




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



PERMIT INFORMATION

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

INSPECTION INFORMATION

Inspection Start Date: October 22, 2013 Inspection Start Time: 13:00 Inspection End Date: October 23, 2013 Inspection End Time: 12:00	Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear
Joint Inspection Agency: None	Joint Inspection Contacts:
Post Inspection Agency: None	Post Inspection Contacts:
Inspector(s): Jason D. Musick	Inspector's Signature:  Signature Date: 10/29/2013

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

COMMENTS

This was a complete coal inspection of the Foidel Creek Mine conducted by Jason Musick of CDRMS. Brian Watterson of TC accompanied the inspection. The weather was clear and the site was dry throughout.. One coal train was loading during the inspection.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

All records were located at the TC office and up to date. See attached DRMS Availability of Records.

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: Ponds B, C, D, E, F, G, 6NM, 18LT, 6NM sediment pond, the Fish Creek borehole ponds, the Fish Creek Tipple pond and the Pit Pond were observed during the inspection. Discharge was noted at Ponds D, Pond B, and the Fish Creek Tipple pond. The Fish Creek Borehole Pond #1 was in the process of being pumped in order to dredge the pond. New baffles will be installed in all three of the ponds.

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Fish Creek Borehole Ponds Cell#1 Pumping



Fish Creek Borehole Ponds Cell#2

All pond embankments were well vegetated and stable with no problems noted. Items identified since the August 2013 Coal Complete inspection which have been addressed include:

- The ditch east of the railway requiring maintenance to remove excess sediment and flow to Pond B has been completed.
- Non-coal waste (old culvert) in the ditch between the emergency and primary spillways of Pond F has been removed.
- A sediment delta at the inlet of Pond E had formed and removed.
- A sediment delta at the inlet of Pond E has dredged.
- The sediment basin east of Pond B has been dredged.
- Heavy erosion from the Haul Road between the Pit and Pond D into Pond D has been addressed.
- Non-coal waste (old logs) was observed in the ditch from the Pit Pond to Pond D has been removed.



18RT Access Road Culvert Maintenance Work

Items identified since the August 2013 Coal Complete inspection which have not been addressed and newly

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identified maintenance items include:

- The silt fence at the Pond D outlet will require re-established as designed.
- The access road to Pond B displayed heavy erosion due to recent precipitation events. No evidence of run-off to Foidel Creek was noted as the run-off was flowing into the Northwest sediment basin. However, this road will require maintenance.

Ditches and culverts throughout the mine site were functioning as designed. No problems were noted with the exception of the following:

Items identified since the August 2013 Coal Complete inspection which have been addressed include:

- The outlet of third culvert from the northern most end of the 18RT access road was blocked and has been re-established.
- The 18RT access roadside ditch continued to cut into the road. The ditch has been cleaned and rock check dams have been repaired and re-established.
- Material had been spilled or dumped in the 6MN diversion ditch at the Rock dust tank at 6MN pad. This material has been pulled back and the ditch re-established.

Items identified since the August 2013 Coal Complete inspection which have not been addressed and new items include:

- An unidentified culvert along the 6MN access road remains blocked at the outlet. This culvert requires maintenance. In addition, this culvert is not identified on the currently approved Map 24. **Please address before November 30, 2013.**
- Heavy down-cutting remains at the 6MN Pad diversion ditch to the 6MN sediment pond, with gullies on the slopes of the 6MN pad to the collection ditch. This area has been addressed; however the down-cutting of the main ditch was not addressed and new gullies have started on the slopes of the pad.
- The lower end of the ditch and associated rock check dams (B-1) west of the BOB Pile has failed. The coal fines were contained in the area by the Southeast sediment basin and the ditch along the railway; however this area will require 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. **All repairs and clean-up to be conducted before November 30, 2013.**
- Although the outlet of the third culvert from the northern most end of the 18RT access road was blocked and has been re-established, this area will require seeding.
- The culvert under the access road to the County Road 27 rock dust tank was block at the outlet and will require maintenance. **Please address before November 30, 2013.**
- Three ~ 8" pipes are identified under the 6MN access road to aid in the drainage of water in the area. These pipes are not identified on Map 24 and no designs for these pipes exist.
- Road base material used to repair the flooded 6NM access road was washed to the north side of the road. This material will need to be pulled back or removed.

The 16LT utility borehole SAE was stable with no problems noted, with the exception of the following:

- The erosion control fabric throughout the pad has been damaged and will require maintenance.

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Ditch B-1 Breach from BOB Pile

GENERAL MINE PLAN COMPLIANCE:

The longwall is currently at the end of the 14LT inby panel and is being prepped to move to the 13LT inby panel. Coal is being stockpiled at the ROM pile and the BOB pile.

