

COVER PAGE

**Must Accompany All Project Reports
Submitted to the Utah SHPO**



UDSH Project Number: U20MM0715

Report Title: Running Foxes Petroleum: Class III Cultural Resource Inventory for the STARFOX 1-1-C Well Pad and Access Road, Grand County, Utah

Report Date: September 30, 2020

Org. Project Number: 2020.UT.011

County(ies): Grand

Report Author(s): Aaron Whittenburg

Principal Investigator: Kimberly Kintz

Record Search Date(s): August 12, 2020

Field Supervisor(s): Aaron Whittenburg, Natasha Krasnow, Garrett Williams

Intensive Acres Surveyed (<15m intervals): 20
USGS 7.5' Series Map Reference(s): Danish Flat 1970

Recon/Intuitive Acres Surveyed (<15m intervals): 0

Sites Reported	Count	Smithsonian Trinomials
Revisits (no updated site forms)	0	
Updates (updated site forms provided)	1	42GR935
New recordings (site forms provided)	0	
Total Count of Archaeological Sites in APE	1	42GR935
Historic Structures (structures forms provided)	0	
Total National Register Eligible Sites	1	42GR935

*Please list all site numbers per category. Number strings are acceptable (e.g. "42TO1-13; 42TO15"). Cells should expand to accommodate extensive lists.

Checklist of Required Items for Submittal to SHPO

- X "Born Digital" Report in a PDF/A format
 - X SHPO Cover Sheet
 - X File Name is the UDSH Project Number with no hyphens or landowner suffixes
- X "Born Digital" Site forms in PDF/A format
 - X UASF with embedded maps and photos
 - X File name is Smithsonian Trinomial without leading zeros (e.g. 42TO13 not 42TO00013)
 - X Photo requirements (including size and quality)
- X Archaeological Site Tabular Data
 - X Single spreadsheet for each project
 - X Follows UTSHPO template (info here: <https://goo.gl/7SLMqj>)
- X GIS data
 - X Zipped polygon shapefile or geodatabase of survey (if different from APE) or other activity area with required field names and variable intensity denoted
 - X Zipped polygon shapefile or geodatabase of site boundaries with a the required field name

Summary Report of Cultural Resources Inspection

PROJECT NUMBER: U20MM0715

Report Title: Running Foxes Petroleum: Class III Cultural Resource Inventory for the STARFOX 1-1-C Well Pad and Access Road, Grand County, Utah

1. Report Date: September 30, 2020
2. Date(s) of Survey: September 1, 2020
3. Development Company: Running Foxes Petroleum, Inc.
4. Responsible Institution: Metcalf Archaeological Consultants, Inc.
5. Principal Investigator: Kimberly Kintz
6. BLM Field Office: Moab Field Office (MFO)
7. County(ies): Grand
8. NEPA Number:
9. Fieldwork Location:
 - USGS Map: Danish Flat 1970
 - Twn: 21 South Range: 23 East Section: 1
10. Description of the Undertaking (including the Area of Potential Effects):

The proposed project involves the construction of a well pad approximately one acre in size and about 135 feet of access road. The proposed well pad measures 200 feet by 200 feet, oriented approximately northwest/southeast. Cut and fill will be necessary, resulting in an area of disturbance larger than the finished pad. The maximum cut (4.2 feet) will be located on the southeast edge of the pad; the maximum fill (5.6 feet) will be located on the northern corner of the pad. The proposed access road begins at an existing crown-and-ditch gravel road and proceeds west/southwest to the well pad. The access road will be approximately 25 feet wide, within a 50-foot right-of-way.

Per discussion with Running Foxes and the BLM-MFO, a 20-acre block centered on the proposed well pad centerstakes was surveyed for the project; this block also adequately covers the area of disturbance plus a 100 foot buffer as well as the proposed access road and will allow for slight project design changes made by Running Foxes, if necessary. The area of potential effects (APE) for the project is defined by the BLM-MFO as the entire 20-acre block; the APE for the proposed access road is a 100 foot-wide corridor centered on the proposed centerline.
11. Location(s) and Date(s) of Literature Review:
 1. Field Office: N/A
 2. Utah Division of State History/Preservation Pro: August 12, 2020
 3. Historic Records and Maps: August 12, 2020
 4. Satellite imagery: August 12, 2020

