0.168	0.743	0.125	0.661	0.361	2.157	4.549
27	0.173	0.039	0.141	0.717	0.101	0.656	0.347	2.221	4.822
28	0.186	0.044	0.116	0.689	0.080	0.645	0.333	2.288	5.112
29	0.201	0.049	0.095	0.658	0.062	0.628	0.321	2.357	5.418
30	0.218	0.055	0.076	0.626	0.047	0.607	0.308	2.427	5.743
31	0.237	0.061	0.059	0.592	0.035	0.581	0.296	2.500	6.088
32	0.258	0.068	0.045	0.556	0.025	0.551	0.285	2.575	6.453
33	0.282	0.075	0.033	0.518	0.017	0.517	0.274	2.652	6.841
34	0.309	0.084	0.024	0.479	0.012	0.480	0.264	2.732	7.251
35	0.339	0.094	0.017	0.439	0.007	0.441	0.253	2.814	7.686
36	0.371	0.105	0.011	0.398	0.004	0.400	0.244	2.898	8.147
37	0.406	0.116	0.007	0.356	0.002	0.358	0.234	2.985	8.636
38	0.444	0.129	0.004	0.315	0.001	0.316	0.225	3.075	9.154
39	0.475	0.142	0.002	0.274	0.001	0.275	0.217	3.167	9.704
40	0.506	0.156	0.001	0.235	0.000	0.236	0.208	3.262	10.286
41	0.539	0.171	0.001	0.198	0.000	0.199	0.200	3.360	10.903
42	0.575	0.186	0.000	0.165	0.000	0.165	0.193	3.461	11.557
43	0.616	0.203	0.000	0.134	0.000	0.134	0.185	3.565	12.250
44	0.661	0.220	0.000	0.107	0.000	0.107	0.178	3.671	12.985
45	0.713	0.238	0.000	0.083	0.000	0.083	0.171	3.782	13.765
46	0.773	0.257	0.000	0.064	0.000	0.064	0.165	3.895	14.590
47	0.841	0.276	0.000	0.047	0.000	0.047	0.158	4.012	15.466
48	0.918	0.297	0.000	0.034	0.000	0.034	0.152	4.132	16.394
49	1.000	0.317	0.000	0.024	0.000	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 62

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	62.00	M		
	CLAIMANT 2 (y)	58.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			18.54	12.96
(12)	APV FOR CLAIMANT 2			45.91	24.20
(13)	APV FOR BOTH CLAIMANTS ALIVE			16.83	12.08
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			30.78	12.99
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			139,164	97,268
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			420,596	233,557
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			25.322	16.719
(23)	APV OF MEDICAL BENEFIT			151,934	100,315

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.027	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.030	0.004	0.973	0.997	0.970	0.030	0.962	1.030	1.060
2	0.033	0.004	0.945	0.993	0.938	0.062	0.925	1.061	1.124
3	0.037	0.005	0.913	0.988	0.903	0.096	0.889	1.093	1.191
4	0.041	0.006	0.880	0.983	0.865	0.133	0.855	1.126	1.262
5	0.046	0.007	0.844	0.978	0.825	0.171	0.822	1.159	1.338
6	0.050	0.008	0.805	0.971	0.782	0.212	0.790	1.194	1.419
7	0.055	0.009	0.765	0.964	0.737	0.254	0.760	1.230	1.504
8	0.059	0.010	0.723	0.955	0.691	0.297	0.731	1.267	1.594
9	0.064	0.011	0.680	0.946	0.643	0.339	0.703	1.305	1.689
10	0.069	0.012	0.637	0.936	0.596	0.381	0.676	1.344	1.791
11	0.074	0.013	0.593	0.925	0.548	0.421	0.650	1.384	1.898
12	0.080	0.014	0.549	0.913	0.501	0.459	0.625	1.426	2.012
13	0.086	0.015	0.505	0.901	0.455	0.496	0.601	1.469	2.133
14	0.094	0.017	0.462	0.887	0.410	0.530	0.577	1.513	2.261
15	0.102	0.018	0.419	0.873	0.365	0.561	0.555	1.558	2.397
16	0.111	0.020	0.376	0.857	0.322	0.589	0.534	1.605	2.540
17	0.121	0.023	0.334	0.839	0.280	0.613	0.513	1.653	2.693
18	0.131	0.025	0.294	0.820	0.241	0.632	0.494	1.702	2.854
19	0.141	0.028	0.255	0.799	0.204	0.647	0.475	1.754	3.026
20	0.151	0.032	0.219	0.777	0.170	0.655	0.456	1.806	3.207
21	0.162	0.035	0.186	0.752	0.140	0.658	0.439	1.860	3.400
22	0.173	0.039	0.156	0.725	0.113	0.655	0.422	1.916	3.604
23	0.186	0.044	0.129	0.697	0.090	0.646	0.406	1.974	3.820
24	0.201	0.049	0.105	0.666	0.070	0.631	0.390	2.033	4.049
25	0.218	0.055	0.084	0.633	0.053	0.611	0.375	2.094	4.292
26	0.237	0.061	0.066	0.599	0.039	0.586	0.361	2.157	4.549
27	0.258	0.068	0.050	0.562	0.028	0.556	0.347	2.221	4.822
28	0.282	0.075	0.037	0.524	0.019	0.522	0.333	2.288	5.112
29	0.309	0.084	0.027	0.485	0.013	0.485	0.321	2.357	5.418
30	0.339	0.094	0.018	0.444	0.008	0.446	0.308	2.427	5.743
31	0.371	0.105	0.012	0.402	0.005	0.405	0.296	2.500	6.088
32	0.406	0.116	0.008	0.360	0.003	0.362	0.285	2.575	6.453
33	0.444	0.129	0.005	0.318	0.001	0.320	0.274	2.652	6.841
34	0.475	0.142	0.003	0.277	0.001	0.278	0.264	2.732	7.251
35	0.506	0.156	0.001	0.238	0.000	0.239	0.253	2.814	7.686
36	0.539	0.171	0.001	0.201	0.000	0.201	0.244	2.898	8.147
37	0.575	0.186	0.000	0.167	0.000	0.167	0.234	2.985	8.636
38	0.616	0.203	0.000	0.136	0.000	0.136	0.225	3.075	9.154
39	0.661	0.220	0.000	0.108	0.000	0.108	0.217	3.167	9.704
40	0.713	0.238	0.000	0.084	0.000	0.084	0.208	3.262	10.286
41	0.773	0.257	0.000	0.064	0.000	0.064	0.200	3.360	10.903
42	0.841	0.276	0.000	0.048	0.000	0.048	0.193	3.461	11.557
43	0.918	0.297	0.000	0.035	0.000	0.035	0.185	3.565	12.250
44	1.000	0.317	0.000	0.024	0.000	0.024	0.178	3.671	12.985
45	-	0.339	-	0.017	-	0.017	0.171	3.782	13.765
46	-	0.361	-	0.011	-	0.011	0.165	3.895	14.590
47	-	0.384	-	0.007	-	0.007	0.158	4.012	15.466
48	-	0.405	-	0.004	-	0.004	0.152	4.132	16.394
49	-	0.425	-	0.003	-	0.003	0.146	4.256	17.378
50	-	0.444	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.464	-	0.001	-	0.001	0.135	4.515	19.525
52	-	0.482	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.495	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 67

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	67.00	M		
	CLAIMANT 2 (y)	63.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			13.84	10.36
(12)	APV FOR CLAIMANT 2			35.86	20.75
(13)	APV FOR BOTH CLAIMANTS ALIVE			12.42	9.53
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			24.87	12.06
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			103,933	77,791
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			326,510	197,793
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			17.737	12.744
(23)	APV OF MEDICAL BENEFIT			106,419	76,463

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.008	0.954	0.993	0.948	0.052	0.962	1.030	1.060
2	0.055	0.009	0.907	0.986	0.894	0.105	0.925	1.061	1.124
3	0.059	0.010	0.857	0.977	0.837	0.159	0.889	1.093	1.191
4	0.064	0.011	0.806	0.968	0.780	0.214	0.855	1.126	1.262
5	0.069	0.012	0.754	0.957	0.722	0.267	0.822	1.159	1.338
6	0.074	0.013	0.703	0.946	0.665	0.319	0.790	1.194	1.419
7	0.080	0.014	0.651	0.934	0.608	0.369	0.760	1.230	1.504
8	0.086	0.015	0.599	0.921	0.552	0.417	0.731	1.267	1.594
9	0.094	0.017	0.547	0.907	0.497	0.461	0.703	1.305	1.689
10	0.102	0.018	0.496	0.892	0.443	0.503	0.676	1.344	1.791
11	0.111	0.020	0.445	0.876	0.390	0.541	0.650	1.384	1.898
12	0.121	0.023	0.396	0.858	0.340	0.575	0.625	1.426	2.012
13	0.131	0.025	0.348	0.839	0.292	0.603	0.601	1.469	2.133
14	0.141	0.028	0.302	0.818	0.247	0.626	0.577	1.513	2.261
15	0.151	0.032	0.260	0.794	0.206	0.641	0.555	1.558	2.397
16	0.162	0.035	0.221	0.769	0.170	0.650	0.534	1.605	2.540
17	0.173	0.039	0.185	0.742	0.137	0.653	0.513	1.653	2.693
18	0.186	0.044	0.153	0.713	0.109	0.648	0.494	1.702	2.854
19	0.201	0.049	0.124	0.681	0.085	0.636	0.475	1.754	3.026
20	0.218	0.055	0.099	0.648	0.064	0.619	0.456	1.806	3.207
21	0.237	0.061	0.078	0.612	0.048	0.595	0.439	1.860	3.400
22	0.258	0.068	0.059	0.575	0.034	0.566	0.422	1.916	3.604
23	0.282	0.075	0.044	0.536	0.024	0.533	0.406	1.974	3.820
24	0.309	0.084	0.032	0.496	0.016	0.496	0.390	2.033	4.049
25	0.339	0.094	0.022	0.454	0.010	0.456	0.375	2.094	4.292
26	0.371	0.105	0.014	0.411	0.006	0.414	0.361	2.157	4.549
27	0.406	0.116	0.009	0.368	0.003	0.371	0.347	2.221	4.822
28	0.444	0.129	0.005	0.326	0.002	0.327	0.333	2.288	5.112
29	0.475	0.142	0.003	0.284	0.001	0.285	0.321	2.357	5.418
30	0.506	0.156	0.002	0.243	0.000	0.244	0.308	2.427	5.743
31	0.539	0.171	0.001	0.205	0.000	0.206	0.296	2.500	6.088
32	0.575	0.186	0.000	0.170	0.000	0.171	0.285	2.575	6.453
33	0.616	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	0.661	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	0.713	0.238	0.000	0.086	0.000	0.086	0.253	2.814	7.686
36	0.773	0.257	0.000	0.066	0.000	0.066	0.244	2.898	8.147
37	0.841	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.918	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	1.000	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	-	0.339	-	0.017	-	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 72

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	72.00	M		
	CLAIMANT 2 (y)	68.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			10.36	8.24
(12)	APV FOR CLAIMANT 2			27.60	17.45
(13)	APV FOR BOTH CLAIMANTS ALIVE			9.19	7.48
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			19.57	10.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			77,740	61,827
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			250,420	164,748
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			12.549	9.704
(23)	APV OF MEDICAL BENEFIT			75,291	58,225

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.013	0.931	0.988	0.920	0.079	0.962	1.030	1.060
2	0.080	0.014	0.863	0.976	0.842	0.155	0.925	1.061	1.124
3	0.086	0.015	0.794	0.962	0.764	0.228	0.889	1.093	1.191
4	0.094	0.017	0.726	0.948	0.688	0.298	0.855	1.126	1.262
5	0.102	0.018	0.658	0.932	0.613	0.364	0.822	1.159	1.338
6	0.111	0.020	0.590	0.915	0.540	0.425	0.790	1.194	1.419
7	0.121	0.023	0.525	0.896	0.470	0.480	0.760	1.230	1.504
8	0.131	0.025	0.461	0.876	0.404	0.529	0.731	1.267	1.594
9	0.141	0.028	0.401	0.854	0.342	0.570	0.703	1.305	1.689
10	0.151	0.032	0.344	0.830	0.286	0.603	0.676	1.344	1.791
11	0.162	0.035	0.292	0.803	0.235	0.626	0.650	1.384	1.898
12	0.173	0.039	0.245	0.775	0.190	0.640	0.625	1.426	2.012
13	0.186	0.044	0.203	0.744	0.151	0.645	0.601	1.469	2.133
14	0.201	0.049	0.165	0.712	0.117	0.642	0.577	1.513	2.261
15	0.218	0.055	0.132	0.677	0.089	0.630	0.555	1.558	2.397
16	0.237	0.061	0.103	0.640	0.066	0.611	0.534	1.605	2.540
17	0.258	0.068	0.079	0.601	0.047	0.585	0.513	1.653	2.693
18	0.282	0.075	0.058	0.560	0.033	0.553	0.494	1.702	2.854
19	0.309	0.084	0.042	0.518	0.022	0.516	0.475	1.754	3.026
20	0.339	0.094	0.029	0.474	0.014	0.476	0.456	1.806	3.207
21	0.371	0.105	0.019	0.430	0.008	0.432	0.439	1.860	3.400
22	0.406	0.116	0.012	0.385	0.005	0.388	0.422	1.916	3.604
23	0.444	0.129	0.007	0.340	0.002	0.342	0.406	1.974	3.820
24	0.475	0.142	0.004	0.296	0.001	0.298	0.390	2.033	4.049
25	0.506	0.156	0.002	0.254	0.001	0.255	0.375	2.094	4.292
26	0.539	0.171	0.001	0.215	0.000	0.215	0.361	2.157	4.549
27	0.575	0.186	0.000	0.178	0.000	0.178	0.347	2.221	4.822
28	0.616	0.203	0.000	0.145	0.000	0.145	0.333	2.288	5.112
29	0.661	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.713	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.773	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.841	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.918	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	1.000	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	-	0.339	-	0.018	-	0.018	0.253	2.814	7.686
36	-	0.361	-	0.012	-	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 80

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	80.00	M		
	CLAIMANT 2 (y)	76.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			6.31	5.44
(12)	APV FOR CLAIMANT 2			17.26	12.43
(13)	APV FOR BOTH CLAIMANTS ALIVE			5.49	4.83
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			12.58	8.21
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,260	11,260
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,507	7,507
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			47,349	40,874
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			156,280	116,033
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			625.60	625.60
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,507.20	7,507.20
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,000.00	6,000.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			7.108	6.053
(23)	APV OF MEDICAL BENEFIT			42,648	36,316

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	0.028	0.869	0.975	0.847	0.150	0.962	1.030	1.060
2	0.151	0.032	0.747	0.947	0.707	0.279	0.925	1.061	1.124
3	0.162	0.035	0.634	0.917	0.581	0.388	0.889	1.093	1.191
4	0.173	0.039	0.531	0.885	0.470	0.476	0.855	1.126	1.262
5	0.186	0.044	0.439	0.850	0.373	0.543	0.822	1.159	1.338
6	0.201	0.049	0.357	0.812	0.290	0.589	0.790	1.194	1.419
7	0.218	0.055	0.285	0.772	0.220	0.617	0.760	1.230	1.504
8	0.237	0.061	0.223	0.730	0.163	0.627	0.731	1.267	1.594
9	0.258	0.068	0.170	0.686	0.117	0.622	0.703	1.305	1.689
10	0.282	0.075	0.126	0.639	0.081	0.604	0.676	1.344	1.791
11	0.309	0.084	0.091	0.591	0.054	0.574	0.650	1.384	1.898
12	0.339	0.094	0.063	0.541	0.034	0.536	0.625	1.426	2.012
13	0.371	0.105	0.041	0.491	0.020	0.491	0.601	1.469	2.133
14	0.406	0.116	0.026	0.439	0.011	0.442	0.577	1.513	2.261
15	0.444	0.129	0.015	0.388	0.006	0.392	0.555	1.558	2.397
16	0.475	0.142	0.009	0.338	0.003	0.341	0.534	1.605	2.540
17	0.506	0.156	0.005	0.290	0.001	0.292	0.513	1.653	2.693
18	0.539	0.171	0.002	0.245	0.001	0.246	0.494	1.702	2.854
19	0.575	0.186	0.001	0.203	0.000	0.204	0.475	1.754	3.026
20	0.616	0.203	0.000	0.165	0.000	0.166	0.456	1.806	3.207
21	0.661	0.220	0.000	0.132	0.000	0.132	0.439	1.860	3.400
22	0.713	0.238	0.000	0.103	0.000	0.103	0.422	1.916	3.604
23	0.773	0.257	0.000	0.078	0.000	0.078	0.406	1.974	3.820
24	0.841	0.276	0.000	0.058	0.000	0.058	0.390	2.033	4.049
25	0.918	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	1.000	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	-	0.339	-	0.020	-	0.020	0.347	2.221	4.822
28	-	0.361	-	0.013	-	0.013	0.333	2.288	5.112
29	-	0.384	-	0.009	-	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF WEIGHTED NOMINAL BENEFITS PER CLAIM FOR ACTIVE MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 42			NOMINAL ESTIMATES AT ENTITLEMENT AGE 47			NOMINAL ESTIMATES AT ENTITLEMENT AGE 52			NOMINAL ESTIMATES AT ENTITLEMENT AGE 57			NOMINAL ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	1,201,834	2,237,281	90,688	1,107,791	2,109,477	128,051	988,869	1,943,903	174,163	848,165	1,732,906	238,736	689,590	1,472,039	321,231
20 - 24	1,075,278	1,784,523	71,205	991,138	1,682,583	104,915	884,739	1,550,516	146,668	758,851	1,382,218	205,050	616,974	1,174,143	279,547
25 - 29	937,419	1,347,696	49,026	864,066	1,270,709	78,784	771,308	1,170,970	115,837	661,560	1,043,870	167,533	537,873	886,728	233,383
30 - 34	818,713	1,019,640	29,627	754,649	961,394	55,990	673,637	885,933	89,011	577,787	789,771	134,969	469,762	670,881	193,395
35 - 39	715,301	771,721	14,168	659,329	727,637	37,533	588,549	670,524	66,970	504,806	597,744	107,841	410,426	507,761	159,698
40 - 44	626,760	585,774	-	577,716	552,312	20,825	515,698	508,961	47,239	442,321	453,717	83,811	359,623	385,415	130,110
45 - 49	626,760	585,774	-	512,298	424,276	-	457,302	390,975	24,374	392,234	348,537	57,969	318,901	296,069	100,342
50 - 54	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	352,063	271,007	31,609	286,240	230,210	71,287
55 - 59	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	263,445	183,544	38,862
60 - 64	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
65 - 69	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
70 - 74	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
75 - 79	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
80 - 84	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-
85 - 89	626,760	585,774	-	512,298	424,276	-	410,467	304,005	-	324,026	216,071	-	251,737	151,934	-

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 67			NOMINAL ESTIMATES AT ENTITLEMENT AGE 72			NOMINAL ESTIMATES AT ENTITLEMENT AGE 80			NOMINAL ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	517,126	1,164,407	424,335	344,079	831,664	536,756	124,481	346,250	632,383	696,753	1,465,049	325,531
20 - 24	462,671	928,767	372,535	307,846	663,360	473,885	111,373	276,180	560,763	623,384	1,168,568	283,373
25 - 29	403,353	701,417	315,425	268,378	500,978	404,787	97,094	208,575	482,262	543,461	882,518	236,691
30 - 34	352,276	530,678	266,033	234,393	379,030	345,097	84,799	157,803	414,514	474,642	667,696	196,255
35 - 39	307,780	401,647	224,037	204,787	286,872	294,018	74,088	119,435	356,225	414,690	505,350	162,173
40 - 44	269,683	304,870	187,412	179,438	217,750	249,689	64,917	90,657	305,846	363,359	383,585	132,251
45 - 49	239,145	234,196	152,576	159,119	167,271	209,267	57,566	69,641	261,591	312,832	288,211	107,288
50 - 54	214,652	182,100	119,945	142,823	130,063	172,661	51,671	54,150	222,782	271,895	218,674	82,894
55 - 59	197,558	145,187	86,171	131,449	103,698	137,297	47,556	43,173	187,921	240,190	168,859	56,614
60 - 64	188,778	120,182	48,715	125,607	85,839	101,189	45,442	35,738	155,804	211,901	131,348	31,218
65 - 69	192,964	106,419	-	128,392	76,009	59,000	46,450	31,645	124,066	171,872	96,319	18,987
70 - 74	192,964	106,419	-	141,541	74,703	13,655	51,207	31,101	96,072	141,541	74,703	13,655
75 - 79	192,964	106,419	-	146,812	75,291	-	69,681	35,625	42,277	69,681	35,625	42,277
80 - 84	192,964	106,419	-	146,812	75,291	-	90,921	42,648	-	90,921	42,648	-
85 - 89	192,964	106,419	-	146,812	75,291	-	90,921	42,648	-	90,921	42,648	-

(1)	OHIO COAL SURVEY DATA
(2)-(4)	SECTION 8, EXHIBIT 5, SHEET 2A, COL. (16), (17), (18)
(5)-(7)	SECTION 8, EXHIBIT 5, SHEET 2B, COL. (16), (17), (18)
(8)-(10)	SECTION 8, EXHIBIT 5, SHEET 2C, COL. (16), (17), (18)
(11)-(13)	SECTION 8, EXHIBIT 5, SHEET 2D, COL. (16), (17), (18)
(14)-(16)	SECTION 8, EXHIBIT 5, SHEET 2E, COL. (16), (17), (18)
(17)-(19)	SECTION 8, EXHIBIT 5, SHEET 2F, COL. (16), (17), (18)
(20) - (22)	SECTION 8, EXHIBIT 5, SHEET 2G, COL. (16), (17), (18)
(23) - (25)	SECTION 8, EXHIBIT 5, SHEET 2H, COL. (16), (17), (18)
(26) - (28)	WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

CALCULATION OF WEIGHTED DISCOUNTED BENEFITS PER CLAIM FOR ACTIVE MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 42			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 47			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 52			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 57			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	199,102	371,479	12,589	164,864	325,489	16,038	132,421	276,522	19,837	101,928	225,214	24,723	74,029	173,047	30,146
20 - 24	208,394	346,632	11,564	172,558	303,718	15,373	138,601	258,027	19,543	106,685	210,151	24,841	77,484	161,473	30,690
25 - 29	221,037	318,497	9,687	183,027	279,066	14,045	147,009	237,083	18,779	113,158	193,093	24,693	82,185	148,366	31,173
30 - 34	234,871	293,175	7,122	194,483	256,879	12,144	156,210	218,234	17,557	120,240	177,742	24,204	87,329	136,571	31,429
35 - 39	249,662	269,965	4,144	206,730	236,543	9,904	166,048	200,957	16,071	127,812	163,670	23,529	92,828	125,759	31,575
40 - 44	266,154	249,312	-	220,386	218,447	6,686	177,016	185,583	13,792	136,255	151,149	22,247	98,960	116,138	31,299
45 - 49	266,154	249,312	-	237,771	204,163	-	190,980	173,448	8,658	147,003	141,266	18,722	106,766	108,544	29,367
50 - 54	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	160,534	133,640	12,420	116,594	102,684	25,384
55 - 59	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	130,557	99,606	16,836
60 - 64	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
65 - 69	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
70 - 74	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
75 - 79	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
80 - 84	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-
85 - 89	266,154	249,312	-	237,771	204,163	-	208,559	164,085	-	179,760	129,634	-	151,784	100,315	-

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 67			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 72			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 80			DISCOUNTED ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	49,333	122,433	35,934	29,035	77,359	40,821	8,536	25,914	40,028	80,006	180,229	29,625
20 - 24	51,636	114,244	36,906	30,390	72,185	42,162	8,934	24,181	41,524	83,740	168,174	30,114
25 - 29	54,768	104,971	38,019	32,233	66,326	43,816	9,476	22,218	43,447	88,820	154,524	30,511
30 - 34	58,196	96,626	39,013	34,251	61,053	45,448	10,069	20,451	45,435	94,379	142,239	30,662
35 - 39	61,861	88,976	39,972	36,408	56,219	47,111	10,704	18,832	47,505	100,323	130,978	30,693
40 - 44	65,947	82,169	40,682	38,812	51,918	48,675	11,411	17,392	49,623	106,950	120,958	30,270
45 - 49	71,149	76,796	40,295	41,874	48,524	49,634	12,311	16,254	51,638	109,174	108,499	29,493
50 - 54	77,699	72,651	38,541	45,729	45,904	49,824	13,444	15,377	53,505	112,807	98,335	27,236
55 - 59	87,004	70,473	33,687	51,205	44,528	48,203	15,054	14,916	54,911	118,283	90,494	21,893
60 - 64	101,149	70,975	23,170	59,530	44,845	43,223	17,501	15,022	55,390	121,376	82,330	13,950
65 - 69	125,792	76,463	-	74,033	48,313	30,662	21,765	16,184	53,662	109,274	67,372	9,554
70 - 74	125,792	76,463	-	95,479	55,548	8,302	28,070	18,607	48,612	95,479	55,548	8,302
75 - 79	125,792	76,463	-	102,996	58,225	-	48,331	26,969	27,068	48,331	26,969	27,068
80 - 84	125,792	76,463	-	102,996	58,225	-	70,938	36,316	-	70,938	36,316	-
85 - 89	125,792	76,463	-	102,996	58,225	-	70,938	36,316	-	70,938	36,316	-

(1)	OHIO COAL SURVEY DATA
(2)-(4)	SECTION 8, EXHIBIT 5, SHEET 2A, COL. (19), (20), (21)
(5)-(7)	SECTION 8, EXHIBIT 5, SHEET 2B, COL. (19), (20), (21)
(8)-(10)	SECTION 8, EXHIBIT 5, SHEET 2C, COL. (19), (20), (21)
(11)-(13)	SECTION 8, EXHIBIT 5, SHEET 2D, COL. (19), (20), (21)
(14)-(16)	SECTION 8, EXHIBIT 5, SHEET 2E, COL. (19), (20), (21)
(17)-(19)	SECTION 8, EXHIBIT 5, SHEET 2F, COL. (19), (20), (21)
(20) - (22)	SECTION 8, EXHIBIT 5, SHEET 2G, COL. (19), (20), (21)
(23) - (25)	SECTION 8, EXHIBIT 5, SHEET 2H, COL. (19), (20), (21)
(26) - (28)	WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

WEIGHTS FOR DEFERRED ANNUITY VALUES

Age @ Entitlement	Active Miners	16-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-85
42	Weights for deferred annuity values - current age to age @ entitlement	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%							
47		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.2%						
52		7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.7%	5.1%					
57		19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	20.1%	18.5%				
62		37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	38.8%	41.0%	44.3%	52.8%			
67		20.7%	20.7%	20.7%	20.7%	20.7%	20.7%	21.6%	23.1%	25.4%	33.2%	71.0%		
72		7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	8.2%	8.7%	9.4%	12.6%	26.1%	100.0%	
80		1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.9%	2.1%	2.4%	1.5%	2.9%	0.0%	
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

The Weights for each age grouping represent the conditional probability of a Miner claim filing being entitled

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
TABLE OF MONTHLY BLACK LUNG BENEFIT RATES

SECTION 8
EXHIBIT 6
SHEET 1

EFFECTIVE DATE	PRIMARY BENEFICIARY	PRIMARY BENEFICIARY & 1 DEPENDENT	PRIMARY BENEFICIARY & 2 DEPENDENTS	PRIMARY BENEFICIARY & 3 OR MORE DEPENDENTS	ANNUAL INCREASE
(1)	(2)	(3)	(4)	(5)	(6)
10/01/81 - 09/30/82	293.20	439.80	513.10	586.40	
10/01/82 - 12/31/83	304.90	457.40	533.60	609.80	4.0%
01/01/84 - 12/31/84	317.10	475.60	554.90	634.20	4.0%
01/01/85 - 12/31/86	328.20	492.30	574.30	656.40	3.5%
01/01/87 - 12/31/87	338.00	507.00	591.50	676.00	3.0%
01/01/88 - 12/31/88	344.80	517.20	603.40	689.50	2.0%
01/01/89 - 12/31/89	358.90	538.40	628.10	717.80	4.1%
01/01/90 - 12/31/90	371.80	557.70	650.70	743.60	3.6%
01/01/91 - 12/31/91	387.10	580.60	677.40	774.10	4.1%
01/01/92 - 12/31/92	403.30	605.00	705.80	806.60	4.2%
01/01/93 - 12/31/93	418.20	627.30	731.90	836.40	3.7%
01/01/94 - 12/31/94	427.40	641.10	748.00	854.80	2.2%
01/01/95 - 12/31/95	427.40	641.10	748.00	854.80	0.0%
01/01/96 - 12/31/96	435.10	652.70	761.50	870.20	1.8%
01/01/97 - 12/31/97	445.10	667.70	779.00	890.20	2.3%
01/01/98 - 12/31/98	455.40	683.10	796.90	910.70	2.3%
01/01/99 - 12/31/99	469.50	704.30	821.60	939.00	3.1%
01/01/00 - 12/31/00	487.40	731.00	852.80	974.70	3.8%
01/01/01 - 12/31/01	500.50	750.80	875.90	1,001.00	2.7%
01/01/02 - 12/31/02	518.00	777.00	907.00	1,037.00	3.5%
01/01/03 - 12/31/03	534.60	801.90	935.50	1,069.20	3.2%
01/01/04 - 12/31/04	549.00	823.50	960.80	1,098.00	2.7%
01/01/05 - 12/31/05	562.80	844.10	984.80	1,125.00	2.5%
01/01/06 - 12/31/06	574.60	861.80	1,005.50	1,149.10	2.1%
01/01/07 - 12/31/07	584.00	876.00	1,022.00	1,168.00	1.6%
01/01/08 - 12/31/08	599.00	898.40	1,048.10	1,197.90	2.6%
01/01/09 - 12/31/09	616.30	924.50	1,078.50	1,232.60	2.9%
01/01/10 - 12/31/10	625.60	938.30	1,094.70	1,251.10	1.5%
01/01/11 - 12/31/11	625.60	938.30	1,094.70	1,251.10	0.0%
01/01/12 - 12/31/12	625.60	938.30	1,094.70	1,251.10	0.0%
				ALL YEAR AVERAGE	2.7%
				3 YEAR AVERAGE	0.5%
				5 YEAR AVERAGE	1.4%
				10 YEAR AVERAGE	1.9%
				SELECTED ANNUAL INCREASE	**3.00%**

(1) EFFECTIVE DATE
(2) - (5) FROM THE DEPARTMENT OF LABOR WEBSITE:
http://www.dol.gov/owcp/dcmwc/benefits_part_c.htm
(6) ANNUAL GROWTH IN % IN COL (2)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

SECTION 8
EXHIBIT 6
SHEET 2

AVERAGE ANNUAL MEDICAL COSTS PER ENTITLEMENT

CALENDAR YEAR	MEDICAL PAYMENTS	ACTIVE LIVING MINER ENTITLEMENTS	AVERAGE ANNUAL MEDICAL COST PER ENTITLEMENT	6% MEDICAL TREND	TRENDED AVERAGE ANNUAL MEDICAL COST PER ENTITLEMENT
(1)	(2)	(3)	(4)	(5)	(6)
2003	164,347				
2004	143,949				
2005	430,209				
2006	338,045				
2007	293,090				
2008	177,178				
2009	250,316	35	7,152	1.262	9,029
2010	145,236	39	3,724	1.191	4,435
2011	220,462	41	5,377	1.124	6,042
2012	268,520	44	6,103	1.060	6,469
TOTAL 2009-2012	**884,533**	**159**	**5,563**		
		4 YR AVERAGE	5,589		6,494
	SELECTED AVG MEDICAL		**6,000**		

(1) CALENDAR YEAR
(2) PROVIDED BY BWC
(3) PROVIDED BY BWC
(4) = (2) / (3)
(5) 6% ANNUAL TREND TO CALENDAR YEAR 2012
(6) = (4) * (5)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	1		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		10/1/2000	
(14)	**DATE OF FILING**		10/16/2000	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		69	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	12.33	9.47
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.33	9.47
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,146.08	62.23
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	92,582	71,057
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	15.437	11.437
(28)	APV OF MEDICAL BENEFIT	92,622	68,619

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.059	-	0.945	1.000	0.945	0.055	0.962	1.030	1.060
2	0.064	-	0.889	1.000	0.889	0.111	0.925	1.061	1.124
3	0.069	-	0.832	1.000	0.832	0.168	0.889	1.093	1.191
4	0.074	-	0.775	1.000	0.775	0.225	0.855	1.126	1.262
5	0.080	-	0.718	1.000	0.718	0.282	0.822	1.159	1.338
6	0.086	-	0.661	1.000	0.661	0.339	0.790	1.194	1.419
7	0.094	-	0.604	1.000	0.604	0.396	0.760	1.230	1.504
8	0.102	-	0.547	1.000	0.547	0.453	0.731	1.267	1.594
9	0.111	-	0.491	1.000	0.491	0.509	0.703	1.305	1.689
10	0.121	-	0.437	1.000	0.437	0.563	0.676	1.344	1.791
11	0.131	-	0.384	1.000	0.384	0.616	0.650	1.384	1.898
12	0.141	-	0.334	1.000	0.334	0.666	0.625	1.426	2.012
13	0.151	-	0.287	1.000	0.287	0.713	0.601	1.469	2.133
14	0.162	-	0.243	1.000	0.243	0.757	0.577	1.513	2.261
15	0.173	-	0.204	1.000	0.204	0.796	0.555	1.558	2.397
16	0.186	-	0.169	1.000	0.169	0.831	0.534	1.605	2.540
17	0.201	-	0.137	1.000	0.137	0.863	0.513	1.653	2.693
18	0.218	-	0.110	1.000	0.110	0.890	0.494	1.702	2.854
19	0.237	-	0.086	1.000	0.086	0.914	0.475	1.754	3.026
20	0.258	-	0.065	1.000	0.065	0.935	0.456	1.806	3.207
21	0.282	-	0.048	1.000	0.048	0.952	0.439	1.860	3.400
22	0.309	-	0.035	1.000	0.035	0.965	0.422	1.916	3.604
23	0.339	-	0.024	1.000	0.024	0.976	0.406	1.974	3.820
24	0.371	-	0.016	1.000	0.016	0.984	0.390	2.033	4.049
25	0.406	-	0.010	1.000	0.010	0.990	0.375	2.094	4.292
26	0.444	-	0.006	1.000	0.006	0.994	0.361	2.157	4.549
27	0.475	-	0.003	1.000	0.003	0.997	0.347	2.221	4.822
28	0.506	-	0.002	1.000	0.002	0.998	0.333	2.288	5.112
29	0.539	-	0.001	1.000	0.001	0.999	0.321	2.357	5.418
30	0.575	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.616	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.661	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.713	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.773	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.841	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.918	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	1.000	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	2		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**	1/9/2004		
(14)	**DATE OF FILING**	1/15/2004		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	78	M	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.14	6.05
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.14	6.05
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,151.27	65.64
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	53,620	45,434
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.181	6.818
(28)	APV OF MEDICAL BENEFIT	49,086	40,907

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.111	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.121	-	0.889	1.000	0.889	0.111	0.962	1.030	1.060
2	0.131	-	0.781	1.000	0.781	0.219	0.925	1.061	1.124
3	0.141	-	0.679	1.000	0.679	0.321	0.889	1.093	1.191
4	0.151	-	0.583	1.000	0.583	0.417	0.855	1.126	1.262
5	0.162	-	0.495	1.000	0.495	0.505	0.822	1.159	1.338
6	0.173	-	0.415	1.000	0.415	0.585	0.790	1.194	1.419
7	0.186	-	0.343	1.000	0.343	0.657	0.760	1.230	1.504
8	0.201	-	0.279	1.000	0.279	0.721	0.731	1.267	1.594
9	0.218	-	0.223	1.000	0.223	0.777	0.703	1.305	1.689
10	0.237	-	0.174	1.000	0.174	0.826	0.676	1.344	1.791
11	0.258	-	0.133	1.000	0.133	0.867	0.650	1.384	1.898
12	0.282	-	0.099	1.000	0.099	0.901	0.625	1.426	2.012
13	0.309	-	0.071	1.000	0.071	0.929	0.601	1.469	2.133
14	0.339	-	0.049	1.000	0.049	0.951	0.577	1.513	2.261
15	0.371	-	0.032	1.000	0.032	0.968	0.555	1.558	2.397
16	0.406	-	0.020	1.000	0.020	0.980	0.534	1.605	2.540
17	0.444	-	0.012	1.000	0.012	0.988	0.513	1.653	2.693
18	0.475	-	0.007	1.000	0.007	0.993	0.494	1.702	2.854
19	0.506	-	0.004	1.000	0.004	0.996	0.475	1.754	3.026
20	0.539	-	0.002	1.000	0.002	0.998	0.456	1.806	3.207
21	0.575	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.616	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.661	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.713	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.773	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.841	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.918	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	1.000	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
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94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	3		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**	1/31/2008		
(14)	**DATE OF FILING**	2/4/2008		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	66	M	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.68	10.84
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	14.68	10.84
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,143.73	60.85
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	110,173	81,394
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	19.031	13.457
(28)	APV OF MEDICAL BENEFIT	114,183	80,740

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.041	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.046	-	0.959	1.000	0.959	0.041	0.962	1.030	1.060
2	0.050	-	0.915	1.000	0.915	0.085	0.925	1.061	1.124
3	0.055	-	0.869	1.000	0.869	0.131	0.889	1.093	1.191
4	0.059	-	0.822	1.000	0.822	0.178	0.855	1.126	1.262
5	0.064	-	0.773	1.000	0.773	0.227	0.822	1.159	1.338
6	0.069	-	0.723	1.000	0.723	0.277	0.790	1.194	1.419
7	0.074	-	0.674	1.000	0.674	0.326	0.760	1.230	1.504
8	0.080	-	0.624	1.000	0.624	0.376	0.731	1.267	1.594
9	0.086	-	0.574	1.000	0.574	0.426	0.703	1.305	1.689
10	0.094	-	0.525	1.000	0.525	0.475	0.676	1.344	1.791
11	0.102	-	0.476	1.000	0.476	0.524	0.650	1.384	1.898
12	0.111	-	0.427	1.000	0.427	0.573	0.625	1.426	2.012
13	0.121	-	0.380	1.000	0.380	0.620	0.601	1.469	2.133
14	0.131	-	0.334	1.000	0.334	0.666	0.577	1.513	2.261
15	0.141	-	0.290	1.000	0.290	0.710	0.555	1.558	2.397
16	0.151	-	0.249	1.000	0.249	0.751	0.534	1.605	2.540
17	0.162	-	0.212	1.000	0.212	0.788	0.513	1.653	2.693
18	0.173	-	0.177	1.000	0.177	0.823	0.494	1.702	2.854
19	0.186	-	0.147	1.000	0.147	0.853	0.475	1.754	3.026
20	0.201	-	0.119	1.000	0.119	0.881	0.456	1.806	3.207
21	0.218	-	0.095	1.000	0.095	0.905	0.439	1.860	3.400
22	0.237	-	0.074	1.000	0.074	0.926	0.422	1.916	3.604
23	0.258	-	0.057	1.000	0.057	0.943	0.406	1.974	3.820
24	0.282	-	0.042	1.000	0.042	0.958	0.390	2.033	4.049
25	0.309	-	0.030	1.000	0.030	0.970	0.375	2.094	4.292
26	0.339	-	0.021	1.000	0.021	0.979	0.361	2.157	4.549
27	0.371	-	0.014	1.000	0.014	0.986	0.347	2.221	4.822
28	0.406	-	0.009	1.000	0.009	0.991	0.333	2.288	5.112
29	0.444	-	0.005	1.000	0.005	0.995	0.321	2.357	5.418
30	0.475	-	0.003	1.000	0.003	0.997	0.308	2.427	5.743
31	0.506	-	0.002	1.000	0.002	0.998	0.296	2.500	6.088
32	0.539	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.575	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.616	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.661	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.713	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.773	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.841	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.918	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	1.000	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
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BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	4		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**	11/4/2008		
(14)	**DATE OF FILING**	11/10/2008		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	66	M	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.68	10.84
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	14.68	10.84
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,143.73	60.85
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	110,173	81,394
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	19.031	13.457
(28)	APV OF MEDICAL BENEFIT	114,183	80,740

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.041	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.046	-	0.959	1.000	0.959	0.041	0.962	1.030	1.060
2	0.050	-	0.915	1.000	0.915	0.085	0.925	1.061	1.124
3	0.055	-	0.869	1.000	0.869	0.131	0.889	1.093	1.191
4	0.059	-	0.822	1.000	0.822	0.178	0.855	1.126	1.262
5	0.064	-	0.773	1.000	0.773	0.227	0.822	1.159	1.338
6	0.069	-	0.723	1.000	0.723	0.277	0.790	1.194	1.419
7	0.074	-	0.674	1.000	0.674	0.326	0.760	1.230	1.504
8	0.080	-	0.624	1.000	0.624	0.376	0.731	1.267	1.594
9	0.086	-	0.574	1.000	0.574	0.426	0.703	1.305	1.689
10	0.094	-	0.525	1.000	0.525	0.475	0.676	1.344	1.791
11	0.102	-	0.476	1.000	0.476	0.524	0.650	1.384	1.898
12	0.111	-	0.427	1.000	0.427	0.573	0.625	1.426	2.012
13	0.121	-	0.380	1.000	0.380	0.620	0.601	1.469	2.133
14	0.131	-	0.334	1.000	0.334	0.666	0.577	1.513	2.261
15	0.141	-	0.290	1.000	0.290	0.710	0.555	1.558	2.397
16	0.151	-	0.249	1.000	0.249	0.751	0.534	1.605	2.540
17	0.162	-	0.212	1.000	0.212	0.788	0.513	1.653	2.693
18	0.173	-	0.177	1.000	0.177	0.823	0.494	1.702	2.854
19	0.186	-	0.147	1.000	0.147	0.853	0.475	1.754	3.026
20	0.201	-	0.119	1.000	0.119	0.881	0.456	1.806	3.207
21	0.218	-	0.095	1.000	0.095	0.905	0.439	1.860	3.400
22	0.237	-	0.074	1.000	0.074	0.926	0.422	1.916	3.604
23	0.258	-	0.057	1.000	0.057	0.943	0.406	1.974	3.820
24	0.282	-	0.042	1.000	0.042	0.958	0.390	2.033	4.049
25	0.309	-	0.030	1.000	0.030	0.970	0.375	2.094	4.292
26	0.339	-	0.021	1.000	0.021	0.979	0.361	2.157	4.549
27	0.371	-	0.014	1.000	0.014	0.986	0.347	2.221	4.822
28	0.406	-	0.009	1.000	0.009	0.991	0.333	2.288	5.112
29	0.444	-	0.005	1.000	0.005	0.995	0.321	2.357	5.418
30	0.475	-	0.003	1.000	0.003	0.997	0.308	2.427	5.743
31	0.506	-	0.002	1.000	0.002	0.998	0.296	2.500	6.088
32	0.539	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.575	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.616	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.661	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.713	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.773	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.841	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.918	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	1.000	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	5		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		12/17/2010	
(14)	**DATE OF FILING**		12/23/2010	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		60	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	20.78	14.10
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	20.78	14.10
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,137.63	57.59
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	155,976	105,835
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	29.191	18.573
(28)	APV OF MEDICAL BENEFIT	175,149	111,440

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.022	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.024	-	0.978	1.000	0.978	0.022	0.962	1.030	1.060
2	0.027	-	0.954	1.000	0.954	0.046	0.925	1.061	1.124
3	0.030	-	0.929	1.000	0.929	0.071	0.889	1.093	1.191
4	0.033	-	0.901	1.000	0.901	0.099	0.855	1.126	1.262
5	0.037	-	0.872	1.000	0.872	0.128	0.822	1.159	1.338
6	0.041	-	0.840	1.000	0.840	0.160	0.790	1.194	1.419
7	0.046	-	0.805	1.000	0.805	0.195	0.760	1.230	1.504
8	0.050	-	0.769	1.000	0.769	0.231	0.731	1.267	1.594
9	0.055	-	0.730	1.000	0.730	0.270	0.703	1.305	1.689
10	0.059	-	0.690	1.000	0.690	0.310	0.676	1.344	1.791
11	0.064	-	0.649	1.000	0.649	0.351	0.650	1.384	1.898
12	0.069	-	0.608	1.000	0.608	0.392	0.625	1.426	2.012
13	0.074	-	0.566	1.000	0.566	0.434	0.601	1.469	2.133
14	0.080	-	0.524	1.000	0.524	0.476	0.577	1.513	2.261
15	0.086	-	0.482	1.000	0.482	0.518	0.555	1.558	2.397
16	0.094	-	0.441	1.000	0.441	0.559	0.534	1.605	2.540
17	0.102	-	0.399	1.000	0.399	0.601	0.513	1.653	2.693
18	0.111	-	0.359	1.000	0.359	0.641	0.494	1.702	2.854
19	0.121	-	0.319	1.000	0.319	0.681	0.475	1.754	3.026
20	0.131	-	0.280	1.000	0.280	0.720	0.456	1.806	3.207
21	0.141	-	0.244	1.000	0.244	0.756	0.439	1.860	3.400
22	0.151	-	0.209	1.000	0.209	0.791	0.422	1.916	3.604
23	0.162	-	0.178	1.000	0.178	0.822	0.406	1.974	3.820
24	0.173	-	0.149	1.000	0.149	0.851	0.390	2.033	4.049
25	0.186	-	0.123	1.000	0.123	0.877	0.375	2.094	4.292
26	0.201	-	0.100	1.000	0.100	0.900	0.361	2.157	4.549
27	0.218	-	0.080	1.000	0.080	0.920	0.347	2.221	4.822
28	0.237	-	0.063	1.000	0.063	0.937	0.333	2.288	5.112
29	0.258	-	0.048	1.000	0.048	0.952	0.321	2.357	5.418
30	0.282	-	0.035	1.000	0.035	0.965	0.308	2.427	5.743
31	0.309	-	0.025	1.000	0.025	0.975	0.296	2.500	6.088
32	0.339	-	0.018	1.000	0.018	0.982	0.285	2.575	6.453
33	0.371	-	0.012	1.000	0.012	0.988	0.274	2.652	6.841
34	0.406	-	0.007	1.000	0.007	0.993	0.264	2.732	7.251
35	0.444	-	0.004	1.000	0.004	0.996	0.253	2.814	7.686
36	0.475	-	0.002	1.000	0.002	0.998	0.244	2.898	8.147
37	0.506	-	0.001	1.000	0.001	0.999	0.234	2.985	8.636
38	0.539	-	0.001	1.000	0.001	0.999	0.225	3.075	9.154
39	0.575	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.616	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.661	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.713	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.773	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.841	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.918	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	1.000	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	6		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		9/1/1997	
(14)	**DATE OF FILING**		10/28/1997	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		69	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	12.33	9.47
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.33	9.47
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,146.08	62.23
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	92,582	71,057
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	15.437	11.437
(28)	APV OF MEDICAL BENEFIT	92,622	68,619

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.059	-	0.945	1.000	0.945	0.055	0.962	1.030	1.060
2	0.064	-	0.889	1.000	0.889	0.111	0.925	1.061	1.124
3	0.069	-	0.832	1.000	0.832	0.168	0.889	1.093	1.191
4	0.074	-	0.775	1.000	0.775	0.225	0.855	1.126	1.262
5	0.080	-	0.718	1.000	0.718	0.282	0.822	1.159	1.338
6	0.086	-	0.661	1.000	0.661	0.339	0.790	1.194	1.419
7	0.094	-	0.604	1.000	0.604	0.396	0.760	1.230	1.504
8	0.102	-	0.547	1.000	0.547	0.453	0.731	1.267	1.594
9	0.111	-	0.491	1.000	0.491	0.509	0.703	1.305	1.689
10	0.121	-	0.437	1.000	0.437	0.563	0.676	1.344	1.791
11	0.131	-	0.384	1.000	0.384	0.616	0.650	1.384	1.898
12	0.141	-	0.334	1.000	0.334	0.666	0.625	1.426	2.012
13	0.151	-	0.287	1.000	0.287	0.713	0.601	1.469	2.133
14	0.162	-	0.243	1.000	0.243	0.757	0.577	1.513	2.261
15	0.173	-	0.204	1.000	0.204	0.796	0.555	1.558	2.397
16	0.186	-	0.169	1.000	0.169	0.831	0.534	1.605	2.540
17	0.201	-	0.137	1.000	0.137	0.863	0.513	1.653	2.693
18	0.218	-	0.110	1.000	0.110	0.890	0.494	1.702	2.854
19	0.237	-	0.086	1.000	0.086	0.914	0.475	1.754	3.026
20	0.258	-	0.065	1.000	0.065	0.935	0.456	1.806	3.207
21	0.282	-	0.048	1.000	0.048	0.952	0.439	1.860	3.400
22	0.309	-	0.035	1.000	0.035	0.965	0.422	1.916	3.604
23	0.339	-	0.024	1.000	0.024	0.976	0.406	1.974	3.820
24	0.371	-	0.016	1.000	0.016	0.984	0.390	2.033	4.049
25	0.406	-	0.010	1.000	0.010	0.990	0.375	2.094	4.292
26	0.444	-	0.006	1.000	0.006	0.994	0.361	2.157	4.549
27	0.475	-	0.003	1.000	0.003	0.997	0.347	2.221	4.822
28	0.506	-	0.002	1.000	0.002	0.998	0.333	2.288	5.112
29	0.539	-	0.001	1.000	0.001	0.999	0.321	2.357	5.418
30	0.575	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.616	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.661	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.713	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.773	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.841	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.918	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	1.000	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
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75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
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92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
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103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
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111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
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116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
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119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	7		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		11/1/1979	
(14)	**DATE OF FILING**		12/4/1979	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		96	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.04	1.97
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	2.04	1.97
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,156.37	69.73
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	15,294	14,763
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.094	2.018
(28)	APV OF MEDICAL BENEFIT	12,562	12,106

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.475	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.506	-	0.525	1.000	0.525	0.475	0.962	1.030	1.060
2	0.539	-	0.259	1.000	0.259	0.741	0.925	1.061	1.124
3	0.575	-	0.120	1.000	0.120	0.880	0.889	1.093	1.191
4	0.616	-	0.051	1.000	0.051	0.949	0.855	1.126	1.262
5	0.661	-	0.019	1.000	0.019	0.981	0.822	1.159	1.338
6	0.713	-	0.007	1.000	0.007	0.993	0.790	1.194	1.419
7	0.773	-	0.002	1.000	0.002	0.998	0.760	1.230	1.504
8	0.841	-	0.000	1.000	0.000	1.000	0.731	1.267	1.594
9	0.918	-	0.000	1.000	0.000	1.000	0.703	1.305	1.689
10	1.000	-	0.000	1.000	0.000	1.000	0.676	1.344	1.791
11	-	-	-	1.000	-	1.000	0.650	1.384	1.898
12	-	-	-	1.000	-	1.000	0.625	1.426	2.012
13	-	-	-	1.000	-	1.000	0.601	1.469	2.133
14	-	-	-	1.000	-	1.000	0.577	1.513	2.261
15	-	-	-	1.000	-	1.000	0.555	1.558	2.397
16	-	-	-	1.000	-	1.000	0.534	1.605	2.540
17	-	-	-	1.000	-	1.000	0.513	1.653	2.693
18	-	-	-	1.000	-	1.000	0.494	1.702	2.854
19	-	-	-	1.000	-	1.000	0.475	1.754	3.026
20	-	-	-	1.000	-	1.000	0.456	1.806	3.207
21	-	-	-	1.000	-	1.000	0.439	1.860	3.400
22	-	-	-	1.000	-	1.000	0.422	1.916	3.604
23	-	-	-	1.000	-	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	8		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		7/1/1987	
(14)	**DATE OF FILING**		8/18/1987	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		79	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.71	5.74
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.71	5.74
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,151.70	65.95
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	50,379	43,093
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.623	6.423
(28)	APV OF MEDICAL BENEFIT	45,740	38,539

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.121	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.131	-	0.879	1.000	0.879	0.121	0.962	1.030	1.060
2	0.141	-	0.764	1.000	0.764	0.236	0.925	1.061	1.124
3	0.151	-	0.656	1.000	0.656	0.344	0.889	1.093	1.191
4	0.162	-	0.557	1.000	0.557	0.443	0.855	1.126	1.262
5	0.173	-	0.467	1.000	0.467	0.533	0.822	1.159	1.338
6	0.186	-	0.386	1.000	0.386	0.614	0.790	1.194	1.419
7	0.201	-	0.314	1.000	0.314	0.686	0.760	1.230	1.504
8	0.218	-	0.251	1.000	0.251	0.749	0.731	1.267	1.594
9	0.237	-	0.196	1.000	0.196	0.804	0.703	1.305	1.689
10	0.258	-	0.150	1.000	0.150	0.850	0.676	1.344	1.791
11	0.282	-	0.111	1.000	0.111	0.889	0.650	1.384	1.898
12	0.309	-	0.080	1.000	0.080	0.920	0.625	1.426	2.012
13	0.339	-	0.055	1.000	0.055	0.945	0.601	1.469	2.133
14	0.371	-	0.036	1.000	0.036	0.964	0.577	1.513	2.261
15	0.406	-	0.023	1.000	0.023	0.977	0.555	1.558	2.397
16	0.444	-	0.014	1.000	0.014	0.986	0.534	1.605	2.540
17	0.475	-	0.008	1.000	0.008	0.992	0.513	1.653	2.693
18	0.506	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.539	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.575	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.616	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.661	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.713	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.773	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.841	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.918	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	1.000	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	9		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		3/1/1989	
(14)	**DATE OF FILING**		3/9/1989	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		71	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.98	8.63
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.98	8.63
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,147.43	63.06
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	82,456	64,822
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	13.450	10.258
(28)	APV OF MEDICAL BENEFIT	80,703	61,548

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	-	0.936	1.000	0.936	0.064	0.962	1.030	1.060
2	0.074	-	0.872	1.000	0.872	0.128	0.925	1.061	1.124
3	0.080	-	0.807	1.000	0.807	0.193	0.889	1.093	1.191
4	0.086	-	0.743	1.000	0.743	0.257	0.855	1.126	1.262
5	0.094	-	0.679	1.000	0.679	0.321	0.822	1.159	1.338
6	0.102	-	0.615	1.000	0.615	0.385	0.790	1.194	1.419
7	0.111	-	0.553	1.000	0.553	0.447	0.760	1.230	1.504
8	0.121	-	0.491	1.000	0.491	0.509	0.731	1.267	1.594
9	0.131	-	0.432	1.000	0.432	0.568	0.703	1.305	1.689
10	0.141	-	0.375	1.000	0.375	0.625	0.676	1.344	1.791
11	0.151	-	0.322	1.000	0.322	0.678	0.650	1.384	1.898
12	0.162	-	0.274	1.000	0.274	0.726	0.625	1.426	2.012
13	0.173	-	0.229	1.000	0.229	0.771	0.601	1.469	2.133
14	0.186	-	0.190	1.000	0.190	0.810	0.577	1.513	2.261
15	0.201	-	0.154	1.000	0.154	0.846	0.555	1.558	2.397
16	0.218	-	0.123	1.000	0.123	0.877	0.534	1.605	2.540
17	0.237	-	0.096	1.000	0.096	0.904	0.513	1.653	2.693
18	0.258	-	0.074	1.000	0.074	0.926	0.494	1.702	2.854
19	0.282	-	0.055	1.000	0.055	0.945	0.475	1.754	3.026
20	0.309	-	0.039	1.000	0.039	0.961	0.456	1.806	3.207
21	0.339	-	0.027	1.000	0.027	0.973	0.439	1.860	3.400
22	0.371	-	0.018	1.000	0.018	0.982	0.422	1.916	3.604
23	0.406	-	0.011	1.000	0.011	0.989	0.406	1.974	3.820
24	0.444	-	0.007	1.000	0.007	0.993	0.390	2.033	4.049
25	0.475	-	0.004	1.000	0.004	0.996	0.375	2.094	4.292
26	0.506	-	0.002	1.000	0.002	0.998	0.361	2.157	4.549
27	0.539	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.575	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.616	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.661	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.713	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.773	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.841	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.918	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	10		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		11/1/1992	
(14)	**DATE OF FILING**		11/30/1992	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		80	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.31	5.44
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.31	5.44
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.10	66.25
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	47,349	40,874
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.108	6.053
(28)	APV OF MEDICAL BENEFIT	42,648	36,316

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	-	0.869	1.000	0.869	0.131	0.962	1.030	1.060
2	0.151	-	0.747	1.000	0.747	0.253	0.925	1.061	1.124
3	0.162	-	0.634	1.000	0.634	0.366	0.889	1.093	1.191
4	0.173	-	0.531	1.000	0.531	0.469	0.855	1.126	1.262
5	0.186	-	0.439	1.000	0.439	0.561	0.822	1.159	1.338
6	0.201	-	0.357	1.000	0.357	0.643	0.790	1.194	1.419
7	0.218	-	0.285	1.000	0.285	0.715	0.760	1.230	1.504
8	0.237	-	0.223	1.000	0.223	0.777	0.731	1.267	1.594
9	0.258	-	0.170	1.000	0.170	0.830	0.703	1.305	1.689
10	0.282	-	0.126	1.000	0.126	0.874	0.676	1.344	1.791
11	0.309	-	0.091	1.000	0.091	0.909	0.650	1.384	1.898
12	0.339	-	0.063	1.000	0.063	0.937	0.625	1.426	2.012
13	0.371	-	0.041	1.000	0.041	0.959	0.601	1.469	2.133
14	0.406	-	0.026	1.000	0.026	0.974	0.577	1.513	2.261
15	0.444	-	0.015	1.000	0.015	0.985	0.555	1.558	2.397
16	0.475	-	0.009	1.000	0.009	0.991	0.534	1.605	2.540
17	0.506	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.539	-	0.002	1.000	0.002	0.998	0.494	1.702	2.854
19	0.575	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.616	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.661	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.713	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.773	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.841	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.918	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	11		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		4/1/1993	
(14)	**DATE OF FILING**		3/23/1995	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		70	M
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	11.64	9.04
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.64	9.04
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	87,390	67,891
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	14.410	10.834
(28)	APV OF MEDICAL BENEFIT	86,461	65,003

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.059	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.064	-	0.941	1.000	0.941	0.059	0.962	1.030	1.060
2	0.069	-	0.880	1.000	0.880	0.120	0.925	1.061	1.124
3	0.074	-	0.820	1.000	0.820	0.180	0.889	1.093	1.191
4	0.080	-	0.759	1.000	0.759	0.241	0.855	1.126	1.262
5	0.086	-	0.699	1.000	0.699	0.301	0.822	1.159	1.338
6	0.094	-	0.639	1.000	0.639	0.361	0.790	1.194	1.419
7	0.102	-	0.579	1.000	0.579	0.421	0.760	1.230	1.504
8	0.111	-	0.520	1.000	0.520	0.480	0.731	1.267	1.594
9	0.121	-	0.462	1.000	0.462	0.538	0.703	1.305	1.689
10	0.131	-	0.406	1.000	0.406	0.594	0.676	1.344	1.791
11	0.141	-	0.353	1.000	0.353	0.647	0.650	1.384	1.898
12	0.151	-	0.303	1.000	0.303	0.697	0.625	1.426	2.012
13	0.162	-	0.257	1.000	0.257	0.743	0.601	1.469	2.133
14	0.173	-	0.216	1.000	0.216	0.784	0.577	1.513	2.261
15	0.186	-	0.178	1.000	0.178	0.822	0.555	1.558	2.397
16	0.201	-	0.145	1.000	0.145	0.855	0.534	1.605	2.540
17	0.218	-	0.116	1.000	0.116	0.884	0.513	1.653	2.693
18	0.237	-	0.091	1.000	0.091	0.909	0.494	1.702	2.854
19	0.258	-	0.069	1.000	0.069	0.931	0.475	1.754	3.026
20	0.282	-	0.051	1.000	0.051	0.949	0.456	1.806	3.207
21	0.309	-	0.037	1.000	0.037	0.963	0.439	1.860	3.400
22	0.339	-	0.025	1.000	0.025	0.975	0.422	1.916	3.604
23	0.371	-	0.017	1.000	0.017	0.983	0.406	1.974	3.820
24	0.406	-	0.011	1.000	0.011	0.989	0.390	2.033	4.049
25	0.444	-	0.006	1.000	0.006	0.994	0.375	2.094	4.292
26	0.475	-	0.003	1.000	0.003	0.997	0.361	2.157	4.549
27	0.506	-	0.002	1.000	0.002	0.998	0.347	2.221	4.822
28	0.539	-	0.001	1.000	0.001	0.999	0.333	2.288	5.112
29	0.575	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.616	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.661	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.713	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.773	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.841	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.918	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
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99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
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103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	12		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		9/1/2009	
(14)	**DATE OF FILING**		3/30/2010	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		71	M
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.98	8.63
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.98	8.63
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	82,456	64,822
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	13.450	10.258
(28)	APV OF MEDICAL BENEFIT	80,703	61,548

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	-	0.936	1.000	0.936	0.064	0.962	1.030	1.060
2	0.074	-	0.872	1.000	0.872	0.128	0.925	1.061	1.124
3	0.080	-	0.807	1.000	0.807	0.193	0.889	1.093	1.191
4	0.086	-	0.743	1.000	0.743	0.257	0.855	1.126	1.262
5	0.094	-	0.679	1.000	0.679	0.321	0.822	1.159	1.338
6	0.102	-	0.615	1.000	0.615	0.385	0.790	1.194	1.419
7	0.111	-	0.553	1.000	0.553	0.447	0.760	1.230	1.504
8	0.121	-	0.491	1.000	0.491	0.509	0.731	1.267	1.594
9	0.131	-	0.432	1.000	0.432	0.568	0.703	1.305	1.689
10	0.141	-	0.375	1.000	0.375	0.625	0.676	1.344	1.791
11	0.151	-	0.322	1.000	0.322	0.678	0.650	1.384	1.898
12	0.162	-	0.274	1.000	0.274	0.726	0.625	1.426	2.012
13	0.173	-	0.229	1.000	0.229	0.771	0.601	1.469	2.133
14	0.186	-	0.190	1.000	0.190	0.810	0.577	1.513	2.261
15	0.201	-	0.154	1.000	0.154	0.846	0.555	1.558	2.397
16	0.218	-	0.123	1.000	0.123	0.877	0.534	1.605	2.540
17	0.237	-	0.096	1.000	0.096	0.904	0.513	1.653	2.693
18	0.258	-	0.074	1.000	0.074	0.926	0.494	1.702	2.854
19	0.282	-	0.055	1.000	0.055	0.945	0.475	1.754	3.026
20	0.309	-	0.039	1.000	0.039	0.961	0.456	1.806	3.207
21	0.339	-	0.027	1.000	0.027	0.973	0.439	1.860	3.400
22	0.371	-	0.018	1.000	0.018	0.982	0.422	1.916	3.604
23	0.406	-	0.011	1.000	0.011	0.989	0.406	1.974	3.820
24	0.444	-	0.007	1.000	0.007	0.993	0.390	2.033	4.049
25	0.475	-	0.004	1.000	0.004	0.996	0.375	2.094	4.292
26	0.506	-	0.002	1.000	0.002	0.998	0.361	2.157	4.549
27	0.539	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.575	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.616	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.661	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.713	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.773	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.841	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.918	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	13		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	2/1/2001		
(14)	**DATE OF FILING**	3/5/2001		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	82	M	
(16)	**CLAIMANT 2 (y)**	86	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		5.57	4.89
(18)	APV FOR CLAIMANT 2		8.76	7.22
(19)	APV FOR BOTH CLAIMANTS ALIVE		4.09	3.72
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		6.16	4.66
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		92,241	76,957
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		6.181	5.371
(28)	APV OF MEDICAL BENEFIT		37,088	32,227

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.151	0.075	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.162	0.084	0.849	0.925	0.785	0.204	0.962	1.030	1.060
2	0.173	0.094	0.712	0.847	0.603	0.353	0.925	1.061	1.124
3	0.186	0.105	0.588	0.767	0.451	0.453	0.889	1.093	1.191
4	0.201	0.116	0.478	0.687	0.329	0.508	0.855	1.126	1.262
5	0.218	0.129	0.382	0.607	0.232	0.525	0.822	1.159	1.338
6	0.237	0.142	0.299	0.529	0.158	0.512	0.790	1.194	1.419
7	0.258	0.156	0.228	0.454	0.104	0.475	0.760	1.230	1.504
8	0.282	0.171	0.169	0.383	0.065	0.423	0.731	1.267	1.594
9	0.309	0.186	0.121	0.318	0.039	0.362	0.703	1.305	1.689
10	0.339	0.203	0.084	0.259	0.022	0.299	0.676	1.344	1.791
11	0.371	0.220	0.055	0.206	0.011	0.239	0.650	1.384	1.898
12	0.406	0.238	0.035	0.161	0.006	0.185	0.625	1.426	2.012
13	0.444	0.257	0.021	0.123	0.003	0.138	0.601	1.469	2.133
14	0.475	0.276	0.012	0.091	0.001	0.101	0.577	1.513	2.261
15	0.506	0.297	0.006	0.066	0.000	0.071	0.555	1.558	2.397
16	0.539	0.317	0.003	0.046	0.000	0.049	0.534	1.605	2.540
17	0.575	0.339	0.001	0.032	0.000	0.033	0.513	1.653	2.693
18	0.616	0.361	0.001	0.021	0.000	0.022	0.494	1.702	2.854
19	0.661	0.384	0.000	0.013	0.000	0.014	0.475	1.754	3.026
20	0.713	0.405	0.000	0.008	0.000	0.008	0.456	1.806	3.207
21	0.773	0.425	0.000	0.005	0.000	0.005	0.439	1.860	3.400
22	0.841	0.444	0.000	0.003	0.000	0.003	0.422	1.916	3.604
23	0.918	0.464	0.000	0.002	0.000	0.002	0.406	1.974	3.820
24	1.000	0.482	0.000	0.001	0.000	0.001	0.390	2.033	4.049
25	-	0.495	-	0.000	-	0.000	0.375	2.094	4.292
26	-	0.500	-	0.000	-	0.000	0.361	2.157	4.549
27	-	0.500	-	0.000	-	0.000	0.347	2.221	4.822
28	-	0.500	-	0.000	-	0.000	0.333	2.288	5.112
29	-	0.500	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	0.500	-	0.000	-	0.000	0.274	2.652	6.841
34	-	1.000	-	0.000	-	0.000	0.264	2.732	7.251
35	-	-	-	-	-	-	0.253	2.814	7.686
36	-	-	-	-	-	-	0.244	2.898	8.147
37	-	-	-	-	-	-	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

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(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	14	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/26/2002	
(14)	**DATE OF FILING**	4/30/2002	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	67	M
(16)	**CLAIMANT 2 (y)**	66	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.84	10.36
(18)	APV FOR CLAIMANT 2	30.71	18.75
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.98	9.27
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	20.59	10.58
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	289,459	183,753
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	17.737	12.744
(28)	APV OF MEDICAL BENEFIT	106,419	76,463

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.010	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.011	0.954	0.990	0.945	0.054	0.962	1.030	1.060
2	0.055	0.012	0.907	0.980	0.888	0.110	0.925	1.061	1.124
3	0.059	0.013	0.857	0.968	0.830	0.166	0.889	1.093	1.191
4	0.064	0.014	0.806	0.956	0.770	0.221	0.855	1.126	1.262
5	0.069	0.015	0.754	0.943	0.711	0.275	0.822	1.159	1.338
6	0.074	0.017	0.703	0.929	0.652	0.326	0.790	1.194	1.419
7	0.080	0.018	0.651	0.913	0.594	0.375	0.760	1.230	1.504
8	0.086	0.020	0.599	0.897	0.537	0.422	0.731	1.267	1.594
9	0.094	0.023	0.547	0.878	0.481	0.464	0.703	1.305	1.689
10	0.102	0.025	0.496	0.858	0.426	0.503	0.676	1.344	1.791
11	0.111	0.028	0.445	0.837	0.373	0.537	0.650	1.384	1.898
12	0.121	0.032	0.396	0.813	0.322	0.565	0.625	1.426	2.012
13	0.131	0.035	0.348	0.787	0.274	0.587	0.601	1.469	2.133
14	0.141	0.039	0.302	0.759	0.230	0.602	0.577	1.513	2.261
15	0.151	0.044	0.260	0.729	0.189	0.610	0.555	1.558	2.397
16	0.162	0.049	0.221	0.697	0.154	0.610	0.534	1.605	2.540
17	0.173	0.055	0.185	0.663	0.123	0.603	0.513	1.653	2.693
18	0.186	0.061	0.153	0.627	0.096	0.588	0.494	1.702	2.854
19	0.201	0.068	0.124	0.588	0.073	0.566	0.475	1.754	3.026
20	0.218	0.075	0.099	0.549	0.054	0.539	0.456	1.806	3.207
21	0.237	0.084	0.078	0.507	0.039	0.506	0.439	1.860	3.400
22	0.258	0.094	0.059	0.465	0.028	0.469	0.422	1.916	3.604
23	0.282	0.105	0.044	0.421	0.019	0.428	0.406	1.974	3.820
24	0.309	0.116	0.032	0.377	0.012	0.385	0.390	2.033	4.049
25	0.339	0.129	0.022	0.333	0.007	0.340	0.375	2.094	4.292
26	0.371	0.142	0.014	0.290	0.004	0.296	0.361	2.157	4.549
27	0.406	0.156	0.009	0.249	0.002	0.254	0.347	2.221	4.822
28	0.444	0.171	0.005	0.210	0.001	0.213	0.333	2.288	5.112
29	0.475	0.186	0.003	0.174	0.001	0.176	0.321	2.357	5.418
30	0.506	0.203	0.002	0.142	0.000	0.143	0.308	2.427	5.743
31	0.539	0.220	0.001	0.113	0.000	0.114	0.296	2.500	6.088
32	0.575	0.238	0.000	0.088	0.000	0.089	0.285	2.575	6.453
33	0.616	0.257	0.000	0.067	0.000	0.067	0.274	2.652	6.841
34	0.661	0.276	0.000	0.050	0.000	0.050	0.264	2.732	7.251
35	0.713	0.297	0.000	0.036	0.000	0.036	0.253	2.814	7.686
36	0.773	0.317	0.000	0.025	0.000	0.025	0.244	2.898	8.147
37	0.841	0.339	0.000	0.017	0.000	0.017	0.234	2.985	8.636
38	0.918	0.361	0.000	0.012	0.000	0.012	0.225	3.075	9.154
39	1.000	0.384	0.000	0.007	0.000	0.007	0.217	3.167	9.704
40	-	0.405	-	0.005	-	0.005	0.208	3.262	10.286
41	-	0.425	-	0.003	-	0.003	0.200	3.360	10.903
42	-	0.444	-	0.002	-	0.002	0.193	3.461	11.557
43	-	0.464	-	0.001	-	0.001	0.185	3.565	12.250
44	-	0.482	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.495	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	1.000	-	0.000	-	0.000	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
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(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	15		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	9/13/2002		
(14)	**DATE OF FILING**	9/26/2002		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	55	M	
(16)	**CLAIMANT 2 (y)**	51	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	27.26	17.09
(18)	APV FOR CLAIMANT 2	63.23	29.04
(19)	APV FOR BOTH CLAIMANTS ALIVE	25.10	16.19
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	40.28	13.75
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	585,057	285,518
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	41.324	23.793
(28)	APV OF MEDICAL BENEFIT	247,943	142,756

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.014	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.015	0.002	0.986	0.998	0.984	0.016	0.962	1.030	1.060
2	0.017	0.002	0.971	0.997	0.968	0.032	0.925	1.061	1.124
3	0.018	0.002	0.954	0.995	0.949	0.050	0.889	1.093	1.191
4	0.020	0.002	0.937	0.993	0.930	0.069	0.855	1.126	1.262
5	0.022	0.003	0.918	0.990	0.909	0.090	0.822	1.159	1.338
6	0.024	0.003	0.898	0.988	0.887	0.112	0.790	1.194	1.419
7	0.027	0.003	0.876	0.985	0.863	0.135	0.760	1.230	1.504
8	0.030	0.004	0.853	0.982	0.837	0.160	0.731	1.267	1.594
9	0.033	0.004	0.828	0.978	0.809	0.187	0.703	1.305	1.689
10	0.037	0.005	0.801	0.974	0.779	0.215	0.676	1.344	1.791
11	0.041	0.006	0.771	0.969	0.747	0.246	0.650	1.384	1.898
12	0.046	0.007	0.740	0.963	0.712	0.278	0.625	1.426	2.012
13	0.050	0.008	0.706	0.957	0.675	0.312	0.601	1.469	2.133
14	0.055	0.009	0.670	0.949	0.636	0.347	0.577	1.513	2.261
15	0.059	0.010	0.634	0.941	0.596	0.382	0.555	1.558	2.397
16	0.064	0.011	0.596	0.932	0.555	0.417	0.534	1.605	2.540
17	0.069	0.012	0.558	0.922	0.514	0.451	0.513	1.653	2.693
18	0.074	0.013	0.520	0.911	0.473	0.484	0.494	1.702	2.854
19	0.080	0.014	0.481	0.899	0.433	0.515	0.475	1.754	3.026
20	0.086	0.015	0.443	0.887	0.393	0.544	0.456	1.806	3.207
21	0.094	0.017	0.405	0.874	0.354	0.571	0.439	1.860	3.400
22	0.102	0.018	0.367	0.859	0.315	0.596	0.422	1.916	3.604
23	0.111	0.020	0.329	0.844	0.278	0.617	0.406	1.974	3.820
24	0.121	0.023	0.293	0.826	0.242	0.635	0.390	2.033	4.049
25	0.131	0.025	0.257	0.808	0.208	0.649	0.375	2.094	4.292
26	0.141	0.028	0.224	0.787	0.176	0.659	0.361	2.157	4.549
27	0.151	0.032	0.192	0.765	0.147	0.663	0.347	2.221	4.822
28	0.162	0.035	0.163	0.741	0.121	0.662	0.333	2.288	5.112
29	0.173	0.039	0.137	0.714	0.098	0.656	0.321	2.357	5.418
30	0.186	0.044	0.113	0.686	0.078	0.644	0.308	2.427	5.743
31	0.201	0.049	0.092	0.656	0.060	0.627	0.296	2.500	6.088
32	0.218	0.055	0.073	0.624	0.046	0.606	0.285	2.575	6.453
33	0.237	0.061	0.057	0.590	0.034	0.579	0.274	2.652	6.841
34	0.258	0.068	0.044	0.554	0.024	0.549	0.264	2.732	7.251
35	0.282	0.075	0.032	0.516	0.017	0.515	0.253	2.814	7.686
36	0.309	0.084	0.023	0.477	0.011	0.478	0.244	2.898	8.147
37	0.339	0.094	0.016	0.437	0.007	0.439	0.234	2.985	8.636
38	0.371	0.105	0.011	0.396	0.004	0.398	0.225	3.075	9.154
39	0.406	0.116	0.007	0.355	0.002	0.357	0.217	3.167	9.704
40	0.444	0.129	0.004	0.314	0.001	0.315	0.208	3.262	10.286
41	0.475	0.142	0.002	0.273	0.001	0.274	0.200	3.360	10.903
42	0.506	0.156	0.001	0.234	0.000	0.235	0.193	3.461	11.557
43	0.539	0.171	0.001	0.198	0.000	0.198	0.185	3.565	12.250
44	0.575	0.186	0.000	0.164	0.000	0.164	0.178	3.671	12.985
45	0.616	0.203	0.000	0.134	0.000	0.134	0.171	3.782	13.765
46	0.661	0.220	0.000	0.106	0.000	0.107	0.165	3.895	14.590
47	0.713	0.238	0.000	0.083	0.000	0.083	0.158	4.012	15.466
48	0.773	0.257	0.000	0.063	0.000	0.063	0.152	4.132	16.394
49	0.841	0.276	0.000	0.047	0.000	0.047	0.146	4.256	17.378
50	0.918	0.297	0.000	0.034	0.000	0.034	0.141	4.384	18.420
51	1.000	0.317	0.000	0.024	0.000	0.024	0.135	4.515	19.525
52	-	0.339	-	0.016	-	0.016	0.130	4.651	20.697
53	-	0.361	-	0.011	-	0.011	0.125	4.790	21.939
54	-	0.384	-	0.007	-	0.007	0.120	4.934	23.255
55	-	0.405	-	0.004	-	0.004	0.116	5.082	24.650
56	-	0.425	-	0.003	-	0.003	0.111	5.235	26.129
57	-	0.444	-	0.001	-	0.001	0.107	5.392	27.697
58	-	0.464	-	0.001	-	0.001	0.103	5.553	29.359
59	-	0.482	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.495	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	0.500	-	0.000	-	0.000	0.075	7.035	46.794
67	-	0.500	-	0.000	-	0.000	0.072	7.246	49.601
68	-	0.500	-	0.000	-	0.000	0.069	7.463	52.577
69	-	1.000	-	0.000	-	0.000	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	16		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	1/24/2003		
(14)	**DATE OF FILING**	2/10/2003		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	61	M	
(16)	**CLAIMANT 2 (y)**	62	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	19.63	13.52
(18)	APV FOR CLAIMANT 2	37.72	21.43
(19)	APV FOR BOTH CLAIMANTS ALIVE	16.81	12.08
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	23.73	10.79
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	367,420	217,029
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	27.193	17.629
(28)	APV OF MEDICAL BENEFIT	163,159	105,774

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.024	0.006	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.027	0.007	0.976	0.994	0.970	0.030	0.962	1.030	1.060
2	0.030	0.008	0.950	0.988	0.938	0.061	0.925	1.061	1.124
3	0.033	0.009	0.922	0.980	0.903	0.095	0.889	1.093	1.191
4	0.037	0.010	0.891	0.972	0.866	0.131	0.855	1.126	1.262
5	0.041	0.011	0.859	0.962	0.826	0.168	0.822	1.159	1.338
6	0.046	0.012	0.824	0.952	0.784	0.208	0.790	1.194	1.419
7	0.050	0.013	0.786	0.941	0.739	0.248	0.760	1.230	1.504
8	0.055	0.014	0.747	0.929	0.693	0.289	0.731	1.267	1.594
9	0.059	0.015	0.706	0.916	0.646	0.329	0.703	1.305	1.689
10	0.064	0.017	0.664	0.902	0.599	0.368	0.676	1.344	1.791
11	0.069	0.018	0.621	0.887	0.551	0.406	0.650	1.384	1.898
12	0.074	0.020	0.579	0.871	0.504	0.442	0.625	1.426	2.012
13	0.080	0.023	0.536	0.853	0.457	0.475	0.601	1.469	2.133
14	0.086	0.025	0.493	0.834	0.411	0.505	0.577	1.513	2.261
15	0.094	0.028	0.451	0.813	0.366	0.531	0.555	1.558	2.397
16	0.102	0.032	0.408	0.790	0.323	0.553	0.534	1.605	2.540
17	0.111	0.035	0.367	0.765	0.280	0.571	0.513	1.653	2.693
18	0.121	0.039	0.326	0.738	0.240	0.583	0.494	1.702	2.854
19	0.131	0.044	0.286	0.709	0.203	0.589	0.475	1.754	3.026
20	0.141	0.049	0.249	0.677	0.169	0.589	0.456	1.806	3.207
21	0.151	0.055	0.214	0.644	0.138	0.582	0.439	1.860	3.400
22	0.162	0.061	0.182	0.609	0.111	0.569	0.422	1.916	3.604
23	0.173	0.068	0.152	0.572	0.087	0.550	0.406	1.974	3.820
24	0.186	0.075	0.126	0.533	0.067	0.525	0.390	2.033	4.049
25	0.201	0.084	0.102	0.493	0.050	0.494	0.375	2.094	4.292
26	0.218	0.094	0.082	0.451	0.037	0.459	0.361	2.157	4.549
27	0.237	0.105	0.064	0.409	0.026	0.421	0.347	2.221	4.822
28	0.258	0.116	0.049	0.366	0.018	0.379	0.333	2.288	5.112
29	0.282	0.129	0.036	0.324	0.012	0.336	0.321	2.357	5.418
30	0.309	0.142	0.026	0.282	0.007	0.293	0.308	2.427	5.743
31	0.339	0.156	0.018	0.242	0.004	0.251	0.296	2.500	6.088
32	0.371	0.171	0.012	0.204	0.002	0.211	0.285	2.575	6.453
33	0.406	0.186	0.007	0.169	0.001	0.174	0.274	2.652	6.841
34	0.444	0.203	0.004	0.138	0.001	0.141	0.264	2.732	7.251
35	0.475	0.220	0.002	0.110	0.000	0.112	0.253	2.814	7.686
36	0.506	0.238	0.001	0.086	0.000	0.087	0.244	2.898	8.147
37	0.539	0.257	0.001	0.065	0.000	0.066	0.234	2.985	8.636
38	0.575	0.276	0.000	0.049	0.000	0.049	0.225	3.075	9.154
39	0.616	0.297	0.000	0.035	0.000	0.035	0.217	3.167	9.704
40	0.661	0.317	0.000	0.025	0.000	0.025	0.208	3.262	10.286
41	0.713	0.339	0.000	0.017	0.000	0.017	0.200	3.360	10.903
42	0.773	0.361	0.000	0.011	0.000	0.011	0.193	3.461	11.557
43	0.841	0.384	0.000	0.007	0.000	0.007	0.185	3.565	12.250
44	0.918	0.405	0.000	0.004	0.000	0.004	0.178	3.671	12.985
45	1.000	0.425	0.000	0.003	0.000	0.003	0.171	3.782	13.765
46	-	0.444	-	0.002	-	0.002	0.165	3.895	14.590
47	-	0.464	-	0.001	-	0.001	0.158	4.012	15.466
48	-	0.482	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.495	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	1.000	-	0.000	-	0.000	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	17	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	2/26/2003	
(14)	**DATE OF FILING**	3/3/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	72	M
(16)	**CLAIMANT 2 (y)**	53	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.36	8.24
(18)	APV FOR CLAIMANT 2	57.88	27.67
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.11	8.08
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	48.01	19.74
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	474,294	239,203
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	12.549	9.704
(28)	APV OF MEDICAL BENEFIT	75,291	58,225

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.002	0.931	0.998	0.930	0.070	0.962	1.030	1.060
2	0.080	0.002	0.863	0.996	0.859	0.140	0.925	1.061	1.124
3	0.086	0.003	0.794	0.994	0.789	0.210	0.889	1.093	1.191
4	0.094	0.003	0.726	0.991	0.719	0.278	0.855	1.126	1.262
5	0.102	0.003	0.658	0.988	0.650	0.346	0.822	1.159	1.338
6	0.111	0.004	0.590	0.985	0.581	0.412	0.790	1.194	1.419
7	0.121	0.004	0.525	0.981	0.515	0.476	0.760	1.230	1.504
8	0.131	0.005	0.461	0.977	0.450	0.537	0.731	1.267	1.594
9	0.141	0.006	0.401	0.972	0.390	0.594	0.703	1.305	1.689
10	0.151	0.007	0.344	0.966	0.333	0.645	0.676	1.344	1.791
11	0.162	0.008	0.292	0.960	0.281	0.691	0.650	1.384	1.898
12	0.173	0.009	0.245	0.952	0.233	0.731	0.625	1.426	2.012
13	0.186	0.010	0.203	0.944	0.191	0.764	0.601	1.469	2.133
14	0.201	0.011	0.165	0.935	0.154	0.792	0.577	1.513	2.261
15	0.218	0.012	0.132	0.925	0.122	0.813	0.555	1.558	2.397
16	0.237	0.013	0.103	0.914	0.094	0.829	0.534	1.605	2.540
17	0.258	0.014	0.079	0.902	0.071	0.839	0.513	1.653	2.693
18	0.282	0.015	0.058	0.890	0.052	0.845	0.494	1.702	2.854
19	0.309	0.017	0.042	0.877	0.037	0.845	0.475	1.754	3.026
20	0.339	0.018	0.029	0.862	0.025	0.841	0.456	1.806	3.207
21	0.371	0.020	0.019	0.846	0.016	0.833	0.439	1.860	3.400
22	0.406	0.023	0.012	0.829	0.010	0.821	0.422	1.916	3.604
23	0.444	0.025	0.007	0.810	0.006	0.806	0.406	1.974	3.820
24	0.475	0.028	0.004	0.790	0.003	0.788	0.390	2.033	4.049
25	0.506	0.032	0.002	0.767	0.002	0.766	0.375	2.094	4.292
26	0.539	0.035	0.001	0.743	0.001	0.743	0.361	2.157	4.549
27	0.575	0.039	0.000	0.717	0.000	0.717	0.347	2.221	4.822
28	0.616	0.044	0.000	0.689	0.000	0.689	0.333	2.288	5.112
29	0.661	0.049	0.000	0.658	0.000	0.658	0.321	2.357	5.418
30	0.713	0.055	0.000	0.626	0.000	0.626	0.308	2.427	5.743
31	0.773	0.061	0.000	0.592	0.000	0.592	0.296	2.500	6.088
32	0.841	0.068	0.000	0.556	0.000	0.556	0.285	2.575	6.453
33	0.918	0.075	0.000	0.518	0.000	0.518	0.274	2.652	6.841
34	1.000	0.084	0.000	0.479	0.000	0.479	0.264	2.732	7.251
35	-	0.094	-	0.439	-	0.439	0.253	2.814	7.686
36	-	0.105	-	0.398	-	0.398	0.244	2.898	8.147
37	-	0.116	-	0.356	-	0.356	0.234	2.985	8.636
38	-	0.129	-	0.315	-	0.315	0.225	3.075	9.154
39	-	0.142	-	0.274	-	0.274	0.217	3.167	9.704
40	-	0.156	-	0.235	-	0.235	0.208	3.262	10.286
41	-	0.171	-	0.198	-	0.198	0.200	3.360	10.903
42	-	0.186	-	0.165	-	0.165	0.193	3.461	11.557
43	-	0.203	-	0.134	-	0.134	0.185	3.565	12.250
44	-	0.220	-	0.107	-	0.107	0.178	3.671	12.985
45	-	0.238	-	0.083	-	0.083	0.171	3.782	13.765
46	-	0.257	-	0.064	-	0.064	0.165	3.895	14.590
47	-	0.276	-	0.047	-	0.047	0.158	4.012	15.466
48	-	0.297	-	0.034	-	0.034	0.152	4.132	16.394
49	-	0.317	-	0.024	-	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	0.500	-	0.000	-	0.000	0.075	7.035	46.794
67	-	1.000	-	0.000	-	0.000	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	18	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	11/14/2003	
(14)	**DATE OF FILING**	11/17/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	67	M
(16)	**CLAIMANT 2 (y)**	60	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.84	10.36
(18)	APV FOR CLAIMANT 2	41.66	22.81
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.77	9.74
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	29.96	13.68
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	368,721	212,425
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	17.737	12.744
(28)	APV OF MEDICAL BENEFIT	106,419	76,463

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.004	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.005	0.954	0.996	0.950	0.050	0.962	1.030	1.060
2	0.055	0.006	0.907	0.990	0.898	0.101	0.925	1.061	1.124
3	0.059	0.007	0.857	0.985	0.844	0.154	0.889	1.093	1.191
4	0.064	0.008	0.806	0.978	0.788	0.207	0.855	1.126	1.262
5	0.069	0.009	0.754	0.971	0.732	0.261	0.822	1.159	1.338
6	0.074	0.010	0.703	0.962	0.676	0.313	0.790	1.194	1.419
7	0.080	0.011	0.651	0.953	0.620	0.363	0.760	1.230	1.504
8	0.086	0.012	0.599	0.943	0.565	0.412	0.731	1.267	1.594
9	0.094	0.013	0.547	0.932	0.510	0.459	0.703	1.305	1.689
10	0.102	0.014	0.496	0.920	0.456	0.503	0.676	1.344	1.791
11	0.111	0.015	0.445	0.907	0.404	0.545	0.650	1.384	1.898
12	0.121	0.017	0.396	0.894	0.354	0.582	0.625	1.426	2.012
13	0.131	0.018	0.348	0.879	0.306	0.615	0.601	1.469	2.133
14	0.141	0.020	0.302	0.863	0.261	0.643	0.577	1.513	2.261
15	0.151	0.023	0.260	0.845	0.220	0.666	0.555	1.558	2.397
16	0.162	0.025	0.221	0.826	0.182	0.682	0.534	1.605	2.540
17	0.173	0.028	0.185	0.805	0.149	0.692	0.513	1.653	2.693
18	0.186	0.032	0.153	0.782	0.120	0.696	0.494	1.702	2.854
19	0.201	0.035	0.124	0.757	0.094	0.693	0.475	1.754	3.026
20	0.218	0.039	0.099	0.731	0.073	0.685	0.456	1.806	3.207
21	0.237	0.044	0.078	0.702	0.055	0.670	0.439	1.860	3.400
22	0.258	0.049	0.059	0.671	0.040	0.651	0.422	1.916	3.604
23	0.282	0.055	0.044	0.638	0.028	0.626	0.406	1.974	3.820
24	0.309	0.061	0.032	0.603	0.019	0.597	0.390	2.033	4.049
25	0.339	0.068	0.022	0.566	0.012	0.563	0.375	2.094	4.292
26	0.371	0.075	0.014	0.528	0.008	0.527	0.361	2.157	4.549
27	0.406	0.084	0.009	0.488	0.004	0.488	0.347	2.221	4.822
28	0.444	0.094	0.005	0.447	0.002	0.448	0.333	2.288	5.112
29	0.475	0.105	0.003	0.405	0.001	0.406	0.321	2.357	5.418
30	0.506	0.116	0.002	0.363	0.001	0.363	0.308	2.427	5.743
31	0.539	0.129	0.001	0.321	0.000	0.321	0.296	2.500	6.088
32	0.575	0.142	0.000	0.279	0.000	0.279	0.285	2.575	6.453
33	0.616	0.156	0.000	0.240	0.000	0.240	0.274	2.652	6.841
34	0.661	0.171	0.000	0.202	0.000	0.202	0.264	2.732	7.251
35	0.713	0.186	0.000	0.168	0.000	0.168	0.253	2.814	7.686
36	0.773	0.203	0.000	0.137	0.000	0.137	0.244	2.898	8.147
37	0.841	0.220	0.000	0.109	0.000	0.109	0.234	2.985	8.636
38	0.918	0.238	0.000	0.085	0.000	0.085	0.225	3.075	9.154
39	1.000	0.257	0.000	0.065	0.000	0.065	0.217	3.167	9.704
40	-	0.276	-	0.048	-	0.048	0.208	3.262	10.286
41	-	0.297	-	0.035	-	0.035	0.200	3.360	10.903
42	-	0.317	-	0.024	-	0.024	0.193	3.461	11.557
43	-	0.339	-	0.017	-	0.017	0.185	3.565	12.250
44	-	0.361	-	0.011	-	0.011	0.178	3.671	12.985
45	-	0.384	-	0.007	-	0.007	0.171	3.782	13.765
46	-	0.405	-	0.004	-	0.004	0.165	3.895	14.590
47	-	0.425	-	0.003	-	0.003	0.158	4.012	15.466
48	-	0.444	-	0.001	-	0.001	0.152	4.132	16.394
49	-	0.464	-	0.001	-	0.001	0.146	4.256	17.378
50	-	0.482	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.495	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	1.000	-	0.000	-	0.000	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	19		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	12/8/2003		
(14)	**DATE OF FILING**	12/9/2003		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	63	M	
(16)	**CLAIMANT 2 (y)**	59	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		17.49	12.40
(18)	APV FOR CLAIMANT 2		43.74	23.50
(19)	APV FOR BOTH CLAIMANTS ALIVE		15.84	11.53
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		29.55	12.84
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		400,239	226,235
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		23.574	15.845
(28)	APV OF MEDICAL BENEFIT		141,446	95,071

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.030	0.004	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.033	0.004	0.970	0.996	0.967	0.033	0.962	1.030	1.060
2	0.037	0.005	0.939	0.992	0.931	0.069	0.925	1.061	1.124
3	0.041	0.006	0.904	0.987	0.892	0.107	0.889	1.093	1.191
4	0.046	0.007	0.867	0.981	0.850	0.147	0.855	1.126	1.262
5	0.050	0.008	0.828	0.974	0.806	0.189	0.822	1.159	1.338
6	0.055	0.009	0.786	0.967	0.760	0.233	0.790	1.194	1.419
7	0.059	0.010	0.743	0.959	0.712	0.277	0.760	1.230	1.504
8	0.064	0.011	0.699	0.949	0.663	0.321	0.731	1.267	1.594
9	0.069	0.012	0.654	0.939	0.614	0.365	0.703	1.305	1.689
10	0.074	0.013	0.609	0.928	0.565	0.407	0.676	1.344	1.791
11	0.080	0.014	0.564	0.916	0.517	0.447	0.650	1.384	1.898
12	0.086	0.015	0.519	0.904	0.469	0.484	0.625	1.426	2.012
13	0.094	0.017	0.475	0.890	0.422	0.520	0.601	1.469	2.133
14	0.102	0.018	0.430	0.875	0.376	0.553	0.577	1.513	2.261
15	0.111	0.020	0.386	0.859	0.332	0.582	0.555	1.558	2.397
16	0.121	0.023	0.343	0.842	0.289	0.607	0.534	1.605	2.540
17	0.131	0.025	0.302	0.823	0.248	0.628	0.513	1.653	2.693
18	0.141	0.028	0.262	0.802	0.210	0.644	0.494	1.702	2.854
19	0.151	0.032	0.225	0.779	0.176	0.653	0.475	1.754	3.026
20	0.162	0.035	0.191	0.754	0.144	0.657	0.456	1.806	3.207
21	0.173	0.039	0.160	0.728	0.117	0.655	0.439	1.860	3.400
22	0.186	0.044	0.132	0.699	0.093	0.646	0.422	1.916	3.604
23	0.201	0.049	0.108	0.668	0.072	0.632	0.406	1.974	3.820
24	0.218	0.055	0.086	0.636	0.055	0.612	0.390	2.033	4.049
25	0.237	0.061	0.067	0.601	0.040	0.587	0.375	2.094	4.292
26	0.258	0.068	0.051	0.564	0.029	0.557	0.361	2.157	4.549
27	0.282	0.075	0.038	0.526	0.020	0.524	0.347	2.221	4.822
28	0.309	0.084	0.027	0.486	0.013	0.487	0.333	2.288	5.112
29	0.339	0.094	0.019	0.445	0.008	0.447	0.321	2.357	5.418
30	0.371	0.105	0.012	0.404	0.005	0.406	0.308	2.427	5.743
31	0.406	0.116	0.008	0.361	0.003	0.364	0.296	2.500	6.088
32	0.444	0.129	0.005	0.319	0.001	0.321	0.285	2.575	6.453
33	0.475	0.142	0.003	0.278	0.001	0.279	0.274	2.652	6.841
34	0.506	0.156	0.001	0.239	0.000	0.239	0.264	2.732	7.251
35	0.539	0.171	0.001	0.202	0.000	0.202	0.253	2.814	7.686
36	0.575	0.186	0.000	0.167	0.000	0.167	0.244	2.898	8.147
37	0.616	0.203	0.000	0.136	0.000	0.136	0.234	2.985	8.636
38	0.661	0.220	0.000	0.108	0.000	0.108	0.225	3.075	9.154
39	0.713	0.238	0.000	0.085	0.000	0.085	0.217	3.167	9.704
40	0.773	0.257	0.000	0.065	0.000	0.065	0.208	3.262	10.286
41	0.841	0.276	0.000	0.048	0.000	0.048	0.200	3.360	10.903
42	0.918	0.297	0.000	0.035	0.000	0.035	0.193	3.461	11.557
43	1.000	0.317	0.000	0.024	0.000	0.024	0.185	3.565	12.250
44	-	0.339	-	0.017	-	0.017	0.178	3.671	12.985
45	-	0.361	-	0.011	-	0.011	0.171	3.782	13.765
46	-	0.384	-	0.007	-	0.007	0.165	3.895	14.590
47	-	0.405	-	0.004	-	0.004	0.158	4.012	15.466
48	-	0.425	-	0.003	-	0.003	0.152	4.132	16.394
49	-	0.444	-	0.001	-	0.001	0.146	4.256	17.378
50	-	0.464	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.482	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.495	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	1.000	-	0.000	-	0.000	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	20	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	10/20/2005	
(14)	**DATE OF FILING**	10/21/2005	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	64	M
(16)	**CLAIMANT 2 (y)**	66	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	16.50	11.86
(18)	APV FOR CLAIMANT 2	30.71	18.75
(19)	APV FOR BOTH CLAIMANTS ALIVE	13.78	10.36
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	19.64	9.89
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	302,636	190,916
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	21.945	15.009
(28)	APV OF MEDICAL BENEFIT	131,670	90,052

