



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:	Wednesday, April 06, 2016
Start Date/Time:	4/6/2016 8:00:00 AM
End Date/Time:	4/6/2016 2:00:00 PM
Last Inspection:	Tuesday, March 08, 2016

Representatives Present During the Inspection:	
Company	Vicky Miller
OGM	Karl Houskeeper

Inspector: Karl Houskeeper
 Weather: Clear Skies, Temp, 44 Deg. F.
 InspectionID Report Number: 5488
 Accepted by: JHELFRIC
 4/18/2016

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

Current Acreages

720.48	Total Permitted
49.66	Total Disturbed
	Phase I
	Phase II
	Phase III

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:

Karl R. Houskeeper

Inspector's Signature:

Karl Houskeeper,
 Inspector ID Number: 49

Date Wednesday, April 06, 2016



Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.
 telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Signs and Markers

Mine identification signs are in place at all points of access into the mining permit area and are in compliance with the regulations.

3. Topsoil

See item 7.

7. Coal Mine Waste, Refuse Piles, Impoundments

The waste rock expansion area construction is completed. The topsoil area still needs to be seeded as well as the final area on the existing waste rock site that was recently covered with soil. Topsoil signs still need to be installed. The signs are on site, but need to be put in place. The contractor was finishing de-mobilization during the inspection.

No new waste rock has been placed into the waste rock expansion area and will not be placed until a base line survey of the area can be completed.

Pictures of the waste rock expansion area and topsoil pile were taken and are attached to the PDF version of this inspection report.

14. Subsidence Control

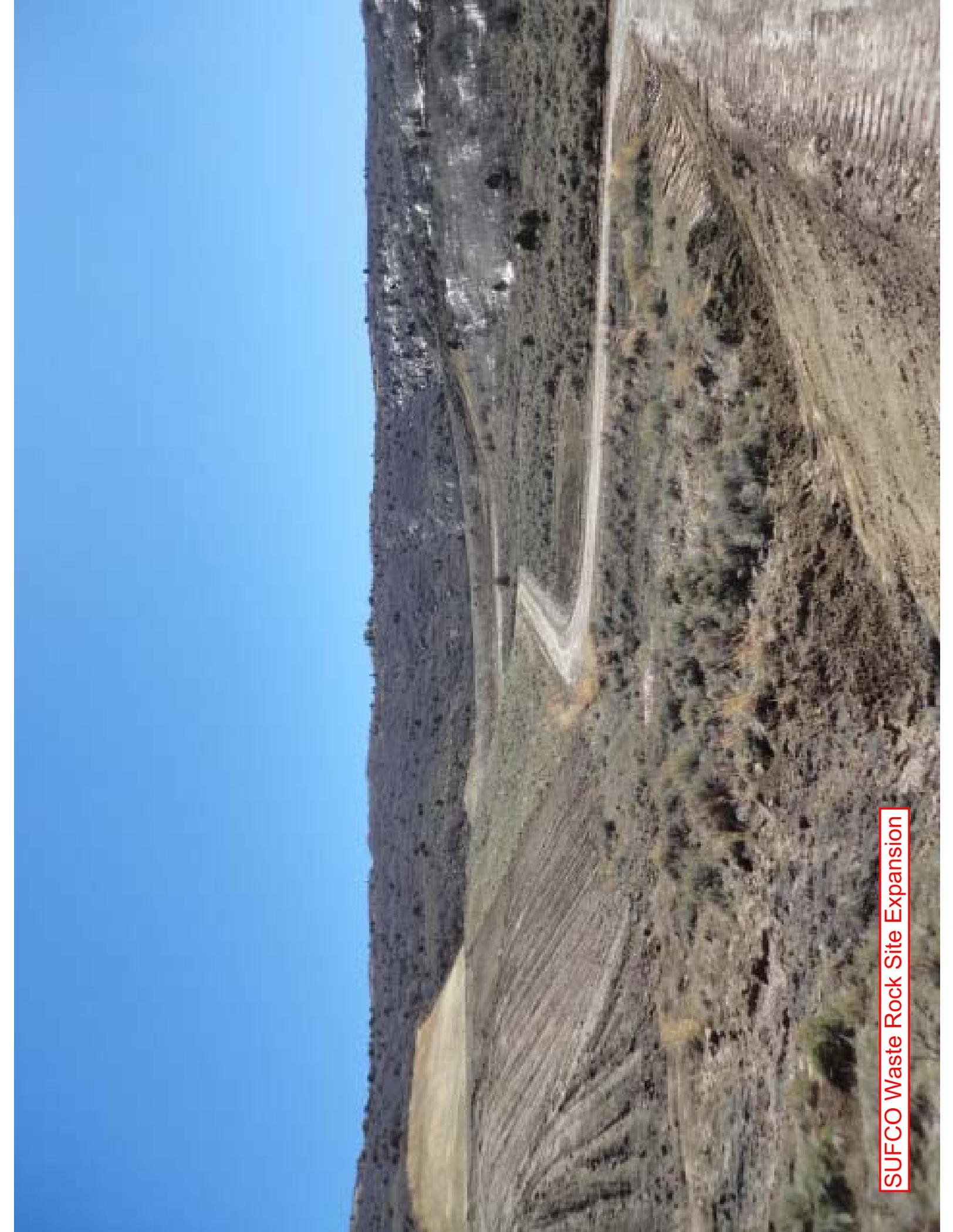
Wyatt Shakespear with SUFCO Mine contacted Division Inspector Karl Houskeeper by phone on 04/05/2016 at 1:50 pm to notify the Division of a subsidence discovery. The subsidence consists of a sink hole approximately 40w X 50l X40d. Division inspector Karl Houskeeper notified the Division Program Manager Daron Haddock immediately after the SUFCO call. The inspector asked that further information be submitted to the Division including location of the sink hole in proximity to mining, when the mining occurred and measures taken to secure and repair the damage.

