



# 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:	C0410002
Inspection Type:	COURTESY
Inspection Date:	Thursday, November 13, 2014
Start Date/Time:	11/13/2014
End Date/Time:	11/13/2014
Last Inspection:	Wednesday, November 12, 2014

Inspector: Priscilla Burton,

Weather: sun 35 F

InspectionID Report Number: 4033

Accepted by: JHELFRIC

12/1/2014

Representatives Present During the Inspection:	
Company	Vicky Miller
OGM	Priscilla Burton
Company	Wyatt Shakespear
OGM	Amanda Daniels
OGM	Cheryl Parker
OGM	Keenan Storrar

Permitee: **CANYON FUEL COMPANY**  
 Operator: **CANYON FUEL COMPANY**  
 Site: **SUF CO MINE**  
 Address: **597 SOUTH SR24, SALINA UT 84654**  
 County: **SEVIER**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **ACTIVE**

#### Current Acreages

720.48	<b>Total Permitted</b>
49.66	<b>Total Disturbed</b>
	<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:

Discussed the waste rock expansion proposal and topsoil handling options. Walked the reclaimed and active lifts at the waste rock site. Checked seeding and sediment control on the new combined topsoil stockpile #Lift5/2/3. Observed vegetation on topsoil and subsoil stockpiles.

Division hydrologists and engineers went on with SUFCO staff to discuss hydrology for waste rock site expansion to the Jones & DeMille office in Richfield with Travis Hollongshead at Jones & DeMille, engineering consultants. Refer to Waste Rock Volume Map 4. for the location of the lifts and topsoil stockpiles.

Inspector's Signature:

Priscilla Burton,

Inspector ID Number: 37

Digitally signed by Priscilla Burton  
 DN: cn=Priscilla Burton, o, ou,  
 email=priscillaburton@utah.gov, c=US  
 Date: 2014.12.11 13:16:52 -07'00'

Date Tuesday, November 12, 2014



**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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

**1. Permits, Change, Transfer, Renewal, Sale**

Expansion of the waste rock site to the east was discussed.

**3. Topsoil**

An area of undisturbed ground between the Lift #5 expansion and topsoil pile #2/3 was tracked over during soil salvage from Lift #5 expansion. This area of in situ topsoil was pocked and seeded (see photo). Soil salvaged from the Lift #5 expansion was placed between topsoil stockpiles #2 and #3. Where previously topsoil pile #2 held 161.4 cu yds and topsoil pile #3 held 138 cu yds, the total volume now contained in the combined pile is 4,114 cu yds., meaning that 3,814.6 cu yds were added to the pile from the lift expansion (Task 4702). A cross section of the enlarged pile has been created for inclusion with as-built documentation. The topsoil had been seeded and sprigs of grass had already been grazed down to the crown. Grazing had occurred all over the pile. Utah is an open range state and the responsibility lies with the permittee to fence out the cattle. The Permittee explained that this is a short term pile which will be utilized quickly in the reclamation of Lift #5. Additional topsoil is stored on top of Lift #4. This topsoil was seeded in the Fall of 2007, but cover is scant. The topsoil stored on Lift #4 (from Lift #5) will be used in reclamation of Lift #5 expansion. The forthcoming waste rock expansion should clarify the source and volume of topsoil to be placed on Lift #5 and the Lift #5 expansion and make appropriate provisions to protect remaining topsoil from grazing. The sediment pond topsoil pile is fenced.

One knapweed plant was noted on the topsoil stockpile adjacent to the road. All stockpiles should be monitored and treated for noxious weeds as appropriate. The east side of the topsoil storage pile and the subsoil pile have poor growth compared to other areas.

## **7. Coal Mine Waste, Refuse Piles, Impoundments**

Trucks enter the Lift #5 from the west and deposit loads by end dumping onto the surface of the pile. A D-6 dozer places a lift by pushing the waste rock down into Lift #5 expansion area. Vicky stated that lifts are approximately two feet in thickness. Each lift is compacted by the dozer (D-6) during the placement and grading of the next lift. An industry standard is to typically require 12-15 passes by a D-6 single tracked dozer to achieve near design (90%) compaction. Due to the variance of materials disposed at the site and without a complete soil lab analysis of the various materials disposed of at the site, exact compaction at any given point on the pile is likely highly variable.

Sediment from the overflow pond had recently been deposited on Lift #5. Highly carbonaceous, black rock, as well as lighter-colored rock were in piles on the lift ready for compaction. As discussed, questionable material, such as the lighter colored overburden may be sampled and analyzed according to the Division's Guidelines for use as subsoil cover.

In the forthcoming waste rock amendment, the final elevation of Lift #5 and Lift #5 expansion should be stated and protection of the topsoil stored on Lift #4 from the adjacent waste rock placement should be assured