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.033	0.010	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.037	0.011	0.967	0.990	0.958	0.042	0.962	1.030	1.060
2	0.041	0.012	0.932	0.980	0.913	0.086	0.925	1.061	1.124
3	0.046	0.013	0.893	0.968	0.865	0.132	0.889	1.093	1.191
4	0.050	0.014	0.853	0.956	0.815	0.178	0.855	1.126	1.262
5	0.055	0.015	0.810	0.943	0.764	0.226	0.822	1.159	1.338
6	0.059	0.017	0.766	0.929	0.711	0.272	0.790	1.194	1.419
7	0.064	0.018	0.720	0.913	0.658	0.318	0.760	1.230	1.504
8	0.069	0.020	0.674	0.897	0.604	0.362	0.731	1.267	1.594
9	0.074	0.023	0.628	0.878	0.551	0.403	0.703	1.305	1.689
10	0.080	0.025	0.581	0.858	0.499	0.442	0.676	1.344	1.791
11	0.086	0.028	0.535	0.837	0.448	0.476	0.650	1.384	1.898
12	0.094	0.032	0.489	0.813	0.397	0.507	0.625	1.426	2.012
13	0.102	0.035	0.443	0.787	0.349	0.533	0.601	1.469	2.133
14	0.111	0.039	0.398	0.759	0.302	0.553	0.577	1.513	2.261
15	0.121	0.044	0.354	0.729	0.258	0.567	0.555	1.558	2.397
16	0.131	0.049	0.311	0.697	0.217	0.575	0.534	1.605	2.540
17	0.141	0.055	0.270	0.663	0.179	0.575	0.513	1.653	2.693
18	0.151	0.061	0.232	0.627	0.145	0.568	0.494	1.702	2.854
19	0.162	0.068	0.197	0.588	0.116	0.554	0.475	1.754	3.026
20	0.173	0.075	0.165	0.549	0.091	0.533	0.456	1.806	3.207
21	0.186	0.084	0.136	0.507	0.069	0.505	0.439	1.860	3.400
22	0.201	0.094	0.111	0.465	0.052	0.472	0.422	1.916	3.604
23	0.218	0.105	0.089	0.421	0.037	0.435	0.406	1.974	3.820
24	0.237	0.116	0.069	0.377	0.026	0.394	0.390	2.033	4.049
25	0.258	0.129	0.053	0.333	0.018	0.351	0.375	2.094	4.292
26	0.282	0.142	0.039	0.290	0.011	0.307	0.361	2.157	4.549
27	0.309	0.156	0.028	0.249	0.007	0.263	0.347	2.221	4.822
28	0.339	0.171	0.019	0.210	0.004	0.221	0.333	2.288	5.112
29	0.371	0.186	0.013	0.174	0.002	0.183	0.321	2.357	5.418
30	0.406	0.203	0.008	0.142	0.001	0.148	0.308	2.427	5.743
31	0.444	0.220	0.005	0.113	0.001	0.117	0.296	2.500	6.088
32	0.475	0.238	0.003	0.088	0.000	0.090	0.285	2.575	6.453
33	0.506	0.257	0.001	0.067	0.000	0.069	0.274	2.652	6.841
34	0.539	0.276	0.001	0.050	0.000	0.051	0.264	2.732	7.251
35	0.575	0.297	0.000	0.036	0.000	0.036	0.253	2.814	7.686
36	0.616	0.317	0.000	0.025	0.000	0.026	0.244	2.898	8.147
37	0.661	0.339	0.000	0.017	0.000	0.017	0.234	2.985	8.636
38	0.713	0.361	0.000	0.012	0.000	0.012	0.225	3.075	9.154
39	0.773	0.384	0.000	0.007	0.000	0.007	0.217	3.167	9.704
40	0.841	0.405	0.000	0.005	0.000	0.005	0.208	3.262	10.286
41	0.918	0.425	0.000	0.003	0.000	0.003	0.200	3.360	10.903
42	1.000	0.444	0.000	0.002	0.000	0.002	0.193	3.461	11.557
43	-	0.464	-	0.001	-	0.001	0.185	3.565	12.250
44	-	0.482	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.495	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	1.000	-	0.000	-	0.000	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
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99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	21		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	8/22/2006		
(14)	**DATE OF FILING**	8/30/2006		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	65	M	
(16)	**CLAIMANT 2 (y)**	62	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		15.56	11.34
(18)	APV FOR CLAIMANT 2		37.72	21.43
(19)	APV FOR BOTH CLAIMANTS ALIVE		13.87	10.40
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		25.54	11.97
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		347,895	206,991
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		20.432	14.212
(28)	APV OF MEDICAL BENEFIT		122,590	85,271

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.037	0.006	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.041	0.007	0.963	0.994	0.958	0.042	0.962	1.030	1.060
2	0.046	0.008	0.924	0.988	0.912	0.087	0.925	1.061	1.124
3	0.050	0.009	0.882	0.980	0.864	0.133	0.889	1.093	1.191
4	0.055	0.010	0.838	0.972	0.814	0.182	0.855	1.126	1.262
5	0.059	0.011	0.792	0.962	0.762	0.230	0.822	1.159	1.338
6	0.064	0.012	0.745	0.952	0.709	0.279	0.790	1.194	1.419
7	0.069	0.013	0.697	0.941	0.655	0.326	0.760	1.230	1.504
8	0.074	0.014	0.649	0.929	0.603	0.372	0.731	1.267	1.594
9	0.080	0.015	0.601	0.916	0.551	0.416	0.703	1.305	1.689
10	0.086	0.017	0.553	0.902	0.499	0.457	0.676	1.344	1.791
11	0.094	0.018	0.506	0.887	0.449	0.496	0.650	1.384	1.898
12	0.102	0.020	0.458	0.871	0.399	0.531	0.625	1.426	2.012
13	0.111	0.023	0.411	0.853	0.351	0.563	0.601	1.469	2.133
14	0.121	0.025	0.366	0.834	0.305	0.590	0.577	1.513	2.261
15	0.131	0.028	0.321	0.813	0.261	0.612	0.555	1.558	2.397
16	0.141	0.032	0.279	0.790	0.221	0.628	0.534	1.605	2.540
17	0.151	0.035	0.240	0.765	0.184	0.638	0.513	1.653	2.693
18	0.162	0.039	0.204	0.738	0.150	0.641	0.494	1.702	2.854
19	0.173	0.044	0.171	0.709	0.121	0.637	0.475	1.754	3.026
20	0.186	0.049	0.141	0.677	0.096	0.627	0.456	1.806	3.207
21	0.201	0.055	0.115	0.644	0.074	0.611	0.439	1.860	3.400
22	0.218	0.061	0.092	0.609	0.056	0.589	0.422	1.916	3.604
23	0.237	0.068	0.072	0.572	0.041	0.561	0.406	1.974	3.820
24	0.258	0.075	0.055	0.533	0.029	0.529	0.390	2.033	4.049
25	0.282	0.084	0.041	0.493	0.020	0.493	0.375	2.094	4.292
26	0.309	0.094	0.029	0.451	0.013	0.454	0.361	2.157	4.549
27	0.339	0.105	0.020	0.409	0.008	0.413	0.347	2.221	4.822
28	0.371	0.116	0.013	0.366	0.005	0.370	0.333	2.288	5.112
29	0.406	0.129	0.008	0.324	0.003	0.327	0.321	2.357	5.418
30	0.444	0.142	0.005	0.282	0.001	0.284	0.308	2.427	5.743
31	0.475	0.156	0.003	0.242	0.001	0.243	0.296	2.500	6.088
32	0.506	0.171	0.001	0.204	0.000	0.205	0.285	2.575	6.453
33	0.539	0.186	0.001	0.169	0.000	0.170	0.274	2.652	6.841
34	0.575	0.203	0.000	0.138	0.000	0.138	0.264	2.732	7.251
35	0.616	0.220	0.000	0.110	0.000	0.110	0.253	2.814	7.686
36	0.661	0.238	0.000	0.086	0.000	0.086	0.244	2.898	8.147
37	0.713	0.257	0.000	0.065	0.000	0.065	0.234	2.985	8.636
38	0.773	0.276	0.000	0.049	0.000	0.049	0.225	3.075	9.154
39	0.841	0.297	0.000	0.035	0.000	0.035	0.217	3.167	9.704
40	0.918	0.317	0.000	0.025	0.000	0.025	0.208	3.262	10.286
41	1.000	0.339	0.000	0.017	0.000	0.017	0.200	3.360	10.903
42	-	0.361	-	0.011	-	0.011	0.193	3.461	11.557
43	-	0.384	-	0.007	-	0.007	0.185	3.565	12.250
44	-	0.405	-	0.004	-	0.004	0.178	3.671	12.985
45	-	0.425	-	0.003	-	0.003	0.171	3.782	13.765
46	-	0.444	-	0.002	-	0.002	0.165	3.895	14.590
47	-	0.464	-	0.001	-	0.001	0.158	4.012	15.466
48	-	0.482	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.495	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	1.000	-	0.000	-	0.000	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	22		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	5/8/2007		
(14)	**DATE OF FILING**	5/11/2007		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	70	M	
(16)	**CLAIMANT 2 (y)**	68	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		11.64	9.04
(18)	APV FOR CLAIMANT 2		27.60	17.45
(19)	APV FOR BOTH CLAIMANTS ALIVE		10.14	8.10
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		18.97	10.29
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		256,540	168,483
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		14.410	10.834
(28)	APV OF MEDICAL BENEFIT		86,461	65,003

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.059	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.064	0.013	0.941	0.988	0.930	0.070	0.962	1.030	1.060
2	0.069	0.014	0.880	0.976	0.859	0.138	0.925	1.061	1.124
3	0.074	0.015	0.820	0.962	0.789	0.204	0.889	1.093	1.191
4	0.080	0.017	0.759	0.948	0.720	0.268	0.855	1.126	1.262
5	0.086	0.018	0.699	0.932	0.652	0.328	0.822	1.159	1.338
6	0.094	0.020	0.639	0.915	0.585	0.385	0.790	1.194	1.419
7	0.102	0.023	0.579	0.896	0.519	0.437	0.760	1.230	1.504
8	0.111	0.025	0.520	0.876	0.455	0.485	0.731	1.267	1.594
9	0.121	0.028	0.462	0.854	0.394	0.527	0.703	1.305	1.689
10	0.131	0.032	0.406	0.830	0.337	0.562	0.676	1.344	1.791
11	0.141	0.035	0.353	0.803	0.284	0.589	0.650	1.384	1.898
12	0.151	0.039	0.303	0.775	0.235	0.608	0.625	1.426	2.012
13	0.162	0.044	0.257	0.744	0.192	0.619	0.601	1.469	2.133
14	0.173	0.049	0.216	0.712	0.154	0.620	0.577	1.513	2.261
15	0.186	0.055	0.178	0.677	0.121	0.614	0.555	1.558	2.397
16	0.201	0.061	0.145	0.640	0.093	0.599	0.534	1.605	2.540
17	0.218	0.068	0.116	0.601	0.070	0.577	0.513	1.653	2.693
18	0.237	0.075	0.091	0.560	0.051	0.549	0.494	1.702	2.854
19	0.258	0.084	0.069	0.518	0.036	0.515	0.475	1.754	3.026
20	0.282	0.094	0.051	0.474	0.024	0.477	0.456	1.806	3.207
21	0.309	0.105	0.037	0.430	0.016	0.435	0.439	1.860	3.400
22	0.339	0.116	0.025	0.385	0.010	0.391	0.422	1.916	3.604
23	0.371	0.129	0.017	0.340	0.006	0.345	0.406	1.974	3.820
24	0.406	0.142	0.011	0.296	0.003	0.301	0.390	2.033	4.049
25	0.444	0.156	0.006	0.254	0.002	0.257	0.375	2.094	4.292
26	0.475	0.171	0.003	0.215	0.001	0.217	0.361	2.157	4.549
27	0.506	0.186	0.002	0.178	0.000	0.179	0.347	2.221	4.822
28	0.539	0.203	0.001	0.145	0.000	0.145	0.333	2.288	5.112
29	0.575	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.616	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.661	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.713	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.773	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	0.841	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	0.918	0.339	0.000	0.018	0.000	0.018	0.253	2.814	7.686
36	1.000	0.361	0.000	0.012	0.000	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	23		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	10/30/2007		
(14)	**DATE OF FILING**	10/30/2007		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	73	M	
(16)	**CLAIMANT 2 (y)**	71	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.75	7.84
(18)	APV FOR CLAIMANT 2	23.35	15.53
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.43	6.96
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	16.24	9.44
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	216,827	149,315
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	11.698	9.170
(28)	APV OF MEDICAL BENEFIT	70,189	55,018

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.074	0.015	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.080	0.017	0.926	0.985	0.912	0.087	0.962	1.030	1.060
2	0.086	0.018	0.853	0.969	0.826	0.169	0.925	1.061	1.124
3	0.094	0.020	0.779	0.951	0.741	0.248	0.889	1.093	1.191
4	0.102	0.023	0.706	0.932	0.658	0.322	0.855	1.126	1.262
5	0.111	0.025	0.634	0.910	0.577	0.390	0.822	1.159	1.338
6	0.121	0.028	0.563	0.887	0.500	0.451	0.790	1.194	1.419
7	0.131	0.032	0.495	0.862	0.427	0.504	0.760	1.230	1.504
8	0.141	0.035	0.430	0.835	0.359	0.547	0.731	1.267	1.594
9	0.151	0.039	0.370	0.805	0.298	0.580	0.703	1.305	1.689
10	0.162	0.044	0.314	0.774	0.243	0.602	0.676	1.344	1.791
11	0.173	0.049	0.263	0.740	0.195	0.614	0.650	1.384	1.898
12	0.186	0.055	0.217	0.703	0.153	0.615	0.625	1.426	2.012
13	0.201	0.061	0.177	0.665	0.118	0.606	0.601	1.469	2.133
14	0.218	0.068	0.141	0.624	0.088	0.589	0.577	1.513	2.261
15	0.237	0.075	0.111	0.582	0.064	0.564	0.555	1.558	2.397
16	0.258	0.084	0.084	0.538	0.045	0.532	0.534	1.605	2.540
17	0.282	0.094	0.063	0.493	0.031	0.494	0.513	1.653	2.693
18	0.309	0.105	0.045	0.447	0.020	0.451	0.494	1.702	2.854
19	0.339	0.116	0.031	0.400	0.012	0.406	0.475	1.754	3.026
20	0.371	0.129	0.021	0.353	0.007	0.359	0.456	1.806	3.207
21	0.406	0.142	0.013	0.308	0.004	0.313	0.439	1.860	3.400
22	0.444	0.156	0.008	0.264	0.002	0.268	0.422	1.916	3.604
23	0.475	0.171	0.004	0.223	0.001	0.225	0.406	1.974	3.820
24	0.506	0.186	0.002	0.185	0.000	0.186	0.390	2.033	4.049
25	0.539	0.203	0.001	0.150	0.000	0.151	0.375	2.094	4.292
26	0.575	0.220	0.001	0.120	0.000	0.120	0.361	2.157	4.549
27	0.616	0.238	0.000	0.094	0.000	0.094	0.347	2.221	4.822
28	0.661	0.257	0.000	0.071	0.000	0.071	0.333	2.288	5.112
29	0.713	0.276	0.000	0.053	0.000	0.053	0.321	2.357	5.418
30	0.773	0.297	0.000	0.038	0.000	0.038	0.308	2.427	5.743
31	0.841	0.317	0.000	0.027	0.000	0.027	0.296	2.500	6.088
32	0.918	0.339	0.000	0.018	0.000	0.018	0.285	2.575	6.453
33	1.000	0.361	0.000	0.012	0.000	0.012	0.274	2.652	6.841
34	-	0.384	-	0.008	-	0.008	0.264	2.732	7.251
35	-	0.405	-	0.005	-	0.005	0.253	2.814	7.686
36	-	0.425	-	0.003	-	0.003	0.244	2.898	8.147
37	-	0.444	-	0.002	-	0.002	0.234	2.985	8.636
38	-	0.464	-	0.001	-	0.001	0.225	3.075	9.154
39	-	0.482	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.495	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	1.000	-	0.000	-	0.000	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
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112	-	-	-	-	-	-	0.012	27.401	682.742
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
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(13) PROVIDED BY BWC
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(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	24		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	4/1/2009		
(14)	**DATE OF FILING**	4/7/2009		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	75	M	
(16)	**CLAIMANT 2 (y)**	73	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.62	7.09
(18)	APV FOR CLAIMANT 2	20.75	14.26
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.40	6.25
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	14.57	8.86
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	192,732	136,826
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	10.143	8.159
(28)	APV OF MEDICAL BENEFIT	60,860	48,952

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.086	0.018	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	0.020	0.914	0.982	0.897	0.101	0.962	1.030	1.060
2	0.102	0.023	0.828	0.962	0.796	0.197	0.925	1.061	1.124
3	0.111	0.025	0.743	0.940	0.699	0.286	0.889	1.093	1.191
4	0.121	0.028	0.661	0.916	0.605	0.366	0.855	1.126	1.262
5	0.131	0.032	0.581	0.890	0.517	0.437	0.822	1.159	1.338
6	0.141	0.035	0.505	0.862	0.435	0.497	0.790	1.194	1.419
7	0.151	0.039	0.434	0.831	0.361	0.544	0.760	1.230	1.504
8	0.162	0.044	0.368	0.799	0.294	0.579	0.731	1.267	1.594
9	0.173	0.049	0.309	0.763	0.236	0.601	0.703	1.305	1.689
10	0.186	0.055	0.255	0.726	0.185	0.611	0.676	1.344	1.791
11	0.201	0.061	0.208	0.686	0.142	0.609	0.650	1.384	1.898
12	0.218	0.068	0.166	0.644	0.107	0.596	0.625	1.426	2.012
13	0.237	0.075	0.130	0.601	0.078	0.575	0.601	1.469	2.133
14	0.258	0.084	0.099	0.555	0.055	0.544	0.577	1.513	2.261
15	0.282	0.094	0.073	0.509	0.037	0.507	0.555	1.558	2.397
16	0.309	0.105	0.053	0.461	0.024	0.465	0.534	1.605	2.540
17	0.339	0.116	0.036	0.413	0.015	0.419	0.513	1.653	2.693
18	0.371	0.129	0.024	0.365	0.009	0.371	0.494	1.702	2.854
19	0.406	0.142	0.015	0.318	0.005	0.323	0.475	1.754	3.026
20	0.444	0.156	0.009	0.273	0.002	0.277	0.456	1.806	3.207
21	0.475	0.171	0.005	0.230	0.001	0.233	0.439	1.860	3.400
22	0.506	0.186	0.003	0.191	0.001	0.193	0.422	1.916	3.604
23	0.539	0.203	0.001	0.155	0.000	0.156	0.406	1.974	3.820
24	0.575	0.220	0.001	0.124	0.000	0.124	0.390	2.033	4.049
25	0.616	0.238	0.000	0.097	0.000	0.097	0.375	2.094	4.292
26	0.661	0.257	0.000	0.074	0.000	0.074	0.361	2.157	4.549
27	0.713	0.276	0.000	0.055	0.000	0.055	0.347	2.221	4.822
28	0.773	0.297	0.000	0.040	0.000	0.040	0.333	2.288	5.112
29	0.841	0.317	0.000	0.028	0.000	0.028	0.321	2.357	5.418
30	0.918	0.339	0.000	0.019	0.000	0.019	0.308	2.427	5.743
31	1.000	0.361	0.000	0.013	0.000	0.013	0.296	2.500	6.088
32	-	0.384	-	0.008	-	0.008	0.285	2.575	6.453
33	-	0.405	-	0.005	-	0.005	0.274	2.652	6.841
34	-	0.425	-	0.003	-	0.003	0.264	2.732	7.251
35	-	0.444	-	0.002	-	0.002	0.253	2.814	7.686
36	-	0.464	-	0.001	-	0.001	0.244	2.898	8.147
37	-	0.482	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.495	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	1.000	-	0.000	-	0.000	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	25		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	4/9/2009		
(14)	**DATE OF FILING**	4/15/2009		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	71	M	
(16)	**CLAIMANT 2 (y)**	78	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		10.98	8.63
(18)	APV FOR CLAIMANT 2		15.18	11.26
(19)	APV FOR BOTH CLAIMANTS ALIVE		7.93	6.63
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		10.31	6.65
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		166,659	124,504
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		13.450	10.258
(28)	APV OF MEDICAL BENEFIT		80,703	61,548

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	0.032	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	0.035	0.936	0.968	0.906	0.092	0.962	1.030	1.060
2	0.074	0.039	0.872	0.934	0.814	0.177	0.925	1.061	1.124
3	0.080	0.044	0.807	0.897	0.724	0.256	0.889	1.093	1.191
4	0.086	0.049	0.743	0.858	0.638	0.326	0.855	1.126	1.262
5	0.094	0.055	0.679	0.816	0.554	0.387	0.822	1.159	1.338
6	0.102	0.061	0.615	0.771	0.474	0.437	0.790	1.194	1.419
7	0.111	0.068	0.553	0.724	0.400	0.476	0.760	1.230	1.504
8	0.121	0.075	0.491	0.675	0.331	0.503	0.731	1.267	1.594
9	0.131	0.084	0.432	0.624	0.269	0.517	0.703	1.305	1.689
10	0.141	0.094	0.375	0.572	0.214	0.518	0.676	1.344	1.791
11	0.151	0.105	0.322	0.518	0.167	0.506	0.650	1.384	1.898
12	0.162	0.116	0.274	0.464	0.127	0.484	0.625	1.426	2.012
13	0.173	0.129	0.229	0.410	0.094	0.451	0.601	1.469	2.133
14	0.186	0.142	0.190	0.357	0.068	0.411	0.577	1.513	2.261
15	0.201	0.156	0.154	0.306	0.047	0.366	0.555	1.558	2.397
16	0.218	0.171	0.123	0.259	0.032	0.318	0.534	1.605	2.540
17	0.237	0.186	0.096	0.214	0.021	0.270	0.513	1.653	2.693
18	0.258	0.203	0.074	0.175	0.013	0.222	0.494	1.702	2.854
19	0.282	0.220	0.055	0.139	0.008	0.179	0.475	1.754	3.026
20	0.309	0.238	0.039	0.109	0.004	0.139	0.456	1.806	3.207
21	0.339	0.257	0.027	0.083	0.002	0.105	0.439	1.860	3.400
22	0.371	0.276	0.018	0.062	0.001	0.077	0.422	1.916	3.604
23	0.406	0.297	0.011	0.045	0.001	0.055	0.406	1.974	3.820
24	0.444	0.317	0.007	0.031	0.000	0.038	0.390	2.033	4.049
25	0.475	0.339	0.004	0.021	0.000	0.025	0.375	2.094	4.292
26	0.506	0.361	0.002	0.014	0.000	0.016	0.361	2.157	4.549
27	0.539	0.384	0.001	0.009	0.000	0.010	0.347	2.221	4.822
28	0.575	0.405	0.000	0.006	0.000	0.006	0.333	2.288	5.112
29	0.616	0.425	0.000	0.003	0.000	0.004	0.321	2.357	5.418
30	0.661	0.444	0.000	0.002	0.000	0.002	0.308	2.427	5.743
31	0.713	0.464	0.000	0.001	0.000	0.001	0.296	2.500	6.088
32	0.773	0.482	0.000	0.001	0.000	0.001	0.285	2.575	6.453
33	0.841	0.495	0.000	0.000	0.000	0.000	0.274	2.652	6.841
34	0.918	0.500	0.000	0.000	0.000	0.000	0.264	2.732	7.251
35	1.000	0.500	0.000	0.000	0.000	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
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53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
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(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	26		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	4/30/2012		
(14)	**DATE OF FILING**	6/21/2012		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	72	M	
(16)	**CLAIMANT 2 (y)**	63	F	
			NOMINAL	**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1		10.36	8.24
(18)	APV FOR CLAIMANT 2		35.86	20.75
(19)	APV FOR BOTH CLAIMANTS ALIVE		9.62	7.76
(20)	APV FOR ONLY 1 CLAIMANT ALIVE		26.98	13.47
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE		11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE		7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT		310,827	188,475
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY		625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY		7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT		6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT		12.549	9.704
(28)	APV OF MEDICAL BENEFIT		75,291	58,225

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.008	0.931	0.993	0.925	0.074	0.962	1.030	1.060
2	0.080	0.009	0.863	0.986	0.850	0.148	0.925	1.061	1.124
3	0.086	0.010	0.794	0.977	0.776	0.219	0.889	1.093	1.191
4	0.094	0.011	0.726	0.968	0.702	0.289	0.855	1.126	1.262
5	0.102	0.012	0.658	0.957	0.629	0.356	0.822	1.159	1.338
6	0.111	0.013	0.590	0.946	0.558	0.419	0.790	1.194	1.419
7	0.121	0.014	0.525	0.934	0.490	0.479	0.760	1.230	1.504
8	0.131	0.015	0.461	0.921	0.425	0.533	0.731	1.267	1.594
9	0.141	0.017	0.401	0.907	0.364	0.581	0.703	1.305	1.689
10	0.151	0.018	0.344	0.892	0.307	0.622	0.676	1.344	1.791
11	0.162	0.020	0.292	0.876	0.256	0.656	0.650	1.384	1.898
12	0.173	0.023	0.245	0.858	0.210	0.683	0.625	1.426	2.012
13	0.186	0.025	0.203	0.839	0.170	0.702	0.601	1.469	2.133
14	0.201	0.028	0.165	0.818	0.135	0.713	0.577	1.513	2.261
15	0.218	0.032	0.132	0.794	0.105	0.717	0.555	1.558	2.397
16	0.237	0.035	0.103	0.769	0.079	0.714	0.534	1.605	2.540
17	0.258	0.039	0.079	0.742	0.058	0.704	0.513	1.653	2.693
18	0.282	0.044	0.058	0.713	0.042	0.688	0.494	1.702	2.854
19	0.309	0.049	0.042	0.681	0.028	0.666	0.475	1.754	3.026
20	0.339	0.055	0.029	0.648	0.019	0.639	0.456	1.806	3.207
21	0.371	0.061	0.019	0.612	0.012	0.608	0.439	1.860	3.400
22	0.406	0.068	0.012	0.575	0.007	0.573	0.422	1.916	3.604
23	0.444	0.075	0.007	0.536	0.004	0.536	0.406	1.974	3.820
24	0.475	0.084	0.004	0.496	0.002	0.496	0.390	2.033	4.049
25	0.506	0.094	0.002	0.454	0.001	0.454	0.375	2.094	4.292
26	0.539	0.105	0.001	0.411	0.000	0.412	0.361	2.157	4.549
27	0.575	0.116	0.000	0.368	0.000	0.369	0.347	2.221	4.822
28	0.616	0.129	0.000	0.326	0.000	0.326	0.333	2.288	5.112
29	0.661	0.142	0.000	0.284	0.000	0.284	0.321	2.357	5.418
30	0.713	0.156	0.000	0.243	0.000	0.243	0.308	2.427	5.743
31	0.773	0.171	0.000	0.205	0.000	0.205	0.296	2.500	6.088
32	0.841	0.186	0.000	0.170	0.000	0.170	0.285	2.575	6.453
33	0.918	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	1.000	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	-	0.238	-	0.086	-	0.086	0.253	2.814	7.686
36	-	0.257	-	0.066	-	0.066	0.244	2.898	8.147
37	-	0.276	-	0.049	-	0.049	0.234	2.985	8.636
38	-	0.297	-	0.035	-	0.035	0.225	3.075	9.154
39	-	0.317	-	0.025	-	0.025	0.217	3.167	9.704
40	-	0.339	-	0.017	-	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	27	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/1/1986	
(14)	**DATE OF FILING**	11/5/1996	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	72	M
(16)	**CLAIMANT 2 (y)**	59	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.36	8.24
(18)	APV FOR CLAIMANT 2	43.74	23.50
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.87	7.92
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	34.37	15.89
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	369,091	208,499
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	12.549	9.704
(28)	APV OF MEDICAL BENEFIT	75,291	58,225

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.004	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.004	0.931	0.996	0.928	0.072	0.962	1.030	1.060
2	0.080	0.005	0.863	0.992	0.855	0.143	0.925	1.061	1.124
3	0.086	0.006	0.794	0.987	0.783	0.214	0.889	1.093	1.191
4	0.094	0.007	0.726	0.981	0.712	0.283	0.855	1.126	1.262
5	0.102	0.008	0.658	0.974	0.641	0.351	0.822	1.159	1.338
6	0.111	0.009	0.590	0.967	0.571	0.416	0.790	1.194	1.419
7	0.121	0.010	0.525	0.959	0.503	0.477	0.760	1.230	1.504
8	0.131	0.011	0.461	0.949	0.438	0.535	0.731	1.267	1.594
9	0.141	0.012	0.401	0.939	0.376	0.587	0.703	1.305	1.689
10	0.151	0.013	0.344	0.928	0.320	0.633	0.676	1.344	1.791
11	0.162	0.014	0.292	0.916	0.268	0.673	0.650	1.384	1.898
12	0.173	0.015	0.245	0.904	0.221	0.706	0.625	1.426	2.012
13	0.186	0.017	0.203	0.890	0.180	0.732	0.601	1.469	2.133
14	0.201	0.018	0.165	0.875	0.144	0.752	0.577	1.513	2.261
15	0.218	0.020	0.132	0.859	0.113	0.765	0.555	1.558	2.397
16	0.237	0.023	0.103	0.842	0.087	0.771	0.534	1.605	2.540
17	0.258	0.025	0.079	0.823	0.065	0.772	0.513	1.653	2.693
18	0.282	0.028	0.058	0.802	0.047	0.767	0.494	1.702	2.854
19	0.309	0.032	0.042	0.779	0.033	0.756	0.475	1.754	3.026
20	0.339	0.035	0.029	0.754	0.022	0.740	0.456	1.806	3.207
21	0.371	0.039	0.019	0.728	0.014	0.719	0.439	1.860	3.400
22	0.406	0.044	0.012	0.699	0.008	0.694	0.422	1.916	3.604
23	0.444	0.049	0.007	0.668	0.005	0.666	0.406	1.974	3.820
24	0.475	0.055	0.004	0.636	0.003	0.634	0.390	2.033	4.049
25	0.506	0.061	0.002	0.601	0.001	0.600	0.375	2.094	4.292
26	0.539	0.068	0.001	0.564	0.001	0.564	0.361	2.157	4.549
27	0.575	0.075	0.000	0.526	0.000	0.526	0.347	2.221	4.822
28	0.616	0.084	0.000	0.486	0.000	0.486	0.333	2.288	5.112
29	0.661	0.094	0.000	0.445	0.000	0.445	0.321	2.357	5.418
30	0.713	0.105	0.000	0.404	0.000	0.404	0.308	2.427	5.743
31	0.773	0.116	0.000	0.361	0.000	0.361	0.296	2.500	6.088
32	0.841	0.129	0.000	0.319	0.000	0.319	0.285	2.575	6.453
33	0.918	0.142	0.000	0.278	0.000	0.278	0.274	2.652	6.841
34	1.000	0.156	0.000	0.239	0.000	0.239	0.264	2.732	7.251
35	-	0.171	-	0.202	-	0.202	0.253	2.814	7.686
36	-	0.186	-	0.167	-	0.167	0.244	2.898	8.147
37	-	0.203	-	0.136	-	0.136	0.234	2.985	8.636
38	-	0.220	-	0.108	-	0.108	0.225	3.075	9.154
39	-	0.238	-	0.085	-	0.085	0.217	3.167	9.704
40	-	0.257	-	0.065	-	0.065	0.208	3.262	10.286
41	-	0.276	-	0.048	-	0.048	0.200	3.360	10.903
42	-	0.297	-	0.035	-	0.035	0.193	3.461	11.557
43	-	0.317	-	0.024	-	0.024	0.185	3.565	12.250
44	-	0.339	-	0.017	-	0.017	0.178	3.671	12.985
45	-	0.361	-	0.011	-	0.011	0.171	3.782	13.765
46	-	0.384	-	0.007	-	0.007	0.165	3.895	14.590
47	-	0.405	-	0.004	-	0.004	0.158	4.012	15.466
48	-	0.425	-	0.003	-	0.003	0.152	4.132	16.394
49	-	0.444	-	0.001	-	0.001	0.146	4.256	17.378
50	-	0.464	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.482	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.495	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	1.000	-	0.000	-	0.000	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	28	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1998	
(14)	**DATE OF FILING**	6/3/1998	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	78	M
(16)	**CLAIMANT 2 (y)**	74	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.14	6.05
(18)	APV FOR CLAIMANT 2	19.54	13.64
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.25	5.41
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	14.17	8.88
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	176,805	127,541
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.181	6.818
(28)	APV OF MEDICAL BENEFIT	49,086	40,907

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.111	0.020	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.121	0.023	0.889	0.980	0.871	0.127	0.962	1.030	1.060
2	0.131	0.025	0.781	0.957	0.748	0.243	0.925	1.061	1.124
3	0.141	0.028	0.679	0.933	0.634	0.345	0.889	1.093	1.191
4	0.151	0.032	0.583	0.907	0.529	0.432	0.855	1.126	1.262
5	0.162	0.035	0.495	0.878	0.435	0.504	0.822	1.159	1.338
6	0.173	0.039	0.415	0.847	0.352	0.559	0.790	1.194	1.419
7	0.186	0.044	0.343	0.814	0.279	0.598	0.760	1.230	1.504
8	0.201	0.049	0.279	0.778	0.217	0.623	0.731	1.267	1.594
9	0.218	0.055	0.223	0.740	0.165	0.633	0.703	1.305	1.689
10	0.237	0.061	0.174	0.699	0.122	0.630	0.676	1.344	1.791
11	0.258	0.068	0.133	0.656	0.087	0.615	0.650	1.384	1.898
12	0.282	0.075	0.099	0.612	0.060	0.590	0.625	1.426	2.012
13	0.309	0.084	0.071	0.566	0.040	0.556	0.601	1.469	2.133
14	0.339	0.094	0.049	0.518	0.025	0.516	0.577	1.513	2.261
15	0.371	0.105	0.032	0.470	0.015	0.472	0.555	1.558	2.397
16	0.406	0.116	0.020	0.420	0.009	0.424	0.534	1.605	2.540
17	0.444	0.129	0.012	0.372	0.004	0.375	0.513	1.653	2.693
18	0.475	0.142	0.007	0.324	0.002	0.326	0.494	1.702	2.854
19	0.506	0.156	0.004	0.278	0.001	0.279	0.475	1.754	3.026
20	0.539	0.171	0.002	0.234	0.000	0.235	0.456	1.806	3.207
21	0.575	0.186	0.001	0.194	0.000	0.195	0.439	1.860	3.400
22	0.616	0.203	0.000	0.158	0.000	0.158	0.422	1.916	3.604
23	0.661	0.220	0.000	0.126	0.000	0.126	0.406	1.974	3.820
24	0.713	0.238	0.000	0.098	0.000	0.099	0.390	2.033	4.049
25	0.773	0.257	0.000	0.075	0.000	0.075	0.375	2.094	4.292
26	0.841	0.276	0.000	0.056	0.000	0.056	0.361	2.157	4.549
27	0.918	0.297	0.000	0.040	0.000	0.040	0.347	2.221	4.822
28	1.000	0.317	0.000	0.028	0.000	0.028	0.333	2.288	5.112
29	-	0.339	-	0.019	-	0.019	0.321	2.357	5.418
30	-	0.361	-	0.013	-	0.013	0.308	2.427	5.743
31	-	0.384	-	0.008	-	0.008	0.296	2.500	6.088
32	-	0.405	-	0.005	-	0.005	0.285	2.575	6.453
33	-	0.425	-	0.003	-	0.003	0.274	2.652	6.841
34	-	0.444	-	0.002	-	0.002	0.264	2.732	7.251
35	-	0.464	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.482	-	0.001	-	0.001	0.244	2.898	8.147
37	-	0.495	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	1.000	-	0.000	-	0.000	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
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89	-	-	-	-	-	-	0.030	13.884	178.740
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103	-	-	-	-	-	-	0.018	21.001	404.114
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109	-	-	-	-	-	-	0.014	25.076	573.244
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114	-	-	-	-	-	-	0.011	29.070	767.129
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117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	29	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1998	
(14)	**DATE OF FILING**	6/16/1998	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	66	M
(16)	**CLAIMANT 2 (y)**	70	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.68	10.84
(18)	APV FOR CLAIMANT 2	24.72	16.17
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.75	9.14
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.90	8.73
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	251,608	168,452
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	19.031	13.457
(28)	APV OF MEDICAL BENEFIT	114,183	80,740

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.041	0.014	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.046	0.015	0.959	0.986	0.946	0.054	0.962	1.030	1.060
2	0.050	0.017	0.915	0.972	0.889	0.108	0.925	1.061	1.124
3	0.055	0.018	0.869	0.955	0.831	0.163	0.889	1.093	1.191
4	0.059	0.020	0.822	0.938	0.771	0.218	0.855	1.126	1.262
5	0.064	0.023	0.773	0.919	0.710	0.271	0.822	1.159	1.338
6	0.069	0.025	0.723	0.898	0.650	0.322	0.790	1.194	1.419
7	0.074	0.028	0.674	0.875	0.590	0.370	0.760	1.230	1.504
8	0.080	0.032	0.624	0.850	0.531	0.413	0.731	1.267	1.594
9	0.086	0.035	0.574	0.823	0.473	0.452	0.703	1.305	1.689
10	0.094	0.039	0.525	0.794	0.417	0.485	0.676	1.344	1.791
11	0.102	0.044	0.476	0.763	0.363	0.513	0.650	1.384	1.898
12	0.111	0.049	0.427	0.729	0.312	0.533	0.625	1.426	2.012
13	0.121	0.055	0.380	0.694	0.263	0.547	0.601	1.469	2.133
14	0.131	0.061	0.334	0.656	0.219	0.552	0.577	1.513	2.261
15	0.141	0.068	0.290	0.616	0.179	0.549	0.555	1.558	2.397
16	0.151	0.075	0.249	0.574	0.143	0.537	0.534	1.605	2.540
17	0.162	0.084	0.212	0.531	0.112	0.518	0.513	1.653	2.693
18	0.173	0.094	0.177	0.486	0.086	0.491	0.494	1.702	2.854
19	0.186	0.105	0.147	0.440	0.065	0.458	0.475	1.754	3.026
20	0.201	0.116	0.119	0.394	0.047	0.420	0.456	1.806	3.207
21	0.218	0.129	0.095	0.349	0.033	0.377	0.439	1.860	3.400
22	0.237	0.142	0.074	0.304	0.023	0.333	0.422	1.916	3.604
23	0.258	0.156	0.057	0.261	0.015	0.288	0.406	1.974	3.820
24	0.282	0.171	0.042	0.220	0.009	0.244	0.390	2.033	4.049
25	0.309	0.186	0.030	0.182	0.006	0.202	0.375	2.094	4.292
26	0.339	0.203	0.021	0.148	0.003	0.163	0.361	2.157	4.549
27	0.371	0.220	0.014	0.118	0.002	0.129	0.347	2.221	4.822
28	0.406	0.238	0.009	0.092	0.001	0.099	0.333	2.288	5.112
29	0.444	0.257	0.005	0.070	0.000	0.075	0.321	2.357	5.418
30	0.475	0.276	0.003	0.052	0.000	0.055	0.308	2.427	5.743
31	0.506	0.297	0.002	0.038	0.000	0.039	0.296	2.500	6.088
32	0.539	0.317	0.001	0.027	0.000	0.027	0.285	2.575	6.453
33	0.575	0.339	0.000	0.018	0.000	0.019	0.274	2.652	6.841
34	0.616	0.361	0.000	0.012	0.000	0.012	0.264	2.732	7.251
35	0.661	0.384	0.000	0.008	0.000	0.008	0.253	2.814	7.686
36	0.713	0.405	0.000	0.005	0.000	0.005	0.244	2.898	8.147
37	0.773	0.425	0.000	0.003	0.000	0.003	0.234	2.985	8.636
38	0.841	0.444	0.000	0.002	0.000	0.002	0.225	3.075	9.154
39	0.918	0.464	0.000	0.001	0.000	0.001	0.217	3.167	9.704
40	1.000	0.482	0.000	0.000	0.000	0.000	0.208	3.262	10.286
41	-	0.495	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	1.000	-	0.000	-	0.000	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	30	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	6/1/1979	
(14)	**DATE OF FILING**	8/17/1979	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	96	M
(16)	**CLAIMANT 2 (y)**	94	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.04	1.97
(18)	APV FOR CLAIMANT 2	4.96	4.41
(19)	APV FOR BOTH CLAIMANTS ALIVE	1.74	1.69
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	3.52	2.99
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	45,972	41,540
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.094	2.018
(28)	APV OF MEDICAL BENEFIT	12,562	12,106

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.475	0.171	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.506	0.186	0.525	0.829	0.436	0.483	0.962	1.030	1.060
2	0.539	0.203	0.259	0.675	0.175	0.584	0.925	1.061	1.124
3	0.575	0.220	0.120	0.538	0.064	0.529	0.889	1.093	1.191
4	0.616	0.238	0.051	0.420	0.021	0.428	0.855	1.126	1.262
5	0.661	0.257	0.019	0.320	0.006	0.327	0.822	1.159	1.338
6	0.713	0.276	0.007	0.238	0.002	0.241	0.790	1.194	1.419
7	0.773	0.297	0.002	0.172	0.000	0.173	0.760	1.230	1.504
8	0.841	0.317	0.000	0.121	0.000	0.121	0.731	1.267	1.594
9	0.918	0.339	0.000	0.083	0.000	0.083	0.703	1.305	1.689
10	1.000	0.361	0.000	0.055	0.000	0.055	0.676	1.344	1.791
11	-	0.384	-	0.035	-	0.035	0.650	1.384	1.898
12	-	0.405	-	0.022	-	0.022	0.625	1.426	2.012
13	-	0.425	-	0.013	-	0.013	0.601	1.469	2.133
14	-	0.444	-	0.007	-	0.007	0.577	1.513	2.261
15	-	0.464	-	0.004	-	0.004	0.555	1.558	2.397
16	-	0.482	-	0.002	-	0.002	0.534	1.605	2.540
17	-	0.495	-	0.001	-	0.001	0.513	1.653	2.693
18	-	0.500	-	0.001	-	0.001	0.494	1.702	2.854
19	-	0.500	-	0.000	-	0.000	0.475	1.754	3.026
20	-	0.500	-	0.000	-	0.000	0.456	1.806	3.207
21	-	0.500	-	0.000	-	0.000	0.439	1.860	3.400
22	-	0.500	-	0.000	-	0.000	0.422	1.916	3.604
23	-	0.500	-	0.000	-	0.000	0.406	1.974	3.820
24	-	0.500	-	0.000	-	0.000	0.390	2.033	4.049
25	-	0.500	-	0.000	-	0.000	0.375	2.094	4.292
26	-	1.000	-	0.000	-	0.000	0.361	2.157	4.549
27	-	-	-	-	-	-	0.347	2.221	4.822
28	-	-	-	-	-	-	0.333	2.288	5.112
29	-	-	-	-	-	-	0.321	2.357	5.418
30	-	-	-	-	-	-	0.308	2.427	5.743
31	-	-	-	-	-	-	0.296	2.500	6.088
32	-	-	-	-	-	-	0.285	2.575	6.453
33	-	-	-	-	-	-	0.274	2.652	6.841
34	-	-	-	-	-	-	0.264	2.732	7.251
35	-	-	-	-	-	-	0.253	2.814	7.686
36	-	-	-	-	-	-	0.244	2.898	8.147
37	-	-	-	-	-	-	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	31	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	12/1/1975	
(14)	**DATE OF FILING**	4/18/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	92	M
(16)	**CLAIMANT 2 (y)**	75	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.71	2.56
(18)	APV FOR CLAIMANT 2	18.37	13.03
(19)	APV FOR BOTH CLAIMANTS ALIVE	2.61	2.48
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.86	10.64
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	148,449	107,758
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.825	2.667
(28)	APV OF MEDICAL BENEFIT	16,953	16,000

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.339	0.023	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.371	0.025	0.661	0.977	0.646	0.346	0.962	1.030	1.060
2	0.406	0.028	0.416	0.953	0.396	0.576	0.925	1.061	1.124
3	0.444	0.032	0.247	0.926	0.229	0.715	0.889	1.093	1.191
4	0.475	0.035	0.137	0.896	0.123	0.787	0.855	1.126	1.262
5	0.506	0.039	0.072	0.864	0.062	0.812	0.822	1.159	1.338
6	0.539	0.044	0.036	0.830	0.030	0.807	0.790	1.194	1.419
7	0.575	0.049	0.016	0.794	0.013	0.784	0.760	1.230	1.504
8	0.616	0.055	0.007	0.755	0.005	0.751	0.731	1.267	1.594
9	0.661	0.061	0.003	0.713	0.002	0.712	0.703	1.305	1.689
10	0.713	0.068	0.001	0.670	0.001	0.670	0.676	1.344	1.791
11	0.773	0.075	0.000	0.625	0.000	0.625	0.650	1.384	1.898
12	0.841	0.084	0.000	0.578	0.000	0.578	0.625	1.426	2.012
13	0.918	0.094	0.000	0.529	0.000	0.529	0.601	1.469	2.133
14	1.000	0.105	0.000	0.479	0.000	0.479	0.577	1.513	2.261
15	-	0.116	-	0.429	-	0.429	0.555	1.558	2.397
16	-	0.129	-	0.379	-	0.379	0.534	1.605	2.540
17	-	0.142	-	0.330	-	0.330	0.513	1.653	2.693
18	-	0.156	-	0.284	-	0.284	0.494	1.702	2.854
19	-	0.171	-	0.239	-	0.239	0.475	1.754	3.026
20	-	0.186	-	0.199	-	0.199	0.456	1.806	3.207
21	-	0.203	-	0.162	-	0.162	0.439	1.860	3.400
22	-	0.220	-	0.129	-	0.129	0.422	1.916	3.604
23	-	0.238	-	0.101	-	0.101	0.406	1.974	3.820
24	-	0.257	-	0.077	-	0.077	0.390	2.033	4.049
25	-	0.276	-	0.057	-	0.057	0.375	2.094	4.292
26	-	0.297	-	0.041	-	0.041	0.361	2.157	4.549
27	-	0.317	-	0.029	-	0.029	0.347	2.221	4.822
28	-	0.339	-	0.020	-	0.020	0.333	2.288	5.112
29	-	0.361	-	0.013	-	0.013	0.321	2.357	5.418
30	-	0.384	-	0.008	-	0.008	0.308	2.427	5.743
31	-	0.405	-	0.005	-	0.005	0.296	2.500	6.088
32	-	0.425	-	0.003	-	0.003	0.285	2.575	6.453
33	-	0.444	-	0.002	-	0.002	0.274	2.652	6.841
34	-	0.464	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.482	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.495	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	1.000	-	0.000	-	0.000	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	32	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/4/1975	
(14)	**DATE OF FILING**	6/24/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	82	M
(16)	**CLAIMANT 2 (y)**	77	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.57	4.89
(18)	APV FOR CLAIMANT 2	16.19	11.84
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.89	4.37
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	11.98	8.00
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	145,008	109,210
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	6.181	5.371
(28)	APV OF MEDICAL BENEFIT	37,088	32,227

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.151	0.028	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.162	0.032	0.849	0.972	0.825	0.171	0.962	1.030	1.060
2	0.173	0.035	0.712	0.941	0.669	0.314	0.925	1.061	1.124
3	0.186	0.039	0.588	0.908	0.534	0.428	0.889	1.093	1.191
4	0.201	0.044	0.478	0.872	0.417	0.516	0.855	1.126	1.262
5	0.218	0.049	0.382	0.833	0.319	0.579	0.822	1.159	1.338
6	0.237	0.055	0.299	0.793	0.237	0.618	0.790	1.194	1.419
7	0.258	0.061	0.228	0.749	0.171	0.635	0.760	1.230	1.504
8	0.282	0.068	0.169	0.703	0.119	0.635	0.731	1.267	1.594
9	0.309	0.075	0.121	0.656	0.080	0.618	0.703	1.305	1.689
10	0.339	0.084	0.084	0.606	0.051	0.588	0.676	1.344	1.791
11	0.371	0.094	0.055	0.555	0.031	0.549	0.650	1.384	1.898
12	0.406	0.105	0.035	0.503	0.018	0.503	0.625	1.426	2.012
13	0.444	0.116	0.021	0.451	0.009	0.453	0.601	1.469	2.133
14	0.475	0.129	0.012	0.398	0.005	0.401	0.577	1.513	2.261
15	0.506	0.142	0.006	0.347	0.002	0.349	0.555	1.558	2.397
16	0.539	0.156	0.003	0.298	0.001	0.299	0.534	1.605	2.540
17	0.575	0.171	0.001	0.251	0.000	0.252	0.513	1.653	2.693
18	0.616	0.186	0.001	0.208	0.000	0.209	0.494	1.702	2.854
19	0.661	0.203	0.000	0.170	0.000	0.170	0.475	1.754	3.026
20	0.713	0.220	0.000	0.135	0.000	0.135	0.456	1.806	3.207
21	0.773	0.238	0.000	0.106	0.000	0.106	0.439	1.860	3.400
22	0.841	0.257	0.000	0.080	0.000	0.080	0.422	1.916	3.604
23	0.918	0.276	0.000	0.060	0.000	0.060	0.406	1.974	3.820
24	1.000	0.297	0.000	0.043	0.000	0.043	0.390	2.033	4.049
25	-	0.317	-	0.030	-	0.030	0.375	2.094	4.292
26	-	0.339	-	0.021	-	0.021	0.361	2.157	4.549
27	-	0.361	-	0.014	-	0.014	0.347	2.221	4.822
28	-	0.384	-	0.009	-	0.009	0.333	2.288	5.112
29	-	0.405	-	0.005	-	0.005	0.321	2.357	5.418
30	-	0.425	-	0.003	-	0.003	0.308	2.427	5.743
31	-	0.444	-	0.002	-	0.002	0.296	2.500	6.088
32	-	0.464	-	0.001	-	0.001	0.285	2.575	6.453
33	-	0.482	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.495	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	1.000	-	0.000	-	0.000	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
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(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	33		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	11/14/1979		
(14)	**DATE OF FILING**	7/28/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	77	M	
(16)	**CLAIMANT 2 (y)**	71	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.60	6.38
(18)	APV FOR CLAIMANT 2	23.35	15.53
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.84	5.84
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	17.27	10.24
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	206,675	142,570
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.786	7.239
(28)	APV OF MEDICAL BENEFIT	52,714	43,432

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.102	0.015	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.111	0.017	0.898	0.985	0.884	0.114	0.962	1.030	1.060
2	0.121	0.018	0.798	0.969	0.773	0.221	0.925	1.061	1.124
3	0.131	0.020	0.701	0.951	0.667	0.318	0.889	1.093	1.191
4	0.141	0.023	0.610	0.932	0.568	0.405	0.855	1.126	1.262
5	0.151	0.025	0.524	0.910	0.477	0.480	0.822	1.159	1.338
6	0.162	0.028	0.445	0.887	0.395	0.543	0.790	1.194	1.419
7	0.173	0.032	0.373	0.862	0.321	0.592	0.760	1.230	1.504
8	0.186	0.035	0.308	0.835	0.257	0.629	0.731	1.267	1.594
9	0.201	0.039	0.251	0.805	0.202	0.652	0.703	1.305	1.689
10	0.218	0.044	0.200	0.774	0.155	0.664	0.676	1.344	1.791
11	0.237	0.049	0.157	0.740	0.116	0.665	0.650	1.384	1.898
12	0.258	0.055	0.119	0.703	0.084	0.655	0.625	1.426	2.012
13	0.282	0.061	0.089	0.665	0.059	0.636	0.601	1.469	2.133
14	0.309	0.068	0.064	0.624	0.040	0.608	0.577	1.513	2.261
15	0.339	0.075	0.044	0.582	0.026	0.575	0.555	1.558	2.397
16	0.371	0.084	0.029	0.538	0.016	0.536	0.534	1.605	2.540
17	0.406	0.094	0.018	0.493	0.009	0.493	0.513	1.653	2.693
18	0.444	0.105	0.011	0.447	0.005	0.448	0.494	1.702	2.854
19	0.475	0.116	0.006	0.400	0.002	0.401	0.475	1.754	3.026
20	0.506	0.129	0.003	0.353	0.001	0.354	0.456	1.806	3.207
21	0.539	0.142	0.002	0.308	0.000	0.309	0.439	1.860	3.400
22	0.575	0.156	0.001	0.264	0.000	0.265	0.422	1.916	3.604
23	0.616	0.171	0.000	0.223	0.000	0.223	0.406	1.974	3.820
24	0.661	0.186	0.000	0.185	0.000	0.185	0.390	2.033	4.049
25	0.713	0.203	0.000	0.150	0.000	0.151	0.375	2.094	4.292
26	0.773	0.220	0.000	0.120	0.000	0.120	0.361	2.157	4.549
27	0.841	0.238	0.000	0.094	0.000	0.094	0.347	2.221	4.822
28	0.918	0.257	0.000	0.071	0.000	0.071	0.333	2.288	5.112
29	1.000	0.276	0.000	0.053	0.000	0.053	0.321	2.357	5.418
30	-	0.297	-	0.038	-	0.038	0.308	2.427	5.743
31	-	0.317	-	0.027	-	0.027	0.296	2.500	6.088
32	-	0.339	-	0.018	-	0.018	0.285	2.575	6.453
33	-	0.361	-	0.012	-	0.012	0.274	2.652	6.841
34	-	0.384	-	0.008	-	0.008	0.264	2.732	7.251
35	-	0.405	-	0.005	-	0.005	0.253	2.814	7.686
36	-	0.425	-	0.003	-	0.003	0.244	2.898	8.147
37	-	0.444	-	0.002	-	0.002	0.234	2.985	8.636
38	-	0.464	-	0.001	-	0.001	0.225	3.075	9.154
39	-	0.482	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.495	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	1.000	-	0.000	-	0.000	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(13) PROVIDED BY BWC
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	34	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	10/1/1976	
(14)	**DATE OF FILING**	10/2/1976	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	78	M
(16)	**CLAIMANT 2 (y)**	77	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.14	6.05
(18)	APV FOR CLAIMANT 2	16.19	11.84
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.97	5.19
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	11.40	7.50
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	152,775	114,808
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.181	6.818
(28)	APV OF MEDICAL BENEFIT	49,086	40,907

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.111	0.028	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.121	0.032	0.889	0.972	0.863	0.133	0.962	1.030	1.060
2	0.131	0.035	0.781	0.941	0.735	0.252	0.925	1.061	1.124
3	0.141	0.039	0.679	0.908	0.616	0.354	0.889	1.093	1.191
4	0.151	0.044	0.583	0.872	0.509	0.438	0.855	1.126	1.262
5	0.162	0.049	0.495	0.833	0.413	0.503	0.822	1.159	1.338
6	0.173	0.055	0.415	0.793	0.329	0.550	0.790	1.194	1.419
7	0.186	0.061	0.343	0.749	0.257	0.578	0.760	1.230	1.504
8	0.201	0.068	0.279	0.703	0.196	0.590	0.731	1.267	1.594
9	0.218	0.075	0.223	0.656	0.146	0.586	0.703	1.305	1.689
10	0.237	0.084	0.174	0.606	0.106	0.569	0.676	1.344	1.791
11	0.258	0.094	0.133	0.555	0.074	0.541	0.650	1.384	1.898
12	0.282	0.105	0.099	0.503	0.050	0.503	0.625	1.426	2.012
13	0.309	0.116	0.071	0.451	0.032	0.458	0.601	1.469	2.133
14	0.339	0.129	0.049	0.398	0.019	0.408	0.577	1.513	2.261
15	0.371	0.142	0.032	0.347	0.011	0.357	0.555	1.558	2.397
16	0.406	0.156	0.020	0.298	0.006	0.306	0.534	1.605	2.540
17	0.444	0.171	0.012	0.251	0.003	0.257	0.513	1.653	2.693
18	0.475	0.186	0.007	0.208	0.001	0.212	0.494	1.702	2.854
19	0.506	0.203	0.004	0.170	0.001	0.172	0.475	1.754	3.026
20	0.539	0.220	0.002	0.135	0.000	0.137	0.456	1.806	3.207
21	0.575	0.238	0.001	0.106	0.000	0.106	0.439	1.860	3.400
22	0.616	0.257	0.000	0.080	0.000	0.081	0.422	1.916	3.604
23	0.661	0.276	0.000	0.060	0.000	0.060	0.406	1.974	3.820
24	0.713	0.297	0.000	0.043	0.000	0.043	0.390	2.033	4.049
25	0.773	0.317	0.000	0.030	0.000	0.030	0.375	2.094	4.292
26	0.841	0.339	0.000	0.021	0.000	0.021	0.361	2.157	4.549
27	0.918	0.361	0.000	0.014	0.000	0.014	0.347	2.221	4.822
28	1.000	0.384	0.000	0.009	0.000	0.009	0.333	2.288	5.112
29	-	0.405	-	0.005	-	0.005	0.321	2.357	5.418
30	-	0.425	-	0.003	-	0.003	0.308	2.427	5.743
31	-	0.444	-	0.002	-	0.002	0.296	2.500	6.088
32	-	0.464	-	0.001	-	0.001	0.285	2.575	6.453
33	-	0.482	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.495	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	1.000	-	0.000	-	0.000	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	35		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	2/1/1987		
(14)	**DATE OF FILING**	3/2/1987		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	82	M	
(16)	**CLAIMANT 2 (y)**	82	F	
		NOMINAL		**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1	5.57		4.89
(18)	APV FOR CLAIMANT 2	11.61		9.11
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.50		4.06
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	8.18		5.89
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260		11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507		7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	112,101		89,878
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60		625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20		7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000		6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	6.181		5.371
(28)	APV OF MEDICAL BENEFIT	37,088		32,227

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.151	0.049	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.162	0.055	0.849	0.951	0.807	0.185	0.962	1.030	1.060
2	0.173	0.061	0.712	0.899	0.639	0.331	0.925	1.061	1.124
3	0.186	0.068	0.588	0.844	0.496	0.439	0.889	1.093	1.191
4	0.201	0.075	0.478	0.787	0.376	0.512	0.855	1.126	1.262
5	0.218	0.084	0.382	0.727	0.278	0.554	0.822	1.159	1.338
6	0.237	0.094	0.299	0.666	0.199	0.567	0.790	1.194	1.419
7	0.258	0.105	0.228	0.604	0.138	0.556	0.760	1.230	1.504
8	0.282	0.116	0.169	0.541	0.091	0.527	0.731	1.267	1.594
9	0.309	0.129	0.121	0.478	0.058	0.483	0.703	1.305	1.689
10	0.339	0.142	0.084	0.416	0.035	0.430	0.676	1.344	1.791
11	0.371	0.156	0.055	0.357	0.020	0.373	0.650	1.384	1.898
12	0.406	0.171	0.035	0.301	0.011	0.315	0.625	1.426	2.012
13	0.444	0.186	0.021	0.250	0.005	0.260	0.601	1.469	2.133
14	0.475	0.203	0.012	0.203	0.002	0.210	0.577	1.513	2.261
15	0.506	0.220	0.006	0.162	0.001	0.166	0.555	1.558	2.397
16	0.539	0.238	0.003	0.127	0.000	0.129	0.534	1.605	2.540
17	0.575	0.257	0.001	0.097	0.000	0.098	0.513	1.653	2.693
18	0.616	0.276	0.001	0.072	0.000	0.072	0.494	1.702	2.854
19	0.661	0.297	0.000	0.052	0.000	0.052	0.475	1.754	3.026
20	0.713	0.317	0.000	0.037	0.000	0.037	0.456	1.806	3.207
21	0.773	0.339	0.000	0.025	0.000	0.025	0.439	1.860	3.400
22	0.841	0.361	0.000	0.016	0.000	0.016	0.422	1.916	3.604
23	0.918	0.384	0.000	0.011	0.000	0.011	0.406	1.974	3.820
24	1.000	0.405	0.000	0.006	0.000	0.006	0.390	2.033	4.049
25	-	0.425	-	0.004	-	0.004	0.375	2.094	4.292
26	-	0.444	-	0.002	-	0.002	0.361	2.157	4.549
27	-	0.464	-	0.001	-	0.001	0.347	2.221	4.822
28	-	0.482	-	0.001	-	0.001	0.333	2.288	5.112
29	-	0.495	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	0.500	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	1.000	-	0.000	-	0.000	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	36	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	11/1/1990	
(14)	**DATE OF FILING**	1/22/1991	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	79	M
(16)	**CLAIMANT 2 (y)**	71	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.71	5.74
(18)	APV FOR CLAIMANT 2	23.35	15.53
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.13	5.31
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	17.79	10.64
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	202,613	139,712
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.623	6.423
(28)	APV OF MEDICAL BENEFIT	45,740	38,539

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.121	0.015	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.131	0.017	0.879	0.985	0.866	0.132	0.962	1.030	1.060
2	0.141	0.018	0.764	0.969	0.740	0.252	0.925	1.061	1.124
3	0.151	0.020	0.656	0.951	0.624	0.359	0.889	1.093	1.191
4	0.162	0.023	0.557	0.932	0.519	0.451	0.855	1.126	1.262
5	0.173	0.025	0.467	0.910	0.425	0.527	0.822	1.159	1.338
6	0.186	0.028	0.386	0.887	0.343	0.588	0.790	1.194	1.419
7	0.201	0.032	0.314	0.862	0.271	0.635	0.760	1.230	1.504
8	0.218	0.035	0.251	0.835	0.209	0.667	0.731	1.267	1.594
9	0.237	0.039	0.196	0.805	0.158	0.686	0.703	1.305	1.689
10	0.258	0.044	0.150	0.774	0.116	0.692	0.676	1.344	1.791
11	0.282	0.049	0.111	0.740	0.082	0.686	0.650	1.384	1.898
12	0.309	0.055	0.080	0.703	0.056	0.671	0.625	1.426	2.012
13	0.339	0.061	0.055	0.665	0.037	0.647	0.601	1.469	2.133
14	0.371	0.068	0.036	0.624	0.023	0.615	0.577	1.513	2.261
15	0.406	0.075	0.023	0.582	0.013	0.578	0.555	1.558	2.397
16	0.444	0.084	0.014	0.538	0.007	0.537	0.534	1.605	2.540
17	0.475	0.094	0.008	0.493	0.004	0.493	0.513	1.653	2.693
18	0.506	0.105	0.004	0.447	0.002	0.447	0.494	1.702	2.854
19	0.539	0.116	0.002	0.400	0.001	0.400	0.475	1.754	3.026
20	0.575	0.129	0.001	0.353	0.000	0.354	0.456	1.806	3.207
21	0.616	0.142	0.000	0.308	0.000	0.308	0.439	1.860	3.400
22	0.661	0.156	0.000	0.264	0.000	0.264	0.422	1.916	3.604
23	0.713	0.171	0.000	0.223	0.000	0.223	0.406	1.974	3.820
24	0.773	0.186	0.000	0.185	0.000	0.185	0.390	2.033	4.049
25	0.841	0.203	0.000	0.150	0.000	0.150	0.375	2.094	4.292
26	0.918	0.220	0.000	0.120	0.000	0.120	0.361	2.157	4.549
27	1.000	0.238	0.000	0.094	0.000	0.094	0.347	2.221	4.822
28	-	0.257	-	0.071	-	0.071	0.333	2.288	5.112
29	-	0.276	-	0.053	-	0.053	0.321	2.357	5.418
30	-	0.297	-	0.038	-	0.038	0.308	2.427	5.743
31	-	0.317	-	0.027	-	0.027	0.296	2.500	6.088
32	-	0.339	-	0.018	-	0.018	0.285	2.575	6.453
33	-	0.361	-	0.012	-	0.012	0.274	2.652	6.841
34	-	0.384	-	0.008	-	0.008	0.264	2.732	7.251
35	-	0.405	-	0.005	-	0.005	0.253	2.814	7.686
36	-	0.425	-	0.003	-	0.003	0.244	2.898	8.147
37	-	0.444	-	0.002	-	0.002	0.234	2.985	8.636
38	-	0.464	-	0.001	-	0.001	0.225	3.075	9.154
39	-	0.482	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.495	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	1.000	-	0.000	-	0.000	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
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99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
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114	-	-	-	-	-	-	0.011	29.070	767.129
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116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	37		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	1/1/1991		
(14)	**DATE OF FILING**	4/2/1991		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	74	M	
(16)	**CLAIMANT 2 (y)**	77	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.17	7.46
(18)	APV FOR CLAIMANT 2	16.19	11.84
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.20	6.11
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	10.96	7.09
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	163,398	121,963
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	10.897	8.654
(28)	APV OF MEDICAL BENEFIT	65,379	51,924

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.080	0.028	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.086	0.032	0.920	0.972	0.894	0.103	0.962	1.030	1.060
2	0.094	0.035	0.841	0.941	0.791	0.199	0.925	1.061	1.124
3	0.102	0.039	0.762	0.908	0.692	0.286	0.889	1.093	1.191
4	0.111	0.044	0.684	0.872	0.597	0.363	0.855	1.126	1.262
5	0.121	0.049	0.608	0.833	0.507	0.428	0.822	1.159	1.338
6	0.131	0.055	0.535	0.793	0.424	0.480	0.790	1.194	1.419
7	0.141	0.061	0.465	0.749	0.348	0.518	0.760	1.230	1.504
8	0.151	0.068	0.399	0.703	0.281	0.541	0.731	1.267	1.594
9	0.162	0.075	0.339	0.656	0.222	0.550	0.703	1.305	1.689
10	0.173	0.084	0.284	0.606	0.172	0.546	0.676	1.344	1.791
11	0.186	0.094	0.235	0.555	0.130	0.529	0.650	1.384	1.898
12	0.201	0.105	0.191	0.503	0.096	0.502	0.625	1.426	2.012
13	0.218	0.116	0.153	0.451	0.069	0.466	0.601	1.469	2.133
14	0.237	0.129	0.119	0.398	0.048	0.423	0.577	1.513	2.261
15	0.258	0.142	0.091	0.347	0.032	0.375	0.555	1.558	2.397
16	0.282	0.156	0.068	0.298	0.020	0.325	0.534	1.605	2.540
17	0.309	0.171	0.048	0.251	0.012	0.275	0.513	1.653	2.693
18	0.339	0.186	0.033	0.208	0.007	0.228	0.494	1.702	2.854
19	0.371	0.203	0.022	0.170	0.004	0.184	0.475	1.754	3.026
20	0.406	0.220	0.014	0.135	0.002	0.145	0.456	1.806	3.207
21	0.444	0.238	0.008	0.106	0.001	0.112	0.439	1.860	3.400
22	0.475	0.257	0.005	0.080	0.000	0.084	0.422	1.916	3.604
23	0.506	0.276	0.002	0.060	0.000	0.062	0.406	1.974	3.820
24	0.539	0.297	0.001	0.043	0.000	0.044	0.390	2.033	4.049
25	0.575	0.317	0.001	0.030	0.000	0.031	0.375	2.094	4.292
26	0.616	0.339	0.000	0.021	0.000	0.021	0.361	2.157	4.549
27	0.661	0.361	0.000	0.014	0.000	0.014	0.347	2.221	4.822
28	0.713	0.384	0.000	0.009	0.000	0.009	0.333	2.288	5.112
29	0.773	0.405	0.000	0.005	0.000	0.005	0.321	2.357	5.418
30	0.841	0.425	0.000	0.003	0.000	0.003	0.308	2.427	5.743
31	0.918	0.444	0.000	0.002	0.000	0.002	0.296	2.500	6.088
32	1.000	0.464	0.000	0.001	0.000	0.001	0.285	2.575	6.453
33	-	0.482	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.495	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	1.000	-	0.000	-	0.000	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
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(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
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(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	38	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1992	
(14)	**DATE OF FILING**	8/30/1994	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	75	M
(16)	**CLAIMANT 2 (y)**	75	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.62	7.09
(18)	APV FOR CLAIMANT 2	18.37	13.03
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.16	6.08
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	12.67	7.97
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	175,752	128,215
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	10.143	8.159
(28)	APV OF MEDICAL BENEFIT	60,860	48,952

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.086	0.023	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	0.025	0.914	0.977	0.893	0.105	0.962	1.030	1.060
2	0.102	0.028	0.828	0.953	0.789	0.203	0.925	1.061	1.124
3	0.111	0.032	0.743	0.926	0.688	0.293	0.889	1.093	1.191
4	0.121	0.035	0.661	0.896	0.592	0.373	0.855	1.126	1.262
5	0.131	0.039	0.581	0.864	0.502	0.441	0.822	1.159	1.338
6	0.141	0.044	0.505	0.830	0.419	0.497	0.790	1.194	1.419
7	0.151	0.049	0.434	0.794	0.344	0.539	0.760	1.230	1.504
8	0.162	0.055	0.368	0.755	0.278	0.567	0.731	1.267	1.594
9	0.173	0.061	0.309	0.713	0.220	0.582	0.703	1.305	1.689
10	0.186	0.068	0.255	0.670	0.171	0.583	0.676	1.344	1.791
11	0.201	0.075	0.208	0.625	0.130	0.573	0.650	1.384	1.898
12	0.218	0.084	0.166	0.578	0.096	0.552	0.625	1.426	2.012
13	0.237	0.094	0.130	0.529	0.069	0.521	0.601	1.469	2.133
14	0.258	0.105	0.099	0.479	0.047	0.483	0.577	1.513	2.261
15	0.282	0.116	0.073	0.429	0.031	0.440	0.555	1.558	2.397
16	0.309	0.129	0.053	0.379	0.020	0.392	0.534	1.605	2.540
17	0.339	0.142	0.036	0.330	0.012	0.343	0.513	1.653	2.693
18	0.371	0.156	0.024	0.284	0.007	0.294	0.494	1.702	2.854
19	0.406	0.171	0.015	0.239	0.004	0.247	0.475	1.754	3.026
20	0.444	0.186	0.009	0.199	0.002	0.204	0.456	1.806	3.207
21	0.475	0.203	0.005	0.162	0.001	0.165	0.439	1.860	3.400
22	0.506	0.220	0.003	0.129	0.000	0.131	0.422	1.916	3.604
23	0.539	0.238	0.001	0.101	0.000	0.102	0.406	1.974	3.820
24	0.575	0.257	0.001	0.077	0.000	0.077	0.390	2.033	4.049
25	0.616	0.276	0.000	0.057	0.000	0.057	0.375	2.094	4.292
26	0.661	0.297	0.000	0.041	0.000	0.041	0.361	2.157	4.549
27	0.713	0.317	0.000	0.029	0.000	0.029	0.347	2.221	4.822
28	0.773	0.339	0.000	0.020	0.000	0.020	0.333	2.288	5.112
29	0.841	0.361	0.000	0.013	0.000	0.013	0.321	2.357	5.418
30	0.918	0.384	0.000	0.008	0.000	0.008	0.308	2.427	5.743
31	1.000	0.405	0.000	0.005	0.000	0.005	0.296	2.500	6.088
32	-	0.425	-	0.003	-	0.003	0.285	2.575	6.453
33	-	0.444	-	0.002	-	0.002	0.274	2.652	6.841
34	-	0.464	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.482	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.495	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
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42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	1.000	-	0.000	-	0.000	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
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52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
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71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	39		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	3/29/1994		
(14)	**DATE OF FILING**	9/27/1994		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	93	M	
(16)	**CLAIMANT 2 (y)**	83	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.51	2.39
(18)	APV FOR CLAIMANT 2	10.84	8.61
(19)	APV FOR BOTH CLAIMANTS ALIVE	2.32	2.22
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	8.71	6.56
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	91,468	74,217
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.604	2.472
(28)	APV OF MEDICAL BENEFIT	15,623	14,835

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.371	0.055	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.406	0.061	0.629	0.945	0.595	0.385	0.962	1.030	1.060
2	0.444	0.068	0.374	0.888	0.331	0.598	0.925	1.061	1.124
3	0.475	0.075	0.208	0.827	0.172	0.692	0.889	1.093	1.191
4	0.506	0.084	0.109	0.765	0.083	0.707	0.855	1.126	1.262
5	0.539	0.094	0.054	0.701	0.038	0.679	0.822	1.159	1.338
6	0.575	0.105	0.025	0.635	0.016	0.628	0.790	1.194	1.419
7	0.616	0.116	0.011	0.569	0.006	0.567	0.760	1.230	1.504
8	0.661	0.129	0.004	0.502	0.002	0.502	0.731	1.267	1.594
9	0.713	0.142	0.001	0.438	0.001	0.438	0.703	1.305	1.689
10	0.773	0.156	0.000	0.376	0.000	0.376	0.676	1.344	1.791
11	0.841	0.171	0.000	0.317	0.000	0.317	0.650	1.384	1.898
12	0.918	0.186	0.000	0.263	0.000	0.263	0.625	1.426	2.012
13	1.000	0.203	0.000	0.214	0.000	0.214	0.601	1.469	2.133
14	-	0.220	-	0.171	-	0.171	0.577	1.513	2.261
15	-	0.238	-	0.133	-	0.133	0.555	1.558	2.397
16	-	0.257	-	0.102	-	0.102	0.534	1.605	2.540
17	-	0.276	-	0.075	-	0.075	0.513	1.653	2.693
18	-	0.297	-	0.055	-	0.055	0.494	1.702	2.854
19	-	0.317	-	0.038	-	0.038	0.475	1.754	3.026
20	-	0.339	-	0.026	-	0.026	0.456	1.806	3.207
21	-	0.361	-	0.017	-	0.017	0.439	1.860	3.400
22	-	0.384	-	0.011	-	0.011	0.422	1.916	3.604
23	-	0.405	-	0.007	-	0.007	0.406	1.974	3.820
24	-	0.425	-	0.004	-	0.004	0.390	2.033	4.049
25	-	0.444	-	0.002	-	0.002	0.375	2.094	4.292
26	-	0.464	-	0.001	-	0.001	0.361	2.157	4.549
27	-	0.482	-	0.001	-	0.001	0.347	2.221	4.822
28	-	0.495	-	0.000	-	0.000	0.333	2.288	5.112
29	-	0.500	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	0.500	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	1.000	-	0.000	-	0.000	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	40	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/1/1995	
(14)	**DATE OF FILING**	1/31/1995	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	68	M
(16)	**CLAIMANT 2 (y)**	52	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.06	9.90
(18)	APV FOR CLAIMANT 2	60.51	28.36
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.67	9.68
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	48.23	18.90
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	504,774	250,883
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	16.542	12.072
(28)	APV OF MEDICAL BENEFIT	99,252	72,429

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.050	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.055	0.002	0.950	0.998	0.948	0.052	0.962	1.030	1.060
2	0.059	0.002	0.898	0.996	0.894	0.105	0.925	1.061	1.124
3	0.064	0.002	0.844	0.994	0.840	0.160	0.889	1.093	1.191
4	0.069	0.003	0.790	0.992	0.784	0.214	0.855	1.126	1.262
5	0.074	0.003	0.736	0.989	0.728	0.269	0.822	1.159	1.338
6	0.080	0.003	0.682	0.987	0.673	0.323	0.790	1.194	1.419
7	0.086	0.004	0.628	0.983	0.617	0.377	0.760	1.230	1.504
8	0.094	0.004	0.573	0.979	0.562	0.430	0.731	1.267	1.594
9	0.102	0.005	0.520	0.975	0.507	0.481	0.703	1.305	1.689
10	0.111	0.006	0.467	0.970	0.453	0.531	0.676	1.344	1.791
11	0.121	0.007	0.415	0.964	0.400	0.579	0.650	1.384	1.898
12	0.131	0.008	0.364	0.958	0.349	0.624	0.625	1.426	2.012
13	0.141	0.009	0.317	0.951	0.301	0.665	0.601	1.469	2.133
14	0.151	0.010	0.272	0.943	0.257	0.702	0.577	1.513	2.261
15	0.162	0.011	0.231	0.933	0.216	0.733	0.555	1.558	2.397
16	0.173	0.012	0.194	0.923	0.179	0.759	0.534	1.605	2.540
17	0.186	0.013	0.160	0.912	0.146	0.780	0.513	1.653	2.693
18	0.201	0.014	0.130	0.901	0.117	0.796	0.494	1.702	2.854
19	0.218	0.015	0.104	0.889	0.092	0.808	0.475	1.754	3.026
20	0.237	0.017	0.081	0.875	0.071	0.814	0.456	1.806	3.207
21	0.258	0.018	0.062	0.861	0.053	0.816	0.439	1.860	3.400
22	0.282	0.020	0.046	0.845	0.039	0.813	0.422	1.916	3.604
23	0.309	0.023	0.033	0.828	0.027	0.806	0.406	1.974	3.820
24	0.339	0.025	0.023	0.809	0.018	0.795	0.390	2.033	4.049
25	0.371	0.028	0.015	0.789	0.012	0.780	0.375	2.094	4.292
26	0.406	0.032	0.009	0.766	0.007	0.761	0.361	2.157	4.549
27	0.444	0.035	0.006	0.742	0.004	0.739	0.347	2.221	4.822
28	0.475	0.039	0.003	0.716	0.002	0.714	0.333	2.288	5.112
29	0.506	0.044	0.002	0.687	0.001	0.687	0.321	2.357	5.418
30	0.539	0.049	0.001	0.657	0.001	0.657	0.308	2.427	5.743
31	0.575	0.055	0.000	0.625	0.000	0.625	0.296	2.500	6.088
32	0.616	0.061	0.000	0.591	0.000	0.591	0.285	2.575	6.453
33	0.661	0.068	0.000	0.555	0.000	0.555	0.274	2.652	6.841
34	0.713	0.075	0.000	0.517	0.000	0.517	0.264	2.732	7.251
35	0.773	0.084	0.000	0.478	0.000	0.478	0.253	2.814	7.686
36	0.841	0.094	0.000	0.438	0.000	0.438	0.244	2.898	8.147
37	0.918	0.105	0.000	0.397	0.000	0.397	0.234	2.985	8.636
38	1.000	0.116	0.000	0.355	0.000	0.355	0.225	3.075	9.154
39	-	0.129	-	0.314	-	0.314	0.217	3.167	9.704
40	-	0.142	-	0.274	-	0.274	0.208	3.262	10.286
41	-	0.156	-	0.235	-	0.235	0.200	3.360	10.903
42	-	0.171	-	0.198	-	0.198	0.193	3.461	11.557
43	-	0.186	-	0.164	-	0.164	0.185	3.565	12.250
44	-	0.203	-	0.134	-	0.134	0.178	3.671	12.985
45	-	0.220	-	0.107	-	0.107	0.171	3.782	13.765
46	-	0.238	-	0.083	-	0.083	0.165	3.895	14.590
47	-	0.257	-	0.063	-	0.063	0.158	4.012	15.466
48	-	0.276	-	0.047	-	0.047	0.152	4.132	16.394
49	-	0.297	-	0.034	-	0.034	0.146	4.256	17.378
50	-	0.317	-	0.024	-	0.024	0.141	4.384	18.420
51	-	0.339	-	0.016	-	0.016	0.135	4.515	19.525
52	-	0.361	-	0.011	-	0.011	0.130	4.651	20.697
53	-	0.384	-	0.007	-	0.007	0.125	4.790	21.939
54	-	0.405	-	0.004	-	0.004	0.120	4.934	23.255
55	-	0.425	-	0.003	-	0.003	0.116	5.082	24.650
56	-	0.444	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.464	-	0.001	-	0.001	0.107	5.392	27.697
58	-	0.482	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.495	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	0.500	-	0.000	-	0.000	0.075	7.035	46.794
67	-	0.500	-	0.000	-	0.000	0.072	7.246	49.601
68	-	1.000	-	0.000	-	0.000	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	41	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	10/1/1993	
(14)	**DATE OF FILING**	1/21/1995	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	76	M
(16)	**CLAIMANT 2 (y)**	72	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.10	6.73
(18)	APV FOR CLAIMANT 2	22.02	14.89
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.13	6.05
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.86	9.52
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	199,362	139,590
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	9.439	7.686
(28)	APV OF MEDICAL BENEFIT	56,637	46,116

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	0.017	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.102	0.018	0.906	0.983	0.891	0.107	0.962	1.030	1.060
2	0.111	0.020	0.814	0.965	0.785	0.208	0.925	1.061	1.124
3	0.121	0.023	0.723	0.946	0.684	0.301	0.889	1.093	1.191
4	0.131	0.025	0.636	0.924	0.587	0.385	0.855	1.126	1.262
5	0.141	0.028	0.552	0.901	0.498	0.458	0.822	1.159	1.338
6	0.151	0.032	0.475	0.875	0.415	0.519	0.790	1.194	1.419
7	0.162	0.035	0.403	0.848	0.342	0.567	0.760	1.230	1.504
8	0.173	0.039	0.338	0.818	0.276	0.603	0.731	1.267	1.594
9	0.186	0.044	0.279	0.785	0.219	0.626	0.703	1.305	1.689
10	0.201	0.049	0.227	0.751	0.171	0.637	0.676	1.344	1.791
11	0.218	0.055	0.181	0.714	0.130	0.636	0.650	1.384	1.898
12	0.237	0.061	0.142	0.675	0.096	0.625	0.625	1.426	2.012
13	0.258	0.068	0.108	0.634	0.069	0.605	0.601	1.469	2.133
14	0.282	0.075	0.080	0.591	0.047	0.576	0.577	1.513	2.261
15	0.309	0.084	0.058	0.546	0.031	0.541	0.555	1.558	2.397
16	0.339	0.094	0.040	0.500	0.020	0.500	0.534	1.605	2.540
17	0.371	0.105	0.026	0.453	0.012	0.456	0.513	1.653	2.693
18	0.406	0.116	0.017	0.406	0.007	0.409	0.494	1.702	2.854
19	0.444	0.129	0.010	0.359	0.004	0.362	0.475	1.754	3.026
20	0.475	0.142	0.005	0.313	0.002	0.315	0.456	1.806	3.207
21	0.506	0.156	0.003	0.268	0.001	0.270	0.439	1.860	3.400
22	0.539	0.171	0.001	0.226	0.000	0.227	0.422	1.916	3.604
23	0.575	0.186	0.001	0.188	0.000	0.188	0.406	1.974	3.820
24	0.616	0.203	0.000	0.153	0.000	0.153	0.390	2.033	4.049
25	0.661	0.220	0.000	0.122	0.000	0.122	0.375	2.094	4.292
26	0.713	0.238	0.000	0.095	0.000	0.095	0.361	2.157	4.549
27	0.773	0.257	0.000	0.072	0.000	0.072	0.347	2.221	4.822
28	0.841	0.276	0.000	0.054	0.000	0.054	0.333	2.288	5.112
29	0.918	0.297	0.000	0.039	0.000	0.039	0.321	2.357	5.418
30	1.000	0.317	0.000	0.027	0.000	0.027	0.308	2.427	5.743
31	-	0.339	-	0.019	-	0.019	0.296	2.500	6.088
32	-	0.361	-	0.012	-	0.012	0.285	2.575	6.453
33	-	0.384	-	0.008	-	0.008	0.274	2.652	6.841
34	-	0.405	-	0.005	-	0.005	0.264	2.732	7.251
35	-	0.425	-	0.003	-	0.003	0.253	2.814	7.686
36	-	0.444	-	0.002	-	0.002	0.244	2.898	8.147
37	-	0.464	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.482	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.495	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	1.000	-	0.000	-	0.000	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
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74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
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(13) PROVIDED BY BWC
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(16) PROVIDED BY BWC
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(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	42		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	8/1/1994		
(14)	**DATE OF FILING**	11/22/1995		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	76	M	
(16)	**CLAIMANT 2 (y)**	75	F	
		NOMINAL		**DISCOUNTED**
	PTD/DEPENDENT BENEFIT PAYMENTS			
(17)	APV FOR CLAIMANT 1	8.10		6.73
(18)	APV FOR CLAIMANT 2	18.37		13.03
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.82		5.83
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	12.83		8.10
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260		11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507		7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	173,107		126,444
	MEDICAL PAYMENTS			
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60		625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20		7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000		6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	9.439		7.686
(28)	APV OF MEDICAL BENEFIT	56,637		46,116

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	0.023	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.102	0.025	0.906	0.977	0.886	0.112	0.962	1.030	1.060
2	0.111	0.028	0.814	0.953	0.775	0.216	0.925	1.061	1.124
3	0.121	0.032	0.723	0.926	0.669	0.310	0.889	1.093	1.191
4	0.131	0.035	0.636	0.896	0.570	0.393	0.855	1.126	1.262
5	0.141	0.039	0.552	0.864	0.478	0.462	0.822	1.159	1.338
6	0.151	0.044	0.475	0.830	0.394	0.517	0.790	1.194	1.419
7	0.162	0.049	0.403	0.794	0.320	0.557	0.760	1.230	1.504
8	0.173	0.055	0.338	0.755	0.255	0.583	0.731	1.267	1.594
9	0.186	0.061	0.279	0.713	0.199	0.594	0.703	1.305	1.689
10	0.201	0.068	0.227	0.670	0.152	0.593	0.676	1.344	1.791
11	0.218	0.075	0.181	0.625	0.113	0.579	0.650	1.384	1.898
12	0.237	0.084	0.142	0.578	0.082	0.556	0.625	1.426	2.012
13	0.258	0.094	0.108	0.529	0.057	0.523	0.601	1.469	2.133
14	0.282	0.105	0.080	0.479	0.038	0.483	0.577	1.513	2.261
15	0.309	0.116	0.058	0.429	0.025	0.437	0.555	1.558	2.397
16	0.339	0.129	0.040	0.379	0.015	0.389	0.534	1.605	2.540
17	0.371	0.142	0.026	0.330	0.009	0.339	0.513	1.653	2.693
18	0.406	0.156	0.017	0.284	0.005	0.291	0.494	1.702	2.854
19	0.444	0.171	0.010	0.239	0.002	0.244	0.475	1.754	3.026
20	0.475	0.186	0.005	0.199	0.001	0.202	0.456	1.806	3.207
21	0.506	0.203	0.003	0.162	0.000	0.163	0.439	1.860	3.400
22	0.539	0.220	0.001	0.129	0.000	0.130	0.422	1.916	3.604
23	0.575	0.238	0.001	0.101	0.000	0.101	0.406	1.974	3.820
24	0.616	0.257	0.000	0.077	0.000	0.077	0.390	2.033	4.049
25	0.661	0.276	0.000	0.057	0.000	0.057	0.375	2.094	4.292
26	0.713	0.297	0.000	0.041	0.000	0.041	0.361	2.157	4.549
27	0.773	0.317	0.000	0.029	0.000	0.029	0.347	2.221	4.822
28	0.841	0.339	0.000	0.020	0.000	0.020	0.333	2.288	5.112
29	0.918	0.361	0.000	0.013	0.000	0.013	0.321	2.357	5.418
30	1.000	0.384	0.000	0.008	0.000	0.008	0.308	2.427	5.743
31	-	0.405	-	0.005	-	0.005	0.296	2.500	6.088
32	-	0.425	-	0.003	-	0.003	0.285	2.575	6.453
33	-	0.444	-	0.002	-	0.002	0.274	2.652	6.841
34	-	0.464	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.482	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.495	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	1.000	-	0.000	-	0.000	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	43		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	4/1/1996		
(14)	**DATE OF FILING**	4/16/1996		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	70	M	
(16)	**CLAIMANT 2 (y)**	68	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	11.64	9.04
(18)	APV FOR CLAIMANT 2	27.60	17.45
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.14	8.10
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	18.97	10.29
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,260	11,260
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	256,540	168,483
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	14.410	10.834
(28)	APV OF MEDICAL BENEFIT	86,461	65,003

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.059	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.064	0.013	0.941	0.988	0.930	0.070	0.962	1.030	1.060
2	0.069	0.014	0.880	0.976	0.859	0.138	0.925	1.061	1.124
3	0.074	0.015	0.820	0.962	0.789	0.204	0.889	1.093	1.191
4	0.080	0.017	0.759	0.948	0.720	0.268	0.855	1.126	1.262
5	0.086	0.018	0.699	0.932	0.652	0.328	0.822	1.159	1.338
6	0.094	0.020	0.639	0.915	0.585	0.385	0.790	1.194	1.419
7	0.102	0.023	0.579	0.896	0.519	0.437	0.760	1.230	1.504
8	0.111	0.025	0.520	0.876	0.455	0.485	0.731	1.267	1.594
9	0.121	0.028	0.462	0.854	0.394	0.527	0.703	1.305	1.689
10	0.131	0.032	0.406	0.830	0.337	0.562	0.676	1.344	1.791
11	0.141	0.035	0.353	0.803	0.284	0.589	0.650	1.384	1.898
12	0.151	0.039	0.303	0.775	0.235	0.608	0.625	1.426	2.012
13	0.162	0.044	0.257	0.744	0.192	0.619	0.601	1.469	2.133
14	0.173	0.049	0.216	0.712	0.154	0.620	0.577	1.513	2.261
15	0.186	0.055	0.178	0.677	0.121	0.614	0.555	1.558	2.397
16	0.201	0.061	0.145	0.640	0.093	0.599	0.534	1.605	2.540
17	0.218	0.068	0.116	0.601	0.070	0.577	0.513	1.653	2.693
18	0.237	0.075	0.091	0.560	0.051	0.549	0.494	1.702	2.854
19	0.258	0.084	0.069	0.518	0.036	0.515	0.475	1.754	3.026
20	0.282	0.094	0.051	0.474	0.024	0.477	0.456	1.806	3.207
21	0.309	0.105	0.037	0.430	0.016	0.435	0.439	1.860	3.400
22	0.339	0.116	0.025	0.385	0.010	0.391	0.422	1.916	3.604
23	0.371	0.129	0.017	0.340	0.006	0.345	0.406	1.974	3.820
24	0.406	0.142	0.011	0.296	0.003	0.301	0.390	2.033	4.049
25	0.444	0.156	0.006	0.254	0.002	0.257	0.375	2.094	4.292
26	0.475	0.171	0.003	0.215	0.001	0.217	0.361	2.157	4.549
27	0.506	0.186	0.002	0.178	0.000	0.179	0.347	2.221	4.822
28	0.539	0.203	0.001	0.145	0.000	0.145	0.333	2.288	5.112
29	0.575	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.616	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.661	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.713	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.773	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	0.841	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	0.918	0.339	0.000	0.018	0.000	0.018	0.253	2.814	7.686
36	1.000	0.361	0.000	0.012	0.000	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	44	
(12)	**TYPE OF CLAIM**	IW + Dep 2	
(13)	**DATE OF INJURY**	10/11/2001	
(14)	**DATE OF FILING**	11/29/2001	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	35	M
(16)	**CLAIMANT 2 (y)**	56	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	69.18	30.03
(18)	APV FOR CLAIMANT 2	50.46	25.59
(19)	APV FOR BOTH CLAIMANTS ALIVE	41.72	22.76
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	36.20	10.10
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	13,136	13,136
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,507	7,507
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	819,840	374,837
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,000	6,000
(27)	APV FOR $1 OF MEDICAL BENEFIT	152.104	53.859
(28)	APV OF MEDICAL BENEFIT	912,622	323,153