The Division received an email from Wyatt Shakespear relative to the subsidence on 04/06/2016. This email, attached photos and maps pertaining to the sink hole are attached to this PDF version of the inspection report.

The subsidence area is currently only accessible by four wheeler access in the early morning hours.

18. Support Facilities, Utility Installations

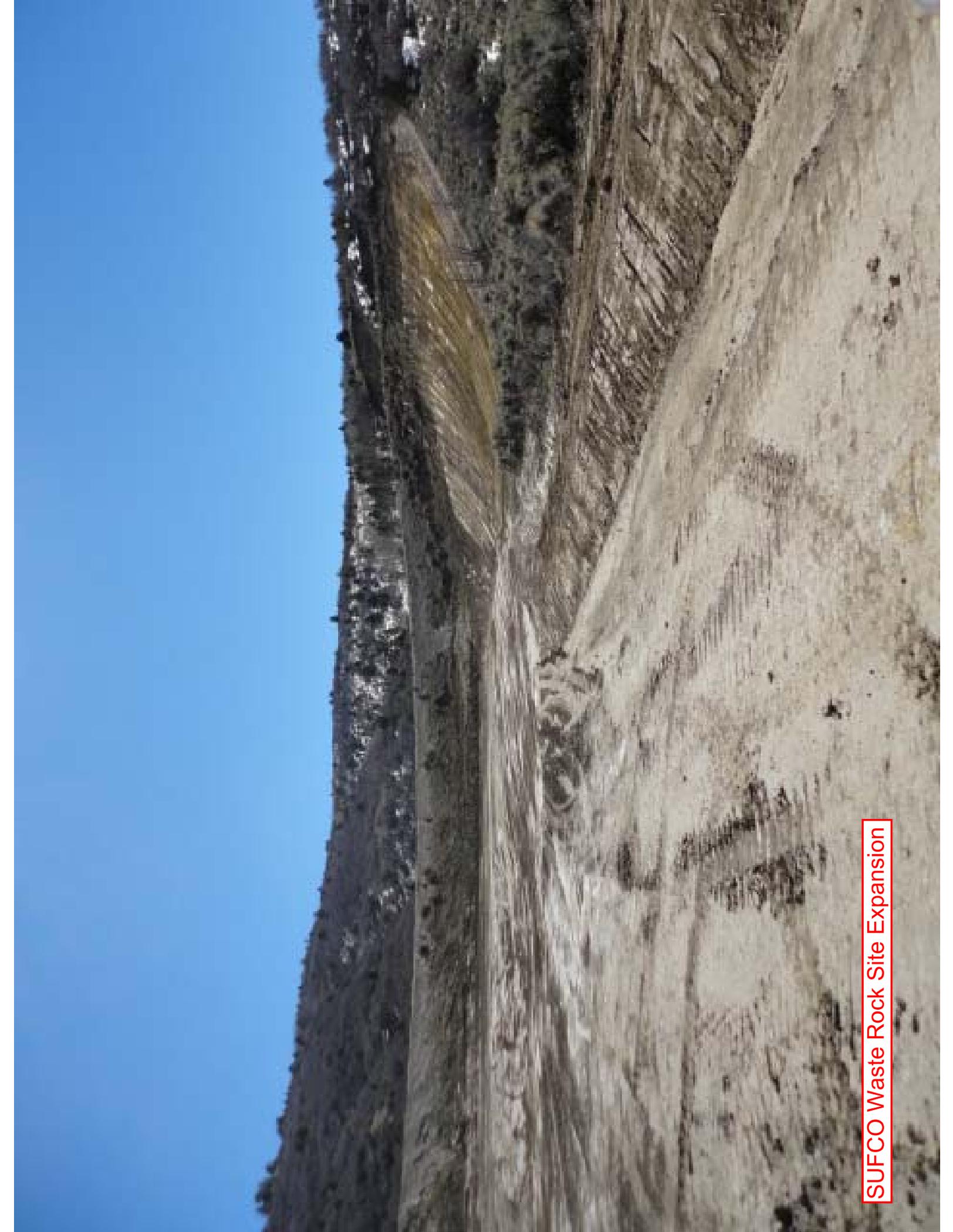
Vegetation has been burned off and/or removed from off the top of the leach field to allow it to function as designed.



