



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 MICHAEL R. STYLER  
*Executive Director*  
 Division of Oil, Gas and Mining  
 JOHN R. BAZA  
*Division Director*

**Inspection Report**

Permit Number:	C0410002
Inspection Type:	PARTIAL
Inspection Date:	Tuesday, November 19, 2019
Start Date/Time:	11/19/2019 9:00:00 AM
End Date/Time:	11/19/2019 1:00:00 PM
Last Inspection:	Tuesday, November 5, 2019

Representatives Present During the Inspection:	
OGM	Amanda Daniels
OGM	Todd Miller
OGM	Justin Eatchel
OGM	Priscilla Burton
Company	Vicky Miller
Company	Amanda Lewis
Company	Bryant Bunnell

Inspector: Amanda Daniels  
 Weather: Mostly sunny, ~40F  
 InspectionID Report Number: 6575  
 Accepted by: SCHRISTE  
 11/22/2019

Permitee: **CANYON FUEL COMPANY**  
 Operator: **CANYON FUEL COMPANY**  
 Site: **SUFKO MINE**  
 Address: **597 SOUTH SR24, SALINA UT 84654**  
 County: **SEVIER**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **ACTIVE**

**Current Acreages**

691.73	<b>Total Permitted</b>
96.42	<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:**

An inspection was conducted as part of the Sufco midterm review on November 19, 2019. The main mine surface facilities were visited as well as the waste rock site. Link Canyon facilities were discussed, but not visited.

Refer to Map 5-2B for Extended East Spring Canyon surface facilities and Waste Rock volume Map 4D for waste rock surface facilities.

During the inspection the recent subsidence cracks that have occurred over panels 3R4E and 4R4E were discussed. The Permittee indicated that it was unlikely that the mine would be able to access the cracks for repair work this year due to snow and ice. The mine surface facilities were hit with a snow storm the night following the midterm inspection.

Inspector's Signature: \_\_\_\_\_

Amanda Daniels,

Inspector ID Number: 70

Date: Wednesday, November 20, 2019



**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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **3. Topsoil**

Three topsoil stockpiles are located in East Spring Canyon: the sediment pond stockpile, the overflow pond stockpile and the substation stockpile. All are shown on Map 5-2B. The latter two were observed and photographed. A recent photograph of the sediment pond topsoil was provided by the operator and is attached. (Due to a knee injury, Priscilla Burton was not able to hike down to the sediment pond stockpile.)

Substitute topsoil found on interim revegetated slopes was photographed. i.e. the slopes above and below the sediment pond and the slope above the portals and behind the office. Substitute topsoil is not marked on the surface facility map, but is identified in MRP Section 2.2.4.

The Waste Rock Map 4 series shows surface facilities and operational phases of the waste rock site facilities. Topsoil and subsoil salvage at the site has been completed through Phase 4, which corresponds to Map 4D. Map 4D shows two stockpile locations and provides a volume for those stockpiles. However, there are currently four stockpiles at the waste rock site. The third and fourth stockpiles are not shown on the Phase 4 Map 4D, because they were not originally contemplated. Since these stockpiles have been in place almost a year and appear to be long term, I discussed with B. Bunnell the need to update the surface facility map to show the location of all the stockpiles. (This request will be part of the mid term review, R645-301-521.165 and R645-301-521.122).

The topsoil and subsoil stockpiles shown on Map 4D were constructed during the initial expansion (Phases 1 & 2). They are bermed, vegetated, and signed. These stockpiles were seeded in 2016. Interestingly, desirable vegetation appears more vigorous on the subsoil than the topsoil stockpile. Stockpile photographs are attached.

The two stockpiles from Phase 3 & 4 construction were constructed, bermed and signed in December 2018. They are not shown on the Phase 4 Map 4D, because they were not originally contemplated. The 2018 stockpiles were seeded and mulched in November 2019. The seed tag from the seeding is attached. The 2018 stockpiles were photographed from a distance.

A repair of the leachfield was just completed and reseeding of the replaced topsoil is planned before the end of the year (personal communication with V. Miller and A. Lewis 11/21/2019).

#### **4.a Hydrologic Balance: Diversions**

The inlets of the undisturbed bypass culverts at the main mine surface facilities were inspected. This is the 60" Mud Spring Hollow culvert and the 72" East Spring Canyon culvert. Both of these diversions were dry and free of debris.

