

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER Ute 13-1 SWD							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT WINDY RIDGE							
4. TYPE OF WELL Water Disposal Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME OF OPERATOR FINLEY RESOURCES INC						7. OPERATOR PHONE 817 231-8735							
8. ADDRESS OF OPERATOR PO Box 2200, Fort Worth, TX, 76113						9. OPERATOR E-MAIL awilkerson@finleyresources.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 1420H624896			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Uintah Partners LLC						14. SURFACE OWNER PHONE (if box 12 = 'fee') 435-200-6800							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 3165 E. Millrock Drive, Salt Lake City, UT 84121						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Indian Tribe			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		1075 FSL 1289 FWL		SWSW		13		4.0 S		1.0 E		U	
Top of Uppermost Producing Zone		1075 FSL 1289 FWL		SWSW		13		4.0 S		1.0 E		U	
At Total Depth		1075 FSL 1289 FWL		SWSW		13		4.0 S		1.0 E		U	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1075			23. NUMBER OF ACRES IN DRILLING UNIT 40							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1040			26. PROPOSED DEPTH MD: 3789 TVD: 3789							
27. ELEVATION - GROUND LEVEL 5103			28. BOND NUMBER RLB0011294			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496							
<b>Hole, Casing, and Cement Information</b>													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight		
COND	17.5	13.375	0 - 60	48.0	H-40 ST&C	0.0	Class G		41	1.17	15.8		
SURF	12.25	9.625	0 - 358	36.0	J-55 ST&C	8.6	Premium Lite High Strength		35	3.53	11.0		
							Class G		85	1.17	15.8		
PROD	8.75	7	0 - 3789	23.0	J-55 LT&C	8.0	50/50 Poz		271	1.24	13.2		
<b>ATTACHMENTS</b>													
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME Zachary Archer				TITLE Landman				PHONE 817-231-8759					
SIGNATURE				DATE 01/27/2014				EMAIL zarcher@finleyresources.com					
API NUMBER ASSIGNED 43047542560000				APPROVAL   Permit Manager									

**Finley Resources, Inc.**  
**Ute 13-1 SWD**  
**1075' FSL 1289' FWL Section 13, T4S, R1E**  
**Uintah County, UT**

**Drilling Program**

**1. Formation Tops**

Duchesne River	surface
Green River(top)	2,278'
Top Bird's Nest	3,222'
Base Bird's Nest	3,589'
TD	3,789'

**2. Depth to Oil, Gas, Water, or Minerals**

Top Bird's Nest	1,722' - 3,222'	(Injection zone)
Base Bird's Nest	3,589' - TD	(Injection zone)

Fresh water may be encountered in the Duchesne Formation, but is not expected below about 300'.

**3. Pressure Control**

<u>Section</u>	<u>BOP Description</u>
Surface	12-1/4" diverter

Interm/Prod The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom							Burst	Collapse	Tension
Conductor 13 3/8	0'	60'	48	H-40	STC	--	--	--	1,730	770	322,000
Surface 9 5/8	0'	358'	36	J-55	STC	8.33	8.6	11	3,520	2,020	422,000
Production 7	0'	3,789'	23	J-55	LTC	8.5	8	11	19.32	16.99	32.74
									4,360	3,270	344,000
									3.36	2.73	3.95

Assumptions:

$$\text{Surface casing MASP} = (\text{frac gradient} + 1.0 \text{ ppg}) - (\text{gas gradient})$$

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

## 5. Cement

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	48	15%	15.8	1.17
				41			
Surface Lead	12 1/4	200'	Premium Lite II w/ 3% KCl + 10% bentonite	125	100%	11.0	3.53
				35			
Surface Tail	12 1/4	158'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	99	100%	15.8	1.17
				85			
Production Tail	8 3/4	1,789'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	336	25%	13.2	1.24
				271			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the production casing string will be calculated from an open hole caliper log, plus 25% excess.

