



Jessica Wilczek, P.E.
Manager of Engineering and Environmental Affairs
Main: (970) 929-2308
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October 9, 2024

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 Self-Inspection Reports – 3rd Quarter 2024

Dear Mr. Simmons:

Attached are Mountain Coal Company, LLC's (MCC) Pond, Outfalls, Refuse Pile and Mine Site quarterly self-inspection reports for the 3rd Quarter 2024.

Should you have questions or require additional information, please contact me at
(970) 929-2308.

Sincerely,

A handwritten signature in blue ink that reads "Jessica Wilczek".

Jessica Wilczek, P.E.
Manager of Engineering and Environmental Affairs
Mountain Coal Company, L.L.C – West Elk Mine

Mountain Coal Company, L.L.C.
A subsidiary of Arch Resources, Inc.
West Elk Mine
5174 Highway 133
Somerset, CO 81434
(970) 929-2200
archrsc.com

Mountain Coal Company, LLC- West Elk Mine
Quarterly Self Mine Site Inspection Report

9/10/2024

3rd Quarter

Date

Quarter/ Year

Surface Material Storage (under C-1)

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

3rd Quarter

Date _____

Quarter/Year

Topsoil pile by ST 1-3

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
Temp. Structures		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Monitoring-Visual		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

3rd Quarter

Quarter/Year

C. Hiatt

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Monitoring-Survey		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Spontaneous Combustion		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

3rd Quarter

Date _____

Quarter/Year

Material Storage Bench, Topsoil Pile #5

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

3rd Quarter

Date _____

Quarter/Year

RPE & RPEE

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Compaction		X		X		X	
Underdrains		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Monitoring-Survey		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Spontaneous Combustion		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

3rd Quarter

C. Hiatt

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability	X		X		X		See comments
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Monitoring-Survey		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Surveyors have been monitoring the slide							
Action Required or Needed:							

3rd Quarter

Date _____

Quarter/Year

North Soils Storage Area (NSSA)

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Action Required or Needed:							

Mountain Coal Company, LLC- West Elk Mine
Quarterly Self Mine Site Inspection Report

9/26/2024

3rd Quarter

Date

Quarter/Year

Lower Refuse Pile (Prep Plant)

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments							
Erosion:	Yes	No	Yes	No	Yes	No								
Rills and Gullies		X		X		X								
Vegetation		X		X		X								
Other		X		X		X								
Drainage:	Yes	No	Yes	No	Yes	No								
Ditches and Channels		X		X		X								
Berms		X		X		X								
Linings		X		X		X								
BMPs		X		X		X								
Culverts		X		X		X								
Other		X		X		X								
Structural:	Yes	No	Yes	No	Yes	No								
Side slopes and Stability		X		X		X								
Compaction		X		X		X								
Underdrains		X		X		X								
Cracks or Settling		X		X		X								
Seepage		X		X		X								
Monitoring-Survey		X		X		X								
Other		X		X		X								
Reclamation:	Yes	No	Yes	No	Yes	No								
Seedbed Material		X		X		X								
Subsoil		X		X		X								
Vegetation		X		X		X								
Mulch		X		X		X								
Other		X		X		X								
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No								
Signs and Markers		X		X		X								
Spontaneous Combustion		X		X		X								
Roads		X		X		X								
Other		X		X		X								
Additional Comments:														
Action Required or Needed:														

Mountain Coal Company, LLC- West Elk Mine
Quarterly Self Mine Site Inspection Report

9/26/2024

3rd Quarter

Date

Quarter/Year

Upper Sly Gulch Road

C. Hiatt

Location

Inspector

Features	Problems		Maintenance		Repairs		Comments							
Erosion:	Yes	No	Yes	No	Yes	No								
Rills and Gullies		X		X		X								
Vegetation		X		X		X								
Other		X		X		X								
Drainage:	Yes	No	Yes	No	Yes	No								
Ditches and Channels		X		X		X								
Berms		X		X		X								
Linings		X		X		X								
BMPs		X		X		X								
Culverts		X		X		X								
Other		X		X		X								
Structural:	Yes	No	Yes	No	Yes	No								
Side slopes and Stability		X		X		X								
Cracks or Settling		X		X		X								
Seepage		X		X		X								
Monitoring-Survey		X		X		X								
Other		X		X		X								
Reclamation:	Yes	No	Yes	No	Yes	No								
Seedbed Material		X		X		X								
Subsoil		X		X		X								
Vegetation		X		X		X								
Mulch		X		X		X								
Other		X		X		X								
General Compliance & Miscellaneous	Yes	No	Yes	No	Yes	No								
Signs and Markers		X		X		X								
Roads		X		X		X								
Other		X		X		X								
Additional Comments:														
Road is in good condition to head into winter														
Action Required or Needed:														