12. Results of Literature Review (½ mile buffer):

Project Number	Project Name	No. of Sites within the APE
U78CD0196	Cultural Resource Inventory of the Danish Flat-Windy Mesa Cultural Mitigation Study Area, East-Central Utah	0
U81GC0312	Archaeological Survey of Three Walter Broadhead Wells, Federal Broadhead #2, Federal Dane #1, and Federal Harris #2, Grand County, Utah	0
U00ST0332	Adesta Fiber Optic Line	0
U05SC1384	An Intensive Cultural Resource Survey and Inventory of Seven Well Pads and Access Corridors in the Greater Cisco Oil and Gas Field	0
U06MQ0583	CRI of Cisco Expro, LLC's Danish Flat 2D Seismic Project, in Grand County, Utah	0
U06MQ1181	Cultural Resource Inventory of Running Foxes Petroleum's Eight Proposed Cisco Gamma Well Locations, Grand County, Utah	0
U07MQ0049	Cultural Resource Inventory of Running Foxes Petroleum's Broadhead Tap and #30-6 ROW Corridor, Grand County, Utah	0
U07MQ0341	Archaeological Survey of ROW Corridor Change in Section 6, Township 21 South, Range 24 East, Grand County, Utah: Addendum to Cultural Resource Inventory of Running Foxes Petroleum's Broadhead Tap and #30-6 ROW Corridor, Grand County, Utah	0
U07MQ0623	Cultural Resource Inventory of Running Foxes Petroleum's Proposed Ten Cisco Wells (#6-11-2, #6-13-2, #6-14-1, #6-15-4, #7-1-1, #7-3-3, #7-7-4, #7-8-1, and #8-5-1) Grand County, Utah	0
U08MQ0683	Cultural Resource Inventory of Running Foxes Petroleum's 3D Cisco Seismic, Grand County, Utah	1
U15HX0438	An Archaeological Inventory for the I-70; Fiber Optic from Cisco to the State Line Project	0

Site Number	Description	Eligibility
42GR935	Denver and Rio Grande narrow gauge railroad	Eligible
42GR4092	Historic temporary camp	Not eligible

Summary and Expectations:

Prior to fieldwork, Metcalf performed a files search through the Utah Division of State History (UDSH) and the UDSH online SEGO database of the project area plus a half-mile buffer and included previously recorded cultural resources and previous cultural resource inventories.

The files search shows 11 previous inventories within the files searched area, one of which intersects the current project area. The intersecting project is U08MQ0683, a 3D seismic project for Running Foxes conducted in 2008. This project resulted in the recording of one resource within the current project area, 42GR935, described below. A majority of the remaining projects are related to oil and gas exploration and extraction in the Cisco Desert. Other projects include a cultural mitigation study and a utility line project.

The files search shows two previously recorded resources within the searched area; one of which intersects the current project area. The site lying within the project area is 42GR935, the Denver and Rio Grande narrow gauge railroad, and trends generally north/south through the central portion of the inventory block. The site is listed as eligible for the National Register. The segment through the project area was recorded by Montgomery Archaeological Consultants in 2008. The other site is 42GR4092 and is a historic temporary camp likely associated with the aforementioned railroad. The site is evaluated as not eligible and is located south of the project area.

Additionally, historic General Land Office (GLO) plats for Township 20 South, Ranges 23 East and 24 East and Township 21 South, Range 23 East and historic 7.5' USGS quadrangle maps were inspected for historic cultural resources. Although there are no maps available for the earliest Euro-American use of the area, the Grand Valley east of Green River was the travel corridor for the North Branch of the Old Spanish Trail, in use from the early to mid-1800s; the North Branch joined the Main Route at present day Green River. The Denver and Rio Grande narrow gauge railroad was completed in 1883 and passes through the inventory block. GLO plats indicate

numerous ranches and roads were located in the area by the early 1900s, especially in areas around springs or washes. Use of the area during this period likely focused on grazing of domestic livestock, and the remains of structures, fences, corrals, and animal pens are found throughout the area. USGS topographic maps from the mid-1900s show numerous well pads and related infrastructure in the area indicating a shift in focus to natural resource exploration and extraction.

More specifically, although there is historic development of the general area, the maps indicate the Denver and Rio Grande narrow gauge railroad and ‘Road from Cisco to Thompson’s’ pass through the project area. The railroad has been previously recorded as 42GR935.

Based on the files search and archival map research, Metcalf expected a limited number of cultural resources in the area, if any, in addition to the aforementioned historic resources. Prehistoric site types were expected to be limited lithic scatters or open camps. Historic site types would likely be related to either early 20th century ranching in the area and include trash scatters, temporary camps, homesteads, ranchsteads, and other features related to ranching and herding (corrals, fences, etc.); or the construction and use of the railroad and include trash scatters, temporary camps, or work areas.