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. **Please address before November 30, 2013.**

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

Refuse material continues to be placed in the RDA expansion area. Material was in the process of placement and grading at the time of 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. TR67 was approved with a stipulation that future bonding for each phase of construction will be required prior to the initiation of the next Phase.

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. The construction of the east perimeter ditch is on-going with topsoil being direct hauled to the face of the RDA Expansion slope. Piezometers have yet to be installed.

The underdrain outlet was draining into the Pit Area Pond as designed. Evidence of weed management along the west side of the RDA was observed.

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Toe Drain at RDA Expansion



RDA Expansion



Toe Drain



RDA Expansion



Perimeter Ditch Construction



Topsoil Placement

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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):

Roads throughout the mine site were dry but stable at the time of the inspection. All roads were in good condition with no problems noted, with the exception of the following:

- As noted in the September 2013 inspection, 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. **Please address before November 30, 2013.**

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

The reclaimed Fish Creek Tipple area, 18RT vent shaft area, and the bleeder shaft are stable with no problems noted.

The Fish Creek Tipple Area had been recently interseeded.

SUBSIDENCE – Rule 4.20:

During the inspection, the Division identified two damaged areas of Routt County Road 27. These areas were ~100ft apart in the asphalt on the North side of the road. The damage was well outside of the current mining limits and the predicted angle of draw due to subsidence. The Division recognized the RCR27 culvert below the damage. At this time the Division does not believe that the damage is due to subsidence; however TC has installed survey points to monitor the area and the Division will continue to research current mining limits and effects of the subsidence.



RCR 27 Damage



RCR 27 TC Marker

SUPPORT FACILITIES ON-SITE:

Support Facilities on-site were stable, with no problems noted, with the exception of the following:

- TC has installed an addition to the concrete trash containment area at the portal. This addition will be permitted under MR268.

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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:

As noted above, topsoil is being replaced on the out slopes of the RDA Expansion area via direct haul and from the RDA Topsoil pile. No topsoil depths were confirmed during this inspection.

Topsoil piles on site were stable and well vegetated with no problems noted with the exception of the following:

- The topsoil pile at the Rock Dust Tank at RCR 27 continues to displayed little vegetation and a substantial amount of rock dust covering the pile. The pile will need to be revegetated and the rock dust removed.

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ENFORCEMENT ACTIONS/COMPLIANCE

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

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Note 1
Permit Application w/Revisions	OK
Findings Document	RN5
Insurance Certificate	Exp 11/11/13
Bond Document	SB-008
	\$10,056,089
Phased Bond Release	SL1
Documents/Findings	
Air Emission Permits	93RO1204 Note3
County Special Use Permits	Exp 8/24/14
UG Mining Landowner Notification	11/09/07
Subsidence Monitoring Reports	2012 ARR
Subsidence Monitoring Data	OK
Rill & Gully Survey	NA
Vegetation Monitoring Data	NA
Specific Variance Approvals	NA
Annual Reclamation Reports	2012
Midterm Review Documents	2010
DRMS/OSM Inspection	Through 9/2013
Reports/Enforcement Actions (3 Years)	
Transfers/Succession of Operator	NA
Temporary Cessation Notification	NA
Reclamation Cost Estimate	2010 Midterm
CERTIFICATIONS	
Pond Certifications	PAP
Annual Certifications for Large Impoundments	OK
Fill Certifications for Excess Spoil or Underground Development Waste	3Q 2013
• Quarterly Inspections	3Q 2013
• Compaction Testing	3Q 2013
• Final Certification	NA
Coal Processing Waste Banks	3Q 2013
Haul Road Certifications	PAP ex 25
Access Road Certifications	PAP ex 25

HYDROLOGIC RECORDS

NPDES Permit	Note 3
NPDES Records	2Q 2013 Note 4
Stormwater Management Plan	2012
SPCC Plan	2011
MSHA Pond Inspections	7/5/2013
	NA
State Engineer's Pond Inspection	
Quarterly Pond Inspections	3Q 2013
Annual Hydrology Reports	2012
• Ground Water Monitoring	AHR
• Surface Water Monitoring	AHR
• Spring & Seep Monitoring	AHR
• Mine Water Discharge Monitoring	AHR
• Mine Inflow Study	AHR
• Water Consumption Records	AHR
Well Permits	OK

BLASTING RECORDS

Blasting Publication	NA
Blasting Records (3 years)	NA
ATFE Explosives Permit	Exp 9/1/2014
Blasting Variances	NA
Pre-Blast Surveys	NA

ADDITIONAL RECORDS (specify)

COMMENTS: 1 – RN6 currently under proposed by the Division 2 – Air Emissions Permit is currently in the renewal process 3 – COG85000 exp 6/30/2013, COG85004 exp 6/30/2013, COG0042161 exp 6/30/2012, CO0027154 exp 8/31/2012, CO0036684 exp 4/30/2012 All expired permits are in the process of renewal with CDPHE

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