3rd 2023

Quarter/Year

C. Hiatt

Inspector

Features	Problems		Maintenance		Repairs		Comments
Erosion:	Yes	No	Yes	No	Yes	No	
Rills and Gullies		X		X		X	
Vegetation		X		X		X	
Other		X		X		X	
Drainage:	Yes	No	Yes	No	Yes	No	
Ditches and Channels		X		X		X	
Berms		X		X		X	
Linings		X		X		X	
BMPs		X		X		X	
Culverts		X		X		X	
Other		X		X		X	
Structural:	Yes	No	Yes	No	Yes	No	
Side slopes and Stability		X		X		X	
Cracks or Settling		X		X		X	
Seepage		X		X		X	
Monitoring-Survey		X		X		X	
Other		X		X		X	
Reclamation:	Yes	No	Yes	No	Yes	No	
Seedbed Material		X		X		X	
Subsoil		X		X		X	
Vegetation		X		X		X	
Mulch		X		X		X	
Other		X		X		X	
Miscellaneous	Yes	No	Yes	No	Yes	No	
Signs and Markers		X		X		X	
Roads		X		X		X	
Other		X		X		X	
Additional Comments:							
Lot of road matinance done this summer							
Action Required or Needed:							

9/26/2024
Date

3rd 2024
Quarter/Year
C.Hiatt
Inspector

Pond ID	FW-1	SG-1	RPE West	RPE East	NSSA	Deepwell
Pond Type	Fresh Water	Sediment	Sediment	Sediment	Sediment	Fault Water
Sediment Level %	N/A	5%	<15%	<5%	0	<5%
Water Level (Approx.)	90%	10%	10%	5%	0	20%
Discharge? Y/N	N/A	N	N	N	N	N

Features	Problems?*		Maintenance?*		Repairs?*		Comments
* If Yes add comments							
Erosional:	Yes	No	Yes	No	Yes	No	
Rill & Gullies		X		X		X	
Inadequate Vegetation		X		X		X	
Outlet Channel Erosion		X		X		X	
Burrows		X		X		X	
Other		X		X		X	
Structural:							
Differential Settling		X		X		X	
Cracks and Slides		X		X		X	
Seepage		X		X		X	
Other		X		X		X	
Appurtenant Structures							
Defective Spillways		X		X		X	
De-Watering Device clogged		X		X		X	
Faulty Gates, Baffles, Pumps		X		X		X	
Other		X		X		X	
Additional Comments:	Water is recycled from the sediment ponds for use as dust control on roadways, as well as pumped to the CPP (as needed) and/or into the sealed area of the mine for storage and later use per MCC's adjudicated water storage right						
Action Needed:	RPE East has been cleaned						

9/26/2024
Date

3rd 2024
Quarter/ Year
C.Hiatt
Inspector

Pond ID	FW-2 North	FW-2 South	MB-3	MB-4	MB-5 North	MB-5 South
Pond Type	Fresh Water	Fresh Water	Sediment	Sediment	Sediment	Sediment
Sediment Level %	N/A	N/A	<5%	<5%	<10%	<5%
Water Level (Approx.)	Full	Full	5%	25%	15%	5%
Discharge? Y/N	N/A	N/A	N	N	N	N

Features	Problems?*		Maintenance?*		Repairs?*		Comments
* If Yes add comments							
Erosional:	Yes	No	Yes	No	Yes	No	
Rill & Gullies		X		X		X	
Inadequate Vegetation		X		X		X	
Outlet Channel Erosion		X		X		X	
Burrows		X		X		X	
Other		X		X		X	
Structural:							
Differential Settling		X		X		X	
Cracks and Slides		X		X		X	
Seepage		X		X		X	
Other		X		X		X	
Appurtenant Structures							
Defective Spillways		X		X		X	
De-Watering Device clogged		X		X		X	
Faulty Gates, Baffles, Pumps		X		X		X	
Other		X		X		X	
Additional Comments:	Water is recycled from the sediment ponds for use as dust control on roadways, as well as pumped to the CPP (as needed) and/or into the sealed area of the mine for storage and later use per MCC's adjudicated water storage right						
Action Needed:	MB-3 and MB-5 have been cleaned						

REFUSE PILE EXPANSION EAST CERTIFICATION

I, Jessica A. Wilczek, Colorado Registered P.E. No. 39802, 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 3rd Quarter of 2024 in accordance with the approved designs for the Refuse Pile Expansion East (RPEE), see the attached compaction test results.