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.003	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.003	0.003	0.997	0.997	0.995	0.005	0.962	1.030	1.060
2	0.003	0.003	0.995	0.995	0.989	0.011	0.925	1.061	1.124
3	0.003	0.004	0.992	0.991	0.984	0.016	0.889	1.093	1.191
4	0.003	0.004	0.989	0.987	0.977	0.023	0.855	1.126	1.262
5	0.003	0.005	0.986	0.983	0.970	0.030	0.822	1.159	1.338
6	0.004	0.006	0.983	0.978	0.961	0.038	0.790	1.194	1.419
7	0.004	0.007	0.979	0.972	0.952	0.047	0.760	1.230	1.504
8	0.005	0.008	0.975	0.966	0.942	0.057	0.731	1.267	1.594
9	0.006	0.009	0.971	0.958	0.930	0.069	0.703	1.305	1.689
10	0.006	0.010	0.965	0.950	0.917	0.081	0.676	1.344	1.791
11	0.007	0.011	0.959	0.941	0.902	0.095	0.650	1.384	1.898
12	0.007	0.012	0.953	0.931	0.887	0.110	0.625	1.426	2.012
13	0.007	0.013	0.946	0.920	0.870	0.125	0.601	1.469	2.133
14	0.008	0.014	0.939	0.908	0.853	0.141	0.577	1.513	2.261
15	0.008	0.015	0.932	0.896	0.835	0.158	0.555	1.558	2.397
16	0.009	0.017	0.924	0.882	0.815	0.176	0.534	1.605	2.540
17	0.010	0.018	0.916	0.868	0.795	0.194	0.513	1.653	2.693
18	0.012	0.020	0.906	0.852	0.772	0.214	0.494	1.702	2.854
19	0.013	0.023	0.896	0.834	0.747	0.235	0.475	1.754	3.026
20	0.014	0.025	0.884	0.816	0.721	0.258	0.456	1.806	3.207
21	0.015	0.028	0.872	0.795	0.693	0.281	0.439	1.860	3.400
22	0.017	0.032	0.858	0.772	0.663	0.305	0.422	1.916	3.604
23	0.018	0.035	0.844	0.748	0.631	0.330	0.406	1.974	3.820
24	0.020	0.039	0.828	0.721	0.598	0.355	0.390	2.033	4.049
25	0.022	0.044	0.812	0.693	0.562	0.380	0.375	2.094	4.292
26	0.024	0.049	0.794	0.662	0.526	0.404	0.361	2.157	4.549
27	0.027	0.055	0.775	0.630	0.488	0.429	0.347	2.221	4.822
28	0.030	0.061	0.754	0.595	0.449	0.452	0.333	2.288	5.112
29	0.033	0.068	0.732	0.559	0.409	0.473	0.321	2.357	5.418
30	0.037	0.075	0.708	0.521	0.369	0.491	0.308	2.427	5.743
31	0.041	0.084	0.682	0.482	0.329	0.507	0.296	2.500	6.088
32	0.046	0.094	0.654	0.441	0.289	0.518	0.285	2.575	6.453
33	0.050	0.105	0.624	0.400	0.250	0.525	0.274	2.652	6.841
34	0.055	0.116	0.593	0.358	0.212	0.526	0.264	2.732	7.251
35	0.059	0.129	0.560	0.317	0.177	0.522	0.253	2.814	7.686
36	0.064	0.142	0.527	0.276	0.145	0.512	0.244	2.898	8.147
37	0.069	0.156	0.493	0.237	0.117	0.496	0.234	2.985	8.636
38	0.074	0.171	0.459	0.200	0.092	0.476	0.225	3.075	9.154
39	0.080	0.186	0.425	0.166	0.070	0.450	0.217	3.167	9.704
40	0.086	0.203	0.392	0.135	0.053	0.421	0.208	3.262	10.286
41	0.094	0.220	0.358	0.107	0.038	0.388	0.200	3.360	10.903
42	0.102	0.238	0.324	0.084	0.027	0.354	0.193	3.461	11.557
43	0.111	0.257	0.291	0.064	0.019	0.318	0.185	3.565	12.250
44	0.121	0.276	0.259	0.048	0.012	0.282	0.178	3.671	12.985
45	0.131	0.297	0.227	0.034	0.008	0.246	0.171	3.782	13.765
46	0.141	0.317	0.198	0.024	0.005	0.212	0.165	3.895	14.590
47	0.151	0.339	0.170	0.017	0.003	0.181	0.158	4.012	15.466
48	0.162	0.361	0.144	0.011	0.002	0.152	0.152	4.132	16.394
49	0.173	0.384	0.121	0.007	0.001	0.126	0.146	4.256	17.378
50	0.186	0.405	0.100	0.004	0.000	0.103	0.141	4.384	18.420
51	0.201	0.425	0.081	0.003	0.000	0.083	0.135	4.515	19.525
52	0.218	0.444	0.065	0.001	0.000	0.066	0.130	4.651	20.697
53	0.237	0.464	0.051	0.001	0.000	0.052	0.125	4.790	21.939
54	0.258	0.482	0.039	0.000	0.000	0.039	0.120	4.934	23.255
55	0.282	0.495	0.029	0.000	0.000	0.029	0.116	5.082	24.650
56	0.309	0.500	0.021	0.000	0.000	0.021	0.111	5.235	26.129
57	0.339	0.500	0.014	0.000	0.000	0.014	0.107	5.392	27.697
58	0.371	0.500	0.009	0.000	0.000	0.009	0.103	5.553	29.359
59	0.406	0.500	0.006	0.000	0.000	0.006	0.099	5.720	31.120
60	0.444	0.500	0.004	0.000	0.000	0.004	0.095	5.892	32.988
61	0.475	0.500	0.002	0.000	0.000	0.002	0.091	6.068	34.967
62	0.506	0.500	0.001	0.000	0.000	0.001	0.088	6.250	37.065
63	0.539	0.500	0.001	0.000	0.000	0.001	0.085	6.438	39.289
64	0.575	1.000	0.000	0.000	0.000	0.000	0.081	6.631	41.646
65	0.616	-	0.000	-	-	0.000	0.078	6.830	44.145
66	0.661	-	0.000	-	-	0.000	0.075	7.035	46.794
67	0.713	-	0.000	-	-	0.000	0.072	7.246	49.601
68	0.773	-	0.000	-	-	0.000	0.069	7.463	52.577
69	0.841	-	0.000	-	-	0.000	0.067	7.687	55.732
70	0.918	-	0.000	-	-	0.000	0.064	7.918	59.076
71	1.000	-	0.000	-	-	0.000	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (4) * 12
(22) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	45		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	12/1/1999		
(14)	**DATE OF FILING**	9/6/2000		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	80	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.31	10.16
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	13.31	10.16
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	99,886	76,247
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.039	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.044	-	0.961	1.000	0.961	0.039	0.962	1.030	1.060
2	0.049	-	0.918	1.000	0.918	0.082	0.925	1.061	1.124
3	0.055	-	0.873	1.000	0.873	0.127	0.889	1.093	1.191
4	0.061	-	0.825	1.000	0.825	0.175	0.855	1.126	1.262
5	0.068	-	0.775	1.000	0.775	0.225	0.822	1.159	1.338
6	0.075	-	0.723	1.000	0.723	0.277	0.790	1.194	1.419
7	0.084	-	0.668	1.000	0.668	0.332	0.760	1.230	1.504
8	0.094	-	0.612	1.000	0.612	0.388	0.731	1.267	1.594
9	0.105	-	0.555	1.000	0.555	0.445	0.703	1.305	1.689
10	0.116	-	0.497	1.000	0.497	0.503	0.676	1.344	1.791
11	0.129	-	0.439	1.000	0.439	0.561	0.650	1.384	1.898
12	0.142	-	0.382	1.000	0.382	0.618	0.625	1.426	2.012
13	0.156	-	0.328	1.000	0.328	0.672	0.601	1.469	2.133
14	0.171	-	0.277	1.000	0.277	0.723	0.577	1.513	2.261
15	0.186	-	0.230	1.000	0.230	0.770	0.555	1.558	2.397
16	0.203	-	0.187	1.000	0.187	0.813	0.534	1.605	2.540
17	0.220	-	0.149	1.000	0.149	0.851	0.513	1.653	2.693
18	0.238	-	0.116	1.000	0.116	0.884	0.494	1.702	2.854
19	0.257	-	0.089	1.000	0.089	0.911	0.475	1.754	3.026
20	0.276	-	0.066	1.000	0.066	0.934	0.456	1.806	3.207
21	0.297	-	0.048	1.000	0.048	0.952	0.439	1.860	3.400
22	0.317	-	0.034	1.000	0.034	0.966	0.422	1.916	3.604
23	0.339	-	0.023	1.000	0.023	0.977	0.406	1.974	3.820
24	0.361	-	0.015	1.000	0.015	0.985	0.390	2.033	4.049
25	0.384	-	0.010	1.000	0.010	0.990	0.375	2.094	4.292
26	0.405	-	0.006	1.000	0.006	0.994	0.361	2.157	4.549
27	0.425	-	0.004	1.000	0.004	0.996	0.347	2.221	4.822
28	0.444	-	0.002	1.000	0.002	0.998	0.333	2.288	5.112
29	0.464	-	0.001	1.000	0.001	0.999	0.321	2.357	5.418
30	0.482	-	0.001	1.000	0.001	0.999	0.308	2.427	5.743
31	0.495	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	1.000	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	46		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	12/1/2000		
(14)	**DATE OF FILING**	1/23/2001		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	72	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	22.02	14.89
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	22.02	14.89
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	165,337	111,798
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.017	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.018	-	0.983	1.000	0.983	0.017	0.962	1.030	1.060
2	0.020	-	0.965	1.000	0.965	0.035	0.925	1.061	1.124
3	0.023	-	0.946	1.000	0.946	0.054	0.889	1.093	1.191
4	0.025	-	0.924	1.000	0.924	0.076	0.855	1.126	1.262
5	0.028	-	0.901	1.000	0.901	0.099	0.822	1.159	1.338
6	0.032	-	0.875	1.000	0.875	0.125	0.790	1.194	1.419
7	0.035	-	0.848	1.000	0.848	0.152	0.760	1.230	1.504
8	0.039	-	0.818	1.000	0.818	0.182	0.731	1.267	1.594
9	0.044	-	0.785	1.000	0.785	0.215	0.703	1.305	1.689
10	0.049	-	0.751	1.000	0.751	0.249	0.676	1.344	1.791
11	0.055	-	0.714	1.000	0.714	0.286	0.650	1.384	1.898
12	0.061	-	0.675	1.000	0.675	0.325	0.625	1.426	2.012
13	0.068	-	0.634	1.000	0.634	0.366	0.601	1.469	2.133
14	0.075	-	0.591	1.000	0.591	0.409	0.577	1.513	2.261
15	0.084	-	0.546	1.000	0.546	0.454	0.555	1.558	2.397
16	0.094	-	0.500	1.000	0.500	0.500	0.534	1.605	2.540
17	0.105	-	0.453	1.000	0.453	0.547	0.513	1.653	2.693
18	0.116	-	0.406	1.000	0.406	0.594	0.494	1.702	2.854
19	0.129	-	0.359	1.000	0.359	0.641	0.475	1.754	3.026
20	0.142	-	0.313	1.000	0.313	0.687	0.456	1.806	3.207
21	0.156	-	0.268	1.000	0.268	0.732	0.439	1.860	3.400
22	0.171	-	0.226	1.000	0.226	0.774	0.422	1.916	3.604
23	0.186	-	0.188	1.000	0.188	0.812	0.406	1.974	3.820
24	0.203	-	0.153	1.000	0.153	0.847	0.390	2.033	4.049
25	0.220	-	0.122	1.000	0.122	0.878	0.375	2.094	4.292
26	0.238	-	0.095	1.000	0.095	0.905	0.361	2.157	4.549
27	0.257	-	0.072	1.000	0.072	0.928	0.347	2.221	4.822
28	0.276	-	0.054	1.000	0.054	0.946	0.333	2.288	5.112
29	0.297	-	0.039	1.000	0.039	0.961	0.321	2.357	5.418
30	0.317	-	0.027	1.000	0.027	0.973	0.308	2.427	5.743
31	0.339	-	0.019	1.000	0.019	0.981	0.296	2.500	6.088
32	0.361	-	0.012	1.000	0.012	0.988	0.285	2.575	6.453
33	0.384	-	0.008	1.000	0.008	0.992	0.274	2.652	6.841
34	0.405	-	0.005	1.000	0.005	0.995	0.264	2.732	7.251
35	0.425	-	0.003	1.000	0.003	0.997	0.253	2.814	7.686
36	0.444	-	0.002	1.000	0.002	0.998	0.244	2.898	8.147
37	0.464	-	0.001	1.000	0.001	0.999	0.234	2.985	8.636
38	0.482	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.495	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.500	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	1.000	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
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62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
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69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
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73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
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87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
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113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	47		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	10/26/2005		
(14)	**DATE OF FILING**	11/22/2005		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	89	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.05	6.00
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.05	6.00
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	52,921	45,057
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.105	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.116	-	0.895	1.000	0.895	0.105	0.962	1.030	1.060
2	0.129	-	0.791	1.000	0.791	0.209	0.925	1.061	1.124
3	0.142	-	0.689	1.000	0.689	0.311	0.889	1.093	1.191
4	0.156	-	0.592	1.000	0.592	0.408	0.855	1.126	1.262
5	0.171	-	0.499	1.000	0.499	0.501	0.822	1.159	1.338
6	0.186	-	0.414	1.000	0.414	0.586	0.790	1.194	1.419
7	0.203	-	0.337	1.000	0.337	0.663	0.760	1.230	1.504
8	0.220	-	0.269	1.000	0.269	0.731	0.731	1.267	1.594
9	0.238	-	0.210	1.000	0.210	0.790	0.703	1.305	1.689
10	0.257	-	0.160	1.000	0.160	0.840	0.676	1.344	1.791
11	0.276	-	0.119	1.000	0.119	0.881	0.650	1.384	1.898
12	0.297	-	0.086	1.000	0.086	0.914	0.625	1.426	2.012
13	0.317	-	0.060	1.000	0.060	0.940	0.601	1.469	2.133
14	0.339	-	0.041	1.000	0.041	0.959	0.577	1.513	2.261
15	0.361	-	0.027	1.000	0.027	0.973	0.555	1.558	2.397
16	0.384	-	0.017	1.000	0.017	0.983	0.534	1.605	2.540
17	0.405	-	0.011	1.000	0.011	0.989	0.513	1.653	2.693
18	0.425	-	0.006	1.000	0.006	0.994	0.494	1.702	2.854
19	0.444	-	0.004	1.000	0.004	0.996	0.475	1.754	3.026
20	0.464	-	0.002	1.000	0.002	0.998	0.456	1.806	3.207
21	0.482	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.495	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	1.000	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	48		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/30/2008		
(14)	**DATE OF FILING**	5/26/2009		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	63	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	35.86	20.75
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	35.86	20.75
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	269,195	155,777
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.007	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.008	-	0.993	1.000	0.993	0.007	0.962	1.030	1.060
2	0.009	-	0.986	1.000	0.986	0.014	0.925	1.061	1.124
3	0.010	-	0.977	1.000	0.977	0.023	0.889	1.093	1.191
4	0.011	-	0.968	1.000	0.968	0.032	0.855	1.126	1.262
5	0.012	-	0.957	1.000	0.957	0.043	0.822	1.159	1.338
6	0.013	-	0.946	1.000	0.946	0.054	0.790	1.194	1.419
7	0.014	-	0.934	1.000	0.934	0.066	0.760	1.230	1.504
8	0.015	-	0.921	1.000	0.921	0.079	0.731	1.267	1.594
9	0.017	-	0.907	1.000	0.907	0.093	0.703	1.305	1.689
10	0.018	-	0.892	1.000	0.892	0.108	0.676	1.344	1.791
11	0.020	-	0.876	1.000	0.876	0.124	0.650	1.384	1.898
12	0.023	-	0.858	1.000	0.858	0.142	0.625	1.426	2.012
13	0.025	-	0.839	1.000	0.839	0.161	0.601	1.469	2.133
14	0.028	-	0.818	1.000	0.818	0.182	0.577	1.513	2.261
15	0.032	-	0.794	1.000	0.794	0.206	0.555	1.558	2.397
16	0.035	-	0.769	1.000	0.769	0.231	0.534	1.605	2.540
17	0.039	-	0.742	1.000	0.742	0.258	0.513	1.653	2.693
18	0.044	-	0.713	1.000	0.713	0.287	0.494	1.702	2.854
19	0.049	-	0.681	1.000	0.681	0.319	0.475	1.754	3.026
20	0.055	-	0.648	1.000	0.648	0.352	0.456	1.806	3.207
21	0.061	-	0.612	1.000	0.612	0.388	0.439	1.860	3.400
22	0.068	-	0.575	1.000	0.575	0.425	0.422	1.916	3.604
23	0.075	-	0.536	1.000	0.536	0.464	0.406	1.974	3.820
24	0.084	-	0.496	1.000	0.496	0.504	0.390	2.033	4.049
25	0.094	-	0.454	1.000	0.454	0.546	0.375	2.094	4.292
26	0.105	-	0.411	1.000	0.411	0.589	0.361	2.157	4.549
27	0.116	-	0.368	1.000	0.368	0.632	0.347	2.221	4.822
28	0.129	-	0.326	1.000	0.326	0.674	0.333	2.288	5.112
29	0.142	-	0.284	1.000	0.284	0.716	0.321	2.357	5.418
30	0.156	-	0.243	1.000	0.243	0.757	0.308	2.427	5.743
31	0.171	-	0.205	1.000	0.205	0.795	0.296	2.500	6.088
32	0.186	-	0.170	1.000	0.170	0.830	0.285	2.575	6.453
33	0.203	-	0.139	1.000	0.139	0.861	0.274	2.652	6.841
34	0.220	-	0.111	1.000	0.111	0.889	0.264	2.732	7.251
35	0.238	-	0.086	1.000	0.086	0.914	0.253	2.814	7.686
36	0.257	-	0.066	1.000	0.066	0.934	0.244	2.898	8.147
37	0.276	-	0.049	1.000	0.049	0.951	0.234	2.985	8.636
38	0.297	-	0.035	1.000	0.035	0.965	0.225	3.075	9.154
39	0.317	-	0.025	1.000	0.025	0.975	0.217	3.167	9.704
40	0.339	-	0.017	1.000	0.017	0.983	0.208	3.262	10.286
41	0.361	-	0.011	1.000	0.011	0.989	0.200	3.360	10.903
42	0.384	-	0.007	1.000	0.007	0.993	0.193	3.461	11.557
43	0.405	-	0.004	1.000	0.004	0.996	0.185	3.565	12.250
44	0.425	-	0.003	1.000	0.003	0.997	0.178	3.671	12.985
45	0.444	-	0.002	1.000	0.002	0.998	0.171	3.782	13.765
46	0.464	-	0.001	1.000	0.001	0.999	0.165	3.895	14.590
47	0.482	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.495	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	0.500	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	0.500	-	0.000	1.000	0.000	1.000	0.141	4.384	18.420
51	0.500	-	0.000	1.000	0.000	1.000	0.135	4.515	19.525
52	0.500	-	0.000	1.000	0.000	1.000	0.130	4.651	20.697
53	0.500	-	0.000	1.000	0.000	1.000	0.125	4.790	21.939
54	0.500	-	0.000	1.000	0.000	1.000	0.120	4.934	23.255
55	0.500	-	0.000	1.000	0.000	1.000	0.116	5.082	24.650
56	0.500	-	0.000	1.000	0.000	1.000	0.111	5.235	26.129
57	1.000	-	0.000	1.000	0.000	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	49		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/1/1976		
(14)	**DATE OF FILING**	8/1/1976		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	97	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.06	3.69
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.06	3.69
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	30,452	27,723
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.220	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.238	-	0.780	1.000	0.780	0.220	0.962	1.030	1.060
2	0.257	-	0.595	1.000	0.595	0.405	0.925	1.061	1.124
3	0.276	-	0.442	1.000	0.442	0.558	0.889	1.093	1.191
4	0.297	-	0.320	1.000	0.320	0.680	0.855	1.126	1.262
5	0.317	-	0.225	1.000	0.225	0.775	0.822	1.159	1.338
6	0.339	-	0.154	1.000	0.154	0.846	0.790	1.194	1.419
7	0.361	-	0.102	1.000	0.102	0.898	0.760	1.230	1.504
8	0.384	-	0.065	1.000	0.065	0.935	0.731	1.267	1.594
9	0.405	-	0.040	1.000	0.040	0.960	0.703	1.305	1.689
10	0.425	-	0.024	1.000	0.024	0.976	0.676	1.344	1.791
11	0.444	-	0.014	1.000	0.014	0.986	0.650	1.384	1.898
12	0.464	-	0.008	1.000	0.008	0.992	0.625	1.426	2.012
13	0.482	-	0.004	1.000	0.004	0.996	0.601	1.469	2.133
14	0.495	-	0.002	1.000	0.002	0.998	0.577	1.513	2.261
15	0.500	-	0.001	1.000	0.001	0.999	0.555	1.558	2.397
16	0.500	-	0.001	1.000	0.001	0.999	0.534	1.605	2.540
17	0.500	-	0.000	1.000	0.000	1.000	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	1.000	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
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50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
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68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
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72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
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(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	50	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	10/1/1981	
(14)	**DATE OF FILING**	3/22/1982	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	83	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.84	8.61
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.84	8.61
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	81,362	64,642
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.061	-	0.945	1.000	0.945	0.055	0.962	1.030	1.060
2	0.068	-	0.888	1.000	0.888	0.112	0.925	1.061	1.124
3	0.075	-	0.827	1.000	0.827	0.173	0.889	1.093	1.191
4	0.084	-	0.765	1.000	0.765	0.235	0.855	1.126	1.262
5	0.094	-	0.701	1.000	0.701	0.299	0.822	1.159	1.338
6	0.105	-	0.635	1.000	0.635	0.365	0.790	1.194	1.419
7	0.116	-	0.569	1.000	0.569	0.431	0.760	1.230	1.504
8	0.129	-	0.502	1.000	0.502	0.498	0.731	1.267	1.594
9	0.142	-	0.438	1.000	0.438	0.562	0.703	1.305	1.689
10	0.156	-	0.376	1.000	0.376	0.624	0.676	1.344	1.791
11	0.171	-	0.317	1.000	0.317	0.683	0.650	1.384	1.898
12	0.186	-	0.263	1.000	0.263	0.737	0.625	1.426	2.012
13	0.203	-	0.214	1.000	0.214	0.786	0.601	1.469	2.133
14	0.220	-	0.171	1.000	0.171	0.829	0.577	1.513	2.261
15	0.238	-	0.133	1.000	0.133	0.867	0.555	1.558	2.397
16	0.257	-	0.102	1.000	0.102	0.898	0.534	1.605	2.540
17	0.276	-	0.075	1.000	0.075	0.925	0.513	1.653	2.693
18	0.297	-	0.055	1.000	0.055	0.945	0.494	1.702	2.854
19	0.317	-	0.038	1.000	0.038	0.962	0.475	1.754	3.026
20	0.339	-	0.026	1.000	0.026	0.974	0.456	1.806	3.207
21	0.361	-	0.017	1.000	0.017	0.983	0.439	1.860	3.400
22	0.384	-	0.011	1.000	0.011	0.989	0.422	1.916	3.604
23	0.405	-	0.007	1.000	0.007	0.993	0.406	1.974	3.820
24	0.425	-	0.004	1.000	0.004	0.996	0.390	2.033	4.049
25	0.444	-	0.002	1.000	0.002	0.998	0.375	2.094	4.292
26	0.464	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.482	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.495	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	1.000	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	51		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1981		
(14)	**DATE OF FILING**	3/2/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	90	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	49,242	42,343
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	52		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/1/1978		
(14)	**DATE OF FILING**	6/8/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
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109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	53		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1978		
(14)	**DATE OF FILING**	4/8/1978		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	49	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	68.93	30.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	68.93	30.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	517,446	228,178
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.001	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.001	-	0.999	1.000	0.999	0.001	0.962	1.030	1.060
2	0.002	-	0.997	1.000	0.997	0.003	0.925	1.061	1.124
3	0.002	-	0.996	1.000	0.996	0.004	0.889	1.093	1.191
4	0.002	-	0.994	1.000	0.994	0.006	0.855	1.126	1.262
5	0.002	-	0.992	1.000	0.992	0.008	0.822	1.159	1.338
6	0.002	-	0.990	1.000	0.990	0.010	0.790	1.194	1.419
7	0.003	-	0.988	1.000	0.988	0.012	0.760	1.230	1.504
8	0.003	-	0.985	1.000	0.985	0.015	0.731	1.267	1.594
9	0.003	-	0.982	1.000	0.982	0.018	0.703	1.305	1.689
10	0.004	-	0.979	1.000	0.979	0.021	0.676	1.344	1.791
11	0.004	-	0.975	1.000	0.975	0.025	0.650	1.384	1.898
12	0.005	-	0.971	1.000	0.971	0.029	0.625	1.426	2.012
13	0.006	-	0.966	1.000	0.966	0.034	0.601	1.469	2.133
14	0.007	-	0.960	1.000	0.960	0.040	0.577	1.513	2.261
15	0.008	-	0.954	1.000	0.954	0.046	0.555	1.558	2.397
16	0.009	-	0.947	1.000	0.947	0.053	0.534	1.605	2.540
17	0.010	-	0.938	1.000	0.938	0.062	0.513	1.653	2.693
18	0.011	-	0.929	1.000	0.929	0.071	0.494	1.702	2.854
19	0.012	-	0.919	1.000	0.919	0.081	0.475	1.754	3.026
20	0.013	-	0.909	1.000	0.909	0.091	0.456	1.806	3.207
21	0.014	-	0.897	1.000	0.897	0.103	0.439	1.860	3.400
22	0.015	-	0.885	1.000	0.885	0.115	0.422	1.916	3.604
23	0.017	-	0.871	1.000	0.871	0.129	0.406	1.974	3.820
24	0.018	-	0.857	1.000	0.857	0.143	0.390	2.033	4.049
25	0.020	-	0.841	1.000	0.841	0.159	0.375	2.094	4.292
26	0.023	-	0.824	1.000	0.824	0.176	0.361	2.157	4.549
27	0.025	-	0.806	1.000	0.806	0.194	0.347	2.221	4.822
28	0.028	-	0.785	1.000	0.785	0.215	0.333	2.288	5.112
29	0.032	-	0.763	1.000	0.763	0.237	0.321	2.357	5.418
30	0.035	-	0.739	1.000	0.739	0.261	0.308	2.427	5.743
31	0.039	-	0.713	1.000	0.713	0.287	0.296	2.500	6.088
32	0.044	-	0.684	1.000	0.684	0.316	0.285	2.575	6.453
33	0.049	-	0.654	1.000	0.654	0.346	0.274	2.652	6.841
34	0.055	-	0.622	1.000	0.622	0.378	0.264	2.732	7.251
35	0.061	-	0.588	1.000	0.588	0.412	0.253	2.814	7.686
36	0.068	-	0.552	1.000	0.552	0.448	0.244	2.898	8.147
37	0.075	-	0.515	1.000	0.515	0.485	0.234	2.985	8.636
38	0.084	-	0.476	1.000	0.476	0.524	0.225	3.075	9.154
39	0.094	-	0.436	1.000	0.436	0.564	0.217	3.167	9.704
40	0.105	-	0.395	1.000	0.395	0.605	0.208	3.262	10.286
41	0.116	-	0.354	1.000	0.354	0.646	0.200	3.360	10.903
42	0.129	-	0.313	1.000	0.313	0.687	0.193	3.461	11.557
43	0.142	-	0.272	1.000	0.272	0.728	0.185	3.565	12.250
44	0.156	-	0.234	1.000	0.234	0.766	0.178	3.671	12.985
45	0.171	-	0.197	1.000	0.197	0.803	0.171	3.782	13.765
46	0.186	-	0.164	1.000	0.164	0.836	0.165	3.895	14.590
47	0.203	-	0.133	1.000	0.133	0.867	0.158	4.012	15.466
48	0.220	-	0.106	1.000	0.106	0.894	0.152	4.132	16.394
49	0.238	-	0.083	1.000	0.083	0.917	0.146	4.256	17.378
50	0.257	-	0.063	1.000	0.063	0.937	0.141	4.384	18.420
51	0.276	-	0.047	1.000	0.047	0.953	0.135	4.515	19.525
52	0.297	-	0.034	1.000	0.034	0.966	0.130	4.651	20.697
53	0.317	-	0.024	1.000	0.024	0.976	0.125	4.790	21.939
54	0.339	-	0.016	1.000	0.016	0.984	0.120	4.934	23.255
55	0.361	-	0.011	1.000	0.011	0.989	0.116	5.082	24.650
56	0.384	-	0.007	1.000	0.007	0.993	0.111	5.235	26.129
57	0.405	-	0.004	1.000	0.004	0.996	0.107	5.392	27.697
58	0.425	-	0.003	1.000	0.003	0.997	0.103	5.553	29.359
59	0.444	-	0.001	1.000	0.001	0.999	0.099	5.720	31.120
60	0.464	-	0.001	1.000	0.001	0.999	0.095	5.892	32.988
61	0.482	-	0.000	1.000	0.000	1.000	0.091	6.068	34.967
62	0.495	-	0.000	1.000	0.000	1.000	0.088	6.250	37.065
63	0.500	-	0.000	1.000	0.000	1.000	0.085	6.438	39.289
64	0.500	-	0.000	1.000	0.000	1.000	0.081	6.631	41.646
65	0.500	-	0.000	1.000	0.000	1.000	0.078	6.830	44.145
66	0.500	-	0.000	1.000	0.000	1.000	0.075	7.035	46.794
67	0.500	-	0.000	1.000	0.000	1.000	0.072	7.246	49.601
68	0.500	-	0.000	1.000	0.000	1.000	0.069	7.463	52.577
69	0.500	-	0.000	1.000	0.000	1.000	0.067	7.687	55.732
70	0.500	-	0.000	1.000	0.000	1.000	0.064	7.918	59.076
71	1.000	-	0.000	1.000	0.000	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	54		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	5/1/1979		
(14)	**DATE OF FILING**	5/18/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	84	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.11	8.13
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.11	8.13
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	75,865	61,038
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.061	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.068	-	0.939	1.000	0.939	0.061	0.962	1.030	1.060
2	0.075	-	0.875	1.000	0.875	0.125	0.925	1.061	1.124
3	0.084	-	0.809	1.000	0.809	0.191	0.889	1.093	1.191
4	0.094	-	0.741	1.000	0.741	0.259	0.855	1.126	1.262
5	0.105	-	0.672	1.000	0.672	0.328	0.822	1.159	1.338
6	0.116	-	0.602	1.000	0.602	0.398	0.790	1.194	1.419
7	0.129	-	0.532	1.000	0.532	0.468	0.760	1.230	1.504
8	0.142	-	0.463	1.000	0.463	0.537	0.731	1.267	1.594
9	0.156	-	0.397	1.000	0.397	0.603	0.703	1.305	1.689
10	0.171	-	0.335	1.000	0.335	0.665	0.676	1.344	1.791
11	0.186	-	0.278	1.000	0.278	0.722	0.650	1.384	1.898
12	0.203	-	0.226	1.000	0.226	0.774	0.625	1.426	2.012
13	0.220	-	0.181	1.000	0.181	0.819	0.601	1.469	2.133
14	0.238	-	0.141	1.000	0.141	0.859	0.577	1.513	2.261
15	0.257	-	0.107	1.000	0.107	0.893	0.555	1.558	2.397
16	0.276	-	0.080	1.000	0.080	0.920	0.534	1.605	2.540
17	0.297	-	0.058	1.000	0.058	0.942	0.513	1.653	2.693
18	0.317	-	0.041	1.000	0.041	0.959	0.494	1.702	2.854
19	0.339	-	0.028	1.000	0.028	0.972	0.475	1.754	3.026
20	0.361	-	0.018	1.000	0.018	0.982	0.456	1.806	3.207
21	0.384	-	0.012	1.000	0.012	0.988	0.439	1.860	3.400
22	0.405	-	0.007	1.000	0.007	0.993	0.422	1.916	3.604
23	0.425	-	0.004	1.000	0.004	0.996	0.406	1.974	3.820
24	0.444	-	0.002	1.000	0.002	0.998	0.390	2.033	4.049
25	0.464	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.482	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.495	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	55	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	6/1/1980	
(14)	**DATE OF FILING**	11/23/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	90	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	49,242	42,343
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	56	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	2/1/1980	
(14)	**DATE OF FILING**	12/4/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	85	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.41	7.67
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.41	7.67
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	70,677	57,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.068	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.075	-	0.932	1.000	0.932	0.068	0.962	1.030	1.060
2	0.084	-	0.862	1.000	0.862	0.138	0.925	1.061	1.124
3	0.094	-	0.790	1.000	0.790	0.210	0.889	1.093	1.191
4	0.105	-	0.716	1.000	0.716	0.284	0.855	1.126	1.262
5	0.116	-	0.641	1.000	0.641	0.359	0.822	1.159	1.338
6	0.129	-	0.566	1.000	0.566	0.434	0.790	1.194	1.419
7	0.142	-	0.493	1.000	0.493	0.507	0.760	1.230	1.504
8	0.156	-	0.423	1.000	0.423	0.577	0.731	1.267	1.594
9	0.171	-	0.357	1.000	0.357	0.643	0.703	1.305	1.689
10	0.186	-	0.296	1.000	0.296	0.704	0.676	1.344	1.791
11	0.203	-	0.241	1.000	0.241	0.759	0.650	1.384	1.898
12	0.220	-	0.192	1.000	0.192	0.808	0.625	1.426	2.012
13	0.238	-	0.150	1.000	0.150	0.850	0.601	1.469	2.133
14	0.257	-	0.114	1.000	0.114	0.886	0.577	1.513	2.261
15	0.276	-	0.085	1.000	0.085	0.915	0.555	1.558	2.397
16	0.297	-	0.062	1.000	0.062	0.938	0.534	1.605	2.540
17	0.317	-	0.043	1.000	0.043	0.957	0.513	1.653	2.693
18	0.339	-	0.030	1.000	0.030	0.970	0.494	1.702	2.854
19	0.361	-	0.020	1.000	0.020	0.980	0.475	1.754	3.026
20	0.384	-	0.012	1.000	0.012	0.988	0.456	1.806	3.207
21	0.405	-	0.008	1.000	0.008	0.992	0.439	1.860	3.400
22	0.425	-	0.005	1.000	0.005	0.995	0.422	1.916	3.604
23	0.444	-	0.003	1.000	0.003	0.997	0.406	1.974	3.820
24	0.464	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.482	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.495	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	57		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1979		
(14)	**DATE OF FILING**	12/11/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	90	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	49,242	42,343
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
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34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
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41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
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45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
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49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
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68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
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71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
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85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
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96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
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105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
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111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	58		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	1/1/1979		
(14)	**DATE OF FILING**	1/25/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	83	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.84	8.61
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.84	8.61
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	81,362	64,642
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.061	-	0.945	1.000	0.945	0.055	0.962	1.030	1.060
2	0.068	-	0.888	1.000	0.888	0.112	0.925	1.061	1.124
3	0.075	-	0.827	1.000	0.827	0.173	0.889	1.093	1.191
4	0.084	-	0.765	1.000	0.765	0.235	0.855	1.126	1.262
5	0.094	-	0.701	1.000	0.701	0.299	0.822	1.159	1.338
6	0.105	-	0.635	1.000	0.635	0.365	0.790	1.194	1.419
7	0.116	-	0.569	1.000	0.569	0.431	0.760	1.230	1.504
8	0.129	-	0.502	1.000	0.502	0.498	0.731	1.267	1.594
9	0.142	-	0.438	1.000	0.438	0.562	0.703	1.305	1.689
10	0.156	-	0.376	1.000	0.376	0.624	0.676	1.344	1.791
11	0.171	-	0.317	1.000	0.317	0.683	0.650	1.384	1.898
12	0.186	-	0.263	1.000	0.263	0.737	0.625	1.426	2.012
13	0.203	-	0.214	1.000	0.214	0.786	0.601	1.469	2.133
14	0.220	-	0.171	1.000	0.171	0.829	0.577	1.513	2.261
15	0.238	-	0.133	1.000	0.133	0.867	0.555	1.558	2.397
16	0.257	-	0.102	1.000	0.102	0.898	0.534	1.605	2.540
17	0.276	-	0.075	1.000	0.075	0.925	0.513	1.653	2.693
18	0.297	-	0.055	1.000	0.055	0.945	0.494	1.702	2.854
19	0.317	-	0.038	1.000	0.038	0.962	0.475	1.754	3.026
20	0.339	-	0.026	1.000	0.026	0.974	0.456	1.806	3.207
21	0.361	-	0.017	1.000	0.017	0.983	0.439	1.860	3.400
22	0.384	-	0.011	1.000	0.011	0.989	0.422	1.916	3.604
23	0.405	-	0.007	1.000	0.007	0.993	0.406	1.974	3.820
24	0.425	-	0.004	1.000	0.004	0.996	0.390	2.033	4.049
25	0.444	-	0.002	1.000	0.002	0.998	0.375	2.094	4.292
26	0.464	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.482	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.495	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	1.000	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	59		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/1/1978		
(14)	**DATE OF FILING**	2/18/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	94	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.96	4.41
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.96	4.41
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	37,204	33,137
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.171	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.186	-	0.829	1.000	0.829	0.171	0.962	1.030	1.060
2	0.203	-	0.675	1.000	0.675	0.325	0.925	1.061	1.124
3	0.220	-	0.538	1.000	0.538	0.462	0.889	1.093	1.191
4	0.238	-	0.420	1.000	0.420	0.580	0.855	1.126	1.262
5	0.257	-	0.320	1.000	0.320	0.680	0.822	1.159	1.338
6	0.276	-	0.238	1.000	0.238	0.762	0.790	1.194	1.419
7	0.297	-	0.172	1.000	0.172	0.828	0.760	1.230	1.504
8	0.317	-	0.121	1.000	0.121	0.879	0.731	1.267	1.594
9	0.339	-	0.083	1.000	0.083	0.917	0.703	1.305	1.689
10	0.361	-	0.055	1.000	0.055	0.945	0.676	1.344	1.791
11	0.384	-	0.035	1.000	0.035	0.965	0.650	1.384	1.898
12	0.405	-	0.022	1.000	0.022	0.978	0.625	1.426	2.012
13	0.425	-	0.013	1.000	0.013	0.987	0.601	1.469	2.133
14	0.444	-	0.007	1.000	0.007	0.993	0.577	1.513	2.261
15	0.464	-	0.004	1.000	0.004	0.996	0.555	1.558	2.397
16	0.482	-	0.002	1.000	0.002	0.998	0.534	1.605	2.540
17	0.495	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	60	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	2/1/1977	
(14)	**DATE OF FILING**	2/25/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	73	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	20.75	14.26
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	20.75	14.26
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	155,805	107,071
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.018	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.020	-	0.982	1.000	0.982	0.018	0.962	1.030	1.060
2	0.023	-	0.962	1.000	0.962	0.038	0.925	1.061	1.124
3	0.025	-	0.940	1.000	0.940	0.060	0.889	1.093	1.191
4	0.028	-	0.916	1.000	0.916	0.084	0.855	1.126	1.262
5	0.032	-	0.890	1.000	0.890	0.110	0.822	1.159	1.338
6	0.035	-	0.862	1.000	0.862	0.138	0.790	1.194	1.419
7	0.039	-	0.831	1.000	0.831	0.169	0.760	1.230	1.504
8	0.044	-	0.799	1.000	0.799	0.201	0.731	1.267	1.594
9	0.049	-	0.763	1.000	0.763	0.237	0.703	1.305	1.689
10	0.055	-	0.726	1.000	0.726	0.274	0.676	1.344	1.791
11	0.061	-	0.686	1.000	0.686	0.314	0.650	1.384	1.898
12	0.068	-	0.644	1.000	0.644	0.356	0.625	1.426	2.012
13	0.075	-	0.601	1.000	0.601	0.399	0.601	1.469	2.133
14	0.084	-	0.555	1.000	0.555	0.445	0.577	1.513	2.261
15	0.094	-	0.509	1.000	0.509	0.491	0.555	1.558	2.397
16	0.105	-	0.461	1.000	0.461	0.539	0.534	1.605	2.540
17	0.116	-	0.413	1.000	0.413	0.587	0.513	1.653	2.693
18	0.129	-	0.365	1.000	0.365	0.635	0.494	1.702	2.854
19	0.142	-	0.318	1.000	0.318	0.682	0.475	1.754	3.026
20	0.156	-	0.273	1.000	0.273	0.727	0.456	1.806	3.207
21	0.171	-	0.230	1.000	0.230	0.770	0.439	1.860	3.400
22	0.186	-	0.191	1.000	0.191	0.809	0.422	1.916	3.604
23	0.203	-	0.155	1.000	0.155	0.845	0.406	1.974	3.820
24	0.220	-	0.124	1.000	0.124	0.876	0.390	2.033	4.049
25	0.238	-	0.097	1.000	0.097	0.903	0.375	2.094	4.292
26	0.257	-	0.074	1.000	0.074	0.926	0.361	2.157	4.549
27	0.276	-	0.055	1.000	0.055	0.945	0.347	2.221	4.822
28	0.297	-	0.040	1.000	0.040	0.960	0.333	2.288	5.112
29	0.317	-	0.028	1.000	0.028	0.972	0.321	2.357	5.418
30	0.339	-	0.019	1.000	0.019	0.981	0.308	2.427	5.743
31	0.361	-	0.013	1.000	0.013	0.987	0.296	2.500	6.088
32	0.384	-	0.008	1.000	0.008	0.992	0.285	2.575	6.453
33	0.405	-	0.005	1.000	0.005	0.995	0.274	2.652	6.841
34	0.425	-	0.003	1.000	0.003	0.997	0.264	2.732	7.251
35	0.444	-	0.002	1.000	0.002	0.998	0.253	2.814	7.686
36	0.464	-	0.001	1.000	0.001	0.999	0.244	2.898	8.147
37	0.482	-	0.001	1.000	0.001	0.999	0.234	2.985	8.636
38	0.495	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	1.000	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
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52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
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75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	61		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1981		
(14)	**DATE OF FILING**	5/26/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	89	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.05	6.00
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.05	6.00
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	52,921	45,057
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.105	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.116	-	0.895	1.000	0.895	0.105	0.962	1.030	1.060
2	0.129	-	0.791	1.000	0.791	0.209	0.925	1.061	1.124
3	0.142	-	0.689	1.000	0.689	0.311	0.889	1.093	1.191
4	0.156	-	0.592	1.000	0.592	0.408	0.855	1.126	1.262
5	0.171	-	0.499	1.000	0.499	0.501	0.822	1.159	1.338
6	0.186	-	0.414	1.000	0.414	0.586	0.790	1.194	1.419
7	0.203	-	0.337	1.000	0.337	0.663	0.760	1.230	1.504
8	0.220	-	0.269	1.000	0.269	0.731	0.731	1.267	1.594
9	0.238	-	0.210	1.000	0.210	0.790	0.703	1.305	1.689
10	0.257	-	0.160	1.000	0.160	0.840	0.676	1.344	1.791
11	0.276	-	0.119	1.000	0.119	0.881	0.650	1.384	1.898
12	0.297	-	0.086	1.000	0.086	0.914	0.625	1.426	2.012
13	0.317	-	0.060	1.000	0.060	0.940	0.601	1.469	2.133
14	0.339	-	0.041	1.000	0.041	0.959	0.577	1.513	2.261
15	0.361	-	0.027	1.000	0.027	0.973	0.555	1.558	2.397
16	0.384	-	0.017	1.000	0.017	0.983	0.534	1.605	2.540
17	0.405	-	0.011	1.000	0.011	0.989	0.513	1.653	2.693
18	0.425	-	0.006	1.000	0.006	0.994	0.494	1.702	2.854
19	0.444	-	0.004	1.000	0.004	0.996	0.475	1.754	3.026
20	0.464	-	0.002	1.000	0.002	0.998	0.456	1.806	3.207
21	0.482	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.495	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	1.000	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	62		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	8/15/1972		
(14)	**DATE OF FILING**	5/7/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	85	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.41	7.67
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.41	7.67
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	70,677	57,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.068	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.075	-	0.932	1.000	0.932	0.068	0.962	1.030	1.060
2	0.084	-	0.862	1.000	0.862	0.138	0.925	1.061	1.124
3	0.094	-	0.790	1.000	0.790	0.210	0.889	1.093	1.191
4	0.105	-	0.716	1.000	0.716	0.284	0.855	1.126	1.262
5	0.116	-	0.641	1.000	0.641	0.359	0.822	1.159	1.338
6	0.129	-	0.566	1.000	0.566	0.434	0.790	1.194	1.419
7	0.142	-	0.493	1.000	0.493	0.507	0.760	1.230	1.504
8	0.156	-	0.423	1.000	0.423	0.577	0.731	1.267	1.594
9	0.171	-	0.357	1.000	0.357	0.643	0.703	1.305	1.689
10	0.186	-	0.296	1.000	0.296	0.704	0.676	1.344	1.791
11	0.203	-	0.241	1.000	0.241	0.759	0.650	1.384	1.898
12	0.220	-	0.192	1.000	0.192	0.808	0.625	1.426	2.012
13	0.238	-	0.150	1.000	0.150	0.850	0.601	1.469	2.133
14	0.257	-	0.114	1.000	0.114	0.886	0.577	1.513	2.261
15	0.276	-	0.085	1.000	0.085	0.915	0.555	1.558	2.397
16	0.297	-	0.062	1.000	0.062	0.938	0.534	1.605	2.540
17	0.317	-	0.043	1.000	0.043	0.957	0.513	1.653	2.693
18	0.339	-	0.030	1.000	0.030	0.970	0.494	1.702	2.854
19	0.361	-	0.020	1.000	0.020	0.980	0.475	1.754	3.026
20	0.384	-	0.012	1.000	0.012	0.988	0.456	1.806	3.207
21	0.405	-	0.008	1.000	0.008	0.992	0.439	1.860	3.400
22	0.425	-	0.005	1.000	0.005	0.995	0.422	1.916	3.604
23	0.444	-	0.003	1.000	0.003	0.997	0.406	1.974	3.820
24	0.464	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.482	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.495	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	63		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/17/1973		
(14)	**DATE OF FILING**	5/21/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
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73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
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85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
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95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
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109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
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112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	64	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	5/1/1976	
(14)	**DATE OF FILING**	1/4/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	94	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.96	4.41
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.96	4.41
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	37,204	33,137
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.171	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.186	-	0.829	1.000	0.829	0.171	0.962	1.030	1.060
2	0.203	-	0.675	1.000	0.675	0.325	0.925	1.061	1.124
3	0.220	-	0.538	1.000	0.538	0.462	0.889	1.093	1.191
4	0.238	-	0.420	1.000	0.420	0.580	0.855	1.126	1.262
5	0.257	-	0.320	1.000	0.320	0.680	0.822	1.159	1.338
6	0.276	-	0.238	1.000	0.238	0.762	0.790	1.194	1.419
7	0.297	-	0.172	1.000	0.172	0.828	0.760	1.230	1.504
8	0.317	-	0.121	1.000	0.121	0.879	0.731	1.267	1.594
9	0.339	-	0.083	1.000	0.083	0.917	0.703	1.305	1.689
10	0.361	-	0.055	1.000	0.055	0.945	0.676	1.344	1.791
11	0.384	-	0.035	1.000	0.035	0.965	0.650	1.384	1.898
12	0.405	-	0.022	1.000	0.022	0.978	0.625	1.426	2.012
13	0.425	-	0.013	1.000	0.013	0.987	0.601	1.469	2.133
14	0.444	-	0.007	1.000	0.007	0.993	0.577	1.513	2.261
15	0.464	-	0.004	1.000	0.004	0.996	0.555	1.558	2.397
16	0.482	-	0.002	1.000	0.002	0.998	0.534	1.605	2.540
17	0.495	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	65		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	10/1/1975		
(14)	**DATE OF FILING**	6/17/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	85	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.41	7.67
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.41	7.67
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	70,677	57,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.068	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.075	-	0.932	1.000	0.932	0.068	0.962	1.030	1.060
2	0.084	-	0.862	1.000	0.862	0.138	0.925	1.061	1.124
3	0.094	-	0.790	1.000	0.790	0.210	0.889	1.093	1.191
4	0.105	-	0.716	1.000	0.716	0.284	0.855	1.126	1.262
5	0.116	-	0.641	1.000	0.641	0.359	0.822	1.159	1.338
6	0.129	-	0.566	1.000	0.566	0.434	0.790	1.194	1.419
7	0.142	-	0.493	1.000	0.493	0.507	0.760	1.230	1.504
8	0.156	-	0.423	1.000	0.423	0.577	0.731	1.267	1.594
9	0.171	-	0.357	1.000	0.357	0.643	0.703	1.305	1.689
10	0.186	-	0.296	1.000	0.296	0.704	0.676	1.344	1.791
11	0.203	-	0.241	1.000	0.241	0.759	0.650	1.384	1.898
12	0.220	-	0.192	1.000	0.192	0.808	0.625	1.426	2.012
13	0.238	-	0.150	1.000	0.150	0.850	0.601	1.469	2.133
14	0.257	-	0.114	1.000	0.114	0.886	0.577	1.513	2.261
15	0.276	-	0.085	1.000	0.085	0.915	0.555	1.558	2.397
16	0.297	-	0.062	1.000	0.062	0.938	0.534	1.605	2.540
17	0.317	-	0.043	1.000	0.043	0.957	0.513	1.653	2.693
18	0.339	-	0.030	1.000	0.030	0.970	0.494	1.702	2.854
19	0.361	-	0.020	1.000	0.020	0.980	0.475	1.754	3.026
20	0.384	-	0.012	1.000	0.012	0.988	0.456	1.806	3.207
21	0.405	-	0.008	1.000	0.008	0.992	0.439	1.860	3.400
22	0.425	-	0.005	1.000	0.005	0.995	0.422	1.916	3.604
23	0.444	-	0.003	1.000	0.003	0.997	0.406	1.974	3.820
24	0.464	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.482	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.495	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	66		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	5/29/1977		
(14)	**DATE OF FILING**	8/19/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
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117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	67		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1980		
(14)	**DATE OF FILING**	12/4/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	68		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**		10/20/1980	
(14)	**DATE OF FILING**		12/12/1980	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		83	F
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.84	8.61
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.84	8.61
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	81,362	64,642
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.061	-	0.945	1.000	0.945	0.055	0.962	1.030	1.060
2	0.068	-	0.888	1.000	0.888	0.112	0.925	1.061	1.124
3	0.075	-	0.827	1.000	0.827	0.173	0.889	1.093	1.191
4	0.084	-	0.765	1.000	0.765	0.235	0.855	1.126	1.262
5	0.094	-	0.701	1.000	0.701	0.299	0.822	1.159	1.338
6	0.105	-	0.635	1.000	0.635	0.365	0.790	1.194	1.419
7	0.116	-	0.569	1.000	0.569	0.431	0.760	1.230	1.504
8	0.129	-	0.502	1.000	0.502	0.498	0.731	1.267	1.594
9	0.142	-	0.438	1.000	0.438	0.562	0.703	1.305	1.689
10	0.156	-	0.376	1.000	0.376	0.624	0.676	1.344	1.791
11	0.171	-	0.317	1.000	0.317	0.683	0.650	1.384	1.898
12	0.186	-	0.263	1.000	0.263	0.737	0.625	1.426	2.012
13	0.203	-	0.214	1.000	0.214	0.786	0.601	1.469	2.133
14	0.220	-	0.171	1.000	0.171	0.829	0.577	1.513	2.261
15	0.238	-	0.133	1.000	0.133	0.867	0.555	1.558	2.397
16	0.257	-	0.102	1.000	0.102	0.898	0.534	1.605	2.540
17	0.276	-	0.075	1.000	0.075	0.925	0.513	1.653	2.693
18	0.297	-	0.055	1.000	0.055	0.945	0.494	1.702	2.854
19	0.317	-	0.038	1.000	0.038	0.962	0.475	1.754	3.026
20	0.339	-	0.026	1.000	0.026	0.974	0.456	1.806	3.207
21	0.361	-	0.017	1.000	0.017	0.983	0.439	1.860	3.400
22	0.384	-	0.011	1.000	0.011	0.989	0.422	1.916	3.604
23	0.405	-	0.007	1.000	0.007	0.993	0.406	1.974	3.820
24	0.425	-	0.004	1.000	0.004	0.996	0.390	2.033	4.049
25	0.444	-	0.002	1.000	0.002	0.998	0.375	2.094	4.292
26	0.464	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.482	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.495	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	1.000	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
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46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
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50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
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52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
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63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
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68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
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71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
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87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
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106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
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115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	69		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	9/8/1980		
(14)	**DATE OF FILING**	1/6/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	75	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	18.37	13.03
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	18.37	13.03
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	137,919	97,817
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.023	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.025	-	0.977	1.000	0.977	0.023	0.962	1.030	1.060
2	0.028	-	0.953	1.000	0.953	0.047	0.925	1.061	1.124
3	0.032	-	0.926	1.000	0.926	0.074	0.889	1.093	1.191
4	0.035	-	0.896	1.000	0.896	0.104	0.855	1.126	1.262
5	0.039	-	0.864	1.000	0.864	0.136	0.822	1.159	1.338
6	0.044	-	0.830	1.000	0.830	0.170	0.790	1.194	1.419
7	0.049	-	0.794	1.000	0.794	0.206	0.760	1.230	1.504
8	0.055	-	0.755	1.000	0.755	0.245	0.731	1.267	1.594
9	0.061	-	0.713	1.000	0.713	0.287	0.703	1.305	1.689
10	0.068	-	0.670	1.000	0.670	0.330	0.676	1.344	1.791
11	0.075	-	0.625	1.000	0.625	0.375	0.650	1.384	1.898
12	0.084	-	0.578	1.000	0.578	0.422	0.625	1.426	2.012
13	0.094	-	0.529	1.000	0.529	0.471	0.601	1.469	2.133
14	0.105	-	0.479	1.000	0.479	0.521	0.577	1.513	2.261
15	0.116	-	0.429	1.000	0.429	0.571	0.555	1.558	2.397
16	0.129	-	0.379	1.000	0.379	0.621	0.534	1.605	2.540
17	0.142	-	0.330	1.000	0.330	0.670	0.513	1.653	2.693
18	0.156	-	0.284	1.000	0.284	0.716	0.494	1.702	2.854
19	0.171	-	0.239	1.000	0.239	0.761	0.475	1.754	3.026
20	0.186	-	0.199	1.000	0.199	0.801	0.456	1.806	3.207
21	0.203	-	0.162	1.000	0.162	0.838	0.439	1.860	3.400
22	0.220	-	0.129	1.000	0.129	0.871	0.422	1.916	3.604
23	0.238	-	0.101	1.000	0.101	0.899	0.406	1.974	3.820
24	0.257	-	0.077	1.000	0.077	0.923	0.390	2.033	4.049
25	0.276	-	0.057	1.000	0.057	0.943	0.375	2.094	4.292
26	0.297	-	0.041	1.000	0.041	0.959	0.361	2.157	4.549
27	0.317	-	0.029	1.000	0.029	0.971	0.347	2.221	4.822
28	0.339	-	0.020	1.000	0.020	0.980	0.333	2.288	5.112
29	0.361	-	0.013	1.000	0.013	0.987	0.321	2.357	5.418
30	0.384	-	0.008	1.000	0.008	0.992	0.308	2.427	5.743
31	0.405	-	0.005	1.000	0.005	0.995	0.296	2.500	6.088
32	0.425	-	0.003	1.000	0.003	0.997	0.285	2.575	6.453
33	0.444	-	0.002	1.000	0.002	0.998	0.274	2.652	6.841
34	0.464	-	0.001	1.000	0.001	0.999	0.264	2.732	7.251
35	0.482	-	0.001	1.000	0.001	0.999	0.253	2.814	7.686
36	0.495	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	1.000	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	70		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	6/1/1978		
(14)	**DATE OF FILING**	1/29/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	97	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.06	3.69
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.06	3.69
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	30,452	27,723
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.220	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.238	-	0.780	1.000	0.780	0.220	0.962	1.030	1.060
2	0.257	-	0.595	1.000	0.595	0.405	0.925	1.061	1.124
3	0.276	-	0.442	1.000	0.442	0.558	0.889	1.093	1.191
4	0.297	-	0.320	1.000	0.320	0.680	0.855	1.126	1.262
5	0.317	-	0.225	1.000	0.225	0.775	0.822	1.159	1.338
6	0.339	-	0.154	1.000	0.154	0.846	0.790	1.194	1.419
7	0.361	-	0.102	1.000	0.102	0.898	0.760	1.230	1.504
8	0.384	-	0.065	1.000	0.065	0.935	0.731	1.267	1.594
9	0.405	-	0.040	1.000	0.040	0.960	0.703	1.305	1.689
10	0.425	-	0.024	1.000	0.024	0.976	0.676	1.344	1.791
11	0.444	-	0.014	1.000	0.014	0.986	0.650	1.384	1.898
12	0.464	-	0.008	1.000	0.008	0.992	0.625	1.426	2.012
13	0.482	-	0.004	1.000	0.004	0.996	0.601	1.469	2.133
14	0.495	-	0.002	1.000	0.002	0.998	0.577	1.513	2.261
15	0.500	-	0.001	1.000	0.001	0.999	0.555	1.558	2.397
16	0.500	-	0.001	1.000	0.001	0.999	0.534	1.605	2.540
17	0.500	-	0.000	1.000	0.000	1.000	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	1.000	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	71		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**		2/2/1981	
(14)	**DATE OF FILING**		3/2/1981	
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	85	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.41	7.67
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.41	7.67
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	70,677	57,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.068	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.075	-	0.932	1.000	0.932	0.068	0.962	1.030	1.060
2	0.084	-	0.862	1.000	0.862	0.138	0.925	1.061	1.124
3	0.094	-	0.790	1.000	0.790	0.210	0.889	1.093	1.191
4	0.105	-	0.716	1.000	0.716	0.284	0.855	1.126	1.262
5	0.116	-	0.641	1.000	0.641	0.359	0.822	1.159	1.338
6	0.129	-	0.566	1.000	0.566	0.434	0.790	1.194	1.419
7	0.142	-	0.493	1.000	0.493	0.507	0.760	1.230	1.504
8	0.156	-	0.423	1.000	0.423	0.577	0.731	1.267	1.594
9	0.171	-	0.357	1.000	0.357	0.643	0.703	1.305	1.689
10	0.186	-	0.296	1.000	0.296	0.704	0.676	1.344	1.791
11	0.203	-	0.241	1.000	0.241	0.759	0.650	1.384	1.898
12	0.220	-	0.192	1.000	0.192	0.808	0.625	1.426	2.012
13	0.238	-	0.150	1.000	0.150	0.850	0.601	1.469	2.133
14	0.257	-	0.114	1.000	0.114	0.886	0.577	1.513	2.261
15	0.276	-	0.085	1.000	0.085	0.915	0.555	1.558	2.397
16	0.297	-	0.062	1.000	0.062	0.938	0.534	1.605	2.540
17	0.317	-	0.043	1.000	0.043	0.957	0.513	1.653	2.693
18	0.339	-	0.030	1.000	0.030	0.970	0.494	1.702	2.854
19	0.361	-	0.020	1.000	0.020	0.980	0.475	1.754	3.026
20	0.384	-	0.012	1.000	0.012	0.988	0.456	1.806	3.207
21	0.405	-	0.008	1.000	0.008	0.992	0.439	1.860	3.400
22	0.425	-	0.005	1.000	0.005	0.995	0.422	1.916	3.604
23	0.444	-	0.003	1.000	0.003	0.997	0.406	1.974	3.820
24	0.464	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.482	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.495	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
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BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	72		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/21/1978		
(14)	**DATE OF FILING**	3/26/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	73		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1980		
(14)	**DATE OF FILING**	3/24/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	90	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	49,242	42,343
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	74		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/12/1977		
(14)	**DATE OF FILING**	4/8/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	45,850	39,801
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
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88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
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91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
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99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
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109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
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111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
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113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	75		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/1/1976		
(14)	**DATE OF FILING**	4/3/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	93	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.31	4.69
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.31	4.69
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	39,852	35,208
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.156	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.171	-	0.844	1.000	0.844	0.156	0.962	1.030	1.060
2	0.186	-	0.700	1.000	0.700	0.300	0.925	1.061	1.124
3	0.203	-	0.570	1.000	0.570	0.430	0.889	1.093	1.191
4	0.220	-	0.454	1.000	0.454	0.546	0.855	1.126	1.262
5	0.238	-	0.354	1.000	0.354	0.646	0.822	1.159	1.338
6	0.257	-	0.270	1.000	0.270	0.730	0.790	1.194	1.419
7	0.276	-	0.201	1.000	0.201	0.799	0.760	1.230	1.504
8	0.297	-	0.145	1.000	0.145	0.855	0.731	1.267	1.594
9	0.317	-	0.102	1.000	0.102	0.898	0.703	1.305	1.689
10	0.339	-	0.070	1.000	0.070	0.930	0.676	1.344	1.791
11	0.361	-	0.046	1.000	0.046	0.954	0.650	1.384	1.898
12	0.384	-	0.030	1.000	0.030	0.970	0.625	1.426	2.012
13	0.405	-	0.018	1.000	0.018	0.982	0.601	1.469	2.133
14	0.425	-	0.011	1.000	0.011	0.989	0.577	1.513	2.261
15	0.444	-	0.006	1.000	0.006	0.994	0.555	1.558	2.397
16	0.464	-	0.003	1.000	0.003	0.997	0.534	1.605	2.540
17	0.482	-	0.002	1.000	0.002	0.998	0.513	1.653	2.693
18	0.495	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	1.000	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	76		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	1/1/1974		
(14)	**DATE OF FILING**	4/30/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	51	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	63.23	29.04
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	63.23	29.04
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	474,686	218,003
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.002	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.002	-	0.998	1.000	0.998	0.002	0.962	1.030	1.060
2	0.002	-	0.997	1.000	0.997	0.003	0.925	1.061	1.124
3	0.002	-	0.995	1.000	0.995	0.005	0.889	1.093	1.191
4	0.002	-	0.993	1.000	0.993	0.007	0.855	1.126	1.262
5	0.003	-	0.990	1.000	0.990	0.010	0.822	1.159	1.338
6	0.003	-	0.988	1.000	0.988	0.012	0.790	1.194	1.419
7	0.003	-	0.985	1.000	0.985	0.015	0.760	1.230	1.504
8	0.004	-	0.982	1.000	0.982	0.018	0.731	1.267	1.594
9	0.004	-	0.978	1.000	0.978	0.022	0.703	1.305	1.689
10	0.005	-	0.974	1.000	0.974	0.026	0.676	1.344	1.791
11	0.006	-	0.969	1.000	0.969	0.031	0.650	1.384	1.898
12	0.007	-	0.963	1.000	0.963	0.037	0.625	1.426	2.012
13	0.008	-	0.957	1.000	0.957	0.043	0.601	1.469	2.133
14	0.009	-	0.949	1.000	0.949	0.051	0.577	1.513	2.261
15	0.010	-	0.941	1.000	0.941	0.059	0.555	1.558	2.397
16	0.011	-	0.932	1.000	0.932	0.068	0.534	1.605	2.540
17	0.012	-	0.922	1.000	0.922	0.078	0.513	1.653	2.693
18	0.013	-	0.911	1.000	0.911	0.089	0.494	1.702	2.854
19	0.014	-	0.899	1.000	0.899	0.101	0.475	1.754	3.026
20	0.015	-	0.887	1.000	0.887	0.113	0.456	1.806	3.207
21	0.017	-	0.874	1.000	0.874	0.126	0.439	1.860	3.400
22	0.018	-	0.859	1.000	0.859	0.141	0.422	1.916	3.604
23	0.020	-	0.844	1.000	0.844	0.156	0.406	1.974	3.820
24	0.023	-	0.826	1.000	0.826	0.174	0.390	2.033	4.049
25	0.025	-	0.808	1.000	0.808	0.192	0.375	2.094	4.292
26	0.028	-	0.787	1.000	0.787	0.213	0.361	2.157	4.549
27	0.032	-	0.765	1.000	0.765	0.235	0.347	2.221	4.822
28	0.035	-	0.741	1.000	0.741	0.259	0.333	2.288	5.112
29	0.039	-	0.714	1.000	0.714	0.286	0.321	2.357	5.418
30	0.044	-	0.686	1.000	0.686	0.314	0.308	2.427	5.743
31	0.049	-	0.656	1.000	0.656	0.344	0.296	2.500	6.088
32	0.055	-	0.624	1.000	0.624	0.376	0.285	2.575	6.453
33	0.061	-	0.590	1.000	0.590	0.410	0.274	2.652	6.841
34	0.068	-	0.554	1.000	0.554	0.446	0.264	2.732	7.251
35	0.075	-	0.516	1.000	0.516	0.484	0.253	2.814	7.686
36	0.084	-	0.477	1.000	0.477	0.523	0.244	2.898	8.147
37	0.094	-	0.437	1.000	0.437	0.563	0.234	2.985	8.636
38	0.105	-	0.396	1.000	0.396	0.604	0.225	3.075	9.154
39	0.116	-	0.355	1.000	0.355	0.645	0.217	3.167	9.704
40	0.129	-	0.314	1.000	0.314	0.686	0.208	3.262	10.286
41	0.142	-	0.273	1.000	0.273	0.727	0.200	3.360	10.903
42	0.156	-	0.234	1.000	0.234	0.766	0.193	3.461	11.557
43	0.171	-	0.198	1.000	0.198	0.802	0.185	3.565	12.250
44	0.186	-	0.164	1.000	0.164	0.836	0.178	3.671	12.985
45	0.203	-	0.134	1.000	0.134	0.866	0.171	3.782	13.765
46	0.220	-	0.106	1.000	0.106	0.894	0.165	3.895	14.590
47	0.238	-	0.083	1.000	0.083	0.917	0.158	4.012	15.466
48	0.257	-	0.063	1.000	0.063	0.937	0.152	4.132	16.394
49	0.276	-	0.047	1.000	0.047	0.953	0.146	4.256	17.378
50	0.297	-	0.034	1.000	0.034	0.966	0.141	4.384	18.420
51	0.317	-	0.024	1.000	0.024	0.976	0.135	4.515	19.525
52	0.339	-	0.016	1.000	0.016	0.984	0.130	4.651	20.697
53	0.361	-	0.011	1.000	0.011	0.989	0.125	4.790	21.939
54	0.384	-	0.007	1.000	0.007	0.993	0.120	4.934	23.255
55	0.405	-	0.004	1.000	0.004	0.996	0.116	5.082	24.650
56	0.425	-	0.003	1.000	0.003	0.997	0.111	5.235	26.129
57	0.444	-	0.001	1.000	0.001	0.999	0.107	5.392	27.697
58	0.464	-	0.001	1.000	0.001	0.999	0.103	5.553	29.359
59	0.482	-	0.000	1.000	0.000	1.000	0.099	5.720	31.120
60	0.495	-	0.000	1.000	0.000	1.000	0.095	5.892	32.988
61	0.500	-	0.000	1.000	0.000	1.000	0.091	6.068	34.967
62	0.500	-	0.000	1.000	0.000	1.000	0.088	6.250	37.065
63	0.500	-	0.000	1.000	0.000	1.000	0.085	6.438	39.289
64	0.500	-	0.000	1.000	0.000	1.000	0.081	6.631	41.646
65	0.500	-	0.000	1.000	0.000	1.000	0.078	6.830	44.145
66	0.500	-	0.000	1.000	0.000	1.000	0.075	7.035	46.794
67	0.500	-	0.000	1.000	0.000	1.000	0.072	7.246	49.601
68	0.500	-	0.000	1.000	0.000	1.000	0.069	7.463	52.577
69	1.000	-	0.000	1.000	0.000	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	77		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**		9/1/1981	
(14)	**DATE OF FILING**		9/2/1981	
		Age		**Sex**
(15)	**CLAIMANT 1 (x)**	77		F
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	16.19	11.84
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	16.19	11.84
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	121,569	88,880
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.028	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.032	-	0.972	1.000	0.972	0.028	0.962	1.030	1.060
2	0.035	-	0.941	1.000	0.941	0.059	0.925	1.061	1.124
3	0.039	-	0.908	1.000	0.908	0.092	0.889	1.093	1.191
4	0.044	-	0.872	1.000	0.872	0.128	0.855	1.126	1.262
5	0.049	-	0.833	1.000	0.833	0.167	0.822	1.159	1.338
6	0.055	-	0.793	1.000	0.793	0.207	0.790	1.194	1.419
7	0.061	-	0.749	1.000	0.749	0.251	0.760	1.230	1.504
8	0.068	-	0.703	1.000	0.703	0.297	0.731	1.267	1.594
9	0.075	-	0.656	1.000	0.656	0.344	0.703	1.305	1.689
10	0.084	-	0.606	1.000	0.606	0.394	0.676	1.344	1.791
11	0.094	-	0.555	1.000	0.555	0.445	0.650	1.384	1.898
12	0.105	-	0.503	1.000	0.503	0.497	0.625	1.426	2.012
13	0.116	-	0.451	1.000	0.451	0.549	0.601	1.469	2.133
14	0.129	-	0.398	1.000	0.398	0.602	0.577	1.513	2.261
15	0.142	-	0.347	1.000	0.347	0.653	0.555	1.558	2.397
16	0.156	-	0.298	1.000	0.298	0.702	0.534	1.605	2.540
17	0.171	-	0.251	1.000	0.251	0.749	0.513	1.653	2.693
18	0.186	-	0.208	1.000	0.208	0.792	0.494	1.702	2.854
19	0.203	-	0.170	1.000	0.170	0.830	0.475	1.754	3.026
20	0.220	-	0.135	1.000	0.135	0.865	0.456	1.806	3.207
21	0.238	-	0.106	1.000	0.106	0.894	0.439	1.860	3.400
22	0.257	-	0.080	1.000	0.080	0.920	0.422	1.916	3.604
23	0.276	-	0.060	1.000	0.060	0.940	0.406	1.974	3.820
24	0.297	-	0.043	1.000	0.043	0.957	0.390	2.033	4.049
25	0.317	-	0.030	1.000	0.030	0.970	0.375	2.094	4.292
26	0.339	-	0.021	1.000	0.021	0.979	0.361	2.157	4.549
27	0.361	-	0.014	1.000	0.014	0.986	0.347	2.221	4.822
28	0.384	-	0.009	1.000	0.009	0.991	0.333	2.288	5.112
29	0.405	-	0.005	1.000	0.005	0.995	0.321	2.357	5.418
30	0.425	-	0.003	1.000	0.003	0.997	0.308	2.427	5.743
31	0.444	-	0.002	1.000	0.002	0.998	0.296	2.500	6.088
32	0.464	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.482	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.495	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	1.000	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	78		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1980		
(14)	**DATE OF FILING**	2/10/1982		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	61,192	51,001
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	79		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	9/1/1983		
(14)	**DATE OF FILING**	9/2/1983		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	86	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.76	7.22
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.76	7.22
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	65,786	54,212
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.075	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.084	-	0.925	1.000	0.925	0.075	0.962	1.030	1.060
2	0.094	-	0.847	1.000	0.847	0.153	0.925	1.061	1.124
3	0.105	-	0.767	1.000	0.767	0.233	0.889	1.093	1.191
4	0.116	-	0.687	1.000	0.687	0.313	0.855	1.126	1.262
5	0.129	-	0.607	1.000	0.607	0.393	0.822	1.159	1.338
6	0.142	-	0.529	1.000	0.529	0.471	0.790	1.194	1.419
7	0.156	-	0.454	1.000	0.454	0.546	0.760	1.230	1.504
8	0.171	-	0.383	1.000	0.383	0.617	0.731	1.267	1.594
9	0.186	-	0.318	1.000	0.318	0.682	0.703	1.305	1.689
10	0.203	-	0.259	1.000	0.259	0.741	0.676	1.344	1.791
11	0.220	-	0.206	1.000	0.206	0.794	0.650	1.384	1.898
12	0.238	-	0.161	1.000	0.161	0.839	0.625	1.426	2.012
13	0.257	-	0.123	1.000	0.123	0.877	0.601	1.469	2.133
14	0.276	-	0.091	1.000	0.091	0.909	0.577	1.513	2.261
15	0.297	-	0.066	1.000	0.066	0.934	0.555	1.558	2.397
16	0.317	-	0.046	1.000	0.046	0.954	0.534	1.605	2.540
17	0.339	-	0.032	1.000	0.032	0.968	0.513	1.653	2.693
18	0.361	-	0.021	1.000	0.021	0.979	0.494	1.702	2.854
19	0.384	-	0.013	1.000	0.013	0.987	0.475	1.754	3.026
20	0.405	-	0.008	1.000	0.008	0.992	0.456	1.806	3.207
21	0.425	-	0.005	1.000	0.005	0.995	0.439	1.860	3.400
22	0.444	-	0.003	1.000	0.003	0.997	0.422	1.916	3.604
23	0.464	-	0.002	1.000	0.002	0.998	0.406	1.974	3.820
24	0.482	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
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31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
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36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
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53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
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74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
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89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
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115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	80		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1984		
(14)	**DATE OF FILING**	4/12/1984		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	78	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	15.18	11.26
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	15.18	11.26
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	113,973	84,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.032	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.035	-	0.968	1.000	0.968	0.032	0.962	1.030	1.060
2	0.039	-	0.934	1.000	0.934	0.066	0.925	1.061	1.124
3	0.044	-	0.897	1.000	0.897	0.103	0.889	1.093	1.191
4	0.049	-	0.858	1.000	0.858	0.142	0.855	1.126	1.262
5	0.055	-	0.816	1.000	0.816	0.184	0.822	1.159	1.338
6	0.061	-	0.771	1.000	0.771	0.229	0.790	1.194	1.419
7	0.068	-	0.724	1.000	0.724	0.276	0.760	1.230	1.504
8	0.075	-	0.675	1.000	0.675	0.325	0.731	1.267	1.594
9	0.084	-	0.624	1.000	0.624	0.376	0.703	1.305	1.689
10	0.094	-	0.572	1.000	0.572	0.428	0.676	1.344	1.791
11	0.105	-	0.518	1.000	0.518	0.482	0.650	1.384	1.898
12	0.116	-	0.464	1.000	0.464	0.536	0.625	1.426	2.012
13	0.129	-	0.410	1.000	0.410	0.590	0.601	1.469	2.133
14	0.142	-	0.357	1.000	0.357	0.643	0.577	1.513	2.261
15	0.156	-	0.306	1.000	0.306	0.694	0.555	1.558	2.397
16	0.171	-	0.259	1.000	0.259	0.741	0.534	1.605	2.540
17	0.186	-	0.214	1.000	0.214	0.786	0.513	1.653	2.693
18	0.203	-	0.175	1.000	0.175	0.825	0.494	1.702	2.854
19	0.220	-	0.139	1.000	0.139	0.861	0.475	1.754	3.026
20	0.238	-	0.109	1.000	0.109	0.891	0.456	1.806	3.207
21	0.257	-	0.083	1.000	0.083	0.917	0.439	1.860	3.400
22	0.276	-	0.062	1.000	0.062	0.938	0.422	1.916	3.604
23	0.297	-	0.045	1.000	0.045	0.955	0.406	1.974	3.820
24	0.317	-	0.031	1.000	0.031	0.969	0.390	2.033	4.049
25	0.339	-	0.021	1.000	0.021	0.979	0.375	2.094	4.292
26	0.361	-	0.014	1.000	0.014	0.986	0.361	2.157	4.549
27	0.384	-	0.009	1.000	0.009	0.991	0.347	2.221	4.822
28	0.405	-	0.006	1.000	0.006	0.994	0.333	2.288	5.112
29	0.425	-	0.003	1.000	0.003	0.997	0.321	2.357	5.418
30	0.444	-	0.002	1.000	0.002	0.998	0.308	2.427	5.743
31	0.464	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.482	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.495	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	1.000	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	81		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1976		
(14)	**DATE OF FILING**	4/8/1985		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	93	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.31	4.69
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.31	4.69
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	39,852	35,208
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.156	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.171	-	0.844	1.000	0.844	0.156	0.962	1.030	1.060
2	0.186	-	0.700	1.000	0.700	0.300	0.925	1.061	1.124
3	0.203	-	0.570	1.000	0.570	0.430	0.889	1.093	1.191
4	0.220	-	0.454	1.000	0.454	0.546	0.855	1.126	1.262
5	0.238	-	0.354	1.000	0.354	0.646	0.822	1.159	1.338
6	0.257	-	0.270	1.000	0.270	0.730	0.790	1.194	1.419
7	0.276	-	0.201	1.000	0.201	0.799	0.760	1.230	1.504
8	0.297	-	0.145	1.000	0.145	0.855	0.731	1.267	1.594
9	0.317	-	0.102	1.000	0.102	0.898	0.703	1.305	1.689
10	0.339	-	0.070	1.000	0.070	0.930	0.676	1.344	1.791
11	0.361	-	0.046	1.000	0.046	0.954	0.650	1.384	1.898
12	0.384	-	0.030	1.000	0.030	0.970	0.625	1.426	2.012
13	0.405	-	0.018	1.000	0.018	0.982	0.601	1.469	2.133
14	0.425	-	0.011	1.000	0.011	0.989	0.577	1.513	2.261
15	0.444	-	0.006	1.000	0.006	0.994	0.555	1.558	2.397
16	0.464	-	0.003	1.000	0.003	0.997	0.534	1.605	2.540
17	0.482	-	0.002	1.000	0.002	0.998	0.513	1.653	2.693
18	0.495	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	1.000	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	82		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/1/1985		
(14)	**DATE OF FILING**	11/25/1985		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	76	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	17.26	12.43
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	17.26	12.43
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	129,553	93,303
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.025	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.028	-	0.975	1.000	0.975	0.025	0.962	1.030	1.060
2	0.032	-	0.947	1.000	0.947	0.053	0.925	1.061	1.124
3	0.035	-	0.917	1.000	0.917	0.083	0.889	1.093	1.191
4	0.039	-	0.885	1.000	0.885	0.115	0.855	1.126	1.262
5	0.044	-	0.850	1.000	0.850	0.150	0.822	1.159	1.338
6	0.049	-	0.812	1.000	0.812	0.188	0.790	1.194	1.419
7	0.055	-	0.772	1.000	0.772	0.228	0.760	1.230	1.504
8	0.061	-	0.730	1.000	0.730	0.270	0.731	1.267	1.594
9	0.068	-	0.686	1.000	0.686	0.314	0.703	1.305	1.689
10	0.075	-	0.639	1.000	0.639	0.361	0.676	1.344	1.791
11	0.084	-	0.591	1.000	0.591	0.409	0.650	1.384	1.898
12	0.094	-	0.541	1.000	0.541	0.459	0.625	1.426	2.012
13	0.105	-	0.491	1.000	0.491	0.509	0.601	1.469	2.133
14	0.116	-	0.439	1.000	0.439	0.561	0.577	1.513	2.261
15	0.129	-	0.388	1.000	0.388	0.612	0.555	1.558	2.397
16	0.142	-	0.338	1.000	0.338	0.662	0.534	1.605	2.540
17	0.156	-	0.290	1.000	0.290	0.710	0.513	1.653	2.693
18	0.171	-	0.245	1.000	0.245	0.755	0.494	1.702	2.854
19	0.186	-	0.203	1.000	0.203	0.797	0.475	1.754	3.026
20	0.203	-	0.165	1.000	0.165	0.835	0.456	1.806	3.207
21	0.220	-	0.132	1.000	0.132	0.868	0.439	1.860	3.400
22	0.238	-	0.103	1.000	0.103	0.897	0.422	1.916	3.604
23	0.257	-	0.078	1.000	0.078	0.922	0.406	1.974	3.820
24	0.276	-	0.058	1.000	0.058	0.942	0.390	2.033	4.049
25	0.297	-	0.042	1.000	0.042	0.958	0.375	2.094	4.292
26	0.317	-	0.030	1.000	0.030	0.970	0.361	2.157	4.549
27	0.339	-	0.020	1.000	0.020	0.980	0.347	2.221	4.822
28	0.361	-	0.013	1.000	0.013	0.987	0.333	2.288	5.112
29	0.384	-	0.009	1.000	0.009	0.991	0.321	2.357	5.418
30	0.405	-	0.005	1.000	0.005	0.995	0.308	2.427	5.743
31	0.425	-	0.003	1.000	0.003	0.997	0.296	2.500	6.088
32	0.444	-	0.002	1.000	0.002	0.998	0.285	2.575	6.453
33	0.464	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.482	-	0.001	1.000	0.001	0.999	0.264	2.732	7.251
35	0.495	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	1.000	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	83		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	12/1/1987		
(14)	**DATE OF FILING**	2/16/1988		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	76	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	17.26	12.43
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	17.26	12.43
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	129,553	93,303
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.025	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.028	-	0.975	1.000	0.975	0.025	0.962	1.030	1.060
2	0.032	-	0.947	1.000	0.947	0.053	0.925	1.061	1.124
3	0.035	-	0.917	1.000	0.917	0.083	0.889	1.093	1.191
4	0.039	-	0.885	1.000	0.885	0.115	0.855	1.126	1.262
5	0.044	-	0.850	1.000	0.850	0.150	0.822	1.159	1.338
6	0.049	-	0.812	1.000	0.812	0.188	0.790	1.194	1.419
7	0.055	-	0.772	1.000	0.772	0.228	0.760	1.230	1.504
8	0.061	-	0.730	1.000	0.730	0.270	0.731	1.267	1.594
9	0.068	-	0.686	1.000	0.686	0.314	0.703	1.305	1.689
10	0.075	-	0.639	1.000	0.639	0.361	0.676	1.344	1.791
11	0.084	-	0.591	1.000	0.591	0.409	0.650	1.384	1.898
12	0.094	-	0.541	1.000	0.541	0.459	0.625	1.426	2.012
13	0.105	-	0.491	1.000	0.491	0.509	0.601	1.469	2.133
14	0.116	-	0.439	1.000	0.439	0.561	0.577	1.513	2.261
15	0.129	-	0.388	1.000	0.388	0.612	0.555	1.558	2.397
16	0.142	-	0.338	1.000	0.338	0.662	0.534	1.605	2.540
17	0.156	-	0.290	1.000	0.290	0.710	0.513	1.653	2.693
18	0.171	-	0.245	1.000	0.245	0.755	0.494	1.702	2.854
19	0.186	-	0.203	1.000	0.203	0.797	0.475	1.754	3.026
20	0.203	-	0.165	1.000	0.165	0.835	0.456	1.806	3.207
21	0.220	-	0.132	1.000	0.132	0.868	0.439	1.860	3.400
22	0.238	-	0.103	1.000	0.103	0.897	0.422	1.916	3.604
23	0.257	-	0.078	1.000	0.078	0.922	0.406	1.974	3.820
24	0.276	-	0.058	1.000	0.058	0.942	0.390	2.033	4.049
25	0.297	-	0.042	1.000	0.042	0.958	0.375	2.094	4.292
26	0.317	-	0.030	1.000	0.030	0.970	0.361	2.157	4.549
27	0.339	-	0.020	1.000	0.020	0.980	0.347	2.221	4.822
28	0.361	-	0.013	1.000	0.013	0.987	0.333	2.288	5.112
29	0.384	-	0.009	1.000	0.009	0.991	0.321	2.357	5.418
30	0.405	-	0.005	1.000	0.005	0.995	0.308	2.427	5.743
31	0.425	-	0.003	1.000	0.003	0.997	0.296	2.500	6.088
32	0.444	-	0.002	1.000	0.002	0.998	0.285	2.575	6.453
33	0.464	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.482	-	0.001	1.000	0.001	0.999	0.264	2.732	7.251
35	0.495	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	1.000	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	84		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1989		
(14)	**DATE OF FILING**	5/11/1989		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	70	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	24.72	16.17
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	24.72	16.17
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,133.70	55.52
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	185,545	121,376
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.014	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.015	-	0.986	1.000	0.986	0.014	0.962	1.030	1.060
2	0.017	-	0.972	1.000	0.972	0.028	0.925	1.061	1.124
3	0.018	-	0.955	1.000	0.955	0.045	0.889	1.093	1.191
4	0.020	-	0.938	1.000	0.938	0.062	0.855	1.126	1.262
5	0.023	-	0.919	1.000	0.919	0.081	0.822	1.159	1.338
6	0.025	-	0.898	1.000	0.898	0.102	0.790	1.194	1.419
7	0.028	-	0.875	1.000	0.875	0.125	0.760	1.230	1.504
8	0.032	-	0.850	1.000	0.850	0.150	0.731	1.267	1.594
9	0.035	-	0.823	1.000	0.823	0.177	0.703	1.305	1.689
10	0.039	-	0.794	1.000	0.794	0.206	0.676	1.344	1.791
11	0.044	-	0.763	1.000	0.763	0.237	0.650	1.384	1.898
12	0.049	-	0.729	1.000	0.729	0.271	0.625	1.426	2.012
13	0.055	-	0.694	1.000	0.694	0.306	0.601	1.469	2.133
14	0.061	-	0.656	1.000	0.656	0.344	0.577	1.513	2.261
15	0.068	-	0.616	1.000	0.616	0.384	0.555	1.558	2.397
16	0.075	-	0.574	1.000	0.574	0.426	0.534	1.605	2.540
17	0.084	-	0.531	1.000	0.531	0.469	0.513	1.653	2.693
18	0.094	-	0.486	1.000	0.486	0.514	0.494	1.702	2.854
19	0.105	-	0.440	1.000	0.440	0.560	0.475	1.754	3.026
20	0.116	-	0.394	1.000	0.394	0.606	0.456	1.806	3.207
21	0.129	-	0.349	1.000	0.349	0.651	0.439	1.860	3.400
22	0.142	-	0.304	1.000	0.304	0.696	0.422	1.916	3.604
23	0.156	-	0.261	1.000	0.261	0.739	0.406	1.974	3.820
24	0.171	-	0.220	1.000	0.220	0.780	0.390	2.033	4.049
25	0.186	-	0.182	1.000	0.182	0.818	0.375	2.094	4.292
26	0.203	-	0.148	1.000	0.148	0.852	0.361	2.157	4.549
27	0.220	-	0.118	1.000	0.118	0.882	0.347	2.221	4.822
28	0.238	-	0.092	1.000	0.092	0.908	0.333	2.288	5.112
29	0.257	-	0.070	1.000	0.070	0.930	0.321	2.357	5.418
30	0.276	-	0.052	1.000	0.052	0.948	0.308	2.427	5.743
31	0.297	-	0.038	1.000	0.038	0.962	0.296	2.500	6.088
32	0.317	-	0.027	1.000	0.027	0.973	0.285	2.575	6.453
33	0.339	-	0.018	1.000	0.018	0.982	0.274	2.652	6.841
34	0.361	-	0.012	1.000	0.012	0.988	0.264	2.732	7.251
35	0.384	-	0.008	1.000	0.008	0.992	0.253	2.814	7.686
36	0.405	-	0.005	1.000	0.005	0.995	0.244	2.898	8.147
37	0.425	-	0.003	1.000	0.003	0.997	0.234	2.985	8.636
38	0.444	-	0.002	1.000	0.002	0.998	0.225	3.075	9.154
39	0.464	-	0.001	1.000	0.001	0.999	0.217	3.167	9.704
40	0.482	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.495	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.500	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.500	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	0.500	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	1.000	-	0.000	1.000	0.000	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	85		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/27/1991		
(14)	**DATE OF FILING**	11/15/1991		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	78	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	15.18	11.26
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	15.18	11.26
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,143.23	60.43
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	113,973	84,561
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.032	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.035	-	0.968	1.000	0.968	0.032	0.962	1.030	1.060
2	0.039	-	0.934	1.000	0.934	0.066	0.925	1.061	1.124
3	0.044	-	0.897	1.000	0.897	0.103	0.889	1.093	1.191
4	0.049	-	0.858	1.000	0.858	0.142	0.855	1.126	1.262
5	0.055	-	0.816	1.000	0.816	0.184	0.822	1.159	1.338
6	0.061	-	0.771	1.000	0.771	0.229	0.790	1.194	1.419
7	0.068	-	0.724	1.000	0.724	0.276	0.760	1.230	1.504
8	0.075	-	0.675	1.000	0.675	0.325	0.731	1.267	1.594
9	0.084	-	0.624	1.000	0.624	0.376	0.703	1.305	1.689
10	0.094	-	0.572	1.000	0.572	0.428	0.676	1.344	1.791
11	0.105	-	0.518	1.000	0.518	0.482	0.650	1.384	1.898
12	0.116	-	0.464	1.000	0.464	0.536	0.625	1.426	2.012
13	0.129	-	0.410	1.000	0.410	0.590	0.601	1.469	2.133
14	0.142	-	0.357	1.000	0.357	0.643	0.577	1.513	2.261
15	0.156	-	0.306	1.000	0.306	0.694	0.555	1.558	2.397
16	0.171	-	0.259	1.000	0.259	0.741	0.534	1.605	2.540
17	0.186	-	0.214	1.000	0.214	0.786	0.513	1.653	2.693
18	0.203	-	0.175	1.000	0.175	0.825	0.494	1.702	2.854
19	0.220	-	0.139	1.000	0.139	0.861	0.475	1.754	3.026
20	0.238	-	0.109	1.000	0.109	0.891	0.456	1.806	3.207
21	0.257	-	0.083	1.000	0.083	0.917	0.439	1.860	3.400
22	0.276	-	0.062	1.000	0.062	0.938	0.422	1.916	3.604
23	0.297	-	0.045	1.000	0.045	0.955	0.406	1.974	3.820
24	0.317	-	0.031	1.000	0.031	0.969	0.390	2.033	4.049
25	0.339	-	0.021	1.000	0.021	0.979	0.375	2.094	4.292
26	0.361	-	0.014	1.000	0.014	0.986	0.361	2.157	4.549
27	0.384	-	0.009	1.000	0.009	0.991	0.347	2.221	4.822
28	0.405	-	0.006	1.000	0.006	0.994	0.333	2.288	5.112
29	0.425	-	0.003	1.000	0.003	0.997	0.321	2.357	5.418
30	0.444	-	0.002	1.000	0.002	0.998	0.308	2.427	5.743
31	0.464	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.482	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.495	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	1.000	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
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73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
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90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
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103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
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111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	86		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/23/1993		
(14)	**DATE OF FILING**	6/28/1993		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.30	66.39
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	45,850	39,801
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	87		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	6/1/1993		
(14)	**DATE OF FILING**	6/28/1993		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	69	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	26.13	16.81
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	26.13	16.81
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,132.28	54.88
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	196,189	126,188
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.013	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.014	-	0.987	1.000	0.987	0.013	0.962	1.030	1.060
2	0.015	-	0.974	1.000	0.974	0.026	0.925	1.061	1.124
3	0.017	-	0.959	1.000	0.959	0.041	0.889	1.093	1.191
4	0.018	-	0.943	1.000	0.943	0.057	0.855	1.126	1.262
5	0.020	-	0.926	1.000	0.926	0.074	0.822	1.159	1.338
6	0.023	-	0.907	1.000	0.907	0.093	0.790	1.194	1.419
7	0.025	-	0.887	1.000	0.887	0.113	0.760	1.230	1.504
8	0.028	-	0.864	1.000	0.864	0.136	0.731	1.267	1.594
9	0.032	-	0.840	1.000	0.840	0.160	0.703	1.305	1.689
10	0.035	-	0.813	1.000	0.813	0.187	0.676	1.344	1.791
11	0.039	-	0.784	1.000	0.784	0.216	0.650	1.384	1.898
12	0.044	-	0.753	1.000	0.753	0.247	0.625	1.426	2.012
13	0.049	-	0.720	1.000	0.720	0.280	0.601	1.469	2.133
14	0.055	-	0.685	1.000	0.685	0.315	0.577	1.513	2.261
15	0.061	-	0.647	1.000	0.647	0.353	0.555	1.558	2.397
16	0.068	-	0.608	1.000	0.608	0.392	0.534	1.605	2.540
17	0.075	-	0.567	1.000	0.567	0.433	0.513	1.653	2.693
18	0.084	-	0.524	1.000	0.524	0.476	0.494	1.702	2.854
19	0.094	-	0.480	1.000	0.480	0.520	0.475	1.754	3.026
20	0.105	-	0.435	1.000	0.435	0.565	0.456	1.806	3.207
21	0.116	-	0.389	1.000	0.389	0.611	0.439	1.860	3.400
22	0.129	-	0.344	1.000	0.344	0.656	0.422	1.916	3.604
23	0.142	-	0.300	1.000	0.300	0.700	0.406	1.974	3.820
24	0.156	-	0.257	1.000	0.257	0.743	0.390	2.033	4.049
25	0.171	-	0.217	1.000	0.217	0.783	0.375	2.094	4.292
26	0.186	-	0.180	1.000	0.180	0.820	0.361	2.157	4.549
27	0.203	-	0.147	1.000	0.147	0.853	0.347	2.221	4.822
28	0.220	-	0.117	1.000	0.117	0.883	0.333	2.288	5.112
29	0.238	-	0.091	1.000	0.091	0.909	0.321	2.357	5.418
30	0.257	-	0.070	1.000	0.070	0.930	0.308	2.427	5.743
31	0.276	-	0.052	1.000	0.052	0.948	0.296	2.500	6.088
32	0.297	-	0.037	1.000	0.037	0.963	0.285	2.575	6.453
33	0.317	-	0.026	1.000	0.026	0.974	0.274	2.652	6.841
34	0.339	-	0.018	1.000	0.018	0.982	0.264	2.732	7.251
35	0.361	-	0.012	1.000	0.012	0.988	0.253	2.814	7.686
36	0.384	-	0.008	1.000	0.008	0.992	0.244	2.898	8.147
37	0.405	-	0.005	1.000	0.005	0.995	0.234	2.985	8.636
38	0.425	-	0.003	1.000	0.003	0.997	0.225	3.075	9.154
39	0.444	-	0.002	1.000	0.002	0.998	0.217	3.167	9.704
40	0.464	-	0.001	1.000	0.001	0.999	0.208	3.262	10.286
41	0.482	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.495	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.500	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.500	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	0.500	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	0.500	-	0.000	1.000	0.000	1.000	0.141	4.384	18.420
51	1.000	-	0.000	1.000	0.000	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
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(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	88		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1995		
(14)	**DATE OF FILING**	5/16/1995		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.30	66.39
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,507	7,507
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	45,850	39,801
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2012

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
17	0.16%	0.03%
18	0.16%	0.03%
19	0.17%	0.03%
20	0.18%	0.03%
21	0.18%	0.03%
22	0.19%	0.03%
23	0.20%	0.03%
24	0.21%	0.03%
25	0.22%	0.03%
26	0.23%	0.03%
27	0.24%	0.03%
28	0.24%	0.03%
29	0.25%	0.03%
30	0.25%	0.04%
31	0.25%	0.04%
32	0.25%	0.04%
33	0.25%	0.04%
34	0.25%	0.04%
35	0.26%	0.05%
36	0.26%	0.05%
37	0.27%	0.06%
38	0.28%	0.06%
39	0.30%	0.07%
40	0.34%	0.07%
41	0.38%	0.08%
42	0.43%	0.08%
43	0.48%	0.09%
44	0.55%	0.09%
45	0.63%	0.10%
46	0.66%	0.10%
47	0.69%	0.11%
48	0.72%	0.12%
49	0.77%	0.13%
50	0.84%	0.14%
51	0.93%	0.16%

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
52	1.04%	0.17%
53	1.16%	0.19%
54	1.29%	0.21%
55	1.41%	0.23%
56	1.54%	0.26%
57	1.68%	0.29%
58	1.83%	0.34%
59	2.00%	0.39%
60	2.20%	0.44%
61	2.42%	0.51%
62	2.67%	0.58%
63	2.96%	0.67%
64	3.29%	0.76%
65	3.67%	0.86%
66	4.10%	0.97%
67	4.55%	1.08%
68	5.02%	1.18%
69	5.48%	1.27%
70	5.94%	1.37%
71	6.40%	1.50%
72	6.87%	1.65%
73	7.38%	1.83%
74	7.96%	2.04%
75	8.62%	2.27%
76	9.38%	2.53%
77	10.22%	2.84%
78	11.13%	3.17%
79	12.09%	3.54%
80	13.08%	3.94%
81	14.08%	4.40%
82	15.11%	4.92%
83	16.18%	5.49%
84	17.35%	6.10%
85	18.64%	6.77%
86	20.11%	7.53%
87	21.79%	8.40%
88	23.69%	9.38%
89	25.84%	10.46%
90	28.24%	11.63%
91	30.92%	12.88%

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
92	33.86%	14.20%
93	37.10%	15.59%
94	40.62%	17.07%
95	44.45%	18.62%
96	47.48%	20.25%
97	50.61%	21.97%
98	53.92%	23.77%
99	57.55%	25.67%
100	61.58%	27.64%
101	66.14%	29.66%
102	71.34%	31.71%
103	77.28%	33.85%
104	84.07%	36.10%
105	91.83%	38.36%
106	100.00%	40.52%
107		42.48%
108		44.44%
109		46.45%
110		48.23%
111		49.51%
112		50.00%
113		50.00%
114		50.00%
115		50.00%
116		50.00%
117		50.00%
118		50.00%
119		50.00%
120		100.00%

(1) AGE OF CLAIMANT

(2) & (3) PROBABILITY OF DYING IN A GIVEN YEAR

NOTE: MORTALITY RATES BASED ON DELOITTE STUDY TITLED “OHIO BUREAU OF WORKERS' COMPENSATION, DOCUMENTATION OF 2010 MORTALITY STUDY” DATED SEPTEMBER 10, 2010.

