



State of Utah
Department of
Natural Resources

MICHAEL R. STYLER
Executive Director

Division of
Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Representatives Present During the Inspection:

OGM	Priscilla Burton	Environmental Scientist III
OGM	Steve Christensen	Environmental Scientist II
Company	Vicky S. Miller	Environmental Specialist

Inspection Report

Permit Number:	C0070039
Inspection Type:	PARTIAL
Inspection Date:	Wednesday, September 24, 2008
Start Date/Time:	9/24/2008 12:00:00 PM
End Date/Time:	9/24/2008 4:00:00 PM
Last Inspection:	Tuesday, August 26, 2008

Inspector: Priscilla Burton, Environmental Scientist III

Weather: sun 65

InspectionID Report Number: 1780

Accepted by: jheltric

10/7/2008

Permittee: **CANYON FUEL COMPANY LLC**
Operator: **CANYON FUEL COMPANY LLC**
Site: **DUGOUT CANYON MINE**
Address: **PO BOX 1029, WELLINGTON UT 84542**
County: **CARBON**
Permit Type: **PERMANENT COAL PROGRAM**
Permit Status: **ACTIVE**

Current Acreages

9,471.00	Total Permitted
51.10	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:

As-built information for gas wells #18, #31 and the AMV road, constructed in the Fall 2007 was received on August 6, 2008 as per commitments stated in MRP Methane Degas Volume Section 234.200 and 240 to provide topsoil stockpile and road construction information (approved with task #2846). In conjunction with the review of this information (task #3025) a field inspection was conducted to verify the as-built drawings, as well as to inspect the condition of the degas well pad G-18 and G-31, topsoil piles and access road.

Pace Canyon was utilized to access the AMV road and drill sites 18 and 31. The condition of topsoil piles 2 - 10 and road culverts were of particular interest. The AMV road was constructed in a previously roadless area in rugged topography with steep slopes in several areas. The erosion control to be constructed and maintained as outlined in the approved MRP was inspected.

Inspector's Signature:

Priscilla Burton

Date Thursday, September 25, 2008

Priscilla Burton, Environmental Scientist III

Inspector ID Number: 37

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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 type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Permits, Change, Transfer, Renewal, Sale

The total acreage disturbed by all degas wells and associated access roads is 45.5 acres. As-Built information for gas wells #18, #31 and the AMV road, constructed in the Fall 2007 was received on August 6, 2008 as per MRP Methane Degas Volume Section 234.200 and 240 to provide topsoil stockpile location and construction information. The information is under review as task #3025.

3. Topsoil

The total disturbed acreage for degas wells #18, #31 and AMV road is 19.29 acres. The AMV road is 6,705 ft. long. An average of one foot of topsoil was removed from all disturbed areas (Attach. 5-4, As-Built Areas and Cut/Fill Volumetrics). Visual characteristics of the topsoil confirms topsoil texture analysis and rockiness detailed in Attachment 2-1 of the Methane Degas Volume. Along the AMV road, salvage of soil to the one foot depth included both topsoil and the whitish subsoil. Topsoil stockpiles at the pads is reddish clay loam. Extremely rocky topsoil and subsoil was noted at degas pad G-18.

Eight topsoil stockpiles were constructed along the road and at well pads in the late fall 2007. Table 2-2 provides stockpile dimensions derived from aerial photography. Stockpiles were roughened and seeded immediately after construction. Some grass seedlings and several snowberry seedlings have emerged on most stockpiles.

Topsoil stockpiles appear to be at the angle of repose, and steep outslopes have lost their surface roughening through slope movement on the following piles: T-5, T-6, T-7, T-9, and T-10. After the site visit, topsoil pile slope angles were calculated from information provided in Attach. 5-4 Plate 3 as follows: T-5, T-6, and T-7 are quite steep (1.5h:1v, 1.6h:1v, and 1.8h:1v, respectively). Stockpiles T-2, T-3, and T-10 have lesser slopes of 2h:1v or less.

The berm around stockpile T-6 is made of topsoil, not subsoil. Berms around several topsoil piles were excavated from around the topsoil pile, so that the piles have moats (T-7, T-10, T-5). As discussed with Ms. Miller, this approach should be avoided in the future.

4.a Hydrologic Balance: Diversions

In order for the Permittee to construct the AMV access road to degas wells G-18 and G-31, it was necessary to install six culverts. The culverts were necessary in order to insure the stability of the road and prevent excessive erosion and cutting where the drainages intersected the alignment of the AMV access road. Upon inspection of the six culverts, it was determined that they had been installed as outlined and approved within the MRP (See Attachment 7-1, Figure 1, Road Runoff Culvert Plan, of approved Methane Degas Amendment). In addition, the dimensions and design considerations of the culverts as identified in the Culvert Sizing Summary information provided by the Permittee, matched the culverts as observed during the field inspection. No signs of cutting, excessive erosion or plugging was observed upon inspection of the culverts.