## **11. Contemporaneous Reclamation**

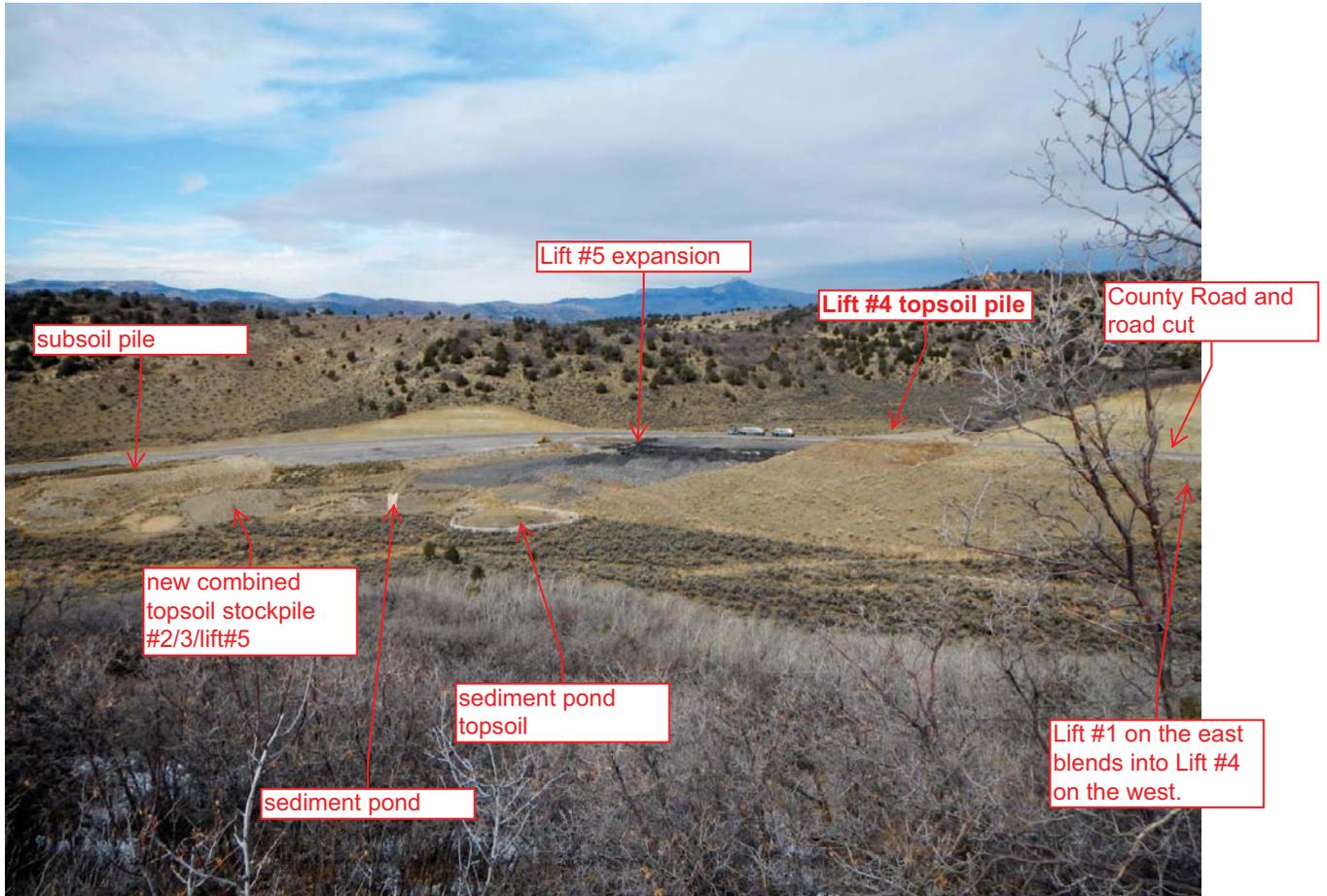
Waste rock Lifts # 1 through 3 were contemporaneously reclaimed using the mix described in Vol. 3 Table 4.6.1-1. The contemporaneously reclaimed lifts have good plant cover. The following seeded species were noted: two species of wheatgrass, Great Basin wildrye, yarrow, penstamon, white stem rabbitbrush. Lift #4 outslopes have been contemporaneously reclaimed. The flat surface of Lift #4 is the storage location of topsoil salvaged from Lift #5.

## **12. Backfilling And Grading**

Contemporaneously reclaimed Lifts have two benches or terraces about 10 ft wide at about 30 ft. intervals up the slope (see Map 4). These terraces have successfully controlled sheet flow and erosion of the soil cover. The upslope and down slope of the reclaimed piles appear stable with minimal signs of erosion (rills). Vegetation has responded favorably to the terrace installation as well (see photos). Terraces should be graded into the final slope of Lift #5 and the Lift #5 expansion as well, per construction design found in Vol 3. App. II and App. III. The use of terraces should be included in the new designs for the forthcoming waste rock amendment.

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

Sevier County recently changed the slope of the 36 inch culverts placed along the county road. The culverts now direct flow away from the waste rock site. Some road wash emerges from beneath the pad adjacent to the topsoil stockpile beside the county road. The topsoil stockpile is protected from this flow by a berm (see photo).



Looking west at the SUFCO waste rock site.



Looking east at the Lift #5 expansion area on left. Fenced circular Sediment pond topsoil pile on right.



Lift #5 expansion area on left.

Waste is deposited on lift #5 (above right) and pushed downhill to be compacted (below, left)



Above foreground recently roughened and seeded.



Above: Subsoil pile on left and signed topsoil pile #1 both dedicated for the mine site facilities. page 3 of 5



Keenan Storrar appears to point directly at the new combined to form topsoil pile #2/3/lift#5 (above and below).



silt fence spillway in berm at base of the combined topsoil pile slope.



The new combined pile was recently seeded, but is not protected from grazing.



Lift #4 (above).



Lift #1( above).



Lifts 3 & 4 with topsoil stockpile on top of Lift #4



Vegetation on Lift #4 topsoil stockpile.  
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