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SUMMARY OF UNPAID LOSSES

		NOMINAL			DISCOUNTED		
		LOW	POINT	HIGH	LOW	POINT	HIGH
(1)	**AWARDED CLAIMS**		**17,973,942**			**11,835,082**	
	PENDING & IBNR CLAIMS						
(2)	DEPT. OF LABOR OH DATA METHOD	10,367,978	17,804,878	25,241,778	2,877,126	4,938,073	6,999,019
(3)	OH EMPLOYEE SURVEY DATA METHOD	325,312,289	405,568,234	485,824,179	97,616,193	121,884,376	146,152,558
(4)	**SELECTED PENDING & IBNR CLAIM**	**89,104,056**	**229,891,318**	**370,678,579**	**26,561,893**	**68,963,033**	**111,364,173**
	ACTIVE MINERS						
(5)	**BASED ON OH EMPLOYEE SURVEY DATA**	**222,841,735**	**276,954,658**	**331,067,582**	**61,082,229**	**76,038,264**	**90,994,298**
(6)	**TOTAL UNPAID LOSSES (FULL YEAR DISCOUNT)**	**329,919,733**	**524,819,918**	**719,720,103**	**99,479,204**	**156,836,379**	**214,193,554**
(7)	**HALF YEAR DISCOUNT ADJUSTMENT**					1.02	
(8)	**TOTAL UNPAID LOSSES**				**101,449,281**	**159,942,351**	**218,435,422**

Note: Active miner is 100% of the liability (e.g. not pro-rated for years of service)

(1) SECTION 8A, EXHIBIT 2, SHEET 1, COL. (9) & (10)
(2) SECTION 8A, EXHIBIT 3, SHEET 1, SUM OF ROW (J) FOR NOMINAL & SUM OF ROW (K) FOR DISCOUNTED
(3) LOW ESTIMATE FROM SECTION 8A, EXHIBIT 4, SHEET 1A, COL. (14) & (14A)
HIGH ESTIMATE FROM SECTION 8A, EXHIBIT 4, SHEET 1B, COL. (14) & (14A)
(4) SELECTED BY DELOITTE; LOW = 75% * (2) + 25% * (3); HIGH = 25% * (2) + 75% * (3)
(5) LOW ESTIMATES FROM SECTION 8A, EXHIBIT 5, SHEET 1A, COL. (14) & (14A)
HIGH ESTIMATE FROM SECTION 8A, EXHIBIT 5, SHEET 1B, COL. (14) & (14A)
(6) = (1) + (4) + (5)
(7) PAYMENTS ASSUMED TO BE MADE AT THE MIDDLE OF EACH YEAR; =1.04^.5
(8) = (6) * (7)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

ACTIVE CLAIM SUMMARY

				ESTIMATED LIABILITY - INDEMNITY		ESTIMATED LIABILITY - MEDICAL		ESTIMATED LIABILITY - TOTAL	
INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	IW	10/1/2000	10/16/2000	90,011	69,927	91,648	68,903	181,659	138,831
2	IW	1/9/2004	1/15/2004	51,890	44,386	48,484	40,851	100,374	85,237
3	IW	1/31/2008	2/4/2008	107,051	80,125	112,805	81,050	219,856	161,175
4	IW	11/4/2008	11/10/2008	107,051	80,125	112,805	81,050	219,856	161,175
5	IW	12/17/2010	12/23/2010	151,804	104,558	172,948	112,120	324,752	216,678
6	IW	9/1/1997	10/28/1997	90,011	69,927	91,648	68,903	181,659	138,831
7	IW	11/1/1979	12/4/1979	14,828	14,369	12,495	12,092	27,323	26,460
8	IW	7/1/1987	8/18/1987	48,769	42,100	45,206	38,495	93,975	80,596
9	IW	3/1/1989	3/9/1989	80,072	63,682	79,809	61,718	159,881	125,401
10	IW	11/1/1992	11/30/1992	45,837	39,924	42,163	36,274	88,000	76,198
11	IW	4/1/1993	3/23/1995	84,930	66,767	85,545	65,241	170,475	132,008
12	IW	9/1/2009	3/30/2010	80,072	63,682	79,809	61,718	159,881	125,401
13	IW + Dep 1	2/1/2001	3/5/2001	88,659	74,778	36,621	32,131	125,280	106,910
14	IW + Dep 1	4/26/2002	4/30/2002	282,591	182,364	105,207	76,775	387,798	259,140
15	IW + Dep 1	9/13/2002	9/26/2002	575,911	286,426	245,401	144,259	821,312	430,685
16	IW + Dep 1	1/24/2003	2/10/2003	359,414	216,025	161,050	106,334	520,464	322,359
17	IW + Dep 1	2/26/2003	3/3/2003	466,436	239,529	74,401	58,319	540,837	297,848
18	IW + Dep 1	11/14/2003	11/17/2003	361,106	211,669	105,207	76,775	466,313	288,444
19	IW + Dep 1	12/8/2003	12/9/2003	392,075	225,550	139,571	95,455	531,645	321,005
20	IW + Dep 1	10/20/2005	10/21/2005	295,399	189,470	129,945	90,387	425,344	279,858
21	IW + Dep 1	8/22/2006	8/30/2006	340,283	205,952	121,034	85,585	461,317	291,536
22	IW + Dep 1	5/8/2007	5/11/2007	250,103	166,907	85,545	65,241	335,648	232,147
23	IW + Dep 1	10/30/2007	10/30/2007	210,669	147,319	69,302	55,039	279,971	202,358
24	IW + Dep 1	4/1/2009	4/7/2009	186,881	134,655	60,035	48,883	246,916	183,539
25	IW + Dep 1	4/9/2009	4/15/2009	161,322	122,204	79,809	61,718	241,131	183,923
26	IW + Dep 1	4/30/2012	6/21/2012	303,886	187,370	74,401	58,319	378,286	245,688
27	IW + Dep 1	1/1/1986	11/5/1996	361,661	207,870	74,401	58,319	436,062	266,189
28	IW + Dep 1	5/1/1998	6/3/1998	171,284	125,368	48,484	40,851	219,768	166,219
29	IW + Dep 1	5/1/1998	6/16/1998	244,903	166,592	112,805	81,050	357,707	247,642
30	IW + Dep 1	6/1/1979	8/17/1979	44,272	40,289	12,495	12,092	56,767	52,380

INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	ESTIMATED LIABILITY - INDEMNITY		ESTIMATED LIABILITY - MEDICAL		ESTIMATED LIABILITY - TOTAL	
				NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED	NOMINAL	DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31	IW + Dep 1	12/1/1975	4/18/1980	143,475	105,632	16,561	15,725	160,036	121,357
32	IW + Dep 1	4/4/1975	6/24/1980	140,080	106,955	36,621	32,131	176,702	139,086
33	IW + Dep 1	11/14/1979	7/28/1980	200,741	140,598	52,031	43,361	252,772	183,959
34	IW + Dep 1	10/1/1976	10/2/1976	147,672	112,512	48,484	40,851	196,156	153,363
35	IW + Dep 1	2/1/1987	3/2/1987	107,926	87,593	36,621	32,131	144,547	119,725
36	IW + Dep 1	11/1/1990	1/22/1991	196,814	137,795	45,206	38,495	242,020	176,290
37	IW + Dep 1	1/1/1991	4/2/1991	158,020	119,606	64,512	51,889	222,532	171,495
38	IW + Dep 1	5/1/1992	8/30/1994	170,147	125,925	60,035	48,883	230,182	174,808
39	IW + Dep 1	3/29/1994	9/27/1994	87,786	72,056	15,298	14,606	103,084	86,662
40	IW + Dep 1	1/1/1995	1/31/1995	496,680	251,400	98,179	72,737	594,859	324,136
41	IW + Dep 1	10/1/1993	1/21/1995	193,458	137,506	55,876	46,038	249,334	183,544
42	IW + Dep 1	8/1/1994	11/22/1995	167,567	124,166	55,876	46,038	223,444	170,204
43	IW + Dep 1	4/1/1996	4/16/1996	250,103	166,907	85,545	65,241	335,648	232,147
44	IW + Dep 2	10/11/2001	11/29/2001	808,575	377,024	908,941	330,683	1,717,516	707,706
45	Survivor	12/1/1999	9/6/2000	96,167	74,422	-	-	96,167	74,422
46	Survivor	12/1/2000	1/23/2001	160,479	110,283	-	-	160,479	110,283
47	Survivor	10/26/2005	11/22/2005	50,719	43,613	-	-	50,719	43,613
48	Survivor	11/30/2008	5/26/2009	263,447	155,237	-	-	263,447	155,237
49	Survivor	7/1/1976	8/1/1976	29,403	26,942	-	-	29,403	26,942
50	Survivor	10/1/1981	3/22/1982	78,141	62,869	-	-	78,141	62,869
51	Survivor	3/1/1981	3/2/1981	47,225	40,995	-	-	47,225	40,995
52	Survivor	11/1/1978	6/8/1979	58,609	49,382	-	-	58,609	49,382
53	Survivor	4/1/1978	4/8/1978	510,608	229,799	-	-	510,608	229,799
54	Survivor	5/1/1979	5/18/1979	72,797	59,287	-	-	72,797	59,287
55	Survivor	6/1/1980	11/23/1980	47,225	40,995	-	-	47,225	40,995
56	Survivor	2/1/1980	12/4/1980	67,760	55,838	-	-	67,760	55,838
57	Survivor	2/1/1979	12/11/1979	47,225	40,995	-	-	47,225	40,995
58	Survivor	1/1/1979	1/25/1980	78,141	62,869	-	-	78,141	62,869
59	Survivor	11/1/1978	2/18/1980	35,808	32,141	-	-	35,808	32,141
60	Survivor	2/1/1977	2/25/1980	151,069	105,481	-	-	151,069	105,481
61	Survivor	4/1/1981	5/26/1981	50,719	43,613	-	-	50,719	43,613
62	Survivor	8/15/1972	5/7/1980	67,760	55,838	-	-	67,760	55,838
63	Survivor	4/17/1973	5/21/1980	58,609	49,382	-	-	58,609	49,382
64	Survivor	5/1/1976	1/4/1980	35,808	32,141	-	-	35,808	32,141
65	Survivor	10/1/1975	6/17/1980	67,760	55,838	-	-	67,760	55,838

INDEX	CLAIMANT TYPE	DATE OF INJURY	DATE REPORTED	ESTIMATED LIABILITY - INDEMNITY NOMINAL	ESTIMATED LIABILITY - INDEMNITY DISCOUNTED	ESTIMATED LIABILITY - MEDICAL NOMINAL	ESTIMATED LIABILITY - MEDICAL DISCOUNTED	ESTIMATED LIABILITY - TOTAL NOMINAL	ESTIMATED LIABILITY - TOTAL DISCOUNTED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
66	Survivor	5/29/1977	8/19/1980	58,609	49,382	-	-	58,609	49,382
67	Survivor	4/1/1980	12/4/1980	58,609	49,382	-	-	58,609	49,382
68	Survivor	10/20/1980	12/12/1980	78,141	62,869	-	-	78,141	62,869
69	Survivor	9/8/1980	1/6/1981	133,439	96,102	-	-	133,439	96,102
70	Survivor	6/1/1978	1/29/1981	29,403	26,942	-	-	29,403	26,942
71	Survivor	2/2/1981	3/2/1981	67,760	55,838	-	-	67,760	55,838
72	Survivor	2/21/1978	3/26/1981	58,609	49,382	-	-	58,609	49,382
73	Survivor	2/1/1980	3/24/1981	47,225	40,995	-	-	47,225	40,995
74	Survivor	7/12/1977	4/8/1981	44,009	38,549	-	-	44,009	38,549
75	Survivor	7/1/1976	4/3/1981	38,320	34,131	-	-	38,320	34,131
76	Survivor	1/1/1974	4/30/1981	467,912	219,259	-	-	467,912	219,259
77	Survivor	9/1/1981	9/2/1981	117,392	87,098	-	-	117,392	87,098
78	Survivor	3/1/1980	2/10/1982	58,609	49,382	-	-	58,609	49,382
79	Survivor	9/1/1983	9/2/1983	63,028	52,531	-	-	63,028	52,531
80	Survivor	3/1/1984	4/12/1984	109,954	82,762	-	-	109,954	82,762
81	Survivor	3/1/1976	4/8/1985	38,320	34,131	-	-	38,320	34,131
82	Survivor	11/1/1985	11/25/1985	125,216	91,546	-	-	125,216	91,546
83	Survivor	12/1/1987	2/16/1988	125,216	91,546	-	-	125,216	91,546
84	Survivor	4/1/1989	5/11/1989	180,516	120,072	-	-	180,516	120,072
85	Survivor	3/27/1991	11/15/1991	109,954	82,762	-	-	109,954	82,762
86	Survivor	4/23/1993	6/28/1993	44,009	38,549	-	-	44,009	38,549
87	Survivor	6/1/1993	6/28/1993	191,111	125,017	-	-	191,111	125,017
88	Survivor	4/1/1995	5/16/1995	44,009	38,549	-	-	44,009	38,549
TOTAL LIABILITY FOR CLAIMS CURRENTLY RECEIVING BENEFIT				**13,683,076**	**8,980,323**	**4,290,866**	**2,854,760**	**17,973,942**	**11,835,082**

(1)	CLAIM INDEX NUMBER	(5)	SECTION 8A, EXHIBIT 7
(2)	PROVIDED BY BWC	(6)	SECTION 8A, EXHIBIT 7
(3)	PROVIDED BY BWC	(7)	SECTION 8A, EXHIBIT 7
(4)	PROVIDED BY BWC	(8)	SECTION 8A, EXHIBIT 7
		(9)	= (5) + (7)
		(10)	= (6) + (8)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

UNPAID LOSSES FOR PENDING & IBNR CLAIMS BASED ON OH DEPT. OF LABOR DATA

		PENDING AND IBNR CLAIMS			
		LIVING MINER		LIVING WIDOW	
NUMBER OF CLAIMS		**LOW**	**HIGH**	**LOW**	**HIGH**
(A)	BASED ON DEPT. OF LABOR DATA FOR OHIO	14	34	1	3
INDEMNITY BENEFIT PER CLAIM					
(B)	NOMINAL	318,097	318,097	109,203	109,203
(C)	DISCOUNTED	98,877	98,877	20,496	20,496
MEDICAL BENEFIT PER CLAIM					
(D)	NOMINAL	414,673	414,673		
(E)	DISCOUNTED	105,168	105,168		
PENDING + IBNR RESERVE FOR CLAIMS - INDEMNITY					
(F)	NOMINAL	4,453,353	10,815,286	109,203	327,609
(G)	DISCOUNTED	1,384,280	3,361,823	20,496	61,488
PENDING + IBNR RESERVE FOR CLAIMS - MEDICAL					
(H)	NOMINAL	5,805,422	14,098,883		
(I)	DISCOUNTED	1,472,350	3,575,708		
PENDING + IBNR RESERVE FOR CLAIMS - TOTAL					
(J)	NOMINAL	10,258,775	24,914,169	109,203	327,609
(K)	DISCOUNTED	2,856,630	6,937,531	20,496	61,488

(A)	LIVING MINER FROM SECTION 8A, EXHIBIT 3, SHEET 4.2	(G)	= (A) * (C)
	LIVING WIDOW FROM SECTION 8A, EXHIBIT 3, SHEET 7.2	(H)	= (A) * (D)
(B)	AVERAGE OF SECTION 8A, EXHIBIT 5, SHEET 1A, COL. (7) AND	(I)	= (A) * (E)
(C)	AVERAGE OF SECTION 8A, EXHIBIT 5, SHEET 1A, COL. (7A) AN[	(J)	= (F) + (H)
(D)	AVERAGE SECTION 8A, EXHIBIT 5, SHEET 1A, COL. (9)	(K)	= (G) + (I)
(E)	AVERAGE SECTION 8A, EXHIBIT 5, SHEET 1A, COL. (9A)		
(F)	= (A) * (B)		

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
SHEET 2.1

Ohio Data from U.S. Department of Labor Living Miner Filings, Insured Only

Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	0	0	0	3	4	4	4	8	14	16	20	20	20	20	20	21	21	21	21	21	22	22	22	22
1971	0	0	0	0	2	2	2	9	13	18	18	18	18	18	18	18	19	19	19	19	19	19	19	20
1972	0	6	8	9	9	19	35	48	56	56	56	56	57	57	57	58	58	59	60	61	61	61	62	63
1973	15	17	20	22	26	35	41	44	44	44	44	44	44	45	45	45	45	46	46	46	47	47	49	49
1974	24	27	28	29	32	32	33	34	34	34	35	35	36	37	37	37	37	37	37	37	37	37	37	37
1975	16	19	20	23	23	23	23	23	23	24	24	24	24	26	26	26	27	27	28	29	30	30	30	31
1976	34	38	40	41	42	42	44	44	44	45	47	47	47	49	49	50	50	50	51	51	51	52	52	52
1977	22	23	24	24	25	26	26	26	27	28	28	29	29	30	31	33	33	33	34	34	34	34	34	34
1978	24	26	28	28	28	28	29	30	32	32	33	33	35	36	36	39	42	45	45	45	45	45	46	47
1979	32	34	34	34	34	34	35	40	40	41	41	41	43	43	43	45	45	45	45	45	46	46	48	48
1980	25	25	27	27	29	33	35	35	37	39	40	40	40	40	40	42	42	42	42	42	45	46	46	47
1981	10	12	14	14	15	16	17	17	18	18	18	18	19	19	20	21	21	22	22	22	22	22	22	23
1982	7	9	9	9	10	11	12	13	14	15	15	16	17	18	20	21	22	22	25	26	27	27	27	27
1983	8	8	9	10	10	11	11	12	13	14	14	14	15	15	15	15	15	17	18	20	21	21	21	21
1984	10	10	11	14	15	15	16	16	21	22	23	25	26	26	26	28	29	29	30	32	33	33	33	33
1985	12	16	17	19	23	23	23	23	23	27	29	29	30	30	30	30	30	31	32	32	33	33	33	33
1986	22	26	30	31	32	32	36	37	37	40	40	41	43	43	43	43	43	44	44	45	45	45	45	45
1987	19	21	23	27	28	32	35	38	39	40	41	41	43	44	47	50	50	50	51	52	54	57	58	58
1988	9	15	18	20	20	20	23	25	25	26	27	28	28	29	29	30	31	32	32	32	32	32	32	32
1989	5	7	10	11	11	13	13	14	15	15	15	15	16	16	18	19	19	19	19	19	19	20	20	20
1990	9	10	12	12	16	19	19	20	21	22	25	25	26	27	29	32	33	34	35	47	48	49	49	
1991	10	15	18	19	20	21	21	21	21	23	26	26	27	29	31	32	32	33	33	35	36	36		
1992	7	10	15	17	19	22	24	27	27	30	30	31	32	33	35	36	37	37	39	41	41			
1993	4	5	7	8	9	9	9	12	13	14	16	16	17	18	19	19	20	20	21	21				
1994	8	10	11	13	15	16	19	20	21	22	22	24	24	25	25	26	27	27	28					
1995	1	1	1	4	5	7	8	8	8	8	8	8	9	9	9	9	9	9						
1996	1	1	3	3	3	4	5	5	5	5	5	5	5	6	7	8	8							
1997	2	3	3	3	3	3	3	3	4	4	6	7	7	7	7	7								
1998	2	2	3	5	6	6	6	6	8	8	8	9	10	10	10									
1999	2	2	5	7	8	9	9	9	9	9	9	9	9	9										
2000	2	2	2	6	6	6	7	7	8	8	8	9	9											
2001	7	13	21	24	25	28	30	33	35	39	50	53												
2002	4	10	14	16	18	19	20	21	25	28	30													
2003	2	2	2	2	2	2	3	4	5	5														
2004	0	1	1	1	3	3	3	3	3															
2005	2	3	3	3	3	5	5	5																
2006	0	0	0	1	2	2	2																	
2007	4	5	5	6	6	6																		
2008	1	2	2	2	2																			
2009	3	6	8	9																				
2010	3	3	3																					
2011	1	4																						
2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
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SECTION 8A
EXHIBIT 3
SHEET 2.2

Ohio Data from U.S. Department of Labor Living Miner Filings, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) CDF	(3) Indicated Ultimate Filings	(4) Selected Ultimate Filings
1970	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	1.000	22	22
1971	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21		21	1.000	21	21
1972	63	65	65	66	66	66	66	66	66	66	66	66	66	66	66	66	66			66	1.000	66	66
1973	49	49	49	49	49	49	50	50	50	50	50	50	50	50	50	50				50	1.000	50	50
1974	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37					37	1.000	37	37
1975	31	31	31	31	31	31	31	31	31	31	31	31	31	31						31	1.000	31	31
1976	52	53	53	53	53	53	53	53	53	53	53	53	53							53	1.000	53	53
1977	34	34	34	35	36	37	37	37	37	37	37	37								37	1.000	37	37
1978	47	48	48	48	48	48	48	48	48	48	49									49	1.000	49	49
1979	48	48	48	49	50	50	51	51	51	51										51	1.003	51	51
1980	48	48	48	48	49	49	49	49	49											49	1.003	49	49
1981	23	23	23	23	24	24	24	24												24	1.003	24	24
1982	28	29	29	29	29	29	29													29	1.003	29	29
1983	21	21	21	21	21	21														21	1.007	21	21
1984	34	34	35	35	35															35	1.009	35	35
1985	33	33	33	33																33	1.016	34	34
1986	45	46	46																	46	1.021	47	47
1987	59	60																		60	1.024	61	61
1988	33																			33	1.034	34	34
1989																				20	1.041	21	21
1990																				49	1.050	51	51
1991																				36	1.059	38	38
1992																				41	1.069	44	44
1993																				21	1.088	23	23
1994																				28	1.121	31	31
1995																				9	1.142	10	10
1996																				8	1.160	9	9
1997																				7	1.176	8	8
1998																				10	1.217	12	12
1999																				9	1.243	11	11
2000																				9	1.271	11	11
2001																				53	1.306	69	69
2002																				30	1.330	40	40
2003																				5	1.391	7	7
2004																				3	1.462	4	4
2005																				5	1.556	8	8
2006																				2	1.683	3	25
2007																				6	1.827	11	25
2008																				2	1.986	4	25
2009																				9	2.138	19	25
2010																				3	2.349	7	25
2011																				4	2.687	11	25
2012																				0	3.270	-	25
																			TOTAL	1,116			1,326

(2) From SECTION 8, EXHIBITS 2.3 AND 2.4
(3) = (1) * (2)
(4) SELECTED BY DEL0ITTE

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
SHEET 2.3

Ohio Data from the U.S. Department of Labor Living Miner Filings, Insured Only - Development Factors

Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970				1.333	1.000	1.000	2.000	1.750	1.143	1.250	1.000	1.000	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.048	1.000	1.000	1.000	1.000
1971					1.000	1.000	4.500	1.444	1.385	1.000	1.000	1.000	1.000	1.000	1.000	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.053	1.000
1972		1.333	1.125	1.000	2.111	1.842	1.371	1.167	1.000	1.000	1.000	1.018	1.000	1.000	1.018	1.000	1.017	1.017	1.017	1.000	1.000	1.016	1.016	1.000
1973	1.133	1.176	1.100	1.182	1.346	1.171	1.073	1.000	1.000	1.000	1.000	1.000	1.023	1.000	1.000	1.000	1.022	1.000	1.000	1.022	1.000	1.043	1.000	1.000
1974	1.125	1.037	1.036	1.103	1.000	1.031	1.030	1.000	1.000	1.029	1.000	1.029	1.028	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1975	1.188	1.053	1.150	1.000	1.000	1.000	1.000	1.000	1.043	1.000	1.000	1.000	1.083	1.000	1.000	1.038	1.000	1.037	1.036	1.034	1.000	1.000	1.033	1.000
1976	1.118	1.053	1.025	1.024	1.000	1.048	1.000	1.000	1.023	1.044	1.000	1.000	1.043	1.000	1.020	1.000	1.000	1.020	1.000	1.000	1.020	1.000	1.000	1.000
1977	1.045	1.043	1.000	1.042	1.040	1.000	1.000	1.038	1.037	1.000	1.036	1.000	1.034	1.033	1.065	1.000	1.000	1.030	1.000	1.000	1.000	1.000	1.000	1.000
1978	1.083	1.077	1.000	1.000	1.000	1.036	1.034	1.067	1.000	1.031	1.000	1.061	1.029	1.000	1.083	1.077	1.071	1.000	1.000	1.000	1.000	1.022	1.022	1.000
1979	1.063	1.000	1.000	1.000	1.000	1.029	1.143	1.000	1.025	1.000	1.000	1.049	1.000	1.000	1.047	1.000	1.000	1.000	1.000	1.022	1.000	1.043	1.000	1.000
1980	1.000	1.080	1.000	1.074	1.138	1.061	1.000	1.057	1.054	1.026	1.000	1.000	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.071	1.022	1.000	1.022	1.021
1981	1.200	1.167	1.000	1.071	1.067	1.063	1.000	1.059	1.000	1.000	1.000	1.056	1.000	1.053	1.050	1.000	1.048	1.000	1.000	1.000	1.000	1.000	1.045	1.000
1982	1.286	1.000	1.000	1.111	1.100	1.091	1.083	1.077	1.071	1.000	1.067	1.063	1.059	1.111	1.050	1.048	1.000	1.136	1.040	1.038	1.000	1.000	1.000	1.037
1983	1.000	1.125	1.111	1.000	1.100	1.000	1.091	1.083	1.077	1.000	1.000	1.071	1.000	1.000	1.000	1.000	1.133	1.059	1.111	1.050	1.000	1.000	1.000	1.000
1984	1.000	1.100	1.273	1.071	1.000	1.067	1.000	1.313	1.048	1.045	1.087	1.040	1.000	1.000	1.077	1.036	1.000	1.034	1.067	1.031	1.000	1.000	1.000	1.030
1985	1.333	1.063	1.118	1.211	1.000	1.000	1.000	1.000	1.174	1.074	1.000	1.034	1.000	1.000	1.000	1.000	1.033	1.032	1.000	1.031	1.000	1.000	1.000	1.000
1986	1.182	1.154	1.033	1.032	1.000	1.125	1.028	1.000	1.081	1.000	1.025	1.049	1.000	1.000	1.000	1.000	1.023	1.000	1.023	1.000	1.000	1.000	1.000	1.000
1987	1.105	1.095	1.174	1.037	1.143	1.094	1.086	1.026	1.026	1.025	1.000	1.049	1.023	1.068	1.064	1.000	1.000	1.020	1.020	1.038	1.056	1.018	1.000	1.017
1988	1.667	1.200	1.111	1.000	1.000	1.150	1.087	1.000	1.040	1.038	1.037	1.000	1.036	1.000	1.034	1.033	1.032	1.000	1.000	1.000	1.000	1.000	1.000	1.031
1989	1.400	1.429	1.100	1.000	1.182	1.000	1.077	1.071	1.000	1.000	1.000	1.067	1.000	1.125	1.056	1.000	1.000	1.000	1.000	1.000	1.053	1.000	1.000	
1990	1.111	1.200	1.000	1.333	1.188	1.000	1.053	1.050	1.048	1.136	1.000	1.040	1.038	1.074	1.103	1.031	1.030	1.029	1.343	1.021	1.021	1.000		
1991	1.500	1.200	1.056	1.053	1.050	1.000	1.000	1.000	1.095	1.130	1.000	1.038	1.074	1.069	1.032	1.000	1.031	1.000	1.061	1.029	1.000			
1992	1.429	1.500	1.133	1.118	1.158	1.091	1.125	1.000	1.111	1.000	1.033	1.032	1.031	1.061	1.029	1.028	1.000	1.054	1.051	1.000				
1993	1.250	1.400	1.143	1.125	1.000	1.000	1.333	1.083	1.077	1.143	1.000	1.063	1.059	1.056	1.000	1.053	1.000	1.050	1.000					
1994	1.250	1.100	1.182	1.154	1.067	1.188	1.053	1.050	1.048	1.000	1.091	1.000	1.042	1.000	1.040	1.038	1.000	1.037						
1995	1.000	1.000	4.000	1.250	1.400	1.143	1.000	1.000	1.000	1.000	1.000	1.125	1.000	1.000	1.000	1.000	1.000							
1996	1.000	3.000	1.000	1.000	1.333	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.200	1.167	1.143	1.000								
1997	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.333	1.000	1.500	1.167	1.000	1.000	1.000	1.000									
1998	1.000	1.500	1.667	1.200	1.000	1.000	1.000	1.333	1.000	1.000	1.125	1.111	1.000	1.000										
1999	1.000	2.500	1.400	1.143	1.125	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
2000	1.000	1.000	3.000	1.000	1.000	1.167	1.000	1.143	1.000	1.000	1.125	1.000												
2001	1.857	1.615	1.143	1.042	1.120	1.071	1.100	1.061	1.114	1.282	1.060													
2002	2.500	1.400	1.143	1.125	1.056	1.053	1.050	1.190	1.120	1.071														
2003	1.000	1.000	1.000	1.000	1.000	1.500	1.333	1.250	1.000															
2004		1.000	1.000	3.000	1.000	1.000	1.000	1.000																
2005	1.500	1.000	1.000	1.000	1.667	1.000	1.000																	
2006				2.000	1.000	1.000																		
2007	1.250	1.000	1.200	1.000	1.000																			
2008	2.000	1.000	1.000	1.000																				
2009	2.000	1.333	1.125																					
2010	1.000	1.000																						
2011	4.000																							
All Yr Wtd Avg	1.217	1.144	1.099	1.077	1.087	1.085	1.082	1.064	1.051	1.045	1.018	1.028	1.023	1.021	1.034	1.014	1.016	1.019	1.030	1.018	1.009	1.009	1.008	1.007
10 yr Wgt Avg	1.800	1.311	1.207	1.103	1.089	1.060	1.055	1.111	1.063	1.117	1.056	1.035	1.042	1.056	1.043	1.019	1.013	1.021	1.060	1.020	1.014	1.003	1.006	1.014
5 yr Wgt Avg	1.667	1.125	1.167	1.231	1.125	1.065	1.082	1.118	1.085	1.141	1.074	1.026	1.025	1.018	1.030	1.031	1.008	1.033	1.109	1.011	1.026	1.005	1.000	1.015
Prior Selected	1.215	1.135	1.099	1.069	1.088	1.081	1.085	1.060	1.048	1.034	1.015	1.023	1.019	1.019	1.036	1.012	1.012	1.020	1.025	1.019	1.010	1.007	1.008	1.006
Selected A-A	1.217	1.144	1.099	1.077	1.087	1.085	1.082	1.064	1.051	1.045	1.018	1.028	1.023	1.021	1.034	1.014	1.016	1.019	1.030	1.018	1.009	1.009	1.008	1.007
Cumulative	3.270	2.687	2.349	2.138	1.986	1.827	1.683	1.556	1.462	1.391	1.330	1.306	1.271	1.243	1.217	1.176	1.160	1.142	1.121	1.088	1.069	1.059	1.050	1.041

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Ohio Data from the U.S. Department of Labor Living Miner Filings, Insured Only - Development Factors

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1971	1.000	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1972	1.032	1.000	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1973	1.000	1.000	1.000	1.000	1.000	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1976	1.019	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1977	1.000	1.000	1.029	1.029	1.028	1.000	1.000	1.000	1.000	1.000	1.000								
1978	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.021									
1979	1.000	1.000	1.021	1.020	1.000	1.020	1.000	1.000	1.000										
1980	1.000	1.000	1.000	1.021	1.000	1.000	1.000	1.000											
1981	1.000	1.000	1.000	1.043	1.000	1.000	1.000												
1982	1.036	1.000	1.000	1.000	1.000	1.000													
1983	1.000	1.000	1.000	1.000	1.000														
1984	1.000	1.029	1.000	1.000															
1985	1.000	1.000	1.000																
1986	1.022	1.000																	
1987	1.017																		
1988																			
1989																			
1990																			
1991																			
1992																			
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2005																			
2006																			
2007																			
2008																			
2009																			
2010																			
2011																			
All Yr Wtd Avg	1.010	1.003	1.005	1.007	1.002	1.004	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
10 yr Wgt Avg	1.010	1.003	1.005	1.011	1.003	1.005	1.000	1.000	1.000										
5 yr Wgt Avg	1.010	1.006	1.000	1.013	1.000	1.005	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000					
Prior Selected	1.007	1.004	1.004	1.006	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Selected A-A	1.010	1.003	1.005	1.007	1.002	1.004	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.034	1.024	1.021	1.016	1.009	1.007	1.003	1.003	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
SHEET 3.1

Ohio Data from the U.S. Department of Labor Living Miner Entitlements, Insured Only

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0	0	0	10	15	15	16	16	17	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19
1971	1971	0	0	11	15	16	16	16	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
1972	1972	0	40	50	50	50	51	52	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
1973	1973	29	31	34	36	38	39	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	43	43
1974	1974	21	25	26	27	28	28	28	28	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
1975	1975	16	18	20	21	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24
1976	1976	30	35	36	38	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
1977	1977	17	18	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	23	23	23	23
1978	1978	24	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
1979	1979	25	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
1980	1980	22	22	22	22	22	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24
1981	1981	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11
1982	1982	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4
1983	1983	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1984	1984	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4
1985	1985	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	4	4	4	4
1986	1986	1	2	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	6	7	7	7	7
1987	1987	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	5	5	6	6	7	7	7	7	7
1988	1988	0	0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	5	7	7
1989	1989	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
1990	1990	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	6	6	6	6	6	
1991	1991	0	1	1	1	1	2	2	2	2	4	4	4	4	5	6	7	7	7	7	7	7	7		
1992	1992	0	0	0	0	0	0	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3			
1993	1993	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3				
1994	1994	2	2	2	2	3	3	5	6	6	6	6	6	6	6	6	7	8	8	8					
1995	1995	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1						
1996	1996	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1							
1997	1997	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1								
1998	1998	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3									
1999	1999	0	0	1	1	1	1	1	1	1	1	1	1	1	1										
2000	2000	0	0	0	0	0	0	0	1	1	1	1	1	1											
2001	2001	0	1	1	1	2	2	2	2	4	4	6	6												
2002	2002	0	1	1	1	1	1	1	2	3	5	5													
2003	2003	0	0	0	0	0	0	0	0	0	0														
2004	2004	0	0	0	0	1	1	1	1	1															
2005	2005	0	0	0	0	0	0	0	0																
2006	2006	0	0	0	0	0	0	0																	
2007	2007	0	0	0	1	1	1																		
2008	2008	0	0	0	0	0																			
2009	2009	1	1	1	1																				
2010	2010	0	0	0																					
2011	2011	0	0																						
2012	2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 3.2

Ohio Data from the U.S. Department of Labor Living Miner Entitlements, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516
1970	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
1971	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
1972	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55		
1973	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44			
1974	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30				
1975	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
1976	40	40	40	40	40	40	40	40	40	40	40	40	40						
1977	23	23	23	23	23	23	23	23	23	23	23	23							
1978	29	29	29	29	29	29	29	29	29	29	29								
1979	28	28	28	28	28	28	28	28	28	28									
1980	24	24	24	24	24	24	24	24	24										
1981	11	11	11	11	11	11	11	11											
1982	5	5	5	5	5	5	5												
1983	7	7	7	7	7	7													
1984	4	4	4	4	4														
1985	4	4	4	4															
1986	8	8	8																
1987	7	7																	
1988	7																		
1989																			
1990																			
1991																			
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2012																			

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 4.1

Cumulative Living Miner Entitlement Ratios (= EXHIBIT 3, SHEET 3 / EXHIBIT 3, SHEET 2 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0.0%	0.0%	0.0%	45.5%	68.2%	68.2%	72.7%	72.7%	77.3%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%
1971	1971	0.0%	0.0%	52.4%	71.4%	76.2%	76.2%	76.2%	81.0%	81.0%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%
1972	1972	0.0%	60.6%	75.8%	75.8%	75.8%	77.3%	78.8%	80.3%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%
1973	1973	58.0%	62.0%	68.0%	72.0%	76.0%	78.0%	82.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	84.0%	86.0%	86.0%
1974	1974	56.8%	67.6%	70.3%	73.0%	75.7%	75.7%	75.7%	75.7%	78.4%	78.4%	78.4%	78.4%	78.4%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%
1975	1975	51.6%	58.1%	64.5%	67.7%	71.0%	71.0%	71.0%	71.0%	71.0%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	77.4%	77.4%	77.4%	77.4%	77.4%
1976	1976	56.6%	66.0%	67.9%	71.7%	73.6%	73.6%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
1977	1977	45.9%	48.6%	54.1%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	59.5%	59.5%	62.2%	62.2%	62.2%	62.2%
1978	1978	49.0%	57.1%	57.1%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%
1979	1979	48.9%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%
1980	1980	44.8%	44.8%	44.8%	44.8%	44.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%
1981	1981	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%
1982	1982	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
1983	1983	23.7%	23.7%	23.7%	28.4%	28.4%	28.4%	28.4%	28.4%	28.4%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%
1984	1984	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
1985	1985	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	9.0%	9.0%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%
1986	1986	2.1%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	6.4%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	12.8%	14.9%	14.9%	14.9%	14.9%
1987	1987	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	4.9%	6.5%	8.1%	8.1%	9.8%	9.8%	11.4%	11.4%	11.4%	11.4%	11.4%
1988	1988	0.0%	0.0%	0.0%	2.9%	2.9%	2.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	11.7%	11.7%	11.7%	11.7%	14.6%	20.5%	20.5%
1989	1989	0.0%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
1990	1990	3.9%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	9.7%	9.7%	11.7%	11.7%	11.7%	11.7%	11.7%	
1991	1991	0.0%	2.6%	2.6%	2.6%	2.6%	5.2%	5.2%	5.2%	5.2%	10.5%	10.5%	10.5%	10.5%	13.1%	15.7%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%		
1992	1992	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	4.6%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%			
1993	1993	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	8.8%	8.8%	8.8%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%				
1994	1994	6.4%	6.4%	6.4%	6.4%	9.6%	9.6%	15.9%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	22.3%	25.5%	25.5%	25.5%					
1995	1995	0.0%	0.0%	0.0%	0.0%	0.0%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%						
1996	1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%							
1997	1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	12.1%	12.1%	12.1%	12.1%	12.1%								
1998	1998	16.4%	16.4%	16.4%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%									
1999	1999	0.0%	0.0%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%										
2000	2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%											
2001	2001	0.0%	1.4%	1.4%	1.4%	2.9%	2.9%	2.9%	2.9%	5.8%	5.8%	8.7%	8.7%												
2002	2002	0.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	5.0%	7.5%	12.5%	12.5%													
2003	2003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														
2004	2004	0.0%	0.0%	0.0%	0.0%	22.8%	22.8%	22.8%	22.8%	22.8%															
2005	2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																
2006	2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																	
2007	2007	0.0%	0.0%	0.0%	4.0%	4.0%	4.0%																		
2008	2008	0.0%	0.0%	0.0%	0.0%	0.0%																			
2009	2009	4.0%	4.0%	4.0%	4.0%																				
2010	2010	0.0%	0.0%	0.0%																					
2011	2011	0.0%	0.0%																						
2012	2012	0.0%																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
SHEET 4.2

Cumulative Living Miner Entitlement Ratios (= EXHIBIT 3, SHEET 3 / EXHIBIT 3, SHEET 2 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) Addl % Add	(3) Indicated Ultimate Entl Ratio	(4) Selected Ultimate Entl Ratio Low	(5) Selected Ultimate Entl Ratio High	(6) # Additional Entitlements Low	(7) # Additional Entitlements High
1970	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	86.4%	0.0%	86.4%	86.4%	86.4%	-	-
1971	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%		85.7%	0.0%	85.7%	85.7%	85.7%	-	-
1972	81.8%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%			83.3%	0.0%	83.3%	83.3%	83.3%	-	-
1973	86.0%	86.0%	86.0%	86.0%	86.0%	86.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%				88.0%	0.0%	88.0%	88.0%	88.0%	-	-
1974	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%	81.1%					81.1%	0.0%	81.1%	81.1%	81.1%	-	-
1975	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%	77.4%						77.4%	0.0%	77.4%	77.4%	77.4%	-	-
1976	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%							75.5%	0.0%	75.5%	75.5%	75.5%	-	-
1977	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%	62.2%								62.2%	0.0%	62.2%	62.2%	62.2%	-	-
1978	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%									59.2%	0.0%	59.2%	59.2%	59.2%	-	-
1979	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%										54.8%	0.0%	54.8%	54.8%	54.8%	-	-
1980	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%	48.8%											48.8%	0.0%	48.8%	48.8%	48.8%	-	-
1981	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%												45.7%	0.0%	45.7%	45.7%	45.7%	-	-
1982	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%													17.2%	0.0%	17.2%	17.2%	17.2%	-	-
1983	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%														33.1%	0.2%	33.3%	33.3%	33.3%	0.0	0.0
1984	11.3%	11.3%	11.3%	11.3%	11.3%															11.3%	0.2%	11.5%	11.5%	11.5%	0.1	0.1
1985	11.9%	11.9%	11.9%	11.9%																11.9%	0.2%	12.1%	12.1%	12.1%	0.1	0.1
1986	17.0%	17.0%	17.0%																	17.0%	0.2%	17.2%	17.2%	17.2%	0.1	0.1
1987	11.4%	11.4%																		11.4%	0.2%	11.5%	11.5%	11.5%	0.1	0.1
1988	20.5%																			20.5%	0.2%	20.7%	20.7%	20.7%	0.1	0.1
1989																				9.6%	0.5%	10.1%	10.1%	10.1%	0.1	0.1
1990																				11.7%	0.5%	12.2%	12.2%	12.2%	0.3	0.3
1991																				18.4%	0.9%	19.3%	19.3%	19.3%	0.3	0.3
1992																				6.8%	1.0%	7.9%	7.9%	7.9%	0.5	0.5
1993																				13.1%	1.2%	14.4%	14.4%	14.4%	0.3	0.3
1994																				25.5%	1.6%	27.1%	27.1%	27.1%	0.5	0.5
1995																				9.7%	2.3%	12.0%	12.0%	12.0%	0.2	0.2
1996																				10.8%	2.7%	13.5%	13.5%	13.5%	0.3	0.3
1997																				12.1%	3.0%	15.2%	15.2%	15.2%	0.2	0.2
1998																				24.7%	3.4%	28.1%	28.1%	28.1%	0.4	0.4
1999																				8.9%	3.7%	12.6%	12.6%	12.6%	0.4	0.4
2000																				8.7%	3.9%	12.7%	12.7%	12.7%	0.5	0.5
2001																				8.7%	3.9%	12.6%	12.6%	12.6%	2.7	2.7
2002																				12.5%	4.0%	16.6%	16.6%	16.6%	1.6	1.6
2003																				0.0%	4.7%	4.7%	4.7%	4.7%	0.3	0.3
2004																				22.8%	5.6%	28.4%	28.4%	28.4%	0.2	0.2
2005																				0.0%	6.3%	6.3%	6.3%	6.3%	0.5	0.5
2006																				0.0%	7.4%	7.4%	10.0%	15.0%	0.3	3.8
2007																				4.0%	8.0%	12.0%	10.0%	15.0%	0.7	2.8
2008																				0.0%	8.4%	8.4%	10.0%	15.0%	0.4	3.8
2009																				4.0%	10.1%	14.1%	10.0%	15.0%	1.2	2.8
2010																				0.0%	12.7%	12.7%	10.0%	15.0%	0.7	3.8
2011																				0.0%	15.1%	15.1%	10.0%	15.0%	1.1	3.8
2012																				0.0%	18.1%	18.1%	10.0%	15.0%	-	3.8
																								TOTAL	14.1	34.0

(2) From SECTION 8, EXHIBITS 4.3 AND 4.4
(3) = (1) + (2)
(4), (5) SELECTED BY DEL0ITTE
(6) = [(4) - (1)]* SECTION 8, EXHIBIT 3, SHEET 2.2, COL (4)
(7) = [(5) - (1)]* SECTION 8, EXHIBIT 3, SHEET 2.2, COL (4)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 4.3

Incremental Living Miner Entitlement Ratios

Date of Last Exposure	Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970	1970	-	-	0.455	0.227	-	0.045	-	0.045	0.045	-	-	-	-	-	0.045	-	-	-	-	-	-	-	-	-
1971	1971	-	0.524	0.190	0.048	-	-	0.048	-	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	1972	0.606	0.152	-	-	0.015	0.015	0.015	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	1973	0.040	0.060	0.040	0.040	0.020	0.040	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.020	-	-
1974	1974	0.108	0.027	0.027	0.027	-	-	-	0.027	-	-	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-
1975	1975	0.065	0.065	0.032	0.032	-	-	-	-	0.032	-	-	-	-	-	-	-	-	-	0.032	-	-	-	-	-
1976	1976	0.094	0.019	0.038	0.019	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	1977	0.027	0.054	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.027	-	0.027	-	-	-	-
1978	1978	0.082	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	1979	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	1980	-	-	-	-	0.020	-	-	-	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-	-
1981	1981	-	-	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-	0.042	-	-	-	-	-	-	-
1982	1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.034	-	-	-	-	-	0.034
1983	1983	-	-	0.047	-	-	-	-	-	0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1984	-	-	-	-	-	-	-	-	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.030	-	0.030	-	-	-	-	-	-
1986	1986	0.021	-	-	-	-	-	-	0.021	0.021	-	-	-	-	-	-	-	-	-	0.043	0.021	-	-	-	0.021
1987	1987	-	-	-	-	-	-	-	-	-	-	-	-	0.033	0.016	0.016	-	0.016	-	0.016	-	-	-	-	-
1988	1988	-	-	0.029	-	-	0.029	-	-	-	-	-	-	-	-	-	-	0.059	-	-	-	0.029	0.059	-	-
1989	1989	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.048	-	-	-	-	-	-
1990	1990	0.019	-	-	-	-	-	0.019	-	-	-	-	-	-	-	-	0.019	-	0.019	-	-	-	-		
1991	1991	0.026	-	-	-	0.026	-	-	-	0.052	-	-	-	0.026	0.026	0.026	-	-	-	-	-	-			
1992	1992	-	-	-	-	-	-	-	0.023	0.023	0.023	-	-	-	-	-	-	-	-	-	-				
1993	1993	-	-	-	-	-	-	0.044	-	-	0.044	-	-	-	-	-	-	-	-	-					
1994	1994	-	-	-	0.032	-	0.064	0.032	-	-	-	-	-	-	-	0.032	0.032	-	-						
1995	1995	-	-	-	-	0.097	-	-	-	-	-	-	-	-	-	-	-	-							
1996	1996	-	-	-	-	-	-	0.108	-	-	-	-	-	-	-	-	-								
1997	1997	-	-	-	-	-	-	-	-	-	0.121	-	-	-	-	-									
1998	1998	-	-	0.082	-	-	-	-	-	-	-	-	-	-	-										
1999	1999	-	0.089	-	-	-	-	-	-	-	-	-	-	-											
2000	2000	-	-	-	-	-	-	0.087	-	-	-	-	-												
2001	2001	0.014	-	-	0.014	-	-	-	0.029	-	0.029	-													
2002	2002	0.025	-	-	-	-	-	0.025	0.025	0.050	-														
2003	2003	-	-	-	-	-	-	-	-	-															
2004	2004	-	-	-	0.228	-	-	-	-																
2005	2005	-	-	-	-	-	-	-																	
2006	2006	-	-	-	-	-	-																		
2007	2007	-	-	0.040	-	-																			
2008	2008	-	-	-	-																				
2009	2009	-	-	-																					
2010	2010	-	-																						
2011	2011	-																							
All Yr Wtd Avg	All Yr Avg	0.029	0.024	0.026	0.017	0.005	0.006	0.011	0.006	0.009	0.007	0.001	-	0.003	0.002	0.004	0.003	0.004	0.006	0.004	0.002	0.001	0.004	-	0.003
10 yr Wgt Avg	10 yr Avg	0.003	-	0.004	0.024	-	-	0.022	0.005	0.005	0.019	-	-	0.003	0.003	0.006	0.005	0.007	0.010	0.006	0.002	0.003	0.006	-	0.006
5 yr Wgt Avg	5 yr Avg	-	-	0.008	0.046	-	-	0.005	0.011	0.010	0.006	-	-	-	-	0.006	0.006	-	0.004	-	-	0.006	0.012	-	0.004
Prior Selected	Prior Selected	0.010	0.013	0.013	0.008	0.005	0.006	0.010	0.008	0.009	0.007	0.001	-	0.003	0.004	0.004	0.002	0.006	0.007	0.004	0.004	0.002	0.004	-	0.005
Selected A-A	Selected Incr	0.029	0.024	0.026	0.017	0.005	0.006	0.011	0.006	0.009	0.007	0.001	-	0.003	0.002	0.004	0.003	0.004	0.006	0.004	0.002	0.001	0.004	-	0.003
Cumulative	Cumulative	0.181	0.151	0.127	0.101	0.084	0.080	0.074	0.063	0.056	0.047	0.040	0.039	0.039	0.037	0.034	0.030	0.027	0.023	0.016	0.012	0.010	0.009	0.005	0.005

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Incremental Living Miner Entitlement Ratios

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1972	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1973	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-				
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
1975	-	-	-	-	-	-	-	-	-	-	-	-	-						
1976	-	-	-	-	-	-	-	-	-	-	-	-							
1977	-	-	-	-	-	-	-	-	-	-	-								
1978	-	-	-	-	-	-	-	-	-	-									
1979	-	-	-	-	-	-	-	-	-										
1980	-	-	-	-	-	-	-	-											
1981	-	-	-	-	-	-	-												
1982	-	-	-	-	-	-													
1983	-	-	-	-	-														
1984	-	-	-	-															
1985	-	-	-																
1986	-	-																	
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2007																			
2008																			
2009																			
2010																			
2011																			
All Yr Wtd Avg	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	
10 yr Wgt Avg	-	-	-	-	-	0.002	-	-	-										
5 yr Wgt Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Prior Selected	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-		
Selected A-A	0.001	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative	0.002	0.002	0.002	0.002	0.002	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 5.1

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
1972	0	0	0	0	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1973	0	1	1	1	2	4	4	4	4	4	4	4	4	4	5	5	5	6	6	6	6	6	6	6
1974	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3
1975	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
1976	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3
1977	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5
1978	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1979	1	1	1	2	2	2	2	2	2	3	4	4	4	5	5	5	5	5	5	6	7	7	7	7
1980	3	3	4	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
1982	0	0	1	1	2	2	2	3	3	4	5	5	5	6	6	6	7	7	7	7	7	7	7	7
1983	0	0	1	1	1	2	2	3	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
1984	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1985	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
1986	2	2	2	2	2	3	3	3	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
1987	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2		
1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1994	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2					
1995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
2000	0	0	0	0	0	0	0	0	0	0	0	0	0											
2001	0	0	0	0	1	1	1	1	1	1	1	1												
2002	0	0	1	1	1	1	1	1	1	1	1													
2003	0	0	0	0	1	1	1	1	1	1														
2004	0	0	0	0	0	0	0	0	0															
2005	0	0	0	0	0	0	0	0																
2006	0	0	0	0	0	0	0																	
2007	0	0	0	0	0	0																		
2008	0	0	1	1	1																			
2009	0	0	0	0																				
2010	0	0	0																					
2011	1	1																						
2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 5.2

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) CDF	(3) Indicated Ultimate Filings	(4) Selected Ultimate Filings
1970	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.000	1	1
1971	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1.000	1	1
1972	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			3	1.000	3	3
1973	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				6	1.000	6	6
1974	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					3	1.000	3	3
1975	2	2	2	2	2	2	2	2	2	2	2	2	2	2						2	1.000	2	2
1976	3	3	3	3	3	3	3	3	3	3	3	3	3							3	1.000	3	3
1977	5	5	5	5	5	5	5	5	5	5	5	5								5	1.000	5	5
1978	3	3	3	3	3	3	3	3	3	3	3									3	1.000	3	3
1979	7	7	7	7	7	7	7	7	7	7										7	1.000	7	7
1980	7	7	7	7	7	7	7	7	7											7	1.000	7	7
1981	2	2	2	2	2	2	2	2												2	1.000	2	2
1982	7	7	7	7	7	7	7													7	1.000	7	7
1983	5	5	5	5	5	5														5	1.000	5	5
1984	4	4	4	4	4															4	1.000	4	4
1985	5	5	5	5																5	1.000	5	5
1986	5	5	5																	5	1.000	5	5
1987	1	1																		1	1.000	1	1
1988	0																			0	1.000	-	-
1989																				1	1.014	1	1
1990																				0	1.029	-	-
1991																				2	1.044	2	2
1992																				0	1.059	-	-
1993																				0	1.091	-	-
1994																				2	1.125	2	2
1995																				0	1.125	-	-
1996																				0	1.177	-	-
1997																				0	1.235	-	-
1998																				0	1.235	-	-
1999																				0	1.277	-	-
2000																				0	1.395	-	-
2001																				1	1.449	1	1
2002																				1	1.477	1	1
2003																				1	1.598	2	2
2004																				0	1.699	-	-
2005																				0	1.815	-	-
2006																				0	1.902	-	2
2007																				0	1.997	-	2
2008																				1	2.349	2	2
2009																				0	2.741	-	2
2010																				0	3.045	-	2
2011																				1	4.111	4	2
2012																				0	5.079	-	2
																			TOTAL	80			94

(2) From SECTION 8, EXHIBITS 5.3 AND 5.4
(3) = (1) * (2)
(4) SELECTED BY DELOITTE

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 5.3

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970													1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1971																						1.000	1.000	1.000
1972					3.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1973		1.000	1.000	2.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.200	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1976	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000
1977	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1978	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1979	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.500	1.333	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.200	1.167	1.000	1.000	1.000	1.000
1980	1.000	1.333	1.250	1.000	1.000	1.400	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1981																					1.000	1.000	1.000	2.000
1982			1.000	2.000	1.000	1.000	1.500	1.000	1.333	1.250	1.000	1.000	1.200	1.000	1.000	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1983			1.000	1.000	2.000	1.000	1.500	1.333	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1984	1.500	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1985	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.333	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.000
1986	1.000	1.000	1.000	1.000	1.500	1.000	1.000	1.333	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1987														1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1988																								
1989													1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
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1994		1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1995																								
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2001					1.000	1.000	1.000	1.000	1.000	1.000	1.000													
2002			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
2003					1.000	1.000	1.000	1.000	1.000															
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2008			1.000	1.000																				
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2011	1.000																							
All Yr Wtd Avg	1.235	1.350	1.111	1.167	1.176	1.050	1.048	1.068	1.064	1.082	1.019	1.038	1.093	1.034	1.000	1.049	1.047	1.000	1.031	1.030	1.014	1.015	1.014	1.014
10 yr Wgt Avg	1.000		1.000	2.000	1.000	1.000	1.000	1.000	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.100	1.000	1.000	1.000	1.000	1.000	1.029	1.024
5 yr Wgt Avg	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			1.000	1.000	1.000	1.333	1.000	1.000	1.000	1.000	1.000	1.091	1.000
Prior Selected	1.214	1.294	1.091	1.174	1.185	1.063	1.029	1.086	1.054	1.079	1.000	1.050	1.071	1.000	1.000	1.067	1.021	1.000	1.043	1.000	1.021	1.020	1.021	1.020
Selected A-A	1.235	1.350	1.111	1.167	1.176	1.050	1.048	1.068	1.064	1.082	1.019	1.038	1.093	1.034	1.000	1.049	1.047	1.000	1.031	1.030	1.014	1.015	1.014	1.014
Cumulative	5.079	4.111	3.045	2.741	2.349	1.997	1.902	1.815	1.699	1.598	1.477	1.449	1.395	1.277	1.235	1.235	1.177	1.125	1.125	1.091	1.059	1.044	1.029	1.014

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Ohio Department of Labor Living Widow Filings, Insured Only

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516	
1970	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1971	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1973	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
1976	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
1977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
1978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
1979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
1980	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
1981	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
1982	1.000	1.000	1.000	1.000	1.000	1.000													
1983	1.000	1.000	1.000	1.000	1.000														
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All Yr Wtd Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
10 yr Wgt Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
5 yr Wgt Avg	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Prior Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Selected A-A	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 6.1

Ohio Department of Labor Living Widow Entitlements, Insured Only

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
1972	1972	0	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1973	1973	1	1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
1974	1974	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
1975	1975	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1976	1976	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
1977	1977	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5
1978	1978	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1979	1979	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1980	1980	3	4	4	4	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1981	1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	1982	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1983	1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	1984	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1985	1985	0	0	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3
1986	1986	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1987	1987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	1989	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1991	1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1992	1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1993	1993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1994	1994	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1995	1995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1996	1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
1997	1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
1998	1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
1999	1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
2000	2000	0	0	0	0	0	0	0	0	0	0	0	0	0											
2001	2001	0	0	0	0	0	0	0	0	0	0	0	0												
2002	2002	0	0	0	0	0	0	0	0	0	0	0													
2003	2003	0	0	0	0	0	0	0	0	0	0														
2004	2004	0	0	0	0	0	0	0	0	0															
2005	2005	0	0	0	0	0	0	0	0																
2006	2006	0	0	0	0	0	0	0																	
2007	2007	0	0	0	0	0	0																		
2008	2008	0	0	0	0	0																			
2009	2009	0	0	0	0																				
2010	2010	0	0	0																					
2011	2011	0	0																						
2012	2012	0																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 6.2

Ohio Department of Labor Living Widow Entitlements, Insured Only

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516
1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1972	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
1973	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
1974	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
1975	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
1976	2	2	2	2	2	2	2	2	2	2	2	2	2						
1977	5	5	5	5	5	5	5	5	5	5	5	5							
1978	3	3	3	3	3	3	3	3	3	3	3								
1979	1	1	1	1	1	1	1	1	1	1									
1980	6	6	6	6	6	6	6	6	6										
1981	0	0	0	0	0	0	0	0											
1982	1	1	1	1	1	1	1												
1983	0	0	0	0	0	0													
1984	2	2	2	2	2														
1985	3	3	3	3															
1986	1	1	1																
1987	0	0																	
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 3
Sheet 7.1

Cumulative Living Widow Entitlement Ratios (= EXHIBIT 3, SHEET 6 / EXHIBIT 3, SHEET 5 (SELECTED ULTIMATE FILINGS)

Date of Last Exposure	Date of Last Exposure	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288
1970	1970	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1971	1971	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%
1972	1972	0.0%	33.3%	66.7%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1973	1973	16.7%	16.7%	16.7%	16.7%	33.3%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
1974	1974	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%
1975	1975	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
1976	1976	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
1977	1977	60.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1978	1978	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1979	1979	0.0%	0.0%	0.0%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%
1980	1980	42.9%	57.1%	57.1%	57.1%	57.1%	71.4%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%
1981	1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	1982	0.0%	0.0%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%
1983	1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	1984	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
1985	1985	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%
1986	1986	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
1987	1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1991	1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
1992	1992	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
1993	1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
1994	1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					
1995	1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
1996	1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%							
1997	1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								
1998	1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%									
1999	1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%										
2000	2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%											
2001	2001	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												
2002	2002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%													
2003	2003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														
2004	2004	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%															
2005	2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																
2006	2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																	
2007	2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%																		
2008	2008	0.0%	0.0%	0.0%	0.0%	0.0%																			
2009	2009	0.0%	0.0%	0.0%	0.0%																				
2010	2010	0.0%	0.0%	0.0%																					
2011	2011	0.0%	0.0%																						
2012	2012	0.0%																							

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Cumulative Living Widow Entitlement Ratios (= EXHIBIT 3, SHEET 6 / EXHIBIT 3, SHEET 5 (SELECTED ULTIMATE FILINGS))

Date of Last Exposure	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492	504	516	(1) As of 12/31/2012	(2) Addl % Add	(3) Indicated Ultimate Entl Ratio	(4) Selected Ultimate Entl Ratio Low	(5) Selected Ultimate Entl Ratio High	(6) # Additional Entitlements Low	(7) # Additional Entitlements High
1970	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1971	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1972	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1973	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%				66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1974	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%					66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1975	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%						50.0%	0.0%	50.0%	50.0%	50.0%	-	-
1976	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%							66.7%	0.0%	66.7%	66.7%	66.7%	-	-
1977	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%								100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1978	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									100.0%	0.0%	100.0%	100.0%	100.0%	-	-
1979	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%										14.3%	0.0%	14.3%	14.3%	14.3%	-	-
1980	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%	85.7%											85.7%	0.0%	85.7%	85.7%	85.7%	-	-
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1982	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%													14.3%	0.0%	14.3%	14.3%	14.3%	-	-
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%														0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1984	50.0%	50.0%	50.0%	50.0%	50.0%															50.0%	0.0%	50.0%	50.0%	50.0%	-	-
1985	60.0%	60.0%	60.0%	60.0%																60.0%	0.0%	60.0%	60.0%	60.0%	-	-
1986	20.0%	20.0%	20.0%																	20.0%	0.0%	20.0%	20.0%	20.0%	-	-
1987	0.0%	0.0%																		0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1988	0.0%																			0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1989																				0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1990																				0.0%	0.0%	0.0%	0.0%	0.0%	-	-
1991																				0.0%	1.0%	1.0%	1.0%	1.0%	0.0	0.0
1992																				0.0%	5.5%	5.5%	5.5%	5.5%	-	-
1993																				0.0%	5.5%	5.5%	5.5%	5.5%	-	-
1994																				0.0%	6.9%	6.9%	6.9%	6.9%	0.2	0.2
1995																				0.0%	6.9%	6.9%	6.9%	6.9%	-	-
1996																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1997																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1998																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
1999																				0.0%	8.8%	8.8%	8.8%	8.8%	-	-
2000																				0.0%	9.5%	9.5%	9.5%	9.5%	-	-
2001																				0.0%	9.5%	9.5%	9.5%	9.5%	0.1	0.1
2002																				0.0%	9.5%	9.5%	9.5%	9.5%	0.1	0.1
2003																				0.0%	10.5%	10.5%	10.5%	10.5%	0.2	0.2
2004																				0.0%	10.5%	10.5%	10.5%	10.5%	-	-
2005																				0.0%	10.5%	10.5%	10.5%	10.5%	-	-
2006																				0.0%	11.0%	11.0%	10.0%	15.0%	-	0.3
2007																				0.0%	11.4%	11.4%	10.0%	15.0%	-	0.3
2008																				0.0%	13.6%	13.6%	10.0%	15.0%	0.2	0.3
2009																				0.0%	14.1%	14.1%	10.0%	15.0%	-	0.3
2010																				0.0%	14.4%	14.4%	10.0%	15.0%	-	0.3
2011																				0.0%	16.9%	16.9%	10.0%	15.0%	0.4	0.3
2012																				0.0%	18.5%	18.5%	10.0%	15.0%	-	0.3
																							TOTAL		1.3	2.7

(2) From SECTION 8, EXHIBITS 7.3 AND 7.4
(3) = (1) + (2)
(4), (5) SELECTED BY DEL0ITTE
(6) = [(4) - (1)]* SECTION 8, EXHIBIT 3, SHEET 5.2, COL (4)
(7) = [(5) - (1)]* SECTION 8, EXHIBIT 3, SHEET 5.2, COL (4)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Incremental Living Widow Entitlement Ratios

Date of Last Exposure	Date of Last Exposure	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300
1970	1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-
1972	1972	0.333	0.333	-	-	0.333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	1973	-	-	-	0.167	0.167	-	-	-	-	-	-	-	-	-	-	-	0.167	-	-	-	-	-	-	-
1974	1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.333	-	-	-	-	-
1975	1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	1976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.333	-	-	-	-	-	-	-
1977	1977	0.200	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-
1978	1978	-	0.333	-	-	-	-	-	-	-	0.333	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	1979	-	-	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	1980	0.143	-	-	-	0.143	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1982	-	0.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1985	-	0.200	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-
1986	1986	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1991	1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1992	1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1993	1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
1994	1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1995	1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
1996	1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
1997	1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
1998	1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
1999	1999	-	-	-	-	-	-	-	-	-	-	-	-	-											
2000	2000	-	-	-	-	-	-	-	-	-	-	-	-												
2001	2001	-	-	-	-	-	-	-	-	-	-	-													
2002	2002	-	-	-	-	-	-	-	-	-	-														
2003	2003	-	-	-	-	-	-	-	-	-															
2004	2004	-	-	-	-	-	-	-	-																
2005	2005	-	-	-	-	-	-	-																	
2006	2006	-	-	-	-	-	-																		
2007	2007	-	-	-	-	-																			
2008	2008	-	-	-	-																				
2009	2009	-	-	-																					
2010	2010	-	-																						
2011	2011	-																							
All Yr Wtd Avg	All Yr Avg	0.016	0.025	0.004	0.004	0.022	0.004	0.006	-	-	0.010	-	-	0.007	-	-	-	0.019	-	0.014	-	0.045	0.010	-	-
10 yr Wgt Avg	10 yr Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.020	-	-
5 yr Wgt Avg	5 yr Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prior Selected	Prior Selected	0.013	0.022	-	0.005	0.019	0.005	0.006	-	-	0.010	-	-	0.007	-	-	-	0.008	-	0.043	-	0.048	0.010	-	-
Selected A-A	Selected Incr	0.016	0.025	0.004	0.004	0.022	0.004	0.006	-	-	0.010	-	-	0.007	-	-	-	0.019	-	0.014	-	0.045	0.010	-	-
Cumulative	Cumulative	0.185	0.169	0.144	0.141	0.136	0.114	0.110	0.105	0.105	0.105	0.095	0.095	0.095	0.088	0.088	0.088	0.088	0.069	0.069	0.055	0.055	0.010	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

Incremental Living Widow Entitlement Ratios

Date of Last Exposure	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408	408-420	420-432	432-444	444-456	456-468	468-480	480-492	492-504	504-516
1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1975	-	-	-	-	-	-	-	-	-	-	-	-	-					
1976	-	-	-	-	-	-	-	-	-	-	-	-						
1977	-	-	-	-	-	-	-	-	-	-	-							
1978	-	-	-	-	-	-	-	-	-	-								
1979	-	-	-	-	-	-	-	-	-									
1980	-	-	-	-	-	-	-	-										
1981	-	-	-	-	-	-	-											
1982	-	-	-	-	-	-												
1983	-	-	-	-	-													
1984	-	-	-	-														
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2011																		
All Yr Wtd Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 yr Wgt Avg	-	-	-	-	-	-	-	-	-									
5 yr Wgt Avg	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Prior Selected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selected A-A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

UNPAID LOSSES FOR PENDING AND IBNR CLAIMS BASED ON OHIO EMPLOYEE SURVEY DATA, TERMINATED MINERS - LOW ESTIMATE

	LOW
(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	10%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF TERMINATED MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER CLAIMS	NUMBER OF SURVIVOR CLAIMS	MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	19	0.1%	6	1	-	697,900	323,979	1,467,460	697,900	1,467,460	2,165,361	100%	2,165,361
20 - 24	24	5.2%	226	23	1	607,625	271,873	1,106,790	14,247,245	25,456,174	39,703,420	100%	39,703,420
25 - 29	28	8.6%	370	37	2	544,756	234,937	884,621	20,625,856	32,730,991	53,356,847	100%	53,356,847
30 - 34	33	11.8%	507	51	3	475,852	194,618	669,397	24,852,311	34,139,266	58,991,577	100%	58,991,577
35 - 39	38	11.3%	486	49	3	415,792	160,680	506,693	20,855,864	24,827,977	45,683,842	100%	45,683,842
40 - 44	43	10.4%	449	45	3	365,239	130,215	385,885	16,826,415	17,364,846	34,191,261	100%	34,191,261
45 - 49	48	8.8%	381	38	2	315,267	104,430	290,708	12,189,005	11,046,909	23,235,914	100%	23,235,914
50 - 54	53	9.1%	393	39	2	275,165	79,276	221,742	10,889,977	8,647,935	19,537,912	100%	19,537,912
55 - 59	58	10.2%	439	44	3	245,064	52,367	173,455	10,939,938	7,632,018	18,571,956	100%	18,571,956
60 - 64	63	10.3%	446	45	3	218,052	28,188	137,561	9,896,905	6,190,223	16,087,127	100%	16,087,127
65 - 69	68	6.3%	271	27	2	177,644	16,642	101,842	4,829,678	2,749,745	7,579,423	100%	7,579,423
70 - 74	73	4.2%	180	18	1	151,216	-	79,809	2,721,895	1,436,559	4,158,455	100%	4,158,455
75 - 79	78	1.8%	79	8	-	77,614	30,974	39,680	620,912	317,443	938,355	100%	938,355
80 - 84	83	1.5%	64	6	-	93,649	-	45,206	561,892	271,239	833,130	100%	833,130
85 - 89	88	0.4%	17	2	-	93,649	-	45,206	187,297	90,413	277,710	100%	277,710
TOTAL			**4,314**	**433**	**25**				**150,943,091**	**174,369,199**	**325,312,289**		**325,312,289**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
83,343	30,650	187,747	83,343	187,747	271,090	100%	271,090
88,283	31,215	172,281	2,061,729	3,962,467	6,024,196	100%	6,024,196
92,593	31,474	161,088	3,488,890	5,960,258	9,449,147	100%	9,449,147
98,404	31,596	148,305	5,113,415	7,563,569	12,676,984	100%	12,676,984
104,613	31,596	136,579	5,220,829	6,692,380	11,913,209	100%	11,913,209
111,626	30,950	126,413	5,116,006	5,688,573	10,804,579	100%	10,804,579
114,242	29,782	113,681	4,400,754	4,319,882	8,720,636	100%	8,720,636
118,333	26,989	103,421	4,668,955	4,033,429	8,702,384	100%	8,702,384
124,193	20,937	95,774	5,527,317	4,214,066	9,741,383	100%	9,741,383
126,607	13,043	87,519	5,736,447	3,938,366	9,674,813	100%	9,674,813
113,741	8,677	71,801	3,088,363	1,938,629	5,026,992	100%	5,026,992
106,085	-	61,718	1,909,539	1,110,933	3,020,472	100%	3,020,472
55,987	20,624	31,241	447,895	249,924	697,819	100%	697,819
73,066	-	38,495	438,395	230,973	669,368	100%	669,368
73,066	-	38,495	146,132	76,991	223,123	100%	223,123
	TOTAL		**47,448,008**	**50,168,185**	**97,616,193**		**97,616,193**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (26)
(7A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. (26)
(8) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (28)
(8A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. (28)

(9) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (27)
(9A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) TERMINATED MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8A, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

UNPAID LOSSES FOR PENDING AND IBNR CLAIMS BASED ON OHIO EMPLOYEE SURVEY DATA, TERMINATED MINERS - HIGH ESTIMATE

	HIGH
(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BENTITLED	15%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF TERMINATED MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER CLAIMS	NUMBER OF SURVIVOR CLAIMS	MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	19	0.1%	6	1	-	697,900	323,979	1,467,460	697,900	1,467,460	2,165,361	100%	2,165,361
20 - 24	24	5.2%	226	34	2	607,625	271,873	1,106,790	21,202,992	37,630,866	58,833,858	100%	58,833,858
25 - 29	28	8.6%	370	56	3	544,756	234,937	884,621	31,211,163	49,538,797	80,749,960	100%	80,749,960
30 - 34	33	11.8%	507	76	5	475,852	194,618	669,397	37,137,850	50,874,201	88,012,050	100%	88,012,050
35 - 39	38	11.3%	486	73	4	415,792	160,680	506,693	30,995,560	36,988,619	67,984,180	100%	67,984,180
40 - 44	43	10.4%	449	67	4	365,239	130,215	385,885	24,991,895	25,854,326	50,846,221	100%	50,846,221
45 - 49	48	8.8%	381	57	3	315,267	104,430	290,708	18,283,508	16,570,363	34,853,871	100%	34,853,871
50 - 54	53	9.1%	393	59	4	275,165	79,276	221,742	16,551,824	13,082,774	29,634,597	100%	29,634,597
55 - 59	58	10.2%	439	66	4	245,064	52,367	173,455	16,383,723	11,448,027	27,831,751	100%	27,831,751
60 - 64	63	10.3%	446	67	4	218,052	28,188	137,561	14,722,237	9,216,554	23,938,791	100%	23,938,791
65 - 69	68	6.3%	271	41	2	177,644	16,642	101,842	7,316,697	4,175,539	11,492,235	100%	11,492,235
70 - 74	73	4.2%	180	27	2	151,216	-	79,809	4,082,843	2,154,839	6,237,682	100%	6,237,682
75 - 79	78	1.8%	79	12	1	77,614	30,974	39,680	962,342	476,165	1,438,506	100%	1,438,506
80 - 84	83	1.5%	64	10	1	93,649	-	45,206	936,486	452,064	1,388,550	100%	1,388,550
85 - 89	88	0.4%	17	3	-	93,649	-	45,206	280,946	135,619	416,565	100%	416,565
TOTAL			**4,314**	**649**	**39**				**225,757,966**	**260,066,214**	**485,824,179**		**485,824,179**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
83,343	30,650	187,747	83,343	187,747	271,090	100%	271,090
88,283	31,215	172,281	3,064,060	5,857,560	8,921,620	100%	8,921,620
92,593	31,474	161,088	5,279,631	9,020,930	14,300,561	100%	14,300,561
98,404	31,596	148,305	7,636,719	11,271,200	18,907,919	100%	18,907,919
104,613	31,596	136,579	7,763,138	9,970,281	17,733,419	100%	17,733,419
111,626	30,950	126,413	7,602,721	8,469,653	16,072,374	100%	16,072,374
114,242	29,782	113,681	6,601,131	6,479,823	13,080,953	100%	13,080,953
118,333	26,989	103,421	7,089,587	6,101,855	13,191,442	100%	13,191,442
124,193	20,937	95,774	8,280,507	6,321,099	14,601,606	100%	14,601,606
126,607	13,043	87,519	8,534,845	5,863,789	14,398,635	100%	14,398,635
113,741	8,677	71,801	4,680,738	2,943,844	7,624,582	100%	7,624,582
106,085	-	61,718	2,864,308	1,666,399	4,530,708	100%	4,530,708
55,987	20,624	31,241	692,467	374,886	1,067,353	100%	1,067,353
73,066	-	38,495	730,659	384,954	1,115,613	100%	1,115,613
73,066	-	38,495	219,198	115,486	334,684	100%	334,684
	TOTAL		**71,123,052**	**75,029,506**	**146,152,558**		**146,152,558**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (26)
(7A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. 26)
(8) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (28)
(8A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. (28)

(9) SECTION 8A, EXHIBIT 4, SHEET 4, COL. (27)
(9A) SECTION 8A, EXHIBIT 4, SHEET 4A, COL. 27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) TERMINATED MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8A, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 42

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	395,317	1,020,933	810,414	620,921
DISCOUNTED	196,703	390,292	288,373	264,271

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	1.974	3.820	0.406	40.0%	0.945	0.055	609,962	259,020	44,693	15,903	1,203,812	2,240,963	88,205	207,407	386,974	12,734
24	1.702	2.854	0.494	40.0%	0.954	0.046	615,646	261,434	37,557	13,364	1,048,096	1,690,183	63,939	219,701	355,097	11,231
28	1.513	2.261	0.577	40.0%	0.962	0.038	621,221	263,802	30,558	10,873	939,653	1,350,908	46,221	230,426	332,027	9,498
33	1.305	1.689	0.703	40.0%	0.974	0.026	629,075	267,137	20,699	7,365	820,800	1,022,239	27,007	244,889	305,679	6,752
38	1.126	1.262	0.855	40.0%	0.987	0.013	637,225	270,598	10,467	3,725	717,203	773,773	11,781	260,339	281,510	3,583
43	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
48	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
53	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
58	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
63	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
68	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
73	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
78	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
83	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
88	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3A, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3A, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3A, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3A, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 47

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	314,516	847,392	679,266	449,733
DISCOUNTED	171,696	354,715	265,329	216,413

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	2.288	5.112	0.333	40.0%	0.919	0.081	484,987	225,095	54,942	21,461	1,109,614	2,112,949	125,704	171,741	339,065	16,374
24	1.974	3.820	0.406	40.0%	0.928	0.072	489,506	227,192	49,124	19,188	966,082	1,593,632	96,951	181,921	311,135	15,365
28	1.754	3.026	0.475	40.0%	0.936	0.064	493,939	229,250	43,417	16,959	866,125	1,273,738	76,132	190,802	290,921	14,115
33	1.513	2.261	0.577	40.0%	0.948	0.052	500,184	232,148	35,379	13,819	756,573	963,844	53,514	202,777	267,835	12,071
38	1.305	1.689	0.703	40.0%	0.960	0.040	506,664	235,156	27,037	10,561	661,082	729,572	35,277	215,571	246,658	9,681
43	1.126	1.262	0.855	40.0%	0.977	0.023	515,489	239,252	15,676	6,123	580,188	554,675	17,643	230,182	228,157	5,891
48	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
53	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
58	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
63	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
68	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
73	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
78	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
83	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
88	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3B, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3B, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3B, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3B, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 52

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	246,008	687,941	555,769	322,245
DISCOUNTED	146,680	317,020	240,191	173,930

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	2.652	6.841	0.274	40.0%	0.883	0.117	373,443	189,747	64,857	28,030	990,497	1,947,102	172,023	137,944	288,056	20,377
24	2.288	5.112	0.333	40.0%	0.892	0.108	376,923	191,515	60,283	26,053	862,373	1,468,547	137,922	146,121	264,328	19,878
28	2.033	4.049	0.390	40.0%	0.900	0.100	380,337	193,250	55,795	24,113	773,147	1,173,761	113,420	153,254	247,154	19,123
33	1.754	3.026	0.475	40.0%	0.911	0.089	385,145	195,693	49,475	21,382	675,354	888,191	86,754	162,873	227,542	17,796
38	1.513	2.261	0.577	40.0%	0.923	0.077	390,135	198,228	42,915	18,547	590,114	672,307	64,913	173,149	209,551	16,200
43	1.305	1.689	0.703	40.0%	0.939	0.061	396,931	201,681	33,982	14,686	517,904	511,138	44,338	184,884	193,832	13,463
48	1.126	1.262	0.855	40.0%	0.968	0.032	409,135	207,882	17,939	7,753	460,485	393,695	20,191	200,001	181,642	7,459
53	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
58	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
63	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
68	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
73	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
78	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
83	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
88	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3C, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3C, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3C, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3C, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 57

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	189,529	550,072	447,542	229,036
DISCOUNTED	122,745	278,765	213,951	137,412

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	3.075	9.154	0.225	40.0%	0.828	0.172	276,299	153,283	77,034	36,827	849,561	1,735,758	236,864	106,180	234,609	25,510
24	2.652	6.841	0.274	40.0%	0.836	0.164	278,874	154,712	73,582	35,176	739,668	1,309,146	195,163	112,474	215,283	25,573
28	2.357	5.418	0.321	40.0%	0.843	0.157	281,400	156,113	70,195	33,557	663,137	1,046,358	165,419	117,964	201,296	25,357
33	2.033	4.049	0.390	40.0%	0.854	0.146	284,957	158,086	65,424	31,277	579,260	791,784	132,994	125,368	185,323	24,803
38	1.754	3.026	0.475	40.0%	0.865	0.135	288,649	160,135	60,474	28,910	506,148	599,333	106,041	133,278	170,670	24,061
43	1.513	2.261	0.577	40.0%	0.880	0.120	293,677	162,924	53,732	25,687	444,213	455,657	81,274	142,311	157,868	22,437
48	1.305	1.689	0.703	40.0%	0.907	0.093	302,706	167,933	41,623	19,898	394,963	350,962	54,309	153,947	147,939	18,241
53	1.126	1.262	0.855	40.0%	0.947	0.053	316,097	175,362	23,667	11,314	355,770	273,861	26,637	168,714	140,449	10,885
58	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
63	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
68	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
73	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
78	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
83	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
88	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3D, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3D, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3D, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3D, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
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(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 62

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	143,339	433,214	354,961	161,050
DISCOUNTED	100,187	240,563	187,095	106,334

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	3.565	12.250	0.185	40.0%	0.747	0.253	193,778	116,838	89,683	47,271	690,725	1,474,461	319,678	77,117	180,265	31,200
24	3.075	9.154	0.225	40.0%	0.754	0.246	195,584	117,926	87,211	45,968	601,377	1,112,071	268,156	81,688	165,416	31,842
28	2.732	7.251	0.264	40.0%	0.761	0.239	197,355	118,994	84,786	44,690	539,155	888,842	231,628	85,676	154,669	32,177
33	2.357	5.418	0.321	40.0%	0.771	0.229	199,850	120,499	81,371	42,889	470,959	672,591	191,756	91,053	142,395	32,409
38	2.033	4.049	0.390	40.0%	0.781	0.219	202,439	122,060	77,826	41,021	411,517	509,111	158,205	96,798	131,137	32,531
43	1.754	3.026	0.475	40.0%	0.794	0.206	205,965	124,186	72,999	38,477	361,162	387,064	128,004	103,359	121,300	32,024
48	1.513	2.261	0.577	40.0%	0.819	0.181	212,298	128,004	64,330	33,907	321,120	298,130	97,304	111,809	113,671	29,617
53	1.305	1.689	0.703	40.0%	0.855	0.145	221,689	133,667	51,473	27,131	289,254	232,635	67,161	122,534	107,916	24,871
58	1.126	1.262	0.855	40.0%	0.918	0.082	238,063	143,539	29,057	15,316	267,943	186,678	32,704	138,098	105,359	14,735
63	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
68	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
73	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
78	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
83	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
88	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3E, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3E, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3E, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3E, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 67

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	107,051	336,305	277,271	112,805
DISCOUNTED	80,125	203,727	160,450	81,050

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	4.132	16.394	0.152	40.0%	0.631	0.369	125,350	81,715	102,401	59,257	517,977	1,166,324	423,147	51,391	127,540	37,267
24	3.565	12.250	0.185	40.0%	0.637	0.363	126,518	82,476	100,772	58,314	450,975	879,666	359,202	54,437	117,034	38,489
28	3.167	9.704	0.217	40.0%	0.642	0.358	127,664	83,223	99,173	57,389	404,314	703,089	314,084	57,095	109,430	39,371
33	2.732	7.251	0.264	40.0%	0.650	0.350	129,278	84,275	96,922	56,086	353,174	532,031	264,780	60,678	100,747	40,382
38	2.357	5.418	0.321	40.0%	0.659	0.341	130,953	85,367	94,585	54,734	308,598	402,715	222,896	64,507	92,781	41,359
43	2.033	4.049	0.390	40.0%	0.670	0.330	133,234	86,854	91,403	52,893	270,836	306,174	185,803	68,879	85,822	41,946
48	1.754	3.026	0.475	40.0%	0.691	0.309	137,330	89,525	85,688	49,586	240,809	235,825	150,255	74,510	80,424	41,270
53	1.513	2.261	0.577	40.0%	0.722	0.278	143,405	93,485	77,213	44,681	216,913	184,018	116,792	81,657	76,352	39,028
58	1.305	1.689	0.703	40.0%	0.775	0.225	153,997	100,390	62,437	36,131	200,931	147,665	81,466	92,029	74,543	33,122
63	1.126	1.262	0.855	40.0%	0.867	0.133	172,323	112,336	36,871	21,337	193,951	123,475	41,499	108,077	75,836	20,528
68	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
73	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
78	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
83	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
88	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3F, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3F, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3F, ROW 12 * ROW 16
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(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
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(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 72

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	80,072	257,933	213,421	79,809
DISCOUNTED	63,682	169,690	134,942	61,718

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	4.790	21.939	0.125	40.0%	0.476	0.524	71,945	50,473	111,881	70,740	344,645	833,033	535,957	30,246	80,586	42,391
24	4.132	16.394	0.152	40.0%	0.480	0.520	72,615	50,943	110,935	70,142	300,064	628,291	458,411	32,038	73,948	44,113
28	3.671	12.985	0.178	40.0%	0.485	0.515	73,273	51,404	110,007	69,555	269,018	502,173	403,884	33,602	69,143	45,467
33	3.167	9.704	0.217	40.0%	0.491	0.509	74,199	52,054	108,699	68,729	234,991	379,997	344,254	35,711	63,657	47,151
38	2.732	7.251	0.264	40.0%	0.497	0.503	75,160	52,729	107,343	67,871	205,331	287,634	293,250	37,965	58,623	48,867
43	2.357	5.418	0.321	40.0%	0.506	0.494	76,470	53,647	105,495	66,702	180,206	218,681	248,605	40,538	54,226	50,403
48	2.033	4.049	0.390	40.0%	0.521	0.479	78,821	55,297	102,177	64,604	160,226	168,435	207,704	43,852	50,816	51,234
53	1.754	3.026	0.475	40.0%	0.544	0.456	82,308	57,743	97,255	61,493	144,327	131,433	170,538	48,059	48,243	51,180
58	1.513	2.261	0.577	40.0%	0.585	0.415	88,387	62,008	88,675	56,068	133,693	105,468	134,129	54,163	47,100	48,974
63	1.305	1.689	0.703	40.0%	0.654	0.346	98,905	69,386	73,831	46,682	129,048	88,191	96,332	63,608	47,917	42,794
68	1.126	1.262	0.855	40.0%	0.790	0.210	119,513	83,844	44,744	28,291	134,513	79,633	50,360	80,666	52,641	27,219
73	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
78	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
83	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
88	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3G, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3G, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3G, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3G, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 80

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	48,769	160,968	133,439	45,206
DISCOUNTED	42,100	119,514	96,102	38,495

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	6.068	34.967	0.091	40.0%	0.219	0.781	20,547	16,031	104,162	75,017	124,686	346,820	632,091	8,892	26,995	41,610
24	5.235	26.129	0.111	40.0%	0.221	0.779	20,738	16,180	103,889	74,820	108,558	261,579	543,819	9,419	24,771	43,555
28	4.651	20.697	0.130	40.0%	0.223	0.777	20,926	16,327	103,621	74,627	97,326	209,072	481,932	9,879	23,162	45,154
33	4.012	15.466	0.158	40.0%	0.226	0.774	21,191	16,533	103,245	74,356	85,015	158,206	414,206	10,499	21,324	47,217
38	3.461	11.557	0.193	40.0%	0.229	0.771	21,465	16,748	102,853	74,074	74,285	119,752	355,944	11,161	19,638	49,366
43	2.985	8.636	0.234	40.0%	0.233	0.767	21,839	17,039	102,321	73,691	65,195	91,044	305,450	11,918	18,165	51,541
48	2.575	6.453	0.285	40.0%	0.240	0.760	22,511	17,563	101,364	73,002	57,967	70,125	261,020	12,892	17,022	53,587
53	2.221	4.822	0.347	40.0%	0.251	0.749	23,507	18,340	99,945	71,980	52,215	54,720	222,006	14,129	16,160	55,452
58	1.916	3.604	0.422	40.0%	0.270	0.730	25,243	19,695	97,471	70,198	48,368	43,910	186,765	15,923	15,778	56,756
63	1.653	2.693	0.513	40.0%	0.302	0.698	28,247	22,038	93,191	67,115	46,687	36,717	154,030	18,700	16,051	56,949
68	1.426	2.012	0.625	40.0%	0.364	0.636	34,132	26,630	84,804	61,075	48,664	33,154	120,911	23,715	17,634	54,389
73	1.230	1.504	0.760	40.0%	0.495	0.505	46,371	36,179	67,366	48,516	57,030	33,658	82,851	33,813	21,780	45,344
78	1.061	1.124	0.925	40.0%	0.781	0.219	73,159	57,079	29,196	21,027	77,614	39,680	30,974	55,987	31,241	20,624
83	1.000	1.000	1.000	40.0%	1.000	-	93,649	73,066	-	-	93,649	45,206	-	73,066	38,495	-
88	1.000	1.000	1.000	40.0%	1.000	-	93,649	73,066	-	-	93,649	45,206	-	73,066	38,495	-

(1) SECTION 8A, EXHIBIT 4, SHEET 3H, ROW 17
(2) SECTION 8A, EXHIBIT 4, SHEET 3H, ROW 18
(3) SECTION 8A, EXHIBIT 4, SHEET 3H, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 4, SHEET 3H, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 42

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	42.00	M		
	CLAIMANT 2 (y)	38.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			51.12	25.44
(12)	APV FOR CLAIMANT 2			104.81	37.29
(13)	APV FOR BOTH CLAIMANTS ALIVE			47.78	24.51
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			60.37	13.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			395,317	196,703
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			1,020,933	390,292
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			97.629	41.552
(23)	APV OF MEDICAL BENEFIT			620,921	264,271

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.004	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.005	0.001	0.996	0.999	0.995	0.005	0.962	1.030	1.060
2	0.006	0.001	0.991	0.999	0.990	0.010	0.925	1.061	1.124
3	0.006	0.001	0.985	0.998	0.984	0.016	0.889	1.093	1.191
4	0.007	0.001	0.979	0.997	0.977	0.023	0.855	1.126	1.262
5	0.007	0.001	0.973	0.996	0.969	0.031	0.822	1.159	1.338
6	0.007	0.001	0.966	0.996	0.962	0.038	0.790	1.194	1.419
7	0.008	0.001	0.959	0.995	0.954	0.046	0.760	1.230	1.504
8	0.008	0.001	0.952	0.994	0.946	0.054	0.731	1.267	1.594
9	0.009	0.001	0.944	0.993	0.937	0.063	0.703	1.305	1.689
10	0.010	0.001	0.935	0.992	0.927	0.072	0.676	1.344	1.791
11	0.012	0.001	0.925	0.990	0.916	0.083	0.650	1.384	1.898
12	0.013	0.001	0.914	0.989	0.904	0.095	0.625	1.426	2.012
13	0.014	0.002	0.903	0.988	0.891	0.107	0.601	1.469	2.133
14	0.015	0.002	0.890	0.986	0.878	0.121	0.577	1.513	2.261
15	0.017	0.002	0.876	0.984	0.863	0.136	0.555	1.558	2.397
16	0.018	0.002	0.861	0.983	0.846	0.151	0.534	1.605	2.540
17	0.020	0.002	0.846	0.980	0.829	0.168	0.513	1.653	2.693
18	0.022	0.003	0.829	0.978	0.811	0.186	0.494	1.702	2.854
19	0.024	0.003	0.811	0.976	0.791	0.205	0.475	1.754	3.026
20	0.027	0.003	0.791	0.973	0.770	0.225	0.456	1.806	3.207
21	0.030	0.004	0.770	0.970	0.746	0.247	0.439	1.860	3.400
22	0.033	0.004	0.747	0.966	0.722	0.270	0.422	1.916	3.604
23	0.037	0.005	0.723	0.962	0.695	0.295	0.406	1.974	3.820
24	0.041	0.006	0.696	0.957	0.666	0.321	0.390	2.033	4.049
25	0.046	0.007	0.667	0.951	0.635	0.349	0.375	2.094	4.292
26	0.050	0.008	0.637	0.945	0.602	0.378	0.361	2.157	4.549
27	0.055	0.009	0.605	0.938	0.567	0.408	0.347	2.221	4.822
28	0.059	0.010	0.572	0.929	0.532	0.438	0.333	2.288	5.112
29	0.064	0.011	0.538	0.920	0.495	0.468	0.321	2.357	5.418
30	0.069	0.012	0.504	0.911	0.458	0.497	0.308	2.427	5.743
31	0.074	0.013	0.469	0.900	0.422	0.525	0.296	2.500	6.088
32	0.080	0.014	0.434	0.888	0.386	0.551	0.285	2.575	6.453
33	0.086	0.015	0.400	0.876	0.350	0.575	0.274	2.652	6.841
34	0.094	0.017	0.365	0.863	0.315	0.598	0.264	2.732	7.251
35	0.102	0.018	0.331	0.849	0.281	0.618	0.253	2.814	7.686
36	0.111	0.020	0.297	0.833	0.248	0.635	0.244	2.898	8.147
37	0.121	0.023	0.264	0.816	0.216	0.649	0.234	2.985	8.636
38	0.131	0.025	0.232	0.798	0.185	0.659	0.225	3.075	9.154
39	0.141	0.028	0.202	0.778	0.157	0.666	0.217	3.167	9.704
40	0.151	0.032	0.173	0.756	0.131	0.667	0.208	3.262	10.286
41	0.162	0.035	0.147	0.732	0.108	0.663	0.200	3.360	10.903
42	0.173	0.039	0.123	0.706	0.087	0.655	0.193	3.461	11.557
43	0.186	0.044	0.102	0.678	0.069	0.642	0.185	3.565	12.250
44	0.201	0.049	0.083	0.648	0.054	0.624	0.178	3.671	12.985
45	0.218	0.055	0.066	0.616	0.041	0.601	0.171	3.782	13.765
46	0.237	0.061	0.052	0.582	0.030	0.574	0.165	3.895	14.590
47	0.258	0.068	0.040	0.547	0.022	0.543	0.158	4.012	15.466
48	0.282	0.075	0.029	0.510	0.015	0.509	0.152	4.132	16.394
49	0.309	0.084	0.021	0.471	0.010	0.473	0.146	4.256	17.378
50	0.339	0.094	0.015	0.432	0.006	0.434	0.141	4.384	18.420
51	0.371	0.105	0.010	0.391	0.004	0.393	0.135	4.515	19.525
52	0.406	0.116	0.006	0.350	0.002	0.352	0.130	4.651	20.697
53	0.444	0.129	0.004	0.310	0.001	0.311	0.125	4.790	21.939
54	0.475	0.142	0.002	0.270	0.001	0.271	0.120	4.934	23.255
55	0.506	0.156	0.001	0.231	0.000	0.232	0.116	5.082	24.650
56	0.539	0.171	0.001	0.195	0.000	0.196	0.111	5.235	26.129
57	0.575	0.186	0.000	0.162	0.000	0.162	0.107	5.392	27.697
58	0.616	0.203	0.000	0.132	0.000	0.132	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
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AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 47

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	47.00	M		
	CLAIMANT 2 (y)	43.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			40.68	22.20
(12)	APV FOR CLAIMANT 2			87.85	34.31
(13)	APV FOR BOTH CLAIMANTS ALIVE			37.85	21.28
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			52.82	13.95
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			314,516	171,696
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			847,392	354,715
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			70.713	34.027
(23)	APV OF MEDICAL BENEFIT			449,733	216,413

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.007	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.007	0.001	0.993	0.999	0.992	0.008	0.962	1.030	1.060
2	0.008	0.001	0.986	0.998	0.984	0.016	0.925	1.061	1.124
3	0.008	0.001	0.978	0.997	0.976	0.024	0.889	1.093	1.191
4	0.009	0.001	0.970	0.996	0.966	0.033	0.855	1.126	1.262
5	0.010	0.001	0.961	0.995	0.956	0.043	0.822	1.159	1.338
6	0.012	0.001	0.951	0.994	0.945	0.054	0.790	1.194	1.419
7	0.013	0.001	0.940	0.993	0.933	0.067	0.760	1.230	1.504
8	0.014	0.002	0.928	0.991	0.920	0.080	0.731	1.267	1.594
9	0.015	0.002	0.915	0.990	0.905	0.094	0.703	1.305	1.689
10	0.017	0.002	0.901	0.988	0.890	0.109	0.676	1.344	1.791
11	0.018	0.002	0.886	0.986	0.873	0.125	0.650	1.384	1.898
12	0.020	0.002	0.869	0.984	0.855	0.142	0.625	1.426	2.012
13	0.022	0.003	0.852	0.982	0.836	0.161	0.601	1.469	2.133
14	0.024	0.003	0.833	0.979	0.816	0.181	0.577	1.513	2.261
15	0.027	0.003	0.813	0.976	0.794	0.202	0.555	1.558	2.397
16	0.030	0.004	0.791	0.973	0.770	0.224	0.534	1.605	2.540
17	0.033	0.004	0.768	0.969	0.744	0.248	0.513	1.653	2.693
18	0.037	0.005	0.743	0.965	0.717	0.274	0.494	1.702	2.854
19	0.041	0.006	0.715	0.960	0.687	0.302	0.475	1.754	3.026
20	0.046	0.007	0.686	0.954	0.655	0.331	0.456	1.806	3.207
21	0.050	0.008	0.655	0.948	0.621	0.361	0.439	1.860	3.400
22	0.055	0.009	0.622	0.941	0.585	0.392	0.422	1.916	3.604
23	0.059	0.010	0.588	0.933	0.548	0.424	0.406	1.974	3.820
24	0.064	0.011	0.553	0.924	0.511	0.455	0.390	2.033	4.049
25	0.069	0.012	0.518	0.914	0.473	0.485	0.375	2.094	4.292
26	0.074	0.013	0.482	0.903	0.435	0.514	0.361	2.157	4.549
27	0.080	0.014	0.447	0.892	0.398	0.542	0.347	2.221	4.822
28	0.086	0.015	0.411	0.879	0.361	0.568	0.333	2.288	5.112
29	0.094	0.017	0.376	0.866	0.325	0.591	0.321	2.357	5.418
30	0.102	0.018	0.340	0.852	0.290	0.612	0.308	2.427	5.743
31	0.111	0.020	0.306	0.836	0.256	0.631	0.296	2.500	6.088
32	0.121	0.023	0.272	0.819	0.222	0.646	0.285	2.575	6.453
33	0.131	0.025	0.239	0.801	0.191	0.657	0.274	2.652	6.841
34	0.141	0.028	0.207	0.780	0.162	0.664	0.264	2.732	7.251
35	0.151	0.032	0.178	0.758	0.135	0.666	0.253	2.814	7.686
36	0.162	0.035	0.151	0.734	0.111	0.663	0.244	2.898	8.147
37	0.173	0.039	0.127	0.708	0.090	0.655	0.234	2.985	8.636
38	0.186	0.044	0.105	0.680	0.071	0.642	0.225	3.075	9.154
39	0.201	0.049	0.085	0.650	0.055	0.625	0.217	3.167	9.704
40	0.218	0.055	0.068	0.618	0.042	0.602	0.208	3.262	10.286
41	0.237	0.061	0.053	0.584	0.031	0.575	0.200	3.360	10.903
42	0.258	0.068	0.041	0.549	0.022	0.545	0.193	3.461	11.557
43	0.282	0.075	0.030	0.512	0.015	0.511	0.185	3.565	12.250
44	0.309	0.084	0.022	0.473	0.010	0.474	0.178	3.671	12.985
45	0.339	0.094	0.015	0.433	0.006	0.435	0.171	3.782	13.765
46	0.371	0.105	0.010	0.393	0.004	0.395	0.165	3.895	14.590
47	0.406	0.116	0.006	0.352	0.002	0.353	0.158	4.012	15.466
48	0.444	0.129	0.004	0.311	0.001	0.312	0.152	4.132	16.394
49	0.475	0.142	0.002	0.271	0.001	0.272	0.146	4.256	17.378
50	0.506	0.156	0.001	0.232	0.000	0.233	0.141	4.384	18.420
51	0.539	0.171	0.001	0.196	0.000	0.196	0.135	4.515	19.525
52	0.575	0.186	0.000	0.163	0.000	0.163	0.130	4.651	20.697
53	0.616	0.203	0.000	0.132	0.000	0.132	0.125	4.790	21.939
54	0.661	0.220	0.000	0.106	0.000	0.106	0.120	4.934	23.255
55	0.713	0.238	0.000	0.082	0.000	0.082	0.116	5.082	24.650
56	0.773	0.257	0.000	0.063	0.000	0.063	0.111	5.235	26.129
57	0.841	0.276	0.000	0.047	0.000	0.047	0.107	5.392	27.697
58	0.918	0.297	0.000	0.034	0.000	0.034	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 52

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	52.00	M		
	CLAIMANT 2 (y)	48.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			31.82	18.97
(12)	APV FOR CLAIMANT 2			71.88	31.06
(13)	APV FOR BOTH CLAIMANTS ALIVE			29.43	18.06
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			44.82	13.91
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			246,008	146,680
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			687,941	317,020
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			50.667	27.347
(23)	APV OF MEDICAL BENEFIT			322,245	173,930

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.010	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.012	0.001	0.990	0.999	0.988	0.012	0.962	1.030	1.060
2	0.013	0.001	0.978	0.997	0.976	0.024	0.925	1.061	1.124
3	0.014	0.002	0.966	0.996	0.962	0.038	0.889	1.093	1.191
4	0.015	0.002	0.952	0.994	0.947	0.053	0.855	1.126	1.262
5	0.017	0.002	0.937	0.993	0.930	0.069	0.822	1.159	1.338
6	0.018	0.002	0.922	0.991	0.913	0.086	0.790	1.194	1.419
7	0.020	0.002	0.905	0.989	0.895	0.104	0.760	1.230	1.504
8	0.022	0.003	0.887	0.987	0.875	0.124	0.731	1.267	1.594
9	0.024	0.003	0.867	0.984	0.853	0.145	0.703	1.305	1.689
10	0.027	0.003	0.846	0.981	0.830	0.167	0.676	1.344	1.791
11	0.030	0.004	0.824	0.978	0.805	0.191	0.650	1.384	1.898
12	0.033	0.004	0.799	0.974	0.778	0.216	0.625	1.426	2.012
13	0.037	0.005	0.773	0.970	0.750	0.244	0.601	1.469	2.133
14	0.041	0.006	0.745	0.965	0.718	0.273	0.577	1.513	2.261
15	0.046	0.007	0.714	0.959	0.685	0.303	0.555	1.558	2.397
16	0.050	0.008	0.682	0.953	0.649	0.336	0.534	1.605	2.540
17	0.055	0.009	0.647	0.946	0.612	0.369	0.513	1.653	2.693
18	0.059	0.010	0.612	0.937	0.573	0.402	0.494	1.702	2.854
19	0.064	0.011	0.575	0.928	0.534	0.435	0.475	1.754	3.026
20	0.069	0.012	0.539	0.918	0.495	0.468	0.456	1.806	3.207
21	0.074	0.013	0.502	0.907	0.455	0.499	0.439	1.860	3.400
22	0.080	0.014	0.465	0.896	0.416	0.528	0.422	1.916	3.604
23	0.086	0.015	0.428	0.884	0.378	0.555	0.406	1.974	3.820
24	0.094	0.017	0.391	0.870	0.340	0.581	0.390	2.033	4.049
25	0.102	0.018	0.354	0.856	0.303	0.604	0.375	2.094	4.292
26	0.111	0.020	0.318	0.840	0.267	0.624	0.361	2.157	4.549
27	0.121	0.023	0.283	0.823	0.233	0.641	0.347	2.221	4.822
28	0.131	0.025	0.248	0.805	0.200	0.653	0.333	2.288	5.112
29	0.141	0.028	0.216	0.784	0.169	0.661	0.321	2.357	5.418
30	0.151	0.032	0.185	0.762	0.141	0.665	0.308	2.427	5.743
31	0.162	0.035	0.157	0.738	0.116	0.663	0.296	2.500	6.088
32	0.173	0.039	0.132	0.712	0.094	0.656	0.285	2.575	6.453
33	0.186	0.044	0.109	0.684	0.075	0.644	0.274	2.652	6.841
34	0.201	0.049	0.089	0.654	0.058	0.626	0.264	2.732	7.251
35	0.218	0.055	0.071	0.621	0.044	0.604	0.253	2.814	7.686
36	0.237	0.061	0.055	0.587	0.033	0.578	0.244	2.898	8.147
37	0.258	0.068	0.042	0.552	0.023	0.547	0.234	2.985	8.636
38	0.282	0.075	0.031	0.514	0.016	0.513	0.225	3.075	9.154
39	0.309	0.084	0.023	0.475	0.011	0.477	0.217	3.167	9.704
40	0.339	0.094	0.016	0.435	0.007	0.438	0.208	3.262	10.286
41	0.371	0.105	0.010	0.395	0.004	0.397	0.200	3.360	10.903
42	0.406	0.116	0.006	0.353	0.002	0.355	0.193	3.461	11.557
43	0.444	0.129	0.004	0.312	0.001	0.314	0.185	3.565	12.250
44	0.475	0.142	0.002	0.272	0.001	0.273	0.178	3.671	12.985
45	0.506	0.156	0.001	0.233	0.000	0.234	0.171	3.782	13.765
46	0.539	0.171	0.001	0.197	0.000	0.197	0.165	3.895	14.590
47	0.575	0.186	0.000	0.163	0.000	0.164	0.158	4.012	15.466
48	0.616	0.203	0.000	0.133	0.000	0.133	0.152	4.132	16.394
49	0.661	0.220	0.000	0.106	0.000	0.106	0.146	4.256	17.378
50	0.713	0.238	0.000	0.083	0.000	0.083	0.141	4.384	18.420
51	0.773	0.257	0.000	0.063	0.000	0.063	0.135	4.515	19.525
52	0.841	0.276	0.000	0.047	0.000	0.047	0.130	4.651	20.697
53	0.918	0.297	0.000	0.034	0.000	0.034	0.125	4.790	21.939
54	1.000	0.317	0.000	0.024	0.000	0.024	0.120	4.934	23.255
55	-	0.339	-	0.016	-	0.016	0.116	5.082	24.650
56	-	0.361	-	0.011	-	0.011	0.111	5.235	26.129
57	-	0.384	-	0.007	-	0.007	0.107	5.392	27.697
58	-	0.405	-	0.004	-	0.004	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 57

