



OGMCOAL DNR <ogmcoal@utah.gov>

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**Fwd: Sufco Change determination**

1 message

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**Daron Haddock** <daronhaddock@utah.gov>  
To: OGMCOAL DNR <ogmcoal@utah.gov>

Fri, Sep 5, 2014 at 10:20 AM

----- Forwarded message -----

From: **Lloyd, Thomas W -FS** <twlloyd@fs.fed.us>

Date: Thu, Sep 4, 2014 at 4:16 PM

Subject: Sufco Change determination

To: Daron Haddock <daronhaddock@utah.gov>, "Steve Christensen (STEVECHRISTENSEN@utah.gov)" <STEVECHRISTENSEN@utah.gov>

See attached documents

*Tom*

Thomas W. Lloyd

Minerals, Engineering, and Lands Staff Officer

Manti - La Sal National Forest

599 West Price River Drive

Price, Utah, 84501

Phones:

Office 435-636-3596

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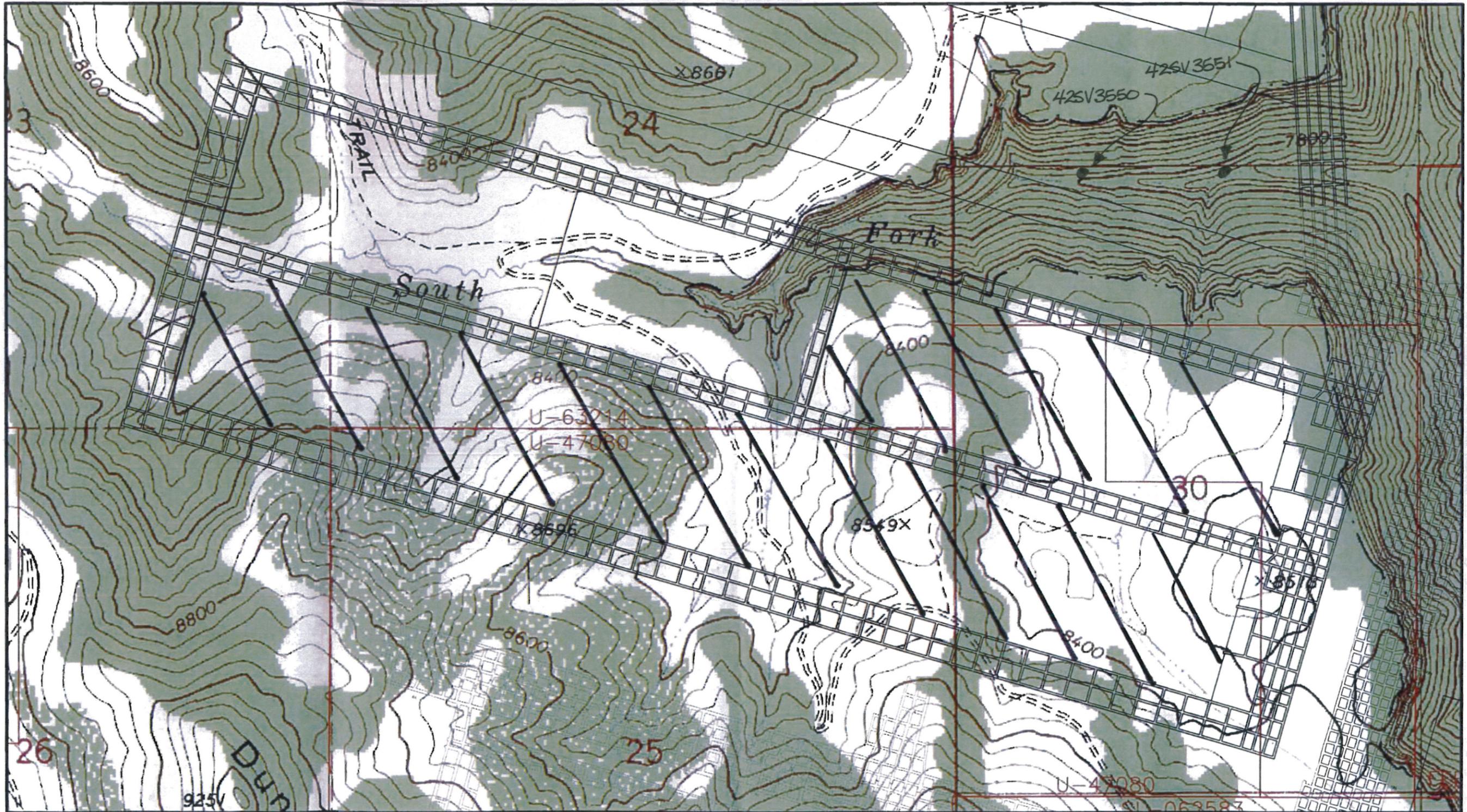
Daron R. Haddock

