



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Inspection Report

Permit Number:	C0150009
Inspection Type:	PARTIAL
Inspection Date:	Wednesday, October 26, 2016
Start Date/Time:	10/26/2016
End Date/Time:	10/26/2016
Last Inspection:	

Representatives Present During the Inspection:
OGM Keenan Storrar

Inspector: Keenan Storrar,

Weather: Sunny, 60 F

InspectionID Report Number: 5691

Accepted by: DHADDOCK
11/16/2016

Permitee: **FOSSIL ROCK RESOURCES, LLC**
 Operator: **FOSSIL ROCK RESOURCES, LLC**
 Site: **FOSSIL ROCK MINE**
 Address: **225 North 5th Street, 9th Floor, CO 81501**
 County: **EMERY**
 Permit Type: **PERMANENT COAL PROGRAM**
 Permit Status: **ACTIVE**

Current Acreages

3,564.83	Total Permitted
27.83	Total Disturbed
	Phase I
	Phase II
	Phase III

Mineral Ownership

- Federal
- State
- County
- Fee
- Other

Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

The Division of Oil, Gas and Mining (the Division) conducted a partial inspection at the Fossil Rock mine on October 26, 2016. The inspection took place at the active waste rock site currently being remined. I checked in with one of the equipment operators before proceeding to walk the perimeter of the site. No mine representatives accompanied me during the inspection. The items inspected included diversions, the sediment pond, and the stability of the subsoil pile.

Inspector's Signature:

Keenan Storrar,
Inspector ID Number: 71

Date Tuesday, November 08, 2016



REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Topsoil

The subsoil pile along the east side of the site was inspected. The recently stockpiled subsoil has been adequately bermed (Photos 1, 2).

The southern end of the subsoil stock pile needs to be stabilized. A large gully has formed and is washing away subsoil needed for reclamation (Photos 3, 4, 5). The gully is still a manageable size making it easy to stabilize the area.

4.a Hydrologic Balance: Diversions

The mine site has experienced one or multiple large storm events over the last couple months. The length of diversion ditch DA was walked. The ditch appeared to be functioning as designed (Photos 6, 7).

4.b Hydrologic Balance: Sediment Ponds and Impoundments

The sediment pond at the waste rock site recently discharged through the primary spillway. This conclusion was determined by examining the high water mark within the pond and the ground below the outlet of the primary spillway. The high water mark of debris and saturated sediment around the perimeter of the pond was observed to be higher in elevation than the opening of the spillway (Photos 8 - 10). This suggests runoff was reporting to the pond at a higher rate than the 8" primary spillway pipe could drain. Additionally, the concrete directly below the outlet of the spillway was still wet while all other areas of the concrete were dry (Photo 11). This suggests water had recently discharged out the spillway and into the channel below the pond.

I have followed up with Vicky Miller since the inspection and confirmed the discharged water was not sampled. A couple options were discussed in order to prevent another occurrence where pond discharge is not sampled. The best option is to add a valve on the end of the primary spillway, essentially turning the spillway into a decant pipe. This would increase the storage volume of the pond and allow for a controlled drawdown of the water level after rain events. As the pond is drawn down outflow can then be easily sampled at the valve.

6. Disposal of Excess Spoil, Fills, Benches

The remaining of the first lift is nearly complete (Photo 12). The large pile of fines has been hauled off and is no longer preventing operations from removing the final portion of the first lift.

ATTACHMENT A – Photos October 26, 2016 site visit	
	
<p>PHOTO 1 Recently constructed berm around subsoil. October 26, 2016</p>	<p>PHOTO 2 Recently constructed berm around subsoil. October 26, 2016</p>
	
<p>PHOTO 3 Upper end of large gully on subsoil pile. October 26, 2016</p>	<p>PHOTO 4 Lower portion of gully on subsoil pile. October 26, 2016</p>

ATTACHMENT A – Photos October 26, 2016 site visit	
	
<p>PHOTO 5 Gully on southern end of subsoil pile. October 26, 2016</p>	<p>PHOTO 6 Diversion ditch DA. October 26, 2016</p>
	
<p>PHOTO 7 Diversion ditch DA. October 26, 2016</p>	<p>PHOTO 8 High water mark of saturated sediment and debris higher in elevation than primary spillway. October 26, 2016</p>

ATTACHMENT A – Photos October 26, 2016 site visit



PHOTO 9
High water mark of saturated sediment and debris roughly a foot above current water level.
October 26, 2016



PHOTO 10
Spillway opening less than a foot above current water level.
October 26, 2016



PHOTO 11
Concrete directly below outlet of spillway saturated from the recent discharge of the primary spillway.
October 26, 2016

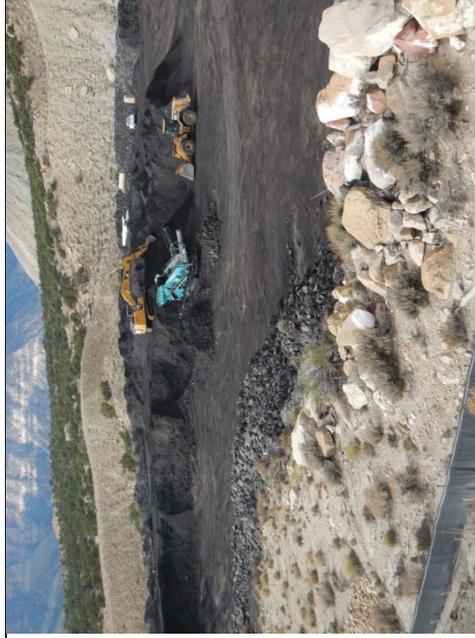


PHOTO 12
The first lift has nearly been removed.
October 26, 2016