



Mountain Coal Company, LLC

West Elk Mine

5174 Highway 133
Somerset, CO 81434

Edward Ogrodny

Mine Engineer

eogrodny@archcoal.com

phone: 970.929.2248

January 27, 2020

Mr. Leigh Simmons
Colorado Division of Reclamation, Mining and Safety
Office of Mined Land Reclamation
1313 Sherman Street, Room 215
Denver, CO 80203

**Re: Mountain Coal Company, LLC - West Elk Mine, CDRMS Permit No. C-1980-007
Pond and Mine Site Quarterly Inspection Reports – 4th Quarter 2019**

Dear Mr. Simmons:

Attached are Mountain Coal Company, LLC's (MCC) Pond, Refuse Pile and Mine Site quarterly self-inspection reports for the 4th Quarter of 2019.

MCC added waste rock material to the RPEE during the 4th quarter, constructing lifts no more than 24". Compaction tests were conducted and the construction of the RPEE certified by John C. Poulos, P.E.

Should you have questions or require additional information, please contact me at (970) 929-2248.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Ogrodny", written over a horizontal line.

Edward Ogrodny
Mine Engineer

Enclosures: Inspection Reports – 4th Quarter 2019
RPEE Certification and Compaction Reports

cc: J. Poulos
K. Welt
Availability of Records File

[illegible]

Quarterly Pond Inspection Report Somerset, Gunnison County, Colorado

Inspector: Edward Ogrodny

Pond Identification	FW-1	SG-1	RPE		NSSA	Deep well
Type of Pond	Fresh Water	Sediment	West Sediment	East Sediment	Sediment	Fault Water
Sediment Level %	NA	~15%	<5%	<5%	0	NA
Water Level (Approx.)	90%	<20%	~15%	~15%	Empty	~20%
Discharge at Time of Inspection (Y/N)	NA	N	N	N	N	N

[illegible]

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: Mine Supply Storage

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction	NA	NA	NA	NA	NA	NA	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey	NA	NA	NA	NA	NA	NA	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: Main Topsoil Stockpile

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey	NA	NA	NA	NA	NA	NA	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads	NA	NA	NA	NA	NA	NA	
Other		√		√		√	
<u>Additional Comments:</u> No issues							
<u>Action Required or Needed:</u>							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: General Mine Site

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey		√	√			√	Some Monitoring mirrors need repaired
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion		√		√		√	
z Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
<p>Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed. Site Monitoring continues with monthly surveys from a few stations and quarterly for the rest. Continue to monitor of slump areas.</p> <p>Action Required or Needed: Survey mirrors that are broke, missing, or dirty need to be repaired.</p>							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: Material Storage Bench, Topsoil Stockpile #5

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:							
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms	√			√	√		Berm/barriers along north edge of the MSB bench repaired
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts	√			√		√	
Other		√		√		√	
Structural:							
Sideslopes & Stability	√			√	√		Continued monitoring of north-facing slump slope. See comments.
Cracks or settling	√			√	√		See comments.
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey	NA	NA	NA	NA	NA	NA	
Monitoring - Visual		√		√		√	Measurements conducted.
Other		√		√		√	
Reclamation:							
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:							
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads	√			√	√		See comments.
Other		√		√		√	
Additional Comments: Continued slumping pushing up on road pavement at base of rock buttress and some cracks along the bench edge. Action Required or Needed: Plans being drawn-up for repairs.							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: Refuse Pile Expansion (RPE) & RPE East (RPEE)

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:							
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:							
Sideslopes & Stability		√		√	√		Slope regrading completed. Area mulched and seeded.
Cracks or settling		√		√		√	
Compaction		√		√		√	24" lifts completed. Compaction tests done.
Seepage		√		√		√	
Underdrains		√		√		√	
Monitoring - Survey		√		√		√	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:							
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:							
Signs & Markers		√		√		√	
Spontaneous Combustion		√		√		√	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
<p>Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed. 24" lifts completed on RPEE. Compaction tests done by Lambert and Associates on 10/25/19, and 11/12/19. See attached reports.</p> <p>Action Required or Needed:</p>							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

Quarterly Stockpile and/or Site Inspection Report Somerset, Gunnison County, Colorado

Date: 12/26/19

Quarter: 4th of 2019

Location: Sylvester Gulch Facilities Area

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains		√		√		√	
Monitoring - Survey		√		√		√	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

**Quarterly Stockpile and/or Site Inspection Report
Somerset, Gunnison County, Colorado**

Date: 12/26/19

Quarter: 4th of 2019

Location: North Soils Storage Area (NSSA)

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey	NA	NA	NA	NA	NA	NA	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