#### **4.b Hydrologic Balance: Sediment Ponds and Impoundments**

During the inspection the Upper Sediment Pond was drained and undergoing cleaning/sediment removal. During routine cleaning, disturbed drainage is routed directly to the Overflow Pond. Both of these ponds were inspected to verify that Plates 7-4 and 7-4A still reflect current conditions in the field. There were no issues found and the above mentioned drawings appear accurate.

The sediment ponds at the waste rock site were also inspected. Both ponds at the waste rock facility were dry and appeared to be in good condition. The sediment marker at the main pond was clearly marked and the primary and secondary outlets were found to be in good condition.

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

The Sufco water monitoring continues to be in compliance with the approved plan contained in the MRP and is entered into the DOGM database in a timely manner.

#### **7. Coal Mine Waste, Refuse Piles, Impoundments**

Topsoil and subsoil had been stripped from Phases 1 - 4 of the waste rock site. The volume of waste rock in Phase 1 was significantly less than anticipated because a sizeable amount had been recently removed. According to operator representative Bryant Bunnell, a large volume of coal mine waste was recently deemed profitable after blending with high grade product, leaving approximately 15% capacity in Phase 1.

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

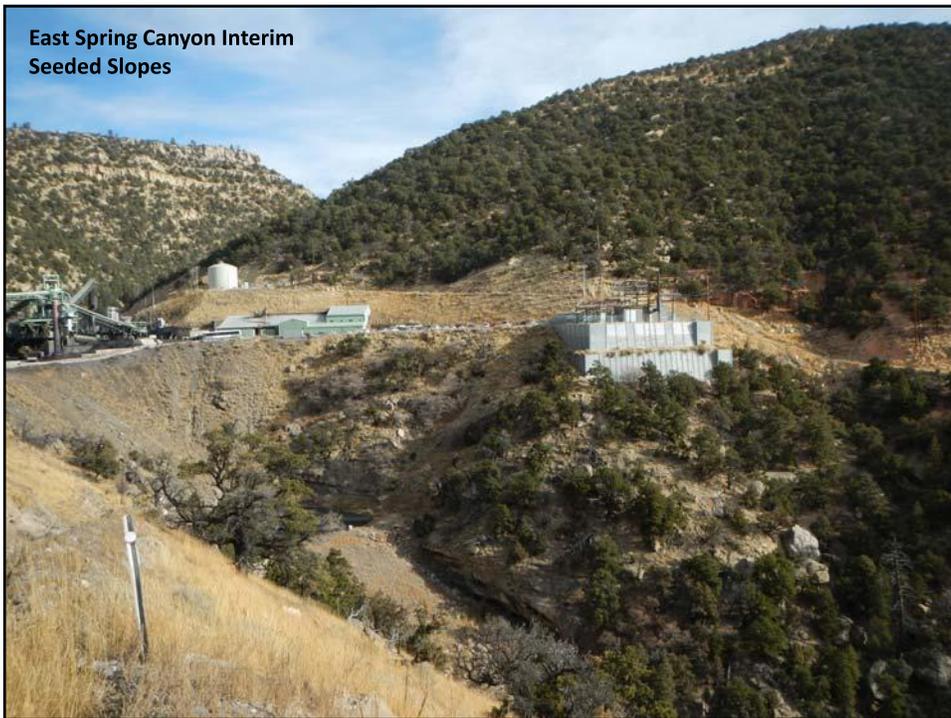
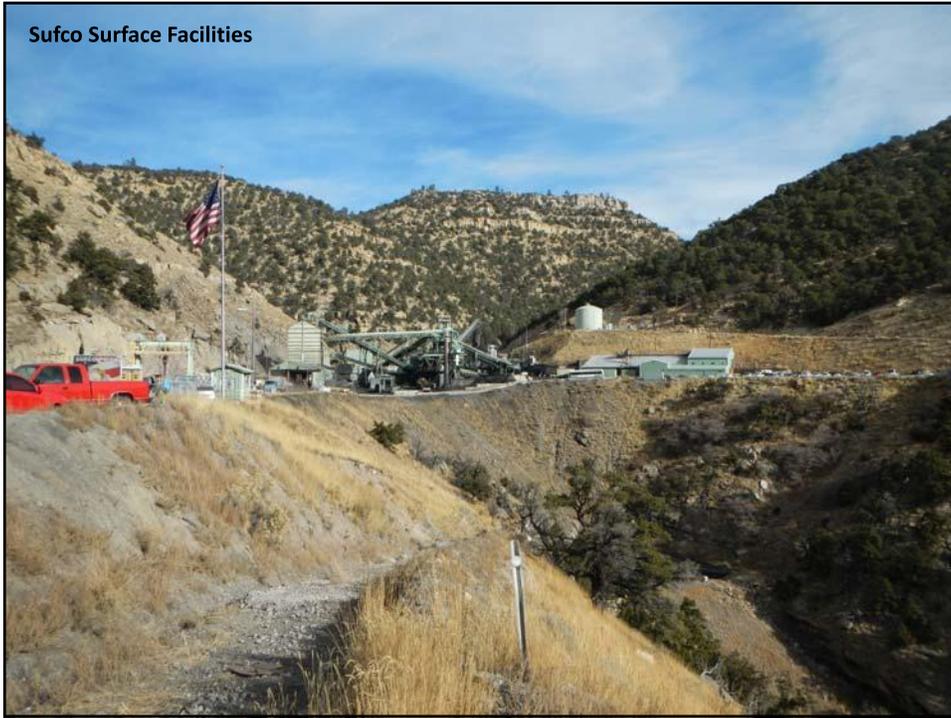
A recent subsidence event has created fairly large tension cracks above the 3R4E and 4R4E panels that were recently mined out. These features were not observed due to time constraints and winter conditions, but plans were discussed to repair these features during the Spring of 2020.