Township/Range	Map Date/Name/Type	Findings
T21S, R23E	1904 original survey GLO plat	‘Road from Cisco to Thompson’s’ and ‘Old Railroad Grade’ (42GR935) plotted in the project area
T21S, R23E	1966 dependent resurvey GLO plat	The railroad grade is still plotted in the project area; a telephone line and road are plotted in the general area
T20S, R23E; T20S, R24E; T21S, R23E	1885 East Tavaputs 1:125,000 USGS topographic map	Nothing in project area; Denver and Rio Grande Western Railroad plotted to the south and east of the area
T20S, R23E; T20S, R24E; T21S, R23E	1956 Grand Junction 1:125,000 USGS topographic map	Unnamed road in the vicinity of the project area (likely Cisco Springs Road); ‘Old RR Grade’; Highway 6/50 immediately south and east of the area
T20S, R23E; T20S, R24E; T21S, R23E	1970 Danish Flat 1:24,000 USGS topographic map	‘Old Railroad Grade’ plotted in the project area

13. Description of Field Methods:

The project area was inventoried using standard pedestrian transects spaced no more than 15 meters apart across the inventory area. In-field navigation of the inventory area was via GIS data on a handheld Trimble GeoXT 6000 GPS unit with real-time WAAS correction of approximately 2-5 meters and post-processed correction to sub-meter. Careful attention was given to areas of high surface exposure, such as anthills, rodent back-dirt piles, and animal trails; and areas of subsurface exposure, such as drainage cuts and two-track road cuts. Additionally, representative photographs of the project area were taken and recorded on a photograph log noting the view and direction.

For this project, Metcalf followed Utah SHPO compliance guidance and Bureau of Land Management guidelines to define sites and isolates.

Sites are defined as:

- At least ten artifacts of a single class within a 10-meter diameter area, except when all pieces appear to originate from a single source, and/or;
- At least 15 artifacts, which include at least two classes of artifacts within a 10-meter area, and/or;
- One or more archaeological features in temporal association with any number of artifacts, and/or;
- Two or more temporally associated archaeological features without artifacts.

Isolates are defined as:

- Resources which do not meet site criteria. These resources are minimally recorded in tabular format but are not evaluated as cultural properties or formally recorded unless they are diagnostic.
- Isolated finds consisting entirely of lithic debitage, ceramics, bottles, or cans are recorded if professional judgment warrants.

Additionally, the Utah Professional Archaeological Council (UPAC) guidelines for historic linear resources (UPAC 2008) were utilized for recording and assessing linear resources.

14. Area Surveyed: 20 acres

Land Owner		BLM	Other Federal	State	Private	TOTAL
Acreage	Class III:	20	0	0	0	20
	Class II:	0	0	0	0	
TOTAL		20	0	0	0	20

15. Sites Recorded:

Land Owner		BLM		Other Federal		State		Private		TOTAL
		#	Site Number	#	Site Number	#	Site Number	#	Site Number	
Revisits (updated forms)	Eligible:	1	42GR935	0		0		0		1
	Not Eligible:	0		0		0		0		0
Revisits (not updated)	Eligible:	0		0		0		0		0
	Not Eligible:	0		0		0		0		0
Newly Recorded	Eligible:	0		0		0		0		0
	Not Eligible:	0		0		0		0		0
TOTAL		1		0		0		0		1

16. Individual Site Descriptions and Determinations of Eligibility and Effect

Site Number: 42GR935

Site Type and Summary: Site 42GR935 is the Denver and Rio Grande narrow gauge railroad completed in 1883 and abandoned and dismantled in the 1890s following the completion of the standard gauge railroad to the south. Numerous segments of the railroad have been recorded in both Utah and Colorado; the revisited segment described here was recorded by Montgomery Archaeological Consultants in 2008.

Metcalf revisited the portion of the previously recorded segment within the current project area. The revisited segment trends north-northwest/south-southeast and is approximately 1,673 feet long. The segment varies from a raised bed grade to a grade cut through hills. The width of the grade varies from about 3 to 15 feet. Metcalf noted the remnants of two bridges (Features 1 and 2) and a light scattering of debris along the segment, including aqua, clear, amber, and olive glass fragments; coal; four railroad spikes; three short, heavy duty bolts (round and square head); and one heavy duty square nut. All elements of the bridges were removed when the railroad was dismantled. One displaced railroad tie was noted partially buried against one of the support posts of Feature 2. The segment has been impacted by a bladed dirt road which bisects the segment, and bioturbation.