**Quarterly Stockpile and/or Site Inspection Report
Somerset, Gunnison County, Colorado**

Date: 12/26/19

Quarter: 4th of 2019

Location: Lower Refuse Pile

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains		√		√		√	
Monitoring - Survey		√		√		√	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion		√		√		√	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

**Quarterly Stockpile and/or Site Inspection Report
Somerset, Gunnison County, Colorado**

Date: 12/26/19

Quarter: 4th of 2019

Location: Upper Sly Gulch Rd & E Seam MVBs

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:	Yes	No	Yes	No	Yes	No	
Sideslopes & Stability							
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage		√		√		√	
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey		√		√		√	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:	Yes	No	Yes	No	Yes	No	
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

MOUNTAIN COAL COMPANY, LLC

WEST ELK MINE

**Quarterly Stockpile and/or Site Inspection Report
Somerset, Gunnison County, Colorado**

Date: 12/26/19

Quarter: 4th of 2019

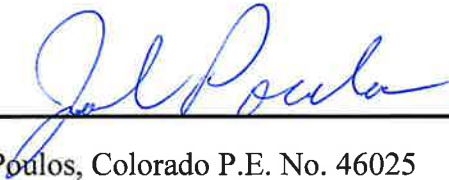
Location: Deer Creek Shaft & Monument Dam Barrow Area

Inspector: Edward Ogrodny

Features	Problems?		Maintenance?		Repairs?		Comments
	Yes	No	Yes	No	Yes	No	
Erosion:							
Rills & Gullies		√		√		√	
Vegetation		√		√		√	
Other		√		√		√	
Drainage:							
Ditches & Channels		√		√		√	Maintenance ongoing as needed
Berms		√		√		√	
Linings		√		√		√	
Temporary Structures		√		√		√	
Culverts		√		√		√	
Other		√		√		√	
Structural:							
Sideslopes & Stability		√		√		√	
Cracks or settling		√		√		√	
Compaction		√		√		√	
Seepage							
Underdrains	NA	NA	NA	NA	NA	NA	
Monitoring - Survey		√		√		√	
Monitoring - Visual		√		√		√	
Other		√		√		√	
Reclamation:							
Seedbed Material		√		√		√	
Subsoil		√		√		√	
Vegetation		√		√		√	
Mulch		√		√		√	
Other		√		√		√	
General Compliance & Miscellaneous:							
Signs & Markers		√		√		√	
Spontaneous Combustion	NA	NA	NA	NA	NA	NA	
Roads		√		√		√	Maintenance ongoing as needed
Other		√		√		√	
Additional Comments: Maintenance of ditches, roads, and facilities ongoing as needed.							
Action Required or Needed:							

REFUSE PILE EXPANSION EAST CERTIFICATION

I, John C. Poulos, Colorado Registered P.E. No. 46025, hereby certify to the best of my knowledge and belief, the preparation of the Refuse Pile Expansion East (RPEE), including topsoil and subsoil salvage, underdrain and drainage ditch construction, and placement and compaction of fill lifts, was completed during the 4th Quarter of 2019 in accordance with the approved designs for the Refuse Pile Expansion East (RPEE), see the attached compaction test results.



John C. Poulos, Colorado P.E. No. 46025



RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M19006MT

DATE: Friday, 10/25/19

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: Hayes

CLIENT: West Elk Mine

NUCLEAR GAUGE USED: 16

	TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
38	RPEE-01		8"	83.5	16.5	96.0	12.3	100	Coal gob, black
39	RPEE-02		8"	"	"	94.2	11.0	100	"
40	RPEE-03		8"	"	"	94.5	13.6	100	"
41	Low water east		8"	107.0	"	102.7	13.4	96	Clay, sand, gravelly, brown
42	Low water middle		8"	"	"	114.7	12.2	100	"
43	Low water west		8"	"	"	110.4	14.6	100	"
44	Retest of #4 on this date		8"	"	"	104.1	11.8	97	"

REMARKS: The test results indicate only the density and moisture content for the location and elevation tested only.