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	57.00	M		
	CLAIMANT 2 (y)	53.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			24.51	15.87
(12)	APV FOR CLAIMANT 2			57.88	27.67
(13)	APV FOR BOTH CLAIMANTS ALIVE			22.50	14.98
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			37.40	13.59
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			189,529	122,745
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			550,072	278,765
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			36.012	21.606
(23)	APV OF MEDICAL BENEFIT			229,036	137,412

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.017	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.018	0.002	0.983	0.998	0.981	0.019	0.962	1.030	1.060
2	0.020	0.002	0.965	0.996	0.961	0.039	0.925	1.061	1.124
3	0.022	0.003	0.946	0.994	0.940	0.060	0.889	1.093	1.191
4	0.024	0.003	0.925	0.991	0.917	0.082	0.855	1.126	1.262
5	0.027	0.003	0.903	0.988	0.892	0.107	0.822	1.159	1.338
6	0.030	0.004	0.879	0.985	0.865	0.133	0.790	1.194	1.419
7	0.033	0.004	0.853	0.981	0.837	0.161	0.760	1.230	1.504
8	0.037	0.005	0.825	0.977	0.806	0.190	0.731	1.267	1.594
9	0.041	0.006	0.794	0.972	0.772	0.222	0.703	1.305	1.689
10	0.046	0.007	0.762	0.966	0.736	0.256	0.676	1.344	1.791
11	0.050	0.008	0.727	0.960	0.698	0.291	0.650	1.384	1.898
12	0.055	0.009	0.691	0.952	0.658	0.327	0.625	1.426	2.012
13	0.059	0.010	0.653	0.944	0.616	0.364	0.601	1.469	2.133
14	0.064	0.011	0.614	0.935	0.574	0.401	0.577	1.513	2.261
15	0.069	0.012	0.575	0.925	0.532	0.437	0.555	1.558	2.397
16	0.074	0.013	0.535	0.914	0.489	0.471	0.534	1.605	2.540
17	0.080	0.014	0.496	0.902	0.447	0.503	0.513	1.653	2.693
18	0.086	0.015	0.456	0.890	0.406	0.534	0.494	1.702	2.854
19	0.094	0.017	0.417	0.877	0.366	0.563	0.475	1.754	3.026
20	0.102	0.018	0.378	0.862	0.326	0.588	0.456	1.806	3.207
21	0.111	0.020	0.339	0.846	0.287	0.611	0.439	1.860	3.400
22	0.121	0.023	0.301	0.829	0.250	0.631	0.422	1.916	3.604
23	0.131	0.025	0.265	0.810	0.215	0.646	0.406	1.974	3.820
24	0.141	0.028	0.230	0.790	0.182	0.656	0.390	2.033	4.049
25	0.151	0.032	0.198	0.767	0.152	0.662	0.375	2.094	4.292
26	0.162	0.035	0.168	0.743	0.125	0.661	0.361	2.157	4.549
27	0.173	0.039	0.141	0.717	0.101	0.656	0.347	2.221	4.822
28	0.186	0.044	0.116	0.689	0.080	0.645	0.333	2.288	5.112
29	0.201	0.049	0.095	0.658	0.062	0.628	0.321	2.357	5.418
30	0.218	0.055	0.076	0.626	0.047	0.607	0.308	2.427	5.743
31	0.237	0.061	0.059	0.592	0.035	0.581	0.296	2.500	6.088
32	0.258	0.068	0.045	0.556	0.025	0.551	0.285	2.575	6.453
33	0.282	0.075	0.033	0.518	0.017	0.517	0.274	2.652	6.841
34	0.309	0.084	0.024	0.479	0.012	0.480	0.264	2.732	7.251
35	0.339	0.094	0.017	0.439	0.007	0.441	0.253	2.814	7.686
36	0.371	0.105	0.011	0.398	0.004	0.400	0.244	2.898	8.147
37	0.406	0.116	0.007	0.356	0.002	0.358	0.234	2.985	8.636
38	0.444	0.129	0.004	0.315	0.001	0.316	0.225	3.075	9.154
39	0.475	0.142	0.002	0.274	0.001	0.275	0.217	3.167	9.704
40	0.506	0.156	0.001	0.235	0.000	0.236	0.208	3.262	10.286
41	0.539	0.171	0.001	0.198	0.000	0.199	0.200	3.360	10.903
42	0.575	0.186	0.000	0.165	0.000	0.165	0.193	3.461	11.557
43	0.616	0.203	0.000	0.134	0.000	0.134	0.185	3.565	12.250
44	0.661	0.220	0.000	0.107	0.000	0.107	0.178	3.671	12.985
45	0.713	0.238	0.000	0.083	0.000	0.083	0.171	3.782	13.765
46	0.773	0.257	0.000	0.064	0.000	0.064	0.165	3.895	14.590
47	0.841	0.276	0.000	0.047	0.000	0.047	0.158	4.012	15.466
48	0.918	0.297	0.000	0.034	0.000	0.034	0.152	4.132	16.394
49	1.000	0.317	0.000	0.024	0.000	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 62

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	62.00	M		
	CLAIMANT 2 (y)	58.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			18.54	12.96
(12)	APV FOR CLAIMANT 2			45.91	24.20
(13)	APV FOR BOTH CLAIMANTS ALIVE			16.83	12.08
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			30.78	12.99
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			143,339	100,187
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			433,214	240,563
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			25.322	16.719
(23)	APV OF MEDICAL BENEFIT			161,050	106,334

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.027	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.030	0.004	0.973	0.997	0.970	0.030	0.962	1.030	1.060
2	0.033	0.004	0.945	0.993	0.938	0.062	0.925	1.061	1.124
3	0.037	0.005	0.913	0.988	0.903	0.096	0.889	1.093	1.191
4	0.041	0.006	0.880	0.983	0.865	0.133	0.855	1.126	1.262
5	0.046	0.007	0.844	0.978	0.825	0.171	0.822	1.159	1.338
6	0.050	0.008	0.805	0.971	0.782	0.212	0.790	1.194	1.419
7	0.055	0.009	0.765	0.964	0.737	0.254	0.760	1.230	1.504
8	0.059	0.010	0.723	0.955	0.691	0.297	0.731	1.267	1.594
9	0.064	0.011	0.680	0.946	0.643	0.339	0.703	1.305	1.689
10	0.069	0.012	0.637	0.936	0.596	0.381	0.676	1.344	1.791
11	0.074	0.013	0.593	0.925	0.548	0.421	0.650	1.384	1.898
12	0.080	0.014	0.549	0.913	0.501	0.459	0.625	1.426	2.012
13	0.086	0.015	0.505	0.901	0.455	0.496	0.601	1.469	2.133
14	0.094	0.017	0.462	0.887	0.410	0.530	0.577	1.513	2.261
15	0.102	0.018	0.419	0.873	0.365	0.561	0.555	1.558	2.397
16	0.111	0.020	0.376	0.857	0.322	0.589	0.534	1.605	2.540
17	0.121	0.023	0.334	0.839	0.280	0.613	0.513	1.653	2.693
18	0.131	0.025	0.294	0.820	0.241	0.632	0.494	1.702	2.854
19	0.141	0.028	0.255	0.799	0.204	0.647	0.475	1.754	3.026
20	0.151	0.032	0.219	0.777	0.170	0.655	0.456	1.806	3.207
21	0.162	0.035	0.186	0.752	0.140	0.658	0.439	1.860	3.400
22	0.173	0.039	0.156	0.725	0.113	0.655	0.422	1.916	3.604
23	0.186	0.044	0.129	0.697	0.090	0.646	0.406	1.974	3.820
24	0.201	0.049	0.105	0.666	0.070	0.631	0.390	2.033	4.049
25	0.218	0.055	0.084	0.633	0.053	0.611	0.375	2.094	4.292
26	0.237	0.061	0.066	0.599	0.039	0.586	0.361	2.157	4.549
27	0.258	0.068	0.050	0.562	0.028	0.556	0.347	2.221	4.822
28	0.282	0.075	0.037	0.524	0.019	0.522	0.333	2.288	5.112
29	0.309	0.084	0.027	0.485	0.013	0.485	0.321	2.357	5.418
30	0.339	0.094	0.018	0.444	0.008	0.446	0.308	2.427	5.743
31	0.371	0.105	0.012	0.402	0.005	0.405	0.296	2.500	6.088
32	0.406	0.116	0.008	0.360	0.003	0.362	0.285	2.575	6.453
33	0.444	0.129	0.005	0.318	0.001	0.320	0.274	2.652	6.841
34	0.475	0.142	0.003	0.277	0.001	0.278	0.264	2.732	7.251
35	0.506	0.156	0.001	0.238	0.000	0.239	0.253	2.814	7.686
36	0.539	0.171	0.001	0.201	0.000	0.201	0.244	2.898	8.147
37	0.575	0.186	0.000	0.167	0.000	0.167	0.234	2.985	8.636
38	0.616	0.203	0.000	0.136	0.000	0.136	0.225	3.075	9.154
39	0.661	0.220	0.000	0.108	0.000	0.108	0.217	3.167	9.704
40	0.713	0.238	0.000	0.084	0.000	0.084	0.208	3.262	10.286
41	0.773	0.257	0.000	0.064	0.000	0.064	0.200	3.360	10.903
42	0.841	0.276	0.000	0.048	0.000	0.048	0.193	3.461	11.557
43	0.918	0.297	0.000	0.035	0.000	0.035	0.185	3.565	12.250
44	1.000	0.317	0.000	0.024	0.000	0.024	0.178	3.671	12.985
45	-	0.339	-	0.017	-	0.017	0.171	3.782	13.765
46	-	0.361	-	0.011	-	0.011	0.165	3.895	14.590
47	-	0.384	-	0.007	-	0.007	0.158	4.012	15.466
48	-	0.405	-	0.004	-	0.004	0.152	4.132	16.394
49	-	0.425	-	0.003	-	0.003	0.146	4.256	17.378
50	-	0.444	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.464	-	0.001	-	0.001	0.135	4.515	19.525
52	-	0.482	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.495	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 67

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	67.00	M		
	CLAIMANT 2 (y)	63.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			13.84	10.36
(12)	APV FOR CLAIMANT 2			35.86	20.75
(13)	APV FOR BOTH CLAIMANTS ALIVE			12.42	9.53
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			24.87	12.06
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			107,051	80,125
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			336,305	203,727
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			17.737	12.744
(23)	APV OF MEDICAL BENEFIT			112,805	81,050

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.008	0.954	0.993	0.948	0.052	0.962	1.030	1.060
2	0.055	0.009	0.907	0.986	0.894	0.105	0.925	1.061	1.124
3	0.059	0.010	0.857	0.977	0.837	0.159	0.889	1.093	1.191
4	0.064	0.011	0.806	0.968	0.780	0.214	0.855	1.126	1.262
5	0.069	0.012	0.754	0.957	0.722	0.267	0.822	1.159	1.338
6	0.074	0.013	0.703	0.946	0.665	0.319	0.790	1.194	1.419
7	0.080	0.014	0.651	0.934	0.608	0.369	0.760	1.230	1.504
8	0.086	0.015	0.599	0.921	0.552	0.417	0.731	1.267	1.594
9	0.094	0.017	0.547	0.907	0.497	0.461	0.703	1.305	1.689
10	0.102	0.018	0.496	0.892	0.443	0.503	0.676	1.344	1.791
11	0.111	0.020	0.445	0.876	0.390	0.541	0.650	1.384	1.898
12	0.121	0.023	0.396	0.858	0.340	0.575	0.625	1.426	2.012
13	0.131	0.025	0.348	0.839	0.292	0.603	0.601	1.469	2.133
14	0.141	0.028	0.302	0.818	0.247	0.626	0.577	1.513	2.261
15	0.151	0.032	0.260	0.794	0.206	0.641	0.555	1.558	2.397
16	0.162	0.035	0.221	0.769	0.170	0.650	0.534	1.605	2.540
17	0.173	0.039	0.185	0.742	0.137	0.653	0.513	1.653	2.693
18	0.186	0.044	0.153	0.713	0.109	0.648	0.494	1.702	2.854
19	0.201	0.049	0.124	0.681	0.085	0.636	0.475	1.754	3.026
20	0.218	0.055	0.099	0.648	0.064	0.619	0.456	1.806	3.207
21	0.237	0.061	0.078	0.612	0.048	0.595	0.439	1.860	3.400
22	0.258	0.068	0.059	0.575	0.034	0.566	0.422	1.916	3.604
23	0.282	0.075	0.044	0.536	0.024	0.533	0.406	1.974	3.820
24	0.309	0.084	0.032	0.496	0.016	0.496	0.390	2.033	4.049
25	0.339	0.094	0.022	0.454	0.010	0.456	0.375	2.094	4.292
26	0.371	0.105	0.014	0.411	0.006	0.414	0.361	2.157	4.549
27	0.406	0.116	0.009	0.368	0.003	0.371	0.347	2.221	4.822
28	0.444	0.129	0.005	0.326	0.002	0.327	0.333	2.288	5.112
29	0.475	0.142	0.003	0.284	0.001	0.285	0.321	2.357	5.418
30	0.506	0.156	0.002	0.243	0.000	0.244	0.308	2.427	5.743
31	0.539	0.171	0.001	0.205	0.000	0.206	0.296	2.500	6.088
32	0.575	0.186	0.000	0.170	0.000	0.171	0.285	2.575	6.453
33	0.616	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	0.661	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	0.713	0.238	0.000	0.086	0.000	0.086	0.253	2.814	7.686
36	0.773	0.257	0.000	0.066	0.000	0.066	0.244	2.898	8.147
37	0.841	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.918	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	1.000	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	-	0.339	-	0.017	-	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 72

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	72.00	M		
	CLAIMANT 2 (y)	68.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			10.36	8.24
(12)	APV FOR CLAIMANT 2			27.60	17.45
(13)	APV FOR BOTH CLAIMANTS ALIVE			9.19	7.48
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			19.57	10.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			80,072	63,682
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			257,933	169,690
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			12.549	9.704
(23)	APV OF MEDICAL BENEFIT			79,809	61,718

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.013	0.931	0.988	0.920	0.079	0.962	1.030	1.060
2	0.080	0.014	0.863	0.976	0.842	0.155	0.925	1.061	1.124
3	0.086	0.015	0.794	0.962	0.764	0.228	0.889	1.093	1.191
4	0.094	0.017	0.726	0.948	0.688	0.298	0.855	1.126	1.262
5	0.102	0.018	0.658	0.932	0.613	0.364	0.822	1.159	1.338
6	0.111	0.020	0.590	0.915	0.540	0.425	0.790	1.194	1.419
7	0.121	0.023	0.525	0.896	0.470	0.480	0.760	1.230	1.504
8	0.131	0.025	0.461	0.876	0.404	0.529	0.731	1.267	1.594
9	0.141	0.028	0.401	0.854	0.342	0.570	0.703	1.305	1.689
10	0.151	0.032	0.344	0.830	0.286	0.603	0.676	1.344	1.791
11	0.162	0.035	0.292	0.803	0.235	0.626	0.650	1.384	1.898
12	0.173	0.039	0.245	0.775	0.190	0.640	0.625	1.426	2.012
13	0.186	0.044	0.203	0.744	0.151	0.645	0.601	1.469	2.133
14	0.201	0.049	0.165	0.712	0.117	0.642	0.577	1.513	2.261
15	0.218	0.055	0.132	0.677	0.089	0.630	0.555	1.558	2.397
16	0.237	0.061	0.103	0.640	0.066	0.611	0.534	1.605	2.540
17	0.258	0.068	0.079	0.601	0.047	0.585	0.513	1.653	2.693
18	0.282	0.075	0.058	0.560	0.033	0.553	0.494	1.702	2.854
19	0.309	0.084	0.042	0.518	0.022	0.516	0.475	1.754	3.026
20	0.339	0.094	0.029	0.474	0.014	0.476	0.456	1.806	3.207
21	0.371	0.105	0.019	0.430	0.008	0.432	0.439	1.860	3.400
22	0.406	0.116	0.012	0.385	0.005	0.388	0.422	1.916	3.604
23	0.444	0.129	0.007	0.340	0.002	0.342	0.406	1.974	3.820
24	0.475	0.142	0.004	0.296	0.001	0.298	0.390	2.033	4.049
25	0.506	0.156	0.002	0.254	0.001	0.255	0.375	2.094	4.292
26	0.539	0.171	0.001	0.215	0.000	0.215	0.361	2.157	4.549
27	0.575	0.186	0.000	0.178	0.000	0.178	0.347	2.221	4.822
28	0.616	0.203	0.000	0.145	0.000	0.145	0.333	2.288	5.112
29	0.661	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.713	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.773	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.841	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.918	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	1.000	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	-	0.339	-	0.018	-	0.018	0.253	2.814	7.686
36	-	0.361	-	0.012	-	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR TERMINATED MINER CLAIMS AT ENTITLEMENT AGE 80

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	80.00	M		
	CLAIMANT 2 (y)	76.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			6.31	5.44
(12)	APV FOR CLAIMANT 2			17.26	12.43
(13)	APV FOR BOTH CLAIMANTS ALIVE			5.49	4.83
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			12.58	8.21
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			48,769	42,100
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			160,968	119,514
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			7.108	6.053
(23)	APV OF MEDICAL BENEFIT			45,206	38,495

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	0.028	0.869	0.975	0.847	0.150	0.962	1.030	1.060
2	0.151	0.032	0.747	0.947	0.707	0.279	0.925	1.061	1.124
3	0.162	0.035	0.634	0.917	0.581	0.388	0.889	1.093	1.191
4	0.173	0.039	0.531	0.885	0.470	0.476	0.855	1.126	1.262
5	0.186	0.044	0.439	0.850	0.373	0.543	0.822	1.159	1.338
6	0.201	0.049	0.357	0.812	0.290	0.589	0.790	1.194	1.419
7	0.218	0.055	0.285	0.772	0.220	0.617	0.760	1.230	1.504
8	0.237	0.061	0.223	0.730	0.163	0.627	0.731	1.267	1.594
9	0.258	0.068	0.170	0.686	0.117	0.622	0.703	1.305	1.689
10	0.282	0.075	0.126	0.639	0.081	0.604	0.676	1.344	1.791
11	0.309	0.084	0.091	0.591	0.054	0.574	0.650	1.384	1.898
12	0.339	0.094	0.063	0.541	0.034	0.536	0.625	1.426	2.012
13	0.371	0.105	0.041	0.491	0.020	0.491	0.601	1.469	2.133
14	0.406	0.116	0.026	0.439	0.011	0.442	0.577	1.513	2.261
15	0.444	0.129	0.015	0.388	0.006	0.392	0.555	1.558	2.397
16	0.475	0.142	0.009	0.338	0.003	0.341	0.534	1.605	2.540
17	0.506	0.156	0.005	0.290	0.001	0.292	0.513	1.653	2.693
18	0.539	0.171	0.002	0.245	0.001	0.246	0.494	1.702	2.854
19	0.575	0.186	0.001	0.203	0.000	0.204	0.475	1.754	3.026
20	0.616	0.203	0.000	0.165	0.000	0.166	0.456	1.806	3.207
21	0.661	0.220	0.000	0.132	0.000	0.132	0.439	1.860	3.400
22	0.713	0.238	0.000	0.103	0.000	0.103	0.422	1.916	3.604
23	0.773	0.257	0.000	0.078	0.000	0.078	0.406	1.974	3.820
24	0.841	0.276	0.000	0.058	0.000	0.058	0.390	2.033	4.049
25	0.918	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	1.000	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	-	0.339	-	0.020	-	0.020	0.347	2.221	4.822
28	-	0.361	-	0.013	-	0.013	0.333	2.288	5.112
29	-	0.384	-	0.009	-	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF WEIGHTED NOMINAL BENEFITS PER CLAIM FOR TERMINATED MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 42			NOMINAL ESTIMATES AT ENTITLEMENT AGE 47			NOMINAL ESTIMATES AT ENTITLEMENT AGE 52			NOMINAL ESTIMATES AT ENTITLEMENT AGE 57			NOMINAL ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	1,203,812	2,240,963	88,205	1,109,614	2,112,949	125,704	990,497	1,947,102	172,023	849,561	1,735,758	236,864	690,725	1,474,461	319,678
20 - 24	1,048,096	1,690,183	63,939	966,082	1,593,632	96,951	862,373	1,468,547	137,922	739,668	1,309,146	195,163	601,377	1,112,071	268,156
25 - 29	939,653	1,350,908	46,221	866,125	1,273,738	76,132	773,147	1,173,761	113,420	663,137	1,046,358	165,419	539,155	888,842	231,628
30 - 34	820,800	1,022,239	27,007	756,573	963,844	53,514	675,354	888,191	86,754	579,260	791,784	132,994	470,959	672,591	191,756
35 - 39	717,203	773,773	11,781	661,082	729,572	35,277	590,114	672,307	64,913	506,148	599,333	106,041	411,517	509,111	158,205
40 - 44	645,563	620,921	-	580,188	554,675	17,643	517,904	511,138	44,338	444,213	455,657	81,274	361,162	387,064	128,004
45 - 49	645,563	620,921	-	527,667	449,733	-	460,485	393,695	20,191	394,963	350,962	54,309	321,120	298,130	97,304
50 - 54	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	355,770	273,861	26,637	289,254	232,635	67,161
55 - 59	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	267,943	186,678	32,704
60 - 64	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
65 - 69	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
70 - 74	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
75 - 79	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
80 - 84	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
85 - 89	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 67			NOMINAL ESTIMATES AT ENTITLEMENT AGE 72			NOMINAL ESTIMATES AT ENTITLEMENT AGE 80			NOMINAL ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	517,977	1,166,324	423,147	344,645	833,033	535,957	124,686	346,820	632,091	697,900	1,467,460	323,979
20 - 24	450,975	879,666	359,202	300,064	628,291	458,411	108,558	261,579	543,819	607,625	1,106,790	271,873
25 - 29	404,314	703,089	314,084	269,018	502,173	403,884	97,326	209,072	481,932	544,756	884,621	234,937
30 - 34	353,174	532,031	264,780	234,991	379,997	344,254	85,015	158,206	414,206	475,852	669,397	194,618
35 - 39	308,598	402,715	222,896	205,331	287,634	293,250	74,285	119,752	355,944	415,792	506,693	160,680
40 - 44	270,836	306,174	185,803	180,206	218,681	248,605	65,195	91,044	305,450	365,239	385,885	130,215
45 - 49	240,809	235,825	150,255	160,226	168,435	207,704	57,967	70,125	261,020	315,267	290,708	104,430
50 - 54	216,913	184,018	116,792	144,327	131,433	170,538	52,215	54,720	222,006	275,165	221,742	79,276
55 - 59	200,931	147,665	81,466	133,693	105,468	134,129	48,368	43,910	186,765	245,064	173,455	52,367
60 - 64	193,951	123,475	41,499	129,048	88,191	96,332	46,687	36,717	154,030	218,052	137,561	28,188
65 - 69	198,753	112,805	-	134,513	79,633	50,360	48,664	33,154	120,911	177,644	101,842	16,642
70 - 74	198,753	112,805	-	151,216	79,809	-	57,030	33,658	82,851	151,216	79,809	-
75 - 79	198,753	112,805	-	151,216	79,809	-	77,614	39,680	30,974	77,614	39,680	30,974
80 - 84	198,753	112,805	-	151,216	79,809	-	93,649	45,206	-	93,649	45,206	-
85 - 89	198,753	112,805	-	151,216	79,809	-	93,649	45,206	-	93,649	45,206	-

(1) OHIO COAL SURVEY DATA
(2)-(4) SECTION 8A, EXHIBIT 4, SHEET 2A, COL. (16), (17), (18)
(5)-(7) SECTION 8A, EXHIBIT 4, SHEET 2B, COL. (16), (17), (18)
(8)-(10) SECTION 8A, EXHIBIT 4, SHEET 2C, COL. (16), (17), (18)
(11)-(13) SECTION 8A, EXHIBIT 4, SHEET 2D, COL. (16), (17), (18)
(14)-(16) SECTION 8A, EXHIBIT 4, SHEET 2E, COL. (16), (17), (18)
(17)-(19) SECTION 8A, EXHIBIT 4, SHEET 2F, COL. (16), (17), (18)
(20) - (22) SECTION 8A, EXHIBIT 4, SHEET 2G, COL. (16), (17), (18)
(23) - (25) SECTION 8A, EXHIBIT 4, SHEET 2H, COL. (16), (17), (18)
(26) - (28) WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8A, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF WEIGHTED DISCOUNTED BENEFITS PER CLAIM FOR TERMINATED MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 42			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 47			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 52			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 57			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	207,407	386,974	12,734	171,741	339,065	16,374	137,944	288,056	20,377	106,180	234,609	25,510	77,117	180,265	31,200
20 - 24	219,701	355,097	11,231	181,921	311,135	15,365	146,121	264,328	19,878	112,474	215,283	25,573	81,688	165,416	31,842
25 - 29	230,426	332,027	9,498	190,802	290,921	14,115	153,254	247,154	19,123	117,964	201,296	25,357	85,676	154,669	32,177
30 - 34	244,889	305,679	6,752	202,777	267,835	12,071	162,873	227,542	17,796	125,368	185,323	24,803	91,053	142,395	32,409
35 - 39	260,339	281,510	3,583	215,571	246,658	9,681	173,149	209,551	16,200	133,278	170,670	24,061	96,798	131,137	32,531
40 - 44	274,139	264,271	-	230,182	228,157	5,891	184,884	193,832	13,463	142,311	157,868	22,437	103,359	121,300	32,024
45 - 49	274,139	264,271	-	244,904	216,413	-	200,001	181,642	7,459	153,947	147,939	18,241	111,809	113,671	29,617
50 - 54	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	168,714	140,449	10,885	122,534	107,916	24,871
55 - 59	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	138,098	105,359	14,735
60 - 64	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
65 - 69	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
70 - 74	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
75 - 79	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
80 - 84	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
85 - 89	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 67			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 72			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 80			DISCOUNTED ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	51,391	127,540	37,267	30,246	80,586	42,391	8,892	26,995	41,610	83,343	187,747	30,650
20 - 24	54,437	117,034	38,489	32,038	73,948	44,113	9,419	24,771	43,555	88,283	172,281	31,215
25 - 29	57,095	109,430	39,371	33,602	69,143	45,467	9,879	23,162	45,154	92,593	161,088	31,474
30 - 34	60,678	100,747	40,382	35,711	63,657	47,151	10,499	21,324	47,217	98,404	148,305	31,596
35 - 39	64,507	92,781	41,359	37,965	58,623	48,867	11,161	19,638	49,366	104,613	136,579	31,596
40 - 44	68,879	85,822	41,946	40,538	54,226	50,403	11,918	18,165	51,541	111,626	126,413	30,950
45 - 49	74,510	80,424	41,270	43,852	50,816	51,234	12,892	17,022	53,587	114,242	113,681	29,782
50 - 54	81,657	76,352	39,028	48,059	48,243	51,180	14,129	16,160	55,452	118,333	103,421	26,989
55 - 59	92,029	74,543	33,122	54,163	47,100	48,974	15,923	15,778	56,756	124,193	95,774	20,937
60 - 64	108,077	75,836	20,528	63,608	47,917	42,794	18,700	16,051	56,949	126,607	87,519	13,043
65 - 69	129,566	81,050	-	80,666	52,641	27,219	23,715	17,634	54,389	113,741	71,801	8,677
70 - 74	129,566	81,050	-	106,085	61,718	-	33,813	21,780	45,344	106,085	61,718	-
75 - 79	129,566	81,050	-	106,085	61,718	-	55,987	31,241	20,624	55,987	31,241	20,624
80 - 84	129,566	81,050	-	106,085	61,718	-	73,066	38,495	-	73,066	38,495	-
85 - 89	129,566	81,050	-	106,085	61,718	-	73,066	38,495	-	73,066	38,495	-

(1)	OHIO COAL SURVEY DATA
(2)-(4)	SECTION 8A, EXHIBIT 4, SHEET 2A, COL. (19), (20), (21)
(5)-(7)	SECTION 8A, EXHIBIT 4, SHEET 2B, COL. (19), (20), (21)
(8)-(10)	SECTION 8A, EXHIBIT 4, SHEET 2C, COL. (19), (20), (21)
(11)-(13)	SECTION 8A, EXHIBIT 4, SHEET 2D, COL. (19), (20), (21)
(14)-(16)	SECTION 8A, EXHIBIT 4, SHEET 2E, COL. (19), (20), (21)
(17)-(19)	SECTION 8A, EXHIBIT 4, SHEET 2F, COL. (19), (20), (21)
(20) - (22)	SECTION 8A, EXHIBIT 4, SHEET 2G, COL. (19), (20), (21)
(23) - (25)	SECTION 8A, EXHIBIT 4, SHEET 2H, COL. (19), (20), (21)
(26) - (28)	WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8A, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF LIABILITY FOR ACTIVE MINERS - LOW ESTIMATE

LOW

(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	10%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF ACTIVE MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER ENTITLEMENTS	NUMBER OF SURVIVOR ENTITLEMENTS	MINER INDEMNITY PER ENTITLEMENT	SURVIVOR INDEMNITY PER ENTITLEMENT	MINER MEDICAL PER ENTITLEMENT	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	19	0.6%	15	2	-	697,900	323,979	1,467,460	1,395,801	2,934,921	4,330,721	100%	4,330,721
20 - 24	23	9.2%	239	24	1	624,589	281,741	1,170,827	15,271,882	28,099,858	43,371,741	100%	43,371,741
25 - 29	28	10.4%	269	27	2	544,756	234,937	884,621	15,178,294	23,884,777	39,063,071	100%	39,063,071
30 - 34	33	11.4%	296	30	2	475,852	194,618	669,397	14,664,799	20,081,921	34,746,720	100%	34,746,720
35 - 39	38	10.2%	264	26	2	415,792	160,680	506,693	11,131,961	13,174,029	24,305,990	100%	24,305,990
40 - 44	43	11.7%	304	30	2	365,239	130,215	385,885	11,217,610	11,576,564	22,794,174	100%	22,794,174
45 - 49	48	9.4%	243	24	1	315,267	104,430	290,708	7,670,838	6,976,995	14,647,833	100%	14,647,833
50 - 54	53	10.5%	272	27	2	275,165	79,276	221,742	7,588,000	5,987,032	13,575,032	100%	13,575,032
55 - 59	58	13.4%	347	35	2	245,064	52,367	173,455	8,681,991	6,070,924	14,752,914	100%	14,752,914
60 - 64	63	8.8%	229	23	1	218,052	28,188	137,561	5,043,385	3,163,892	8,207,276	100%	8,207,276
65 - 69	68	2.9%	75	8	-	177,644	16,642	101,842	1,421,154	814,739	2,235,893	100%	2,235,893
70 - 74	72	1.0%	27	3	-	151,216	-	79,809	453,649	239,427	693,076	100%	693,076
75 - 79	78	0.3%	8	1	-	77,614	30,974	39,680	77,614	39,680	117,294	100%	117,294
80 - 84	85	0.1%	2	-	-	93,649	-	45,206	-	-	-	100%	-
85 - 89	87	0.1%	2	-	-	93,649	-	45,206	-	-	-	100%	-
TOTAL			**2,592**	**260**	**15**				**99,796,976**	**123,044,759**	**222,841,735**		**222,841,735**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
83,343	30,650	187,747	166,686	375,493	542,179	100%	542,179
87,258	31,121	175,240	2,125,306	4,205,749	6,331,055	100%	6,331,055
92,593	31,474	161,088	2,562,959	4,349,377	6,912,336	100%	6,912,336
98,404	31,596	148,305	3,015,326	4,449,158	7,464,484	100%	7,464,484
104,613	31,596	136,579	2,783,132	3,551,059	6,334,191	100%	6,334,191
111,626	30,950	126,413	3,410,671	3,792,382	7,203,052	100%	7,203,052
114,242	29,782	113,681	2,771,586	2,728,346	5,499,932	100%	5,499,932
118,333	26,989	103,421	3,248,962	2,792,374	6,041,336	100%	6,041,336
124,193	20,937	95,774	4,388,640	3,352,098	7,740,738	100%	7,740,738
126,607	13,043	87,519	2,925,006	2,012,943	4,937,948	100%	4,937,948
113,741	8,677	71,801	909,929	574,409	1,484,337	100%	1,484,337
106,085	-	61,718	318,256	185,155	503,412	100%	503,411.96
55,987	20,624	31,241	55,987	31,241	87,227	100%	87,227
73,066	-	38,495	-	-	-	100%	-
73,066	-	38,495	-	-	-	100%	-
	TOTAL		**28,682,446**	**32,399,783**	**61,082,229**		**61,082,229**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (26)
(7A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (26)
(8) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (28)
(8A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (28)
(9) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (27)
(9A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) ACTIVE MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8A, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF LIABILITY FOR ACTIVE MINERS - HIGH ESTIMATE

	HIGH
(A) PROB OF CLAIM FILING	100%
(B) PROB OF FILING BEING ENTITLED	15%
(C) SURVIVOR FREQUENCY LOAD	6%

NOMINAL ESTIMATES

CURRENT AGE GROUP OF ACTIVE MINERS	AVERAGE AGE	% OF MINERS	NUMBER OF MINERS	NUMBER OF MINER ENTITLEMENTS	NUMBER OF SURVIVOR ENTITLEMENTS	MINER INDEMNITY PER ENTITLEMENT	SURVIVOR INDEMNITY PER ENTITLEMENT	MINER MEDICAL PER ENTITLEMENT	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14 - 19	19	0.6%	15	2	-	697,900	323,979	1,467,460	1,395,801	2,934,921	4,330,721	100%	4,330,721
20 - 24	23	9.2%	239	36	2	624,589	281,741	1,170,827	23,048,694	42,149,787	65,198,481	100%	65,198,481
25 - 29	28	10.4%	269	40	2	544,756	234,937	884,621	22,260,125	35,384,855	57,644,980	100%	57,644,980
30 - 34	33	11.4%	296	44	3	475,852	194,618	669,397	21,521,346	29,453,485	50,974,831	100%	50,974,831
35 - 39	38	10.2%	264	40	2	415,792	160,680	506,693	16,953,053	20,267,737	37,220,790	100%	37,220,790
40 - 44	43	11.7%	304	46	3	365,239	130,215	385,885	17,191,654	17,750,732	34,942,386	100%	34,942,386
45 - 49	48	9.4%	243	36	2	315,267	104,430	290,708	11,558,471	10,465,492	22,023,964	100%	22,023,964
50 - 54	53	10.5%	272	41	2	275,165	79,276	221,742	11,440,306	9,091,419	20,531,725	100%	20,531,725
55 - 59	58	13.4%	347	52	3	245,064	52,367	173,455	12,900,454	9,019,658	21,920,112	100%	21,920,112
60 - 64	63	8.8%	229	34	2	218,052	28,188	137,561	7,470,145	4,677,057	12,147,202	100%	12,147,202
65 - 69	68	2.9%	75	11	1	177,644	16,642	101,842	1,970,728	1,120,266	3,090,995	100%	3,090,995
70 - 74	72	1.0%	27	4	-	151,216	-	79,809	604,866	319,235	924,101	100%	924,101
75 - 79	78	0.3%	8	1	-	77,614	30,974	39,680	77,614	39,680	117,294	100%	117,294
80 - 84	85	0.1%	2	-	-	93,649	-	45,206	-	-	-	100%	-
85 - 89	87	0.1%	2	-	-	93,649	-	45,206	-	-	-	100%	-
TOTAL			**2,592**	**387**	**22**				**148,393,257**	**182,674,325**	**331,067,582**		**331,067,582**

DISCOUNTED ESTIMATES

MINER INDEMNITY PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	TOTAL INDEMNITY	TOTAL MEDICAL	TOTAL	% ACCRUED	ACCRUED LIABILITY
(7A)	(8A)	(9A)	(10A)	(11A)	(12A)	(13A)	(14A)
83,343	30,650	187,747	166,686	375,493	542,179	100%	542,179
87,258	31,121	175,240	3,203,520	6,308,623	9,512,143	100%	9,512,143
92,593	31,474	161,088	3,766,669	6,443,522	10,210,190	100%	10,210,190
98,404	31,596	148,305	4,424,584	6,525,432	10,950,016	100%	10,950,016
104,613	31,596	136,579	4,247,715	5,463,168	9,710,882	100%	9,710,882
111,626	30,950	126,413	5,227,632	5,814,985	11,042,617	100%	11,042,617
114,242	29,782	113,681	4,172,270	4,092,519	8,264,790	100%	8,264,790
118,333	26,989	103,421	4,905,620	4,240,272	9,145,892	100%	9,145,892
124,193	20,937	95,774	6,520,863	4,980,260	11,501,123	100%	11,501,123
126,607	13,043	87,519	4,330,726	2,975,654	7,306,381	100%	7,306,381
113,741	8,677	71,801	1,259,829	789,812	2,049,641	100%	2,049,641
106,085	-	61,718	424,342	246,874	671,216	100%	671,216
55,987	20,624	31,241	55,987	31,241	87,227	100%	87,227
73,066	-	38,495	-	-	-	100%	-
73,066	-	38,495	-	-	-	100%	-
	TOTAL		**42,706,444**	**48,287,854**	**90,994,298**		**90,994,298**

(1) OHIO COAL SURVEY DATA
(2) OHIO COAL SURVEY DATA
(3) = (4) / (4, TOTAL)
(4) OHIO COAL SURVEY DATA
(5) = (4) * SELECTED PROB OF CLAIM FILING * SELECTED PROB OF FILING BEING ENTITLED
(6) = SELECTED SURVIVOR FREQUENCY LOAD * (4)
(7) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (26)
(7A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (26)
(8) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (28)
(8A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (28)

(9) SECTION 8A, EXHIBIT 5, SHEET 4, COL. (27)
(9A) SECTION 8A, EXHIBIT 5, SHEET 4A, COL. (27)
(10) & (10A) = (5) * (7) + (6) * (8)
(11) & (11A) = (5) * (9)
(12) & (12A) = (10) + (11)
(13) & (13A) ACTIVE MINER IS 100% OF THE LIABILITY
(E.G. NOT PRO-RATED FOR YEARS OF SERVICE)
(14) & (14A) = (12) * (13)
(A) SELECTED BY DELOITTE
(B) BASED ON ULTIMATE LIVING MINER ENTITLEMENT RATIOS FROM SECTION 8A, EXHIBIT 3, SHEET 4.2
(C) BASED ON OHIO AND COUNTRYWIDE DEPT. OF LABOR LIVING WIDOW ENTITLEMENT DATA

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 42

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	395,317	1,020,933	810,414	620,921
DISCOUNTED	196,703	390,292	288,373	264,271

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	1.974	3.820	0.406	40.0%	0.945	0.055	609,962	259,020	44,693	15,903	1,203,812	2,240,963	88,205	207,407	386,974	12,734
23	1.754	3.026	0.475	40.0%	0.952	0.048	614,402	260,906	39,119	13,920	1,077,357	1,787,974	68,595	217,149	361,195	11,585
28	1.513	2.261	0.577	40.0%	0.962	0.038	621,221	263,802	30,558	10,873	939,653	1,350,908	46,221	230,426	332,027	9,498
33	1.305	1.689	0.703	40.0%	0.974	0.026	629,075	267,137	20,699	7,365	820,800	1,022,239	27,007	244,889	305,679	6,752
38	1.126	1.262	0.855	40.0%	0.987	0.013	637,225	270,598	10,467	3,725	717,203	773,773	11,781	260,339	281,510	3,583
43	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
48	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
53	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
58	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
63	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
68	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
72	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
78	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
85	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-
87	1.000	1.000	1.000	40.0%	1.000	-	645,563	274,139	-	-	645,563	620,921	-	274,139	264,271	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3A, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3A, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3A, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 5, SHEET 3A, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 47

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	314,516	847,392	679,266	449,733
DISCOUNTED	171,696	354,715	265,329	216,413

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	2.288	5.112	0.333	40.0%	0.919	0.081	484,987	225,095	54,942	21,461	1,109,614	2,112,949	125,704	171,741	339,065	16,374
23	2.033	4.049	0.390	40.0%	0.926	0.074	488,517	226,733	50,397	19,686	993,054	1,685,837	102,447	179,808	316,478	15,612
28	1.754	3.026	0.475	40.0%	0.936	0.064	493,939	229,250	43,417	16,959	866,125	1,273,738	76,132	190,802	290,921	14,115
33	1.513	2.261	0.577	40.0%	0.948	0.052	500,184	232,148	35,379	13,819	756,573	963,844	53,514	202,777	267,835	12,071
38	1.305	1.689	0.703	40.0%	0.960	0.040	506,664	235,156	27,037	10,561	661,082	729,572	35,277	215,571	246,658	9,681
43	1.126	1.262	0.855	40.0%	0.977	0.023	515,489	239,252	15,676	6,123	580,188	554,675	17,643	230,182	228,157	5,891
48	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
53	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
58	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
63	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
68	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
72	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
78	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
85	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-
87	1.000	1.000	1.000	40.0%	1.000	-	527,667	244,904	-	-	527,667	449,733	-	244,904	216,413	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3B, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3B, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3B, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 5, SHEET 3B, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 52

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	246,008	687,941	555,769	322,245
DISCOUNTED	146,680	317,020	240,191	173,930

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	2.652	6.841	0.274	40.0%	0.883	0.117	373,443	189,747	64,857	28,030	990,497	1,947,102	172,023	137,944	288,056	20,377
23	2.357	5.418	0.321	40.0%	0.890	0.110	376,162	191,128	61,284	26,485	886,450	1,553,515	144,419	144,424	268,867	20,013
28	2.033	4.049	0.390	40.0%	0.900	0.100	380,337	193,250	55,795	24,113	773,147	1,173,761	113,420	153,254	247,154	19,123
33	1.754	3.026	0.475	40.0%	0.911	0.089	385,145	195,693	49,475	21,382	675,354	888,191	86,754	162,873	227,542	17,796
38	1.513	2.261	0.577	40.0%	0.923	0.077	390,135	198,228	42,915	18,547	590,114	672,307	64,913	173,149	209,551	16,200
43	1.305	1.689	0.703	40.0%	0.939	0.061	396,931	201,681	33,982	14,686	517,904	511,138	44,338	184,884	193,832	13,463
48	1.126	1.262	0.855	40.0%	0.968	0.032	409,135	207,882	17,939	7,753	460,485	393,695	20,191	200,001	181,642	7,459
53	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
58	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
63	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
68	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
72	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
78	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
85	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-
87	1.000	1.000	1.000	40.0%	1.000	-	422,781	214,816	-	-	422,781	322,245	-	214,816	173,930	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3C, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3C, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3C, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 5, SHEET 3C, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 57

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	189,529	550,072	447,542	229,036
DISCOUNTED	122,745	278,765	213,951	137,412

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	3.075	9.154	0.225	40.0%	0.828	0.172	276,299	153,283	77,034	36,827	849,561	1,735,758	236,864	106,180	234,609	25,510
23	2.732	7.251	0.264	40.0%	0.834	0.166	278,311	154,399	74,337	35,537	760,319	1,384,891	203,082	111,167	218,980	25,587
28	2.357	5.418	0.321	40.0%	0.843	0.157	281,400	156,113	70,195	33,557	663,137	1,046,358	165,419	117,964	201,296	25,357
33	2.033	4.049	0.390	40.0%	0.854	0.146	284,957	158,086	65,424	31,277	579,260	791,784	132,994	125,368	185,323	24,803
38	1.754	3.026	0.475	40.0%	0.865	0.135	288,649	160,135	60,474	28,910	506,148	599,333	106,041	133,278	170,670	24,061
43	1.513	2.261	0.577	40.0%	0.880	0.120	293,677	162,924	53,732	25,687	444,213	455,657	81,274	142,311	157,868	22,437
48	1.305	1.689	0.703	40.0%	0.907	0.093	302,706	167,933	41,623	19,898	394,963	350,962	54,309	153,947	147,939	18,241
53	1.126	1.262	0.855	40.0%	0.947	0.053	316,097	175,362	23,667	11,314	355,770	273,861	26,637	168,714	140,449	10,885
58	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
63	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
68	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
72	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
78	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
85	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-
87	1.000	1.000	1.000	40.0%	1.000	-	333,746	185,153	-	-	333,746	229,036	-	185,153	137,412	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3D, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3D, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3D, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 5, SHEET 3D, ROW 23
(5) AVERAGE AGE OF THE GROUP
(6) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
(17) = (4) * (7) * (10) ON A NOMINAL BASIS
(18) = (6) * (14)
(19) = (6) * (8) * (12)
(20) = (4) * (7) * (8) * (10) ON A DISCOUNTED BASIS
(21) = (6) * (8) * (15)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 62

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	143,339	433,214	354,961	161,050
DISCOUNTED	100,187	240,563	187,095	106,334

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	3.565	12.250	0.185	40.0%	0.747	0.253	193,778	116,838	89,683	47,271	690,725	1,474,461	319,678	77,117	180,265	31,200
23	3.167	9.704	0.217	40.0%	0.753	0.247	195,189	117,688	87,752	46,253	618,167	1,176,413	277,914	80,739	168,256	31,732
28	2.732	7.251	0.264	40.0%	0.761	0.239	197,355	118,994	84,786	44,690	539,155	888,842	231,628	85,676	154,669	32,177
33	2.357	5.418	0.321	40.0%	0.771	0.229	199,850	120,499	81,371	42,889	470,959	672,591	191,756	91,053	142,395	32,409
38	2.033	4.049	0.390	40.0%	0.781	0.219	202,439	122,060	77,826	41,021	411,517	509,111	158,205	96,798	131,137	32,531
43	1.754	3.026	0.475	40.0%	0.794	0.206	205,965	124,186	72,999	38,477	361,162	387,064	128,004	103,359	121,300	32,024
48	1.513	2.261	0.577	40.0%	0.819	0.181	212,298	128,004	64,330	33,907	321,120	298,130	97,304	111,809	113,671	29,617
53	1.305	1.689	0.703	40.0%	0.855	0.145	221,689	133,667	51,473	27,131	289,254	232,635	67,161	122,534	107,916	24,871
58	1.126	1.262	0.855	40.0%	0.918	0.082	238,063	143,539	29,057	15,316	267,943	186,678	32,704	138,098	105,359	14,735
63	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
68	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
72	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
78	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
85	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-
87	1.000	1.000	1.000	40.0%	1.000	-	259,289	156,337	-	-	259,289	161,050	-	156,337	106,334	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3E, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3E, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3E, ROW 12 * ROW 16
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(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
(8) DISCOUNT FACTOR AT 4% FROM AVERAGE AGE TO ENTITLEMENT AGE
(9) BASED ON DEPARTMENT OF LABOR (DOL) FEDERAL BLACK LUNG 'DATABASE FOR COUNTRYWIDE AND OHIO ENTITLED CLAIMS
(10) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(11) CALCULATED BASED ON MORTALITY ASSUMPTIONS
(12) & (13) = [(1) * (10)] * [1 - (9)] + (2) * (10) * (9); NOMINAL AND DISCOUNTED RESPECTIVELY
(14) & (15) = (3) * (11); NOMINAL AND DISCOUNTED RESPECTIVELY
(16) = (6) * (12)
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 67

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	107,051	336,305	277,271	112,805
DISCOUNTED	80,125	203,727	160,450	81,050

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	4.132	16.394	0.152	40.0%	0.631	0.369	125,350	81,715	102,401	59,257	517,977	1,166,324	423,147	51,391	127,540	37,267
23	3.671	12.985	0.178	40.0%	0.635	0.365	126,262	82,310	101,128	58,520	463,566	930,563	371,287	53,805	119,044	38,254
28	3.167	9.704	0.217	40.0%	0.642	0.358	127,664	83,223	99,173	57,389	404,314	703,089	314,084	57,095	109,430	39,371
33	2.732	7.251	0.264	40.0%	0.650	0.350	129,278	84,275	96,922	56,086	353,174	532,031	264,780	60,678	100,747	40,382
38	2.357	5.418	0.321	40.0%	0.659	0.341	130,953	85,367	94,585	54,734	308,598	402,715	222,896	64,507	92,781	41,359
43	2.033	4.049	0.390	40.0%	0.670	0.330	133,234	86,854	91,403	52,893	270,836	306,174	185,803	68,879	85,822	41,946
48	1.754	3.026	0.475	40.0%	0.691	0.309	137,330	89,525	85,688	49,586	240,809	235,825	150,255	74,510	80,424	41,270
53	1.513	2.261	0.577	40.0%	0.722	0.278	143,405	93,485	77,213	44,681	216,913	184,018	116,792	81,657	76,352	39,028
58	1.305	1.689	0.703	40.0%	0.775	0.225	153,997	100,390	62,437	36,131	200,931	147,665	81,466	92,029	74,543	33,122
63	1.126	1.262	0.855	40.0%	0.867	0.133	172,323	112,336	36,871	21,337	193,951	123,475	41,499	108,077	75,836	20,528
68	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
72	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
78	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
85	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-
87	1.000	1.000	1.000	40.0%	1.000	-	198,753	129,566	-	-	198,753	112,805	-	129,566	81,050	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3F, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3F, ROW 18
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(17) = (4) * (7) * (10) ON A NOMINAL BASIS
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(19) = (6) * (8) * (12)
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 72

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	80,072	257,933	213,421	79,809
DISCOUNTED	63,682	169,690	134,942	61,718

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	4.790	21.939	0.125	40.0%	0.476	0.524	71,945	50,473	111,881	70,740	344,645	833,033	535,957	30,246	80,586	42,391
23	4.256	17.378	0.146	40.0%	0.479	0.521	72,468	50,840	111,142	70,273	308,442	664,643	473,045	31,666	75,218	43,770
28	3.671	12.985	0.178	40.0%	0.485	0.515	73,273	51,404	110,007	69,555	269,018	502,173	403,884	33,602	69,143	45,467
33	3.167	9.704	0.217	40.0%	0.491	0.509	74,199	52,054	108,699	68,729	234,991	379,997	344,254	35,711	63,657	47,151
38	2.732	7.251	0.264	40.0%	0.497	0.503	75,160	52,729	107,343	67,871	205,331	287,634	293,250	37,965	58,623	48,867
43	2.357	5.418	0.321	40.0%	0.506	0.494	76,470	53,647	105,495	66,702	180,206	218,681	248,605	40,538	54,226	50,403
48	2.033	4.049	0.390	40.0%	0.521	0.479	78,821	55,297	102,177	64,604	160,226	168,435	207,704	43,852	50,816	51,234
53	1.754	3.026	0.475	40.0%	0.544	0.456	82,308	57,743	97,255	61,493	144,327	131,433	170,538	48,059	48,243	51,180
58	1.513	2.261	0.577	40.0%	0.585	0.415	88,387	62,008	88,675	56,068	133,693	105,468	134,129	54,163	47,100	48,974
63	1.305	1.689	0.703	40.0%	0.654	0.346	98,905	69,386	73,831	46,682	129,048	88,191	96,332	63,608	47,917	42,794
68	1.126	1.262	0.855	40.0%	0.790	0.210	119,513	83,844	44,744	28,291	134,513	79,633	50,360	80,666	52,641	27,219
72	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
78	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
85	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-
87	1.000	1.000	1.000	40.0%	1.000	-	151,216	106,085	-	-	151,216	79,809	-	106,085	61,718	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3G, ROW 17
(2) SECTION 8A, EXHIBIT 5, SHEET 3G, ROW 18
(3) SECTION 8A, EXHIBIT 5, SHEET 3G, ROW 12 * ROW 16
(4) SECTION 8A, EXHIBIT 5, SHEET 3G, ROW 23
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(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF CURRENT SEVERITY OF ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 80

	INDEMNITY - IW	INDEMNITY - IW + 1 DEP.	INDEMNITY - SURVIVOR	MEDICAL - IW ONLY
	(1)	(2)	(3)	(4)
APV AT AGE OF CLAIM				
NOMINAL	48,769	160,968	133,439	45,206
DISCOUNTED	42,100	119,514	96,102	38,495

					PROBABILITY		PROBABILITY WEIGHTED INDEMNITY BENEFIT				NOMINAL VALUE			DISCOUNTED VALUE		
AVERAGE AGE	INDEMNITY TREND	MEDICAL TREND	DISCOUNT FACTOR	PERCENT OF MINERS MARRIED	MINER SURVIVES	MINER DIES	MINER NOMINAL	MINER DISCOUNTED	SURVIVOR NOMINAL	SURVIVOR DISCOUNTED	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY	MINER INDEMNITY	MINER MEDICAL	SURVIVOR INDEMNITY
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19	6.068	34.967	0.091	40.0%	0.219	0.781	20,547	16,031	104,162	75,017	124,686	346,820	632,091	8,892	26,995	41,610
23	5.392	27.697	0.107	40.0%	0.221	0.779	20,697	16,148	103,949	74,863	111,589	276,714	560,456	9,310	25,196	43,161
28	4.651	20.697	0.130	40.0%	0.223	0.777	20,926	16,327	103,621	74,627	97,326	209,072	481,932	9,879	23,162	45,154
33	4.012	15.466	0.158	40.0%	0.226	0.774	21,191	16,533	103,245	74,356	85,015	158,206	414,206	10,499	21,324	47,217
38	3.461	11.557	0.193	40.0%	0.229	0.771	21,465	16,748	102,853	74,074	74,285	119,752	355,944	11,161	19,638	49,366
43	2.985	8.636	0.234	40.0%	0.233	0.767	21,839	17,039	102,321	73,691	65,195	91,044	305,450	11,918	18,165	51,541
48	2.575	6.453	0.285	40.0%	0.240	0.760	22,511	17,563	101,364	73,002	57,967	70,125	261,020	12,892	17,022	53,587
53	2.221	4.822	0.347	40.0%	0.251	0.749	23,507	18,340	99,945	71,980	52,215	54,720	222,006	14,129	16,160	55,452
58	1.916	3.604	0.422	40.0%	0.270	0.730	25,243	19,695	97,471	70,198	48,368	43,910	186,765	15,923	15,778	56,756
63	1.653	2.693	0.513	40.0%	0.302	0.698	28,247	22,038	93,191	67,115	46,687	36,717	154,030	18,700	16,051	56,949
68	1.426	2.012	0.625	40.0%	0.364	0.636	34,132	26,630	84,804	61,075	48,664	33,154	120,911	23,715	17,634	54,389
72	1.267	1.594	0.731	40.0%	0.461	0.539	43,186	33,695	71,903	51,784	54,707	33,227	91,085	31,188	20,675	47,932
78	1.061	1.124	0.925	40.0%	0.781	0.219	73,159	57,079	29,196	21,027	77,614	39,680	30,974	55,987	31,241	20,624
85	1.000	1.000	1.000	40.0%	1.000	-	93,649	73,066	-	-	93,649	45,206	-	73,066	38,495	-
87	1.000	1.000	1.000	40.0%	1.000	-	93,649	73,066	-	-	93,649	45,206	-	73,066	38,495	-

(1) SECTION 8A, EXHIBIT 5, SHEET 3H, ROW 17
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(7) MEDICAL INFLATION RATE @ 6% PER YEAR; TRENDED FROM AVERAGE AGE TO ENTITLEMENT AGE
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 42

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	42.00	M		
	CLAIMANT 2 (y)	38.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			51.12	25.44
(12)	APV FOR CLAIMANT 2			104.81	37.29
(13)	APV FOR BOTH CLAIMANTS ALIVE			47.78	24.51
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			60.37	13.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			395,317	196,703
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			1,020,933	390,292
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			97.629	41.552
(23)	APV OF MEDICAL BENEFIT			620,921	264,271

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.004	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.005	0.001	0.996	0.999	0.995	0.005	0.962	1.030	1.060
2	0.006	0.001	0.991	0.999	0.990	0.010	0.925	1.061	1.124
3	0.006	0.001	0.985	0.998	0.984	0.016	0.889	1.093	1.191
4	0.007	0.001	0.979	0.997	0.977	0.023	0.855	1.126	1.262
5	0.007	0.001	0.973	0.996	0.969	0.031	0.822	1.159	1.338
6	0.007	0.001	0.966	0.996	0.962	0.038	0.790	1.194	1.419
7	0.008	0.001	0.959	0.995	0.954	0.046	0.760	1.230	1.504
8	0.008	0.001	0.952	0.994	0.946	0.054	0.731	1.267	1.594
9	0.009	0.001	0.944	0.993	0.937	0.063	0.703	1.305	1.689
10	0.010	0.001	0.935	0.992	0.927	0.072	0.676	1.344	1.791
11	0.012	0.001	0.925	0.990	0.916	0.083	0.650	1.384	1.898
12	0.013	0.001	0.914	0.989	0.904	0.095	0.625	1.426	2.012
13	0.014	0.002	0.903	0.988	0.891	0.107	0.601	1.469	2.133
14	0.015	0.002	0.890	0.986	0.878	0.121	0.577	1.513	2.261
15	0.017	0.002	0.876	0.984	0.863	0.136	0.555	1.558	2.397
16	0.018	0.002	0.861	0.983	0.846	0.151	0.534	1.605	2.540
17	0.020	0.002	0.846	0.980	0.829	0.168	0.513	1.653	2.693
18	0.022	0.003	0.829	0.978	0.811	0.186	0.494	1.702	2.854
19	0.024	0.003	0.811	0.976	0.791	0.205	0.475	1.754	3.026
20	0.027	0.003	0.791	0.973	0.770	0.225	0.456	1.806	3.207
21	0.030	0.004	0.770	0.970	0.746	0.247	0.439	1.860	3.400
22	0.033	0.004	0.747	0.966	0.722	0.270	0.422	1.916	3.604
23	0.037	0.005	0.723	0.962	0.695	0.295	0.406	1.974	3.820
24	0.041	0.006	0.696	0.957	0.666	0.321	0.390	2.033	4.049
25	0.046	0.007	0.667	0.951	0.635	0.349	0.375	2.094	4.292
26	0.050	0.008	0.637	0.945	0.602	0.378	0.361	2.157	4.549
27	0.055	0.009	0.605	0.938	0.567	0.408	0.347	2.221	4.822
28	0.059	0.010	0.572	0.929	0.532	0.438	0.333	2.288	5.112
29	0.064	0.011	0.538	0.920	0.495	0.468	0.321	2.357	5.418
30	0.069	0.012	0.504	0.911	0.458	0.497	0.308	2.427	5.743
31	0.074	0.013	0.469	0.900	0.422	0.525	0.296	2.500	6.088
32	0.080	0.014	0.434	0.888	0.386	0.551	0.285	2.575	6.453
33	0.086	0.015	0.400	0.876	0.350	0.575	0.274	2.652	6.841
34	0.094	0.017	0.365	0.863	0.315	0.598	0.264	2.732	7.251
35	0.102	0.018	0.331	0.849	0.281	0.618	0.253	2.814	7.686
36	0.111	0.020	0.297	0.833	0.248	0.635	0.244	2.898	8.147
37	0.121	0.023	0.264	0.816	0.216	0.649	0.234	2.985	8.636
38	0.131	0.025	0.232	0.798	0.185	0.659	0.225	3.075	9.154
39	0.141	0.028	0.202	0.778	0.157	0.666	0.217	3.167	9.704
40	0.151	0.032	0.173	0.756	0.131	0.667	0.208	3.262	10.286
41	0.162	0.035	0.147	0.732	0.108	0.663	0.200	3.360	10.903
42	0.173	0.039	0.123	0.706	0.087	0.655	0.193	3.461	11.557
43	0.186	0.044	0.102	0.678	0.069	0.642	0.185	3.565	12.250
44	0.201	0.049	0.083	0.648	0.054	0.624	0.178	3.671	12.985
45	0.218	0.055	0.066	0.616	0.041	0.601	0.171	3.782	13.765
46	0.237	0.061	0.052	0.582	0.030	0.574	0.165	3.895	14.590
47	0.258	0.068	0.040	0.547	0.022	0.543	0.158	4.012	15.466
48	0.282	0.075	0.029	0.510	0.015	0.509	0.152	4.132	16.394
49	0.309	0.084	0.021	0.471	0.010	0.473	0.146	4.256	17.378
50	0.339	0.094	0.015	0.432	0.006	0.434	0.141	4.384	18.420
51	0.371	0.105	0.010	0.391	0.004	0.393	0.135	4.515	19.525
52	0.406	0.116	0.006	0.350	0.002	0.352	0.130	4.651	20.697
53	0.444	0.129	0.004	0.310	0.001	0.311	0.125	4.790	21.939
54	0.475	0.142	0.002	0.270	0.001	0.271	0.120	4.934	23.255
55	0.506	0.156	0.001	0.231	0.000	0.232	0.116	5.082	24.650
56	0.539	0.171	0.001	0.195	0.000	0.196	0.111	5.235	26.129
57	0.575	0.186	0.000	0.162	0.000	0.162	0.107	5.392	27.697
58	0.616	0.203	0.000	0.132	0.000	0.132	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 47

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	47.00	M		
	CLAIMANT 2 (y)	43.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			40.68	22.20
(12)	APV FOR CLAIMANT 2			87.85	34.31
(13)	APV FOR BOTH CLAIMANTS ALIVE			37.85	21.28
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			52.82	13.95
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			314,516	171,696
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			847,392	354,715
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			70.713	34.027
(23)	APV OF MEDICAL BENEFIT			449,733	216,413

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.007	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.007	0.001	0.993	0.999	0.992	0.008	0.962	1.030	1.060
2	0.008	0.001	0.986	0.998	0.984	0.016	0.925	1.061	1.124
3	0.008	0.001	0.978	0.997	0.976	0.024	0.889	1.093	1.191
4	0.009	0.001	0.970	0.996	0.966	0.033	0.855	1.126	1.262
5	0.010	0.001	0.961	0.995	0.956	0.043	0.822	1.159	1.338
6	0.012	0.001	0.951	0.994	0.945	0.054	0.790	1.194	1.419
7	0.013	0.001	0.940	0.993	0.933	0.067	0.760	1.230	1.504
8	0.014	0.002	0.928	0.991	0.920	0.080	0.731	1.267	1.594
9	0.015	0.002	0.915	0.990	0.905	0.094	0.703	1.305	1.689
10	0.017	0.002	0.901	0.988	0.890	0.109	0.676	1.344	1.791
11	0.018	0.002	0.886	0.986	0.873	0.125	0.650	1.384	1.898
12	0.020	0.002	0.869	0.984	0.855	0.142	0.625	1.426	2.012
13	0.022	0.003	0.852	0.982	0.836	0.161	0.601	1.469	2.133
14	0.024	0.003	0.833	0.979	0.816	0.181	0.577	1.513	2.261
15	0.027	0.003	0.813	0.976	0.794	0.202	0.555	1.558	2.397
16	0.030	0.004	0.791	0.973	0.770	0.224	0.534	1.605	2.540
17	0.033	0.004	0.768	0.969	0.744	0.248	0.513	1.653	2.693
18	0.037	0.005	0.743	0.965	0.717	0.274	0.494	1.702	2.854
19	0.041	0.006	0.715	0.960	0.687	0.302	0.475	1.754	3.026
20	0.046	0.007	0.686	0.954	0.655	0.331	0.456	1.806	3.207
21	0.050	0.008	0.655	0.948	0.621	0.361	0.439	1.860	3.400
22	0.055	0.009	0.622	0.941	0.585	0.392	0.422	1.916	3.604
23	0.059	0.010	0.588	0.933	0.548	0.424	0.406	1.974	3.820
24	0.064	0.011	0.553	0.924	0.511	0.455	0.390	2.033	4.049
25	0.069	0.012	0.518	0.914	0.473	0.485	0.375	2.094	4.292
26	0.074	0.013	0.482	0.903	0.435	0.514	0.361	2.157	4.549
27	0.080	0.014	0.447	0.892	0.398	0.542	0.347	2.221	4.822
28	0.086	0.015	0.411	0.879	0.361	0.568	0.333	2.288	5.112
29	0.094	0.017	0.376	0.866	0.325	0.591	0.321	2.357	5.418
30	0.102	0.018	0.340	0.852	0.290	0.612	0.308	2.427	5.743
31	0.111	0.020	0.306	0.836	0.256	0.631	0.296	2.500	6.088
32	0.121	0.023	0.272	0.819	0.222	0.646	0.285	2.575	6.453
33	0.131	0.025	0.239	0.801	0.191	0.657	0.274	2.652	6.841
34	0.141	0.028	0.207	0.780	0.162	0.664	0.264	2.732	7.251
35	0.151	0.032	0.178	0.758	0.135	0.666	0.253	2.814	7.686
36	0.162	0.035	0.151	0.734	0.111	0.663	0.244	2.898	8.147
37	0.173	0.039	0.127	0.708	0.090	0.655	0.234	2.985	8.636
38	0.186	0.044	0.105	0.680	0.071	0.642	0.225	3.075	9.154
39	0.201	0.049	0.085	0.650	0.055	0.625	0.217	3.167	9.704
40	0.218	0.055	0.068	0.618	0.042	0.602	0.208	3.262	10.286
41	0.237	0.061	0.053	0.584	0.031	0.575	0.200	3.360	10.903
42	0.258	0.068	0.041	0.549	0.022	0.545	0.193	3.461	11.557
43	0.282	0.075	0.030	0.512	0.015	0.511	0.185	3.565	12.250
44	0.309	0.084	0.022	0.473	0.010	0.474	0.178	3.671	12.985
45	0.339	0.094	0.015	0.433	0.006	0.435	0.171	3.782	13.765
46	0.371	0.105	0.010	0.393	0.004	0.395	0.165	3.895	14.590
47	0.406	0.116	0.006	0.352	0.002	0.353	0.158	4.012	15.466
48	0.444	0.129	0.004	0.311	0.001	0.312	0.152	4.132	16.394
49	0.475	0.142	0.002	0.271	0.001	0.272	0.146	4.256	17.378
50	0.506	0.156	0.001	0.232	0.000	0.233	0.141	4.384	18.420
51	0.539	0.171	0.001	0.196	0.000	0.196	0.135	4.515	19.525
52	0.575	0.186	0.000	0.163	0.000	0.163	0.130	4.651	20.697
53	0.616	0.203	0.000	0.132	0.000	0.132	0.125	4.790	21.939
54	0.661	0.220	0.000	0.106	0.000	0.106	0.120	4.934	23.255
55	0.713	0.238	0.000	0.082	0.000	0.082	0.116	5.082	24.650
56	0.773	0.257	0.000	0.063	0.000	0.063	0.111	5.235	26.129
57	0.841	0.276	0.000	0.047	0.000	0.047	0.107	5.392	27.697
58	0.918	0.297	0.000	0.034	0.000	0.034	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 52

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	52.00	M		
	CLAIMANT 2 (y)	48.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			31.82	18.97
(12)	APV FOR CLAIMANT 2			71.88	31.06
(13)	APV FOR BOTH CLAIMANTS ALIVE			29.43	18.06
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			44.82	13.91
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			246,008	146,680
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			687,941	317,020
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			50.667	27.347
(23)	APV OF MEDICAL BENEFIT			322,245	173,930

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.010	0.001	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.012	0.001	0.990	0.999	0.988	0.012	0.962	1.030	1.060
2	0.013	0.001	0.978	0.997	0.976	0.024	0.925	1.061	1.124
3	0.014	0.002	0.966	0.996	0.962	0.038	0.889	1.093	1.191
4	0.015	0.002	0.952	0.994	0.947	0.053	0.855	1.126	1.262
5	0.017	0.002	0.937	0.993	0.930	0.069	0.822	1.159	1.338
6	0.018	0.002	0.922	0.991	0.913	0.086	0.790	1.194	1.419
7	0.020	0.002	0.905	0.989	0.895	0.104	0.760	1.230	1.504
8	0.022	0.003	0.887	0.987	0.875	0.124	0.731	1.267	1.594
9	0.024	0.003	0.867	0.984	0.853	0.145	0.703	1.305	1.689
10	0.027	0.003	0.846	0.981	0.830	0.167	0.676	1.344	1.791
11	0.030	0.004	0.824	0.978	0.805	0.191	0.650	1.384	1.898
12	0.033	0.004	0.799	0.974	0.778	0.216	0.625	1.426	2.012
13	0.037	0.005	0.773	0.970	0.750	0.244	0.601	1.469	2.133
14	0.041	0.006	0.745	0.965	0.718	0.273	0.577	1.513	2.261
15	0.046	0.007	0.714	0.959	0.685	0.303	0.555	1.558	2.397
16	0.050	0.008	0.682	0.953	0.649	0.336	0.534	1.605	2.540
17	0.055	0.009	0.647	0.946	0.612	0.369	0.513	1.653	2.693
18	0.059	0.010	0.612	0.937	0.573	0.402	0.494	1.702	2.854
19	0.064	0.011	0.575	0.928	0.534	0.435	0.475	1.754	3.026
20	0.069	0.012	0.539	0.918	0.495	0.468	0.456	1.806	3.207
21	0.074	0.013	0.502	0.907	0.455	0.499	0.439	1.860	3.400
22	0.080	0.014	0.465	0.896	0.416	0.528	0.422	1.916	3.604
23	0.086	0.015	0.428	0.884	0.378	0.555	0.406	1.974	3.820
24	0.094	0.017	0.391	0.870	0.340	0.581	0.390	2.033	4.049
25	0.102	0.018	0.354	0.856	0.303	0.604	0.375	2.094	4.292
26	0.111	0.020	0.318	0.840	0.267	0.624	0.361	2.157	4.549
27	0.121	0.023	0.283	0.823	0.233	0.641	0.347	2.221	4.822
28	0.131	0.025	0.248	0.805	0.200	0.653	0.333	2.288	5.112
29	0.141	0.028	0.216	0.784	0.169	0.661	0.321	2.357	5.418
30	0.151	0.032	0.185	0.762	0.141	0.665	0.308	2.427	5.743
31	0.162	0.035	0.157	0.738	0.116	0.663	0.296	2.500	6.088
32	0.173	0.039	0.132	0.712	0.094	0.656	0.285	2.575	6.453
33	0.186	0.044	0.109	0.684	0.075	0.644	0.274	2.652	6.841
34	0.201	0.049	0.089	0.654	0.058	0.626	0.264	2.732	7.251
35	0.218	0.055	0.071	0.621	0.044	0.604	0.253	2.814	7.686
36	0.237	0.061	0.055	0.587	0.033	0.578	0.244	2.898	8.147
37	0.258	0.068	0.042	0.552	0.023	0.547	0.234	2.985	8.636
38	0.282	0.075	0.031	0.514	0.016	0.513	0.225	3.075	9.154
39	0.309	0.084	0.023	0.475	0.011	0.477	0.217	3.167	9.704
40	0.339	0.094	0.016	0.435	0.007	0.438	0.208	3.262	10.286
41	0.371	0.105	0.010	0.395	0.004	0.397	0.200	3.360	10.903
42	0.406	0.116	0.006	0.353	0.002	0.355	0.193	3.461	11.557
43	0.444	0.129	0.004	0.312	0.001	0.314	0.185	3.565	12.250
44	0.475	0.142	0.002	0.272	0.001	0.273	0.178	3.671	12.985
45	0.506	0.156	0.001	0.233	0.000	0.234	0.171	3.782	13.765
46	0.539	0.171	0.001	0.197	0.000	0.197	0.165	3.895	14.590
47	0.575	0.186	0.000	0.163	0.000	0.164	0.158	4.012	15.466
48	0.616	0.203	0.000	0.133	0.000	0.133	0.152	4.132	16.394
49	0.661	0.220	0.000	0.106	0.000	0.106	0.146	4.256	17.378
50	0.713	0.238	0.000	0.083	0.000	0.083	0.141	4.384	18.420
51	0.773	0.257	0.000	0.063	0.000	0.063	0.135	4.515	19.525
52	0.841	0.276	0.000	0.047	0.000	0.047	0.130	4.651	20.697
53	0.918	0.297	0.000	0.034	0.000	0.034	0.125	4.790	21.939
54	1.000	0.317	0.000	0.024	0.000	0.024	0.120	4.934	23.255
55	-	0.339	-	0.016	-	0.016	0.116	5.082	24.650
56	-	0.361	-	0.011	-	0.011	0.111	5.235	26.129
57	-	0.384	-	0.007	-	0.007	0.107	5.392	27.697
58	-	0.405	-	0.004	-	0.004	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 57

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	57.00	M		
	CLAIMANT 2 (y)	53.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			24.51	15.87
(12)	APV FOR CLAIMANT 2			57.88	27.67
(13)	APV FOR BOTH CLAIMANTS ALIVE			22.50	14.98
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			37.40	13.59
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			189,529	122,745
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			550,072	278,765
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			36.012	21.606
(23)	APV OF MEDICAL BENEFIT			229,036	137,412

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.017	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.018	0.002	0.983	0.998	0.981	0.019	0.962	1.030	1.060
2	0.020	0.002	0.965	0.996	0.961	0.039	0.925	1.061	1.124
3	0.022	0.003	0.946	0.994	0.940	0.060	0.889	1.093	1.191
4	0.024	0.003	0.925	0.991	0.917	0.082	0.855	1.126	1.262
5	0.027	0.003	0.903	0.988	0.892	0.107	0.822	1.159	1.338
6	0.030	0.004	0.879	0.985	0.865	0.133	0.790	1.194	1.419
7	0.033	0.004	0.853	0.981	0.837	0.161	0.760	1.230	1.504
8	0.037	0.005	0.825	0.977	0.806	0.190	0.731	1.267	1.594
9	0.041	0.006	0.794	0.972	0.772	0.222	0.703	1.305	1.689
10	0.046	0.007	0.762	0.966	0.736	0.256	0.676	1.344	1.791
11	0.050	0.008	0.727	0.960	0.698	0.291	0.650	1.384	1.898
12	0.055	0.009	0.691	0.952	0.658	0.327	0.625	1.426	2.012
13	0.059	0.010	0.653	0.944	0.616	0.364	0.601	1.469	2.133
14	0.064	0.011	0.614	0.935	0.574	0.401	0.577	1.513	2.261
15	0.069	0.012	0.575	0.925	0.532	0.437	0.555	1.558	2.397
16	0.074	0.013	0.535	0.914	0.489	0.471	0.534	1.605	2.540
17	0.080	0.014	0.496	0.902	0.447	0.503	0.513	1.653	2.693
18	0.086	0.015	0.456	0.890	0.406	0.534	0.494	1.702	2.854
19	0.094	0.017	0.417	0.877	0.366	0.563	0.475	1.754	3.026
20	0.102	0.018	0.378	0.862	0.326	0.588	0.456	1.806	3.207
21	0.111	0.020	0.339	0.846	0.287	0.611	0.439	1.860	3.400
22	0.121	0.023	0.301	0.829	0.250	0.631	0.422	1.916	3.604
23	0.131	0.025	0.265	0.810	0.215	0.646	0.406	1.974	3.820
24	0.141	0.028	0.230	0.790	0.182	0.656	0.390	2.033	4.049
25	0.151	0.032	0.198	0.767	0.152	0.662	0.375	2.094	4.292
26	0.162	0.035	0.168	0.743	0.125	0.661	0.361	2.157	4.549
27	0.173	0.039	0.141	0.717	0.101	0.656	0.347	2.221	4.822
28	0.186	0.044	0.116	0.689	0.080	0.645	0.333	2.288	5.112
29	0.201	0.049	0.095	0.658	0.062	0.628	0.321	2.357	5.418
30	0.218	0.055	0.076	0.626	0.047	0.607	0.308	2.427	5.743
31	0.237	0.061	0.059	0.592	0.035	0.581	0.296	2.500	6.088
32	0.258	0.068	0.045	0.556	0.025	0.551	0.285	2.575	6.453
33	0.282	0.075	0.033	0.518	0.017	0.517	0.274	2.652	6.841
34	0.309	0.084	0.024	0.479	0.012	0.480	0.264	2.732	7.251
35	0.339	0.094	0.017	0.439	0.007	0.441	0.253	2.814	7.686
36	0.371	0.105	0.011	0.398	0.004	0.400	0.244	2.898	8.147
37	0.406	0.116	0.007	0.356	0.002	0.358	0.234	2.985	8.636
38	0.444	0.129	0.004	0.315	0.001	0.316	0.225	3.075	9.154
39	0.475	0.142	0.002	0.274	0.001	0.275	0.217	3.167	9.704
40	0.506	0.156	0.001	0.235	0.000	0.236	0.208	3.262	10.286
41	0.539	0.171	0.001	0.198	0.000	0.199	0.200	3.360	10.903
42	0.575	0.186	0.000	0.165	0.000	0.165	0.193	3.461	11.557
43	0.616	0.203	0.000	0.134	0.000	0.134	0.185	3.565	12.250
44	0.661	0.220	0.000	0.107	0.000	0.107	0.178	3.671	12.985
45	0.713	0.238	0.000	0.083	0.000	0.083	0.171	3.782	13.765
46	0.773	0.257	0.000	0.064	0.000	0.064	0.165	3.895	14.590
47	0.841	0.276	0.000	0.047	0.000	0.047	0.158	4.012	15.466
48	0.918	0.297	0.000	0.034	0.000	0.034	0.152	4.132	16.394
49	1.000	0.317	0.000	0.024	0.000	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 62

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	62.00	M		
	CLAIMANT 2 (y)	58.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			18.54	12.96
(12)	APV FOR CLAIMANT 2			45.91	24.20
(13)	APV FOR BOTH CLAIMANTS ALIVE			16.83	12.08
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			30.78	12.99
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			143,339	100,187
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			433,214	240,563
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			25.322	16.719
(23)	APV OF MEDICAL BENEFIT			161,050	106,334

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.027	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.030	0.004	0.973	0.997	0.970	0.030	0.962	1.030	1.060
2	0.033	0.004	0.945	0.993	0.938	0.062	0.925	1.061	1.124
3	0.037	0.005	0.913	0.988	0.903	0.096	0.889	1.093	1.191
4	0.041	0.006	0.880	0.983	0.865	0.133	0.855	1.126	1.262
5	0.046	0.007	0.844	0.978	0.825	0.171	0.822	1.159	1.338
6	0.050	0.008	0.805	0.971	0.782	0.212	0.790	1.194	1.419
7	0.055	0.009	0.765	0.964	0.737	0.254	0.760	1.230	1.504
8	0.059	0.010	0.723	0.955	0.691	0.297	0.731	1.267	1.594
9	0.064	0.011	0.680	0.946	0.643	0.339	0.703	1.305	1.689
10	0.069	0.012	0.637	0.936	0.596	0.381	0.676	1.344	1.791
11	0.074	0.013	0.593	0.925	0.548	0.421	0.650	1.384	1.898
12	0.080	0.014	0.549	0.913	0.501	0.459	0.625	1.426	2.012
13	0.086	0.015	0.505	0.901	0.455	0.496	0.601	1.469	2.133
14	0.094	0.017	0.462	0.887	0.410	0.530	0.577	1.513	2.261
15	0.102	0.018	0.419	0.873	0.365	0.561	0.555	1.558	2.397
16	0.111	0.020	0.376	0.857	0.322	0.589	0.534	1.605	2.540
17	0.121	0.023	0.334	0.839	0.280	0.613	0.513	1.653	2.693
18	0.131	0.025	0.294	0.820	0.241	0.632	0.494	1.702	2.854
19	0.141	0.028	0.255	0.799	0.204	0.647	0.475	1.754	3.026
20	0.151	0.032	0.219	0.777	0.170	0.655	0.456	1.806	3.207
21	0.162	0.035	0.186	0.752	0.140	0.658	0.439	1.860	3.400
22	0.173	0.039	0.156	0.725	0.113	0.655	0.422	1.916	3.604
23	0.186	0.044	0.129	0.697	0.090	0.646	0.406	1.974	3.820
24	0.201	0.049	0.105	0.666	0.070	0.631	0.390	2.033	4.049
25	0.218	0.055	0.084	0.633	0.053	0.611	0.375	2.094	4.292
26	0.237	0.061	0.066	0.599	0.039	0.586	0.361	2.157	4.549
27	0.258	0.068	0.050	0.562	0.028	0.556	0.347	2.221	4.822
28	0.282	0.075	0.037	0.524	0.019	0.522	0.333	2.288	5.112
29	0.309	0.084	0.027	0.485	0.013	0.485	0.321	2.357	5.418
30	0.339	0.094	0.018	0.444	0.008	0.446	0.308	2.427	5.743
31	0.371	0.105	0.012	0.402	0.005	0.405	0.296	2.500	6.088
32	0.406	0.116	0.008	0.360	0.003	0.362	0.285	2.575	6.453
33	0.444	0.129	0.005	0.318	0.001	0.320	0.274	2.652	6.841
34	0.475	0.142	0.003	0.277	0.001	0.278	0.264	2.732	7.251
35	0.506	0.156	0.001	0.238	0.000	0.239	0.253	2.814	7.686
36	0.539	0.171	0.001	0.201	0.000	0.201	0.244	2.898	8.147
37	0.575	0.186	0.000	0.167	0.000	0.167	0.234	2.985	8.636
38	0.616	0.203	0.000	0.136	0.000	0.136	0.225	3.075	9.154
39	0.661	0.220	0.000	0.108	0.000	0.108	0.217	3.167	9.704
40	0.713	0.238	0.000	0.084	0.000	0.084	0.208	3.262	10.286
41	0.773	0.257	0.000	0.064	0.000	0.064	0.200	3.360	10.903
42	0.841	0.276	0.000	0.048	0.000	0.048	0.193	3.461	11.557
43	0.918	0.297	0.000	0.035	0.000	0.035	0.185	3.565	12.250
44	1.000	0.317	0.000	0.024	0.000	0.024	0.178	3.671	12.985
45	-	0.339	-	0.017	-	0.017	0.171	3.782	13.765
46	-	0.361	-	0.011	-	0.011	0.165	3.895	14.590
47	-	0.384	-	0.007	-	0.007	0.158	4.012	15.466
48	-	0.405	-	0.004	-	0.004	0.152	4.132	16.394
49	-	0.425	-	0.003	-	0.003	0.146	4.256	17.378
50	-	0.444	-	0.001	-	0.001	0.141	4.384	18.420
51	-	0.464	-	0.001	-	0.001	0.135	4.515	19.525
52	-	0.482	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.495	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 67

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	67.00	M		
	CLAIMANT 2 (y)	63.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			13.84	10.36
(12)	APV FOR CLAIMANT 2			35.86	20.75
(13)	APV FOR BOTH CLAIMANTS ALIVE			12.42	9.53
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			24.87	12.06
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			107,051	80,125
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			336,305	203,727
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			17.737	12.744
(23)	APV OF MEDICAL BENEFIT			112,805	81,050

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.008	0.954	0.993	0.948	0.052	0.962	1.030	1.060
2	0.055	0.009	0.907	0.986	0.894	0.105	0.925	1.061	1.124
3	0.059	0.010	0.857	0.977	0.837	0.159	0.889	1.093	1.191
4	0.064	0.011	0.806	0.968	0.780	0.214	0.855	1.126	1.262
5	0.069	0.012	0.754	0.957	0.722	0.267	0.822	1.159	1.338
6	0.074	0.013	0.703	0.946	0.665	0.319	0.790	1.194	1.419
7	0.080	0.014	0.651	0.934	0.608	0.369	0.760	1.230	1.504
8	0.086	0.015	0.599	0.921	0.552	0.417	0.731	1.267	1.594
9	0.094	0.017	0.547	0.907	0.497	0.461	0.703	1.305	1.689
10	0.102	0.018	0.496	0.892	0.443	0.503	0.676	1.344	1.791
11	0.111	0.020	0.445	0.876	0.390	0.541	0.650	1.384	1.898
12	0.121	0.023	0.396	0.858	0.340	0.575	0.625	1.426	2.012
13	0.131	0.025	0.348	0.839	0.292	0.603	0.601	1.469	2.133
14	0.141	0.028	0.302	0.818	0.247	0.626	0.577	1.513	2.261
15	0.151	0.032	0.260	0.794	0.206	0.641	0.555	1.558	2.397
16	0.162	0.035	0.221	0.769	0.170	0.650	0.534	1.605	2.540
17	0.173	0.039	0.185	0.742	0.137	0.653	0.513	1.653	2.693
18	0.186	0.044	0.153	0.713	0.109	0.648	0.494	1.702	2.854
19	0.201	0.049	0.124	0.681	0.085	0.636	0.475	1.754	3.026
20	0.218	0.055	0.099	0.648	0.064	0.619	0.456	1.806	3.207
21	0.237	0.061	0.078	0.612	0.048	0.595	0.439	1.860	3.400
22	0.258	0.068	0.059	0.575	0.034	0.566	0.422	1.916	3.604
23	0.282	0.075	0.044	0.536	0.024	0.533	0.406	1.974	3.820
24	0.309	0.084	0.032	0.496	0.016	0.496	0.390	2.033	4.049
25	0.339	0.094	0.022	0.454	0.010	0.456	0.375	2.094	4.292
26	0.371	0.105	0.014	0.411	0.006	0.414	0.361	2.157	4.549
27	0.406	0.116	0.009	0.368	0.003	0.371	0.347	2.221	4.822
28	0.444	0.129	0.005	0.326	0.002	0.327	0.333	2.288	5.112
29	0.475	0.142	0.003	0.284	0.001	0.285	0.321	2.357	5.418
30	0.506	0.156	0.002	0.243	0.000	0.244	0.308	2.427	5.743
31	0.539	0.171	0.001	0.205	0.000	0.206	0.296	2.500	6.088
32	0.575	0.186	0.000	0.170	0.000	0.171	0.285	2.575	6.453
33	0.616	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	0.661	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	0.713	0.238	0.000	0.086	0.000	0.086	0.253	2.814	7.686
36	0.773	0.257	0.000	0.066	0.000	0.066	0.244	2.898	8.147
37	0.841	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.918	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	1.000	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	-	0.339	-	0.017	-	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
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BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 72

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	72.00	M		
	CLAIMANT 2 (y)	68.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			10.36	8.24
(12)	APV FOR CLAIMANT 2			27.60	17.45
(13)	APV FOR BOTH CLAIMANTS ALIVE			9.19	7.48
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			19.57	10.72
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			80,072	63,682
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			257,933	169,690
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			12.549	9.704
(23)	APV OF MEDICAL BENEFIT			79,809	61,718

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.012	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.013	0.931	0.988	0.920	0.079	0.962	1.030	1.060
2	0.080	0.014	0.863	0.976	0.842	0.155	0.925	1.061	1.124
3	0.086	0.015	0.794	0.962	0.764	0.228	0.889	1.093	1.191
4	0.094	0.017	0.726	0.948	0.688	0.298	0.855	1.126	1.262
5	0.102	0.018	0.658	0.932	0.613	0.364	0.822	1.159	1.338
6	0.111	0.020	0.590	0.915	0.540	0.425	0.790	1.194	1.419
7	0.121	0.023	0.525	0.896	0.470	0.480	0.760	1.230	1.504
8	0.131	0.025	0.461	0.876	0.404	0.529	0.731	1.267	1.594
9	0.141	0.028	0.401	0.854	0.342	0.570	0.703	1.305	1.689
10	0.151	0.032	0.344	0.830	0.286	0.603	0.676	1.344	1.791
11	0.162	0.035	0.292	0.803	0.235	0.626	0.650	1.384	1.898
12	0.173	0.039	0.245	0.775	0.190	0.640	0.625	1.426	2.012
13	0.186	0.044	0.203	0.744	0.151	0.645	0.601	1.469	2.133
14	0.201	0.049	0.165	0.712	0.117	0.642	0.577	1.513	2.261
15	0.218	0.055	0.132	0.677	0.089	0.630	0.555	1.558	2.397
16	0.237	0.061	0.103	0.640	0.066	0.611	0.534	1.605	2.540
17	0.258	0.068	0.079	0.601	0.047	0.585	0.513	1.653	2.693
18	0.282	0.075	0.058	0.560	0.033	0.553	0.494	1.702	2.854
19	0.309	0.084	0.042	0.518	0.022	0.516	0.475	1.754	3.026
20	0.339	0.094	0.029	0.474	0.014	0.476	0.456	1.806	3.207
21	0.371	0.105	0.019	0.430	0.008	0.432	0.439	1.860	3.400
22	0.406	0.116	0.012	0.385	0.005	0.388	0.422	1.916	3.604
23	0.444	0.129	0.007	0.340	0.002	0.342	0.406	1.974	3.820
24	0.475	0.142	0.004	0.296	0.001	0.298	0.390	2.033	4.049
25	0.506	0.156	0.002	0.254	0.001	0.255	0.375	2.094	4.292
26	0.539	0.171	0.001	0.215	0.000	0.215	0.361	2.157	4.549
27	0.575	0.186	0.000	0.178	0.000	0.178	0.347	2.221	4.822
28	0.616	0.203	0.000	0.145	0.000	0.145	0.333	2.288	5.112
29	0.661	0.220	0.000	0.115	0.000	0.116	0.321	2.357	5.418
30	0.713	0.238	0.000	0.090	0.000	0.090	0.308	2.427	5.743
31	0.773	0.257	0.000	0.069	0.000	0.069	0.296	2.500	6.088
32	0.841	0.276	0.000	0.051	0.000	0.051	0.285	2.575	6.453
33	0.918	0.297	0.000	0.037	0.000	0.037	0.274	2.652	6.841
34	1.000	0.317	0.000	0.026	0.000	0.026	0.264	2.732	7.251
35	-	0.339	-	0.018	-	0.018	0.253	2.814	7.686
36	-	0.361	-	0.012	-	0.012	0.244	2.898	8.147
37	-	0.384	-	0.008	-	0.008	0.234	2.985	8.636
38	-	0.405	-	0.005	-	0.005	0.225	3.075	9.154
39	-	0.425	-	0.003	-	0.003	0.217	3.167	9.704
40	-	0.444	-	0.002	-	0.002	0.208	3.262	10.286
41	-	0.464	-	0.001	-	0.001	0.200	3.360	10.903
42	-	0.482	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.495	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	1.000	-	0.000	-	0.000	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
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BENEFIT CALCULATION DETAILS FOR ACTIVE MINER CLAIMS AT ENTITLEMENT AGE 80

		Age	Sex	NOMINAL	DISCOUNTED
	CLAIMANT 1 (x)	80.00	M		
	CLAIMANT 2 (y)	76.00	F		
	PTD/DEPENDENT BENEFIT PAYMENTS				
(11)	APV FOR CLAIMANT 1			6.31	5.44
(12)	APV FOR CLAIMANT 2			17.26	12.43
(13)	APV FOR BOTH CLAIMANTS ALIVE			5.49	4.83
(14)	APV FOR ONLY 1 CLAIMANT ALIVE			12.58	8.21
(15)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE			11,597	11,597
(16)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE			7,732	7,732
(17)	APV OF INDEMNITY BENEFITS PAID TO IW ONLY			48,769	42,100
(18)	APV OF INDEMNITY BENEFITS PAID TO IW + DEP.			160,968	119,514
	MEDICAL PAYMENTS				
(19)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY			644.37	644.37
(20)	CURRENT MINER INDEMNITY BENEFIT - YEARLY			7,732.42	7,732.42
(21)	ESTIMATED ANNUAL MEDICAL PAYMENT			6,360.00	6,360.00
(22)	APV FOR $1 OF MEDICAL BENEFIT			7.108	6.053
(23)	APV OF MEDICAL BENEFIT			45,206	38,495

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	0.028	0.869	0.975	0.847	0.150	0.962	1.030	1.060
2	0.151	0.032	0.747	0.947	0.707	0.279	0.925	1.061	1.124
3	0.162	0.035	0.634	0.917	0.581	0.388	0.889	1.093	1.191
4	0.173	0.039	0.531	0.885	0.470	0.476	0.855	1.126	1.262
5	0.186	0.044	0.439	0.850	0.373	0.543	0.822	1.159	1.338
6	0.201	0.049	0.357	0.812	0.290	0.589	0.790	1.194	1.419
7	0.218	0.055	0.285	0.772	0.220	0.617	0.760	1.230	1.504
8	0.237	0.061	0.223	0.730	0.163	0.627	0.731	1.267	1.594
9	0.258	0.068	0.170	0.686	0.117	0.622	0.703	1.305	1.689
10	0.282	0.075	0.126	0.639	0.081	0.604	0.676	1.344	1.791
11	0.309	0.084	0.091	0.591	0.054	0.574	0.650	1.384	1.898
12	0.339	0.094	0.063	0.541	0.034	0.536	0.625	1.426	2.012
13	0.371	0.105	0.041	0.491	0.020	0.491	0.601	1.469	2.133
14	0.406	0.116	0.026	0.439	0.011	0.442	0.577	1.513	2.261
15	0.444	0.129	0.015	0.388	0.006	0.392	0.555	1.558	2.397
16	0.475	0.142	0.009	0.338	0.003	0.341	0.534	1.605	2.540
17	0.506	0.156	0.005	0.290	0.001	0.292	0.513	1.653	2.693
18	0.539	0.171	0.002	0.245	0.001	0.246	0.494	1.702	2.854
19	0.575	0.186	0.001	0.203	0.000	0.204	0.475	1.754	3.026
20	0.616	0.203	0.000	0.165	0.000	0.166	0.456	1.806	3.207
21	0.661	0.220	0.000	0.132	0.000	0.132	0.439	1.860	3.400
22	0.713	0.238	0.000	0.103	0.000	0.103	0.422	1.916	3.604
23	0.773	0.257	0.000	0.078	0.000	0.078	0.406	1.974	3.820
24	0.841	0.276	0.000	0.058	0.000	0.058	0.390	2.033	4.049
25	0.918	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	1.000	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	-	0.339	-	0.020	-	0.020	0.347	2.221	4.822
28	-	0.361	-	0.013	-	0.013	0.333	2.288	5.112
29	-	0.384	-	0.009	-	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(12) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(13) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(14) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(15) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3)
(16) = 12 * SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(17) = (11) * (16)
(18) = (13) * (15) + (14) * (16)
(19) = (20) / 12
(20) = (16)
(21) FROM SECTION 8A, EXHIBIT 6, SHEET 2
(22) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(23) = (21) * (22)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF WEIGHTED NOMINAL BENEFITS PER CLAIM FOR ACTIVE MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 42			NOMINAL ESTIMATES AT ENTITLEMENT AGE 47			NOMINAL ESTIMATES AT ENTITLEMENT AGE 52			NOMINAL ESTIMATES AT ENTITLEMENT AGE 57			NOMINAL ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	1,203,812	2,240,963	88,205	1,109,614	2,112,949	125,704	990,497	1,947,102	172,023	849,561	1,735,758	236,864	690,725	1,474,461	319,678
20 - 24	1,077,357	1,787,974	68,595	993,054	1,685,837	102,447	886,450	1,553,515	144,419	760,319	1,384,891	203,082	618,167	1,176,413	277,914
25 - 29	939,653	1,350,908	46,221	866,125	1,273,738	76,132	773,147	1,173,761	113,420	663,137	1,046,358	165,419	539,155	888,842	231,628
30 - 34	820,800	1,022,239	27,007	756,573	963,844	53,514	675,354	888,191	86,754	579,260	791,784	132,994	470,959	672,591	191,756
35 - 39	717,203	773,773	11,781	661,082	729,572	35,277	590,114	672,307	64,913	506,148	599,333	106,041	411,517	509,111	158,205
40 - 44	645,563	620,921	-	580,188	554,675	17,643	517,904	511,138	44,338	444,213	455,657	81,274	361,162	387,064	128,004
45 - 49	645,563	620,921	-	527,667	449,733	-	460,485	393,695	20,191	394,963	350,962	54,309	321,120	298,130	97,304
50 - 54	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	355,770	273,861	26,637	289,254	232,635	67,161
55 - 59	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	267,943	186,678	32,704
60 - 64	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
65 - 69	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
70 - 74	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
75 - 79	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
80 - 84	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-
85 - 89	645,563	620,921	-	527,667	449,733	-	422,781	322,245	-	333,746	229,036	-	259,289	161,050	-

CURRENT AGE GROUP OF ACTIVE MINERS	NOMINAL ESTIMATES AT ENTITLEMENT AGE 67			NOMINAL ESTIMATES AT ENTITLEMENT AGE 72			NOMINAL ESTIMATES AT ENTITLEMENT AGE 80			NOMINAL ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	517,977	1,166,324	423,147	344,645	833,033	535,957	124,686	346,820	632,091	697,900	1,467,460	323,979
20 - 24	463,566	930,563	371,287	308,442	664,643	473,045	111,589	276,714	560,456	624,589	1,170,827	281,741
25 - 29	404,314	703,089	314,084	269,018	502,173	403,884	97,326	209,072	481,932	544,756	884,621	234,937
30 - 34	353,174	532,031	264,780	234,991	379,997	344,254	85,015	158,206	414,206	475,852	669,397	194,618
35 - 39	308,598	402,715	222,896	205,331	287,634	293,250	74,285	119,752	355,944	415,792	506,693	160,680
40 - 44	270,836	306,174	185,803	180,206	218,681	248,605	65,195	91,044	305,450	365,239	385,885	130,215
45 - 49	240,809	235,825	150,255	160,226	168,435	207,704	57,967	70,125	261,020	315,267	290,708	104,430
50 - 54	216,913	184,018	116,792	144,327	131,433	170,538	52,215	54,720	222,006	275,165	221,742	79,276
55 - 59	200,931	147,665	81,466	133,693	105,468	134,129	48,368	43,910	186,765	245,064	173,455	52,367
60 - 64	193,951	123,475	41,499	129,048	88,191	96,332	46,687	36,717	154,030	218,052	137,561	28,188
65 - 69	198,753	112,805	-	134,513	79,633	50,360	48,664	33,154	120,911	177,644	101,842	16,642
70 - 74	198,753	112,805	-	151,216	79,809	-	54,707	33,227	91,085	151,216	79,809	-
75 - 79	198,753	112,805	-	151,216	79,809	-	77,614	39,680	30,974	77,614	39,680	30,974
80 - 84	198,753	112,805	-	151,216	79,809	-	93,649	45,206	-	93,649	45,206	-
85 - 89	198,753	112,805	-	151,216	79,809	-	93,649	45,206	-	93,649	45,206	-