National Register Eligibility Determination (analyze the aspects of integrity, evaluate the resource within its historic context, and NR criteria for evaluation – see National Register Bulletin 15): 42GR935 has previously been evaluated as eligible for nomination to the NRHP under Criterion A for its historic value regarding early transportation and socio-economic development of southeastern and central Utah. Metcalf observed no change to the revisited segment and recommends it remain eligible for the NRHP.

This segment of railroad retains integrity of location, design, workmanship, and association; integrity of setting and feeling has been slightly compromised; there is little integrity of materials. The railroad grade location matches historic maps and archival research and thus preserves integrity of location. Integrity of design and workmanship are retained in that the route planning for the railroad is still clearly discernible and the segment has not been repurposed by later development. The surrounding area has undergone little historic or modern development, although traffic on I-70 is visible and audible from the segment and a portion of the segment has been bisected and destroyed by a modern bladed dirt road. Thus, integrity of setting and feeling have been modestly compromised. Most of the original materials of the railroad, including the rails, railroad ties, ballast, and portions of features have been removed. The remaining material evidence of the railroad includes the grade, bridge supports, and a single displaced tie; thus, the integrity of materials is also compromised.

Recommendation of Effect: (no historic properties affected, no adverse effect, adverse effect – discuss any measures to avoid)

Site 42GR935 should be avoided. As currently proposed, the western corner of the STARFOX 1-1-C well pad disturbance area is approximately 46 feet from site 42GR935. This is the closest point of the proposed well and access development to the site. The typical APE buffer for well pad developments in the MFO is 100 feet from the maximum extent of proposed

disturbance. However, per discussion with BLM MFO archaeologist Ami Schlosser, the buffer width can be modified in some circumstances. In the case of the STARFOX 1-1-C well pad and access road, 42GR935 will not be physically impacted if the well pad is built as proposed in the current location, and the BLM has indicated that as long as disturbance does not occur any closer to the site than is currently proposed (~46 feet), construction will have no effect on the site (personal communication, Ami Schlosser, August 25, 2020). As a precaution, Metcalf recommends that it may be helpful to put up a temporary fence between the proposed western pad corner and site 42GR935 to prevent inadvertent impacts to the site.

17. Isolated Finds:

IF Numbers	Description:	UTM Easting	UTM Northing
IF NK-01	Historic amethyst and brown glass fragments, likely associated with 42GR935	645761 m E	4319734 m N

18. Summary of Findings:

Inventory resulted in the revisit and update of a segment of 42GR935 and the recording of one isolated find. The isolated find consists of several pieces of historic amethyst and brown glass fragments, likely associated with 42GR935, and is recommended as not eligible for the National Register. The revisited/updated segment of 42GR935 was originally recorded by Montgomery in 2008 and was recommended as eligible for the National Register. The site appears much the same as it is described in the initial 2008 recording. Metcalf did not observe anything that warrants a change to this and recommends that the segment remain eligible for the National Register. Avoidance is recommended. As currently proposed, the western corner of the STARFOX 1-1-C well pad disturbance area is approximately 46 feet from site 42GR935. This is the closest point of the proposed well and access development to the site. The typical APE buffer for well pad developments in the MFO is 100 feet from the maximum extent of proposed disturbance. However, per consultation with BLM MFO archaeologist Ami Schlosser, the buffer width can be modified in some circumstances. Site 42GR935 will not be physically impacted if the well pad is built as proposed in the current location. The BLM has indicated that as long as disturbance does not occur any closer to the site than is currently proposed (~46 feet), construction will have no effect on the site.

19. Collection Yes No X

(If Yes) Curation Facility:

Accession Number(s):

20. Conclusion/Recommendation of Effect:

Metcalf has completed a Class III cultural resource inventory for the Running Foxes proposed STARFOX 1-1-C well pad and access road in Grand County, Utah on lands administered by the BLM-MFO. Inventory covered 20 acres and resulted in the revisit and update of a segment of 42GR935 and the recording of one isolated find. The isolated find consists of several pieces of historic amethyst and brown glass fragments, likely associated with 42GR935; it is recommended as not eligible for the National Register. The revisited/updated segment of 42GR935 was originally recorded by Montgomery in 2008 and was recommended as eligible for the National Register. Metcalf did not observe anything that warrants a change to this and recommends that the segment remain eligible for the National Register.