Lambert and Associates

PROJECT NUMBER: M19006MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M19006MT

DATE: Tuesday, 11/12/19

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: Hayes

CLIENT: West Elk Mine

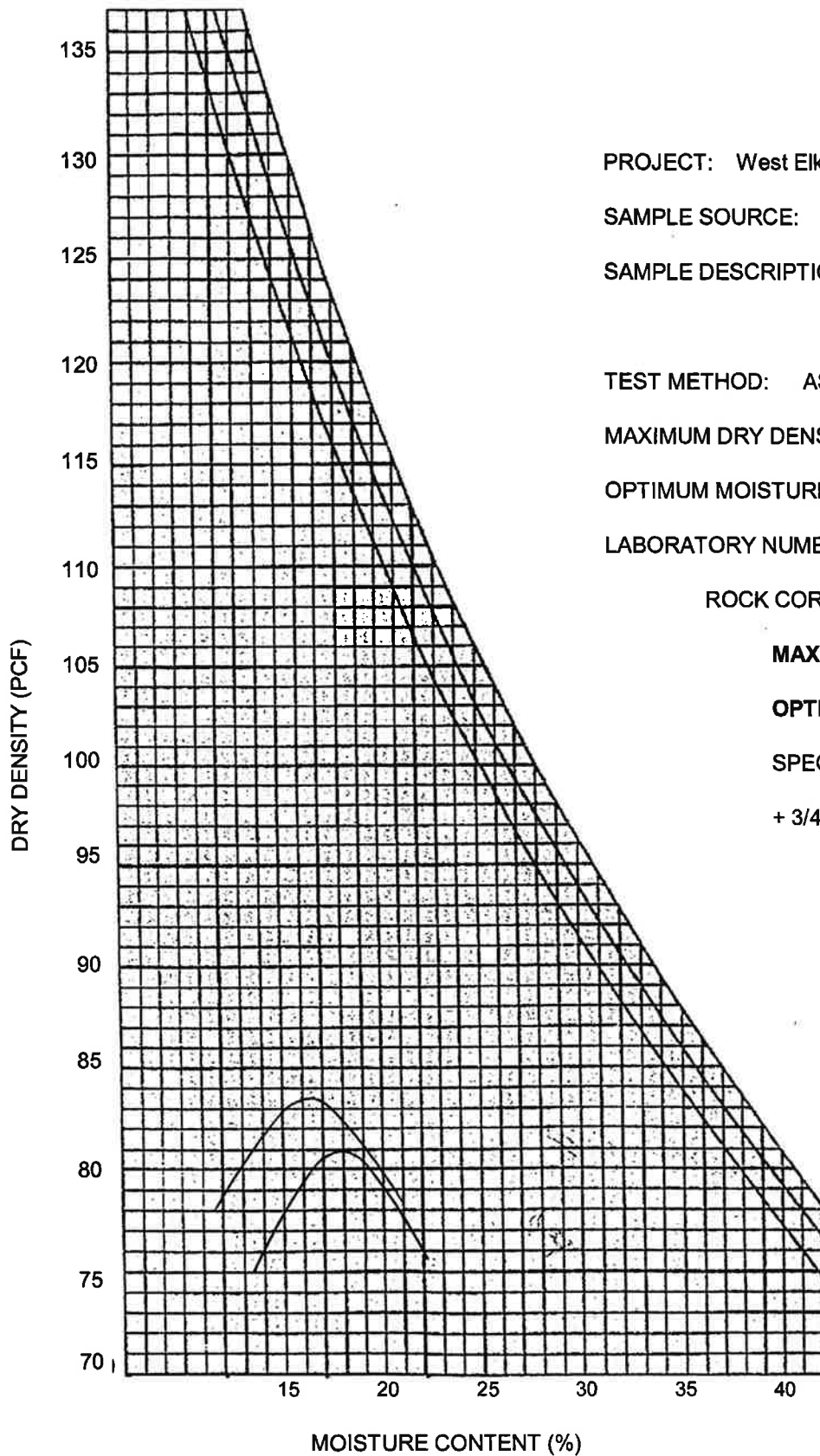
NUCLEAR GAUGE USED: 16

	TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
45	RPEE-01		6"	83.5	16.5	92.9	9.8	100	Coal gob, black
46	RPEE-02		6"	83.5	16.5	90.4	14.9	100	"
47	RPEE-03		6"	83.5	16.5	87.4	17.6	100	"
48	Low water east		6"	107.0	16.5	105.1	12.0	98	Clay, sand, gravelly, brown
49	Low water middle		6"	107.0	16.5	101.4	10.2	95	"
50	Low water west		6"	107.0	16.5	115.0	10.7	100	"

REMARKS: The test results indicate only the density and moisture content for the location and elevation tested only.