(1) OHIO COAL SURVEY DATA
(2)-(4) SECTION 8A, EXHIBIT 5, SHEET 2A, COL. (16), (17), (18)
(5)-(7) SECTION 8A, EXHIBIT 5, SHEET 2B, COL. (16), (17), (18)
(8)-(10) SECTION 8A, EXHIBIT 5, SHEET 2C, COL. (16), (17), (18)
(11)-(13) SECTION 8A, EXHIBIT 5, SHEET 2D, COL. (16), (17), (18)
(14)-(16) SECTION 8A, EXHIBIT 5, SHEET 2E, COL. (16), (17), (18)
(17)-(19) SECTION 8A, EXHIBIT 5, SHEET 2F, COL. (16), (17), (18)
(20) - (22) SECTION 8A, EXHIBIT 5, SHEET 2G, COL. (16), (17), (18)
(23) - (25) SECTION 8A, EXHIBIT 5, SHEET 2H, COL. (16), (17), (18)
(26) - (28) WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8A, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

CALCULATION OF WEIGHTED DISCOUNTED BENEFITS PER CLAIM FOR ACTIVE MINERS

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 42			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 47			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 52			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 57			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 62		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
14 - 19	207,407	386,974	12,734	171,741	339,065	16,374	137,944	288,056	20,377	106,180	234,609	25,510	77,117	180,265	31,200
20 - 24	217,149	361,195	11,585	179,808	316,478	15,612	144,424	268,867	20,013	111,167	218,980	25,587	80,739	168,256	31,732
25 - 29	230,426	332,027	9,498	190,802	290,921	14,115	153,254	247,154	19,123	117,964	201,296	25,357	85,676	154,669	32,177
30 - 34	244,889	305,679	6,752	202,777	267,835	12,071	162,873	227,542	17,796	125,368	185,323	24,803	91,053	142,395	32,409
35 - 39	260,339	281,510	3,583	215,571	246,658	9,681	173,149	209,551	16,200	133,278	170,670	24,061	96,798	131,137	32,531
40 - 44	274,139	264,271	-	230,182	228,157	5,891	184,884	193,832	13,463	142,311	157,868	22,437	103,359	121,300	32,024
45 - 49	274,139	264,271	-	244,904	216,413	-	200,001	181,642	7,459	153,947	147,939	18,241	111,809	113,671	29,617
50 - 54	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	168,714	140,449	10,885	122,534	107,916	24,871
55 - 59	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	138,098	105,359	14,735
60 - 64	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
65 - 69	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
70 - 74	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
75 - 79	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
80 - 84	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-
85 - 89	274,139	264,271	-	244,904	216,413	-	214,816	173,930	-	185,153	137,412	-	156,337	106,334	-

CURRENT AGE GROUP OF ACTIVE MINERS	DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 67			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 72			DISCOUNTED ESTIMATES AT ENTITLEMENT AGE 80			DISCOUNTED ESTIMATES WEIGHTED BENEFITS		
	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM	MINER INDEMNITY PER CLAIM	MINER MEDICAL PER CLAIM	SURVIVOR INDEMNITY PER CLAIM
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
14 - 19	51,391	127,540	37,267	30,246	80,586	42,391	8,892	26,995	41,610	83,343	187,747	30,650
20 - 24	53,805	119,044	38,254	31,666	75,218	43,770	9,310	25,196	43,161	87,258	175,240	31,121
25 - 29	57,095	109,430	39,371	33,602	69,143	45,467	9,879	23,162	45,154	92,593	161,088	31,474
30 - 34	60,678	100,747	40,382	35,711	63,657	47,151	10,499	21,324	47,217	98,404	148,305	31,596
35 - 39	64,507	92,781	41,359	37,965	58,623	48,867	11,161	19,638	49,366	104,613	136,579	31,596
40 - 44	68,879	85,822	41,946	40,538	54,226	50,403	11,918	18,165	51,541	111,626	126,413	30,950
45 - 49	74,510	80,424	41,270	43,852	50,816	51,234	12,892	17,022	53,587	114,242	113,681	29,782
50 - 54	81,657	76,352	39,028	48,059	48,243	51,180	14,129	16,160	55,452	118,333	103,421	26,989
55 - 59	92,029	74,543	33,122	54,163	47,100	48,974	15,923	15,778	56,756	124,193	95,774	20,937
60 - 64	108,077	75,836	20,528	63,608	47,917	42,794	18,700	16,051	56,949	126,607	87,519	13,043
65 - 69	129,566	81,050	-	80,666	52,641	27,219	23,715	17,634	54,389	113,741	71,801	8,677
70 - 74	129,566	81,050	-	106,085	61,718	-	31,188	20,675	47,932	106,085	61,718	-
75 - 79	129,566	81,050	-	106,085	61,718	-	55,987	31,241	20,624	55,987	31,241	20,624
80 - 84	129,566	81,050	-	106,085	61,718	-	73,066	38,495	-	73,066	38,495	-
85 - 89	129,566	81,050	-	106,085	61,718	-	73,066	38,495	-	73,066	38,495	-

(1) OHIO COAL SURVEY DATA
(2)-(4) SECTION 8A, EXHIBIT 5, SHEET 2A, COL. (19), (20), (21)
(5)-(7) SECTION 8A, EXHIBIT 5, SHEET 2B, COL. (19), (20), (21)
(8)-(10) SECTION 8A, EXHIBIT 5, SHEET 2C, COL. (19), (20), (21)
(11)-(13) SECTION 8A, EXHIBIT 5, SHEET 2D, COL. (19), (20), (21)
(14)-(16) SECTION 8A, EXHIBIT 5, SHEET 2E, COL. (19), (20), (21)
(17)-(19) SECTION 8A, EXHIBIT 5, SHEET 2F, COL. (19), (20), (21)
(20) - (22) SECTION 8A, EXHIBIT 5, SHEET 2G, COL. (19), (20), (21)
(23) - (25) SECTION 8A, EXHIBIT 5, SHEET 2H, COL. (19), (20), (21)
(26) - (28) WEIGHTED AVERAGE OF MINER INDEMNITY VALUES IN (2) THROUGH (25) USING WEIGHTS FROM SECTION 8A, EXHIBIT 5, SHEET 5

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

WEIGHTS FOR DEFERRED ANNUITY VALUES

Age @ Entitlement	Active Miners	16-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-85
42	Weights for deferred annuity values - current age to age @ entitlement	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%							
47		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.2%						
52		7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.7%	5.1%					
57		19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	19.7%	20.1%	18.5%				
62		37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	38.8%	41.0%	44.3%	52.8%			
67		20.7%	20.7%	20.7%	20.7%	20.7%	20.7%	21.6%	23.1%	25.4%	33.2%	71.0%		
72		7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	8.2%	8.7%	9.4%	12.6%	26.1%	100.0%	
80		1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.9%	2.1%	2.4%	1.5%	2.9%	0.0%	
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

The Weights for each age grouping represent the conditional probability of a Miner claim filing being entitled

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
TABLE OF MONTHLY BLACK LUNG BENEFIT RATES

SECTION 8A
EXHIBIT 6
SHEET 1

EFFECTIVE DATE	PRIMARY BENEFICIARY	PRIMARY BENEFICIARY & 1 DEPENDENT	PRIMARY BENEFICIARY & 2 DEPENDENTS	PRIMARY BENEFICIARY & 3 OR MORE DEPENDENTS	ANNUAL INCREASE
(1)	(2)	(3)	(4)	(5)	(6)
10/01/81 - 09/30/82	293.20	439.80	513.10	586.40	
10/01/82 - 12/31/83	304.90	457.40	533.60	609.80	4.0%
01/01/84 - 12/31/84	317.10	475.60	554.90	634.20	4.0%
01/01/85 - 12/31/86	328.20	492.30	574.30	656.40	3.5%
01/01/87 - 12/31/87	338.00	507.00	591.50	676.00	3.0%
01/01/88 - 12/31/88	344.80	517.20	603.40	689.50	2.0%
01/01/89 - 12/31/89	358.90	538.40	628.10	717.80	4.1%
01/01/90 - 12/31/90	371.80	557.70	650.70	743.60	3.6%
01/01/91 - 12/31/91	387.10	580.60	677.40	774.10	4.1%
01/01/92 - 12/31/92	403.30	605.00	705.80	806.60	4.2%
01/01/93 - 12/31/93	418.20	627.30	731.90	836.40	3.7%
01/01/94 - 12/31/94	427.40	641.10	748.00	854.80	2.2%
01/01/95 - 12/31/95	427.40	641.10	748.00	854.80	0.0%
01/01/96 - 12/31/96	435.10	652.70	761.50	870.20	1.8%
01/01/97 - 12/31/97	445.10	667.70	779.00	890.20	2.3%
01/01/98 - 12/31/98	455.40	683.10	796.90	910.70	2.3%
01/01/99 - 12/31/99	469.50	704.30	821.60	939.00	3.1%
01/01/00 - 12/31/00	487.40	731.00	852.80	974.70	3.8%
01/01/01 - 12/31/01	500.50	750.80	875.90	1,001.00	2.7%
01/01/02 - 12/31/02	518.00	777.00	907.00	1,037.00	3.5%
01/01/03 - 12/31/03	534.60	801.90	935.50	1,069.20	3.2%
01/01/04 - 12/31/04	549.00	823.50	960.80	1,098.00	2.7%
01/01/05 - 12/31/05	562.80	844.10	984.80	1,125.00	2.5%
01/01/06 - 12/31/06	574.60	861.80	1,005.50	1,149.10	2.1%
01/01/07 - 12/31/07	584.00	876.00	1,022.00	1,168.00	1.6%
01/01/08 - 12/31/08	599.00	898.40	1,048.10	1,197.90	2.6%
01/01/09 - 12/31/09	616.30	924.50	1,078.50	1,232.60	2.9%
01/01/10 - 12/31/10	625.60	938.30	1,094.70	1,251.10	1.5%
01/01/11 - 12/31/11	625.60	938.30	1,094.70	1,251.10	0.0%
01/01/12 - 12/31/12	625.60	938.30	1,094.70	1,251.10	0.0%
				ALL YEAR AVERAGE	2.7%
				3 YEAR AVERAGE	0.5%
				5 YEAR AVERAGE	1.4%
				10 YEAR AVERAGE	1.9%
				SELECTED ANNUAL INCREASE	**3.00%**

(1) EFFECTIVE DATE
(2) - (5) FROM THE DEPARTMENT OF LABOR WEBSITE:
http://www.dol.gov/owcp/dcmwc/benefits_part_c.htm
(6) ANNUAL GROWTH IN % IN COL (2)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 6
SHEET 2

AVERAGE ANNUAL MEDICAL COSTS PER ENTITLEMENT

CALENDAR YEAR	MEDICAL PAYMENTS	ACTIVE LIVING MINER ENTITLEMENTS	AVERAGE ANNUAL MEDICAL COST PER ENTITLEMENT	6% MEDICAL TREND	TRENDED AVERAGE ANNUAL MEDICAL COST PER ENTITLEMENT
(1)	(2)	(3)	(4)	(5)	(6)
2003	164,347				
2004	143,949				
2005	430,209				
2006	338,045				
2007	293,090				
2008	177,178				
2009	250,316	35	7,152	1.262	9,029
2010	145,236	39	3,724	1.191	4,435
2011	220,462	41	5,377	1.124	6,042
2012	268,520	44	6,103	1.060	6,469
TOTAL 2009-2012	**884,533**	**159**	**5,563**		
		4 YR AVERAGE	5,589		6,494
	SELECTED AVG MEDICAL		**6,000**		

(1) CALENDAR YEAR
(2) PROVIDED BY BWC
(3) PROVIDED BY BWC
(4) = (2) / (3)
(5) 6% ANNUAL TREND TO CALENDAR YEAR 2012
(6) = (4) * (5)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	1		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		10/1/2000	
(14)	**DATE OF FILING**		10/16/2000	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		70	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	11.64	9.04
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.64	9.04
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,146.77	62.65
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	90,011	69,927
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	14.410	10.834
(28)	APV OF MEDICAL BENEFIT	91,648	68,903

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.059	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.064	-	0.941	1.000	0.941	0.059	0.962	1.030	1.060
2	0.069	-	0.880	1.000	0.880	0.120	0.925	1.061	1.124
3	0.074	-	0.820	1.000	0.820	0.180	0.889	1.093	1.191
4	0.080	-	0.759	1.000	0.759	0.241	0.855	1.126	1.262
5	0.086	-	0.699	1.000	0.699	0.301	0.822	1.159	1.338
6	0.094	-	0.639	1.000	0.639	0.361	0.790	1.194	1.419
7	0.102	-	0.579	1.000	0.579	0.421	0.760	1.230	1.504
8	0.111	-	0.520	1.000	0.520	0.480	0.731	1.267	1.594
9	0.121	-	0.462	1.000	0.462	0.538	0.703	1.305	1.689
10	0.131	-	0.406	1.000	0.406	0.594	0.676	1.344	1.791
11	0.141	-	0.353	1.000	0.353	0.647	0.650	1.384	1.898
12	0.151	-	0.303	1.000	0.303	0.697	0.625	1.426	2.012
13	0.162	-	0.257	1.000	0.257	0.743	0.601	1.469	2.133
14	0.173	-	0.216	1.000	0.216	0.784	0.577	1.513	2.261
15	0.186	-	0.178	1.000	0.178	0.822	0.555	1.558	2.397
16	0.201	-	0.145	1.000	0.145	0.855	0.534	1.605	2.540
17	0.218	-	0.116	1.000	0.116	0.884	0.513	1.653	2.693
18	0.237	-	0.091	1.000	0.091	0.909	0.494	1.702	2.854
19	0.258	-	0.069	1.000	0.069	0.931	0.475	1.754	3.026
20	0.282	-	0.051	1.000	0.051	0.949	0.456	1.806	3.207
21	0.309	-	0.037	1.000	0.037	0.963	0.439	1.860	3.400
22	0.339	-	0.025	1.000	0.025	0.975	0.422	1.916	3.604
23	0.371	-	0.017	1.000	0.017	0.983	0.406	1.974	3.820
24	0.406	-	0.011	1.000	0.011	0.989	0.390	2.033	4.049
25	0.444	-	0.006	1.000	0.006	0.994	0.375	2.094	4.292
26	0.475	-	0.003	1.000	0.003	0.997	0.361	2.157	4.549
27	0.506	-	0.002	1.000	0.002	0.998	0.347	2.221	4.822
28	0.539	-	0.001	1.000	0.001	0.999	0.333	2.288	5.112
29	0.575	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.616	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.661	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.713	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.773	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.841	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.918	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	2		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**	1/9/2004		
(14)	**DATE OF FILING**	1/15/2004		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	79	M	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.71	5.74
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.71	5.74
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,151.70	65.95
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	51,890	44,386
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.623	6.423
(28)	APV OF MEDICAL BENEFIT	48,484	40,851

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.121	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.131	-	0.879	1.000	0.879	0.121	0.962	1.030	1.060
2	0.141	-	0.764	1.000	0.764	0.236	0.925	1.061	1.124
3	0.151	-	0.656	1.000	0.656	0.344	0.889	1.093	1.191
4	0.162	-	0.557	1.000	0.557	0.443	0.855	1.126	1.262
5	0.173	-	0.467	1.000	0.467	0.533	0.822	1.159	1.338
6	0.186	-	0.386	1.000	0.386	0.614	0.790	1.194	1.419
7	0.201	-	0.314	1.000	0.314	0.686	0.760	1.230	1.504
8	0.218	-	0.251	1.000	0.251	0.749	0.731	1.267	1.594
9	0.237	-	0.196	1.000	0.196	0.804	0.703	1.305	1.689
10	0.258	-	0.150	1.000	0.150	0.850	0.676	1.344	1.791
11	0.282	-	0.111	1.000	0.111	0.889	0.650	1.384	1.898
12	0.309	-	0.080	1.000	0.080	0.920	0.625	1.426	2.012
13	0.339	-	0.055	1.000	0.055	0.945	0.601	1.469	2.133
14	0.371	-	0.036	1.000	0.036	0.964	0.577	1.513	2.261
15	0.406	-	0.023	1.000	0.023	0.977	0.555	1.558	2.397
16	0.444	-	0.014	1.000	0.014	0.986	0.534	1.605	2.540
17	0.475	-	0.008	1.000	0.008	0.992	0.513	1.653	2.693
18	0.506	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.539	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.575	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.616	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.661	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.713	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.773	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.841	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.918	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	1.000	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	3		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		1/31/2008	
(14)	**DATE OF FILING**		2/4/2008	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		67	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.84	10.36
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	13.84	10.36
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,144.57	61.33
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	107,051	80,125
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	17.737	12.744
(28)	APV OF MEDICAL BENEFIT	112,805	81,050

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	-	0.954	1.000	0.954	0.046	0.962	1.030	1.060
2	0.055	-	0.907	1.000	0.907	0.093	0.925	1.061	1.124
3	0.059	-	0.857	1.000	0.857	0.143	0.889	1.093	1.191
4	0.064	-	0.806	1.000	0.806	0.194	0.855	1.126	1.262
5	0.069	-	0.754	1.000	0.754	0.246	0.822	1.159	1.338
6	0.074	-	0.703	1.000	0.703	0.297	0.790	1.194	1.419
7	0.080	-	0.651	1.000	0.651	0.349	0.760	1.230	1.504
8	0.086	-	0.599	1.000	0.599	0.401	0.731	1.267	1.594
9	0.094	-	0.547	1.000	0.547	0.453	0.703	1.305	1.689
10	0.102	-	0.496	1.000	0.496	0.504	0.676	1.344	1.791
11	0.111	-	0.445	1.000	0.445	0.555	0.650	1.384	1.898
12	0.121	-	0.396	1.000	0.396	0.604	0.625	1.426	2.012
13	0.131	-	0.348	1.000	0.348	0.652	0.601	1.469	2.133
14	0.141	-	0.302	1.000	0.302	0.698	0.577	1.513	2.261
15	0.151	-	0.260	1.000	0.260	0.740	0.555	1.558	2.397
16	0.162	-	0.221	1.000	0.221	0.779	0.534	1.605	2.540
17	0.173	-	0.185	1.000	0.185	0.815	0.513	1.653	2.693
18	0.186	-	0.153	1.000	0.153	0.847	0.494	1.702	2.854
19	0.201	-	0.124	1.000	0.124	0.876	0.475	1.754	3.026
20	0.218	-	0.099	1.000	0.099	0.901	0.456	1.806	3.207
21	0.237	-	0.078	1.000	0.078	0.922	0.439	1.860	3.400
22	0.258	-	0.059	1.000	0.059	0.941	0.422	1.916	3.604
23	0.282	-	0.044	1.000	0.044	0.956	0.406	1.974	3.820
24	0.309	-	0.032	1.000	0.032	0.968	0.390	2.033	4.049
25	0.339	-	0.022	1.000	0.022	0.978	0.375	2.094	4.292
26	0.371	-	0.014	1.000	0.014	0.986	0.361	2.157	4.549
27	0.406	-	0.009	1.000	0.009	0.991	0.347	2.221	4.822
28	0.444	-	0.005	1.000	0.005	0.995	0.333	2.288	5.112
29	0.475	-	0.003	1.000	0.003	0.997	0.321	2.357	5.418
30	0.506	-	0.002	1.000	0.002	0.998	0.308	2.427	5.743
31	0.539	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.575	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.616	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.661	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.713	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.773	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.841	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.918	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	1.000	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	4		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		11/4/2008	
(14)	**DATE OF FILING**		11/10/2008	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		67	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.84	10.36
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	13.84	10.36
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,144.57	61.33
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	107,051	80,125
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	17.737	12.744
(28)	APV OF MEDICAL BENEFIT	112,805	81,050

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	-	0.954	1.000	0.954	0.046	0.962	1.030	1.060
2	0.055	-	0.907	1.000	0.907	0.093	0.925	1.061	1.124
3	0.059	-	0.857	1.000	0.857	0.143	0.889	1.093	1.191
4	0.064	-	0.806	1.000	0.806	0.194	0.855	1.126	1.262
5	0.069	-	0.754	1.000	0.754	0.246	0.822	1.159	1.338
6	0.074	-	0.703	1.000	0.703	0.297	0.790	1.194	1.419
7	0.080	-	0.651	1.000	0.651	0.349	0.760	1.230	1.504
8	0.086	-	0.599	1.000	0.599	0.401	0.731	1.267	1.594
9	0.094	-	0.547	1.000	0.547	0.453	0.703	1.305	1.689
10	0.102	-	0.496	1.000	0.496	0.504	0.676	1.344	1.791
11	0.111	-	0.445	1.000	0.445	0.555	0.650	1.384	1.898
12	0.121	-	0.396	1.000	0.396	0.604	0.625	1.426	2.012
13	0.131	-	0.348	1.000	0.348	0.652	0.601	1.469	2.133
14	0.141	-	0.302	1.000	0.302	0.698	0.577	1.513	2.261
15	0.151	-	0.260	1.000	0.260	0.740	0.555	1.558	2.397
16	0.162	-	0.221	1.000	0.221	0.779	0.534	1.605	2.540
17	0.173	-	0.185	1.000	0.185	0.815	0.513	1.653	2.693
18	0.186	-	0.153	1.000	0.153	0.847	0.494	1.702	2.854
19	0.201	-	0.124	1.000	0.124	0.876	0.475	1.754	3.026
20	0.218	-	0.099	1.000	0.099	0.901	0.456	1.806	3.207
21	0.237	-	0.078	1.000	0.078	0.922	0.439	1.860	3.400
22	0.258	-	0.059	1.000	0.059	0.941	0.422	1.916	3.604
23	0.282	-	0.044	1.000	0.044	0.956	0.406	1.974	3.820
24	0.309	-	0.032	1.000	0.032	0.968	0.390	2.033	4.049
25	0.339	-	0.022	1.000	0.022	0.978	0.375	2.094	4.292
26	0.371	-	0.014	1.000	0.014	0.986	0.361	2.157	4.549
27	0.406	-	0.009	1.000	0.009	0.991	0.347	2.221	4.822
28	0.444	-	0.005	1.000	0.005	0.995	0.333	2.288	5.112
29	0.475	-	0.003	1.000	0.003	0.997	0.321	2.357	5.418
30	0.506	-	0.002	1.000	0.002	0.998	0.308	2.427	5.743
31	0.539	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.575	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.616	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.661	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.713	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.773	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.841	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.918	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	1.000	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	5		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		12/17/2010	
(14)	**DATE OF FILING**		12/23/2010	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		61	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	19.63	13.52
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	19.63	13.52
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,138.78	58.17
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	151,804	104,558
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	27.193	17.629
(28)	APV OF MEDICAL BENEFIT	172,948	112,120

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.024	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.027	-	0.976	1.000	0.976	0.024	0.962	1.030	1.060
2	0.030	-	0.950	1.000	0.950	0.050	0.925	1.061	1.124
3	0.033	-	0.922	1.000	0.922	0.078	0.889	1.093	1.191
4	0.037	-	0.891	1.000	0.891	0.109	0.855	1.126	1.262
5	0.041	-	0.859	1.000	0.859	0.141	0.822	1.159	1.338
6	0.046	-	0.824	1.000	0.824	0.176	0.790	1.194	1.419
7	0.050	-	0.786	1.000	0.786	0.214	0.760	1.230	1.504
8	0.055	-	0.747	1.000	0.747	0.253	0.731	1.267	1.594
9	0.059	-	0.706	1.000	0.706	0.294	0.703	1.305	1.689
10	0.064	-	0.664	1.000	0.664	0.336	0.676	1.344	1.791
11	0.069	-	0.621	1.000	0.621	0.379	0.650	1.384	1.898
12	0.074	-	0.579	1.000	0.579	0.421	0.625	1.426	2.012
13	0.080	-	0.536	1.000	0.536	0.464	0.601	1.469	2.133
14	0.086	-	0.493	1.000	0.493	0.507	0.577	1.513	2.261
15	0.094	-	0.451	1.000	0.451	0.549	0.555	1.558	2.397
16	0.102	-	0.408	1.000	0.408	0.592	0.534	1.605	2.540
17	0.111	-	0.367	1.000	0.367	0.633	0.513	1.653	2.693
18	0.121	-	0.326	1.000	0.326	0.674	0.494	1.702	2.854
19	0.131	-	0.286	1.000	0.286	0.714	0.475	1.754	3.026
20	0.141	-	0.249	1.000	0.249	0.751	0.456	1.806	3.207
21	0.151	-	0.214	1.000	0.214	0.786	0.439	1.860	3.400
22	0.162	-	0.182	1.000	0.182	0.818	0.422	1.916	3.604
23	0.173	-	0.152	1.000	0.152	0.848	0.406	1.974	3.820
24	0.186	-	0.126	1.000	0.126	0.874	0.390	2.033	4.049
25	0.201	-	0.102	1.000	0.102	0.898	0.375	2.094	4.292
26	0.218	-	0.082	1.000	0.082	0.918	0.361	2.157	4.549
27	0.237	-	0.064	1.000	0.064	0.936	0.347	2.221	4.822
28	0.258	-	0.049	1.000	0.049	0.951	0.333	2.288	5.112
29	0.282	-	0.036	1.000	0.036	0.964	0.321	2.357	5.418
30	0.309	-	0.026	1.000	0.026	0.974	0.308	2.427	5.743
31	0.339	-	0.018	1.000	0.018	0.982	0.296	2.500	6.088
32	0.371	-	0.012	1.000	0.012	0.988	0.285	2.575	6.453
33	0.406	-	0.007	1.000	0.007	0.993	0.274	2.652	6.841
34	0.444	-	0.004	1.000	0.004	0.996	0.264	2.732	7.251
35	0.475	-	0.002	1.000	0.002	0.998	0.253	2.814	7.686
36	0.506	-	0.001	1.000	0.001	0.999	0.244	2.898	8.147
37	0.539	-	0.001	1.000	0.001	0.999	0.234	2.985	8.636
38	0.575	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.616	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.661	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.713	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.773	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.841	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.918	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	1.000	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	6		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		9/1/1997	
(14)	**DATE OF FILING**		10/28/1997	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		70	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	11.64	9.04
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.64	9.04
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,146.77	62.65
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	90,011	69,927
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	14.410	10.834
(28)	APV OF MEDICAL BENEFIT	91,648	68,903

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.059	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.064	-	0.941	1.000	0.941	0.059	0.962	1.030	1.060
2	0.069	-	0.880	1.000	0.880	0.120	0.925	1.061	1.124
3	0.074	-	0.820	1.000	0.820	0.180	0.889	1.093	1.191
4	0.080	-	0.759	1.000	0.759	0.241	0.855	1.126	1.262
5	0.086	-	0.699	1.000	0.699	0.301	0.822	1.159	1.338
6	0.094	-	0.639	1.000	0.639	0.361	0.790	1.194	1.419
7	0.102	-	0.579	1.000	0.579	0.421	0.760	1.230	1.504
8	0.111	-	0.520	1.000	0.520	0.480	0.731	1.267	1.594
9	0.121	-	0.462	1.000	0.462	0.538	0.703	1.305	1.689
10	0.131	-	0.406	1.000	0.406	0.594	0.676	1.344	1.791
11	0.141	-	0.353	1.000	0.353	0.647	0.650	1.384	1.898
12	0.151	-	0.303	1.000	0.303	0.697	0.625	1.426	2.012
13	0.162	-	0.257	1.000	0.257	0.743	0.601	1.469	2.133
14	0.173	-	0.216	1.000	0.216	0.784	0.577	1.513	2.261
15	0.186	-	0.178	1.000	0.178	0.822	0.555	1.558	2.397
16	0.201	-	0.145	1.000	0.145	0.855	0.534	1.605	2.540
17	0.218	-	0.116	1.000	0.116	0.884	0.513	1.653	2.693
18	0.237	-	0.091	1.000	0.091	0.909	0.494	1.702	2.854
19	0.258	-	0.069	1.000	0.069	0.931	0.475	1.754	3.026
20	0.282	-	0.051	1.000	0.051	0.949	0.456	1.806	3.207
21	0.309	-	0.037	1.000	0.037	0.963	0.439	1.860	3.400
22	0.339	-	0.025	1.000	0.025	0.975	0.422	1.916	3.604
23	0.371	-	0.017	1.000	0.017	0.983	0.406	1.974	3.820
24	0.406	-	0.011	1.000	0.011	0.989	0.390	2.033	4.049
25	0.444	-	0.006	1.000	0.006	0.994	0.375	2.094	4.292
26	0.475	-	0.003	1.000	0.003	0.997	0.361	2.157	4.549
27	0.506	-	0.002	1.000	0.002	0.998	0.347	2.221	4.822
28	0.539	-	0.001	1.000	0.001	0.999	0.333	2.288	5.112
29	0.575	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.616	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.661	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.713	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.773	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.841	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.918	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	7		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		11/1/1979	
(14)	**DATE OF FILING**		12/4/1979	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		97	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	1.92	1.86
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	1.92	1.86
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,156.49	69.83
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	14,828	14,369
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	1.965	1.901
(28)	APV OF MEDICAL BENEFIT	12,495	12,092

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.506	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.539	-	0.494	1.000	0.494	0.506	0.962	1.030	1.060
2	0.575	-	0.228	1.000	0.228	0.772	0.925	1.061	1.124
3	0.616	-	0.097	1.000	0.097	0.903	0.889	1.093	1.191
4	0.661	-	0.037	1.000	0.037	0.963	0.855	1.126	1.262
5	0.713	-	0.013	1.000	0.013	0.987	0.822	1.159	1.338
6	0.773	-	0.004	1.000	0.004	0.996	0.790	1.194	1.419
7	0.841	-	0.001	1.000	0.001	0.999	0.760	1.230	1.504
8	0.918	-	0.000	1.000	0.000	1.000	0.731	1.267	1.594
9	1.000	-	0.000	1.000	0.000	1.000	0.703	1.305	1.689
10	-	-	-	1.000	-	1.000	0.676	1.344	1.791
11	-	-	-	1.000	-	1.000	0.650	1.384	1.898
12	-	-	-	1.000	-	1.000	0.625	1.426	2.012
13	-	-	-	1.000	-	1.000	0.601	1.469	2.133
14	-	-	-	1.000	-	1.000	0.577	1.513	2.261
15	-	-	-	1.000	-	1.000	0.555	1.558	2.397
16	-	-	-	1.000	-	1.000	0.534	1.605	2.540
17	-	-	-	1.000	-	1.000	0.513	1.653	2.693
18	-	-	-	1.000	-	1.000	0.494	1.702	2.854
19	-	-	-	1.000	-	1.000	0.475	1.754	3.026
20	-	-	-	1.000	-	1.000	0.456	1.806	3.207
21	-	-	-	1.000	-	1.000	0.439	1.860	3.400
22	-	-	-	1.000	-	1.000	0.422	1.916	3.604
23	-	-	-	1.000	-	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	8		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		7/1/1987	
(14)	**DATE OF FILING**		8/18/1987	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		80	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.31	5.44
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.31	5.44
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.10	66.25
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	48,769	42,100
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.108	6.053
(28)	APV OF MEDICAL BENEFIT	45,206	38,495

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	-	0.869	1.000	0.869	0.131	0.962	1.030	1.060
2	0.151	-	0.747	1.000	0.747	0.253	0.925	1.061	1.124
3	0.162	-	0.634	1.000	0.634	0.366	0.889	1.093	1.191
4	0.173	-	0.531	1.000	0.531	0.469	0.855	1.126	1.262
5	0.186	-	0.439	1.000	0.439	0.561	0.822	1.159	1.338
6	0.201	-	0.357	1.000	0.357	0.643	0.790	1.194	1.419
7	0.218	-	0.285	1.000	0.285	0.715	0.760	1.230	1.504
8	0.237	-	0.223	1.000	0.223	0.777	0.731	1.267	1.594
9	0.258	-	0.170	1.000	0.170	0.830	0.703	1.305	1.689
10	0.282	-	0.126	1.000	0.126	0.874	0.676	1.344	1.791
11	0.309	-	0.091	1.000	0.091	0.909	0.650	1.384	1.898
12	0.339	-	0.063	1.000	0.063	0.937	0.625	1.426	2.012
13	0.371	-	0.041	1.000	0.041	0.959	0.601	1.469	2.133
14	0.406	-	0.026	1.000	0.026	0.974	0.577	1.513	2.261
15	0.444	-	0.015	1.000	0.015	0.985	0.555	1.558	2.397
16	0.475	-	0.009	1.000	0.009	0.991	0.534	1.605	2.540
17	0.506	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.539	-	0.002	1.000	0.002	0.998	0.494	1.702	2.854
19	0.575	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.616	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.661	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.713	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.773	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.841	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.918	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	9		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**	3/1/1989		
(14)	**DATE OF FILING**	3/9/1989		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	72	M	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.36	8.24
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.36	8.24
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,148.06	63.46
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	80,072	63,682
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	12.549	9.704
(28)	APV OF MEDICAL BENEFIT	79,809	61,718

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	-	0.931	1.000	0.931	0.069	0.962	1.030	1.060
2	0.080	-	0.863	1.000	0.863	0.137	0.925	1.061	1.124
3	0.086	-	0.794	1.000	0.794	0.206	0.889	1.093	1.191
4	0.094	-	0.726	1.000	0.726	0.274	0.855	1.126	1.262
5	0.102	-	0.658	1.000	0.658	0.342	0.822	1.159	1.338
6	0.111	-	0.590	1.000	0.590	0.410	0.790	1.194	1.419
7	0.121	-	0.525	1.000	0.525	0.475	0.760	1.230	1.504
8	0.131	-	0.461	1.000	0.461	0.539	0.731	1.267	1.594
9	0.141	-	0.401	1.000	0.401	0.599	0.703	1.305	1.689
10	0.151	-	0.344	1.000	0.344	0.656	0.676	1.344	1.791
11	0.162	-	0.292	1.000	0.292	0.708	0.650	1.384	1.898
12	0.173	-	0.245	1.000	0.245	0.755	0.625	1.426	2.012
13	0.186	-	0.203	1.000	0.203	0.797	0.601	1.469	2.133
14	0.201	-	0.165	1.000	0.165	0.835	0.577	1.513	2.261
15	0.218	-	0.132	1.000	0.132	0.868	0.555	1.558	2.397
16	0.237	-	0.103	1.000	0.103	0.897	0.534	1.605	2.540
17	0.258	-	0.079	1.000	0.079	0.921	0.513	1.653	2.693
18	0.282	-	0.058	1.000	0.058	0.942	0.494	1.702	2.854
19	0.309	-	0.042	1.000	0.042	0.958	0.475	1.754	3.026
20	0.339	-	0.029	1.000	0.029	0.971	0.456	1.806	3.207
21	0.371	-	0.019	1.000	0.019	0.981	0.439	1.860	3.400
22	0.406	-	0.012	1.000	0.012	0.988	0.422	1.916	3.604
23	0.444	-	0.007	1.000	0.007	0.993	0.406	1.974	3.820
24	0.475	-	0.004	1.000	0.004	0.996	0.390	2.033	4.049
25	0.506	-	0.002	1.000	0.002	0.998	0.375	2.094	4.292
26	0.539	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.575	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.616	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.661	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.713	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.773	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.841	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.918	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	10		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		11/1/1992	
(14)	**DATE OF FILING**		11/30/1992	
			Age	**Sex**
(15)	**CLAIMANT 1 (x)**		81	M
(16)	**CLAIMANT 2 (y)**		0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.93	5.16
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.93	5.16
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.48	66.53
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	45,837	39,924
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	6.629	5.703
(28)	APV OF MEDICAL BENEFIT	42,163	36,274

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.141	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.151	-	0.859	1.000	0.859	0.141	0.962	1.030	1.060
2	0.162	-	0.729	1.000	0.729	0.271	0.925	1.061	1.124
3	0.173	-	0.611	1.000	0.611	0.389	0.889	1.093	1.191
4	0.186	-	0.505	1.000	0.505	0.495	0.855	1.126	1.262
5	0.201	-	0.411	1.000	0.411	0.589	0.822	1.159	1.338
6	0.218	-	0.328	1.000	0.328	0.672	0.790	1.194	1.419
7	0.237	-	0.257	1.000	0.257	0.743	0.760	1.230	1.504
8	0.258	-	0.196	1.000	0.196	0.804	0.731	1.267	1.594
9	0.282	-	0.145	1.000	0.145	0.855	0.703	1.305	1.689
10	0.309	-	0.104	1.000	0.104	0.896	0.676	1.344	1.791
11	0.339	-	0.072	1.000	0.072	0.928	0.650	1.384	1.898
12	0.371	-	0.048	1.000	0.048	0.952	0.625	1.426	2.012
13	0.406	-	0.030	1.000	0.030	0.970	0.601	1.469	2.133
14	0.444	-	0.018	1.000	0.018	0.982	0.577	1.513	2.261
15	0.475	-	0.010	1.000	0.010	0.990	0.555	1.558	2.397
16	0.506	-	0.005	1.000	0.005	0.995	0.534	1.605	2.540
17	0.539	-	0.003	1.000	0.003	0.997	0.513	1.653	2.693
18	0.575	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.616	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.661	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.713	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.773	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.841	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.918	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	1.000	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	11		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		4/1/1993	
(14)	**DATE OF FILING**		3/23/1995	
		Age		**Sex**
(15)	**CLAIMANT 1 (x)**	71		M
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.98	8.63
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.98	8.63
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	84,930	66,767
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	13.450	10.258
(28)	APV OF MEDICAL BENEFIT	85,545	65,241

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	-	0.936	1.000	0.936	0.064	0.962	1.030	1.060
2	0.074	-	0.872	1.000	0.872	0.128	0.925	1.061	1.124
3	0.080	-	0.807	1.000	0.807	0.193	0.889	1.093	1.191
4	0.086	-	0.743	1.000	0.743	0.257	0.855	1.126	1.262
5	0.094	-	0.679	1.000	0.679	0.321	0.822	1.159	1.338
6	0.102	-	0.615	1.000	0.615	0.385	0.790	1.194	1.419
7	0.111	-	0.553	1.000	0.553	0.447	0.760	1.230	1.504
8	0.121	-	0.491	1.000	0.491	0.509	0.731	1.267	1.594
9	0.131	-	0.432	1.000	0.432	0.568	0.703	1.305	1.689
10	0.141	-	0.375	1.000	0.375	0.625	0.676	1.344	1.791
11	0.151	-	0.322	1.000	0.322	0.678	0.650	1.384	1.898
12	0.162	-	0.274	1.000	0.274	0.726	0.625	1.426	2.012
13	0.173	-	0.229	1.000	0.229	0.771	0.601	1.469	2.133
14	0.186	-	0.190	1.000	0.190	0.810	0.577	1.513	2.261
15	0.201	-	0.154	1.000	0.154	0.846	0.555	1.558	2.397
16	0.218	-	0.123	1.000	0.123	0.877	0.534	1.605	2.540
17	0.237	-	0.096	1.000	0.096	0.904	0.513	1.653	2.693
18	0.258	-	0.074	1.000	0.074	0.926	0.494	1.702	2.854
19	0.282	-	0.055	1.000	0.055	0.945	0.475	1.754	3.026
20	0.309	-	0.039	1.000	0.039	0.961	0.456	1.806	3.207
21	0.339	-	0.027	1.000	0.027	0.973	0.439	1.860	3.400
22	0.371	-	0.018	1.000	0.018	0.982	0.422	1.916	3.604
23	0.406	-	0.011	1.000	0.011	0.989	0.406	1.974	3.820
24	0.444	-	0.007	1.000	0.007	0.993	0.390	2.033	4.049
25	0.475	-	0.004	1.000	0.004	0.996	0.375	2.094	4.292
26	0.506	-	0.002	1.000	0.002	0.998	0.361	2.157	4.549
27	0.539	-	0.001	1.000	0.001	0.999	0.347	2.221	4.822
28	0.575	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.616	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.661	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.713	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.773	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.841	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.918	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	12		
(12)	**TYPE OF CLAIM**	IW		
(13)	**DATE OF INJURY**		9/1/2009	
(14)	**DATE OF FILING**		3/30/2010	
		Age		**Sex**
(15)	**CLAIMANT 1 (x)**	72		M
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.36	8.24
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.36	8.24
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	80,072	63,682
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	12.549	9.704
(28)	APV OF MEDICAL BENEFIT	79,809	61,718

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	-	0.931	1.000	0.931	0.069	0.962	1.030	1.060
2	0.080	-	0.863	1.000	0.863	0.137	0.925	1.061	1.124
3	0.086	-	0.794	1.000	0.794	0.206	0.889	1.093	1.191
4	0.094	-	0.726	1.000	0.726	0.274	0.855	1.126	1.262
5	0.102	-	0.658	1.000	0.658	0.342	0.822	1.159	1.338
6	0.111	-	0.590	1.000	0.590	0.410	0.790	1.194	1.419
7	0.121	-	0.525	1.000	0.525	0.475	0.760	1.230	1.504
8	0.131	-	0.461	1.000	0.461	0.539	0.731	1.267	1.594
9	0.141	-	0.401	1.000	0.401	0.599	0.703	1.305	1.689
10	0.151	-	0.344	1.000	0.344	0.656	0.676	1.344	1.791
11	0.162	-	0.292	1.000	0.292	0.708	0.650	1.384	1.898
12	0.173	-	0.245	1.000	0.245	0.755	0.625	1.426	2.012
13	0.186	-	0.203	1.000	0.203	0.797	0.601	1.469	2.133
14	0.201	-	0.165	1.000	0.165	0.835	0.577	1.513	2.261
15	0.218	-	0.132	1.000	0.132	0.868	0.555	1.558	2.397
16	0.237	-	0.103	1.000	0.103	0.897	0.534	1.605	2.540
17	0.258	-	0.079	1.000	0.079	0.921	0.513	1.653	2.693
18	0.282	-	0.058	1.000	0.058	0.942	0.494	1.702	2.854
19	0.309	-	0.042	1.000	0.042	0.958	0.475	1.754	3.026
20	0.339	-	0.029	1.000	0.029	0.971	0.456	1.806	3.207
21	0.371	-	0.019	1.000	0.019	0.981	0.439	1.860	3.400
22	0.406	-	0.012	1.000	0.012	0.988	0.422	1.916	3.604
23	0.444	-	0.007	1.000	0.007	0.993	0.406	1.974	3.820
24	0.475	-	0.004	1.000	0.004	0.996	0.390	2.033	4.049
25	0.506	-	0.002	1.000	0.002	0.998	0.375	2.094	4.292
26	0.539	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.575	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.616	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.661	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.713	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.773	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.841	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.918	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
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113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
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120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	13	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	2/1/2001	
(14)	**DATE OF FILING**	3/5/2001	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	83	M
(16)	**CLAIMANT 2 (y)**	87	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.23	4.63
(18)	APV FOR CLAIMANT 2	8.15	6.79
(19)	APV FOR BOTH CLAIMANTS ALIVE	3.82	3.50
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	5.74	4.41
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	88,659	74,778
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	5.758	5.052
(28)	APV OF MEDICAL BENEFIT	36,621	32,131

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.162	0.084	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.173	0.094	0.838	0.916	0.768	0.219	0.962	1.030	1.060
2	0.186	0.105	0.693	0.830	0.575	0.373	0.925	1.061	1.124
3	0.201	0.116	0.564	0.743	0.419	0.469	0.889	1.093	1.191
4	0.218	0.129	0.450	0.657	0.296	0.516	0.855	1.126	1.262
5	0.237	0.142	0.352	0.572	0.202	0.521	0.822	1.159	1.338
6	0.258	0.156	0.269	0.491	0.132	0.496	0.790	1.194	1.419
7	0.282	0.171	0.199	0.414	0.083	0.449	0.760	1.230	1.504
8	0.309	0.186	0.143	0.344	0.049	0.388	0.731	1.267	1.594
9	0.339	0.203	0.099	0.280	0.028	0.323	0.703	1.305	1.689
10	0.371	0.220	0.065	0.223	0.015	0.259	0.676	1.344	1.791
11	0.406	0.238	0.041	0.174	0.007	0.201	0.650	1.384	1.898
12	0.444	0.257	0.024	0.133	0.003	0.151	0.625	1.426	2.012
13	0.475	0.276	0.014	0.099	0.001	0.110	0.601	1.469	2.133
14	0.506	0.297	0.007	0.071	0.001	0.077	0.577	1.513	2.261
15	0.539	0.317	0.004	0.050	0.000	0.053	0.555	1.558	2.397
16	0.575	0.339	0.002	0.034	0.000	0.036	0.534	1.605	2.540
17	0.616	0.361	0.001	0.023	0.000	0.023	0.513	1.653	2.693
18	0.661	0.384	0.000	0.014	0.000	0.015	0.494	1.702	2.854
19	0.713	0.405	0.000	0.009	0.000	0.009	0.475	1.754	3.026
20	0.773	0.425	0.000	0.005	0.000	0.005	0.456	1.806	3.207
21	0.841	0.444	0.000	0.003	0.000	0.003	0.439	1.860	3.400
22	0.918	0.464	0.000	0.002	0.000	0.002	0.422	1.916	3.604
23	1.000	0.482	0.000	0.001	0.000	0.001	0.406	1.974	3.820
24	-	0.495	-	0.000	-	0.000	0.390	2.033	4.049
25	-	0.500	-	0.000	-	0.000	0.375	2.094	4.292
26	-	0.500	-	0.000	-	0.000	0.361	2.157	4.549
27	-	0.500	-	0.000	-	0.000	0.347	2.221	4.822
28	-	0.500	-	0.000	-	0.000	0.333	2.288	5.112
29	-	0.500	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	1.000	-	0.000	-	0.000	0.274	2.652	6.841
34	-	-	-	-	-	-	0.264	2.732	7.251
35	-	-	-	-	-	-	0.253	2.814	7.686
36	-	-	-	-	-	-	0.244	2.898	8.147
37	-	-	-	-	-	-	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	14	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/26/2002	
(14)	**DATE OF FILING**	4/30/2002	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	68	M
(16)	**CLAIMANT 2 (y)**	67	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.06	9.90
(18)	APV FOR CLAIMANT 2	29.12	18.10
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.28	8.83
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	19.63	10.34
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	282,591	182,364
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	16.542	12.072
(28)	APV OF MEDICAL BENEFIT	105,207	76,775

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.050	0.011	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.055	0.012	0.950	0.989	0.940	0.060	0.962	1.030	1.060
2	0.059	0.013	0.898	0.978	0.878	0.120	0.925	1.061	1.124
3	0.064	0.014	0.844	0.965	0.815	0.180	0.889	1.093	1.191
4	0.069	0.015	0.790	0.952	0.752	0.238	0.855	1.126	1.262
5	0.074	0.017	0.736	0.938	0.690	0.293	0.822	1.159	1.338
6	0.080	0.018	0.682	0.922	0.629	0.347	0.790	1.194	1.419
7	0.086	0.020	0.628	0.905	0.568	0.397	0.760	1.230	1.504
8	0.094	0.023	0.573	0.887	0.509	0.443	0.731	1.267	1.594
9	0.102	0.025	0.520	0.867	0.450	0.486	0.703	1.305	1.689
10	0.111	0.028	0.467	0.845	0.394	0.523	0.676	1.344	1.791
11	0.121	0.032	0.415	0.821	0.340	0.555	0.650	1.384	1.898
12	0.131	0.035	0.364	0.795	0.290	0.580	0.625	1.426	2.012
13	0.141	0.039	0.317	0.767	0.243	0.598	0.601	1.469	2.133
14	0.151	0.044	0.272	0.736	0.200	0.608	0.577	1.513	2.261
15	0.162	0.049	0.231	0.704	0.163	0.610	0.555	1.558	2.397
16	0.173	0.055	0.194	0.669	0.130	0.604	0.534	1.605	2.540
17	0.186	0.061	0.160	0.633	0.101	0.590	0.513	1.653	2.693
18	0.201	0.068	0.130	0.594	0.077	0.570	0.494	1.702	2.854
19	0.218	0.075	0.104	0.554	0.058	0.543	0.475	1.754	3.026
20	0.237	0.084	0.081	0.512	0.042	0.510	0.456	1.806	3.207
21	0.258	0.094	0.062	0.469	0.029	0.473	0.439	1.860	3.400
22	0.282	0.105	0.046	0.425	0.020	0.432	0.422	1.916	3.604
23	0.309	0.116	0.033	0.381	0.013	0.389	0.406	1.974	3.820
24	0.339	0.129	0.023	0.336	0.008	0.344	0.390	2.033	4.049
25	0.371	0.142	0.015	0.293	0.004	0.299	0.375	2.094	4.292
26	0.406	0.156	0.009	0.251	0.002	0.256	0.361	2.157	4.549
27	0.444	0.171	0.006	0.212	0.001	0.216	0.347	2.221	4.822
28	0.475	0.186	0.003	0.176	0.001	0.178	0.333	2.288	5.112
29	0.506	0.203	0.002	0.143	0.000	0.144	0.321	2.357	5.418
30	0.539	0.220	0.001	0.114	0.000	0.115	0.308	2.427	5.743
31	0.575	0.238	0.000	0.089	0.000	0.089	0.296	2.500	6.088
32	0.616	0.257	0.000	0.068	0.000	0.068	0.285	2.575	6.453
33	0.661	0.276	0.000	0.051	0.000	0.051	0.274	2.652	6.841
34	0.713	0.297	0.000	0.037	0.000	0.037	0.264	2.732	7.251
35	0.773	0.317	0.000	0.026	0.000	0.026	0.253	2.814	7.686
36	0.841	0.339	0.000	0.018	0.000	0.018	0.244	2.898	8.147
37	0.918	0.361	0.000	0.012	0.000	0.012	0.234	2.985	8.636
38	1.000	0.384	0.000	0.007	0.000	0.007	0.225	3.075	9.154
39	-	0.405	-	0.005	-	0.005	0.217	3.167	9.704
40	-	0.425	-	0.003	-	0.003	0.208	3.262	10.286
41	-	0.444	-	0.002	-	0.002	0.200	3.360	10.903
42	-	0.464	-	0.001	-	0.001	0.193	3.461	11.557
43	-	0.482	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.495	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	1.000	-	0.000	-	0.000	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	15	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	9/13/2002	
(14)	**DATE OF FILING**	9/26/2002	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	56	M
(16)	**CLAIMANT 2 (y)**	52	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	25.86	16.48
(18)	APV FOR CLAIMANT 2	60.51	28.36
(19)	APV FOR BOTH CLAIMANTS ALIVE	23.77	15.58
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	38.82	13.67
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	575,911	286,426
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	38.585	22.682
(28)	APV OF MEDICAL BENEFIT	245,401	144,259

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.015	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.017	0.002	0.985	0.998	0.983	0.017	0.962	1.030	1.060
2	0.018	0.002	0.968	0.996	0.965	0.035	0.925	1.061	1.124
3	0.020	0.002	0.950	0.994	0.945	0.055	0.889	1.093	1.191
4	0.022	0.003	0.931	0.992	0.924	0.076	0.855	1.126	1.262
5	0.024	0.003	0.911	0.989	0.901	0.098	0.822	1.159	1.338
6	0.027	0.003	0.889	0.987	0.877	0.122	0.790	1.194	1.419
7	0.030	0.004	0.865	0.983	0.851	0.147	0.760	1.230	1.504
8	0.033	0.004	0.840	0.979	0.822	0.174	0.731	1.267	1.594
9	0.037	0.005	0.812	0.975	0.792	0.204	0.703	1.305	1.689
10	0.041	0.006	0.782	0.970	0.759	0.235	0.676	1.344	1.791
11	0.046	0.007	0.750	0.964	0.723	0.268	0.650	1.384	1.898
12	0.050	0.008	0.716	0.958	0.686	0.302	0.625	1.426	2.012
13	0.055	0.009	0.680	0.951	0.647	0.338	0.601	1.469	2.133
14	0.059	0.010	0.643	0.943	0.606	0.374	0.577	1.513	2.261
15	0.064	0.011	0.605	0.933	0.564	0.409	0.555	1.558	2.397
16	0.069	0.012	0.566	0.923	0.522	0.444	0.534	1.605	2.540
17	0.074	0.013	0.527	0.912	0.481	0.478	0.513	1.653	2.693
18	0.080	0.014	0.488	0.901	0.440	0.510	0.494	1.702	2.854
19	0.086	0.015	0.449	0.889	0.399	0.539	0.475	1.754	3.026
20	0.094	0.017	0.411	0.875	0.359	0.567	0.456	1.806	3.207
21	0.102	0.018	0.372	0.861	0.320	0.592	0.439	1.860	3.400
22	0.111	0.020	0.334	0.845	0.282	0.615	0.422	1.916	3.604
23	0.121	0.023	0.297	0.828	0.246	0.633	0.406	1.974	3.820
24	0.131	0.025	0.261	0.809	0.211	0.648	0.390	2.033	4.049
25	0.141	0.028	0.227	0.789	0.179	0.658	0.375	2.094	4.292
26	0.151	0.032	0.195	0.766	0.149	0.662	0.361	2.157	4.549
27	0.162	0.035	0.165	0.742	0.123	0.662	0.347	2.221	4.822
28	0.173	0.039	0.139	0.716	0.099	0.656	0.333	2.288	5.112
29	0.186	0.044	0.115	0.687	0.079	0.644	0.321	2.357	5.418
30	0.201	0.049	0.093	0.657	0.061	0.628	0.308	2.427	5.743
31	0.218	0.055	0.074	0.625	0.047	0.606	0.296	2.500	6.088
32	0.237	0.061	0.058	0.591	0.034	0.580	0.285	2.575	6.453
33	0.258	0.068	0.044	0.555	0.025	0.550	0.274	2.652	6.841
34	0.282	0.075	0.033	0.517	0.017	0.516	0.264	2.732	7.251
35	0.309	0.084	0.024	0.478	0.011	0.479	0.253	2.814	7.686
36	0.339	0.094	0.016	0.438	0.007	0.440	0.244	2.898	8.147
37	0.371	0.105	0.011	0.397	0.004	0.399	0.234	2.985	8.636
38	0.406	0.116	0.007	0.355	0.002	0.357	0.225	3.075	9.154
39	0.444	0.129	0.004	0.314	0.001	0.316	0.217	3.167	9.704
40	0.475	0.142	0.002	0.274	0.001	0.275	0.208	3.262	10.286
41	0.506	0.156	0.001	0.235	0.000	0.235	0.200	3.360	10.903
42	0.539	0.171	0.001	0.198	0.000	0.198	0.193	3.461	11.557
43	0.575	0.186	0.000	0.164	0.000	0.164	0.185	3.565	12.250
44	0.616	0.203	0.000	0.134	0.000	0.134	0.178	3.671	12.985
45	0.661	0.220	0.000	0.107	0.000	0.107	0.171	3.782	13.765
46	0.713	0.238	0.000	0.083	0.000	0.083	0.165	3.895	14.590
47	0.773	0.257	0.000	0.063	0.000	0.063	0.158	4.012	15.466
48	0.841	0.276	0.000	0.047	0.000	0.047	0.152	4.132	16.394
49	0.918	0.297	0.000	0.034	0.000	0.034	0.146	4.256	17.378
50	1.000	0.317	0.000	0.024	0.000	0.024	0.141	4.384	18.420
51	-	0.339	-	0.016	-	0.016	0.135	4.515	19.525
52	-	0.361	-	0.011	-	0.011	0.130	4.651	20.697
53	-	0.384	-	0.007	-	0.007	0.125	4.790	21.939
54	-	0.405	-	0.004	-	0.004	0.120	4.934	23.255
55	-	0.425	-	0.003	-	0.003	0.116	5.082	24.650
56	-	0.444	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.464	-	0.001	-	0.001	0.107	5.392	27.697
58	-	0.482	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.495	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	0.500	-	0.000	-	0.000	0.075	7.035	46.794
67	-	0.500	-	0.000	-	0.000	0.072	7.246	49.601
68	-	1.000	-	0.000	-	0.000	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
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110	-	-	-	-	-	-	0.013	25.828	607.638
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117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	16	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/24/2003	
(14)	**DATE OF FILING**	2/10/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	62	M
(16)	**CLAIMANT 2 (y)**	63	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	18.54	12.96
(18)	APV FOR CLAIMANT 2	35.86	20.75
(19)	APV FOR BOTH CLAIMANTS ALIVE	15.82	11.54
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	22.75	10.64
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	359,414	216,025
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	25.322	16.719
(28)	APV OF MEDICAL BENEFIT	161,050	106,334

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.027	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.030	0.008	0.973	0.993	0.967	0.033	0.962	1.030	1.060
2	0.033	0.009	0.945	0.986	0.931	0.068	0.925	1.061	1.124
3	0.037	0.010	0.913	0.977	0.893	0.105	0.889	1.093	1.191
4	0.041	0.011	0.880	0.968	0.852	0.145	0.855	1.126	1.262
5	0.046	0.012	0.844	0.957	0.808	0.185	0.822	1.159	1.338
6	0.050	0.013	0.805	0.946	0.762	0.227	0.790	1.194	1.419
7	0.055	0.014	0.765	0.934	0.715	0.270	0.760	1.230	1.504
8	0.059	0.015	0.723	0.921	0.666	0.312	0.731	1.267	1.594
9	0.064	0.017	0.680	0.907	0.617	0.353	0.703	1.305	1.689
10	0.069	0.018	0.637	0.892	0.568	0.393	0.676	1.344	1.791
11	0.074	0.020	0.593	0.876	0.519	0.430	0.650	1.384	1.898
12	0.080	0.023	0.549	0.858	0.471	0.465	0.625	1.426	2.012
13	0.086	0.025	0.505	0.839	0.424	0.496	0.601	1.469	2.133
14	0.094	0.028	0.462	0.818	0.378	0.524	0.577	1.513	2.261
15	0.102	0.032	0.419	0.794	0.333	0.548	0.555	1.558	2.397
16	0.111	0.035	0.376	0.769	0.289	0.567	0.534	1.605	2.540
17	0.121	0.039	0.334	0.742	0.248	0.580	0.513	1.653	2.693
18	0.131	0.044	0.294	0.713	0.209	0.588	0.494	1.702	2.854
19	0.141	0.049	0.255	0.681	0.174	0.589	0.475	1.754	3.026
20	0.151	0.055	0.219	0.648	0.142	0.583	0.456	1.806	3.207
21	0.162	0.061	0.186	0.612	0.114	0.571	0.439	1.860	3.400
22	0.173	0.068	0.156	0.575	0.090	0.552	0.422	1.916	3.604
23	0.186	0.075	0.129	0.536	0.069	0.527	0.406	1.974	3.820
24	0.201	0.084	0.105	0.496	0.052	0.497	0.390	2.033	4.049
25	0.218	0.094	0.084	0.454	0.038	0.462	0.375	2.094	4.292
26	0.237	0.105	0.066	0.411	0.027	0.423	0.361	2.157	4.549
27	0.258	0.116	0.050	0.368	0.018	0.382	0.347	2.221	4.822
28	0.282	0.129	0.037	0.326	0.012	0.339	0.333	2.288	5.112
29	0.309	0.142	0.027	0.284	0.008	0.295	0.321	2.357	5.418
30	0.339	0.156	0.018	0.243	0.004	0.253	0.308	2.427	5.743
31	0.371	0.171	0.012	0.205	0.002	0.213	0.296	2.500	6.088
32	0.406	0.186	0.008	0.170	0.001	0.175	0.285	2.575	6.453
33	0.444	0.203	0.005	0.139	0.001	0.142	0.274	2.652	6.841
34	0.475	0.220	0.003	0.111	0.000	0.113	0.264	2.732	7.251
35	0.506	0.238	0.001	0.086	0.000	0.087	0.253	2.814	7.686
36	0.539	0.257	0.001	0.066	0.000	0.066	0.244	2.898	8.147
37	0.575	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.616	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	0.661	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	0.713	0.339	0.000	0.017	0.000	0.017	0.208	3.262	10.286
41	0.773	0.361	0.000	0.011	0.000	0.011	0.200	3.360	10.903
42	0.841	0.384	0.000	0.007	0.000	0.007	0.193	3.461	11.557
43	0.918	0.405	0.000	0.004	0.000	0.004	0.185	3.565	12.250
44	1.000	0.425	0.000	0.003	0.000	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	17	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	2/26/2003	
(14)	**DATE OF FILING**	3/3/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	73	M
(16)	**CLAIMANT 2 (y)**	54	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.75	7.84
(18)	APV FOR CLAIMANT 2	55.33	26.98
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.52	7.69
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	46.05	19.44
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	466,436	239,529
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	11.698	9.170
(28)	APV OF MEDICAL BENEFIT	74,401	58,319

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.074	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.080	0.002	0.926	0.998	0.924	0.076	0.962	1.030	1.060
2	0.086	0.003	0.853	0.996	0.849	0.151	0.925	1.061	1.124
3	0.094	0.003	0.779	0.993	0.774	0.225	0.889	1.093	1.191
4	0.102	0.003	0.706	0.990	0.699	0.298	0.855	1.126	1.262
5	0.111	0.004	0.634	0.987	0.626	0.370	0.822	1.159	1.338
6	0.121	0.004	0.563	0.983	0.554	0.439	0.790	1.194	1.419
7	0.131	0.005	0.495	0.979	0.485	0.505	0.760	1.230	1.504
8	0.141	0.006	0.430	0.974	0.419	0.566	0.731	1.267	1.594
9	0.151	0.007	0.370	0.968	0.358	0.622	0.703	1.305	1.689
10	0.162	0.008	0.314	0.962	0.302	0.672	0.676	1.344	1.791
11	0.173	0.009	0.263	0.954	0.251	0.715	0.650	1.384	1.898
12	0.186	0.010	0.217	0.946	0.206	0.752	0.625	1.426	2.012
13	0.201	0.011	0.177	0.937	0.166	0.782	0.601	1.469	2.133
14	0.218	0.012	0.141	0.927	0.131	0.806	0.577	1.513	2.261
15	0.237	0.013	0.111	0.916	0.101	0.824	0.555	1.558	2.397
16	0.258	0.014	0.084	0.904	0.076	0.836	0.534	1.605	2.540
17	0.282	0.015	0.063	0.892	0.056	0.843	0.513	1.653	2.693
18	0.309	0.017	0.045	0.878	0.039	0.844	0.494	1.702	2.854
19	0.339	0.018	0.031	0.864	0.027	0.841	0.475	1.754	3.026
20	0.371	0.020	0.021	0.848	0.017	0.834	0.456	1.806	3.207
21	0.406	0.023	0.013	0.831	0.011	0.822	0.439	1.860	3.400
22	0.444	0.025	0.008	0.812	0.006	0.807	0.422	1.916	3.604
23	0.475	0.028	0.004	0.791	0.003	0.789	0.406	1.974	3.820
24	0.506	0.032	0.002	0.769	0.002	0.768	0.390	2.033	4.049
25	0.539	0.035	0.001	0.745	0.001	0.744	0.375	2.094	4.292
26	0.575	0.039	0.001	0.718	0.000	0.718	0.361	2.157	4.549
27	0.616	0.044	0.000	0.690	0.000	0.690	0.347	2.221	4.822
28	0.661	0.049	0.000	0.660	0.000	0.660	0.333	2.288	5.112
29	0.713	0.055	0.000	0.627	0.000	0.627	0.321	2.357	5.418
30	0.773	0.061	0.000	0.593	0.000	0.593	0.308	2.427	5.743
31	0.841	0.068	0.000	0.557	0.000	0.557	0.296	2.500	6.088
32	0.918	0.075	0.000	0.519	0.000	0.519	0.285	2.575	6.453
33	1.000	0.084	0.000	0.480	0.000	0.480	0.274	2.652	6.841
34	-	0.094	-	0.440	-	0.440	0.264	2.732	7.251
35	-	0.105	-	0.398	-	0.398	0.253	2.814	7.686
36	-	0.116	-	0.357	-	0.357	0.244	2.898	8.147
37	-	0.129	-	0.315	-	0.315	0.234	2.985	8.636
38	-	0.142	-	0.275	-	0.275	0.225	3.075	9.154
39	-	0.156	-	0.236	-	0.236	0.217	3.167	9.704
40	-	0.171	-	0.199	-	0.199	0.208	3.262	10.286
41	-	0.186	-	0.165	-	0.165	0.200	3.360	10.903
42	-	0.203	-	0.134	-	0.134	0.193	3.461	11.557
43	-	0.220	-	0.107	-	0.107	0.185	3.565	12.250
44	-	0.238	-	0.084	-	0.084	0.178	3.671	12.985
45	-	0.257	-	0.064	-	0.064	0.171	3.782	13.765
46	-	0.276	-	0.047	-	0.047	0.165	3.895	14.590
47	-	0.297	-	0.034	-	0.034	0.158	4.012	15.466
48	-	0.317	-	0.024	-	0.024	0.152	4.132	16.394
49	-	0.339	-	0.016	-	0.016	0.146	4.256	17.378
50	-	0.361	-	0.011	-	0.011	0.141	4.384	18.420
51	-	0.384	-	0.007	-	0.007	0.135	4.515	19.525
52	-	0.405	-	0.004	-	0.004	0.130	4.651	20.697
53	-	0.425	-	0.003	-	0.003	0.125	4.790	21.939
54	-	0.444	-	0.001	-	0.001	0.120	4.934	23.255
55	-	0.464	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.482	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.495	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	1.000	-	0.000	-	0.000	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	18	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	11/14/2003	
(14)	**DATE OF FILING**	11/17/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	68	M
(16)	**CLAIMANT 2 (y)**	61	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.06	9.90
(18)	APV FOR CLAIMANT 2	39.65	22.12
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.03	9.29
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	28.66	13.44
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	361,106	211,669
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	16.542	12.072
(28)	APV OF MEDICAL BENEFIT	105,207	76,775

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.050	0.005	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.055	0.006	0.950	0.995	0.945	0.055	0.962	1.030	1.060
2	0.059	0.007	0.898	0.989	0.888	0.111	0.925	1.061	1.124
3	0.064	0.008	0.844	0.983	0.830	0.168	0.889	1.093	1.191
4	0.069	0.009	0.790	0.975	0.771	0.224	0.855	1.126	1.262
5	0.074	0.010	0.736	0.967	0.711	0.280	0.822	1.159	1.338
6	0.080	0.011	0.682	0.957	0.653	0.334	0.790	1.194	1.419
7	0.086	0.012	0.628	0.947	0.594	0.386	0.760	1.230	1.504
8	0.094	0.013	0.573	0.936	0.537	0.436	0.731	1.267	1.594
9	0.102	0.014	0.520	0.924	0.480	0.483	0.703	1.305	1.689
10	0.111	0.015	0.467	0.911	0.425	0.528	0.676	1.344	1.791
11	0.121	0.017	0.415	0.898	0.372	0.568	0.650	1.384	1.898
12	0.131	0.018	0.364	0.883	0.322	0.604	0.625	1.426	2.012
13	0.141	0.020	0.317	0.867	0.275	0.634	0.601	1.469	2.133
14	0.151	0.023	0.272	0.849	0.231	0.659	0.577	1.513	2.261
15	0.162	0.025	0.231	0.830	0.192	0.677	0.555	1.558	2.397
16	0.173	0.028	0.194	0.809	0.157	0.689	0.534	1.605	2.540
17	0.186	0.032	0.160	0.786	0.126	0.694	0.513	1.653	2.693
18	0.201	0.035	0.130	0.761	0.099	0.693	0.494	1.702	2.854
19	0.218	0.039	0.104	0.734	0.076	0.685	0.475	1.754	3.026
20	0.237	0.044	0.081	0.705	0.057	0.672	0.456	1.806	3.207
21	0.258	0.049	0.062	0.674	0.042	0.652	0.439	1.860	3.400
22	0.282	0.055	0.046	0.641	0.030	0.628	0.422	1.916	3.604
23	0.309	0.061	0.033	0.606	0.020	0.599	0.406	1.974	3.820
24	0.339	0.068	0.023	0.569	0.013	0.566	0.390	2.033	4.049
25	0.371	0.075	0.015	0.530	0.008	0.529	0.375	2.094	4.292
26	0.406	0.084	0.009	0.490	0.005	0.490	0.361	2.157	4.549
27	0.444	0.094	0.006	0.449	0.003	0.450	0.347	2.221	4.822
28	0.475	0.105	0.003	0.407	0.001	0.408	0.333	2.288	5.112
29	0.506	0.116	0.002	0.364	0.001	0.365	0.321	2.357	5.418
30	0.539	0.129	0.001	0.322	0.000	0.322	0.308	2.427	5.743
31	0.575	0.142	0.000	0.281	0.000	0.281	0.296	2.500	6.088
32	0.616	0.156	0.000	0.241	0.000	0.241	0.285	2.575	6.453
33	0.661	0.171	0.000	0.203	0.000	0.203	0.274	2.652	6.841
34	0.713	0.186	0.000	0.169	0.000	0.169	0.264	2.732	7.251
35	0.773	0.203	0.000	0.137	0.000	0.137	0.253	2.814	7.686
36	0.841	0.220	0.000	0.109	0.000	0.109	0.244	2.898	8.147
37	0.918	0.238	0.000	0.085	0.000	0.085	0.234	2.985	8.636
38	1.000	0.257	0.000	0.065	0.000	0.065	0.225	3.075	9.154
39	-	0.276	-	0.048	-	0.048	0.217	3.167	9.704
40	-	0.297	-	0.035	-	0.035	0.208	3.262	10.286
41	-	0.317	-	0.025	-	0.025	0.200	3.360	10.903
42	-	0.339	-	0.017	-	0.017	0.193	3.461	11.557
43	-	0.361	-	0.011	-	0.011	0.185	3.565	12.250
44	-	0.384	-	0.007	-	0.007	0.178	3.671	12.985
45	-	0.405	-	0.004	-	0.004	0.171	3.782	13.765
46	-	0.425	-	0.003	-	0.003	0.165	3.895	14.590
47	-	0.444	-	0.001	-	0.001	0.158	4.012	15.466
48	-	0.464	-	0.001	-	0.001	0.152	4.132	16.394
49	-	0.482	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.495	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	1.000	-	0.000	-	0.000	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	19	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	12/8/2003	
(14)	**DATE OF FILING**	12/9/2003	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	64	M
(16)	**CLAIMANT 2 (y)**	60	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	16.50	11.86
(18)	APV FOR CLAIMANT 2	41.66	22.81
(19)	APV FOR BOTH CLAIMANTS ALIVE	14.91	11.00
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	28.35	12.67
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	392,075	225,550
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	21.945	15.009
(28)	APV OF MEDICAL BENEFIT	139,571	95,455

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.033	0.004	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.037	0.005	0.967	0.996	0.963	0.037	0.962	1.030	1.060
2	0.041	0.006	0.932	0.990	0.923	0.077	0.925	1.061	1.124
3	0.046	0.007	0.893	0.985	0.880	0.119	0.889	1.093	1.191
4	0.050	0.008	0.853	0.978	0.834	0.163	0.855	1.126	1.262
5	0.055	0.009	0.810	0.971	0.786	0.208	0.822	1.159	1.338
6	0.059	0.010	0.766	0.962	0.737	0.254	0.790	1.194	1.419
7	0.064	0.011	0.720	0.953	0.686	0.301	0.760	1.230	1.504
8	0.069	0.012	0.674	0.943	0.635	0.346	0.731	1.267	1.594
9	0.074	0.013	0.628	0.932	0.585	0.390	0.703	1.305	1.689
10	0.080	0.014	0.581	0.920	0.535	0.432	0.676	1.344	1.791
11	0.086	0.015	0.535	0.907	0.485	0.471	0.650	1.384	1.898
12	0.094	0.017	0.489	0.894	0.437	0.509	0.625	1.426	2.012
13	0.102	0.018	0.443	0.879	0.389	0.543	0.601	1.469	2.133
14	0.111	0.020	0.398	0.863	0.343	0.574	0.577	1.513	2.261
15	0.121	0.023	0.354	0.845	0.299	0.601	0.555	1.558	2.397
16	0.131	0.025	0.311	0.826	0.257	0.623	0.534	1.605	2.540
17	0.141	0.028	0.270	0.805	0.217	0.640	0.513	1.653	2.693
18	0.151	0.032	0.232	0.782	0.182	0.651	0.494	1.702	2.854
19	0.162	0.035	0.197	0.757	0.149	0.656	0.475	1.754	3.026
20	0.173	0.039	0.165	0.731	0.121	0.654	0.456	1.806	3.207
21	0.186	0.044	0.136	0.702	0.096	0.647	0.439	1.860	3.400
22	0.201	0.049	0.111	0.671	0.075	0.633	0.422	1.916	3.604
23	0.218	0.055	0.089	0.638	0.057	0.614	0.406	1.974	3.820
24	0.237	0.061	0.069	0.603	0.042	0.589	0.390	2.033	4.049
25	0.258	0.068	0.053	0.566	0.030	0.559	0.375	2.094	4.292
26	0.282	0.075	0.039	0.528	0.021	0.526	0.361	2.157	4.549
27	0.309	0.084	0.028	0.488	0.014	0.489	0.347	2.221	4.822
28	0.339	0.094	0.019	0.447	0.009	0.449	0.333	2.288	5.112
29	0.371	0.105	0.013	0.405	0.005	0.408	0.321	2.357	5.418
30	0.406	0.116	0.008	0.363	0.003	0.365	0.308	2.427	5.743
31	0.444	0.129	0.005	0.321	0.002	0.322	0.296	2.500	6.088
32	0.475	0.142	0.003	0.279	0.001	0.280	0.285	2.575	6.453
33	0.506	0.156	0.001	0.240	0.000	0.240	0.274	2.652	6.841
34	0.539	0.171	0.001	0.202	0.000	0.203	0.264	2.732	7.251
35	0.575	0.186	0.000	0.168	0.000	0.168	0.253	2.814	7.686
36	0.616	0.203	0.000	0.137	0.000	0.137	0.244	2.898	8.147
37	0.661	0.220	0.000	0.109	0.000	0.109	0.234	2.985	8.636
38	0.713	0.238	0.000	0.085	0.000	0.085	0.225	3.075	9.154
39	0.773	0.257	0.000	0.065	0.000	0.065	0.217	3.167	9.704
40	0.841	0.276	0.000	0.048	0.000	0.048	0.208	3.262	10.286
41	0.918	0.297	0.000	0.035	0.000	0.035	0.200	3.360	10.903
42	1.000	0.317	0.000	0.024	0.000	0.024	0.193	3.461	11.557
43	-	0.339	-	0.017	-	0.017	0.185	3.565	12.250
44	-	0.361	-	0.011	-	0.011	0.178	3.671	12.985
45	-	0.384	-	0.007	-	0.007	0.171	3.782	13.765
46	-	0.405	-	0.004	-	0.004	0.165	3.895	14.590
47	-	0.425	-	0.003	-	0.003	0.158	4.012	15.466
48	-	0.444	-	0.001	-	0.001	0.152	4.132	16.394
49	-	0.464	-	0.001	-	0.001	0.146	4.256	17.378
50	-	0.482	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.495	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	1.000	-	0.000	-	0.000	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
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(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	20	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	10/20/2005	
(14)	**DATE OF FILING**	10/21/2005	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	65	M
(16)	**CLAIMANT 2 (y)**	67	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	15.56	11.34
(18)	APV FOR CLAIMANT 2	29.12	18.10
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.96	9.87
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	18.77	9.70
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	295,399	189,470
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	20.432	14.212
(28)	APV OF MEDICAL BENEFIT	129,945	90,387

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.037	0.011	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.041	0.012	0.963	0.989	0.953	0.047	0.962	1.030	1.060
2	0.046	0.013	0.924	0.978	0.903	0.095	0.925	1.061	1.124
3	0.050	0.014	0.882	0.965	0.851	0.145	0.889	1.093	1.191
4	0.055	0.015	0.838	0.952	0.797	0.195	0.855	1.126	1.262
5	0.059	0.017	0.792	0.938	0.742	0.245	0.822	1.159	1.338
6	0.064	0.018	0.745	0.922	0.687	0.294	0.790	1.194	1.419
7	0.069	0.020	0.697	0.905	0.631	0.340	0.760	1.230	1.504
8	0.074	0.023	0.649	0.887	0.576	0.385	0.731	1.267	1.594
9	0.080	0.025	0.601	0.867	0.521	0.426	0.703	1.305	1.689
10	0.086	0.028	0.553	0.845	0.467	0.463	0.676	1.344	1.791
11	0.094	0.032	0.506	0.821	0.415	0.496	0.650	1.384	1.898
12	0.102	0.035	0.458	0.795	0.364	0.525	0.625	1.426	2.012
13	0.111	0.039	0.411	0.767	0.315	0.547	0.601	1.469	2.133
14	0.121	0.044	0.366	0.736	0.269	0.564	0.577	1.513	2.261
15	0.131	0.049	0.321	0.704	0.226	0.573	0.555	1.558	2.397
16	0.141	0.055	0.279	0.669	0.187	0.575	0.534	1.605	2.540
17	0.151	0.061	0.240	0.633	0.152	0.569	0.513	1.653	2.693
18	0.162	0.068	0.204	0.594	0.121	0.556	0.494	1.702	2.854
19	0.173	0.075	0.171	0.554	0.095	0.536	0.475	1.754	3.026
20	0.186	0.084	0.141	0.512	0.072	0.509	0.456	1.806	3.207
21	0.201	0.094	0.115	0.469	0.054	0.476	0.439	1.860	3.400
22	0.218	0.105	0.092	0.425	0.039	0.439	0.422	1.916	3.604
23	0.237	0.116	0.072	0.381	0.027	0.398	0.406	1.974	3.820
24	0.258	0.129	0.055	0.336	0.018	0.354	0.390	2.033	4.049
25	0.282	0.142	0.041	0.293	0.012	0.310	0.375	2.094	4.292
26	0.309	0.156	0.029	0.251	0.007	0.266	0.361	2.157	4.549
27	0.339	0.171	0.020	0.212	0.004	0.224	0.347	2.221	4.822
28	0.371	0.186	0.013	0.176	0.002	0.185	0.333	2.288	5.112
29	0.406	0.203	0.008	0.143	0.001	0.149	0.321	2.357	5.418
30	0.444	0.220	0.005	0.114	0.001	0.118	0.308	2.427	5.743
31	0.475	0.238	0.003	0.089	0.000	0.091	0.296	2.500	6.088
32	0.506	0.257	0.001	0.068	0.000	0.069	0.285	2.575	6.453
33	0.539	0.276	0.001	0.051	0.000	0.051	0.274	2.652	6.841
34	0.575	0.297	0.000	0.037	0.000	0.037	0.264	2.732	7.251
35	0.616	0.317	0.000	0.026	0.000	0.026	0.253	2.814	7.686
36	0.661	0.339	0.000	0.018	0.000	0.018	0.244	2.898	8.147
37	0.713	0.361	0.000	0.012	0.000	0.012	0.234	2.985	8.636
38	0.773	0.384	0.000	0.007	0.000	0.007	0.225	3.075	9.154
39	0.841	0.405	0.000	0.005	0.000	0.005	0.217	3.167	9.704
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41	1.000	0.444	0.000	0.002	0.000	0.002	0.200	3.360	10.903
42	-	0.464	-	0.001	-	0.001	0.193	3.461	11.557
43	-	0.482	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.495	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
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52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	1.000	-	0.000	-	0.000	0.125	4.790	21.939
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(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	21	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	8/22/2006	
(14)	**DATE OF FILING**	8/30/2006	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	66	M
(16)	**CLAIMANT 2 (y)**	63	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.68	10.84
(18)	APV FOR CLAIMANT 2	35.86	20.75
(19)	APV FOR BOTH CLAIMANTS ALIVE	13.05	9.91
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	24.44	11.77
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	340,283	205,952
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	19.031	13.457
(28)	APV OF MEDICAL BENEFIT	121,034	85,585

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.041	0.007	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.046	0.008	0.959	0.993	0.953	0.047	0.962	1.030	1.060
2	0.050	0.009	0.915	0.986	0.902	0.096	0.925	1.061	1.124
3	0.055	0.010	0.869	0.977	0.850	0.147	0.889	1.093	1.191
4	0.059	0.011	0.822	0.968	0.795	0.199	0.855	1.126	1.262
5	0.064	0.012	0.773	0.957	0.740	0.250	0.822	1.159	1.338
6	0.069	0.013	0.723	0.946	0.684	0.301	0.790	1.194	1.419
7	0.074	0.014	0.674	0.934	0.629	0.349	0.760	1.230	1.504
8	0.080	0.015	0.624	0.921	0.575	0.395	0.731	1.267	1.594
9	0.086	0.017	0.574	0.907	0.521	0.439	0.703	1.305	1.689
10	0.094	0.018	0.525	0.892	0.468	0.480	0.676	1.344	1.791
11	0.102	0.020	0.476	0.876	0.417	0.518	0.650	1.384	1.898
12	0.111	0.023	0.427	0.858	0.367	0.552	0.625	1.426	2.012
13	0.121	0.025	0.380	0.839	0.318	0.582	0.601	1.469	2.133
14	0.131	0.028	0.334	0.818	0.273	0.606	0.577	1.513	2.261
15	0.141	0.032	0.290	0.794	0.230	0.624	0.555	1.558	2.397
16	0.151	0.035	0.249	0.769	0.192	0.635	0.534	1.605	2.540
17	0.162	0.039	0.212	0.742	0.157	0.640	0.513	1.653	2.693
18	0.173	0.044	0.177	0.713	0.126	0.637	0.494	1.702	2.854
19	0.186	0.049	0.147	0.681	0.100	0.628	0.475	1.754	3.026
20	0.201	0.055	0.119	0.648	0.077	0.613	0.456	1.806	3.207
21	0.218	0.061	0.095	0.612	0.058	0.591	0.439	1.860	3.400
22	0.237	0.068	0.074	0.575	0.043	0.564	0.422	1.916	3.604
23	0.258	0.075	0.057	0.536	0.030	0.532	0.406	1.974	3.820
24	0.282	0.084	0.042	0.496	0.021	0.496	0.390	2.033	4.049
25	0.309	0.094	0.030	0.454	0.014	0.457	0.375	2.094	4.292
26	0.339	0.105	0.021	0.411	0.009	0.415	0.361	2.157	4.549
27	0.371	0.116	0.014	0.368	0.005	0.372	0.347	2.221	4.822
28	0.406	0.129	0.009	0.326	0.003	0.329	0.333	2.288	5.112
29	0.444	0.142	0.005	0.284	0.001	0.286	0.321	2.357	5.418
30	0.475	0.156	0.003	0.243	0.001	0.245	0.308	2.427	5.743
31	0.506	0.171	0.002	0.205	0.000	0.206	0.296	2.500	6.088
32	0.539	0.186	0.001	0.170	0.000	0.171	0.285	2.575	6.453
33	0.575	0.203	0.000	0.139	0.000	0.139	0.274	2.652	6.841
34	0.616	0.220	0.000	0.111	0.000	0.111	0.264	2.732	7.251
35	0.661	0.238	0.000	0.086	0.000	0.086	0.253	2.814	7.686
36	0.713	0.257	0.000	0.066	0.000	0.066	0.244	2.898	8.147
37	0.773	0.276	0.000	0.049	0.000	0.049	0.234	2.985	8.636
38	0.841	0.297	0.000	0.035	0.000	0.035	0.225	3.075	9.154
39	0.918	0.317	0.000	0.025	0.000	0.025	0.217	3.167	9.704
40	1.000	0.339	0.000	0.017	0.000	0.017	0.208	3.262	10.286
41	-	0.361	-	0.011	-	0.011	0.200	3.360	10.903
42	-	0.384	-	0.007	-	0.007	0.193	3.461	11.557
43	-	0.405	-	0.004	-	0.004	0.185	3.565	12.250
44	-	0.425	-	0.003	-	0.003	0.178	3.671	12.985
45	-	0.444	-	0.002	-	0.002	0.171	3.782	13.765
46	-	0.464	-	0.001	-	0.001	0.165	3.895	14.590
47	-	0.482	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.495	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	1.000	-	0.000	-	0.000	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	22	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/8/2007	
(14)	**DATE OF FILING**	5/11/2007	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	71	M
(16)	**CLAIMANT 2 (y)**	69	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.98	8.63
(18)	APV FOR CLAIMANT 2	26.13	16.81
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.54	7.71
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	18.03	10.02
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	250,103	166,907
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	13.450	10.258
(28)	APV OF MEDICAL BENEFIT	85,545	65,241

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	0.013	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	0.014	0.936	0.987	0.924	0.075	0.962	1.030	1.060
2	0.074	0.015	0.872	0.974	0.849	0.148	0.925	1.061	1.124
3	0.080	0.017	0.807	0.959	0.774	0.218	0.889	1.093	1.191
4	0.086	0.018	0.743	0.943	0.701	0.284	0.855	1.126	1.262
5	0.094	0.020	0.679	0.926	0.629	0.347	0.822	1.159	1.338
6	0.102	0.023	0.615	0.907	0.558	0.406	0.790	1.194	1.419
7	0.111	0.025	0.553	0.887	0.490	0.459	0.760	1.230	1.504
8	0.121	0.028	0.491	0.864	0.424	0.507	0.731	1.267	1.594
9	0.131	0.032	0.432	0.840	0.362	0.546	0.703	1.305	1.689
10	0.141	0.035	0.375	0.813	0.305	0.578	0.676	1.344	1.791
11	0.151	0.039	0.322	0.784	0.253	0.601	0.650	1.384	1.898
12	0.162	0.044	0.274	0.753	0.206	0.615	0.625	1.426	2.012
13	0.173	0.049	0.229	0.720	0.165	0.619	0.601	1.469	2.133
14	0.186	0.055	0.190	0.685	0.130	0.615	0.577	1.513	2.261
15	0.201	0.061	0.154	0.647	0.100	0.602	0.555	1.558	2.397
16	0.218	0.068	0.123	0.608	0.075	0.581	0.534	1.605	2.540
17	0.237	0.075	0.096	0.567	0.055	0.554	0.513	1.653	2.693
18	0.258	0.084	0.074	0.524	0.039	0.520	0.494	1.702	2.854
19	0.282	0.094	0.055	0.480	0.026	0.482	0.475	1.754	3.026
20	0.309	0.105	0.039	0.435	0.017	0.440	0.456	1.806	3.207
21	0.339	0.116	0.027	0.389	0.011	0.395	0.439	1.860	3.400
22	0.371	0.129	0.018	0.344	0.006	0.350	0.422	1.916	3.604
23	0.406	0.142	0.011	0.300	0.003	0.304	0.406	1.974	3.820
24	0.444	0.156	0.007	0.257	0.002	0.260	0.390	2.033	4.049
25	0.475	0.171	0.004	0.217	0.001	0.219	0.375	2.094	4.292
26	0.506	0.186	0.002	0.180	0.000	0.181	0.361	2.157	4.549
27	0.539	0.203	0.001	0.147	0.000	0.147	0.347	2.221	4.822
28	0.575	0.220	0.000	0.117	0.000	0.117	0.333	2.288	5.112
29	0.616	0.238	0.000	0.091	0.000	0.091	0.321	2.357	5.418
30	0.661	0.257	0.000	0.070	0.000	0.070	0.308	2.427	5.743
31	0.713	0.276	0.000	0.052	0.000	0.052	0.296	2.500	6.088
32	0.773	0.297	0.000	0.037	0.000	0.037	0.285	2.575	6.453
33	0.841	0.317	0.000	0.026	0.000	0.026	0.274	2.652	6.841
34	0.918	0.339	0.000	0.018	0.000	0.018	0.264	2.732	7.251
35	1.000	0.361	0.000	0.012	0.000	0.012	0.253	2.814	7.686
36	-	0.384	-	0.008	-	0.008	0.244	2.898	8.147
37	-	0.405	-	0.005	-	0.005	0.234	2.985	8.636
38	-	0.425	-	0.003	-	0.003	0.225	3.075	9.154
39	-	0.444	-	0.002	-	0.002	0.217	3.167	9.704
40	-	0.464	-	0.001	-	0.001	0.208	3.262	10.286
41	-	0.482	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.495	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	1.000	-	0.000	-	0.000	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	23	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	10/30/2007	
(14)	**DATE OF FILING**	10/30/2007	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	74	M
(16)	**CLAIMANT 2 (y)**	72	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.17	7.46
(18)	APV FOR CLAIMANT 2	22.02	14.89
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.90	6.60
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.39	9.15
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	210,669	147,319
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	10.897	8.654
(28)	APV OF MEDICAL BENEFIT	69,302	55,039

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.080	0.017	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.086	0.018	0.920	0.983	0.905	0.093	0.962	1.030	1.060
2	0.094	0.020	0.841	0.965	0.812	0.182	0.925	1.061	1.124
3	0.102	0.023	0.762	0.946	0.721	0.266	0.889	1.093	1.191
4	0.111	0.025	0.684	0.924	0.633	0.344	0.855	1.126	1.262
5	0.121	0.028	0.608	0.901	0.548	0.413	0.822	1.159	1.338
6	0.131	0.032	0.535	0.875	0.468	0.474	0.790	1.194	1.419
7	0.141	0.035	0.465	0.848	0.394	0.525	0.760	1.230	1.504
8	0.151	0.039	0.399	0.818	0.326	0.564	0.731	1.267	1.594
9	0.162	0.044	0.339	0.785	0.266	0.592	0.703	1.305	1.689
10	0.173	0.049	0.284	0.751	0.213	0.608	0.676	1.344	1.791
11	0.186	0.055	0.235	0.714	0.168	0.614	0.650	1.384	1.898
12	0.201	0.061	0.191	0.675	0.129	0.608	0.625	1.426	2.012
13	0.218	0.068	0.153	0.634	0.097	0.593	0.601	1.469	2.133
14	0.237	0.075	0.119	0.591	0.071	0.569	0.577	1.513	2.261
15	0.258	0.084	0.091	0.546	0.050	0.538	0.555	1.558	2.397
16	0.282	0.094	0.068	0.500	0.034	0.500	0.534	1.605	2.540
17	0.309	0.105	0.048	0.453	0.022	0.458	0.513	1.653	2.693
18	0.339	0.116	0.033	0.406	0.014	0.412	0.494	1.702	2.854
19	0.371	0.129	0.022	0.359	0.008	0.365	0.475	1.754	3.026
20	0.406	0.142	0.014	0.313	0.004	0.318	0.456	1.806	3.207
21	0.444	0.156	0.008	0.268	0.002	0.272	0.439	1.860	3.400
22	0.475	0.171	0.005	0.226	0.001	0.229	0.422	1.916	3.604
23	0.506	0.186	0.002	0.188	0.000	0.189	0.406	1.974	3.820
24	0.539	0.203	0.001	0.153	0.000	0.154	0.390	2.033	4.049
25	0.575	0.220	0.001	0.122	0.000	0.122	0.375	2.094	4.292
26	0.616	0.238	0.000	0.095	0.000	0.095	0.361	2.157	4.549
27	0.661	0.257	0.000	0.072	0.000	0.073	0.347	2.221	4.822
28	0.713	0.276	0.000	0.054	0.000	0.054	0.333	2.288	5.112
29	0.773	0.297	0.000	0.039	0.000	0.039	0.321	2.357	5.418
30	0.841	0.317	0.000	0.027	0.000	0.027	0.308	2.427	5.743
31	0.918	0.339	0.000	0.019	0.000	0.019	0.296	2.500	6.088
32	1.000	0.361	0.000	0.012	0.000	0.012	0.285	2.575	6.453
33	-	0.384	-	0.008	-	0.008	0.274	2.652	6.841
34	-	0.405	-	0.005	-	0.005	0.264	2.732	7.251
35	-	0.425	-	0.003	-	0.003	0.253	2.814	7.686
36	-	0.444	-	0.002	-	0.002	0.244	2.898	8.147
37	-	0.464	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.482	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.495	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	1.000	-	0.000	-	0.000	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
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(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(13) PROVIDED BY BWC
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(15) PROVIDED BY BWC
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	24	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/1/2009	
(14)	**DATE OF FILING**	4/7/2009	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	76	M
(16)	**CLAIMANT 2 (y)**	74	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.10	6.73
(18)	APV FOR CLAIMANT 2	19.54	13.64
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.93	5.91
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	13.77	8.56
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	186,881	134,655
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	9.439	7.686
(28)	APV OF MEDICAL BENEFIT	60,035	48,883

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	0.020	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.102	0.023	0.906	0.980	0.888	0.110	0.962	1.030	1.060
2	0.111	0.025	0.814	0.957	0.779	0.213	0.925	1.061	1.124
3	0.121	0.028	0.723	0.933	0.675	0.307	0.889	1.093	1.191
4	0.131	0.032	0.636	0.907	0.576	0.390	0.855	1.126	1.262
5	0.141	0.035	0.552	0.878	0.485	0.460	0.822	1.159	1.338
6	0.151	0.039	0.475	0.847	0.402	0.518	0.790	1.194	1.419
7	0.162	0.044	0.403	0.814	0.328	0.561	0.760	1.230	1.504
8	0.173	0.049	0.338	0.778	0.263	0.590	0.731	1.267	1.594
9	0.186	0.055	0.279	0.740	0.206	0.606	0.703	1.305	1.689
10	0.201	0.061	0.227	0.699	0.159	0.609	0.676	1.344	1.791
11	0.218	0.068	0.181	0.656	0.119	0.600	0.650	1.384	1.898
12	0.237	0.075	0.142	0.612	0.087	0.580	0.625	1.426	2.012
13	0.258	0.084	0.108	0.566	0.061	0.552	0.601	1.469	2.133
14	0.282	0.094	0.080	0.518	0.042	0.515	0.577	1.513	2.261
15	0.309	0.105	0.058	0.470	0.027	0.473	0.555	1.558	2.397
16	0.339	0.116	0.040	0.420	0.017	0.427	0.534	1.605	2.540
17	0.371	0.129	0.026	0.372	0.010	0.378	0.513	1.653	2.693
18	0.406	0.142	0.017	0.324	0.005	0.330	0.494	1.702	2.854
19	0.444	0.156	0.010	0.278	0.003	0.282	0.475	1.754	3.026
20	0.475	0.171	0.005	0.234	0.001	0.237	0.456	1.806	3.207
21	0.506	0.186	0.003	0.194	0.001	0.196	0.439	1.860	3.400
22	0.539	0.203	0.001	0.158	0.000	0.159	0.422	1.916	3.604
23	0.575	0.220	0.001	0.126	0.000	0.127	0.406	1.974	3.820
24	0.616	0.238	0.000	0.098	0.000	0.099	0.390	2.033	4.049
25	0.661	0.257	0.000	0.075	0.000	0.075	0.375	2.094	4.292
26	0.713	0.276	0.000	0.056	0.000	0.056	0.361	2.157	4.549
27	0.773	0.297	0.000	0.040	0.000	0.040	0.347	2.221	4.822
28	0.841	0.317	0.000	0.028	0.000	0.028	0.333	2.288	5.112
29	0.918	0.339	0.000	0.019	0.000	0.019	0.321	2.357	5.418
30	1.000	0.361	0.000	0.013	0.000	0.013	0.308	2.427	5.743
31	-	0.384	-	0.008	-	0.008	0.296	2.500	6.088
32	-	0.405	-	0.005	-	0.005	0.285	2.575	6.453
33	-	0.425	-	0.003	-	0.003	0.274	2.652	6.841
34	-	0.444	-	0.002	-	0.002	0.264	2.732	7.251
35	-	0.464	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.482	-	0.001	-	0.001	0.244	2.898	8.147
37	-	0.495	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	1.000	-	0.000	-	0.000	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	25	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/9/2009	
(14)	**DATE OF FILING**	4/15/2009	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	72	M
(16)	**CLAIMANT 2 (y)**	79	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.36	8.24
(18)	APV FOR CLAIMANT 2	14.22	10.70
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.42	6.27
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	9.73	6.40
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	161,322	122,204
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	12.549	9.704
(28)	APV OF MEDICAL BENEFIT	79,809	61,718