Coal Program Manager  
Utah Division of Oil, Gas & Mining  
[\(801\) 538-5325](tel:8015385325)

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**4 attachments**

-  **Attachment A 9\_4\_14.pdf**  
5855K
-  **Attachment B 9\_4\_14.pdf**  
5967K
-  **Attachment C 9\_4\_14.pdf**  
3962K
-  **Change Determination 9\_4\_14 Sufco Mine.pdf**  
35K



Canyon Fuel Company, LLC  
 SUFCO Mine  
 597 South SR 24 - Salina, UT 84654  
 (435) 286-4880 Phone  
 (435) 286-4499 Fax

**SUFCO MINE PLAN**

**2 SOUTH LONGWALL DISTRICT**

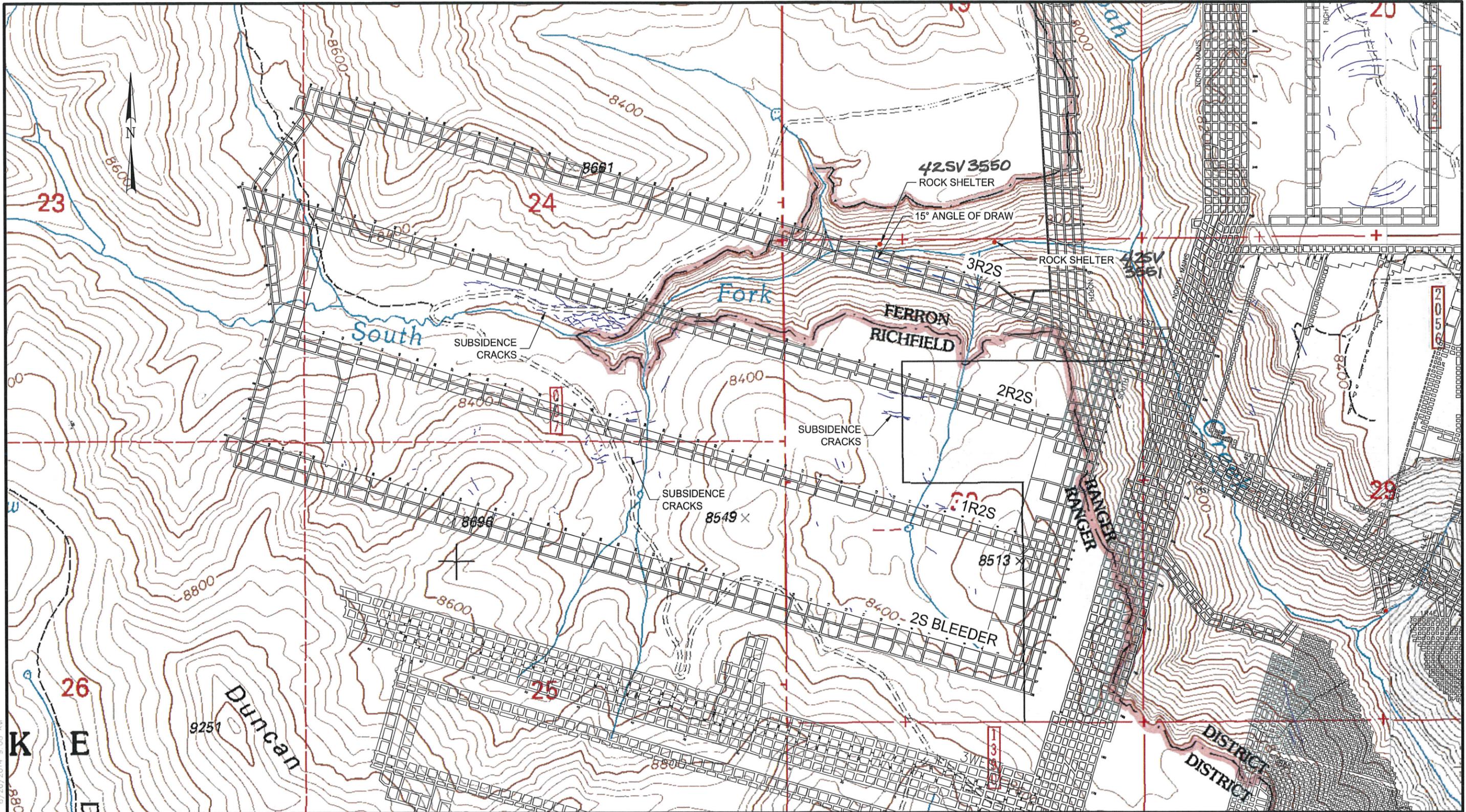
SCALE: 1" = 800'    DATE: 03/04/2010    DRAWN BY: JMB    ENGINEER: JMB    CHECKED BY:

