

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



PERMIT INFORMATION

Permit Number: C-1981-014 Mine Name: Southfield Mine Operator: Energy Fuels Coal, Inc. Operator Address: Mr George Patterson P.O. Box 459 Florence, CO 81226 **County:** Fremont **Operation Type:** Underground **Permit Status:** Permanent Cessation **Ownership:** Private

Operator Representative Present:

None

Operator Representative Signature: (Field Issuance Only)

INSPECTION INFORMATION

		Inspection Type: Coal Partial Inspection Inspection Reason: Normal I&E Program Weather: Clear		
Joint Inspection Agency:		Joint Inspection Contacts:		
None				
Post Inspection Agency:		Post Inspection Contacts:		
Inspector's Signature:		nature: Signature Date:		
Jan		10/17/12		
		2012 Joint Post Inspector's Sig		

Inspection Topic Summary

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

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

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

COMMENTS

This was a partial inspection conducted by Janet Binns and Jason Musick of DRMS. The focus of this inspection was to locate and document the condition of drill holes, exploration holes, development drill holes, and other holes, previously identified by a landowner, Dr. W. D. Corley. The weather was warm and dry at the onset of the inspection, with a rain storm moving in late morning on 10/12/2012.

Dr. Corley and Jack Robeda, Ranch Manager for the Corley Company, met us at the Corley Ranch road on Thursday monring. Dr. Corley and Jack Robeda discussed their concerns with us regarding the sediment deposition on Fremont County road No. 92 at the locked gate north of the Southfield permit boundary. We showed Dr. Corley the list of drill holes that he had previously sent to the DRMS. At this time Dr. Corley informed the Diviison that he had some additional holes on a spreadsheet. He will send the additional hole coordinates to the Division. We we unable to receive this updated list while in the field.

BACKFILL and GRADING – Rule 4.14, Stabilization of Rills and Gullies 4.14.6:

EFCI had contractors on site filling the previously identified subsidence holes with spoil material. The spoil material used for filling the holes is a stockpile that is located immediately adjacent to the subsided area that is believed to be remnant from reclamation of a surface pit conducted by the DRMS-Inactive Mines Program in the 1980's.

Use of this material was acceptable to the landowner and is addressed in MR58. Five of the 6 holes had been filled, compacted and graded by Friday morining (10/12/2012). The contractor was in the process of filling the remaining hole with dirt and rock mixture from the pre-existing spoil pile. Observation of the spoil material did not visually indicate any cause for concern regarding use of this material.

FISH and WILDLIFE – Rule 4.18:

A herd of elk were observed on the ridge east of the portal area the morning of 10/12/12. It was opening day of rifle season. No hunters were observed, nor were any expected to be in the area according to the landowner.

Several cow elk were observed along with 4 to 5 bull elk.

Wild turkeys were encountered along Fremont County Road No. 92.

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;

Sediment control ponds and ditches appeared to be functioning as designed.

GENERAL MINE PLAN COMPLANCE:

Subsidence holes previously identified are being mitigated in accordance with the PAP. The Division continues to research the status of exploration/development drilling holes.

ROADS – Rule 4.03 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):

Sediment remains on the surface of the Fremont County Road north and south of the locked gate. Waterbars have been cut into the roadway between the gate and Southfield's permit boundary. This appears to be an effort to direct runoff off the road and into the roadside ditches. Dr. Corley and Jack Robeda expressed concerns with these waterbars and request they be graded out.

The source of much of the sediment appears to be from the GEC ditch on the South side of the county road, and from undisturbed and historic disturbances on the north side of the road north and west of EFCI's disturbance area. All EFCI disturbance area runoff reports to Pond 5, Pond 4, or several permitted SAE's. There was no evidence that EFCI's sediment control system had failed or breached. There was no evidence that Pond 5 had discharged.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The focus of this inspection was to document the status of drill holes specifically located on Dr. Corley's property. Map 12 shows many of the drill holes. Dr. Corley had previously sent an e-mail attachment (March 8, 2012) listing the coordinates and specifics of holes of concern. Exploration drill holes were also included on the list of holes to verify. Jason Musick downloaded the coordinates into a GPS unit (Yuma). We started observations with drill holes along Fremont County Road No. 15.

DH4: Based upon coordinates and maps, this hole location was on the north side of FCR 15, approximately at the intersection with the turn off for the Thompson Ranch road. There was no sign of an open hole. However, this location appeared to correlate with a steel manhole located along the Florence water line. Any disturbance alongside the county road had been graded and seeded and had an adequate cover of grasses.

SF-87-07: remains opened and a 4" diameter PCVC casing with a cap remain in place. This hole was permitted with MR-11 and was originally drilled under exploration permit CX1988-154-19. Southfield will need to seal this borehole in accordance with Rule 4.07.3.

C5601 and C6301 were located and found to be sealed, reclaimed and marked with steel posts.

C5602 and C6302 were located along the property line fence. Each location was sealed, reclaimed, and marked with a steel post along the fence line.

CC-21 was located, sealed, reclaimed and marked with a 1 1/2" aluminum post.

We were unable to locate any evidence of TB-02, TB-03, TB-04, or TB-05.

SR63 was located and found evidence of cuttings on the surface, sealed and reclaimed. No marker.

LS14142 location we found 3 posts. Area appeared reclaimed with no open holes.

SF87-09 remains open. A 4" pvc casing is present, and is capped. This hole was previously permitted as CC54A and was converted to SF87-09 with MR-11. Southfield will need to seal this borehole in accordance with Rule 4.07.3.

CC-54 is sealed, reclaimed and marked with a steel post, and located adjacent to SF87-09.

SF85-02. We were unable to locate a marker, open hole or casing. The area looked like a reclaimed access road with a good stand of reclaimed grass species. This hole was originally permitted under MR7 (1985). It appears that this well was not drilled, as only 6 of the permitted 11 holes were drilled.

