



# 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:	C0150032
Inspection Type:	PARTIAL
Inspection Date:	Wednesday, October 17, 2018
Start Date/Time:	10/17/2018 10:30:00 AM
End Date/Time:	10/17/2018 12:30:00 PM
Last Inspection:	Tuesday, September 25, 2018

Representatives Present During the Inspection:	
OGM	Justin Eatchel
Company	Karin Madsen

Inspector: Justin Eatchel

Weather: Overcast, light snow. 35F

InspectionID Report Number: 6270

Accepted by:

Permittee: **GENWAL RESOURCES INC**  
 Operator: **GENWAL RESOURCES INC**  
 Site: **CRANDALL CANYON MINE**  
 Address: **PO BOX 910, EAST CARBON UT 84520-0910**  
 County: **EMERY**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **INACTIVE**

#### Current Acreages

1,257.75	<b>Total Permitted</b>
34.23	<b>Total Disturbed</b>
11.89	<b>Phase I</b>
	<b>Phase II</b>
	<b>Phase III</b>

#### 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:

This partial inspection was conducted on Wednesday, October 17. Karin Madsen with UtahAmerican Energy was present, and water samples were taken from the mine water treatment facility and sent to the laboratory to test the levels of iron, aluminum, and selenium. Fairly heavy rainstorms have hit this area in recent weeks, and there were several places where it appeared that debris flows had overwhelmed drainage ditches and culverts. A particularly heavy rainstorm appeared to have overwhelmed the C-6 culvert recently and resulted in the main offices being flooded. The north wall of the office building was breached by the flood waters and the shop area is currently covered with about 12 - 18 inches of mud and other organic debris.

Inspector's Signature:

*Justin Eatchel*

Date: Monday, October 22, 2018

Justin Eatchel,

Inspector ID Number: 73

**Note:** This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining. telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov



**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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input checked="" 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"/>

#### **4.a Hydrologic Balance: Diversions**

A debris flow from the burn scarred area to the north appears to have overwhelmed the C-6 culvert behind the main office building. The overflowing debris then progressed down the slopes and breached the north office building wall, flooding the shop with mud and other organic debris. A smaller office on the west of the building was also breached and flooded with mud. No other culvert within the permit area had been adversely affected, although several diversion ditches along the USFS road had been overwhelmed, intermittently spilling mud and other organic debris out over the road.

#### **4.b Hydrologic Balance: Sediment Ponds and Impoundments**

The sediment pond was impounding a modest amount of water and the surface was frozen.

#### **4.d Hydrologic Balance: Water Monitoring**

Samples were taken where the mine discharges into the treatment facility and again at UPDES outfall #002. Flowrate = 236 gpm, Flocculant = 3.1 ppm, and Coagulant = 0. Coagulant was zero because the coagulant lines had frozen over the previous night, and Karin was in the process of thawing out and flushing the lines to restore flow.

#### **10. Slides and Other Damage**

As stated previously, the main offices had been damaged by a debris flow from the overwhelmed culvert C-6. One of the north walls of the building was breached, and the door of a smaller office on the west of the building was forced open.

#### **16.b Roads: Drainage Controls**

It appeared that debris from strong rainstorms had overwhelmed the drainage ditches along the USFS road at several locations. Mud and other debris had been deposited by flood waters intermittently along the length of the road. No structural damaged was apparent.

**ATTACHMENT A – Crandall Canyon partial inspection, October 17, 2018**



**PHOTO 1 – WATER TREATMENT FACILITY**

Looking east over cells 1, 2, and 3. Water sampling location Pre-002 is from the end of the white PVC.



**PHOTO 2 – TREATMENT POND OUTFALL**

The water flowing under the trash rack is sampling point for UPDES discharge #002. The white PVC pipe drains water that collects at the base of the weeping highwall adjacent to the treatment pond.



**PHOTO 3 – CRANDALL CREEK**

The inlet of the 72” culvert running beneath the main mine site. It does not appear to have been affected by any flooding or debris flows.



**PHOTO 4 – MEMORIAL WALL**

The memorial is to the right of this, and Crandall Creek is to the left. It does not appear that any flooding has taken place here.

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**PHOTO 5 – CRANDALL CREEK**

The larger culvert is the 72" bypass that runs beneath the main mine site. The smaller CMP is the outlet of UPDES discharge #001 coming out of the sediment pond.



**PHOTO 6 – CRANDALL CREEK**

Closeup of the outlets.



**PHOTO 7 – SEDIMENT POND**

The sediment pond is currently frozen, although the ice is not very thick.



**PHOTO 8 – GABION WALL**

The steel pylons and other support structures have not shown any signs of movement recently, and appear stable.

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**PHOTO 9 – BUCKLED NORTH WALL**

This section of wall has been buckled under by the debris flow coming off of the hillside behind the main office.



**PHOTO 10 – BUCKLED NORTH WALL**

A close up view.



**PHOTO 11 – MUD FLOW**

The mud flows forced this door open and mud and other debris entered this door on the west side of the building.



**PHOTO 12 – MAIN OFFICE BUILDING**

Mud and debris leaking from underneath the roll-up doors in the shop.

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**PHOTO 13 – INSIDE THE SHOP**

This is the section of wall that buckled and enabled the mud flow to enter the building.



**PHOTO 14 – INSIDE THE SHOP**

Another view showing the thick blanket of debris that has collected in the shop. This Hylift is encased in mud.



**PHOTO 15 – EAST END OF MAIN OFFICE BUILDING**

The debris flow lost a lot of momentum here, leaving behind a thick blanket of mud, sticks, and other organic material.



**PHOTO 16 – CULVERT C-6**

A torrent of mud and rocks overwhelmed this culvert and overflowed to the side and down towards the main office building. It appears the trash rack held, but requires cleaning.

**ATTACHMENT A – Crandall Canyon partial inspection, October 17, 2018**



**PHOTO 21 – CULVERT C-6 RELIEF TRENCH**  
Scamp cut a temporary relief trench to the side of the culvert, enabling time to clean out the culvert and trash racks.



**PHOTO 22 – CULVERT C-6 RELIEF TRENCH**  
Scamp Construction cut this diagonal trench after the flood event. The objective of the trench is to redirect any additional flood events away from the path of the main office.



**PHOTO 23 – CULVERT C-6, SIDE VIEW**  
Structurally, the trash racks held but require cleaning.