




**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY  
COAL PROGRAM INSPECTION REPORT**



**PERMIT INFORMATION**

<b>Permit Number:</b> C-1982-056 <b>Mine Name:</b> Foidel Creek Mine <b>Operator:</b> Twentymile Coal, LLC <b>Operator Address:</b> Mr Jerry Nettleton 29515 Routt County Road No. 27 Oak Creek, CO 80467	<b>County:</b> Routt <b>Operation Type:</b> Underground <b>Permit Status:</b> Active <b>Ownership:</b> Federal
	<b>Operator Representative Present:</b>  Brian Watterson
<b>Operator Representative Signature: (Field Issuance Only)</b>  	

**INSPECTION INFORMATION**

<b>Inspection Start Date:</b> November 20, 2013 <b>Inspection Start Time:</b> 08:00 <b>Inspection End Date:</b> November 20, 2013 <b>Inspection End Time:</b> 12:00		<b>Inspection Type:</b> Coal Partial Inspection <b>Inspection Reason:</b> Normal I&E Program <b>Weather:</b> Foggy	
<b>Joint Inspection Agency:</b>  None		<b>Joint Inspection Contacts:</b>	
<b>Post Inspection Agency:</b>  None		<b>Post Inspection Contacts:</b>	
<b>Inspector(s):</b>  Jason D. Musick  Zach T. Trujillo	<b>Inspector's Signature:</b>  		<b>Signature Date:</b>  11/25/2013

<b>Inspection Topic Summary</b>	
NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable	
<b>N</b> - Air Resource Protection <b>N</b> - Availability of Records <b>NA</b> - Backfill & Grading <b>NA</b> - Excess Spoil and Dev. Waste <b>N</b> - Explosives <b>N</b> - Fish & Wildlife <b>R</b> - Hydrologic Balance <b>R</b> - Gen. Compliance With Mine Plan <b>NA</b> - Other <b>R</b> - Processing Waste	<b>R</b> - Roads <b>N</b> - Reclamation Success <b>N</b> - Revegetation <b>N</b> - Subsidence <b>NA</b> - Slides and Other Damage <b>N</b> - Support Facilities On-site <b>Y</b> - Signs and Markers <b>NA</b> - Support Facilities Not On-site <b>NA</b> - Special Categories Of Mining <b>R</b> - Topsoil

### **COMMENTS**

This was a partial coal inspection conducted by Jason Musick of DRMS. Zach Trujillo of the Division and Brian Watterson of Twentymile Coal accompanied the inspection. The weather was cloudy with light snow fall and the mine site was wet at the time of the inspection. This inspection focused on approved activities associated with the Refuse Disposal Areas. One coal train was in the process of loading during the inspection.

#### **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;

Due to construction of the CRDA being completed in phases, initial perimeter ditches are constructed as temporary ditches. Permanent ditches have been designed, but are not constructed due to the initial stages of CRDA construction. All temporary CRDA ditches were stable at the time of the inspection. The construction for RDA-4 has been initiated. RDA-4 has not been cut in,; however, topsoil has been windrowed and will be direct hauled to the face of the RDA. No problems were noted.

The CRDA has been designed with a toe-drain to prevent any significant build-up of hydrostatic pressure within the pile. The toe-drain is designed to discharge into the Area #1 Pit. The Northern end of the toe-drain has been covered with refuse and no discharge was noted at the outlet and into the Area #1 Pit. No problems were noted. The southern end of the toe drain remains uncovered. The toe-drain construction will continue south upon the initiation of Phase II of the RDA Expansion.

In addition to the RDA area, the following areas identified in the previous inspection and observed during this inspection, have been addressed:

- The lower end of the ditch and associated rock check dams (B-1) west of the BOB Pile had failed. The coal fines were contained in the area by the Southeast sediment basin and the ditch along the railway; however this area required maintenance to clear coal fines that have built up and to re-establish the ditch. Evidence of maintenance was identified; however additional material has breached the ditch and continues towards the north west. This area has been adequately addressed and the ditch re-established.

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 2



BOB Pile Clean up and Ditch Repair

**GENERAL MINE PLAN COMPLIANCE:**

The Foidel Creek Mine was in the process of a longwall miner move from the 14 LT Panel to the 13 LT Panel during the inspection. According to TC personnel, the longwall move should be completed in approximately 10 days from the date of the inspection. Recent permitted activities include the construction of the EMD water monitoring boreholes permitted with MR268.

In addition to the RDA area, the following areas identified in the previous inspection and observed during this inspection, have been addressed:

Due to the dredging operations at the Fish Creek Borehole ponds water is being diverted and new valves are being installed on the pipeline along the Fish Creek Borehole access road. These areas are approved to be disturbed and have yet to achieve bond release; however backfilling and grading, topsoil replacement and reseeding has been done in these two valve installation areas. Any disturbance will require segregation of topsoil, erosion control installation, and required markers. These areas have been identified and BMP's were in place at the time of the inspection.



Erosion Control at Fish Creek Borehole Access Road

**PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11**

Drainage Control; Surface Stabilization; Placement:

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Refuse material continues to be placed in the RDA expansion area. Material has been placed towards the middle of the Phase 1 area of the RDA expansion area and approximately midway in the RDA with evidence of grading having been conducted during the inspection. The RDA was well compacted and stable at the time of the inspection. The refuse material had not yet reached the head of the under-drain of the RDA. The exposed under-drain was stable and constructed as designed. Phase 1 of the RDA expansion is nearing completion.

The first bench has been completed and the second bench is near elevation. The out slope of the first bench is stable and the outslope of the second bench is stable.



RDA Bench



Cover material on RDA toe

In order to determine the current elevation of the RDA expansion area and make a comparison with the approved Exhibits C-101 and C-102. GPS points were collected at the current end of the underdrain, the outlet of the underdrain, along the first bench of the RDA, and at the edge of the current lift of refuse elevations utilizing a Trimble Yuma. The points collected at the site were downloaded from the Trimble into Pathfinder office and converted into a point shapefile to utilize in ArcGIS. The points collected were compared with the approved RDA elevations in Exhibit 26C.

Elevation data, using the Trimble Yuma is not exact. The main purpose of the elevation collection was to determine if the elevation data showed any anomalies such as drastic elevation changes or fluctuations in elevation. All elevation points were ~10' lower than the elevation from the base points. Given the inexact elevation data collection of the Trimble Yuma, this difference in elevation is acceptable.

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

RDA haul roads were stable in and around the refuse area. No problems were noted during the inspection.

In addition to the RDA area, the following areas identified in the previous inspection and observed during this inspection, have not been addressed:

- Maintenance work conducted along Haul Road C and the Brown Palace access road to clear the roadside culvert and the sediment pump was conducted. This maintenance breached the established berm and failed to re-establish proper drainage to the sump on the east side of the road. This area will require additional maintenance to re-establish the berm and address the east side of the road.

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

Due to the initiation of the RDA-4 ditch, topsoil is being windrowed along the ditch construction area. This material will be direct hauled to the toe of the RDA expansion area. Based on the approved Exhibit 26C 2.5 feet of cover material will be placed on the toe of the RDA and 1.5 feet of topsoil will be placed on cover material for a total of 4 feet of cover. Cover material was placed on the toe slope to the first bench of the RDA. Four cover material depths were inspected and found to be +2 feet of cover material.

**DOCUMENTS RECEIVED** MR-271 application was received during this inspection.

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Number of Complete Inspections this Fiscal Year: 2

**ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions are pending and none were taken as a result of this inspection.

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Number of Complete Inspections this Fiscal Year: 2