Lambert and Associates

PROJECT NUMBER: M19006MT



PROJECT: West Elk Mine

SAMPLE SOURCE: RPEE

SAMPLE DESCRIPTION: Coal gob, black

TEST METHOD: ASTM D698C

MAXIMUM DRY DENSITY: 81.0 pcf

OPTIMUM MOISTURE CONTENT: 18.0 %

LABORATORY NUMBER: 3907

ROCK CORRECTION:

MAXIMUM DRY DENSITY: 83.5 pcf

OPTIMUM MOISTURE CONTENT: 16.5%

SPECIFIC GRAVITY: 1.74

+ 3/4 INCH = 14.9 % TOTAL WEIGHT

2.8
2.7
2.6

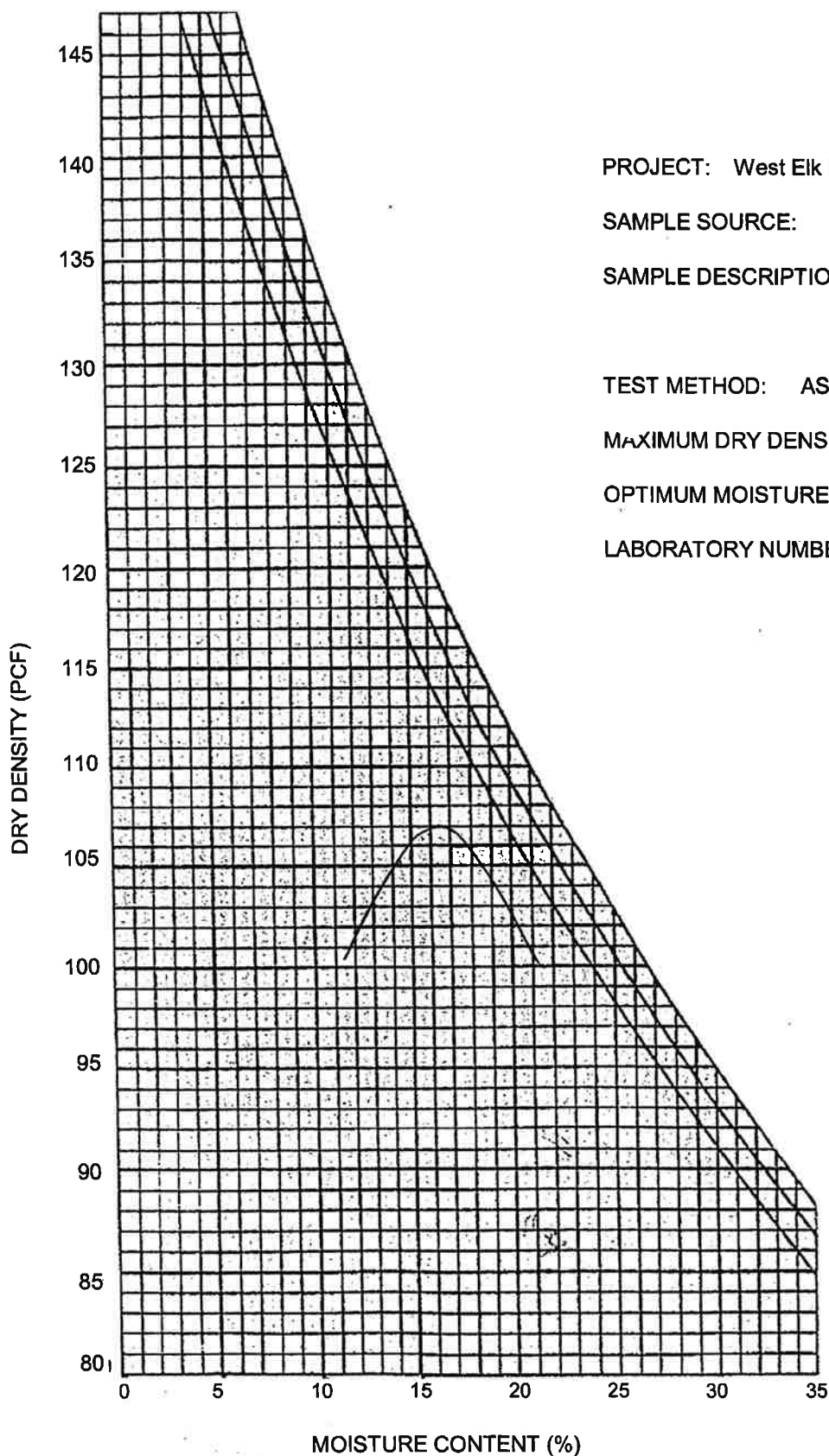
Zero Air Voids for
Specific Gravity

Lambert and Associates

Project No. M19006MT

Date: November 1, 2019

Figure: 1



PROJECT: West Elk Mine

SAMPLE SOURCE: Cut Area

SAMPLE DESCRIPTION: Clay, sandy, gravelly, brown

TEST METHOD: ASTM D698C

MAXIMUM DRY DENSITY: 107.0 pcf

OPTIMUM MOISTURE CONTENT: 16.5 %

LABORATORY NUMBER: 3908

2.8
2.7
2.6
Zero Air Voids for
Specific Gravity