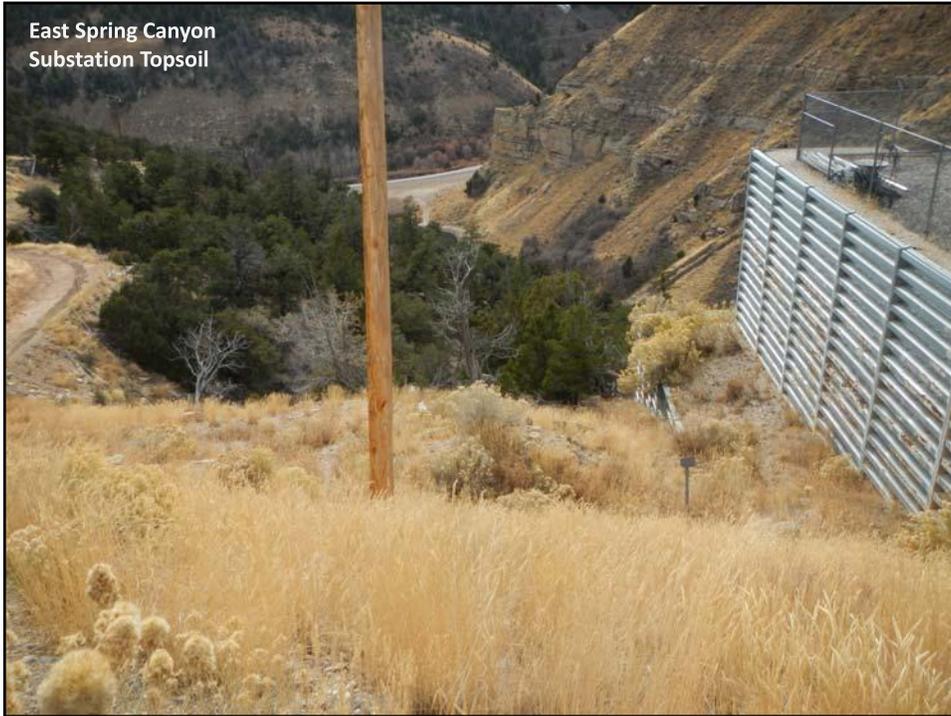
#### **13. Revegetation**

Five reference areas were observed during the inspection. At the Pond/Segregation location the Pinyon Juniper and Oakbrush reference areas were observed to be in good condition with no offsite impacts noted. At the Waste Rock Site the Sagebrush/Grass, Rabbitbrush/Sagebrush, and Mountain Brush reference areas were all observed to be in good condition with no offsite impacts noted.

