



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:	
Company	David Shaver Manager
Company	Karla Knoop Consultant
OGM	Steven Fluke Environmental Scientist II

# Inspection Report

Permit Number:	C0070041
Inspection Type:	TECHNICAL
Inspection Date:	Wednesday, May 23, 2007
Start Date/Time:	5/23/2007 8:30:00 AM
End Date/Time:	5/23/2007 3:30:00 PM
Last Inspection:	

Inspector: Steven Fluke, Environmental Scientist II

Weather: mostly cloudy, cool ~45 F, slight breeze

InspectionID Report Number: 1307

Accepted by: whedberg

6/7/2007

Permittee: **WEST RIDGE RESOURCES**  
 Operator: **WEST RIDGE RESOURCES**  
 Site: **WEST RIDGE MINE**  
 Address: **PO BOX 1077, PRICE UT 84501**  
 County: **CARBON**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **ACTIVE**

**Current Acreages**

6,114.89	<b>Total Permitted</b>
29.06	<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:**

The purpose of the site visit was to inspect the condition of the Bear Canyon drainage following undermining by longwall mining that began in November 2006. The ephemeral stream channel is approximately 325 feet above the first longwall panel at the point of shallowest cover. As a condition of the West Ridge MRP, the Permittee visually must inspect the stream channel following undermining and mitigate any adverse impacts to the hydrologic balance caused by subsidence. In addition, the Permittee must conduct a pre- and post-mining subsidence survey of the canyon bottom. A report is to be submitted to the Division within 30 days of the inspection. The post-mining subsidence survey is to be conducted a day or two following the visual inspection. The stream was not flowing at the time of the inspection. In general, subsidence-related impacts to the stream channel were minimal with only minor cracks observed in outcrops along the channel. No fractures were observed along the channel bottom. It appeared that no adverse impacts to the hydrologic balance had occurred from the subsidence and no mitigation is recommended. Photos from the inspection can be found in the Division database.

Inspector's Signature:

Date

Friday, May 25, 2007

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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## **2. Signs and Markers**

Flagging and markers were located along the stream channel identifying where the longwall panel crosses beneath the channel. These markers are used for the pre- and post-mining subsidence surveys.

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

The main fork of Bear Canyon within the permit area appears to be an ephemeral drainage. At the time the lease area was being inspected prior to addition to the West Ridge permit area (late spring, 2005), the stream was flowing approximately 30 gpm in June, and up to 5 gpm in places in July 2005. No flow has been observed during monthly monitoring from Aug. to Oct. 2005, May to Sept. 2006, and March 2007. It appears that the flow observed in spring of 2005 was from an unusually high runoff year. At the time, it appeared that the stream was intermittent, but based on baseline data from 199? and the monitoring in 2005, 2006, and 2007 the stream appears to be ephemerally functioning. No flow was observed at the time of this inspection at sites ST-11, ST-12, and ST-13.

## **9. Protection of Fish, Wildlife and Related Environmental Issues**

A pre-subsidence vegetation survey was conducted in the Bear Canyon drainage during the growing seasons in 2005 and 2006. No biologist was present at the time of this inspection, but it did not appear that any impacts had occurred to vegetation and wildlife habitat in the drainage due to subsidence.

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

Based on our observations during the inspection, the effects of subsidence in the Bear Canyon stream channel appeared to be minimal. Since November 2006, West Ridge has undermined the stream channel with two longwall panels. The longwall panels are situated perpendicular to the length of the stream channel with approximately 325 feet of cover at the shallowest point where the panels begin. We walked the length of the stream channel to ST-12 beyond the angle of draw for the second panel. Only a few cracks caused by subsidence were observed in sandstone outcrops within the drainage. The cracks ranged from fractures with no displacement to 2-inches wide. In addition, some spalling had occurred from cliffs above the stream channel producing a few freshly broken boulders in the channel bottom. No fractures were observed along the stream channel that could potentially intercept flow and no disruption of soil or vegetation due to subsidence was evident. Overall, our impression was that the effects from subsidence was minimal and the fractures and freshly broken/spalled boulders observed would have likely been overlooked had we not been looking for them. Photos of the stream channel and some fractures at the point of greatest subsidence (the middle of the first panel) are available on the Division database.

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## Inspection Continuation Sheet

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### **22. Other**

Follow-up: The Permittee must conduct the post-mining subsidence survey scheduled for May 24 or 25. A written report of the inspection and survey is to be submitted to the Division within 30 days.