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.069	0.035	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.074	0.039	0.931	0.965	0.898	0.099	0.962	1.030	1.060
2	0.080	0.044	0.863	0.927	0.799	0.191	0.925	1.061	1.124
3	0.086	0.049	0.794	0.886	0.703	0.273	0.889	1.093	1.191
4	0.094	0.055	0.726	0.842	0.611	0.346	0.855	1.126	1.262
5	0.102	0.061	0.658	0.796	0.523	0.407	0.822	1.159	1.338
6	0.111	0.068	0.590	0.748	0.441	0.455	0.790	1.194	1.419
7	0.121	0.075	0.525	0.697	0.366	0.490	0.760	1.230	1.504
8	0.131	0.084	0.461	0.644	0.297	0.511	0.731	1.267	1.594
9	0.141	0.094	0.401	0.590	0.237	0.518	0.703	1.305	1.689
10	0.151	0.105	0.344	0.535	0.184	0.511	0.676	1.344	1.791
11	0.162	0.116	0.292	0.479	0.140	0.491	0.650	1.384	1.898
12	0.173	0.129	0.245	0.423	0.104	0.461	0.625	1.426	2.012
13	0.186	0.142	0.203	0.369	0.075	0.422	0.601	1.469	2.133
14	0.201	0.156	0.165	0.316	0.052	0.377	0.577	1.513	2.261
15	0.218	0.171	0.132	0.267	0.035	0.328	0.555	1.558	2.397
16	0.237	0.186	0.103	0.222	0.023	0.279	0.534	1.605	2.540
17	0.258	0.203	0.079	0.180	0.014	0.230	0.513	1.653	2.693
18	0.282	0.220	0.058	0.144	0.008	0.185	0.494	1.702	2.854
19	0.309	0.238	0.042	0.112	0.005	0.145	0.475	1.754	3.026
20	0.339	0.257	0.029	0.086	0.002	0.109	0.456	1.806	3.207
21	0.371	0.276	0.019	0.064	0.001	0.080	0.439	1.860	3.400
22	0.406	0.297	0.012	0.046	0.001	0.057	0.422	1.916	3.604
23	0.444	0.317	0.007	0.032	0.000	0.039	0.406	1.974	3.820
24	0.475	0.339	0.004	0.022	0.000	0.026	0.390	2.033	4.049
25	0.506	0.361	0.002	0.015	0.000	0.017	0.375	2.094	4.292
26	0.539	0.384	0.001	0.009	0.000	0.010	0.361	2.157	4.549
27	0.575	0.405	0.000	0.006	0.000	0.006	0.347	2.221	4.822
28	0.616	0.425	0.000	0.003	0.000	0.004	0.333	2.288	5.112
29	0.661	0.444	0.000	0.002	0.000	0.002	0.321	2.357	5.418
30	0.713	0.464	0.000	0.001	0.000	0.001	0.308	2.427	5.743
31	0.773	0.482	0.000	0.001	0.000	0.001	0.296	2.500	6.088
32	0.841	0.495	0.000	0.000	0.000	0.000	0.285	2.575	6.453
33	0.918	0.500	0.000	0.000	0.000	0.000	0.274	2.652	6.841
34	1.000	0.500	0.000	0.000	0.000	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	1.000	-	0.000	-	0.000	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
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(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	26	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/30/2012	
(14)	**DATE OF FILING**	6/21/2012	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	73	M
(16)	**CLAIMANT 2 (y)**	64	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.75	7.84
(18)	APV FOR CLAIMANT 2	34.07	20.08
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.04	7.38
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	25.74	13.17
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	303,886	187,370
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	11.698	9.170
(28)	APV OF MEDICAL BENEFIT	74,401	58,319

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.074	0.008	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.080	0.009	0.926	0.992	0.919	0.080	0.962	1.030	1.060
2	0.086	0.010	0.853	0.984	0.839	0.159	0.925	1.061	1.124
3	0.094	0.011	0.779	0.974	0.759	0.235	0.889	1.093	1.191
4	0.102	0.012	0.706	0.964	0.680	0.309	0.855	1.126	1.262
5	0.111	0.013	0.634	0.952	0.604	0.379	0.822	1.159	1.338
6	0.121	0.014	0.563	0.940	0.530	0.444	0.790	1.194	1.419
7	0.131	0.015	0.495	0.927	0.459	0.504	0.760	1.230	1.504
8	0.141	0.017	0.430	0.914	0.393	0.558	0.731	1.267	1.594
9	0.151	0.018	0.370	0.898	0.332	0.604	0.703	1.305	1.689
10	0.162	0.020	0.314	0.882	0.277	0.642	0.676	1.344	1.791
11	0.173	0.023	0.263	0.864	0.227	0.672	0.650	1.384	1.898
12	0.186	0.025	0.217	0.844	0.184	0.695	0.625	1.426	2.012
13	0.201	0.028	0.177	0.823	0.146	0.709	0.601	1.469	2.133
14	0.218	0.032	0.141	0.800	0.113	0.715	0.577	1.513	2.261
15	0.237	0.035	0.111	0.774	0.086	0.714	0.555	1.558	2.397
16	0.258	0.039	0.084	0.747	0.063	0.705	0.534	1.605	2.540
17	0.282	0.044	0.063	0.718	0.045	0.690	0.513	1.653	2.693
18	0.309	0.049	0.045	0.686	0.031	0.669	0.494	1.702	2.854
19	0.339	0.055	0.031	0.652	0.020	0.643	0.475	1.754	3.026
20	0.371	0.061	0.021	0.616	0.013	0.612	0.456	1.806	3.207
21	0.406	0.068	0.013	0.579	0.007	0.577	0.439	1.860	3.400
22	0.444	0.075	0.008	0.540	0.004	0.539	0.422	1.916	3.604
23	0.475	0.084	0.004	0.499	0.002	0.499	0.406	1.974	3.820
24	0.506	0.094	0.002	0.457	0.001	0.457	0.390	2.033	4.049
25	0.539	0.105	0.001	0.414	0.000	0.414	0.375	2.094	4.292
26	0.575	0.116	0.001	0.371	0.000	0.371	0.361	2.157	4.549
27	0.616	0.129	0.000	0.328	0.000	0.328	0.347	2.221	4.822
28	0.661	0.142	0.000	0.286	0.000	0.286	0.333	2.288	5.112
29	0.713	0.156	0.000	0.245	0.000	0.245	0.321	2.357	5.418
30	0.773	0.171	0.000	0.207	0.000	0.207	0.308	2.427	5.743
31	0.841	0.186	0.000	0.172	0.000	0.172	0.296	2.500	6.088
32	0.918	0.203	0.000	0.140	0.000	0.140	0.285	2.575	6.453
33	1.000	0.220	0.000	0.111	0.000	0.111	0.274	2.652	6.841
34	-	0.238	-	0.087	-	0.087	0.264	2.732	7.251
35	-	0.257	-	0.066	-	0.066	0.253	2.814	7.686
36	-	0.276	-	0.049	-	0.049	0.244	2.898	8.147
37	-	0.297	-	0.036	-	0.036	0.234	2.985	8.636
38	-	0.317	-	0.025	-	0.025	0.225	3.075	9.154
39	-	0.339	-	0.017	-	0.017	0.217	3.167	9.704
40	-	0.361	-	0.011	-	0.011	0.208	3.262	10.286
41	-	0.384	-	0.007	-	0.007	0.200	3.360	10.903
42	-	0.405	-	0.004	-	0.004	0.193	3.461	11.557
43	-	0.425	-	0.003	-	0.003	0.185	3.565	12.250
44	-	0.444	-	0.002	-	0.002	0.178	3.671	12.985
45	-	0.464	-	0.001	-	0.001	0.171	3.782	13.765
46	-	0.482	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.495	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.500	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	1.000	-	0.000	-	0.000	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
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(8) DISCOUNT FACTOR AT 4% FOR T YEARS
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(10) MEDICAL INFLATION RATE @ 6% PER YEAR
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(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	27	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/1/1986	
(14)	**DATE OF FILING**	11/5/1996	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	73	M
(16)	**CLAIMANT 2 (y)**	60	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.75	7.84
(18)	APV FOR CLAIMANT 2	41.66	22.81
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.28	7.53
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(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	361,661	207,870
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	11.698	9.170
(28)	APV OF MEDICAL BENEFIT	74,401	58,319

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.074	0.004	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.080	0.005	0.926	0.996	0.922	0.078	0.962	1.030	1.060
2	0.086	0.006	0.853	0.990	0.844	0.154	0.925	1.061	1.124
3	0.094	0.007	0.779	0.985	0.767	0.229	0.889	1.093	1.191
4	0.102	0.008	0.706	0.978	0.691	0.303	0.855	1.126	1.262
5	0.111	0.009	0.634	0.971	0.615	0.374	0.822	1.159	1.338
6	0.121	0.010	0.563	0.962	0.542	0.441	0.790	1.194	1.419
7	0.131	0.011	0.495	0.953	0.472	0.504	0.760	1.230	1.504
8	0.141	0.012	0.430	0.943	0.406	0.562	0.731	1.267	1.594
9	0.151	0.013	0.370	0.932	0.344	0.612	0.703	1.305	1.689
10	0.162	0.014	0.314	0.920	0.289	0.656	0.676	1.344	1.791
11	0.173	0.015	0.263	0.907	0.239	0.693	0.650	1.384	1.898
12	0.186	0.017	0.217	0.894	0.194	0.722	0.625	1.426	2.012
13	0.201	0.018	0.177	0.879	0.155	0.745	0.601	1.469	2.133
14	0.218	0.020	0.141	0.863	0.122	0.760	0.577	1.513	2.261
15	0.237	0.023	0.111	0.845	0.093	0.769	0.555	1.558	2.397
16	0.258	0.025	0.084	0.826	0.070	0.771	0.534	1.605	2.540
17	0.282	0.028	0.063	0.805	0.050	0.767	0.513	1.653	2.693
18	0.309	0.032	0.045	0.782	0.035	0.757	0.494	1.702	2.854
19	0.339	0.035	0.031	0.757	0.023	0.741	0.475	1.754	3.026
20	0.371	0.039	0.021	0.731	0.015	0.721	0.456	1.806	3.207
21	0.406	0.044	0.013	0.702	0.009	0.697	0.439	1.860	3.400
22	0.444	0.049	0.008	0.671	0.005	0.668	0.422	1.916	3.604
23	0.475	0.055	0.004	0.638	0.003	0.637	0.406	1.974	3.820
24	0.506	0.061	0.002	0.603	0.001	0.603	0.390	2.033	4.049
25	0.539	0.068	0.001	0.566	0.001	0.566	0.375	2.094	4.292
26	0.575	0.075	0.001	0.528	0.000	0.528	0.361	2.157	4.549
27	0.616	0.084	0.000	0.488	0.000	0.488	0.347	2.221	4.822
28	0.661	0.094	0.000	0.447	0.000	0.447	0.333	2.288	5.112
29	0.713	0.105	0.000	0.405	0.000	0.405	0.321	2.357	5.418
30	0.773	0.116	0.000	0.363	0.000	0.363	0.308	2.427	5.743
31	0.841	0.129	0.000	0.321	0.000	0.321	0.296	2.500	6.088
32	0.918	0.142	0.000	0.279	0.000	0.279	0.285	2.575	6.453
33	1.000	0.156	0.000	0.240	0.000	0.240	0.274	2.652	6.841
34	-	0.171	-	0.202	-	0.202	0.264	2.732	7.251
35	-	0.186	-	0.168	-	0.168	0.253	2.814	7.686
36	-	0.203	-	0.137	-	0.137	0.244	2.898	8.147
37	-	0.220	-	0.109	-	0.109	0.234	2.985	8.636
38	-	0.238	-	0.085	-	0.085	0.225	3.075	9.154
39	-	0.257	-	0.065	-	0.065	0.217	3.167	9.704
40	-	0.276	-	0.048	-	0.048	0.208	3.262	10.286
41	-	0.297	-	0.035	-	0.035	0.200	3.360	10.903
42	-	0.317	-	0.024	-	0.024	0.193	3.461	11.557
43	-	0.339	-	0.017	-	0.017	0.185	3.565	12.250
44	-	0.361	-	0.011	-	0.011	0.178	3.671	12.985
45	-	0.384	-	0.007	-	0.007	0.171	3.782	13.765
46	-	0.405	-	0.004	-	0.004	0.165	3.895	14.590
47	-	0.425	-	0.003	-	0.003	0.158	4.012	15.466
48	-	0.444	-	0.001	-	0.001	0.152	4.132	16.394
49	-	0.464	-	0.001	-	0.001	0.146	4.256	17.378
50	-	0.482	-	0.000	-	0.000	0.141	4.384	18.420
51	-	0.495	-	0.000	-	0.000	0.135	4.515	19.525
52	-	0.500	-	0.000	-	0.000	0.130	4.651	20.697
53	-	0.500	-	0.000	-	0.000	0.125	4.790	21.939
54	-	0.500	-	0.000	-	0.000	0.120	4.934	23.255
55	-	0.500	-	0.000	-	0.000	0.116	5.082	24.650
56	-	0.500	-	0.000	-	0.000	0.111	5.235	26.129
57	-	0.500	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.500	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	1.000	-	0.000	-	0.000	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
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(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	28	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1998	
(14)	**DATE OF FILING**	6/3/1998	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	79	M
(16)	**CLAIMANT 2 (y)**	75	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.71	5.74
(18)	APV FOR CLAIMANT 2	18.37	13.03
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.86	5.11
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	13.36	8.55
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	171,284	125,368
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.623	6.423
(28)	APV OF MEDICAL BENEFIT	48,484	40,851

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.121	0.023	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.131	0.025	0.879	0.977	0.859	0.138	0.962	1.030	1.060
2	0.141	0.028	0.764	0.953	0.728	0.261	0.925	1.061	1.124
3	0.151	0.032	0.656	0.926	0.608	0.367	0.889	1.093	1.191
4	0.162	0.035	0.557	0.896	0.499	0.455	0.855	1.126	1.262
5	0.173	0.039	0.467	0.864	0.404	0.524	0.822	1.159	1.338
6	0.186	0.044	0.386	0.830	0.321	0.575	0.790	1.194	1.419
7	0.201	0.049	0.314	0.794	0.249	0.609	0.760	1.230	1.504
8	0.218	0.055	0.251	0.755	0.189	0.627	0.731	1.267	1.594
9	0.237	0.061	0.196	0.713	0.140	0.630	0.703	1.305	1.689
10	0.258	0.068	0.150	0.670	0.100	0.619	0.676	1.344	1.791
11	0.282	0.075	0.111	0.625	0.069	0.597	0.650	1.384	1.898
12	0.309	0.084	0.080	0.578	0.046	0.565	0.625	1.426	2.012
13	0.339	0.094	0.055	0.529	0.029	0.526	0.601	1.469	2.133
14	0.371	0.105	0.036	0.479	0.017	0.481	0.577	1.513	2.261
15	0.406	0.116	0.023	0.429	0.010	0.432	0.555	1.558	2.397
16	0.444	0.129	0.014	0.379	0.005	0.383	0.534	1.605	2.540
17	0.475	0.142	0.008	0.330	0.002	0.333	0.513	1.653	2.693
18	0.506	0.156	0.004	0.284	0.001	0.285	0.494	1.702	2.854
19	0.539	0.171	0.002	0.239	0.000	0.240	0.475	1.754	3.026
20	0.575	0.186	0.001	0.199	0.000	0.199	0.456	1.806	3.207
21	0.616	0.203	0.000	0.162	0.000	0.162	0.439	1.860	3.400
22	0.661	0.220	0.000	0.129	0.000	0.129	0.422	1.916	3.604
23	0.713	0.238	0.000	0.101	0.000	0.101	0.406	1.974	3.820
24	0.773	0.257	0.000	0.077	0.000	0.077	0.390	2.033	4.049
25	0.841	0.276	0.000	0.057	0.000	0.057	0.375	2.094	4.292
26	0.918	0.297	0.000	0.041	0.000	0.041	0.361	2.157	4.549
27	1.000	0.317	0.000	0.029	0.000	0.029	0.347	2.221	4.822
28	-	0.339	-	0.020	-	0.020	0.333	2.288	5.112
29	-	0.361	-	0.013	-	0.013	0.321	2.357	5.418
30	-	0.384	-	0.008	-	0.008	0.308	2.427	5.743
31	-	0.405	-	0.005	-	0.005	0.296	2.500	6.088
32	-	0.425	-	0.003	-	0.003	0.285	2.575	6.453
33	-	0.444	-	0.002	-	0.002	0.274	2.652	6.841
34	-	0.464	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.482	-	0.001	-	0.001	0.253	2.814	7.686
36	-	0.495	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	1.000	-	0.000	-	0.000	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
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85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
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89	-	-	-	-	-	-	0.030	13.884	178.740
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94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
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106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
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117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
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(13) PROVIDED BY BWC
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(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	29	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1998	
(14)	**DATE OF FILING**	6/16/1998	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	67	M
(16)	**CLAIMANT 2 (y)**	71	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	13.84	10.36
(18)	APV FOR CLAIMANT 2	23.35	15.53
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.03	8.69
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.13	8.51
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	244,903	166,592
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	17.737	12.744
(28)	APV OF MEDICAL BENEFIT	112,805	81,050

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.046	0.015	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.050	0.017	0.954	0.985	0.940	0.059	0.962	1.030	1.060
2	0.055	0.018	0.907	0.969	0.878	0.119	0.925	1.061	1.124
3	0.059	0.020	0.857	0.951	0.815	0.178	0.889	1.093	1.191
4	0.064	0.023	0.806	0.932	0.751	0.236	0.855	1.126	1.262
5	0.069	0.025	0.754	0.910	0.687	0.291	0.822	1.159	1.338
6	0.074	0.028	0.703	0.887	0.623	0.343	0.790	1.194	1.419
7	0.080	0.032	0.651	0.862	0.561	0.391	0.760	1.230	1.504
8	0.086	0.035	0.599	0.835	0.500	0.434	0.731	1.267	1.594
9	0.094	0.039	0.547	0.805	0.441	0.471	0.703	1.305	1.689
10	0.102	0.044	0.496	0.774	0.384	0.502	0.676	1.344	1.791
11	0.111	0.049	0.445	0.740	0.329	0.526	0.650	1.384	1.898
12	0.121	0.055	0.396	0.703	0.278	0.542	0.625	1.426	2.012
13	0.131	0.061	0.348	0.665	0.231	0.550	0.601	1.469	2.133
14	0.141	0.068	0.302	0.624	0.189	0.549	0.577	1.513	2.261
15	0.151	0.075	0.260	0.582	0.151	0.539	0.555	1.558	2.397
16	0.162	0.084	0.221	0.538	0.119	0.521	0.534	1.605	2.540
17	0.173	0.094	0.185	0.493	0.091	0.495	0.513	1.653	2.693
18	0.186	0.105	0.153	0.447	0.068	0.463	0.494	1.702	2.854
19	0.201	0.116	0.124	0.400	0.050	0.425	0.475	1.754	3.026
20	0.218	0.129	0.099	0.353	0.035	0.383	0.456	1.806	3.207
21	0.237	0.142	0.078	0.308	0.024	0.338	0.439	1.860	3.400
22	0.258	0.156	0.059	0.264	0.016	0.292	0.422	1.916	3.604
23	0.282	0.171	0.044	0.223	0.010	0.247	0.406	1.974	3.820
24	0.309	0.186	0.032	0.185	0.006	0.205	0.390	2.033	4.049
25	0.339	0.203	0.022	0.150	0.003	0.166	0.375	2.094	4.292
26	0.371	0.220	0.014	0.120	0.002	0.131	0.361	2.157	4.549
27	0.406	0.238	0.009	0.094	0.001	0.101	0.347	2.221	4.822
28	0.444	0.257	0.005	0.071	0.000	0.076	0.333	2.288	5.112
29	0.475	0.276	0.003	0.053	0.000	0.056	0.321	2.357	5.418
30	0.506	0.297	0.002	0.038	0.000	0.040	0.308	2.427	5.743
31	0.539	0.317	0.001	0.027	0.000	0.028	0.296	2.500	6.088
32	0.575	0.339	0.000	0.018	0.000	0.019	0.285	2.575	6.453
33	0.616	0.361	0.000	0.012	0.000	0.012	0.274	2.652	6.841
34	0.661	0.384	0.000	0.008	0.000	0.008	0.264	2.732	7.251
35	0.713	0.405	0.000	0.005	0.000	0.005	0.253	2.814	7.686
36	0.773	0.425	0.000	0.003	0.000	0.003	0.244	2.898	8.147
37	0.841	0.444	0.000	0.002	0.000	0.002	0.234	2.985	8.636
38	0.918	0.464	0.000	0.001	0.000	0.001	0.225	3.075	9.154
39	1.000	0.482	0.000	0.000	0.000	0.000	0.217	3.167	9.704
40	-	0.495	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	1.000	-	0.000	-	0.000	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	30	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	6/1/1979	
(14)	**DATE OF FILING**	8/17/1979	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	97	M
(16)	**CLAIMANT 2 (y)**	95	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	1.92	1.86
(18)	APV FOR CLAIMANT 2	4.63	4.16
(19)	APV FOR BOTH CLAIMANTS ALIVE	1.65	1.61
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	3.26	2.80
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	44,272	40,289
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	1.965	1.901
(28)	APV OF MEDICAL BENEFIT	12,495	12,092

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.506	0.186	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.539	0.203	0.494	0.814	0.402	0.504	0.962	1.030	1.060
2	0.575	0.220	0.228	0.649	0.148	0.581	0.925	1.061	1.124
3	0.616	0.238	0.097	0.506	0.049	0.505	0.889	1.093	1.191
4	0.661	0.257	0.037	0.386	0.014	0.394	0.855	1.126	1.262
5	0.713	0.276	0.013	0.287	0.004	0.292	0.822	1.159	1.338
6	0.773	0.297	0.004	0.208	0.001	0.210	0.790	1.194	1.419
7	0.841	0.317	0.001	0.146	0.000	0.147	0.760	1.230	1.504
8	0.918	0.339	0.000	0.100	0.000	0.100	0.731	1.267	1.594
9	1.000	0.361	0.000	0.066	0.000	0.066	0.703	1.305	1.689
10	-	0.384	-	0.042	-	0.042	0.676	1.344	1.791
11	-	0.405	-	0.026	-	0.026	0.650	1.384	1.898
12	-	0.425	-	0.015	-	0.015	0.625	1.426	2.012
13	-	0.444	-	0.009	-	0.009	0.601	1.469	2.133
14	-	0.464	-	0.005	-	0.005	0.577	1.513	2.261
15	-	0.482	-	0.003	-	0.003	0.555	1.558	2.397
16	-	0.495	-	0.001	-	0.001	0.534	1.605	2.540
17	-	0.500	-	0.001	-	0.001	0.513	1.653	2.693
18	-	0.500	-	0.000	-	0.000	0.494	1.702	2.854
19	-	0.500	-	0.000	-	0.000	0.475	1.754	3.026
20	-	0.500	-	0.000	-	0.000	0.456	1.806	3.207
21	-	0.500	-	0.000	-	0.000	0.439	1.860	3.400
22	-	0.500	-	0.000	-	0.000	0.422	1.916	3.604
23	-	0.500	-	0.000	-	0.000	0.406	1.974	3.820
24	-	0.500	-	0.000	-	0.000	0.390	2.033	4.049
25	-	1.000	-	0.000	-	0.000	0.375	2.094	4.292
26	-	-	-	-	-	-	0.361	2.157	4.549
27	-	-	-	-	-	-	0.347	2.221	4.822
28	-	-	-	-	-	-	0.333	2.288	5.112
29	-	-	-	-	-	-	0.321	2.357	5.418
30	-	-	-	-	-	-	0.308	2.427	5.743
31	-	-	-	-	-	-	0.296	2.500	6.088
32	-	-	-	-	-	-	0.285	2.575	6.453
33	-	-	-	-	-	-	0.274	2.652	6.841
34	-	-	-	-	-	-	0.264	2.732	7.251
35	-	-	-	-	-	-	0.253	2.814	7.686
36	-	-	-	-	-	-	0.244	2.898	8.147
37	-	-	-	-	-	-	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	31	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	12/1/1975	
(14)	**DATE OF FILING**	4/18/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	93	M
(16)	**CLAIMANT 2 (y)**	76	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.51	2.39
(18)	APV FOR CLAIMANT 2	17.26	12.43
(19)	APV FOR BOTH CLAIMANTS ALIVE	2.42	2.31
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	14.93	10.20
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	143,475	105,632
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.604	2.472
(28)	APV OF MEDICAL BENEFIT	16,561	15,725

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.371	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.406	0.028	0.629	0.975	0.613	0.378	0.962	1.030	1.060
2	0.444	0.032	0.374	0.947	0.354	0.613	0.925	1.061	1.124
3	0.475	0.035	0.208	0.917	0.190	0.744	0.889	1.093	1.191
4	0.506	0.039	0.109	0.885	0.096	0.801	0.855	1.126	1.262
5	0.539	0.044	0.054	0.850	0.046	0.812	0.822	1.159	1.338
6	0.575	0.049	0.025	0.812	0.020	0.797	0.790	1.194	1.419
7	0.616	0.055	0.011	0.772	0.008	0.767	0.760	1.230	1.504
8	0.661	0.061	0.004	0.730	0.003	0.728	0.731	1.267	1.594
9	0.713	0.068	0.001	0.686	0.001	0.685	0.703	1.305	1.689
10	0.773	0.075	0.000	0.639	0.000	0.639	0.676	1.344	1.791
11	0.841	0.084	0.000	0.591	0.000	0.591	0.650	1.384	1.898
12	0.918	0.094	0.000	0.541	0.000	0.541	0.625	1.426	2.012
13	1.000	0.105	0.000	0.491	0.000	0.491	0.601	1.469	2.133
14	-	0.116	-	0.439	-	0.439	0.577	1.513	2.261
15	-	0.129	-	0.388	-	0.388	0.555	1.558	2.397
16	-	0.142	-	0.338	-	0.338	0.534	1.605	2.540
17	-	0.156	-	0.290	-	0.290	0.513	1.653	2.693
18	-	0.171	-	0.245	-	0.245	0.494	1.702	2.854
19	-	0.186	-	0.203	-	0.203	0.475	1.754	3.026
20	-	0.203	-	0.165	-	0.165	0.456	1.806	3.207
21	-	0.220	-	0.132	-	0.132	0.439	1.860	3.400
22	-	0.238	-	0.103	-	0.103	0.422	1.916	3.604
23	-	0.257	-	0.078	-	0.078	0.406	1.974	3.820
24	-	0.276	-	0.058	-	0.058	0.390	2.033	4.049
25	-	0.297	-	0.042	-	0.042	0.375	2.094	4.292
26	-	0.317	-	0.030	-	0.030	0.361	2.157	4.549
27	-	0.339	-	0.020	-	0.020	0.347	2.221	4.822
28	-	0.361	-	0.013	-	0.013	0.333	2.288	5.112
29	-	0.384	-	0.009	-	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
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120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
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(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
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(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	32	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/4/1975	
(14)	**DATE OF FILING**	6/24/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	83	M
(16)	**CLAIMANT 2 (y)**	78	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.23	4.63
(18)	APV FOR CLAIMANT 2	15.18	11.26
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.58	4.12
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	11.25	7.65
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	140,080	106,955
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	5.758	5.052
(28)	APV OF MEDICAL BENEFIT	36,621	32,131

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.162	0.032	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.173	0.035	0.838	0.968	0.812	0.183	0.962	1.030	1.060
2	0.186	0.039	0.693	0.934	0.647	0.333	0.925	1.061	1.124
3	0.201	0.044	0.564	0.897	0.506	0.449	0.889	1.093	1.191
4	0.218	0.049	0.450	0.858	0.386	0.536	0.855	1.126	1.262
5	0.237	0.055	0.352	0.816	0.287	0.593	0.822	1.159	1.338
6	0.258	0.061	0.269	0.771	0.207	0.625	0.790	1.194	1.419
7	0.282	0.068	0.199	0.724	0.144	0.635	0.760	1.230	1.504
8	0.309	0.075	0.143	0.675	0.096	0.625	0.731	1.267	1.594
9	0.339	0.084	0.099	0.624	0.062	0.600	0.703	1.305	1.689
10	0.371	0.094	0.065	0.572	0.037	0.562	0.676	1.344	1.791
11	0.406	0.105	0.041	0.518	0.021	0.516	0.650	1.384	1.898
12	0.444	0.116	0.024	0.464	0.011	0.466	0.625	1.426	2.012
13	0.475	0.129	0.014	0.410	0.006	0.412	0.601	1.469	2.133
14	0.506	0.142	0.007	0.357	0.003	0.359	0.577	1.513	2.261
15	0.539	0.156	0.004	0.306	0.001	0.308	0.555	1.558	2.397
16	0.575	0.171	0.002	0.259	0.000	0.259	0.534	1.605	2.540
17	0.616	0.186	0.001	0.214	0.000	0.215	0.513	1.653	2.693
18	0.661	0.203	0.000	0.175	0.000	0.175	0.494	1.702	2.854
19	0.713	0.220	0.000	0.139	0.000	0.139	0.475	1.754	3.026
20	0.773	0.238	0.000	0.109	0.000	0.109	0.456	1.806	3.207
21	0.841	0.257	0.000	0.083	0.000	0.083	0.439	1.860	3.400
22	0.918	0.276	0.000	0.062	0.000	0.062	0.422	1.916	3.604
23	1.000	0.297	0.000	0.045	0.000	0.045	0.406	1.974	3.820
24	-	0.317	-	0.031	-	0.031	0.390	2.033	4.049
25	-	0.339	-	0.021	-	0.021	0.375	2.094	4.292
26	-	0.361	-	0.014	-	0.014	0.361	2.157	4.549
27	-	0.384	-	0.009	-	0.009	0.347	2.221	4.822
28	-	0.405	-	0.006	-	0.006	0.333	2.288	5.112
29	-	0.425	-	0.003	-	0.003	0.321	2.357	5.418
30	-	0.444	-	0.002	-	0.002	0.308	2.427	5.743
31	-	0.464	-	0.001	-	0.001	0.296	2.500	6.088
32	-	0.482	-	0.001	-	0.001	0.285	2.575	6.453
33	-	0.495	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	1.000	-	0.000	-	0.000	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	33	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	11/14/1979	
(14)	**DATE OF FILING**	7/28/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	78	M
(16)	**CLAIMANT 2 (y)**	72	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.14	6.05
(18)	APV FOR CLAIMANT 2	22.02	14.89
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.41	5.52
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	16.35	9.90
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	200,741	140,598
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.181	6.818
(28)	APV OF MEDICAL BENEFIT	52,031	43,361

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.111	0.017	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.121	0.018	0.889	0.983	0.874	0.124	0.962	1.030	1.060
2	0.131	0.020	0.781	0.965	0.754	0.238	0.925	1.061	1.124
3	0.141	0.023	0.679	0.946	0.642	0.340	0.889	1.093	1.191
4	0.151	0.025	0.583	0.924	0.539	0.429	0.855	1.126	1.262
5	0.162	0.028	0.495	0.901	0.446	0.504	0.822	1.159	1.338
6	0.173	0.032	0.415	0.875	0.363	0.564	0.790	1.194	1.419
7	0.186	0.035	0.343	0.848	0.291	0.609	0.760	1.230	1.504
8	0.201	0.039	0.279	0.818	0.228	0.640	0.731	1.267	1.594
9	0.218	0.044	0.223	0.785	0.175	0.658	0.703	1.305	1.689
10	0.237	0.049	0.174	0.751	0.131	0.663	0.676	1.344	1.791
11	0.258	0.055	0.133	0.714	0.095	0.657	0.650	1.384	1.898
12	0.282	0.061	0.099	0.675	0.067	0.640	0.625	1.426	2.012
13	0.309	0.068	0.071	0.634	0.045	0.615	0.601	1.469	2.133
14	0.339	0.075	0.049	0.591	0.029	0.582	0.577	1.513	2.261
15	0.371	0.084	0.032	0.546	0.018	0.543	0.555	1.558	2.397
16	0.406	0.094	0.020	0.500	0.010	0.500	0.534	1.605	2.540
17	0.444	0.105	0.012	0.453	0.005	0.455	0.513	1.653	2.693
18	0.475	0.116	0.007	0.406	0.003	0.407	0.494	1.702	2.854
19	0.506	0.129	0.004	0.359	0.001	0.360	0.475	1.754	3.026
20	0.539	0.142	0.002	0.313	0.001	0.313	0.456	1.806	3.207
21	0.575	0.156	0.001	0.268	0.000	0.269	0.439	1.860	3.400
22	0.616	0.171	0.000	0.226	0.000	0.227	0.422	1.916	3.604
23	0.661	0.186	0.000	0.188	0.000	0.188	0.406	1.974	3.820
24	0.713	0.203	0.000	0.153	0.000	0.153	0.390	2.033	4.049
25	0.773	0.220	0.000	0.122	0.000	0.122	0.375	2.094	4.292
26	0.841	0.238	0.000	0.095	0.000	0.095	0.361	2.157	4.549
27	0.918	0.257	0.000	0.072	0.000	0.072	0.347	2.221	4.822
28	1.000	0.276	0.000	0.054	0.000	0.054	0.333	2.288	5.112
29	-	0.297	-	0.039	-	0.039	0.321	2.357	5.418
30	-	0.317	-	0.027	-	0.027	0.308	2.427	5.743
31	-	0.339	-	0.019	-	0.019	0.296	2.500	6.088
32	-	0.361	-	0.012	-	0.012	0.285	2.575	6.453
33	-	0.384	-	0.008	-	0.008	0.274	2.652	6.841
34	-	0.405	-	0.005	-	0.005	0.264	2.732	7.251
35	-	0.425	-	0.003	-	0.003	0.253	2.814	7.686
36	-	0.444	-	0.002	-	0.002	0.244	2.898	8.147
37	-	0.464	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.482	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.495	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	1.000	-	0.000	-	0.000	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	34		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	10/1/1976		
(14)	**DATE OF FILING**	10/2/1976		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	79	M	
(16)	**CLAIMANT 2 (y)**	78	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.71	5.74
(18)	APV FOR CLAIMANT 2	15.18	11.26
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.59	4.91
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	10.72	7.19
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	147,672	112,512
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.623	6.423
(28)	APV OF MEDICAL BENEFIT	48,484	40,851

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.121	0.032	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.131	0.035	0.879	0.968	0.851	0.145	0.962	1.030	1.060
2	0.141	0.039	0.764	0.934	0.714	0.271	0.925	1.061	1.124
3	0.151	0.044	0.656	0.897	0.589	0.376	0.889	1.093	1.191
4	0.162	0.049	0.557	0.858	0.478	0.459	0.855	1.126	1.262
5	0.173	0.055	0.467	0.816	0.381	0.521	0.822	1.159	1.338
6	0.186	0.061	0.386	0.771	0.298	0.562	0.790	1.194	1.419
7	0.201	0.068	0.314	0.724	0.227	0.583	0.760	1.230	1.504
8	0.218	0.075	0.251	0.675	0.169	0.587	0.731	1.267	1.594
9	0.237	0.084	0.196	0.624	0.122	0.575	0.703	1.305	1.689
10	0.258	0.094	0.150	0.572	0.086	0.550	0.676	1.344	1.791
11	0.282	0.105	0.111	0.518	0.058	0.514	0.650	1.384	1.898
12	0.309	0.116	0.080	0.464	0.037	0.470	0.625	1.426	2.012
13	0.339	0.129	0.055	0.410	0.023	0.420	0.601	1.469	2.133
14	0.371	0.142	0.036	0.357	0.013	0.367	0.577	1.513	2.261
15	0.406	0.156	0.023	0.306	0.007	0.315	0.555	1.558	2.397
16	0.444	0.171	0.014	0.259	0.004	0.265	0.534	1.605	2.540
17	0.475	0.186	0.008	0.214	0.002	0.219	0.513	1.653	2.693
18	0.506	0.203	0.004	0.175	0.001	0.177	0.494	1.702	2.854
19	0.539	0.220	0.002	0.139	0.000	0.141	0.475	1.754	3.026
20	0.575	0.238	0.001	0.109	0.000	0.109	0.456	1.806	3.207
21	0.616	0.257	0.000	0.083	0.000	0.083	0.439	1.860	3.400
22	0.661	0.276	0.000	0.062	0.000	0.062	0.422	1.916	3.604
23	0.713	0.297	0.000	0.045	0.000	0.045	0.406	1.974	3.820
24	0.773	0.317	0.000	0.031	0.000	0.031	0.390	2.033	4.049
25	0.841	0.339	0.000	0.021	0.000	0.021	0.375	2.094	4.292
26	0.918	0.361	0.000	0.014	0.000	0.014	0.361	2.157	4.549
27	1.000	0.384	0.000	0.009	0.000	0.009	0.347	2.221	4.822
28	-	0.405	-	0.006	-	0.006	0.333	2.288	5.112
29	-	0.425	-	0.003	-	0.003	0.321	2.357	5.418
30	-	0.444	-	0.002	-	0.002	0.308	2.427	5.743
31	-	0.464	-	0.001	-	0.001	0.296	2.500	6.088
32	-	0.482	-	0.001	-	0.001	0.285	2.575	6.453
33	-	0.495	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	1.000	-	0.000	-	0.000	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	35	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	2/1/1987	
(14)	**DATE OF FILING**	3/2/1987	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	83	M
(16)	**CLAIMANT 2 (y)**	83	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.23	4.63
(18)	APV FOR CLAIMANT 2	10.84	8.61
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.21	3.82
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	7.64	5.59
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	107,926	87,593
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	5.758	5.052
(28)	APV OF MEDICAL BENEFIT	36,621	32,131

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.162	0.055	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.173	0.061	0.838	0.945	0.792	0.199	0.962	1.030	1.060
2	0.186	0.068	0.693	0.888	0.615	0.351	0.925	1.061	1.124
3	0.201	0.075	0.564	0.827	0.466	0.458	0.889	1.093	1.191
4	0.218	0.084	0.450	0.765	0.344	0.526	0.855	1.126	1.262
5	0.237	0.094	0.352	0.701	0.247	0.559	0.822	1.159	1.338
6	0.258	0.105	0.269	0.635	0.171	0.562	0.790	1.194	1.419
7	0.282	0.116	0.199	0.569	0.113	0.541	0.760	1.230	1.504
8	0.309	0.129	0.143	0.502	0.072	0.502	0.731	1.267	1.594
9	0.339	0.142	0.099	0.438	0.043	0.450	0.703	1.305	1.689
10	0.371	0.156	0.065	0.376	0.025	0.392	0.676	1.344	1.791
11	0.406	0.171	0.041	0.317	0.013	0.332	0.650	1.384	1.898
12	0.444	0.186	0.024	0.263	0.006	0.275	0.625	1.426	2.012
13	0.475	0.203	0.014	0.214	0.003	0.222	0.601	1.469	2.133
14	0.506	0.220	0.007	0.171	0.001	0.175	0.577	1.513	2.261
15	0.539	0.238	0.004	0.133	0.000	0.136	0.555	1.558	2.397
16	0.575	0.257	0.002	0.102	0.000	0.103	0.534	1.605	2.540
17	0.616	0.276	0.001	0.075	0.000	0.076	0.513	1.653	2.693
18	0.661	0.297	0.000	0.055	0.000	0.055	0.494	1.702	2.854
19	0.713	0.317	0.000	0.038	0.000	0.038	0.475	1.754	3.026
20	0.773	0.339	0.000	0.026	0.000	0.026	0.456	1.806	3.207
21	0.841	0.361	0.000	0.017	0.000	0.017	0.439	1.860	3.400
22	0.918	0.384	0.000	0.011	0.000	0.011	0.422	1.916	3.604
23	1.000	0.405	0.000	0.007	0.000	0.007	0.406	1.974	3.820
24	-	0.425	-	0.004	-	0.004	0.390	2.033	4.049
25	-	0.444	-	0.002	-	0.002	0.375	2.094	4.292
26	-	0.464	-	0.001	-	0.001	0.361	2.157	4.549
27	-	0.482	-	0.001	-	0.001	0.347	2.221	4.822
28	-	0.495	-	0.000	-	0.000	0.333	2.288	5.112
29	-	0.500	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	0.500	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	1.000	-	0.000	-	0.000	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
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(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	36	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	11/1/1990	
(14)	**DATE OF FILING**	1/22/1991	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	80	M
(16)	**CLAIMANT 2 (y)**	72	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.31	5.44
(18)	APV FOR CLAIMANT 2	22.02	14.89
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.75	5.03
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	16.82	10.27
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	196,814	137,795
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	7.108	6.053
(28)	APV OF MEDICAL BENEFIT	45,206	38,495

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.131	0.017	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.141	0.018	0.869	0.983	0.855	0.143	0.962	1.030	1.060
2	0.151	0.020	0.747	0.965	0.721	0.270	0.925	1.061	1.124
3	0.162	0.023	0.634	0.946	0.600	0.381	0.889	1.093	1.191
4	0.173	0.025	0.531	0.924	0.491	0.473	0.855	1.126	1.262
5	0.186	0.028	0.439	0.901	0.396	0.549	0.822	1.159	1.338
6	0.201	0.032	0.357	0.875	0.313	0.607	0.790	1.194	1.419
7	0.218	0.035	0.285	0.848	0.242	0.649	0.760	1.230	1.504
8	0.237	0.039	0.223	0.818	0.183	0.676	0.731	1.267	1.594
9	0.258	0.044	0.170	0.785	0.134	0.688	0.703	1.305	1.689
10	0.282	0.049	0.126	0.751	0.095	0.687	0.676	1.344	1.791
11	0.309	0.055	0.091	0.714	0.065	0.675	0.650	1.384	1.898
12	0.339	0.061	0.063	0.675	0.042	0.653	0.625	1.426	2.012
13	0.371	0.068	0.041	0.634	0.026	0.623	0.601	1.469	2.133
14	0.406	0.075	0.026	0.591	0.015	0.586	0.577	1.513	2.261
15	0.444	0.084	0.015	0.546	0.008	0.545	0.555	1.558	2.397
16	0.475	0.094	0.009	0.500	0.004	0.500	0.534	1.605	2.540
17	0.506	0.105	0.005	0.453	0.002	0.454	0.513	1.653	2.693
18	0.539	0.116	0.002	0.406	0.001	0.406	0.494	1.702	2.854
19	0.575	0.129	0.001	0.359	0.000	0.359	0.475	1.754	3.026
20	0.616	0.142	0.000	0.313	0.000	0.313	0.456	1.806	3.207
21	0.661	0.156	0.000	0.268	0.000	0.268	0.439	1.860	3.400
22	0.713	0.171	0.000	0.226	0.000	0.226	0.422	1.916	3.604
23	0.773	0.186	0.000	0.188	0.000	0.188	0.406	1.974	3.820
24	0.841	0.203	0.000	0.153	0.000	0.153	0.390	2.033	4.049
25	0.918	0.220	0.000	0.122	0.000	0.122	0.375	2.094	4.292
26	1.000	0.238	0.000	0.095	0.000	0.095	0.361	2.157	4.549
27	-	0.257	-	0.072	-	0.072	0.347	2.221	4.822
28	-	0.276	-	0.054	-	0.054	0.333	2.288	5.112
29	-	0.297	-	0.039	-	0.039	0.321	2.357	5.418
30	-	0.317	-	0.027	-	0.027	0.308	2.427	5.743
31	-	0.339	-	0.019	-	0.019	0.296	2.500	6.088
32	-	0.361	-	0.012	-	0.012	0.285	2.575	6.453
33	-	0.384	-	0.008	-	0.008	0.274	2.652	6.841
34	-	0.405	-	0.005	-	0.005	0.264	2.732	7.251
35	-	0.425	-	0.003	-	0.003	0.253	2.814	7.686
36	-	0.444	-	0.002	-	0.002	0.244	2.898	8.147
37	-	0.464	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.482	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.495	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	1.000	-	0.000	-	0.000	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
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73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	37	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/1/1991	
(14)	**DATE OF FILING**	4/2/1991	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	75	M
(16)	**CLAIMANT 2 (y)**	78	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.62	7.09
(18)	APV FOR CLAIMANT 2	15.18	11.26
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.73	5.77
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	10.34	6.82
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
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	MEDICAL PAYMENTS		
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(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	10.143	8.159
(28)	APV OF MEDICAL BENEFIT	64,512	51,889

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.086	0.032	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	0.035	0.914	0.968	0.885	0.112	0.962	1.030	1.060
2	0.102	0.039	0.828	0.934	0.773	0.215	0.925	1.061	1.124
3	0.111	0.044	0.743	0.897	0.667	0.307	0.889	1.093	1.191
4	0.121	0.049	0.661	0.858	0.567	0.385	0.855	1.126	1.262
5	0.131	0.055	0.581	0.816	0.474	0.449	0.822	1.159	1.338
6	0.141	0.061	0.505	0.771	0.389	0.497	0.790	1.194	1.419
7	0.151	0.068	0.434	0.724	0.314	0.530	0.760	1.230	1.504
8	0.162	0.075	0.368	0.675	0.248	0.546	0.731	1.267	1.594
9	0.173	0.084	0.309	0.624	0.193	0.547	0.703	1.305	1.689
10	0.186	0.094	0.255	0.572	0.146	0.535	0.676	1.344	1.791
11	0.201	0.105	0.208	0.518	0.107	0.510	0.650	1.384	1.898
12	0.218	0.116	0.166	0.464	0.077	0.476	0.625	1.426	2.012
13	0.237	0.129	0.130	0.410	0.053	0.433	0.601	1.469	2.133
14	0.258	0.142	0.099	0.357	0.035	0.385	0.577	1.513	2.261
15	0.282	0.156	0.073	0.306	0.022	0.335	0.555	1.558	2.397
16	0.309	0.171	0.053	0.259	0.014	0.284	0.534	1.605	2.540
17	0.339	0.186	0.036	0.214	0.008	0.235	0.513	1.653	2.693
18	0.371	0.203	0.024	0.175	0.004	0.190	0.494	1.702	2.854
19	0.406	0.220	0.015	0.139	0.002	0.150	0.475	1.754	3.026
20	0.444	0.238	0.009	0.109	0.001	0.116	0.456	1.806	3.207
21	0.475	0.257	0.005	0.083	0.000	0.087	0.439	1.860	3.400
22	0.506	0.276	0.003	0.062	0.000	0.064	0.422	1.916	3.604
23	0.539	0.297	0.001	0.045	0.000	0.046	0.406	1.974	3.820
24	0.575	0.317	0.001	0.031	0.000	0.032	0.390	2.033	4.049
25	0.616	0.339	0.000	0.021	0.000	0.022	0.375	2.094	4.292
26	0.661	0.361	0.000	0.014	0.000	0.014	0.361	2.157	4.549
27	0.713	0.384	0.000	0.009	0.000	0.009	0.347	2.221	4.822
28	0.773	0.405	0.000	0.006	0.000	0.006	0.333	2.288	5.112
29	0.841	0.425	0.000	0.003	0.000	0.003	0.321	2.357	5.418
30	0.918	0.444	0.000	0.002	0.000	0.002	0.308	2.427	5.743
31	1.000	0.464	0.000	0.001	0.000	0.001	0.296	2.500	6.088
32	-	0.482	-	0.001	-	0.001	0.285	2.575	6.453
33	-	0.495	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	1.000	-	0.000	-	0.000	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	38	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	5/1/1992	
(14)	**DATE OF FILING**	8/30/1994	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	76	M
(16)	**CLAIMANT 2 (y)**	76	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.10	6.73
(18)	APV FOR CLAIMANT 2	17.26	12.43
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.70	5.74
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	11.95	7.68
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	170,147	125,925
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	9.439	7.686
(28)	APV OF MEDICAL BENEFIT	60,035	48,883

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.102	0.028	0.906	0.975	0.883	0.114	0.962	1.030	1.060
2	0.111	0.032	0.814	0.947	0.771	0.220	0.925	1.061	1.124
3	0.121	0.035	0.723	0.917	0.663	0.314	0.889	1.093	1.191
4	0.131	0.039	0.636	0.885	0.562	0.396	0.855	1.126	1.262
5	0.141	0.044	0.552	0.850	0.469	0.463	0.822	1.159	1.338
6	0.151	0.049	0.475	0.812	0.386	0.516	0.790	1.194	1.419
7	0.162	0.055	0.403	0.772	0.311	0.553	0.760	1.230	1.504
8	0.173	0.061	0.338	0.730	0.247	0.575	0.731	1.267	1.594
9	0.186	0.068	0.279	0.686	0.191	0.582	0.703	1.305	1.689
10	0.201	0.075	0.227	0.639	0.145	0.576	0.676	1.344	1.791
11	0.218	0.084	0.181	0.591	0.107	0.558	0.650	1.384	1.898
12	0.237	0.094	0.142	0.541	0.077	0.530	0.625	1.426	2.012
13	0.258	0.105	0.108	0.491	0.053	0.493	0.601	1.469	2.133
14	0.282	0.116	0.080	0.439	0.035	0.449	0.577	1.513	2.261
15	0.309	0.129	0.058	0.388	0.022	0.401	0.555	1.558	2.397
16	0.339	0.142	0.040	0.338	0.013	0.351	0.534	1.605	2.540
17	0.371	0.156	0.026	0.290	0.008	0.301	0.513	1.653	2.693
18	0.406	0.171	0.017	0.245	0.004	0.253	0.494	1.702	2.854
19	0.444	0.186	0.010	0.203	0.002	0.209	0.475	1.754	3.026
20	0.475	0.203	0.005	0.165	0.001	0.169	0.456	1.806	3.207
21	0.506	0.220	0.003	0.132	0.000	0.134	0.439	1.860	3.400
22	0.539	0.238	0.001	0.103	0.000	0.104	0.422	1.916	3.604
23	0.575	0.257	0.001	0.078	0.000	0.079	0.406	1.974	3.820
24	0.616	0.276	0.000	0.058	0.000	0.059	0.390	2.033	4.049
25	0.661	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	0.713	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	0.773	0.339	0.000	0.020	0.000	0.020	0.347	2.221	4.822
28	0.841	0.361	0.000	0.013	0.000	0.013	0.333	2.288	5.112
29	0.918	0.384	0.000	0.009	0.000	0.009	0.321	2.357	5.418
30	1.000	0.405	0.000	0.005	0.000	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	39	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	3/29/1994	
(14)	**DATE OF FILING**	9/27/1994	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	94	M
(16)	**CLAIMANT 2 (y)**	84	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	2.32	2.22
(18)	APV FOR CLAIMANT 2	10.11	8.13
(19)	APV FOR BOTH CLAIMANTS ALIVE	2.15	2.07
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	8.12	6.21
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	87,786	72,056
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	2.405	2.297
(28)	APV OF MEDICAL BENEFIT	15,298	14,606

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.406	0.061	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.444	0.068	0.594	0.939	0.558	0.418	0.962	1.030	1.060
2	0.475	0.075	0.330	0.875	0.289	0.628	0.925	1.061	1.124
3	0.506	0.084	0.173	0.809	0.140	0.702	0.889	1.093	1.191
4	0.539	0.094	0.086	0.741	0.063	0.700	0.855	1.126	1.262
5	0.575	0.105	0.039	0.672	0.026	0.658	0.822	1.159	1.338
6	0.616	0.116	0.017	0.602	0.010	0.598	0.790	1.194	1.419
7	0.661	0.129	0.006	0.532	0.003	0.531	0.760	1.230	1.504
8	0.713	0.142	0.002	0.463	0.001	0.463	0.731	1.267	1.594
9	0.773	0.156	0.001	0.397	0.000	0.398	0.703	1.305	1.689
10	0.841	0.171	0.000	0.335	0.000	0.336	0.676	1.344	1.791
11	0.918	0.186	0.000	0.278	0.000	0.278	0.650	1.384	1.898
12	1.000	0.203	0.000	0.226	0.000	0.226	0.625	1.426	2.012
13	-	0.220	-	0.181	-	0.181	0.601	1.469	2.133
14	-	0.238	-	0.141	-	0.141	0.577	1.513	2.261
15	-	0.257	-	0.107	-	0.107	0.555	1.558	2.397
16	-	0.276	-	0.080	-	0.080	0.534	1.605	2.540
17	-	0.297	-	0.058	-	0.058	0.513	1.653	2.693
18	-	0.317	-	0.041	-	0.041	0.494	1.702	2.854
19	-	0.339	-	0.028	-	0.028	0.475	1.754	3.026
20	-	0.361	-	0.018	-	0.018	0.456	1.806	3.207
21	-	0.384	-	0.012	-	0.012	0.439	1.860	3.400
22	-	0.405	-	0.007	-	0.007	0.422	1.916	3.604
23	-	0.425	-	0.004	-	0.004	0.406	1.974	3.820
24	-	0.444	-	0.002	-	0.002	0.390	2.033	4.049
25	-	0.464	-	0.001	-	0.001	0.375	2.094	4.292
26	-	0.482	-	0.001	-	0.001	0.361	2.157	4.549
27	-	0.495	-	0.000	-	0.000	0.347	2.221	4.822
28	-	0.500	-	0.000	-	0.000	0.333	2.288	5.112
29	-	0.500	-	0.000	-	0.000	0.321	2.357	5.418
30	-	0.500	-	0.000	-	0.000	0.308	2.427	5.743
31	-	0.500	-	0.000	-	0.000	0.296	2.500	6.088
32	-	0.500	-	0.000	-	0.000	0.285	2.575	6.453
33	-	0.500	-	0.000	-	0.000	0.274	2.652	6.841
34	-	0.500	-	0.000	-	0.000	0.264	2.732	7.251
35	-	0.500	-	0.000	-	0.000	0.253	2.814	7.686
36	-	1.000	-	0.000	-	0.000	0.244	2.898	8.147
37	-	-	-	-	-	-	0.234	2.985	8.636
38	-	-	-	-	-	-	0.225	3.075	9.154
39	-	-	-	-	-	-	0.217	3.167	9.704
40	-	-	-	-	-	-	0.208	3.262	10.286
41	-	-	-	-	-	-	0.200	3.360	10.903
42	-	-	-	-	-	-	0.193	3.461	11.557
43	-	-	-	-	-	-	0.185	3.565	12.250
44	-	-	-	-	-	-	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
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103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
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109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
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114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	40	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	1/1/1995	
(14)	**DATE OF FILING**	1/31/1995	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	69	M
(16)	**CLAIMANT 2 (y)**	53	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	12.33	9.47
(18)	APV FOR CLAIMANT 2	57.88	27.67
(19)	APV FOR BOTH CLAIMANTS ALIVE	11.95	9.24
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	46.30	18.65
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	496,680	251,400
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	15.437	11.437
(28)	APV OF MEDICAL BENEFIT	98,179	72,737

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.055	0.002	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.059	0.002	0.945	0.998	0.943	0.057	0.962	1.030	1.060
2	0.064	0.002	0.889	0.996	0.885	0.114	0.925	1.061	1.124
3	0.069	0.003	0.832	0.994	0.827	0.172	0.889	1.093	1.191
4	0.074	0.003	0.775	0.991	0.768	0.230	0.855	1.126	1.262
5	0.080	0.003	0.718	0.988	0.709	0.287	0.822	1.159	1.338
6	0.086	0.004	0.661	0.985	0.651	0.344	0.790	1.194	1.419
7	0.094	0.004	0.604	0.981	0.592	0.400	0.760	1.230	1.504
8	0.102	0.005	0.547	0.977	0.534	0.455	0.731	1.267	1.594
9	0.111	0.006	0.491	0.972	0.477	0.508	0.703	1.305	1.689
10	0.121	0.007	0.437	0.966	0.422	0.559	0.676	1.344	1.791
11	0.131	0.008	0.384	0.960	0.368	0.607	0.650	1.384	1.898
12	0.141	0.009	0.334	0.952	0.318	0.651	0.625	1.426	2.012
13	0.151	0.010	0.287	0.944	0.271	0.690	0.601	1.469	2.133
14	0.162	0.011	0.243	0.935	0.227	0.723	0.577	1.513	2.261
15	0.173	0.012	0.204	0.925	0.189	0.752	0.555	1.558	2.397
16	0.186	0.013	0.169	0.914	0.154	0.775	0.534	1.605	2.540
17	0.201	0.014	0.137	0.902	0.124	0.792	0.513	1.653	2.693
18	0.218	0.015	0.110	0.890	0.097	0.805	0.494	1.702	2.854
19	0.237	0.017	0.086	0.877	0.075	0.812	0.475	1.754	3.026
20	0.258	0.018	0.065	0.862	0.056	0.815	0.456	1.806	3.207
21	0.282	0.020	0.048	0.846	0.041	0.813	0.439	1.860	3.400
22	0.309	0.023	0.035	0.829	0.029	0.806	0.422	1.916	3.604
23	0.339	0.025	0.024	0.810	0.019	0.795	0.406	1.974	3.820
24	0.371	0.028	0.016	0.790	0.013	0.781	0.390	2.033	4.049
25	0.406	0.032	0.010	0.767	0.008	0.762	0.375	2.094	4.292
26	0.444	0.035	0.006	0.743	0.004	0.740	0.361	2.157	4.549
27	0.475	0.039	0.003	0.717	0.002	0.715	0.347	2.221	4.822
28	0.506	0.044	0.002	0.689	0.001	0.688	0.333	2.288	5.112
29	0.539	0.049	0.001	0.658	0.001	0.658	0.321	2.357	5.418
30	0.575	0.055	0.000	0.626	0.000	0.626	0.308	2.427	5.743
31	0.616	0.061	0.000	0.592	0.000	0.592	0.296	2.500	6.088
32	0.661	0.068	0.000	0.556	0.000	0.556	0.285	2.575	6.453
33	0.713	0.075	0.000	0.518	0.000	0.518	0.274	2.652	6.841
34	0.773	0.084	0.000	0.479	0.000	0.479	0.264	2.732	7.251
35	0.841	0.094	0.000	0.439	0.000	0.439	0.253	2.814	7.686
36	0.918	0.105	0.000	0.398	0.000	0.398	0.244	2.898	8.147
37	1.000	0.116	0.000	0.356	0.000	0.356	0.234	2.985	8.636
38	-	0.129	-	0.315	-	0.315	0.225	3.075	9.154
39	-	0.142	-	0.274	-	0.274	0.217	3.167	9.704
40	-	0.156	-	0.235	-	0.235	0.208	3.262	10.286
41	-	0.171	-	0.198	-	0.198	0.200	3.360	10.903
42	-	0.186	-	0.165	-	0.165	0.193	3.461	11.557
43	-	0.203	-	0.134	-	0.134	0.185	3.565	12.250
44	-	0.220	-	0.107	-	0.107	0.178	3.671	12.985
45	-	0.238	-	0.083	-	0.083	0.171	3.782	13.765
46	-	0.257	-	0.064	-	0.064	0.165	3.895	14.590
47	-	0.276	-	0.047	-	0.047	0.158	4.012	15.466
48	-	0.297	-	0.034	-	0.034	0.152	4.132	16.394
49	-	0.317	-	0.024	-	0.024	0.146	4.256	17.378
50	-	0.339	-	0.016	-	0.016	0.141	4.384	18.420
51	-	0.361	-	0.011	-	0.011	0.135	4.515	19.525
52	-	0.384	-	0.007	-	0.007	0.130	4.651	20.697
53	-	0.405	-	0.004	-	0.004	0.125	4.790	21.939
54	-	0.425	-	0.003	-	0.003	0.120	4.934	23.255
55	-	0.444	-	0.001	-	0.001	0.116	5.082	24.650
56	-	0.464	-	0.001	-	0.001	0.111	5.235	26.129
57	-	0.482	-	0.000	-	0.000	0.107	5.392	27.697
58	-	0.495	-	0.000	-	0.000	0.103	5.553	29.359
59	-	0.500	-	0.000	-	0.000	0.099	5.720	31.120
60	-	0.500	-	0.000	-	0.000	0.095	5.892	32.988
61	-	0.500	-	0.000	-	0.000	0.091	6.068	34.967
62	-	0.500	-	0.000	-	0.000	0.088	6.250	37.065
63	-	0.500	-	0.000	-	0.000	0.085	6.438	39.289
64	-	0.500	-	0.000	-	0.000	0.081	6.631	41.646
65	-	0.500	-	0.000	-	0.000	0.078	6.830	44.145
66	-	0.500	-	0.000	-	0.000	0.075	7.035	46.794
67	-	1.000	-	0.000	-	0.000	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
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(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
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(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	41		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	10/1/1993		
(14)	**DATE OF FILING**	1/21/1995		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	77	M	
(16)	**CLAIMANT 2 (y)**	73	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.60	6.38
(18)	APV FOR CLAIMANT 2	20.75	14.26
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.68	5.72
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	15.00	9.20
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	193,458	137,506
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.786	7.239
(28)	APV OF MEDICAL BENEFIT	55,876	46,038

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.102	0.018	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.111	0.020	0.898	0.982	0.881	0.117	0.962	1.030	1.060
2	0.121	0.023	0.798	0.962	0.767	0.225	0.925	1.061	1.124
3	0.131	0.025	0.701	0.940	0.659	0.323	0.889	1.093	1.191
4	0.141	0.028	0.610	0.916	0.558	0.409	0.855	1.126	1.262
5	0.151	0.032	0.524	0.890	0.466	0.481	0.822	1.159	1.338
6	0.162	0.035	0.445	0.862	0.383	0.540	0.790	1.194	1.419
7	0.173	0.039	0.373	0.831	0.310	0.584	0.760	1.230	1.504
8	0.186	0.044	0.308	0.799	0.246	0.615	0.731	1.267	1.594
9	0.201	0.049	0.251	0.763	0.191	0.631	0.703	1.305	1.689
10	0.218	0.055	0.200	0.726	0.145	0.635	0.676	1.344	1.791
11	0.237	0.061	0.157	0.686	0.107	0.628	0.650	1.384	1.898
12	0.258	0.068	0.119	0.644	0.077	0.610	0.625	1.426	2.012
13	0.282	0.075	0.089	0.601	0.053	0.583	0.601	1.469	2.133
14	0.309	0.084	0.064	0.555	0.035	0.548	0.577	1.513	2.261
15	0.339	0.094	0.044	0.509	0.022	0.508	0.555	1.558	2.397
16	0.371	0.105	0.029	0.461	0.013	0.463	0.534	1.605	2.540
17	0.406	0.116	0.018	0.413	0.008	0.416	0.513	1.653	2.693
18	0.444	0.129	0.011	0.365	0.004	0.368	0.494	1.702	2.854
19	0.475	0.142	0.006	0.318	0.002	0.320	0.475	1.754	3.026
20	0.506	0.156	0.003	0.273	0.001	0.274	0.456	1.806	3.207
21	0.539	0.171	0.002	0.230	0.000	0.231	0.439	1.860	3.400
22	0.575	0.186	0.001	0.191	0.000	0.191	0.422	1.916	3.604
23	0.616	0.203	0.000	0.155	0.000	0.156	0.406	1.974	3.820
24	0.661	0.220	0.000	0.124	0.000	0.124	0.390	2.033	4.049
25	0.713	0.238	0.000	0.097	0.000	0.097	0.375	2.094	4.292
26	0.773	0.257	0.000	0.074	0.000	0.074	0.361	2.157	4.549
27	0.841	0.276	0.000	0.055	0.000	0.055	0.347	2.221	4.822
28	0.918	0.297	0.000	0.040	0.000	0.040	0.333	2.288	5.112
29	1.000	0.317	0.000	0.028	0.000	0.028	0.321	2.357	5.418
30	-	0.339	-	0.019	-	0.019	0.308	2.427	5.743
31	-	0.361	-	0.013	-	0.013	0.296	2.500	6.088
32	-	0.384	-	0.008	-	0.008	0.285	2.575	6.453
33	-	0.405	-	0.005	-	0.005	0.274	2.652	6.841
34	-	0.425	-	0.003	-	0.003	0.264	2.732	7.251
35	-	0.444	-	0.002	-	0.002	0.253	2.814	7.686
36	-	0.464	-	0.001	-	0.001	0.244	2.898	8.147
37	-	0.482	-	0.001	-	0.001	0.234	2.985	8.636
38	-	0.495	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	1.000	-	0.000	-	0.000	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
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89	-	-	-	-	-	-	0.030	13.884	178.740
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106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

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(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	42		
(12)	**TYPE OF CLAIM**	IW + Dep 1		
(13)	**DATE OF INJURY**	8/1/1994		
(14)	**DATE OF FILING**	11/22/1995		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	77	M	
(16)	**CLAIMANT 2 (y)**	76	F	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.60	6.38
(18)	APV FOR CLAIMANT 2	17.26	12.43
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.38	5.50
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	12.10	7.81
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	167,567	124,166
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	8.786	7.239
(28)	APV OF MEDICAL BENEFIT	55,876	46,038

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.102	0.025	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.111	0.028	0.898	0.975	0.875	0.122	0.962	1.030	1.060
2	0.121	0.032	0.798	0.947	0.756	0.234	0.925	1.061	1.124
3	0.131	0.035	0.701	0.917	0.643	0.332	0.889	1.093	1.191
4	0.141	0.039	0.610	0.885	0.539	0.416	0.855	1.126	1.262
5	0.151	0.044	0.524	0.850	0.445	0.483	0.822	1.159	1.338
6	0.162	0.049	0.445	0.812	0.361	0.535	0.790	1.194	1.419
7	0.173	0.055	0.373	0.772	0.288	0.569	0.760	1.230	1.504
8	0.186	0.061	0.308	0.730	0.225	0.588	0.731	1.267	1.594
9	0.201	0.068	0.251	0.686	0.172	0.593	0.703	1.305	1.689
10	0.218	0.075	0.200	0.639	0.128	0.583	0.676	1.344	1.791
11	0.237	0.084	0.157	0.591	0.093	0.562	0.650	1.384	1.898
12	0.258	0.094	0.119	0.541	0.065	0.531	0.625	1.426	2.012
13	0.282	0.105	0.089	0.491	0.043	0.492	0.601	1.469	2.133
14	0.309	0.116	0.064	0.439	0.028	0.447	0.577	1.513	2.261
15	0.339	0.129	0.044	0.388	0.017	0.398	0.555	1.558	2.397
16	0.371	0.142	0.029	0.338	0.010	0.348	0.534	1.605	2.540
17	0.406	0.156	0.018	0.290	0.005	0.298	0.513	1.653	2.693
18	0.444	0.171	0.011	0.245	0.003	0.250	0.494	1.702	2.854
19	0.475	0.186	0.006	0.203	0.001	0.207	0.475	1.754	3.026
20	0.506	0.203	0.003	0.165	0.001	0.167	0.456	1.806	3.207
21	0.539	0.220	0.002	0.132	0.000	0.133	0.439	1.860	3.400
22	0.575	0.238	0.001	0.103	0.000	0.103	0.422	1.916	3.604
23	0.616	0.257	0.000	0.078	0.000	0.079	0.406	1.974	3.820
24	0.661	0.276	0.000	0.058	0.000	0.058	0.390	2.033	4.049
25	0.713	0.297	0.000	0.042	0.000	0.042	0.375	2.094	4.292
26	0.773	0.317	0.000	0.030	0.000	0.030	0.361	2.157	4.549
27	0.841	0.339	0.000	0.020	0.000	0.020	0.347	2.221	4.822
28	0.918	0.361	0.000	0.013	0.000	0.013	0.333	2.288	5.112
29	1.000	0.384	0.000	0.009	0.000	0.009	0.321	2.357	5.418
30	-	0.405	-	0.005	-	0.005	0.308	2.427	5.743
31	-	0.425	-	0.003	-	0.003	0.296	2.500	6.088
32	-	0.444	-	0.002	-	0.002	0.285	2.575	6.453
33	-	0.464	-	0.001	-	0.001	0.274	2.652	6.841
34	-	0.482	-	0.001	-	0.001	0.264	2.732	7.251
35	-	0.495	-	0.000	-	0.000	0.253	2.814	7.686
36	-	0.500	-	0.000	-	0.000	0.244	2.898	8.147
37	-	0.500	-	0.000	-	0.000	0.234	2.985	8.636
38	-	0.500	-	0.000	-	0.000	0.225	3.075	9.154
39	-	0.500	-	0.000	-	0.000	0.217	3.167	9.704
40	-	0.500	-	0.000	-	0.000	0.208	3.262	10.286
41	-	0.500	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.500	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	1.000	-	0.000	-	0.000	0.178	3.671	12.985
45	-	-	-	-	-	-	0.171	3.782	13.765
46	-	-	-	-	-	-	0.165	3.895	14.590
47	-	-	-	-	-	-	0.158	4.012	15.466
48	-	-	-	-	-	-	0.152	4.132	16.394
49	-	-	-	-	-	-	0.146	4.256	17.378
50	-	-	-	-	-	-	0.141	4.384	18.420
51	-	-	-	-	-	-	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	43	
(12)	**TYPE OF CLAIM**	IW + Dep 1	
(13)	**DATE OF INJURY**	4/1/1996	
(14)	**DATE OF FILING**	4/16/1996	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	71	M
(16)	**CLAIMANT 2 (y)**	69	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.98	8.63
(18)	APV FOR CLAIMANT 2	26.13	16.81
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.54	7.71
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	18.03	10.02
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	11,597	11,597
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	250,103	166,907
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	13.450	10.258
(28)	APV OF MEDICAL BENEFIT	85,545	65,241

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.064	0.013	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.069	0.014	0.936	0.987	0.924	0.075	0.962	1.030	1.060
2	0.074	0.015	0.872	0.974	0.849	0.148	0.925	1.061	1.124
3	0.080	0.017	0.807	0.959	0.774	0.218	0.889	1.093	1.191
4	0.086	0.018	0.743	0.943	0.701	0.284	0.855	1.126	1.262
5	0.094	0.020	0.679	0.926	0.629	0.347	0.822	1.159	1.338
6	0.102	0.023	0.615	0.907	0.558	0.406	0.790	1.194	1.419
7	0.111	0.025	0.553	0.887	0.490	0.459	0.760	1.230	1.504
8	0.121	0.028	0.491	0.864	0.424	0.507	0.731	1.267	1.594
9	0.131	0.032	0.432	0.840	0.362	0.546	0.703	1.305	1.689
10	0.141	0.035	0.375	0.813	0.305	0.578	0.676	1.344	1.791
11	0.151	0.039	0.322	0.784	0.253	0.601	0.650	1.384	1.898
12	0.162	0.044	0.274	0.753	0.206	0.615	0.625	1.426	2.012
13	0.173	0.049	0.229	0.720	0.165	0.619	0.601	1.469	2.133
14	0.186	0.055	0.190	0.685	0.130	0.615	0.577	1.513	2.261
15	0.201	0.061	0.154	0.647	0.100	0.602	0.555	1.558	2.397
16	0.218	0.068	0.123	0.608	0.075	0.581	0.534	1.605	2.540
17	0.237	0.075	0.096	0.567	0.055	0.554	0.513	1.653	2.693
18	0.258	0.084	0.074	0.524	0.039	0.520	0.494	1.702	2.854
19	0.282	0.094	0.055	0.480	0.026	0.482	0.475	1.754	3.026
20	0.309	0.105	0.039	0.435	0.017	0.440	0.456	1.806	3.207
21	0.339	0.116	0.027	0.389	0.011	0.395	0.439	1.860	3.400
22	0.371	0.129	0.018	0.344	0.006	0.350	0.422	1.916	3.604
23	0.406	0.142	0.011	0.300	0.003	0.304	0.406	1.974	3.820
24	0.444	0.156	0.007	0.257	0.002	0.260	0.390	2.033	4.049
25	0.475	0.171	0.004	0.217	0.001	0.219	0.375	2.094	4.292
26	0.506	0.186	0.002	0.180	0.000	0.181	0.361	2.157	4.549
27	0.539	0.203	0.001	0.147	0.000	0.147	0.347	2.221	4.822
28	0.575	0.220	0.000	0.117	0.000	0.117	0.333	2.288	5.112
29	0.616	0.238	0.000	0.091	0.000	0.091	0.321	2.357	5.418
30	0.661	0.257	0.000	0.070	0.000	0.070	0.308	2.427	5.743
31	0.713	0.276	0.000	0.052	0.000	0.052	0.296	2.500	6.088
32	0.773	0.297	0.000	0.037	0.000	0.037	0.285	2.575	6.453
33	0.841	0.317	0.000	0.026	0.000	0.026	0.274	2.652	6.841
34	0.918	0.339	0.000	0.018	0.000	0.018	0.264	2.732	7.251
35	1.000	0.361	0.000	0.012	0.000	0.012	0.253	2.814	7.686
36	-	0.384	-	0.008	-	0.008	0.244	2.898	8.147
37	-	0.405	-	0.005	-	0.005	0.234	2.985	8.636
38	-	0.425	-	0.003	-	0.003	0.225	3.075	9.154
39	-	0.444	-	0.002	-	0.002	0.217	3.167	9.704
40	-	0.464	-	0.001	-	0.001	0.208	3.262	10.286
41	-	0.482	-	0.000	-	0.000	0.200	3.360	10.903
42	-	0.495	-	0.000	-	0.000	0.193	3.461	11.557
43	-	0.500	-	0.000	-	0.000	0.185	3.565	12.250
44	-	0.500	-	0.000	-	0.000	0.178	3.671	12.985
45	-	0.500	-	0.000	-	0.000	0.171	3.782	13.765
46	-	0.500	-	0.000	-	0.000	0.165	3.895	14.590
47	-	0.500	-	0.000	-	0.000	0.158	4.012	15.466
48	-	0.500	-	0.000	-	0.000	0.152	4.132	16.394
49	-	0.500	-	0.000	-	0.000	0.146	4.256	17.378
50	-	0.500	-	0.000	-	0.000	0.141	4.384	18.420
51	-	1.000	-	0.000	-	0.000	0.135	4.515	19.525
52	-	-	-	-	-	-	0.130	4.651	20.697
53	-	-	-	-	-	-	0.125	4.790	21.939
54	-	-	-	-	-	-	0.120	4.934	23.255
55	-	-	-	-	-	-	0.116	5.082	24.650
56	-	-	-	-	-	-	0.111	5.235	26.129
57	-	-	-	-	-	-	0.107	5.392	27.697
58	-	-	-	-	-	-	0.103	5.553	29.359
59	-	-	-	-	-	-	0.099	5.720	31.120
60	-	-	-	-	-	-	0.095	5.892	32.988
61	-	-	-	-	-	-	0.091	6.068	34.967
62	-	-	-	-	-	-	0.088	6.250	37.065
63	-	-	-	-	-	-	0.085	6.438	39.289
64	-	-	-	-	-	-	0.081	6.631	41.646
65	-	-	-	-	-	-	0.078	6.830	44.145
66	-	-	-	-	-	-	0.075	7.035	46.794
67	-	-	-	-	-	-	0.072	7.246	49.601
68	-	-	-	-	-	-	0.069	7.463	52.577
69	-	-	-	-	-	-	0.067	7.687	55.732
70	-	-	-	-	-	-	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
78	-	-	-	-	-	-	0.047	10.030	94.158
79	-	-	-	-	-	-	0.045	10.331	99.808
80	-	-	-	-	-	-	0.043	10.641	105.796
81	-	-	-	-	-	-	0.042	10.960	112.144
82	-	-	-	-	-	-	0.040	11.289	118.872
83	-	-	-	-	-	-	0.039	11.628	126.005
84	-	-	-	-	-	-	0.037	11.976	133.565
85	-	-	-	-	-	-	0.036	12.336	141.579
86	-	-	-	-	-	-	0.034	12.706	150.074
87	-	-	-	-	-	-	0.033	13.087	159.078
88	-	-	-	-	-	-	0.032	13.480	168.623
89	-	-	-	-	-	-	0.030	13.884	178.740
90	-	-	-	-	-	-	0.029	14.300	189.465
91	-	-	-	-	-	-	0.028	14.729	200.832
92	-	-	-	-	-	-	0.027	15.171	212.882
93	-	-	-	-	-	-	0.026	15.627	225.655
94	-	-	-	-	-	-	0.025	16.095	239.195
95	-	-	-	-	-	-	0.024	16.578	253.546
96	-	-	-	-	-	-	0.023	17.076	268.759
97	-	-	-	-	-	-	0.022	17.588	284.885
98	-	-	-	-	-	-	0.021	18.115	301.978
99	-	-	-	-	-	-	0.021	18.659	320.096
100	-	-	-	-	-	-	0.020	19.219	339.302
101	-	-	-	-	-	-	0.019	19.795	359.660
102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
104	-	-	-	-	-	-	0.017	21.631	428.361
105	-	-	-	-	-	-	0.016	22.280	454.063
106	-	-	-	-	-	-	0.016	22.948	481.306
107	-	-	-	-	-	-	0.015	23.636	510.185
108	-	-	-	-	-	-	0.014	24.346	540.796
109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
118	-	-	-	-	-	-	0.010	32.718	968.483
119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (3) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	44	
(12)	**TYPE OF CLAIM**	IW + Dep 2	
(13)	**DATE OF INJURY**	10/11/2001	
(14)	**DATE OF FILING**	11/29/2001	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	36	M
(16)	**CLAIMANT 2 (y)**	57	F

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	66.37	29.39
(18)	APV FOR CLAIMANT 2	48.14	24.89
(19)	APV FOR BOTH CLAIMANTS ALIVE	39.74	22.09
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	35.03	10.11
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	13,530	13,530
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	7,732	7,732
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	808,575	377,024
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	625.60	625.60
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	7,507.20	7,507.20
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	6,360	6,360
(27)	APV FOR $1 OF MEDICAL BENEFIT	142.915	51.994
(28)	APV OF MEDICAL BENEFIT	908,941	330,683