Avoidance of the National Register eligible segment of 42GR935 is recommended. As currently proposed, the western corner of the STARFOX 1-1-C well pad disturbance area is approximately 46 feet from site 42GR935. This is the closest point of the proposed well and access development to the site. The typical APE buffer for well pad developments in the MFO is 100 feet from the maximum extent of proposed disturbance. However, per consultation with BLM MFO archaeologist Ami Schlosser, the buffer width can be modified in some circumstances. In the case of the STARFOX 1-1-C well pad and access road, 42GR935 will not be physically impacted if the well pad is built as proposed in the current location, and the BLM has indicated that as long as disturbance does not occur any closer to the site than is currently proposed (~46 feet), construction will have no effect on the site. As a precaution, Metcalf recommends that it may be helpful to put up a temporary fence between the proposed western pad corner and site 42GR935 to prevent inadvertent impacts to the site. Based on discussion with the BLM MFO, Metcalf recommends a finding of *no historic properties affected*, provided impacts to 42GR935 are avoided.

*Include the appropriate amount of 1:24,000 scale topographic maps, which clearly identify the Area of Potential Effect, area of Class II or III survey area, sites, and isolated finds.

**Include at least one landscape photograph of the area surveyed.

8100-3 Form

Project Photos



Figure 1. Project overview from northeast corner of project area, view southwest. 42GR935 highlighted by arrows.
(Roll 20-232, image 13, by Aaron Whittenburg, 09/01/2020)

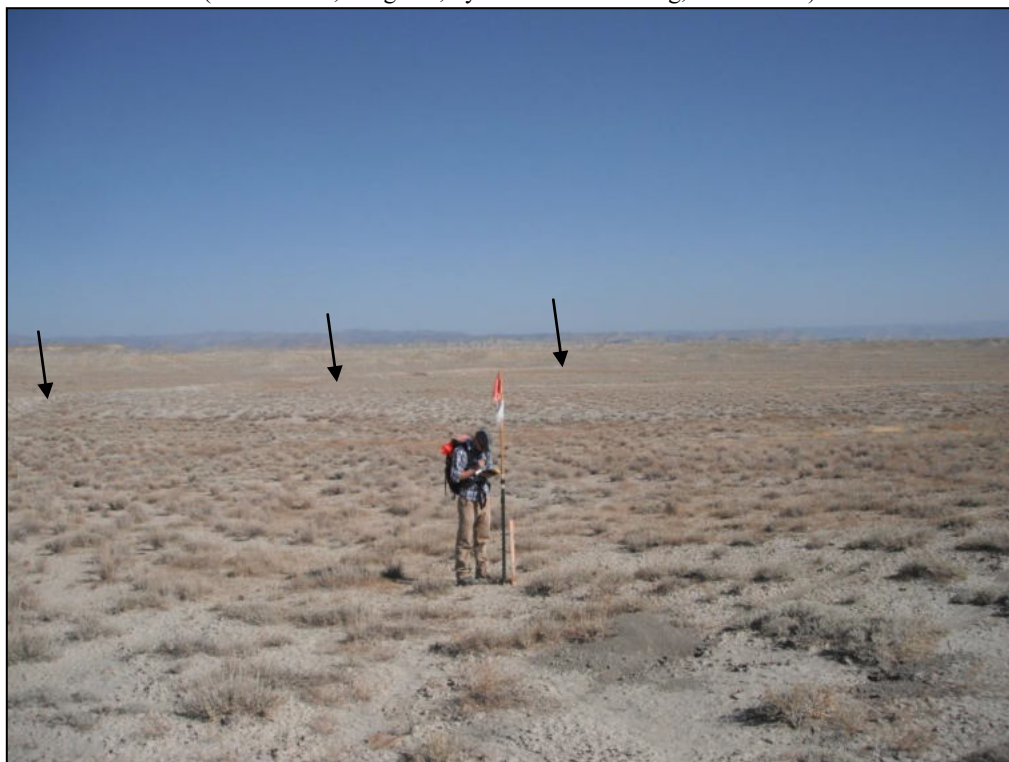


Figure 2. Project overview from center stake, view north. 42GR935 highlighted by arrows.
(Roll 20-232, image 14, by Aaron Whittenburg, 09/01/2020)

Site Photos



Figure 3. 42GR935 site overview from northern end of the segment, view southeast, looking over Feature 1 (Roll 20-808, image 18, by Natasha Krasnow, 09/01/2020)



Figure 4. 42GR935 Feature 1, earthen bridge, view southwest (Roll 20-808, image 07, by Natasha Krasnow, 09/01/2020)

Site Photos (cont'd)



Figure 5. 42GR935 Feature 1, earthen bridge, detail of wood plank impression
(Roll 20-808, image 08, by Natasha Krasnow, 09/01/2020)



Figure 6. 42GR935 Feature 2, bridge remnants, view southwest
(Roll 20-808, image 17, by Natasha Krasnow, 09/01/2020)