FILE NAME: H:\DRAWNGS\MAPSURF\Topo Quads\SUFCO TOPO.dwg

REVISIONS				
NO.	DATE	REQ. BY	DWG. BY	REMARKS

SHEET NO.  
**1**

ATTACHMENT A



Tbrown: 8/26/2014 9:08 AM



**Canyon Fuel Company, LLC**  
**SUFCO Mine**  
 597 South SR 24 - Salina, UT 84654  
 (435) 286-4880 Phone  
 (435) 286-4499 Fax

**2 SOUTH PANELS**

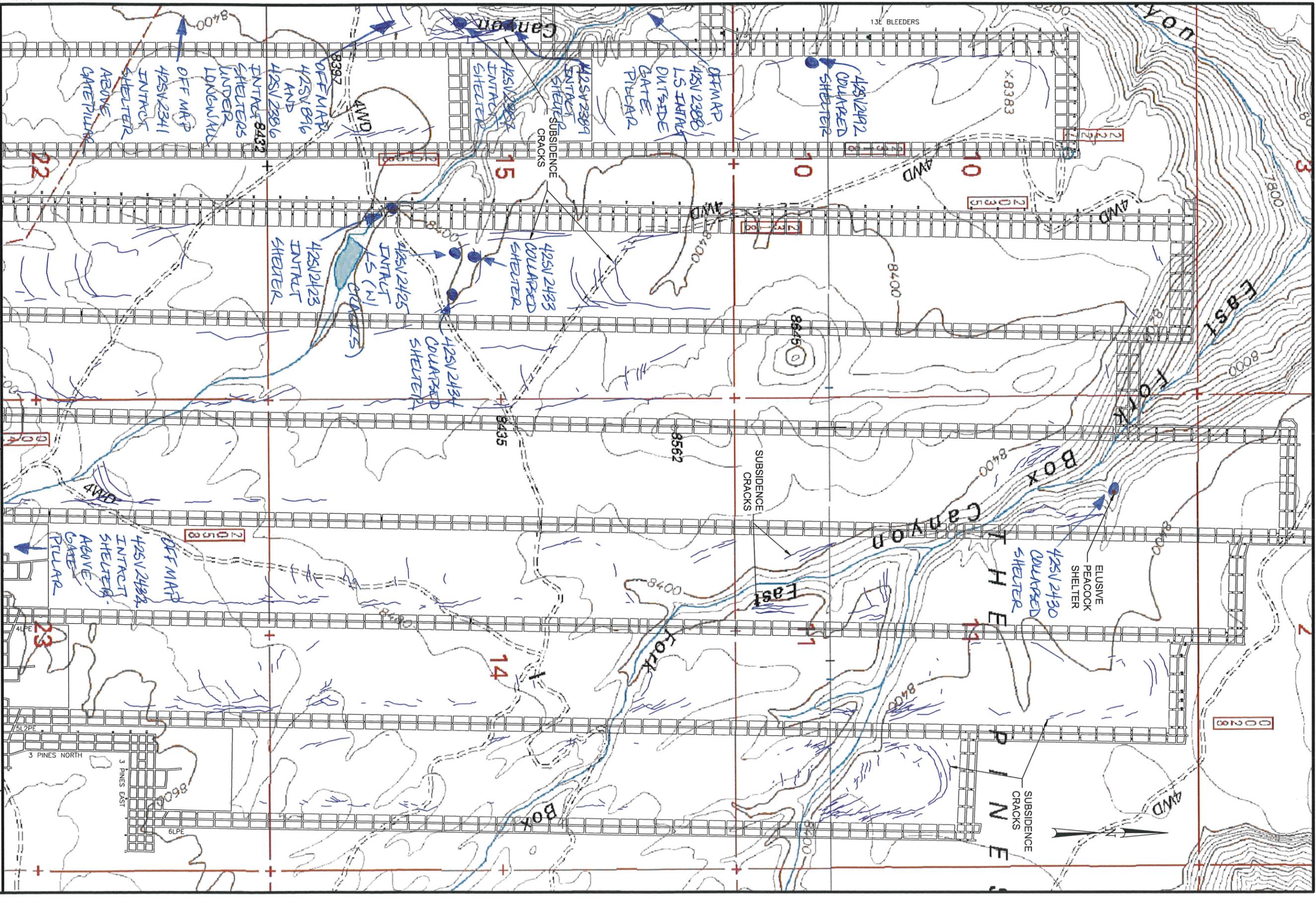
**TENSION CRACK LOCATIONS**

SCALE: 1" = 1,000'    DATE: 8/26/2014    DRAWN BY: T.R.B.    ENGINEER: J.D.B.    CHECKED BY: J.D.B.  
 FILE NAME: M:\PROJ\0814-003\dwg\TENSION CRACKS.dwg    PROJ: 0814-003

REVISIONS				
NO.	DATE	REQ. BY	DWG. BY	REMARKS

SHEET NO.  
**3**

ATTACHMENT B



Canyon Fuel Company, LLC  
 SUFCO Mine  
 597 South SR 24 - Salina, UT 84654  
 (435) 286-4880 Phone  
 (435) 286-4499 Fax

TENSION CRACK LOCATIONS  
 SCALE: 1" = 1,000'  
 DATE: 8/26/2014  
 ENGINEER: J.D.B.  
 CHECKED BY: J.D.B.  
 DRAWN BY: T.R.B.  
 PROJ: 0814-003

PINES  
 SHEET NO. 2

ATTACHMENT C



United States  
Department of  
Agriculture

Forest  
Service

Manti-La Sal  
National Forest

Supervisor's Office  
599 West Price River Drive  
Price, UT 84501  
Phone # (435) 637-2817  
Fax # (435) 637-4940

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File Code: 2820/2360

Date: September 4, 2014

Lori Hunsaker  
Deputy State Historic Preservation Officer, Archaeology  
Utah State Historical Society  
300 S. Rio Grande Street  
Salt Lake City, UT 84101-1182

Dear Ms. Hunsaker:

RE: U-13-EZ-0690f "CRI of Approximately 300 Acres in South Fork of Quitchupah Canyon for the SUFCO Mine – South Fork of Quitchupah Coal Development, Fishlake and Manti-La Sal National Forests, Sevier County, Utah" (Forest Project ML-13-1452).

