



The State of Utah  
 Department of  
 Natural Resources  
 Division of  
 Oil, Gas & Mining

ROBERT L. MORGAN  
 Executive Director

LOWELL P. BRAXTON  
 Division Director

OLENE S. WALKER  
 Governor

GAYLE F. McKEACHNIE  
 Lieutenant Governor

Representatives Present During the Inspection:	
Company	Mike Davis
Company	Chris D. Hansen
Other	Erik Petersen
Federal	Tom Lloyd Ferron-Price District Geologist
OGM	Steven Fluke Environmental Scientist II

# Inspection Report

Permit Number:	C0410002
Inspection Type:	TECHNICAL
Inspection Date:	Thursday, April 29, 2004
Start Date/Time:	04/29/2004 9:00:00 AM
End Date/Time:	04/29/2004 4:00:00 PM
Last Inspection:	

Inspector: Steven Fluke, Environmental Scientist II

Weather: overcast, cold 30-40 F, snow squalls

InspectionID Report Number: 255

Accepted by: dhaddock

06/07/2004

*OK*

Permitee: CANYON FUEL COMPANY LLC  
 Operator: CANYON FUEL COMPANY LLC  
 Site: SUFCO MINE  
 Address: 397 S 800 W, SALINA UT 84654  
 County: SEVIER  
 Permit Type: PERMANENT COAL PROGRAM  
 Permit Status: ACTIVE

**Current Acreages**

24,632.95	Total Permitted
27.36	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, Divison Orders, and amendments:**

This was the first monitoring of the East Fork of Box Canyon (EFB) after postponing monitoring in January due to snow and winter conditions. Participants were Mike Davis and Chris Hansen (SUFCO), Erik Petersen (Petersen Hydrologic), Tom Lloyd (Manti-La Sal NF), and Steve Fluke (DOGM). We entered the canyon at the confluence with the east fork of EFB and hiked down canyon beyond the angle of draw of the third left panel. Overall, new cracks and buckling of bedrock within the EFB stream channel were observed that divert the stream flow beneath the surface for 100 to 200 feet at several stretches. However, flow does resume and the net flow measured downstream of the subsidence cracks does not appear to be diminished.

Inspector's Signature: \_\_\_\_\_

*St Fluke*

Date

Friday, April 30, 2004

Steven Fluke, Environmental Scientist II

Inspector ID Number: 53

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

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**REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENT**

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 2. Signs and Markers

Mike Davis stated that on April 6, 2004, he installed a sign warning of subsidence cracks just before loop at the end of the road approximately 100 yards east of the Elusive Peacock Shelter. We did not have time to observe the sign during this site visit.

### 4.d Hydrologic Balance: Water Monitoring

Eric Petersen and Chris Hansen collected flow data at monitoring stations EFB-6 through EFB-14. Flow data has been submitted by SUFCO as presented in a report prepared by Petersen Hydrologic. Observations during the water monitoring and the flow results are summarized below.

Monitoring stations EFB 14, EFB 13 (north and south), and EFB-12 (north and south) were visited first. These sites are springs located along the east slope of the stream channel near the Castlegate-Blackhawk contact. All of these springs were not flowing at the time of the site visit and the ground around the spring areas was wet but mostly frozen.

The spring flowing from the Elusive Peacock Shelter (Pines 214) appears to be flowing subsurface due to subsidence fractures and now discharges near the confluence with the stream. Pines 214 is measured flowing at 1.32 gpm. Stream flow at EFB-11 just below the confluence with Pines 214 was measured at 21.4 gpm.

There is much fractured and buckled bedrock in the stream channel below the confluence of Pines 214 and the stream. The stream is dry in many places, but usually reappears at shale layers within 20 to 100 feet. Flow appears diminished in places relative to flow at EFB-11. Approximately 300 feet below EFB-11, the flow reappears with iron staining for approximately 150 feet until flow is subsurface again at fractures. The fractures and diminished flow are evident even at EFB-11a (an additional monitoring station established downstream of the fractures in December). Erik and Chris measure flow approximately 50 feet below EFB-11a where no fractures are evident and flow appears to have fully recovered (EFB-11b?). Flow is measured at 21.2 gpm; similar to flow at EFB-11.

Heading back upstream, flow is measured at EFB-10 (18.4 gpm), EFB-9 (16.7 gpm), EFB-8 (15.4 gpm), EFB-7 (15.9 gpm), and EFB-6 (3.1 gpm). There is a dry section where the stream flows subsurface for approximately 150 feet between EFB-9 and EFB-10. Upstream of EFB-9, no subsurface flow is evident.

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**10. Slides and Other Damage**

The slide located along the east stream bank between EFB-10 and EFB-11 has dammed-up the stream and created a small pond. The sandy material blocking the stream appears to be slowly eroding away and the pond area will likely be washed out during a high-flow storm event. No new slides or rock spalling was observed.

**22. Other**

Follow-up action: Need to measure and further evaluate the sections of stream that show diminished flow and are dry. Make sure mitigation and monitoring plan is being followed.