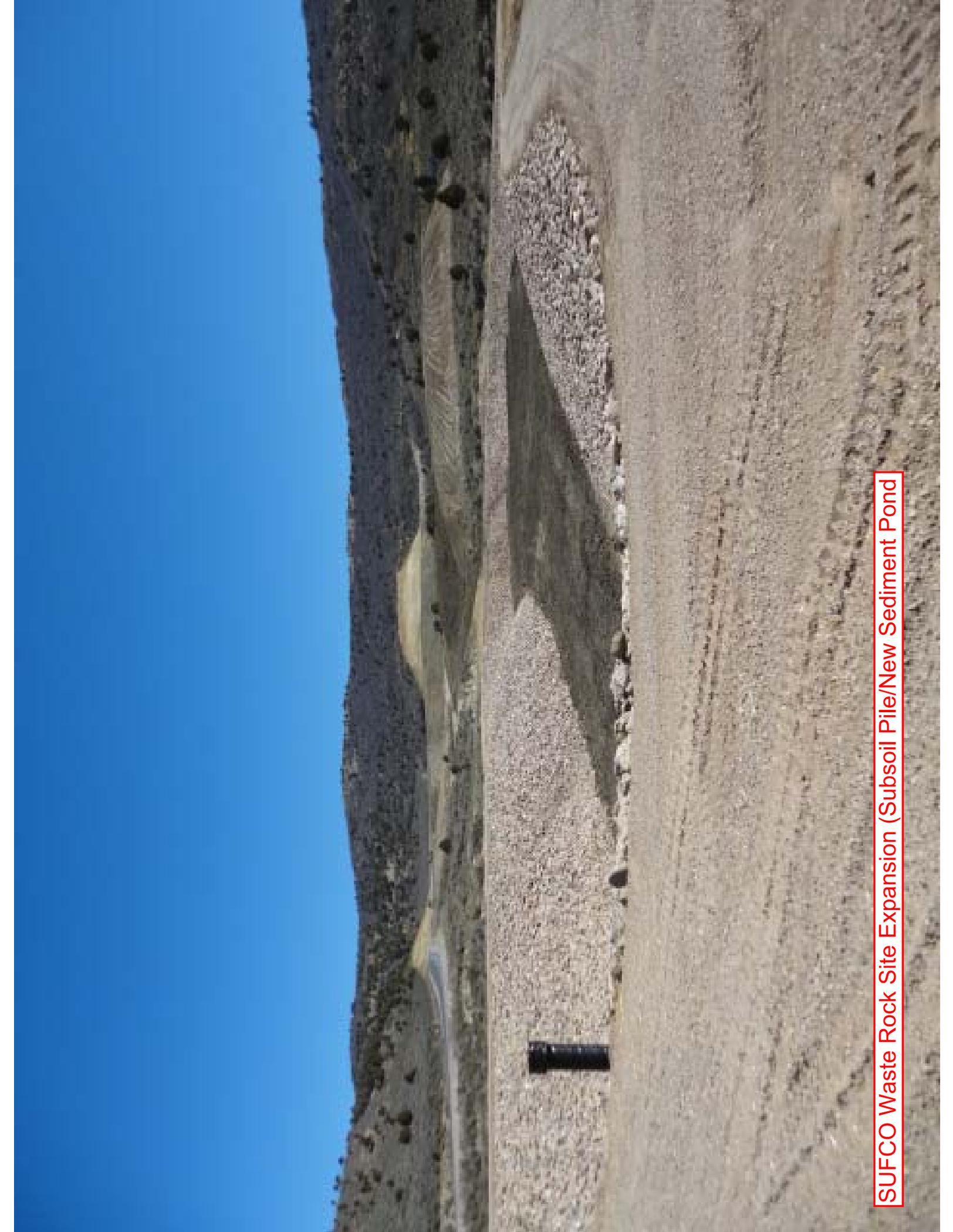
SUFCO Waste Rock Site Expansion



SUFCO Waste Rock Site Expansion



SUFCO Waste Rock Site Expansion



SUFCO Waste Rock Site Expansion (Subsoil Pile/New Sediment Pond)



SUFCO Waste Rock Site Expansion (Subsoil Pile/New Sediment Pond & Topsoil Pile)



SUFCO Waste Rock Site Expansion (Subsoil Pile/New Sediment Pond)



Karl Houskeeper <karlhouskeeper@utah.gov>

Sinkhole at Sufco Mine

1 message

Wyatt Shakespear <WShakespear@bowieresources.onmicrosoft.com>

Wed, Apr 6, 2016 at 8:31 AM

To: "DARONHADDOCK@utah.gov" <DARONHADDOCK@utah.gov>

Cc: Amanda Daniels <amandadaniels@utah.gov>, "karlhouskeeper@utah.gov" <karlhouskeeper@utah.gov>, Chris Hansen <chansen@bowieresources.com>, Jacob Smith <jsmith@bowieresources.com>

Daron,

The purpose of this email is to notify the Division that Sufco Mine has encountered an unusual sinkhole on the surface above our 2RWL panel within the Castlegate Sandstone. It is located near mid-panel in an area mined back in December 2016. The sinkhole measures roughly 40 ft. W X 50 ft. L X 40 ft. deep.

This is the first time we have ever observed such a feature during longwall mining. It is located along a fault zone we crossed in that area at depth. We suspect the fault zone may actually be exposed within the sinkhole at the surface but more mapping and observation will be required once the area is accessible by vehicles. Sink features are known to occur naturally in the Castlegate Sandstone along the Mud Springs Hollow fault zone nearby to the east. We suspect that mining-related subsidence has