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.003	0.003	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.003	0.003	0.997	0.997	0.995	0.005	0.962	1.030	1.060
2	0.003	0.004	0.995	0.994	0.989	0.011	0.925	1.061	1.124
3	0.003	0.004	0.992	0.990	0.982	0.018	0.889	1.093	1.191
4	0.003	0.005	0.989	0.985	0.975	0.025	0.855	1.126	1.262
5	0.004	0.006	0.986	0.980	0.966	0.033	0.822	1.159	1.338
6	0.004	0.007	0.982	0.975	0.957	0.042	0.790	1.194	1.419
7	0.005	0.008	0.978	0.968	0.947	0.053	0.760	1.230	1.504
8	0.006	0.009	0.973	0.961	0.935	0.064	0.731	1.267	1.594
9	0.006	0.010	0.968	0.953	0.922	0.077	0.703	1.305	1.689
10	0.007	0.011	0.962	0.943	0.907	0.091	0.676	1.344	1.791
11	0.007	0.012	0.955	0.933	0.891	0.106	0.650	1.384	1.898
12	0.007	0.013	0.949	0.922	0.875	0.121	0.625	1.426	2.012
13	0.008	0.014	0.942	0.910	0.857	0.137	0.601	1.469	2.133
14	0.008	0.015	0.934	0.898	0.839	0.154	0.577	1.513	2.261
15	0.009	0.017	0.927	0.885	0.820	0.172	0.555	1.558	2.397
16	0.010	0.018	0.918	0.870	0.799	0.191	0.534	1.605	2.540
17	0.012	0.020	0.908	0.854	0.776	0.211	0.513	1.653	2.693
18	0.013	0.023	0.898	0.837	0.751	0.232	0.494	1.702	2.854
19	0.014	0.025	0.886	0.818	0.725	0.255	0.475	1.754	3.026
20	0.015	0.028	0.874	0.797	0.696	0.278	0.456	1.806	3.207
21	0.017	0.032	0.860	0.774	0.666	0.302	0.439	1.860	3.400
22	0.018	0.035	0.846	0.750	0.634	0.327	0.422	1.916	3.604
23	0.020	0.039	0.830	0.723	0.601	0.352	0.406	1.974	3.820
24	0.022	0.044	0.814	0.695	0.565	0.378	0.390	2.033	4.049
25	0.024	0.049	0.796	0.664	0.529	0.403	0.375	2.094	4.292
26	0.027	0.055	0.777	0.632	0.491	0.427	0.361	2.157	4.549
27	0.030	0.061	0.756	0.597	0.451	0.450	0.347	2.221	4.822
28	0.033	0.068	0.734	0.561	0.411	0.472	0.333	2.288	5.112
29	0.037	0.075	0.709	0.523	0.371	0.491	0.321	2.357	5.418
30	0.041	0.084	0.683	0.483	0.330	0.506	0.308	2.427	5.743
31	0.046	0.094	0.655	0.443	0.290	0.518	0.296	2.500	6.088
32	0.050	0.105	0.626	0.401	0.251	0.525	0.285	2.575	6.453
33	0.055	0.116	0.594	0.359	0.213	0.527	0.274	2.652	6.841
34	0.059	0.129	0.562	0.317	0.178	0.523	0.264	2.732	7.251
35	0.064	0.142	0.528	0.276	0.146	0.513	0.253	2.814	7.686
36	0.069	0.156	0.494	0.237	0.117	0.497	0.244	2.898	8.147
37	0.074	0.171	0.460	0.200	0.092	0.476	0.234	2.985	8.636
38	0.080	0.186	0.427	0.166	0.071	0.451	0.225	3.075	9.154
39	0.086	0.203	0.393	0.135	0.053	0.422	0.217	3.167	9.704
40	0.094	0.220	0.359	0.108	0.039	0.389	0.208	3.262	10.286
41	0.102	0.238	0.325	0.084	0.027	0.355	0.200	3.360	10.903
42	0.111	0.257	0.292	0.064	0.019	0.319	0.193	3.461	11.557
43	0.121	0.276	0.259	0.048	0.012	0.282	0.185	3.565	12.250
44	0.131	0.297	0.228	0.034	0.008	0.247	0.178	3.671	12.985
45	0.141	0.317	0.198	0.024	0.005	0.213	0.171	3.782	13.765
46	0.151	0.339	0.170	0.017	0.003	0.181	0.165	3.895	14.590
47	0.162	0.361	0.145	0.011	0.002	0.152	0.158	4.012	15.466
48	0.173	0.384	0.121	0.007	0.001	0.126	0.152	4.132	16.394
49	0.186	0.405	0.100	0.004	0.000	0.104	0.146	4.256	17.378
50	0.201	0.425	0.081	0.003	0.000	0.084	0.141	4.384	18.420
51	0.218	0.444	0.065	0.001	0.000	0.066	0.135	4.515	19.525
52	0.237	0.464	0.051	0.001	0.000	0.052	0.130	4.651	20.697
53	0.258	0.482	0.039	0.000	0.000	0.039	0.125	4.790	21.939
54	0.282	0.495	0.029	0.000	0.000	0.029	0.120	4.934	23.255
55	0.309	0.500	0.021	0.000	0.000	0.021	0.116	5.082	24.650
56	0.339	0.500	0.014	0.000	0.000	0.014	0.111	5.235	26.129
57	0.371	0.500	0.009	0.000	0.000	0.009	0.107	5.392	27.697
58	0.406	0.500	0.006	0.000	0.000	0.006	0.103	5.553	29.359
59	0.444	0.500	0.004	0.000	0.000	0.004	0.099	5.720	31.120
60	0.475	0.500	0.002	0.000	0.000	0.002	0.095	5.892	32.988
61	0.506	0.500	0.001	0.000	0.000	0.001	0.091	6.068	34.967
62	0.539	0.500	0.001	0.000	0.000	0.001	0.088	6.250	37.065
63	0.575	1.000	0.000	0.000	0.000	0.000	0.085	6.438	39.289
64	0.616	-	0.000	-	-	0.000	0.081	6.631	41.646
65	0.661	-	0.000	-	-	0.000	0.078	6.830	44.145
66	0.713	-	0.000	-	-	0.000	0.075	7.035	46.794
67	0.773	-	0.000	-	-	0.000	0.072	7.246	49.601
68	0.841	-	0.000	-	-	0.000	0.069	7.463	52.577
69	0.918	-	0.000	-	-	0.000	0.067	7.687	55.732
70	1.000	-	0.000	-	-	0.000	0.064	7.918	59.076
71	-	-	-	-	-	-	0.062	8.155	62.620
72	-	-	-	-	-	-	0.059	8.400	66.378
73	-	-	-	-	-	-	0.057	8.652	70.360
74	-	-	-	-	-	-	0.055	8.912	74.582
75	-	-	-	-	-	-	0.053	9.179	79.057
76	-	-	-	-	-	-	0.051	9.454	83.800
77	-	-	-	-	-	-	0.049	9.738	88.828
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102	-	-	-	-	-	-	0.018	20.389	381.240
103	-	-	-	-	-	-	0.018	21.001	404.114
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109	-	-	-	-	-	-	0.014	25.076	573.244
110	-	-	-	-	-	-	0.013	25.828	607.638
111	-	-	-	-	-	-	0.013	26.603	644.097
112	-	-	-	-	-	-	0.012	27.401	682.742
113	-	-	-	-	-	-	0.012	28.223	723.707
114	-	-	-	-	-	-	0.011	29.070	767.129
115	-	-	-	-	-	-	0.011	29.942	813.157
116	-	-	-	-	-	-	0.011	30.840	861.947
117	-	-	-	-	-	-	0.010	31.765	913.663
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119	-	-	-	-	-	-	0.009	33.700	1,026.592
120	-	-	-	-	-	-	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (4) * 12
(22) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(23) = (20) * (22) + (21) * (23)
(24) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2)
(25) = (25) * (12)
(26) SECTION 8A, EXHIBIT 6, SHEET 2
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	45	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	12/1/1999	
(14)	**DATE OF FILING**	9/6/2000	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	81	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	12.44	9.62
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	12.44	9.62
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	96,167	74,422
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.044	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.049	-	0.956	1.000	0.956	0.044	0.962	1.030	1.060
2	0.055	-	0.909	1.000	0.909	0.091	0.925	1.061	1.124
3	0.061	-	0.859	1.000	0.859	0.141	0.889	1.093	1.191
4	0.068	-	0.807	1.000	0.807	0.193	0.855	1.126	1.262
5	0.075	-	0.752	1.000	0.752	0.248	0.822	1.159	1.338
6	0.084	-	0.695	1.000	0.695	0.305	0.790	1.194	1.419
7	0.094	-	0.637	1.000	0.637	0.363	0.760	1.230	1.504
8	0.105	-	0.577	1.000	0.577	0.423	0.731	1.267	1.594
9	0.116	-	0.517	1.000	0.517	0.483	0.703	1.305	1.689
10	0.129	-	0.457	1.000	0.457	0.543	0.676	1.344	1.791
11	0.142	-	0.398	1.000	0.398	0.602	0.650	1.384	1.898
12	0.156	-	0.341	1.000	0.341	0.659	0.625	1.426	2.012
13	0.171	-	0.288	1.000	0.288	0.712	0.601	1.469	2.133
14	0.186	-	0.239	1.000	0.239	0.761	0.577	1.513	2.261
15	0.203	-	0.195	1.000	0.195	0.805	0.555	1.558	2.397
16	0.220	-	0.155	1.000	0.155	0.845	0.534	1.605	2.540
17	0.238	-	0.121	1.000	0.121	0.879	0.513	1.653	2.693
18	0.257	-	0.092	1.000	0.092	0.908	0.494	1.702	2.854
19	0.276	-	0.069	1.000	0.069	0.931	0.475	1.754	3.026
20	0.297	-	0.050	1.000	0.050	0.950	0.456	1.806	3.207
21	0.317	-	0.035	1.000	0.035	0.965	0.439	1.860	3.400
22	0.339	-	0.024	1.000	0.024	0.976	0.422	1.916	3.604
23	0.361	-	0.016	1.000	0.016	0.984	0.406	1.974	3.820
24	0.384	-	0.010	1.000	0.010	0.990	0.390	2.033	4.049
25	0.405	-	0.006	1.000	0.006	0.994	0.375	2.094	4.292
26	0.425	-	0.004	1.000	0.004	0.996	0.361	2.157	4.549
27	0.444	-	0.002	1.000	0.002	0.998	0.347	2.221	4.822
28	0.464	-	0.001	1.000	0.001	0.999	0.333	2.288	5.112
29	0.482	-	0.001	1.000	0.001	0.999	0.321	2.357	5.418
30	0.495	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	1.000	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	46		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	12/1/2000		
(14)	**DATE OF FILING**	1/23/2001		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	73	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	20.75	14.26
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	20.75	14.26
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	160,479	110,283
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.018	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.020	-	0.982	1.000	0.982	0.018	0.962	1.030	1.060
2	0.023	-	0.962	1.000	0.962	0.038	0.925	1.061	1.124
3	0.025	-	0.940	1.000	0.940	0.060	0.889	1.093	1.191
4	0.028	-	0.916	1.000	0.916	0.084	0.855	1.126	1.262
5	0.032	-	0.890	1.000	0.890	0.110	0.822	1.159	1.338
6	0.035	-	0.862	1.000	0.862	0.138	0.790	1.194	1.419
7	0.039	-	0.831	1.000	0.831	0.169	0.760	1.230	1.504
8	0.044	-	0.799	1.000	0.799	0.201	0.731	1.267	1.594
9	0.049	-	0.763	1.000	0.763	0.237	0.703	1.305	1.689
10	0.055	-	0.726	1.000	0.726	0.274	0.676	1.344	1.791
11	0.061	-	0.686	1.000	0.686	0.314	0.650	1.384	1.898
12	0.068	-	0.644	1.000	0.644	0.356	0.625	1.426	2.012
13	0.075	-	0.601	1.000	0.601	0.399	0.601	1.469	2.133
14	0.084	-	0.555	1.000	0.555	0.445	0.577	1.513	2.261
15	0.094	-	0.509	1.000	0.509	0.491	0.555	1.558	2.397
16	0.105	-	0.461	1.000	0.461	0.539	0.534	1.605	2.540
17	0.116	-	0.413	1.000	0.413	0.587	0.513	1.653	2.693
18	0.129	-	0.365	1.000	0.365	0.635	0.494	1.702	2.854
19	0.142	-	0.318	1.000	0.318	0.682	0.475	1.754	3.026
20	0.156	-	0.273	1.000	0.273	0.727	0.456	1.806	3.207
21	0.171	-	0.230	1.000	0.230	0.770	0.439	1.860	3.400
22	0.186	-	0.191	1.000	0.191	0.809	0.422	1.916	3.604
23	0.203	-	0.155	1.000	0.155	0.845	0.406	1.974	3.820
24	0.220	-	0.124	1.000	0.124	0.876	0.390	2.033	4.049
25	0.238	-	0.097	1.000	0.097	0.903	0.375	2.094	4.292
26	0.257	-	0.074	1.000	0.074	0.926	0.361	2.157	4.549
27	0.276	-	0.055	1.000	0.055	0.945	0.347	2.221	4.822
28	0.297	-	0.040	1.000	0.040	0.960	0.333	2.288	5.112
29	0.317	-	0.028	1.000	0.028	0.972	0.321	2.357	5.418
30	0.339	-	0.019	1.000	0.019	0.981	0.308	2.427	5.743
31	0.361	-	0.013	1.000	0.013	0.987	0.296	2.500	6.088
32	0.384	-	0.008	1.000	0.008	0.992	0.285	2.575	6.453
33	0.405	-	0.005	1.000	0.005	0.995	0.274	2.652	6.841
34	0.425	-	0.003	1.000	0.003	0.997	0.264	2.732	7.251
35	0.444	-	0.002	1.000	0.002	0.998	0.253	2.814	7.686
36	0.464	-	0.001	1.000	0.001	0.999	0.244	2.898	8.147
37	0.482	-	0.001	1.000	0.001	0.999	0.234	2.985	8.636
38	0.495	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	1.000	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	47		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	10/26/2005		
(14)	**DATE OF FILING**	11/22/2005		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	90	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	50,719	43,613
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	48	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	11/30/2008	
(14)	**DATE OF FILING**	5/26/2009	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	64	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	34.07	20.08
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	34.07	20.08
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	263,447	155,237
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.008	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.009	-	0.992	1.000	0.992	0.008	0.962	1.030	1.060
2	0.010	-	0.984	1.000	0.984	0.016	0.925	1.061	1.124
3	0.011	-	0.974	1.000	0.974	0.026	0.889	1.093	1.191
4	0.012	-	0.964	1.000	0.964	0.036	0.855	1.126	1.262
5	0.013	-	0.952	1.000	0.952	0.048	0.822	1.159	1.338
6	0.014	-	0.940	1.000	0.940	0.060	0.790	1.194	1.419
7	0.015	-	0.927	1.000	0.927	0.073	0.760	1.230	1.504
8	0.017	-	0.914	1.000	0.914	0.086	0.731	1.267	1.594
9	0.018	-	0.898	1.000	0.898	0.102	0.703	1.305	1.689
10	0.020	-	0.882	1.000	0.882	0.118	0.676	1.344	1.791
11	0.023	-	0.864	1.000	0.864	0.136	0.650	1.384	1.898
12	0.025	-	0.844	1.000	0.844	0.156	0.625	1.426	2.012
13	0.028	-	0.823	1.000	0.823	0.177	0.601	1.469	2.133
14	0.032	-	0.800	1.000	0.800	0.200	0.577	1.513	2.261
15	0.035	-	0.774	1.000	0.774	0.226	0.555	1.558	2.397
16	0.039	-	0.747	1.000	0.747	0.253	0.534	1.605	2.540
17	0.044	-	0.718	1.000	0.718	0.282	0.513	1.653	2.693
18	0.049	-	0.686	1.000	0.686	0.314	0.494	1.702	2.854
19	0.055	-	0.652	1.000	0.652	0.348	0.475	1.754	3.026
20	0.061	-	0.616	1.000	0.616	0.384	0.456	1.806	3.207
21	0.068	-	0.579	1.000	0.579	0.421	0.439	1.860	3.400
22	0.075	-	0.540	1.000	0.540	0.460	0.422	1.916	3.604
23	0.084	-	0.499	1.000	0.499	0.501	0.406	1.974	3.820
24	0.094	-	0.457	1.000	0.457	0.543	0.390	2.033	4.049
25	0.105	-	0.414	1.000	0.414	0.586	0.375	2.094	4.292
26	0.116	-	0.371	1.000	0.371	0.629	0.361	2.157	4.549
27	0.129	-	0.328	1.000	0.328	0.672	0.347	2.221	4.822
28	0.142	-	0.286	1.000	0.286	0.714	0.333	2.288	5.112
29	0.156	-	0.245	1.000	0.245	0.755	0.321	2.357	5.418
30	0.171	-	0.207	1.000	0.207	0.793	0.308	2.427	5.743
31	0.186	-	0.172	1.000	0.172	0.828	0.296	2.500	6.088
32	0.203	-	0.140	1.000	0.140	0.860	0.285	2.575	6.453
33	0.220	-	0.111	1.000	0.111	0.889	0.274	2.652	6.841
34	0.238	-	0.087	1.000	0.087	0.913	0.264	2.732	7.251
35	0.257	-	0.066	1.000	0.066	0.934	0.253	2.814	7.686
36	0.276	-	0.049	1.000	0.049	0.951	0.244	2.898	8.147
37	0.297	-	0.036	1.000	0.036	0.964	0.234	2.985	8.636
38	0.317	-	0.025	1.000	0.025	0.975	0.225	3.075	9.154
39	0.339	-	0.017	1.000	0.017	0.983	0.217	3.167	9.704
40	0.361	-	0.011	1.000	0.011	0.989	0.208	3.262	10.286
41	0.384	-	0.007	1.000	0.007	0.993	0.200	3.360	10.903
42	0.405	-	0.004	1.000	0.004	0.996	0.193	3.461	11.557
43	0.425	-	0.003	1.000	0.003	0.997	0.185	3.565	12.250
44	0.444	-	0.002	1.000	0.002	0.998	0.178	3.671	12.985
45	0.464	-	0.001	1.000	0.001	0.999	0.171	3.782	13.765
46	0.482	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.495	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.500	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	0.500	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	0.500	-	0.000	1.000	0.000	1.000	0.141	4.384	18.420
51	0.500	-	0.000	1.000	0.000	1.000	0.135	4.515	19.525
52	0.500	-	0.000	1.000	0.000	1.000	0.130	4.651	20.697
53	0.500	-	0.000	1.000	0.000	1.000	0.125	4.790	21.939
54	0.500	-	0.000	1.000	0.000	1.000	0.120	4.934	23.255
55	0.500	-	0.000	1.000	0.000	1.000	0.116	5.082	24.650
56	1.000	-	0.000	1.000	0.000	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	49		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/1/1976		
(14)	**DATE OF FILING**	8/1/1976		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	98	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	3.80	3.48
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	3.80	3.48
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	29,403	26,942
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.238	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.257	-	0.762	1.000	0.762	0.238	0.962	1.030	1.060
2	0.276	-	0.567	1.000	0.567	0.433	0.925	1.061	1.124
3	0.297	-	0.410	1.000	0.410	0.590	0.889	1.093	1.191
4	0.317	-	0.288	1.000	0.288	0.712	0.855	1.126	1.262
5	0.339	-	0.197	1.000	0.197	0.803	0.822	1.159	1.338
6	0.361	-	0.130	1.000	0.130	0.870	0.790	1.194	1.419
7	0.384	-	0.083	1.000	0.083	0.917	0.760	1.230	1.504
8	0.405	-	0.051	1.000	0.051	0.949	0.731	1.267	1.594
9	0.425	-	0.031	1.000	0.031	0.969	0.703	1.305	1.689
10	0.444	-	0.018	1.000	0.018	0.982	0.676	1.344	1.791
11	0.464	-	0.010	1.000	0.010	0.990	0.650	1.384	1.898
12	0.482	-	0.005	1.000	0.005	0.995	0.625	1.426	2.012
13	0.495	-	0.003	1.000	0.003	0.997	0.601	1.469	2.133
14	0.500	-	0.001	1.000	0.001	0.999	0.577	1.513	2.261
15	0.500	-	0.001	1.000	0.001	0.999	0.555	1.558	2.397
16	0.500	-	0.000	1.000	0.000	1.000	0.534	1.605	2.540
17	0.500	-	0.000	1.000	0.000	1.000	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	1.000	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	-	-	-	1.000	-	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	50	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	10/1/1981	
(14)	**DATE OF FILING**	3/22/1982	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	84	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.11	8.13
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.11	8.13
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	78,141	62,869
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.061	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.068	-	0.939	1.000	0.939	0.061	0.962	1.030	1.060
2	0.075	-	0.875	1.000	0.875	0.125	0.925	1.061	1.124
3	0.084	-	0.809	1.000	0.809	0.191	0.889	1.093	1.191
4	0.094	-	0.741	1.000	0.741	0.259	0.855	1.126	1.262
5	0.105	-	0.672	1.000	0.672	0.328	0.822	1.159	1.338
6	0.116	-	0.602	1.000	0.602	0.398	0.790	1.194	1.419
7	0.129	-	0.532	1.000	0.532	0.468	0.760	1.230	1.504
8	0.142	-	0.463	1.000	0.463	0.537	0.731	1.267	1.594
9	0.156	-	0.397	1.000	0.397	0.603	0.703	1.305	1.689
10	0.171	-	0.335	1.000	0.335	0.665	0.676	1.344	1.791
11	0.186	-	0.278	1.000	0.278	0.722	0.650	1.384	1.898
12	0.203	-	0.226	1.000	0.226	0.774	0.625	1.426	2.012
13	0.220	-	0.181	1.000	0.181	0.819	0.601	1.469	2.133
14	0.238	-	0.141	1.000	0.141	0.859	0.577	1.513	2.261
15	0.257	-	0.107	1.000	0.107	0.893	0.555	1.558	2.397
16	0.276	-	0.080	1.000	0.080	0.920	0.534	1.605	2.540
17	0.297	-	0.058	1.000	0.058	0.942	0.513	1.653	2.693
18	0.317	-	0.041	1.000	0.041	0.959	0.494	1.702	2.854
19	0.339	-	0.028	1.000	0.028	0.972	0.475	1.754	3.026
20	0.361	-	0.018	1.000	0.018	0.982	0.456	1.806	3.207
21	0.384	-	0.012	1.000	0.012	0.988	0.439	1.860	3.400
22	0.405	-	0.007	1.000	0.007	0.993	0.422	1.916	3.604
23	0.425	-	0.004	1.000	0.004	0.996	0.406	1.974	3.820
24	0.444	-	0.002	1.000	0.002	0.998	0.390	2.033	4.049
25	0.464	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.482	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.495	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	51		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1981		
(14)	**DATE OF FILING**	3/2/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	47,225	40,995
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	52		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/1/1978		
(14)	**DATE OF FILING**	6/8/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
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54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
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74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
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76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
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(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	53		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1978		
(14)	**DATE OF FILING**	4/8/1978		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	50	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	66.03	29.72
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	66.03	29.72
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	510,608	229,799
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.001	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.002	-	0.999	1.000	0.999	0.001	0.962	1.030	1.060
2	0.002	-	0.997	1.000	0.997	0.003	0.925	1.061	1.124
3	0.002	-	0.995	1.000	0.995	0.005	0.889	1.093	1.191
4	0.002	-	0.993	1.000	0.993	0.007	0.855	1.126	1.262
5	0.002	-	0.991	1.000	0.991	0.009	0.822	1.159	1.338
6	0.003	-	0.989	1.000	0.989	0.011	0.790	1.194	1.419
7	0.003	-	0.987	1.000	0.987	0.013	0.760	1.230	1.504
8	0.003	-	0.984	1.000	0.984	0.016	0.731	1.267	1.594
9	0.004	-	0.980	1.000	0.980	0.020	0.703	1.305	1.689
10	0.004	-	0.977	1.000	0.977	0.023	0.676	1.344	1.791
11	0.005	-	0.972	1.000	0.972	0.028	0.650	1.384	1.898
12	0.006	-	0.967	1.000	0.967	0.033	0.625	1.426	2.012
13	0.007	-	0.962	1.000	0.962	0.038	0.601	1.469	2.133
14	0.008	-	0.955	1.000	0.955	0.045	0.577	1.513	2.261
15	0.009	-	0.948	1.000	0.948	0.052	0.555	1.558	2.397
16	0.010	-	0.940	1.000	0.940	0.060	0.534	1.605	2.540
17	0.011	-	0.931	1.000	0.931	0.069	0.513	1.653	2.693
18	0.012	-	0.921	1.000	0.921	0.079	0.494	1.702	2.854
19	0.013	-	0.910	1.000	0.910	0.090	0.475	1.754	3.026
20	0.014	-	0.898	1.000	0.898	0.102	0.456	1.806	3.207
21	0.015	-	0.886	1.000	0.886	0.114	0.439	1.860	3.400
22	0.017	-	0.873	1.000	0.873	0.127	0.422	1.916	3.604
23	0.018	-	0.858	1.000	0.858	0.142	0.406	1.974	3.820
24	0.020	-	0.842	1.000	0.842	0.158	0.390	2.033	4.049
25	0.023	-	0.825	1.000	0.825	0.175	0.375	2.094	4.292
26	0.025	-	0.807	1.000	0.807	0.193	0.361	2.157	4.549
27	0.028	-	0.786	1.000	0.786	0.214	0.347	2.221	4.822
28	0.032	-	0.764	1.000	0.764	0.236	0.333	2.288	5.112
29	0.035	-	0.740	1.000	0.740	0.260	0.321	2.357	5.418
30	0.039	-	0.713	1.000	0.713	0.287	0.308	2.427	5.743
31	0.044	-	0.685	1.000	0.685	0.315	0.296	2.500	6.088
32	0.049	-	0.655	1.000	0.655	0.345	0.285	2.575	6.453
33	0.055	-	0.623	1.000	0.623	0.377	0.274	2.652	6.841
34	0.061	-	0.589	1.000	0.589	0.411	0.264	2.732	7.251
35	0.068	-	0.553	1.000	0.553	0.447	0.253	2.814	7.686
36	0.075	-	0.515	1.000	0.515	0.485	0.244	2.898	8.147
37	0.084	-	0.477	1.000	0.477	0.523	0.234	2.985	8.636
38	0.094	-	0.437	1.000	0.437	0.563	0.225	3.075	9.154
39	0.105	-	0.396	1.000	0.396	0.604	0.217	3.167	9.704
40	0.116	-	0.354	1.000	0.354	0.646	0.208	3.262	10.286
41	0.129	-	0.313	1.000	0.313	0.687	0.200	3.360	10.903
42	0.142	-	0.273	1.000	0.273	0.727	0.193	3.461	11.557
43	0.156	-	0.234	1.000	0.234	0.766	0.185	3.565	12.250
44	0.171	-	0.198	1.000	0.198	0.802	0.178	3.671	12.985
45	0.186	-	0.164	1.000	0.164	0.836	0.171	3.782	13.765
46	0.203	-	0.133	1.000	0.133	0.867	0.165	3.895	14.590
47	0.220	-	0.106	1.000	0.106	0.894	0.158	4.012	15.466
48	0.238	-	0.083	1.000	0.083	0.917	0.152	4.132	16.394
49	0.257	-	0.063	1.000	0.063	0.937	0.146	4.256	17.378
50	0.276	-	0.047	1.000	0.047	0.953	0.141	4.384	18.420
51	0.297	-	0.034	1.000	0.034	0.966	0.135	4.515	19.525
52	0.317	-	0.024	1.000	0.024	0.976	0.130	4.651	20.697
53	0.339	-	0.016	1.000	0.016	0.984	0.125	4.790	21.939
54	0.361	-	0.011	1.000	0.011	0.989	0.120	4.934	23.255
55	0.384	-	0.007	1.000	0.007	0.993	0.116	5.082	24.650
56	0.405	-	0.004	1.000	0.004	0.996	0.111	5.235	26.129
57	0.425	-	0.003	1.000	0.003	0.997	0.107	5.392	27.697
58	0.444	-	0.001	1.000	0.001	0.999	0.103	5.553	29.359
59	0.464	-	0.001	1.000	0.001	0.999	0.099	5.720	31.120
60	0.482	-	0.000	1.000	0.000	1.000	0.095	5.892	32.988
61	0.495	-	0.000	1.000	0.000	1.000	0.091	6.068	34.967
62	0.500	-	0.000	1.000	0.000	1.000	0.088	6.250	37.065
63	0.500	-	0.000	1.000	0.000	1.000	0.085	6.438	39.289
64	0.500	-	0.000	1.000	0.000	1.000	0.081	6.631	41.646
65	0.500	-	0.000	1.000	0.000	1.000	0.078	6.830	44.145
66	0.500	-	0.000	1.000	0.000	1.000	0.075	7.035	46.794
67	0.500	-	0.000	1.000	0.000	1.000	0.072	7.246	49.601
68	0.500	-	0.000	1.000	0.000	1.000	0.069	7.463	52.577
69	0.500	-	0.000	1.000	0.000	1.000	0.067	7.687	55.732
70	1.000	-	0.000	1.000	0.000	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	54		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	5/1/1979		
(14)	**DATE OF FILING**	5/18/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	85	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	9.41	7.67
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	9.41	7.67
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	72,797	59,287
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.068	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.075	-	0.932	1.000	0.932	0.068	0.962	1.030	1.060
2	0.084	-	0.862	1.000	0.862	0.138	0.925	1.061	1.124
3	0.094	-	0.790	1.000	0.790	0.210	0.889	1.093	1.191
4	0.105	-	0.716	1.000	0.716	0.284	0.855	1.126	1.262
5	0.116	-	0.641	1.000	0.641	0.359	0.822	1.159	1.338
6	0.129	-	0.566	1.000	0.566	0.434	0.790	1.194	1.419
7	0.142	-	0.493	1.000	0.493	0.507	0.760	1.230	1.504
8	0.156	-	0.423	1.000	0.423	0.577	0.731	1.267	1.594
9	0.171	-	0.357	1.000	0.357	0.643	0.703	1.305	1.689
10	0.186	-	0.296	1.000	0.296	0.704	0.676	1.344	1.791
11	0.203	-	0.241	1.000	0.241	0.759	0.650	1.384	1.898
12	0.220	-	0.192	1.000	0.192	0.808	0.625	1.426	2.012
13	0.238	-	0.150	1.000	0.150	0.850	0.601	1.469	2.133
14	0.257	-	0.114	1.000	0.114	0.886	0.577	1.513	2.261
15	0.276	-	0.085	1.000	0.085	0.915	0.555	1.558	2.397
16	0.297	-	0.062	1.000	0.062	0.938	0.534	1.605	2.540
17	0.317	-	0.043	1.000	0.043	0.957	0.513	1.653	2.693
18	0.339	-	0.030	1.000	0.030	0.970	0.494	1.702	2.854
19	0.361	-	0.020	1.000	0.020	0.980	0.475	1.754	3.026
20	0.384	-	0.012	1.000	0.012	0.988	0.456	1.806	3.207
21	0.405	-	0.008	1.000	0.008	0.992	0.439	1.860	3.400
22	0.425	-	0.005	1.000	0.005	0.995	0.422	1.916	3.604
23	0.444	-	0.003	1.000	0.003	0.997	0.406	1.974	3.820
24	0.464	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.482	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.495	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	1.000	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	55		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	6/1/1980		
(14)	**DATE OF FILING**	11/23/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	47,225	40,995
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
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62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
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72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
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89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
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117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	56		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1980		
(14)	**DATE OF FILING**	12/4/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	86	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.76	7.22
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.76	7.22
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	67,760	55,838
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.075	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.084	-	0.925	1.000	0.925	0.075	0.962	1.030	1.060
2	0.094	-	0.847	1.000	0.847	0.153	0.925	1.061	1.124
3	0.105	-	0.767	1.000	0.767	0.233	0.889	1.093	1.191
4	0.116	-	0.687	1.000	0.687	0.313	0.855	1.126	1.262
5	0.129	-	0.607	1.000	0.607	0.393	0.822	1.159	1.338
6	0.142	-	0.529	1.000	0.529	0.471	0.790	1.194	1.419
7	0.156	-	0.454	1.000	0.454	0.546	0.760	1.230	1.504
8	0.171	-	0.383	1.000	0.383	0.617	0.731	1.267	1.594
9	0.186	-	0.318	1.000	0.318	0.682	0.703	1.305	1.689
10	0.203	-	0.259	1.000	0.259	0.741	0.676	1.344	1.791
11	0.220	-	0.206	1.000	0.206	0.794	0.650	1.384	1.898
12	0.238	-	0.161	1.000	0.161	0.839	0.625	1.426	2.012
13	0.257	-	0.123	1.000	0.123	0.877	0.601	1.469	2.133
14	0.276	-	0.091	1.000	0.091	0.909	0.577	1.513	2.261
15	0.297	-	0.066	1.000	0.066	0.934	0.555	1.558	2.397
16	0.317	-	0.046	1.000	0.046	0.954	0.534	1.605	2.540
17	0.339	-	0.032	1.000	0.032	0.968	0.513	1.653	2.693
18	0.361	-	0.021	1.000	0.021	0.979	0.494	1.702	2.854
19	0.384	-	0.013	1.000	0.013	0.987	0.475	1.754	3.026
20	0.405	-	0.008	1.000	0.008	0.992	0.456	1.806	3.207
21	0.425	-	0.005	1.000	0.005	0.995	0.439	1.860	3.400
22	0.444	-	0.003	1.000	0.003	0.997	0.422	1.916	3.604
23	0.464	-	0.002	1.000	0.002	0.998	0.406	1.974	3.820
24	0.482	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.495	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	57		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1979		
(14)	**DATE OF FILING**	12/11/1979		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	47,225	40,995
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	58		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	1/1/1979		
(14)	**DATE OF FILING**	1/25/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	84	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.11	8.13
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.11	8.13
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	78,141	62,869
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.061	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.068	-	0.939	1.000	0.939	0.061	0.962	1.030	1.060
2	0.075	-	0.875	1.000	0.875	0.125	0.925	1.061	1.124
3	0.084	-	0.809	1.000	0.809	0.191	0.889	1.093	1.191
4	0.094	-	0.741	1.000	0.741	0.259	0.855	1.126	1.262
5	0.105	-	0.672	1.000	0.672	0.328	0.822	1.159	1.338
6	0.116	-	0.602	1.000	0.602	0.398	0.790	1.194	1.419
7	0.129	-	0.532	1.000	0.532	0.468	0.760	1.230	1.504
8	0.142	-	0.463	1.000	0.463	0.537	0.731	1.267	1.594
9	0.156	-	0.397	1.000	0.397	0.603	0.703	1.305	1.689
10	0.171	-	0.335	1.000	0.335	0.665	0.676	1.344	1.791
11	0.186	-	0.278	1.000	0.278	0.722	0.650	1.384	1.898
12	0.203	-	0.226	1.000	0.226	0.774	0.625	1.426	2.012
13	0.220	-	0.181	1.000	0.181	0.819	0.601	1.469	2.133
14	0.238	-	0.141	1.000	0.141	0.859	0.577	1.513	2.261
15	0.257	-	0.107	1.000	0.107	0.893	0.555	1.558	2.397
16	0.276	-	0.080	1.000	0.080	0.920	0.534	1.605	2.540
17	0.297	-	0.058	1.000	0.058	0.942	0.513	1.653	2.693
18	0.317	-	0.041	1.000	0.041	0.959	0.494	1.702	2.854
19	0.339	-	0.028	1.000	0.028	0.972	0.475	1.754	3.026
20	0.361	-	0.018	1.000	0.018	0.982	0.456	1.806	3.207
21	0.384	-	0.012	1.000	0.012	0.988	0.439	1.860	3.400
22	0.405	-	0.007	1.000	0.007	0.993	0.422	1.916	3.604
23	0.425	-	0.004	1.000	0.004	0.996	0.406	1.974	3.820
24	0.444	-	0.002	1.000	0.002	0.998	0.390	2.033	4.049
25	0.464	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.482	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.495	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
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96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	59	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	11/1/1978	
(14)	**DATE OF FILING**	2/18/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	95	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.63	4.16
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.63	4.16
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	35,808	32,141
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.186	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.203	-	0.814	1.000	0.814	0.186	0.962	1.030	1.060
2	0.220	-	0.649	1.000	0.649	0.351	0.925	1.061	1.124
3	0.238	-	0.506	1.000	0.506	0.494	0.889	1.093	1.191
4	0.257	-	0.386	1.000	0.386	0.614	0.855	1.126	1.262
5	0.276	-	0.287	1.000	0.287	0.713	0.822	1.159	1.338
6	0.297	-	0.208	1.000	0.208	0.792	0.790	1.194	1.419
7	0.317	-	0.146	1.000	0.146	0.854	0.760	1.230	1.504
8	0.339	-	0.100	1.000	0.100	0.900	0.731	1.267	1.594
9	0.361	-	0.066	1.000	0.066	0.934	0.703	1.305	1.689
10	0.384	-	0.042	1.000	0.042	0.958	0.676	1.344	1.791
11	0.405	-	0.026	1.000	0.026	0.974	0.650	1.384	1.898
12	0.425	-	0.015	1.000	0.015	0.985	0.625	1.426	2.012
13	0.444	-	0.009	1.000	0.009	0.991	0.601	1.469	2.133
14	0.464	-	0.005	1.000	0.005	0.995	0.577	1.513	2.261
15	0.482	-	0.003	1.000	0.003	0.997	0.555	1.558	2.397
16	0.495	-	0.001	1.000	0.001	0.999	0.534	1.605	2.540
17	0.500	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	1.000	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	60		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1977		
(14)	**DATE OF FILING**	2/25/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	74	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	19.54	13.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	19.54	13.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	151,069	105,481
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.020	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.023	-	0.980	1.000	0.980	0.020	0.962	1.030	1.060
2	0.025	-	0.957	1.000	0.957	0.043	0.925	1.061	1.124
3	0.028	-	0.933	1.000	0.933	0.067	0.889	1.093	1.191
4	0.032	-	0.907	1.000	0.907	0.093	0.855	1.126	1.262
5	0.035	-	0.878	1.000	0.878	0.122	0.822	1.159	1.338
6	0.039	-	0.847	1.000	0.847	0.153	0.790	1.194	1.419
7	0.044	-	0.814	1.000	0.814	0.186	0.760	1.230	1.504
8	0.049	-	0.778	1.000	0.778	0.222	0.731	1.267	1.594
9	0.055	-	0.740	1.000	0.740	0.260	0.703	1.305	1.689
10	0.061	-	0.699	1.000	0.699	0.301	0.676	1.344	1.791
11	0.068	-	0.656	1.000	0.656	0.344	0.650	1.384	1.898
12	0.075	-	0.612	1.000	0.612	0.388	0.625	1.426	2.012
13	0.084	-	0.566	1.000	0.566	0.434	0.601	1.469	2.133
14	0.094	-	0.518	1.000	0.518	0.482	0.577	1.513	2.261
15	0.105	-	0.470	1.000	0.470	0.530	0.555	1.558	2.397
16	0.116	-	0.420	1.000	0.420	0.580	0.534	1.605	2.540
17	0.129	-	0.372	1.000	0.372	0.628	0.513	1.653	2.693
18	0.142	-	0.324	1.000	0.324	0.676	0.494	1.702	2.854
19	0.156	-	0.278	1.000	0.278	0.722	0.475	1.754	3.026
20	0.171	-	0.234	1.000	0.234	0.766	0.456	1.806	3.207
21	0.186	-	0.194	1.000	0.194	0.806	0.439	1.860	3.400
22	0.203	-	0.158	1.000	0.158	0.842	0.422	1.916	3.604
23	0.220	-	0.126	1.000	0.126	0.874	0.406	1.974	3.820
24	0.238	-	0.098	1.000	0.098	0.902	0.390	2.033	4.049
25	0.257	-	0.075	1.000	0.075	0.925	0.375	2.094	4.292
26	0.276	-	0.056	1.000	0.056	0.944	0.361	2.157	4.549
27	0.297	-	0.040	1.000	0.040	0.960	0.347	2.221	4.822
28	0.317	-	0.028	1.000	0.028	0.972	0.333	2.288	5.112
29	0.339	-	0.019	1.000	0.019	0.981	0.321	2.357	5.418
30	0.361	-	0.013	1.000	0.013	0.987	0.308	2.427	5.743
31	0.384	-	0.008	1.000	0.008	0.992	0.296	2.500	6.088
32	0.405	-	0.005	1.000	0.005	0.995	0.285	2.575	6.453
33	0.425	-	0.003	1.000	0.003	0.997	0.274	2.652	6.841
34	0.444	-	0.002	1.000	0.002	0.998	0.264	2.732	7.251
35	0.464	-	0.001	1.000	0.001	0.999	0.253	2.814	7.686
36	0.482	-	0.001	1.000	0.001	0.999	0.244	2.898	8.147
37	0.495	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	1.000	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	61		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1981		
(14)	**DATE OF FILING**	5/26/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	90	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.56	5.64
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.56	5.64
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	50,719	43,613
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.116	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.129	-	0.884	1.000	0.884	0.116	0.962	1.030	1.060
2	0.142	-	0.770	1.000	0.770	0.230	0.925	1.061	1.124
3	0.156	-	0.661	1.000	0.661	0.339	0.889	1.093	1.191
4	0.171	-	0.558	1.000	0.558	0.442	0.855	1.126	1.262
5	0.186	-	0.462	1.000	0.462	0.538	0.822	1.159	1.338
6	0.203	-	0.376	1.000	0.376	0.624	0.790	1.194	1.419
7	0.220	-	0.300	1.000	0.300	0.700	0.760	1.230	1.504
8	0.238	-	0.234	1.000	0.234	0.766	0.731	1.267	1.594
9	0.257	-	0.179	1.000	0.179	0.821	0.703	1.305	1.689
10	0.276	-	0.133	1.000	0.133	0.867	0.676	1.344	1.791
11	0.297	-	0.096	1.000	0.096	0.904	0.650	1.384	1.898
12	0.317	-	0.068	1.000	0.068	0.932	0.625	1.426	2.012
13	0.339	-	0.046	1.000	0.046	0.954	0.601	1.469	2.133
14	0.361	-	0.031	1.000	0.031	0.969	0.577	1.513	2.261
15	0.384	-	0.019	1.000	0.019	0.981	0.555	1.558	2.397
16	0.405	-	0.012	1.000	0.012	0.988	0.534	1.605	2.540
17	0.425	-	0.007	1.000	0.007	0.993	0.513	1.653	2.693
18	0.444	-	0.004	1.000	0.004	0.996	0.494	1.702	2.854
19	0.464	-	0.002	1.000	0.002	0.998	0.475	1.754	3.026
20	0.482	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.495	-	0.001	1.000	0.001	0.999	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	1.000	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	62		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	8/15/1972		
(14)	**DATE OF FILING**	5/7/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	86	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.76	7.22
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.76	7.22
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	67,760	55,838
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.075	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.084	-	0.925	1.000	0.925	0.075	0.962	1.030	1.060
2	0.094	-	0.847	1.000	0.847	0.153	0.925	1.061	1.124
3	0.105	-	0.767	1.000	0.767	0.233	0.889	1.093	1.191
4	0.116	-	0.687	1.000	0.687	0.313	0.855	1.126	1.262
5	0.129	-	0.607	1.000	0.607	0.393	0.822	1.159	1.338
6	0.142	-	0.529	1.000	0.529	0.471	0.790	1.194	1.419
7	0.156	-	0.454	1.000	0.454	0.546	0.760	1.230	1.504
8	0.171	-	0.383	1.000	0.383	0.617	0.731	1.267	1.594
9	0.186	-	0.318	1.000	0.318	0.682	0.703	1.305	1.689
10	0.203	-	0.259	1.000	0.259	0.741	0.676	1.344	1.791
11	0.220	-	0.206	1.000	0.206	0.794	0.650	1.384	1.898
12	0.238	-	0.161	1.000	0.161	0.839	0.625	1.426	2.012
13	0.257	-	0.123	1.000	0.123	0.877	0.601	1.469	2.133
14	0.276	-	0.091	1.000	0.091	0.909	0.577	1.513	2.261
15	0.297	-	0.066	1.000	0.066	0.934	0.555	1.558	2.397
16	0.317	-	0.046	1.000	0.046	0.954	0.534	1.605	2.540
17	0.339	-	0.032	1.000	0.032	0.968	0.513	1.653	2.693
18	0.361	-	0.021	1.000	0.021	0.979	0.494	1.702	2.854
19	0.384	-	0.013	1.000	0.013	0.987	0.475	1.754	3.026
20	0.405	-	0.008	1.000	0.008	0.992	0.456	1.806	3.207
21	0.425	-	0.005	1.000	0.005	0.995	0.439	1.860	3.400
22	0.444	-	0.003	1.000	0.003	0.997	0.422	1.916	3.604
23	0.464	-	0.002	1.000	0.002	0.998	0.406	1.974	3.820
24	0.482	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.495	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
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(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	63		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/17/1973		
(14)	**DATE OF FILING**	5/21/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
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53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
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74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
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(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	64	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	5/1/1976	
(14)	**DATE OF FILING**	1/4/1980	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	95	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.63	4.16
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.63	4.16
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	35,808	32,141
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.186	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.203	-	0.814	1.000	0.814	0.186	0.962	1.030	1.060
2	0.220	-	0.649	1.000	0.649	0.351	0.925	1.061	1.124
3	0.238	-	0.506	1.000	0.506	0.494	0.889	1.093	1.191
4	0.257	-	0.386	1.000	0.386	0.614	0.855	1.126	1.262
5	0.276	-	0.287	1.000	0.287	0.713	0.822	1.159	1.338
6	0.297	-	0.208	1.000	0.208	0.792	0.790	1.194	1.419
7	0.317	-	0.146	1.000	0.146	0.854	0.760	1.230	1.504
8	0.339	-	0.100	1.000	0.100	0.900	0.731	1.267	1.594
9	0.361	-	0.066	1.000	0.066	0.934	0.703	1.305	1.689
10	0.384	-	0.042	1.000	0.042	0.958	0.676	1.344	1.791
11	0.405	-	0.026	1.000	0.026	0.974	0.650	1.384	1.898
12	0.425	-	0.015	1.000	0.015	0.985	0.625	1.426	2.012
13	0.444	-	0.009	1.000	0.009	0.991	0.601	1.469	2.133
14	0.464	-	0.005	1.000	0.005	0.995	0.577	1.513	2.261
15	0.482	-	0.003	1.000	0.003	0.997	0.555	1.558	2.397
16	0.495	-	0.001	1.000	0.001	0.999	0.534	1.605	2.540
17	0.500	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	1.000	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	65		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	10/1/1975		
(14)	**DATE OF FILING**	6/17/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	86	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.76	7.22
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.76	7.22
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	67,760	55,838
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.075	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.084	-	0.925	1.000	0.925	0.075	0.962	1.030	1.060
2	0.094	-	0.847	1.000	0.847	0.153	0.925	1.061	1.124
3	0.105	-	0.767	1.000	0.767	0.233	0.889	1.093	1.191
4	0.116	-	0.687	1.000	0.687	0.313	0.855	1.126	1.262
5	0.129	-	0.607	1.000	0.607	0.393	0.822	1.159	1.338
6	0.142	-	0.529	1.000	0.529	0.471	0.790	1.194	1.419
7	0.156	-	0.454	1.000	0.454	0.546	0.760	1.230	1.504
8	0.171	-	0.383	1.000	0.383	0.617	0.731	1.267	1.594
9	0.186	-	0.318	1.000	0.318	0.682	0.703	1.305	1.689
10	0.203	-	0.259	1.000	0.259	0.741	0.676	1.344	1.791
11	0.220	-	0.206	1.000	0.206	0.794	0.650	1.384	1.898
12	0.238	-	0.161	1.000	0.161	0.839	0.625	1.426	2.012
13	0.257	-	0.123	1.000	0.123	0.877	0.601	1.469	2.133
14	0.276	-	0.091	1.000	0.091	0.909	0.577	1.513	2.261
15	0.297	-	0.066	1.000	0.066	0.934	0.555	1.558	2.397
16	0.317	-	0.046	1.000	0.046	0.954	0.534	1.605	2.540
17	0.339	-	0.032	1.000	0.032	0.968	0.513	1.653	2.693
18	0.361	-	0.021	1.000	0.021	0.979	0.494	1.702	2.854
19	0.384	-	0.013	1.000	0.013	0.987	0.475	1.754	3.026
20	0.405	-	0.008	1.000	0.008	0.992	0.456	1.806	3.207
21	0.425	-	0.005	1.000	0.005	0.995	0.439	1.860	3.400
22	0.444	-	0.003	1.000	0.003	0.997	0.422	1.916	3.604
23	0.464	-	0.002	1.000	0.002	0.998	0.406	1.974	3.820
24	0.482	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.495	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	66		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	5/29/1977		
(14)	**DATE OF FILING**	8/19/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
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77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
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120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
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(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
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(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	67		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1980		
(14)	**DATE OF FILING**	12/4/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	68		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	10/20/1980		
(14)	**DATE OF FILING**	12/12/1980		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	84	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	10.11	8.13
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	10.11	8.13
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	78,141	62,869
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.061	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.068	-	0.939	1.000	0.939	0.061	0.962	1.030	1.060
2	0.075	-	0.875	1.000	0.875	0.125	0.925	1.061	1.124
3	0.084	-	0.809	1.000	0.809	0.191	0.889	1.093	1.191
4	0.094	-	0.741	1.000	0.741	0.259	0.855	1.126	1.262
5	0.105	-	0.672	1.000	0.672	0.328	0.822	1.159	1.338
6	0.116	-	0.602	1.000	0.602	0.398	0.790	1.194	1.419
7	0.129	-	0.532	1.000	0.532	0.468	0.760	1.230	1.504
8	0.142	-	0.463	1.000	0.463	0.537	0.731	1.267	1.594
9	0.156	-	0.397	1.000	0.397	0.603	0.703	1.305	1.689
10	0.171	-	0.335	1.000	0.335	0.665	0.676	1.344	1.791
11	0.186	-	0.278	1.000	0.278	0.722	0.650	1.384	1.898
12	0.203	-	0.226	1.000	0.226	0.774	0.625	1.426	2.012
13	0.220	-	0.181	1.000	0.181	0.819	0.601	1.469	2.133
14	0.238	-	0.141	1.000	0.141	0.859	0.577	1.513	2.261
15	0.257	-	0.107	1.000	0.107	0.893	0.555	1.558	2.397
16	0.276	-	0.080	1.000	0.080	0.920	0.534	1.605	2.540
17	0.297	-	0.058	1.000	0.058	0.942	0.513	1.653	2.693
18	0.317	-	0.041	1.000	0.041	0.959	0.494	1.702	2.854
19	0.339	-	0.028	1.000	0.028	0.972	0.475	1.754	3.026
20	0.361	-	0.018	1.000	0.018	0.982	0.456	1.806	3.207
21	0.384	-	0.012	1.000	0.012	0.988	0.439	1.860	3.400
22	0.405	-	0.007	1.000	0.007	0.993	0.422	1.916	3.604
23	0.425	-	0.004	1.000	0.004	0.996	0.406	1.974	3.820
24	0.444	-	0.002	1.000	0.002	0.998	0.390	2.033	4.049
25	0.464	-	0.001	1.000	0.001	0.999	0.375	2.094	4.292
26	0.482	-	0.001	1.000	0.001	0.999	0.361	2.157	4.549
27	0.495	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	1.000	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	69	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	9/8/1980	
(14)	**DATE OF FILING**	1/6/1981	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	76	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	17.26	12.43
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	17.26	12.43
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	133,439	96,102
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.025	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.028	-	0.975	1.000	0.975	0.025	0.962	1.030	1.060
2	0.032	-	0.947	1.000	0.947	0.053	0.925	1.061	1.124
3	0.035	-	0.917	1.000	0.917	0.083	0.889	1.093	1.191
4	0.039	-	0.885	1.000	0.885	0.115	0.855	1.126	1.262
5	0.044	-	0.850	1.000	0.850	0.150	0.822	1.159	1.338
6	0.049	-	0.812	1.000	0.812	0.188	0.790	1.194	1.419
7	0.055	-	0.772	1.000	0.772	0.228	0.760	1.230	1.504
8	0.061	-	0.730	1.000	0.730	0.270	0.731	1.267	1.594
9	0.068	-	0.686	1.000	0.686	0.314	0.703	1.305	1.689
10	0.075	-	0.639	1.000	0.639	0.361	0.676	1.344	1.791
11	0.084	-	0.591	1.000	0.591	0.409	0.650	1.384	1.898
12	0.094	-	0.541	1.000	0.541	0.459	0.625	1.426	2.012
13	0.105	-	0.491	1.000	0.491	0.509	0.601	1.469	2.133
14	0.116	-	0.439	1.000	0.439	0.561	0.577	1.513	2.261
15	0.129	-	0.388	1.000	0.388	0.612	0.555	1.558	2.397
16	0.142	-	0.338	1.000	0.338	0.662	0.534	1.605	2.540
17	0.156	-	0.290	1.000	0.290	0.710	0.513	1.653	2.693
18	0.171	-	0.245	1.000	0.245	0.755	0.494	1.702	2.854
19	0.186	-	0.203	1.000	0.203	0.797	0.475	1.754	3.026
20	0.203	-	0.165	1.000	0.165	0.835	0.456	1.806	3.207
21	0.220	-	0.132	1.000	0.132	0.868	0.439	1.860	3.400
22	0.238	-	0.103	1.000	0.103	0.897	0.422	1.916	3.604
23	0.257	-	0.078	1.000	0.078	0.922	0.406	1.974	3.820
24	0.276	-	0.058	1.000	0.058	0.942	0.390	2.033	4.049
25	0.297	-	0.042	1.000	0.042	0.958	0.375	2.094	4.292
26	0.317	-	0.030	1.000	0.030	0.970	0.361	2.157	4.549
27	0.339	-	0.020	1.000	0.020	0.980	0.347	2.221	4.822
28	0.361	-	0.013	1.000	0.013	0.987	0.333	2.288	5.112
29	0.384	-	0.009	1.000	0.009	0.991	0.321	2.357	5.418
30	0.405	-	0.005	1.000	0.005	0.995	0.308	2.427	5.743
31	0.425	-	0.003	1.000	0.003	0.997	0.296	2.500	6.088
32	0.444	-	0.002	1.000	0.002	0.998	0.285	2.575	6.453
33	0.464	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.482	-	0.001	1.000	0.001	0.999	0.264	2.732	7.251
35	0.495	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	1.000	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
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108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	70		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	6/1/1978		
(14)	**DATE OF FILING**	1/29/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	98	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	3.80	3.48
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	3.80	3.48
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	29,403	26,942
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.238	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.257	-	0.762	1.000	0.762	0.238	0.962	1.030	1.060
2	0.276	-	0.567	1.000	0.567	0.433	0.925	1.061	1.124
3	0.297	-	0.410	1.000	0.410	0.590	0.889	1.093	1.191
4	0.317	-	0.288	1.000	0.288	0.712	0.855	1.126	1.262
5	0.339	-	0.197	1.000	0.197	0.803	0.822	1.159	1.338
6	0.361	-	0.130	1.000	0.130	0.870	0.790	1.194	1.419
7	0.384	-	0.083	1.000	0.083	0.917	0.760	1.230	1.504
8	0.405	-	0.051	1.000	0.051	0.949	0.731	1.267	1.594
9	0.425	-	0.031	1.000	0.031	0.969	0.703	1.305	1.689
10	0.444	-	0.018	1.000	0.018	0.982	0.676	1.344	1.791
11	0.464	-	0.010	1.000	0.010	0.990	0.650	1.384	1.898
12	0.482	-	0.005	1.000	0.005	0.995	0.625	1.426	2.012
13	0.495	-	0.003	1.000	0.003	0.997	0.601	1.469	2.133
14	0.500	-	0.001	1.000	0.001	0.999	0.577	1.513	2.261
15	0.500	-	0.001	1.000	0.001	0.999	0.555	1.558	2.397
16	0.500	-	0.000	1.000	0.000	1.000	0.534	1.605	2.540
17	0.500	-	0.000	1.000	0.000	1.000	0.513	1.653	2.693
18	0.500	-	0.000	1.000	0.000	1.000	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	1.000	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	-	-	-	1.000	-	1.000	0.406	1.974	3.820
24	-	-	-	1.000	-	1.000	0.390	2.033	4.049
25	-	-	-	1.000	-	1.000	0.375	2.094	4.292
26	-	-	-	1.000	-	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	71		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/2/1981		
(14)	**DATE OF FILING**	3/2/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	86	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.76	7.22
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.76	7.22
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	67,760	55,838
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.075	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.084	-	0.925	1.000	0.925	0.075	0.962	1.030	1.060
2	0.094	-	0.847	1.000	0.847	0.153	0.925	1.061	1.124
3	0.105	-	0.767	1.000	0.767	0.233	0.889	1.093	1.191
4	0.116	-	0.687	1.000	0.687	0.313	0.855	1.126	1.262
5	0.129	-	0.607	1.000	0.607	0.393	0.822	1.159	1.338
6	0.142	-	0.529	1.000	0.529	0.471	0.790	1.194	1.419
7	0.156	-	0.454	1.000	0.454	0.546	0.760	1.230	1.504
8	0.171	-	0.383	1.000	0.383	0.617	0.731	1.267	1.594
9	0.186	-	0.318	1.000	0.318	0.682	0.703	1.305	1.689
10	0.203	-	0.259	1.000	0.259	0.741	0.676	1.344	1.791
11	0.220	-	0.206	1.000	0.206	0.794	0.650	1.384	1.898
12	0.238	-	0.161	1.000	0.161	0.839	0.625	1.426	2.012
13	0.257	-	0.123	1.000	0.123	0.877	0.601	1.469	2.133
14	0.276	-	0.091	1.000	0.091	0.909	0.577	1.513	2.261
15	0.297	-	0.066	1.000	0.066	0.934	0.555	1.558	2.397
16	0.317	-	0.046	1.000	0.046	0.954	0.534	1.605	2.540
17	0.339	-	0.032	1.000	0.032	0.968	0.513	1.653	2.693
18	0.361	-	0.021	1.000	0.021	0.979	0.494	1.702	2.854
19	0.384	-	0.013	1.000	0.013	0.987	0.475	1.754	3.026
20	0.405	-	0.008	1.000	0.008	0.992	0.456	1.806	3.207
21	0.425	-	0.005	1.000	0.005	0.995	0.439	1.860	3.400
22	0.444	-	0.003	1.000	0.003	0.997	0.422	1.916	3.604
23	0.464	-	0.002	1.000	0.002	0.998	0.406	1.974	3.820
24	0.482	-	0.001	1.000	0.001	0.999	0.390	2.033	4.049
25	0.495	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	1.000	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
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43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
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49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
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66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
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83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
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100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
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103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
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112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	72		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/21/1978		
(14)	**DATE OF FILING**	3/26/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	73		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	2/1/1980		
(14)	**DATE OF FILING**	3/24/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	91	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	6.11	5.30
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	6.11	5.30
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	47,225	40,995
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.129	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.142	-	0.871	1.000	0.871	0.129	0.962	1.030	1.060
2	0.156	-	0.748	1.000	0.748	0.252	0.925	1.061	1.124
3	0.171	-	0.631	1.000	0.631	0.369	0.889	1.093	1.191
4	0.186	-	0.523	1.000	0.523	0.477	0.855	1.126	1.262
5	0.203	-	0.426	1.000	0.426	0.574	0.822	1.159	1.338
6	0.220	-	0.340	1.000	0.340	0.660	0.790	1.194	1.419
7	0.238	-	0.265	1.000	0.265	0.735	0.760	1.230	1.504
8	0.257	-	0.202	1.000	0.202	0.798	0.731	1.267	1.594
9	0.276	-	0.150	1.000	0.150	0.850	0.703	1.305	1.689
10	0.297	-	0.109	1.000	0.109	0.891	0.676	1.344	1.791
11	0.317	-	0.076	1.000	0.076	0.924	0.650	1.384	1.898
12	0.339	-	0.052	1.000	0.052	0.948	0.625	1.426	2.012
13	0.361	-	0.035	1.000	0.035	0.965	0.601	1.469	2.133
14	0.384	-	0.022	1.000	0.022	0.978	0.577	1.513	2.261
15	0.405	-	0.014	1.000	0.014	0.986	0.555	1.558	2.397
16	0.425	-	0.008	1.000	0.008	0.992	0.534	1.605	2.540
17	0.444	-	0.005	1.000	0.005	0.995	0.513	1.653	2.693
18	0.464	-	0.003	1.000	0.003	0.997	0.494	1.702	2.854
19	0.482	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.495	-	0.001	1.000	0.001	0.999	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	1.000	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
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(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	74		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/12/1977		
(14)	**DATE OF FILING**	4/8/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	92	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.69	4.99
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.69	4.99
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	44,009	38,549
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.142	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.156	-	0.858	1.000	0.858	0.142	0.962	1.030	1.060
2	0.171	-	0.724	1.000	0.724	0.276	0.925	1.061	1.124
3	0.186	-	0.601	1.000	0.601	0.399	0.889	1.093	1.191
4	0.203	-	0.489	1.000	0.489	0.511	0.855	1.126	1.262
5	0.220	-	0.390	1.000	0.390	0.610	0.822	1.159	1.338
6	0.238	-	0.304	1.000	0.304	0.696	0.790	1.194	1.419
7	0.257	-	0.232	1.000	0.232	0.768	0.760	1.230	1.504
8	0.276	-	0.172	1.000	0.172	0.828	0.731	1.267	1.594
9	0.297	-	0.125	1.000	0.125	0.875	0.703	1.305	1.689
10	0.317	-	0.088	1.000	0.088	0.912	0.676	1.344	1.791
11	0.339	-	0.060	1.000	0.060	0.940	0.650	1.384	1.898
12	0.361	-	0.040	1.000	0.040	0.960	0.625	1.426	2.012
13	0.384	-	0.025	1.000	0.025	0.975	0.601	1.469	2.133
14	0.405	-	0.016	1.000	0.016	0.984	0.577	1.513	2.261
15	0.425	-	0.009	1.000	0.009	0.991	0.555	1.558	2.397
16	0.444	-	0.005	1.000	0.005	0.995	0.534	1.605	2.540
17	0.464	-	0.003	1.000	0.003	0.997	0.513	1.653	2.693
18	0.482	-	0.002	1.000	0.002	0.998	0.494	1.702	2.854
19	0.495	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	1.000	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
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53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
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74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
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⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
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(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	75		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	7/1/1976		
(14)	**DATE OF FILING**	4/3/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	94	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.96	4.41
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.96	4.41
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	38,320	34,131
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.171	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.186	-	0.829	1.000	0.829	0.171	0.962	1.030	1.060
2	0.203	-	0.675	1.000	0.675	0.325	0.925	1.061	1.124
3	0.220	-	0.538	1.000	0.538	0.462	0.889	1.093	1.191
4	0.238	-	0.420	1.000	0.420	0.580	0.855	1.126	1.262
5	0.257	-	0.320	1.000	0.320	0.680	0.822	1.159	1.338
6	0.276	-	0.238	1.000	0.238	0.762	0.790	1.194	1.419
7	0.297	-	0.172	1.000	0.172	0.828	0.760	1.230	1.504
8	0.317	-	0.121	1.000	0.121	0.879	0.731	1.267	1.594
9	0.339	-	0.083	1.000	0.083	0.917	0.703	1.305	1.689
10	0.361	-	0.055	1.000	0.055	0.945	0.676	1.344	1.791
11	0.384	-	0.035	1.000	0.035	0.965	0.650	1.384	1.898
12	0.405	-	0.022	1.000	0.022	0.978	0.625	1.426	2.012
13	0.425	-	0.013	1.000	0.013	0.987	0.601	1.469	2.133
14	0.444	-	0.007	1.000	0.007	0.993	0.577	1.513	2.261
15	0.464	-	0.004	1.000	0.004	0.996	0.555	1.558	2.397
16	0.482	-	0.002	1.000	0.002	0.998	0.534	1.605	2.540
17	0.495	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	76		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	1/1/1974		
(14)	**DATE OF FILING**	4/30/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	52	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	60.51	28.36
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	60.51	28.36
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	467,912	219,259
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.002	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.002	-	0.998	1.000	0.998	0.002	0.962	1.030	1.060
2	0.002	-	0.996	1.000	0.996	0.004	0.925	1.061	1.124
3	0.002	-	0.994	1.000	0.994	0.006	0.889	1.093	1.191
4	0.003	-	0.992	1.000	0.992	0.008	0.855	1.126	1.262
5	0.003	-	0.989	1.000	0.989	0.011	0.822	1.159	1.338
6	0.003	-	0.987	1.000	0.987	0.013	0.790	1.194	1.419
7	0.004	-	0.983	1.000	0.983	0.017	0.760	1.230	1.504
8	0.004	-	0.979	1.000	0.979	0.021	0.731	1.267	1.594
9	0.005	-	0.975	1.000	0.975	0.025	0.703	1.305	1.689
10	0.006	-	0.970	1.000	0.970	0.030	0.676	1.344	1.791
11	0.007	-	0.964	1.000	0.964	0.036	0.650	1.384	1.898
12	0.008	-	0.958	1.000	0.958	0.042	0.625	1.426	2.012
13	0.009	-	0.951	1.000	0.951	0.049	0.601	1.469	2.133
14	0.010	-	0.943	1.000	0.943	0.057	0.577	1.513	2.261
15	0.011	-	0.933	1.000	0.933	0.067	0.555	1.558	2.397
16	0.012	-	0.923	1.000	0.923	0.077	0.534	1.605	2.540
17	0.013	-	0.912	1.000	0.912	0.088	0.513	1.653	2.693
18	0.014	-	0.901	1.000	0.901	0.099	0.494	1.702	2.854
19	0.015	-	0.889	1.000	0.889	0.111	0.475	1.754	3.026
20	0.017	-	0.875	1.000	0.875	0.125	0.456	1.806	3.207
21	0.018	-	0.861	1.000	0.861	0.139	0.439	1.860	3.400
22	0.020	-	0.845	1.000	0.845	0.155	0.422	1.916	3.604
23	0.023	-	0.828	1.000	0.828	0.172	0.406	1.974	3.820
24	0.025	-	0.809	1.000	0.809	0.191	0.390	2.033	4.049
25	0.028	-	0.789	1.000	0.789	0.211	0.375	2.094	4.292
26	0.032	-	0.766	1.000	0.766	0.234	0.361	2.157	4.549
27	0.035	-	0.742	1.000	0.742	0.258	0.347	2.221	4.822
28	0.039	-	0.716	1.000	0.716	0.284	0.333	2.288	5.112
29	0.044	-	0.687	1.000	0.687	0.313	0.321	2.357	5.418
30	0.049	-	0.657	1.000	0.657	0.343	0.308	2.427	5.743
31	0.055	-	0.625	1.000	0.625	0.375	0.296	2.500	6.088
32	0.061	-	0.591	1.000	0.591	0.409	0.285	2.575	6.453
33	0.068	-	0.555	1.000	0.555	0.445	0.274	2.652	6.841
34	0.075	-	0.517	1.000	0.517	0.483	0.264	2.732	7.251
35	0.084	-	0.478	1.000	0.478	0.522	0.253	2.814	7.686
36	0.094	-	0.438	1.000	0.438	0.562	0.244	2.898	8.147
37	0.105	-	0.397	1.000	0.397	0.603	0.234	2.985	8.636
38	0.116	-	0.355	1.000	0.355	0.645	0.225	3.075	9.154
39	0.129	-	0.314	1.000	0.314	0.686	0.217	3.167	9.704
40	0.142	-	0.274	1.000	0.274	0.726	0.208	3.262	10.286
41	0.156	-	0.235	1.000	0.235	0.765	0.200	3.360	10.903
42	0.171	-	0.198	1.000	0.198	0.802	0.193	3.461	11.557
43	0.186	-	0.164	1.000	0.164	0.836	0.185	3.565	12.250
44	0.203	-	0.134	1.000	0.134	0.866	0.178	3.671	12.985
45	0.220	-	0.107	1.000	0.107	0.893	0.171	3.782	13.765
46	0.238	-	0.083	1.000	0.083	0.917	0.165	3.895	14.590
47	0.257	-	0.063	1.000	0.063	0.937	0.158	4.012	15.466
48	0.276	-	0.047	1.000	0.047	0.953	0.152	4.132	16.394
49	0.297	-	0.034	1.000	0.034	0.966	0.146	4.256	17.378
50	0.317	-	0.024	1.000	0.024	0.976	0.141	4.384	18.420
51	0.339	-	0.016	1.000	0.016	0.984	0.135	4.515	19.525
52	0.361	-	0.011	1.000	0.011	0.989	0.130	4.651	20.697
53	0.384	-	0.007	1.000	0.007	0.993	0.125	4.790	21.939
54	0.405	-	0.004	1.000	0.004	0.996	0.120	4.934	23.255
55	0.425	-	0.003	1.000	0.003	0.997	0.116	5.082	24.650
56	0.444	-	0.001	1.000	0.001	0.999	0.111	5.235	26.129
57	0.464	-	0.001	1.000	0.001	0.999	0.107	5.392	27.697
58	0.482	-	0.000	1.000	0.000	1.000	0.103	5.553	29.359
59	0.495	-	0.000	1.000	0.000	1.000	0.099	5.720	31.120
60	0.500	-	0.000	1.000	0.000	1.000	0.095	5.892	32.988
61	0.500	-	0.000	1.000	0.000	1.000	0.091	6.068	34.967
62	0.500	-	0.000	1.000	0.000	1.000	0.088	6.250	37.065
63	0.500	-	0.000	1.000	0.000	1.000	0.085	6.438	39.289
64	0.500	-	0.000	1.000	0.000	1.000	0.081	6.631	41.646
65	0.500	-	0.000	1.000	0.000	1.000	0.078	6.830	44.145
66	0.500	-	0.000	1.000	0.000	1.000	0.075	7.035	46.794
67	0.500	-	0.000	1.000	0.000	1.000	0.072	7.246	49.601
68	1.000	-	0.000	1.000	0.000	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	77		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	9/1/1981		
(14)	**DATE OF FILING**	9/2/1981		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	78	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	15.18	11.26
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	15.18	11.26
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	117,392	87,098
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.032	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.035	-	0.968	1.000	0.968	0.032	0.962	1.030	1.060
2	0.039	-	0.934	1.000	0.934	0.066	0.925	1.061	1.124
3	0.044	-	0.897	1.000	0.897	0.103	0.889	1.093	1.191
4	0.049	-	0.858	1.000	0.858	0.142	0.855	1.126	1.262
5	0.055	-	0.816	1.000	0.816	0.184	0.822	1.159	1.338
6	0.061	-	0.771	1.000	0.771	0.229	0.790	1.194	1.419
7	0.068	-	0.724	1.000	0.724	0.276	0.760	1.230	1.504
8	0.075	-	0.675	1.000	0.675	0.325	0.731	1.267	1.594
9	0.084	-	0.624	1.000	0.624	0.376	0.703	1.305	1.689
10	0.094	-	0.572	1.000	0.572	0.428	0.676	1.344	1.791
11	0.105	-	0.518	1.000	0.518	0.482	0.650	1.384	1.898
12	0.116	-	0.464	1.000	0.464	0.536	0.625	1.426	2.012
13	0.129	-	0.410	1.000	0.410	0.590	0.601	1.469	2.133
14	0.142	-	0.357	1.000	0.357	0.643	0.577	1.513	2.261
15	0.156	-	0.306	1.000	0.306	0.694	0.555	1.558	2.397
16	0.171	-	0.259	1.000	0.259	0.741	0.534	1.605	2.540
17	0.186	-	0.214	1.000	0.214	0.786	0.513	1.653	2.693
18	0.203	-	0.175	1.000	0.175	0.825	0.494	1.702	2.854
19	0.220	-	0.139	1.000	0.139	0.861	0.475	1.754	3.026
20	0.238	-	0.109	1.000	0.109	0.891	0.456	1.806	3.207
21	0.257	-	0.083	1.000	0.083	0.917	0.439	1.860	3.400
22	0.276	-	0.062	1.000	0.062	0.938	0.422	1.916	3.604
23	0.297	-	0.045	1.000	0.045	0.955	0.406	1.974	3.820
24	0.317	-	0.031	1.000	0.031	0.969	0.390	2.033	4.049
25	0.339	-	0.021	1.000	0.021	0.979	0.375	2.094	4.292
26	0.361	-	0.014	1.000	0.014	0.986	0.361	2.157	4.549
27	0.384	-	0.009	1.000	0.009	0.991	0.347	2.221	4.822
28	0.405	-	0.006	1.000	0.006	0.994	0.333	2.288	5.112
29	0.425	-	0.003	1.000	0.003	0.997	0.321	2.357	5.418
30	0.444	-	0.002	1.000	0.002	0.998	0.308	2.427	5.743
31	0.464	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.482	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.495	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	1.000	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
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89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
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95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
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98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
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112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	78		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1980		
(14)	**DATE OF FILING**	2/10/1982		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	88	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	7.58	6.39
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	7.58	6.39
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	58,609	49,382
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.094	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.105	-	0.906	1.000	0.906	0.094	0.962	1.030	1.060
2	0.116	-	0.811	1.000	0.811	0.189	0.925	1.061	1.124
3	0.129	-	0.717	1.000	0.717	0.283	0.889	1.093	1.191
4	0.142	-	0.625	1.000	0.625	0.375	0.855	1.126	1.262
5	0.156	-	0.536	1.000	0.536	0.464	0.822	1.159	1.338
6	0.171	-	0.452	1.000	0.452	0.548	0.790	1.194	1.419
7	0.186	-	0.375	1.000	0.375	0.625	0.760	1.230	1.504
8	0.203	-	0.305	1.000	0.305	0.695	0.731	1.267	1.594
9	0.220	-	0.244	1.000	0.244	0.756	0.703	1.305	1.689
10	0.238	-	0.190	1.000	0.190	0.810	0.676	1.344	1.791
11	0.257	-	0.145	1.000	0.145	0.855	0.650	1.384	1.898
12	0.276	-	0.108	1.000	0.108	0.892	0.625	1.426	2.012
13	0.297	-	0.078	1.000	0.078	0.922	0.601	1.469	2.133
14	0.317	-	0.055	1.000	0.055	0.945	0.577	1.513	2.261
15	0.339	-	0.037	1.000	0.037	0.963	0.555	1.558	2.397
16	0.361	-	0.025	1.000	0.025	0.975	0.534	1.605	2.540
17	0.384	-	0.016	1.000	0.016	0.984	0.513	1.653	2.693
18	0.405	-	0.010	1.000	0.010	0.990	0.494	1.702	2.854
19	0.425	-	0.006	1.000	0.006	0.994	0.475	1.754	3.026
20	0.444	-	0.003	1.000	0.003	0.997	0.456	1.806	3.207
21	0.464	-	0.002	1.000	0.002	0.998	0.439	1.860	3.400
22	0.482	-	0.001	1.000	0.001	0.999	0.422	1.916	3.604
23	0.495	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	1.000	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	79		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	9/1/1983		
(14)	**DATE OF FILING**	9/2/1983		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	87	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	8.15	6.79
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	8.15	6.79
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	63,028	52,531
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.084	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.094	-	0.916	1.000	0.916	0.084	0.962	1.030	1.060
2	0.105	-	0.830	1.000	0.830	0.170	0.925	1.061	1.124
3	0.116	-	0.743	1.000	0.743	0.257	0.889	1.093	1.191
4	0.129	-	0.657	1.000	0.657	0.343	0.855	1.126	1.262
5	0.142	-	0.572	1.000	0.572	0.428	0.822	1.159	1.338
6	0.156	-	0.491	1.000	0.491	0.509	0.790	1.194	1.419
7	0.171	-	0.414	1.000	0.414	0.586	0.760	1.230	1.504
8	0.186	-	0.344	1.000	0.344	0.656	0.731	1.267	1.594
9	0.203	-	0.280	1.000	0.280	0.720	0.703	1.305	1.689
10	0.220	-	0.223	1.000	0.223	0.777	0.676	1.344	1.791
11	0.238	-	0.174	1.000	0.174	0.826	0.650	1.384	1.898
12	0.257	-	0.133	1.000	0.133	0.867	0.625	1.426	2.012
13	0.276	-	0.099	1.000	0.099	0.901	0.601	1.469	2.133
14	0.297	-	0.071	1.000	0.071	0.929	0.577	1.513	2.261
15	0.317	-	0.050	1.000	0.050	0.950	0.555	1.558	2.397
16	0.339	-	0.034	1.000	0.034	0.966	0.534	1.605	2.540
17	0.361	-	0.023	1.000	0.023	0.977	0.513	1.653	2.693
18	0.384	-	0.014	1.000	0.014	0.986	0.494	1.702	2.854
19	0.405	-	0.009	1.000	0.009	0.991	0.475	1.754	3.026
20	0.425	-	0.005	1.000	0.005	0.995	0.456	1.806	3.207
21	0.444	-	0.003	1.000	0.003	0.997	0.439	1.860	3.400
22	0.464	-	0.002	1.000	0.002	0.998	0.422	1.916	3.604
23	0.482	-	0.001	1.000	0.001	0.999	0.406	1.974	3.820
24	0.495	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	0.500	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	0.500	-	0.000	1.000	0.000	1.000	0.321	2.357	5.418
30	0.500	-	0.000	1.000	0.000	1.000	0.308	2.427	5.743
31	0.500	-	0.000	1.000	0.000	1.000	0.296	2.500	6.088
32	0.500	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	1.000	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	80		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/1/1984		
(14)	**DATE OF FILING**	4/12/1984		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	79	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.22	10.70
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	14.22	10.70
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	109,954	82,762
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.035	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.039	-	0.965	1.000	0.965	0.035	0.962	1.030	1.060
2	0.044	-	0.927	1.000	0.927	0.073	0.925	1.061	1.124
3	0.049	-	0.886	1.000	0.886	0.114	0.889	1.093	1.191
4	0.055	-	0.842	1.000	0.842	0.158	0.855	1.126	1.262
5	0.061	-	0.796	1.000	0.796	0.204	0.822	1.159	1.338
6	0.068	-	0.748	1.000	0.748	0.252	0.790	1.194	1.419
7	0.075	-	0.697	1.000	0.697	0.303	0.760	1.230	1.504
8	0.084	-	0.644	1.000	0.644	0.356	0.731	1.267	1.594
9	0.094	-	0.590	1.000	0.590	0.410	0.703	1.305	1.689
10	0.105	-	0.535	1.000	0.535	0.465	0.676	1.344	1.791
11	0.116	-	0.479	1.000	0.479	0.521	0.650	1.384	1.898
12	0.129	-	0.423	1.000	0.423	0.577	0.625	1.426	2.012
13	0.142	-	0.369	1.000	0.369	0.631	0.601	1.469	2.133
14	0.156	-	0.316	1.000	0.316	0.684	0.577	1.513	2.261
15	0.171	-	0.267	1.000	0.267	0.733	0.555	1.558	2.397
16	0.186	-	0.222	1.000	0.222	0.778	0.534	1.605	2.540
17	0.203	-	0.180	1.000	0.180	0.820	0.513	1.653	2.693
18	0.220	-	0.144	1.000	0.144	0.856	0.494	1.702	2.854
19	0.238	-	0.112	1.000	0.112	0.888	0.475	1.754	3.026
20	0.257	-	0.086	1.000	0.086	0.914	0.456	1.806	3.207
21	0.276	-	0.064	1.000	0.064	0.936	0.439	1.860	3.400
22	0.297	-	0.046	1.000	0.046	0.954	0.422	1.916	3.604
23	0.317	-	0.032	1.000	0.032	0.968	0.406	1.974	3.820
24	0.339	-	0.022	1.000	0.022	0.978	0.390	2.033	4.049
25	0.361	-	0.015	1.000	0.015	0.985	0.375	2.094	4.292
26	0.384	-	0.009	1.000	0.009	0.991	0.361	2.157	4.549
27	0.405	-	0.006	1.000	0.006	0.994	0.347	2.221	4.822
28	0.425	-	0.003	1.000	0.003	0.997	0.333	2.288	5.112
29	0.444	-	0.002	1.000	0.002	0.998	0.321	2.357	5.418
30	0.464	-	0.001	1.000	0.001	0.999	0.308	2.427	5.743
31	0.482	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.495	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	1.000	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	81	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	3/1/1976	
(14)	**DATE OF FILING**	4/8/1985	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	94	F
(16)	**CLAIMANT 2 (y)**		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	4.96	4.41
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	4.96	4.41
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	38,320	34,131
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.171	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.186	-	0.829	1.000	0.829	0.171	0.962	1.030	1.060
2	0.203	-	0.675	1.000	0.675	0.325	0.925	1.061	1.124
3	0.220	-	0.538	1.000	0.538	0.462	0.889	1.093	1.191
4	0.238	-	0.420	1.000	0.420	0.580	0.855	1.126	1.262
5	0.257	-	0.320	1.000	0.320	0.680	0.822	1.159	1.338
6	0.276	-	0.238	1.000	0.238	0.762	0.790	1.194	1.419
7	0.297	-	0.172	1.000	0.172	0.828	0.760	1.230	1.504
8	0.317	-	0.121	1.000	0.121	0.879	0.731	1.267	1.594
9	0.339	-	0.083	1.000	0.083	0.917	0.703	1.305	1.689
10	0.361	-	0.055	1.000	0.055	0.945	0.676	1.344	1.791
11	0.384	-	0.035	1.000	0.035	0.965	0.650	1.384	1.898
12	0.405	-	0.022	1.000	0.022	0.978	0.625	1.426	2.012
13	0.425	-	0.013	1.000	0.013	0.987	0.601	1.469	2.133
14	0.444	-	0.007	1.000	0.007	0.993	0.577	1.513	2.261
15	0.464	-	0.004	1.000	0.004	0.996	0.555	1.558	2.397
16	0.482	-	0.002	1.000	0.002	0.998	0.534	1.605	2.540
17	0.495	-	0.001	1.000	0.001	0.999	0.513	1.653	2.693
18	0.500	-	0.001	1.000	0.001	0.999	0.494	1.702	2.854
19	0.500	-	0.000	1.000	0.000	1.000	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	1.000	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	-	-	-	1.000	-	1.000	0.347	2.221	4.822
28	-	-	-	1.000	-	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	82		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	11/1/1985		
(14)	**DATE OF FILING**	11/25/1985		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	77	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	16.19	11.84
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	16.19	11.84
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	125,216	91,546
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.028	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.032	-	0.972	1.000	0.972	0.028	0.962	1.030	1.060
2	0.035	-	0.941	1.000	0.941	0.059	0.925	1.061	1.124
3	0.039	-	0.908	1.000	0.908	0.092	0.889	1.093	1.191
4	0.044	-	0.872	1.000	0.872	0.128	0.855	1.126	1.262
5	0.049	-	0.833	1.000	0.833	0.167	0.822	1.159	1.338
6	0.055	-	0.793	1.000	0.793	0.207	0.790	1.194	1.419
7	0.061	-	0.749	1.000	0.749	0.251	0.760	1.230	1.504
8	0.068	-	0.703	1.000	0.703	0.297	0.731	1.267	1.594
9	0.075	-	0.656	1.000	0.656	0.344	0.703	1.305	1.689
10	0.084	-	0.606	1.000	0.606	0.394	0.676	1.344	1.791
11	0.094	-	0.555	1.000	0.555	0.445	0.650	1.384	1.898
12	0.105	-	0.503	1.000	0.503	0.497	0.625	1.426	2.012
13	0.116	-	0.451	1.000	0.451	0.549	0.601	1.469	2.133
14	0.129	-	0.398	1.000	0.398	0.602	0.577	1.513	2.261
15	0.142	-	0.347	1.000	0.347	0.653	0.555	1.558	2.397
16	0.156	-	0.298	1.000	0.298	0.702	0.534	1.605	2.540
17	0.171	-	0.251	1.000	0.251	0.749	0.513	1.653	2.693
18	0.186	-	0.208	1.000	0.208	0.792	0.494	1.702	2.854
19	0.203	-	0.170	1.000	0.170	0.830	0.475	1.754	3.026
20	0.220	-	0.135	1.000	0.135	0.865	0.456	1.806	3.207
21	0.238	-	0.106	1.000	0.106	0.894	0.439	1.860	3.400
22	0.257	-	0.080	1.000	0.080	0.920	0.422	1.916	3.604
23	0.276	-	0.060	1.000	0.060	0.940	0.406	1.974	3.820
24	0.297	-	0.043	1.000	0.043	0.957	0.390	2.033	4.049
25	0.317	-	0.030	1.000	0.030	0.970	0.375	2.094	4.292
26	0.339	-	0.021	1.000	0.021	0.979	0.361	2.157	4.549
27	0.361	-	0.014	1.000	0.014	0.986	0.347	2.221	4.822
28	0.384	-	0.009	1.000	0.009	0.991	0.333	2.288	5.112
29	0.405	-	0.005	1.000	0.005	0.995	0.321	2.357	5.418
30	0.425	-	0.003	1.000	0.003	0.997	0.308	2.427	5.743
31	0.444	-	0.002	1.000	0.002	0.998	0.296	2.500	6.088
32	0.464	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.482	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.495	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	1.000	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
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52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
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70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
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74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
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86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
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105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
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113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	83		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	12/1/1987		
(14)	**DATE OF FILING**	2/16/1988		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	77	F	
(16)	**CLAIMANT 2 (y)**			

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	16.19	11.84
(18)			
(19)	APV FOR BOTH CLAIMANTS ALIVE	16.19	11.84
(20)			
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	125,216	91,546
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.028	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.032	-	0.972	1.000	0.972	0.028	0.962	1.030	1.060
2	0.035	-	0.941	1.000	0.941	0.059	0.925	1.061	1.124
3	0.039	-	0.908	1.000	0.908	0.092	0.889	1.093	1.191
4	0.044	-	0.872	1.000	0.872	0.128	0.855	1.126	1.262
5	0.049	-	0.833	1.000	0.833	0.167	0.822	1.159	1.338
6	0.055	-	0.793	1.000	0.793	0.207	0.790	1.194	1.419
7	0.061	-	0.749	1.000	0.749	0.251	0.760	1.230	1.504
8	0.068	-	0.703	1.000	0.703	0.297	0.731	1.267	1.594
9	0.075	-	0.656	1.000	0.656	0.344	0.703	1.305	1.689
10	0.084	-	0.606	1.000	0.606	0.394	0.676	1.344	1.791
11	0.094	-	0.555	1.000	0.555	0.445	0.650	1.384	1.898
12	0.105	-	0.503	1.000	0.503	0.497	0.625	1.426	2.012
13	0.116	-	0.451	1.000	0.451	0.549	0.601	1.469	2.133
14	0.129	-	0.398	1.000	0.398	0.602	0.577	1.513	2.261
15	0.142	-	0.347	1.000	0.347	0.653	0.555	1.558	2.397
16	0.156	-	0.298	1.000	0.298	0.702	0.534	1.605	2.540
17	0.171	-	0.251	1.000	0.251	0.749	0.513	1.653	2.693
18	0.186	-	0.208	1.000	0.208	0.792	0.494	1.702	2.854
19	0.203	-	0.170	1.000	0.170	0.830	0.475	1.754	3.026
20	0.220	-	0.135	1.000	0.135	0.865	0.456	1.806	3.207
21	0.238	-	0.106	1.000	0.106	0.894	0.439	1.860	3.400
22	0.257	-	0.080	1.000	0.080	0.920	0.422	1.916	3.604
23	0.276	-	0.060	1.000	0.060	0.940	0.406	1.974	3.820
24	0.297	-	0.043	1.000	0.043	0.957	0.390	2.033	4.049
25	0.317	-	0.030	1.000	0.030	0.970	0.375	2.094	4.292
26	0.339	-	0.021	1.000	0.021	0.979	0.361	2.157	4.549
27	0.361	-	0.014	1.000	0.014	0.986	0.347	2.221	4.822
28	0.384	-	0.009	1.000	0.009	0.991	0.333	2.288	5.112
29	0.405	-	0.005	1.000	0.005	0.995	0.321	2.357	5.418
30	0.425	-	0.003	1.000	0.003	0.997	0.308	2.427	5.743
31	0.444	-	0.002	1.000	0.002	0.998	0.296	2.500	6.088
32	0.464	-	0.001	1.000	0.001	0.999	0.285	2.575	6.453
33	0.482	-	0.001	1.000	0.001	0.999	0.274	2.652	6.841
34	0.495	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.500	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	1.000	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	84	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	4/1/1989	
(14)	**DATE OF FILING**	5/11/1989	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	71	F
(16)	**CLAIMANT 2 (y)**	0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	23.35	15.53
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	23.35	15.53
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,135.07	56.16
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	180,516	120,072
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.015	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.017	-	0.985	1.000	0.985	0.015	0.962	1.030	1.060
2	0.018	-	0.969	1.000	0.969	0.031	0.925	1.061	1.124
3	0.020	-	0.951	1.000	0.951	0.049	0.889	1.093	1.191
4	0.023	-	0.932	1.000	0.932	0.068	0.855	1.126	1.262
5	0.025	-	0.910	1.000	0.910	0.090	0.822	1.159	1.338
6	0.028	-	0.887	1.000	0.887	0.113	0.790	1.194	1.419
7	0.032	-	0.862	1.000	0.862	0.138	0.760	1.230	1.504
8	0.035	-	0.835	1.000	0.835	0.165	0.731	1.267	1.594
9	0.039	-	0.805	1.000	0.805	0.195	0.703	1.305	1.689
10	0.044	-	0.774	1.000	0.774	0.226	0.676	1.344	1.791
11	0.049	-	0.740	1.000	0.740	0.260	0.650	1.384	1.898
12	0.055	-	0.703	1.000	0.703	0.297	0.625	1.426	2.012
13	0.061	-	0.665	1.000	0.665	0.335	0.601	1.469	2.133
14	0.068	-	0.624	1.000	0.624	0.376	0.577	1.513	2.261
15	0.075	-	0.582	1.000	0.582	0.418	0.555	1.558	2.397
16	0.084	-	0.538	1.000	0.538	0.462	0.534	1.605	2.540
17	0.094	-	0.493	1.000	0.493	0.507	0.513	1.653	2.693
18	0.105	-	0.447	1.000	0.447	0.553	0.494	1.702	2.854
19	0.116	-	0.400	1.000	0.400	0.600	0.475	1.754	3.026
20	0.129	-	0.353	1.000	0.353	0.647	0.456	1.806	3.207
21	0.142	-	0.308	1.000	0.308	0.692	0.439	1.860	3.400
22	0.156	-	0.264	1.000	0.264	0.736	0.422	1.916	3.604
23	0.171	-	0.223	1.000	0.223	0.777	0.406	1.974	3.820
24	0.186	-	0.185	1.000	0.185	0.815	0.390	2.033	4.049
25	0.203	-	0.150	1.000	0.150	0.850	0.375	2.094	4.292
26	0.220	-	0.120	1.000	0.120	0.880	0.361	2.157	4.549
27	0.238	-	0.094	1.000	0.094	0.906	0.347	2.221	4.822
28	0.257	-	0.071	1.000	0.071	0.929	0.333	2.288	5.112
29	0.276	-	0.053	1.000	0.053	0.947	0.321	2.357	5.418
30	0.297	-	0.038	1.000	0.038	0.962	0.308	2.427	5.743
31	0.317	-	0.027	1.000	0.027	0.973	0.296	2.500	6.088
32	0.339	-	0.018	1.000	0.018	0.982	0.285	2.575	6.453
33	0.361	-	0.012	1.000	0.012	0.988	0.274	2.652	6.841
34	0.384	-	0.008	1.000	0.008	0.992	0.264	2.732	7.251
35	0.405	-	0.005	1.000	0.005	0.995	0.253	2.814	7.686
36	0.425	-	0.003	1.000	0.003	0.997	0.244	2.898	8.147
37	0.444	-	0.002	1.000	0.002	0.998	0.234	2.985	8.636
38	0.464	-	0.001	1.000	0.001	0.999	0.225	3.075	9.154
39	0.482	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
40	0.495	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.500	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.500	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.500	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	1.000	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
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(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	85		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	3/27/1991		
(14)	**DATE OF FILING**	11/15/1991		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	79	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	14.22	10.70
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	14.22	10.70
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,144.19	60.99
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	109,954	82,762
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.035	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.039	-	0.965	1.000	0.965	0.035	0.962	1.030	1.060
2	0.044	-	0.927	1.000	0.927	0.073	0.925	1.061	1.124
3	0.049	-	0.886	1.000	0.886	0.114	0.889	1.093	1.191
4	0.055	-	0.842	1.000	0.842	0.158	0.855	1.126	1.262
5	0.061	-	0.796	1.000	0.796	0.204	0.822	1.159	1.338
6	0.068	-	0.748	1.000	0.748	0.252	0.790	1.194	1.419
7	0.075	-	0.697	1.000	0.697	0.303	0.760	1.230	1.504
8	0.084	-	0.644	1.000	0.644	0.356	0.731	1.267	1.594
9	0.094	-	0.590	1.000	0.590	0.410	0.703	1.305	1.689
10	0.105	-	0.535	1.000	0.535	0.465	0.676	1.344	1.791
11	0.116	-	0.479	1.000	0.479	0.521	0.650	1.384	1.898
12	0.129	-	0.423	1.000	0.423	0.577	0.625	1.426	2.012
13	0.142	-	0.369	1.000	0.369	0.631	0.601	1.469	2.133
14	0.156	-	0.316	1.000	0.316	0.684	0.577	1.513	2.261
15	0.171	-	0.267	1.000	0.267	0.733	0.555	1.558	2.397
16	0.186	-	0.222	1.000	0.222	0.778	0.534	1.605	2.540
17	0.203	-	0.180	1.000	0.180	0.820	0.513	1.653	2.693
18	0.220	-	0.144	1.000	0.144	0.856	0.494	1.702	2.854
19	0.238	-	0.112	1.000	0.112	0.888	0.475	1.754	3.026
20	0.257	-	0.086	1.000	0.086	0.914	0.456	1.806	3.207
21	0.276	-	0.064	1.000	0.064	0.936	0.439	1.860	3.400
22	0.297	-	0.046	1.000	0.046	0.954	0.422	1.916	3.604
23	0.317	-	0.032	1.000	0.032	0.968	0.406	1.974	3.820
24	0.339	-	0.022	1.000	0.022	0.978	0.390	2.033	4.049
25	0.361	-	0.015	1.000	0.015	0.985	0.375	2.094	4.292
26	0.384	-	0.009	1.000	0.009	0.991	0.361	2.157	4.549
27	0.405	-	0.006	1.000	0.006	0.994	0.347	2.221	4.822
28	0.425	-	0.003	1.000	0.003	0.997	0.333	2.288	5.112
29	0.444	-	0.002	1.000	0.002	0.998	0.321	2.357	5.418
30	0.464	-	0.001	1.000	0.001	0.999	0.308	2.427	5.743
31	0.482	-	0.001	1.000	0.001	0.999	0.296	2.500	6.088
32	0.495	-	0.000	1.000	0.000	1.000	0.285	2.575	6.453
33	0.500	-	0.000	1.000	0.000	1.000	0.274	2.652	6.841
34	0.500	-	0.000	1.000	0.000	1.000	0.264	2.732	7.251
35	0.500	-	0.000	1.000	0.000	1.000	0.253	2.814	7.686
36	0.500	-	0.000	1.000	0.000	1.000	0.244	2.898	8.147
37	0.500	-	0.000	1.000	0.000	1.000	0.234	2.985	8.636
38	0.500	-	0.000	1.000	0.000	1.000	0.225	3.075	9.154
39	0.500	-	0.000	1.000	0.000	1.000	0.217	3.167	9.704
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(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	86	
(12)	**TYPE OF CLAIM**	Survivor	
(13)	**DATE OF INJURY**	4/23/1993	
(14)	**DATE OF FILING**	6/28/1993	
		Age	**Sex**
(15)	**CLAIMANT 1 (x)**	92	F
(16)	**CLAIMANT 2 (y)**	0	

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.69	4.99
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.69	4.99
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.72	66.71
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	44,009	38,549
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.142	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.156	-	0.858	1.000	0.858	0.142	0.962	1.030	1.060
2	0.171	-	0.724	1.000	0.724	0.276	0.925	1.061	1.124
3	0.186	-	0.601	1.000	0.601	0.399	0.889	1.093	1.191
4	0.203	-	0.489	1.000	0.489	0.511	0.855	1.126	1.262
5	0.220	-	0.390	1.000	0.390	0.610	0.822	1.159	1.338
6	0.238	-	0.304	1.000	0.304	0.696	0.790	1.194	1.419
7	0.257	-	0.232	1.000	0.232	0.768	0.760	1.230	1.504
8	0.276	-	0.172	1.000	0.172	0.828	0.731	1.267	1.594
9	0.297	-	0.125	1.000	0.125	0.875	0.703	1.305	1.689
10	0.317	-	0.088	1.000	0.088	0.912	0.676	1.344	1.791
11	0.339	-	0.060	1.000	0.060	0.940	0.650	1.384	1.898
12	0.361	-	0.040	1.000	0.040	0.960	0.625	1.426	2.012
13	0.384	-	0.025	1.000	0.025	0.975	0.601	1.469	2.133
14	0.405	-	0.016	1.000	0.016	0.984	0.577	1.513	2.261
15	0.425	-	0.009	1.000	0.009	0.991	0.555	1.558	2.397
16	0.444	-	0.005	1.000	0.005	0.995	0.534	1.605	2.540
17	0.464	-	0.003	1.000	0.003	0.997	0.513	1.653	2.693
18	0.482	-	0.002	1.000	0.002	0.998	0.494	1.702	2.854
19	0.495	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	1.000	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	87		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	6/1/1993		
(14)	**DATE OF FILING**	6/28/1993		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	70	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	24.72	16.17
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	24.72	16.17
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,133.70	55.52
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	191,111	125,017
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.014	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.015	-	0.986	1.000	0.986	0.014	0.962	1.030	1.060
2	0.017	-	0.972	1.000	0.972	0.028	0.925	1.061	1.124
3	0.018	-	0.955	1.000	0.955	0.045	0.889	1.093	1.191
4	0.020	-	0.938	1.000	0.938	0.062	0.855	1.126	1.262
5	0.023	-	0.919	1.000	0.919	0.081	0.822	1.159	1.338
6	0.025	-	0.898	1.000	0.898	0.102	0.790	1.194	1.419
7	0.028	-	0.875	1.000	0.875	0.125	0.760	1.230	1.504
8	0.032	-	0.850	1.000	0.850	0.150	0.731	1.267	1.594
9	0.035	-	0.823	1.000	0.823	0.177	0.703	1.305	1.689
10	0.039	-	0.794	1.000	0.794	0.206	0.676	1.344	1.791
11	0.044	-	0.763	1.000	0.763	0.237	0.650	1.384	1.898
12	0.049	-	0.729	1.000	0.729	0.271	0.625	1.426	2.012
13	0.055	-	0.694	1.000	0.694	0.306	0.601	1.469	2.133
14	0.061	-	0.656	1.000	0.656	0.344	0.577	1.513	2.261
15	0.068	-	0.616	1.000	0.616	0.384	0.555	1.558	2.397
16	0.075	-	0.574	1.000	0.574	0.426	0.534	1.605	2.540
17	0.084	-	0.531	1.000	0.531	0.469	0.513	1.653	2.693
18	0.094	-	0.486	1.000	0.486	0.514	0.494	1.702	2.854
19	0.105	-	0.440	1.000	0.440	0.560	0.475	1.754	3.026
20	0.116	-	0.394	1.000	0.394	0.606	0.456	1.806	3.207
21	0.129	-	0.349	1.000	0.349	0.651	0.439	1.860	3.400
22	0.142	-	0.304	1.000	0.304	0.696	0.422	1.916	3.604
23	0.156	-	0.261	1.000	0.261	0.739	0.406	1.974	3.820
24	0.171	-	0.220	1.000	0.220	0.780	0.390	2.033	4.049
25	0.186	-	0.182	1.000	0.182	0.818	0.375	2.094	4.292
26	0.203	-	0.148	1.000	0.148	0.852	0.361	2.157	4.549
27	0.220	-	0.118	1.000	0.118	0.882	0.347	2.221	4.822
28	0.238	-	0.092	1.000	0.092	0.908	0.333	2.288	5.112
29	0.257	-	0.070	1.000	0.070	0.930	0.321	2.357	5.418
30	0.276	-	0.052	1.000	0.052	0.948	0.308	2.427	5.743
31	0.297	-	0.038	1.000	0.038	0.962	0.296	2.500	6.088
32	0.317	-	0.027	1.000	0.027	0.973	0.285	2.575	6.453
33	0.339	-	0.018	1.000	0.018	0.982	0.274	2.652	6.841
34	0.361	-	0.012	1.000	0.012	0.988	0.264	2.732	7.251
35	0.384	-	0.008	1.000	0.008	0.992	0.253	2.814	7.686
36	0.405	-	0.005	1.000	0.005	0.995	0.244	2.898	8.147
37	0.425	-	0.003	1.000	0.003	0.997	0.234	2.985	8.636
38	0.444	-	0.002	1.000	0.002	0.998	0.225	3.075	9.154
39	0.464	-	0.001	1.000	0.001	0.999	0.217	3.167	9.704
40	0.482	-	0.000	1.000	0.000	1.000	0.208	3.262	10.286
41	0.495	-	0.000	1.000	0.000	1.000	0.200	3.360	10.903
42	0.500	-	0.000	1.000	0.000	1.000	0.193	3.461	11.557
43	0.500	-	0.000	1.000	0.000	1.000	0.185	3.565	12.250
44	0.500	-	0.000	1.000	0.000	1.000	0.178	3.671	12.985
45	0.500	-	0.000	1.000	0.000	1.000	0.171	3.782	13.765
46	0.500	-	0.000	1.000	0.000	1.000	0.165	3.895	14.590
47	0.500	-	0.000	1.000	0.000	1.000	0.158	4.012	15.466
48	0.500	-	0.000	1.000	0.000	1.000	0.152	4.132	16.394
49	0.500	-	0.000	1.000	0.000	1.000	0.146	4.256	17.378
50	1.000	-	0.000	1.000	0.000	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
60	-	-	-	1.000	-	1.000	0.095	5.892	32.988
61	-	-	-	1.000	-	1.000	0.091	6.068	34.967
62	-	-	-	1.000	-	1.000	0.088	6.250	37.065
63	-	-	-	1.000	-	1.000	0.085	6.438	39.289
64	-	-	-	1.000	-	1.000	0.081	6.631	41.646
65	-	-	-	1.000	-	1.000	0.078	6.830	44.145
66	-	-	-	1.000	-	1.000	0.075	7.035	46.794
67	-	-	-	1.000	-	1.000	0.072	7.246	49.601
68	-	-	-	1.000	-	1.000	0.069	7.463	52.577
69	-	-	-	1.000	-	1.000	0.067	7.687	55.732
70	-	-	-	1.000	-	1.000	0.064	7.918	59.076
71	-	-	-	1.000	-	1.000	0.062	8.155	62.620
72	-	-	-	1.000	-	1.000	0.059	8.400	66.378
73	-	-	-	1.000	-	1.000	0.057	8.652	70.360
74	-	-	-	1.000	-	1.000	0.055	8.912	74.582
75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
81	-	-	-	1.000	-	1.000	0.042	10.960	112.144
82	-	-	-	1.000	-	1.000	0.040	11.289	118.872
83	-	-	-	1.000	-	1.000	0.039	11.628	126.005
84	-	-	-	1.000	-	1.000	0.037	11.976	133.565
85	-	-	-	1.000	-	1.000	0.036	12.336	141.579
86	-	-	-	1.000	-	1.000	0.034	12.706	150.074
87	-	-	-	1.000	-	1.000	0.033	13.087	159.078
88	-	-	-	1.000	-	1.000	0.032	13.480	168.623
89	-	-	-	1.000	-	1.000	0.030	13.884	178.740
90	-	-	-	1.000	-	1.000	0.029	14.300	189.465
91	-	-	-	1.000	-	1.000	0.028	14.729	200.832
92	-	-	-	1.000	-	1.000	0.027	15.171	212.882
93	-	-	-	1.000	-	1.000	0.026	15.627	225.655
94	-	-	-	1.000	-	1.000	0.025	16.095	239.195
95	-	-	-	1.000	-	1.000	0.024	16.578	253.546
96	-	-	-	1.000	-	1.000	0.023	17.076	268.759
97	-	-	-	1.000	-	1.000	0.022	17.588	284.885
98	-	-	-	1.000	-	1.000	0.021	18.115	301.978
99	-	-	-	1.000	-	1.000	0.021	18.659	320.096
100	-	-	-	1.000	-	1.000	0.020	19.219	339.302
101	-	-	-	1.000	-	1.000	0.019	19.795	359.660
102	-	-	-	1.000	-	1.000	0.018	20.389	381.240
103	-	-	-	1.000	-	1.000	0.018	21.001	404.114
104	-	-	-	1.000	-	1.000	0.017	21.631	428.361
105	-	-	-	1.000	-	1.000	0.016	22.280	454.063
106	-	-	-	1.000	-	1.000	0.016	22.948	481.306
107	-	-	-	1.000	-	1.000	0.015	23.636	510.185
108	-	-	-	1.000	-	1.000	0.014	24.346	540.796
109	-	-	-	1.000	-	1.000	0.014	25.076	573.244
110	-	-	-	1.000	-	1.000	0.013	25.828	607.638
111	-	-	-	1.000	-	1.000	0.013	26.603	644.097
112	-	-	-	1.000	-	1.000	0.012	27.401	682.742
113	-	-	-	1.000	-	1.000	0.012	28.223	723.707
114	-	-	-	1.000	-	1.000	0.011	29.070	767.129
115	-	-	-	1.000	-	1.000	0.011	29.942	813.157
116	-	-	-	1.000	-	1.000	0.011	30.840	861.947
117	-	-	-	1.000	-	1.000	0.010	31.765	913.663
118	-	-	-	1.000	-	1.000	0.010	32.718	968.483
119	-	-	-	1.000	-	1.000	0.009	33.700	1,026.592
120	-	-	-	1.000	-	1.000	0.009	34.711	1,088.188
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
(4) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 1
(5) PROBABILITY OF SURVIVING t YEARS FOR CLAIMANT 2
(6) = (4) * (5) - PROBABILITY THAT BOTH ARE SURVIVE FOR T YEARS
(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
(17) = SUMPRODUCT OF (4) & (9) FOR NOMINAL AND (4), (9) & (8) FOR DISCOUNTED
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(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

BENEFIT CALCULATION DETAILS FOR CLAIMS CURRENTLY ON AWARD

CLAIM INFO

(11)	**INDEX**	88		
(12)	**TYPE OF CLAIM**	Survivor		
(13)	**DATE OF INJURY**	4/1/1995		
(14)	**DATE OF FILING**	5/16/1995		
		Age	**Sex**	
(15)	**CLAIMANT 1 (x)**	92	F	
(16)	**CLAIMANT 2 (y)**	0		

		NOMINAL	DISCOUNTED
	PTD/DEPENDENT BENEFIT PAYMENTS		
(17)	APV FOR CLAIMANT 1	5.69	4.99
(18)	APV FOR CLAIMANT 2	1,158.41	71.69
(19)	APV FOR BOTH CLAIMANTS ALIVE	5.69	4.99
(20)	APV FOR ONLY 1 CLAIMANT ALIVE	1,152.72	66.71
(21)	ANNUAL BENEFIT WHEN ALL CLAIMANTS ARE ALIVE	7,732	7,732
(22)	ANNUAL BENEFIT WHEN ONLY ONE IS ALIVE	-	-
(23)	APV OF INDEMNITY BENEFITS PAID TO CLAIMANT	44,009	38,549
	MEDICAL PAYMENTS		
(24)	CURRENT MINER INDEMNITY BENEFIT - MONTHLY	-	-
(25)	CURRENT MINER INDEMNITY BENEFIT - YEARLY	-	-
(26)	ESTIMATED ANNUAL MEDICAL PAYMENT	-	-
(27)	APV FOR $1 OF MEDICAL BENEFIT	-	-
(28)	APV OF MEDICAL BENEFIT	-	-

MORTALITY FOR SELECTED CASE

t	qx	qy	tpx	tpy	tpxy	tpx + tpy - 2*tpxy	v^t	Benefit Escalation	Medical Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0.142	-	1.000	1.000	1.000	-	1.000	1.000	1.000
1	0.156	-	0.858	1.000	0.858	0.142	0.962	1.030	1.060
2	0.171	-	0.724	1.000	0.724	0.276	0.925	1.061	1.124
3	0.186	-	0.601	1.000	0.601	0.399	0.889	1.093	1.191
4	0.203	-	0.489	1.000	0.489	0.511	0.855	1.126	1.262
5	0.220	-	0.390	1.000	0.390	0.610	0.822	1.159	1.338
6	0.238	-	0.304	1.000	0.304	0.696	0.790	1.194	1.419
7	0.257	-	0.232	1.000	0.232	0.768	0.760	1.230	1.504
8	0.276	-	0.172	1.000	0.172	0.828	0.731	1.267	1.594
9	0.297	-	0.125	1.000	0.125	0.875	0.703	1.305	1.689
10	0.317	-	0.088	1.000	0.088	0.912	0.676	1.344	1.791
11	0.339	-	0.060	1.000	0.060	0.940	0.650	1.384	1.898
12	0.361	-	0.040	1.000	0.040	0.960	0.625	1.426	2.012
13	0.384	-	0.025	1.000	0.025	0.975	0.601	1.469	2.133
14	0.405	-	0.016	1.000	0.016	0.984	0.577	1.513	2.261
15	0.425	-	0.009	1.000	0.009	0.991	0.555	1.558	2.397
16	0.444	-	0.005	1.000	0.005	0.995	0.534	1.605	2.540
17	0.464	-	0.003	1.000	0.003	0.997	0.513	1.653	2.693
18	0.482	-	0.002	1.000	0.002	0.998	0.494	1.702	2.854
19	0.495	-	0.001	1.000	0.001	0.999	0.475	1.754	3.026
20	0.500	-	0.000	1.000	0.000	1.000	0.456	1.806	3.207
21	0.500	-	0.000	1.000	0.000	1.000	0.439	1.860	3.400
22	0.500	-	0.000	1.000	0.000	1.000	0.422	1.916	3.604
23	0.500	-	0.000	1.000	0.000	1.000	0.406	1.974	3.820
24	0.500	-	0.000	1.000	0.000	1.000	0.390	2.033	4.049
25	0.500	-	0.000	1.000	0.000	1.000	0.375	2.094	4.292
26	0.500	-	0.000	1.000	0.000	1.000	0.361	2.157	4.549
27	0.500	-	0.000	1.000	0.000	1.000	0.347	2.221	4.822
28	1.000	-	0.000	1.000	0.000	1.000	0.333	2.288	5.112
29	-	-	-	1.000	-	1.000	0.321	2.357	5.418
30	-	-	-	1.000	-	1.000	0.308	2.427	5.743
31	-	-	-	1.000	-	1.000	0.296	2.500	6.088
32	-	-	-	1.000	-	1.000	0.285	2.575	6.453
33	-	-	-	1.000	-	1.000	0.274	2.652	6.841
34	-	-	-	1.000	-	1.000	0.264	2.732	7.251
35	-	-	-	1.000	-	1.000	0.253	2.814	7.686
36	-	-	-	1.000	-	1.000	0.244	2.898	8.147
37	-	-	-	1.000	-	1.000	0.234	2.985	8.636
38	-	-	-	1.000	-	1.000	0.225	3.075	9.154
39	-	-	-	1.000	-	1.000	0.217	3.167	9.704
40	-	-	-	1.000	-	1.000	0.208	3.262	10.286
41	-	-	-	1.000	-	1.000	0.200	3.360	10.903
42	-	-	-	1.000	-	1.000	0.193	3.461	11.557
43	-	-	-	1.000	-	1.000	0.185	3.565	12.250
44	-	-	-	1.000	-	1.000	0.178	3.671	12.985
45	-	-	-	1.000	-	1.000	0.171	3.782	13.765
46	-	-	-	1.000	-	1.000	0.165	3.895	14.590
47	-	-	-	1.000	-	1.000	0.158	4.012	15.466
48	-	-	-	1.000	-	1.000	0.152	4.132	16.394
49	-	-	-	1.000	-	1.000	0.146	4.256	17.378
50	-	-	-	1.000	-	1.000	0.141	4.384	18.420
51	-	-	-	1.000	-	1.000	0.135	4.515	19.525
52	-	-	-	1.000	-	1.000	0.130	4.651	20.697
53	-	-	-	1.000	-	1.000	0.125	4.790	21.939
54	-	-	-	1.000	-	1.000	0.120	4.934	23.255
55	-	-	-	1.000	-	1.000	0.116	5.082	24.650
56	-	-	-	1.000	-	1.000	0.111	5.235	26.129
57	-	-	-	1.000	-	1.000	0.107	5.392	27.697
58	-	-	-	1.000	-	1.000	0.103	5.553	29.359
59	-	-	-	1.000	-	1.000	0.099	5.720	31.120
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75	-	-	-	1.000	-	1.000	0.053	9.179	79.057
76	-	-	-	1.000	-	1.000	0.051	9.454	83.800
77	-	-	-	1.000	-	1.000	0.049	9.738	88.828
78	-	-	-	1.000	-	1.000	0.047	10.030	94.158
79	-	-	-	1.000	-	1.000	0.045	10.331	99.808
80	-	-	-	1.000	-	1.000	0.043	10.641	105.796
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⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

(1) TIME PERIOD (IN YEARS)
(2) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 1
(3) PROBABILITY OF DYING IN A GIVEN YEAR FOR CLAIMANT 2
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(7) = (4) + (5) - 2* (6) - PROB. THAT EXACTLY ONE IS ALIVE AFTER T YEARS
(8) DISCOUNT FACTOR AT 4% FOR T YEARS
(9) INDEMNITY BENEFIT INFLATION RATE @3% PER YEAR
(10) MEDICAL INFLATION RATE @ 6% PER YEAR
(11) CLAIM INDEX NUMBER
(12) PROVIDED BY BWC
(13) PROVIDED BY BWC
(14) PROVIDED BY BWC
(15) PROVIDED BY BWC
(16) PROVIDED BY BWC
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(18) = SUMPRODUCT OF (5) & (9) FOR NOMINAL AND (5), (9) & (8) FOR DISC.
(19) = SUMPRODUCT OF (6) & (9) FOR NOMINAL AND (6), (9) & (8) FOR DISC.
(20) = SUMPRODUCT OF (7) & (9) FOR NOMINAL AND (7), (9) & (8) FOR DISC.
(21) SECTION 8A, EXHIBIT 6, SHEET 1, COL. (2) * 12
(22) N/A
(23) = (20) * (22) + (21) * (23)
(24) N/A
(25) = (25) * (12)
(26) N/A
(27) = SUMPRODUCT OF (4) & (10) FOR NOMINAL AND (4), (8) & (10) FOR DISCOUNTED
(28) = (27) * (28)

OHIO BUREAU OF WORKERS COMPENSATION
COAL WORKERS PNEUMOCONIOSIS FUND
AS OF DECEMBER 31, 2013

SECTION 8A
EXHIBIT 8
SHEET 1

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
17	0.16%	0.03%
18	0.16%	0.03%
19	0.17%	0.03%
20	0.18%	0.03%
21	0.18%	0.03%
22	0.19%	0.03%
23	0.20%	0.03%
24	0.21%	0.03%
25	0.22%	0.03%
26	0.23%	0.03%
27	0.24%	0.03%
28	0.24%	0.03%
29	0.25%	0.03%
30	0.25%	0.04%
31	0.25%	0.04%
32	0.25%	0.04%
33	0.25%	0.04%
34	0.25%	0.04%
35	0.26%	0.05%
36	0.26%	0.05%
37	0.27%	0.06%
38	0.28%	0.06%
39	0.30%	0.07%
40	0.34%	0.07%
41	0.38%	0.08%
42	0.43%	0.08%
43	0.48%	0.09%
44	0.55%	0.09%
45	0.63%	0.10%
46	0.66%	0.10%
47	0.69%	0.11%
48	0.72%	0.12%
49	0.77%	0.13%
50	0.84%	0.14%
51	0.93%	0.16%

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
52	1.04%	0.17%
53	1.16%	0.19%
54	1.29%	0.21%
55	1.41%	0.23%
56	1.54%	0.26%
57	1.68%	0.29%
58	1.83%	0.34%
59	2.00%	0.39%
60	2.20%	0.44%
61	2.42%	0.51%
62	2.67%	0.58%
63	2.96%	0.67%
64	3.29%	0.76%
65	3.67%	0.86%
66	4.10%	0.97%
67	4.55%	1.08%
68	5.02%	1.18%
69	5.48%	1.27%
70	5.94%	1.37%
71	6.40%	1.50%
72	6.87%	1.65%
73	7.38%	1.83%
74	7.96%	2.04%
75	8.62%	2.27%
76	9.38%	2.53%
77	10.22%	2.84%
78	11.13%	3.17%
79	12.09%	3.54%
80	13.08%	3.94%
81	14.08%	4.40%
82	15.11%	4.92%
83	16.18%	5.49%
84	17.35%	6.10%
85	18.64%	6.77%
86	20.11%	7.53%
87	21.79%	8.40%
88	23.69%	9.38%
89	25.84%	10.46%
90	28.24%	11.63%
91	30.92%	12.88%

MORTALITY TABLE

Age	Male	Female
(1)	(2)	(3)
92	33.86%	14.20%
93	37.10%	15.59%
94	40.62%	17.07%
95	44.45%	18.62%
96	47.48%	20.25%
97	50.61%	21.97%
98	53.92%	23.77%
99	57.55%	25.67%
100	61.58%	27.64%
101	66.14%	29.66%
102	71.34%	31.71%
103	77.28%	33.85%
104	84.07%	36.10%
105	91.83%	38.36%
106	100.00%	40.52%
107		42.48%
108		44.44%
109		46.45%
110		48.23%
111		49.51%
112		50.00%
113		50.00%
114		50.00%
115		50.00%
116		50.00%
117		50.00%
118		50.00%
119		50.00%
120		100.00%

(1) AGE OF CLAIMANT

(2) & (3) PROBABILITY OF DYING IN A GIVEN YEAR

NOTE: MORTALITY RATES BASED ON DELOITTE STUDY TITLED “OHIO BUREAU OF WORKERS' COMPENSATION, DOCUMENTATION OF 2010 MORTALITY STUDY” DATED SEPTEMBER 10, 2010.