SF85-03: Area was reclaimed, a steel post was lying on the ground in the area, and partially buried black plastic was noted at this location. The Division has a drill hole abandonment report for this hole, dated 1/10/1986, Mitchell Drilling, lic. #973. This is found in the MR7 files.

SF64, SR62 and SR62A, there were no signs of disturbance, holes, reclamation, casing or markers for any of these three holes.

MW-8 was located. This monitoring well consists of a PVC casing contained within a steel casing. This well is not capped. EFCI no longer monitors this groundwater well. This well will require permanent sealing in accordance with Rule 4.07.3.

CC-11 is located just north of the Corley ranch road. This hole remains open with a steel casing and cap. The cap is not locked. The Division is researching if EFCI is responsible for this well.

CC-45 was not located. No evidence of disturbance, casing or marker was found.

DH-5 consists of a concrete vault with a pipe and valve in it. No borehole was observed in this location. A discussion with the landowner, Doug Corley, later in the day, Dr. Corley believed that DH-5 was a valve access to the old abandoned Florence waterline.

WCC-10 was marked with a green steel post. The hole had been sealed, the area reclaimed and revegetated. CC-16 had been sealed, reclaimed and marked with an aluminum post.

WCC-18 (or 1B) could not find any sign of hole, disturbance, casing or marker.

WCC-03: A 4X4 wooden post was cemented into the ground with a steel post lying nearby on the ground. The site has been sealed and reclaimed.

WCC-06: Unable to locate disturbance, casing, hole or marker at this location.

WCC-05: Hole has been sealed, site reclaimed and a steel post marking the location.

CC59: No sign of disturbance, casing, marker at this location. Location is adjacent to the Coley ranch road and near a cinderblock building.

SR56 Unable to locate a sign of a hole, casing or marker.

NC2: Unable to locate sign of a hole, casing or marker.

SR5R: No sign of hole, marker or casing.

TH6: No sign of hole, marker or casing at the coordinates shown on map or provided by the landowner.

Unidentified hole located west of TH6 almost on fence line. This hole is between TH6 and HW-1 on the map. Hole appears sealed with about 2 ft. open at the surface. There was no marker or casing remaining. Pieces of wood on the ground near this opening.

SR55: vegetation dominated by smooth brome typical of reclaimed drill pad, cuttings on surface, pink flagging tape on yucca next to cuttings. No marker.

TH3: No evidence, no hole, casing or marker.

TH2: T-post marker located, area appears reclaimed.

NC-1: A steel T-post was located on the edge of the Newlin Creek Mine reclamation.

SUBSIDENCE – Rule 4.20:

Six subsidence holes had previously been identified located west of the Thompson Ranch road and east of Fremont County road No. 15, adjacent to Newlin Creek. EFCI is in the process of repairing these subsidence holes. Repair consists of filling with additional rock/dirt mixture, compacting this material with the bucket of the excavator. grading the surface to blend with the surrounding area, topsoil placement, seeding with the permitted seed mix, chipping the tree branches and spreading the chipped organic material as a surface mulch. A contractor, Kessler Construction, was on site conducting this work during both days of the inspection.

The contractor was taking precaution not to disturb the AML brass cap markers from a project conducted by the Division in the early 1980's. Five of the 6 holes were already filled, compacted and graded at the time the inspectors observed the repair work on the morning of 10/12/12. The contractor said that the holes did not collapse any further as rock/dirt material was packed into them. No further subsidence was encountered. The contractor was using a Cat 950 wheeled front end loader and an excavator to conduct the repair. The contractor also committed to repair to any fences and access routes used to access the site.

SIGNS AND MARKERS - Rule 4.02:

The landowner, Dr. Corley expressed a concern over the remaining Energy Fuels Mining sign located at the intersection of Fremont County Road No. 15 and 92. This location is outside of the permit area boundary and is not the official mine identification sign.

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

The contactor working on backfilling the subsidence holes indicated that topsoil would be imported from near the town of Rockvale. EFCI has collected analytical samples of this material and has sent the samples to a lab for analyses of fertility, texture, and SAR. The contactor expected to be placing topsoil on the regraded holes early next week. This topsoil is being provided by the contractor.

DOCUMENTS RECEIVED None

OTHER (SPECIFY) NA

ENFORCEMENT ACTIONS/COMPLIANCE

The Division continues to evaluate the mitigation of the subsidence holes and the clearing of the wood probe in MW-NW.

PHOTOGRAPHS



SF87-07

C-63-01



C-56-01



C56-02





SR-63



LS14142

SF87-09







CC-54

SF85-02





SR-62A

SF85-03





DH-5





CC-16





WCC-03

WCC-06



WCC-05



Repairs to subsidence holes



final subsidence hole to fill



Repair to subsidence hole



AML brasscap. Contractor avoidance



Subsidence hole repair



spoil used for fill in subsidence holes



Open surface of hole near TH6 [HW-1(?)]





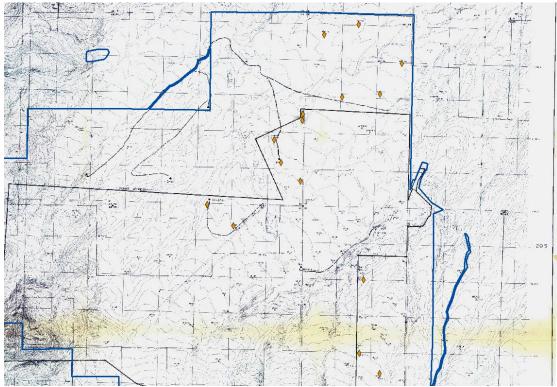




TH-2



East slope of RDA



Drill hole locations verified