Jessica Wilczek

Jessica A. Wilczek, Colorado P.E. No. 39802



RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: July 2, 2024

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
15			6	88.0	16.5	96.7	10.5	100+	Coal gob, black, RPEE East
16			6	88.0	16.5	88.8	14.4	100	Coal gob, black, RPEE East
17			6	94.5	15.0	96.7	16.0	100	Coal gob, black, RPEE Upper

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: July 9, 2024

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
18			4	97.0	15.0	94.1	10.2	97	Coal gob, black, RPEE Middle
19			8	97.0	15.0	90.9	10.8	94	Coal gob, black, RPEE Middle
20			8	97.0	15.0	101.6	12.5	100+	Coal gob, black, RPEE Middle
21			8	97.0	15.0	96.5	7.0	100	Coal gob, black, RPEE Middle

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk

PROJECT NUMBER: M24039MT

DATE: 7-16-24

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT: Wells Excavation

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
22			6	97.0	15.0	104.1	9.4	100+	Coal gob black, RPE middle
23			6	97.0	15.0	94.9	11.8	98	Coal gob black, RPE middle
24			8	97.0	15.0	94.3	13.8	97	Coal gob black, RPE middle
25			6	97.0	15.0	98.3	9.8	100+	Coal gob black, RPE middle
26			6	97.0	15.0	99.4	11.9	100+	Coal gob black, RPE middle

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M24039MT

DATE: 7-23-24

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT:

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
27			6	97.0	15	97.3	10.7	100+	Coal gob black, RPE middle
28			6	97.0	15	106.5	11.2	100+	Coal gob black, RPE middle
29			6	97.0	15	98.8	13.4	100+	Coal gob black, RPE middle
30			6	97.0	15	92.4	12.3	95	Coal gob black, RPE middle

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: August 13, 2024

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE 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			8	97.0	15.0	91.8	11.6	95	Coal Gob Black
46			4	97.0	15.0	100.7	12.1	100	Coal Gob Black
47			4	97.0	15.0	101.0	12.6	100	Coal Gob Black
48			6	97.0	15.0	99.5	16.3	100	Coal Gob Black
49			4	97.0	15.0	93.4	15.7	96	Coal Gob Black

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M24039MT

DATE: August 20, 2024

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
50			6	97.0	15.0	100.1	12.6	100	RPEE Middle, Coal Gob, Black
51			6	97.0	15.0	102.3	14.4	100	RPEE Middle, Coal Gob, Black
52			6	97.0	15.0	99.6	12.6	100	RPEE Middle, Coal Gob, Black
53			6	97.0	15.0	91.8	10.7	95	RPEE Middle, Coal Gob, Black
54			6	90.0	16.0	90.2	14.8	100	RPEE North, Coal Gob, Black

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M24039MT

DATE: August 29, 2024

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
55			6	97.0	15.0	102.8	10.0	100	Coal Gob, Black
56			6	97.0	15.0	95.5	13.4	98	Coal Gob, Black
57			2	97.0	15.0	104.5	12.3	100	Coal Gob, Black
58			4	97.0	15.0	96.8	10.5	100	Coal Gob, Black
59			4	97.0	15.0	97.9	9.0	100	Coal Gob, Black
60			6	90.0	16.0	91.9	9.8	100	Coal Gob, Black

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: September 3, 2024

LOCATION: Somerset

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
61			4	97.0	15.0	97.5	12.7	100	Coal Gob, Black
62			4	97.0	15.0	95.1	10.8	98	Coal Gob, Black
63			4	97.0	15.0	96.5	13.0	100	Coal Gob, Black
64			4	97.0	15.0	104.3	10.6	100	Coal Gob, Black
65			4	90.0	16.0	90.3	12.6	100	Coal Gob, Black

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: 9-10-24

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
66			6"	97.0	15.0	99.6	11.8	100	Coal gob black
67			6"	97.0	15.0	99.6	15.4	100	Coal gob black
68			6"	97.0	15.0	99.1	9.4	100	Coal gob black
69			4"	97.0	15.0	94.6	9.5	98	Coal gob black

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

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Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine**PROJECT NUMBER: M24039MT**

DATE: September 17, 2024

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
70			6	97.0	16.0	100.3	14.7	100	Coal gob black
71			4	97.0	16.0	93.7	12.9	97	Coal gob black
72			6	90.0	16.0	87.2	15.0	97	Coal gob black

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

Lambert and Associates

PROJECT NUMBER: M24039MT

RELATIVE COMPACTION TEST RESULTS

PROJECT: West Elk Mine

PROJECT NUMBER: M24039MT

DATE: 9-24-24

LOCATION: Somerset, CO

ENGINEERING TECHNICIAN: SZ

CLIENT: Mountain Coal Company

NUCLEAR GAUGE USED: 14

TEST NO.	APPROXIMATE TEST LOCATION	DEPTH OR ELEVATION	PROBE DEPTH (IN)	LABORATORY PROCTOR DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	RELATIVE COMPACTION (%)	SOIL TYPE
73			4"	97.0	15.0	91.4	11.1	94	Coal gob black R PE
74			BS	97.0	15.0	94.2	12.6	97	Coal gob black R PE
75			6"	97.0	15.0	93.6	15.7	96	Coal gob black R PE
76			8"	97.0	15.0	100	13.5	100	Coal gob black R PE

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

Lambert and Associates

PROJECT NUMBER: M24039MT