4.c Hydrologic Balance: Other Sediment Control Measures

On page 7-16 of the approved methane degas well amendment to the MRP, the Permittee states that additional contributions of sediment or runoff outside the wellsite areas, as well as the access roads, will be prevented to the extent possible by utilizing silt fences, berms and straw bale dikes. Upon inspection of the AMV access road, the Permittee opted to use silt fences at the out slopes of the access road, as well as along the perimeter of the pads for degas wells G-18 and G-31. Although large segments of the access road's silt fence was functioning as designed and was observed to have additional sediment holding capacity, there were several areas observed during the field inspection where the constructed silt fence was either entirely buried or had already failed allowing sediment to be transported off the disturbed area (See Attached Photos).

Areas where the silt fence was noticeably impacted and failing was observed in numerous areas: 1) Directly adjacent to degas pad G-31 on the east side. 2) Up and down gradient of culvert C5. 3) Up and down gradient of culvert C4 and 4) The approximately 900' of AMV access road between culvert C4 and topsoil pile T-3. The aforementioned locations are general examples of where the sediment controls require maintenance. It is not intended as a comprehensive list.

The maintenance of the silt fence was discussed with Vicky Miller at the site during the September 24th, 2008 field inspection. At that time, Ms. Miller indicated that the approved methane degas amendment to the MRP outlined the utilization of the silt fence during construction only and that the Permittee was not required to clean out/maintain the silt fence. Mr. Christensen indicated that he would consult the approved MRP.

On September 30th, 2008, Ms. Miller and Mr. Christensen discussed the approved sediment control language within the approved methane degas amendment to the MRP. Mr. Christensen pointed out that according Section 742.200 on page 7-16, "Additional contributions of suspended solids and sediment or runoff outside the well site area, including access roads, will be prevented to the extent possible using silt fences, berms and straw bale dikes." Due to the observed failure of the silt fence in numerous locations adjacent to the AMV access road and degas pads, Ms. Miller indicated that additional silt fence would be installed in order to provide adequate sediment control. Ms. Miller indicated that the additional sediment controls would be installed prior to the onset of winter and inaccessible conditions due to snowfall.

On October 14, 2008, Ms. Miller indicated to Mr. Christensen via a phone conversation that additional silt fence had been ordered and that the additional silt fence would be installed prior to be driven off the mountain due to weather conditions.

4.d Hydrologic Balance: Water Monitoring

Ms. Miller informed us that the discharge from Pace Canyon portal was reduced from 800 gpm down to 100 gpm due to the recent sealing of mine workings.

16.a Roads: Construction, Maintenance, Surfacing

Attachment 2-4, Plate 1 shows the profile of the AMV road. Between station +12:00 and station +13:00 the road was constructed on approximately 20 feet of compacted fill and boulders. This construction was preferred over a route that would have crossed an ephemeral stream channel at this location. This change in construction was related to the Division Engineer, Wayne Western.

Figure 1 of Attachment 7-1, Road Runoff Culvert Plan, depicts the typical cross-section that was approved during the review of the G-18, G-31 and AMV Access Road amendment. Upon inspecting the road geometry during the field visit, it was determined that the road had been constructed according to plan. The road did not show signs of excessive erosion on the in-slopes or on the road surface itself. The berm's that were constructed along the out slope edge of the road surface were intact and appeared to be functioning as designed.

18. Support Facilities, Utility Installations

Gas Wells GW-18, GW-19 and GW-31 were photographed. GW-19 is east of the AMV road as shown on Attachment 5-4, Plate 1. GW-31 is no longer active and may be reclaimed next season. Two mudpits at GW-31 still contain water.

GW 11 and GW12 were noted in Pace Canyon below the AMV road. Ms. Miller stated that the landowner would like to have a corral constructed in the vicinity of GW11 as part of the post mining land use of grazing. Permitting of this post mining land use enhancement was discussed.

22. Other

Pace Canyon was bustling with activity. Trucks from Nelco construction, Boart Longyear drilling, and several mine employees (driving trucks, ATV, road grader, and trackhoe) were noted in the canyon.

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GW-19



GW-31



GW-18
(topsoil pile T-10 in background)



mud pits at GW-31



excavated "moat" around T-7



Emerging grasses on T-7



Gouges "melted" on slope of T-9



Silt Fence Failure Example (Adjacent to G-31)



Silt Fence Failure Example (Adjacent to G-31)



Silt Fence Failure Example



Silt Fence Failure Example