The Manti-La Sal National Forest proposes to change its determination of effect for the sites 42SV3550 and 42SV3551 in the South Fork Quitchupah portion of the SUFCO Mine, as described in the above report. This change in determination is based on three factors. The first is based on a change in our understanding of the potential for the project to affect sites. The second is based on current subsidence monitoring data that helps us understand how subsidence is occurring above the underground workings in the South Quitchupah area. The third considers past cultural resource monitoring data from the adjacent Pines Tract portion of the SUFCO mine. In other words, we're using all available information to make this call, and to do it confidently.

First, the initial adverse effect determination was based on an outdated mine plan that placed both rock shelters above the longwall (see Attachment A – 2 South Longwall District, 2010). Note that on this drawing there is a gap between the longwall shown crossing over the head of the South Fork of Quitchupah and the proposed longwall unit that crosses directly over the bottom of the South Fork where the rock shelters are located. The area above the longwall is where subsidence is known to occur at the SUFCO mine, which led us to make the adverse effect determination.

However, the current mine plan places both of these sites outside of both the long wall and the adjacent gate pillars, as shown on Attachment B – Tension Cracks 2 South Locations, 2014. This is a significant change in potential effect and raises the question, does subsidence occur outside both the longwall and the gate pillars at the SUFCO mine?

To answer that question, we considered the most recent SUFCO monitoring data which maps out subsidence cracking on the ground surface above current mining in the South Quitchupah area (Attachment B). The vast majority of the subsidence cracking is occurring above the long wall between the gate pillars. If you study the map closely as we did, you'll see a couple of cracks that extends very slightly across the boundary between the long wall and the adjacent gate pillar on the north side of 1R2S. But they don't extend more than about 60 feet into the area above the pillars. This is within the projected angle of draw (or projected area of subsidence) as shown on the north side of 2R2S near the rock shelters in the bottom of the South Fork of Quitchupah on Attachment B.



We also have monitoring data for a series of archaeological rock shelters (and two lithic scatters) within the Pines Tract portion of the SUFCO Mine (see Attachment C – Pines Tension Crack Locations). This area is just northeast of the South Fork of Quitchupah and within the same topographic and geologic setting. Eleven rock shelters and two surface lithic scatters were monitored to identify any effects from subsidence between 2000 and 2008, the period during which mining occurred under those sites. Eight rock shelters and one lithic scatter are located above long wall panels. Of the eight rock shelters, four suffered partial or complete roof collapse as a result of subsidence (and the lithic scatter received minor subsidence cracking).

Three rock shelters and one lithic scatter are located above or just outside of gate pillars. None of these sites were affected by subsidence in any way. This monitoring indicates that sites above and outside of the gate pillars have not been affected by subsidence.

Joe Helfrich of the Division of Oil, Gas and Mining Coal Regulatory Program and Charmaine Thompson from the Manti-La Sal Heritage Program visited the project area on Thursday, August 28, 2014. They were able to put the above information into the context of the landscape. The data made sense to both of them on paper, and on the ground.

We ask for your concurrence in our decision to change our determination of effect for the above project from “adverse” to “no adverse effect.” The sites will not be affected by coal mining itself. However, these sites are now in an area with regular visitation from SUFCO mine staff monitoring ground water in adjacent South Fork of Quitchupah Creek. We recognize that this increase in traffic within an otherwise remote area does create foot trails and increase public knowledge of these sites.

We will monitor sites 42SV3550 and 42SV3551 annually for at least five years in order to assess the potential effect to the sites from increased visitation in the South Fork of Quitchupah that results from mine monitoring activities in the area. We will make the first monitoring visit after longwall activities in the area end because the longwall runs under the area’s access road. This will mean we cannot make the first visit until the late fall of 2014. An early winter will mean that we must defer our first visit until the spring of 2015. We will report the results of the first monitoring visit to your office via a letter report.

Thank you for your assistance in fulfilling our consultation responsibilities as described in 36 CFR Part 800.4. If you have any questions please contact Charmaine Thompson at 435-636-3511.

Sincerely,

*/s/ Mat Meccariello (for):*  
ALLEN ROWLEY  
Acting Forest Supervisor

cc: Thomas W Lloyd  
Kyle Beagley