triggered this collapse into some sort of cavity within the fault zone. Exploration drilling over the years in this area has encountered voids on occasion but such voids have always been interpreted as limited zones of open fractures. In this case there may have been a large open fracture that allowed accommodation space for the sinkhole to develop.

Longwall mining height was in the 9 to 10.5 ft. range beneath the sinkhole while the sinkhole is approximately 40 ft. deep, definitely much deeper than could have been produced by subsidence alone. Overburden depth in the area is 890 ft. At that depth and at mid-panel, we would normally project subsidence of about 50-60% mine height, or about 5 to 6 ft.

We have notified Rob Hamilton with the Fishlake National Forrest regarding this matter. Also, we are constructing a barbed wire fence surrounding the sinkhole area in the interest of public safety. If you need more information, please call me at (435) 286-4490 or Vicky at (435) 286-4481. I have attached photos as well as a map to this email, and coordinates of the sinkhole below:

- UTM WGS84 - 462,587 E 4,308,832 N
- ST PLN NAD 27 - 2,019,674.6 E 216,479.1 N

Thanks,

Wyatt

Wyatt Shakespear

Environmental Engineer

Canyon Fuel Company- Sufco Mine

SUFCO e-mail about Subsidence

(435) 286-4490

wshakespear@bowieresources.com

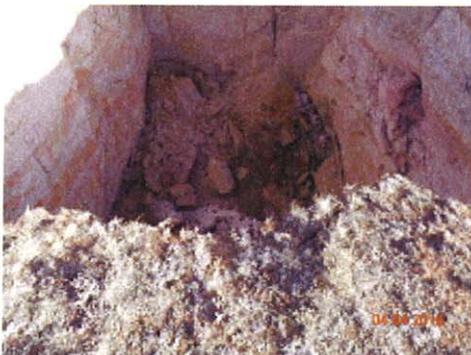
4 attachments



DSC01500.jpg
8096K



DSC01505.jpg
8043K



DSC01506.jpg
8031K

 Sinkhole Map to DOGM.pdf
253K

SUFco e-mail about Subsidence



04 04 2016

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