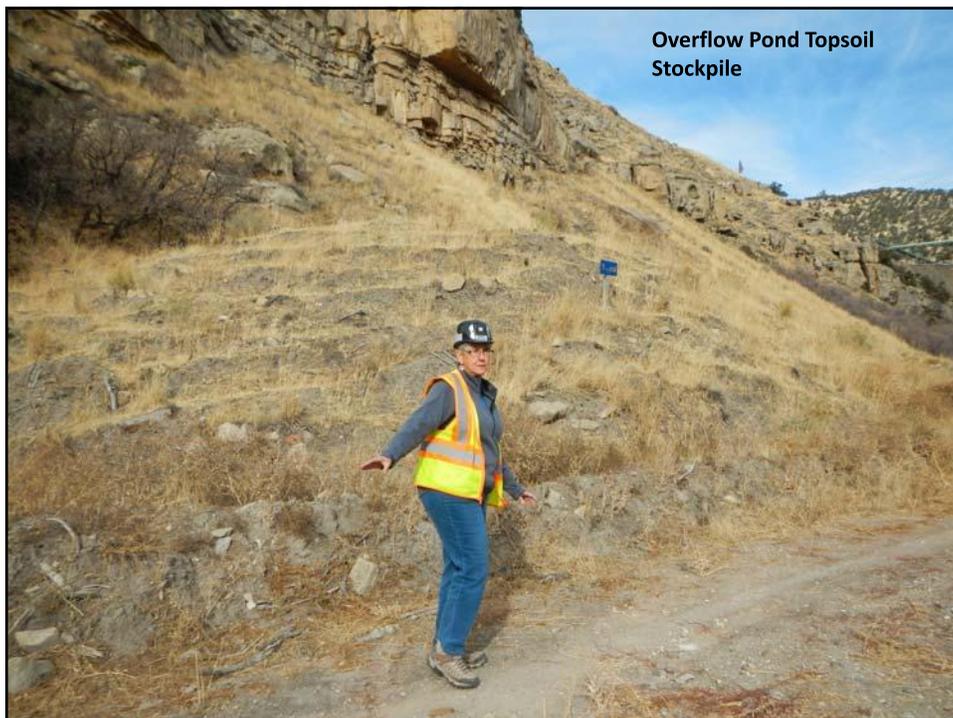
#### **21. Bonding and Insurance**

A reclamation bond in the amount of \$5,103,000 is held through Ironshore Indemnity Inc., an A-rated insurance company. Liability insurance is provided through Great Midwest Insurance Co. Policy number GL00169760 is current and is set to expire on February 1, 2020.













**Pond-Segregation  
Oakbrush Ref. Area**



**Pond-Segregation Pinyon  
Juniper Ref. Area**



**Waste Rock Mountain  
Brush Ref. Area**



**Waste Rock Rabbitbrush-  
Sagebrush Ref. Area**



**Waste Rock Sagebrush-  
Grass Ref. Area**



**Upper Waste Rock Site**



**Waste Rock Site, Phase 3 & 4  
subsoil on left & topsoil on right**



**Waste Rock Site,  
Phase 1 & 2 topsoil**



**Waste Rock Site,  
Phase 1 & 2 Subsoil**



**Waste Rock Primary  
Sediment Pond**









INTERMOUNTAIN SEED, INC.

Variety/Species	Purity% Germ%	Hard/ Dorm%	Total Viable%	Origin	Test Date
Bromar Mountain Brome	21.97	1.00	49.00	WA	8/6/2019
Goldar Bluebunch Wheatgrass	12.92	85.00	TZ	WA	7/25/2019
Schwendimar Thickspike Wheatgrass	11.44	96.00		WA	4/9/2019
Arriba Western Wheatgrass	11.44	96.00	TZ	ID	9/3/2019
Native Saskatoon Serviceberry	8.23	89.00	TZ	UT	6/13/2019
Tetra Basin Wildrye	7.63	96.00		UT	8/26/2019
Maple Grove Blue Flax	3.81	96.00	TZ	WA	8/12/2019
Native Mountain Snowberry	3.81	96.00	TZ	UT	8/12/2019
Timp Utah Northern Sweetvetch	1.97	93.00	TZ	CO	8/12/2019
Bandera Rocky Mtn Penstemon	1.87	98.00	TZ	CO	10/4/2019

*hks*

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Ephraim, Utah 84627

(435) 283-6639

Sales@siseed.com



INTERMOUNTAIN SEED, INC.

Variety/Species	Purity% Germ%	Hard/ Dorm%	Total Viable%	Origin	Test Date
Native Western Rubber Rabbitbrush	1.87	98.00	TZ	UT	3/21/2019
Native Mountain Big Sagebrush	1.05	70.00	TZ	UT	4/5/2019
Louisiana Wormwood - VNS	0.40	63.00	28.00	UT	6/20/2019
Eagle Western Yarrow	0.39	95.00	TZ	ID	8/6/2019

Total Purity: 88.80 Inert% 10.99 Crop% 0.14 Weed 0.06  
 Restricted Weed(s) None Found Noxious Weed(s) None Found  
 Seed Mixture Lot No. M-4581 Net Weight(lbs) 50.00 Customer Order No. Surfco Mine  
 Seed Mix Name or Project Custom Seed Mix - 2 acres

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