

## **PERMIT INFORMATION**

Permit Number: C-1996-083 Mine Name: Bowie No. 2 Mine Operator: Bowie Resources, LLC Operator Address: Mr. Basil Bear P.O. Box 1488 Paonia, CO 81428 County: Delta Operation Type: Underground Permit Status: Active Ownership: Private

**Operator Representative Present:** 

Basil Bear

**Operator Representative Signature:** (Field Issuance Only)

### **INSPECTION INFORMATION**

Inspection Start Date: April 11, 2023 Inspection Start Time: 14:20 Inspection End Date: April 12, 2023 Inspection End Time: 11:10			<b>Inspection Type:</b> Coal Part <b>Inspection Reason:</b> Norma <b>Weather:</b> Clear	<b>1</b>
Joint Inspection Agency:		Joint Inspection Contacts:		
None				
Post Inspection Agency:		Post	Inspection Contacts:	
None				
Inspector(s):	Inspecto	r's Sig	gnature:	Signature Date:
Robert Zuber, P.E.	Phot	D.	24-	
				4/18/2023

#### **Inspection Topic Summary**

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

- N Air Resource Protection
  N Availability of Records
  N Backfill & Grading
  NA Excess Spoil and Dev. Waste
  NA Explosives
  R Fish & Wildlife
- **R** Hydrologic Balance
- Y Gen. Compliance With Mine Plan
- N Other
- **R** Processing Waste

- **R** Roads
- **N** Reclamation Success
- **R** Revegetation
- $\boldsymbol{N}$  Subsidence
- ${\bf R}\,$  Slides and Other Damage
- **R** Support Facilities On-site
- Y Signs and Markers
- N Support Facilities Not On-site
- Y Special Categories Of Mining
- **R** Topsoil

## **COMMENTS**

A partial inspection was conducted by Rob Zuber of DRMS on April 11 - 12, 2023.

Basil Bear was with the inspector at: the D Portal bench, the B Portal bench, along the road to the portals, and Gob Piles 2 and 4.

BRL staff were moving subsoil to the northwest corner of Gob Pile 3 from the stockpile east of that pile.

The weather was warm and clear. The ground was mostly dry.

FISH and WILDLIFE – Rule 4.18:

Many deer were seen onsite.

#### HYDROLOGIC BALANCE - Rule 4.05

Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

Seven sediment ponds were inspected: B, C, D, F, J, and K. None of the ponds were discharging. Most of the ponds contained water, but it was well below spillways. No significant problems were identified with embankments, spillways, inlet channels, or other features of the ponds.

The irrigation ditches that run through the permit area (Fire Mountain Canal, Deer Trail Ditch) were not flowing. The underdrain under Gob Pile 3 was flowing, but the flow was very small.

The ditch below Curve 8 on the road to the portals (Ditch B10) has been temporarily repaired. Permanent repairs (e.g., riprap) are required. No other problems with ditches or culverts were seen.

PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11 Drainage Control; Surface Stabilization; Placement:

Gob Piles 1, 2, and 3 appeared stable. The ditches and BMPs on the upper part of Gob Pile 2 appeared to be functioning.

Rings of mineral deposits were seen on Gob Piles 2 and 4, suggesting that water is leaching through the pile. This issue should be alleviated somewhat on Gob Pile 2 when the upper portion is reclaimed and there is less infiltration through the gob.

A blowout was seen at Gob Pile 4. This had been reported by BRL via email, and was inspected with Basil Bear. More detail is provided in the Slides and Other Damage section of this report.

ROADS – Rule 4.03 Construction 4.03.1(3)/4.03.2(3), Drainage 4.03.1(4)/4.03.2(4), Surfacing and Maintenance4.03.1(5) and (6)/4.03.2(5) and (6), Reclamation 4.03.1(7)/4.03.2(7):

The road to the portals was in good condition, but new slides were seen on the slopes adjacent to the roads. More detail is provided in the Slides and Other Damage section of this report.

No problems were identified with other roads.

REVEGETATION – Rule 4.15 Vegetative Cover; Timing:

Thistle plants were emerging on Gob Piles 2 and 4.

SLIDES and DAMAGE - Rule 4.12:

The blowout on Gob Pile 4 is about ten feet wide, and the height of the resulting face is approximately seven feet. Several drain pipes were scattered around the area, and apparently had been placed to drain a seep at the area of the blowout. Basil Bear noted that he never saw flow out of the pipe. The area above the blowout was inspected, and no low spots for water ponding was seen. However, the diversion ditch above this area needs to be cleaned.

It appears that the slump by Curve Number 11 along the Haul Road has not moved significantly in the recent past. However, other issues with slumps on the slopes above the road to the portals were seen:

- A slide has appeared above Curve 6.
- The slide on the west side of the B Portal bench is significantly worse and covers a bigger area than in the past.
- A small slide was seen at Curve 10.

These slides need to be monitored closely, and ditches and culverts along the road to the portals must be continually inspected to make sure they are functioning. Also, on the road surface itself, any cracks that appear need to be sealed to prevent water from saturating the soil below the road.

The cave in above the D portal (which occurred around February 25, 2023) was inspected, and the repairs appear to have been successful so far. BRL will monitor this closely, per Basil Bear.

#### SUPPORT FACILITIES - Rule 4.04:

The following areas appeared stable with no signs of erosion:

- D Portal bench
- Material storage area beside Topsoil Stockpile A
- Conveyor corridors
- Slopes above and below the Coal Stockpile Pad
- The area around the office
- The Preparation Plant and nearby water tank
- Pump House and Filter Building
- Old power plant
- Storage area west of Pond D
- The Unit Train Loadout, including the portion below Terror Creek Loadout.

TOPSOIL – Rule 4.06 Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

No erosion or other problems were seen with topsoil stockpiles or coverfill piles.

**DOCUMENTS RECEIVED** - none

OTHER (SPECIFY) - none

## ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

# **PHOTOGRAPHS**



Lower portion of Gob Pile 2 (note "ring" of mineral deposits from seep)



Pond F



Ditch F7 above Pond F, looking west







Train tracks below the Terror Creek Loadout



Ditch B29 and culvert B28, east of B Pond



Soil piles east of Gob Pile 3



**Blowout on Gob Pile 4** 



West Diversion Ditch above the blowout on Gob Pile 4



Slide above Curve 6 (Curve 8 in background)



Temporary repair of Ditch B10 (Curve 8 in background)



Slides above the B Portal bench