## 6. Type and Characteristics of Proposed Circulating Medium

<u>Interval</u>	<u>Description</u>
Surface - 358'	An air and/or fresh water system will be utilized.
358' - TD	A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite. Anticipated maximum mud weight is 8.0 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from PBTD to the cement top behind the production casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

**8. Anticipated Abnormal Pressure or Temperature**

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.44 psi/ft gradient.

$$3,789' \times 0.44 \text{ psi/ft} = 1675 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

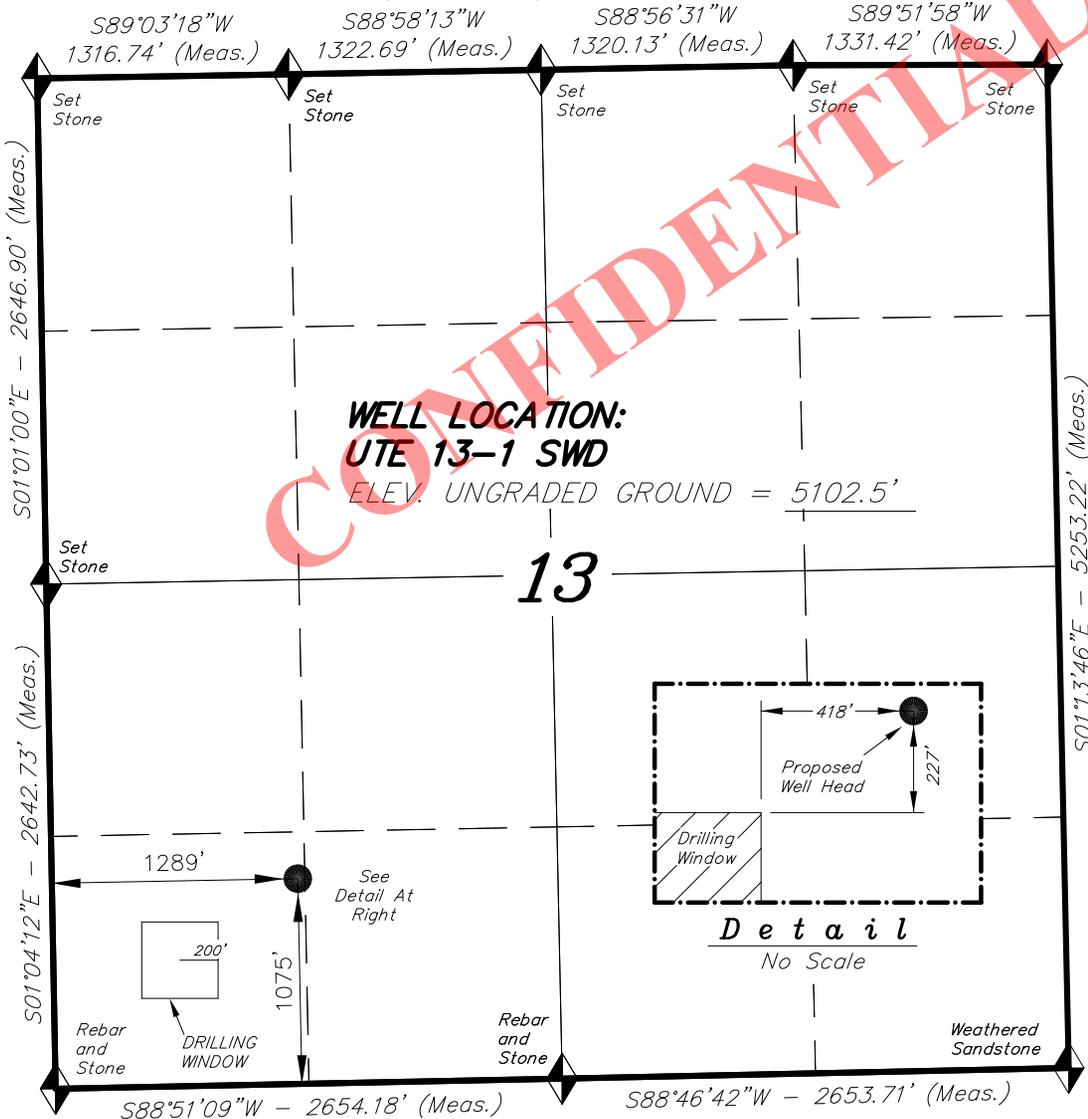
**9. Other Aspects**

This is planned as a vertical well.

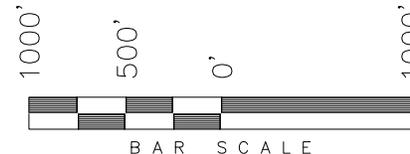
**CONFIDENTIAL**

**T4S, R1E, U.S.B.&M.**

**FINLEY RESOURCES INC.**



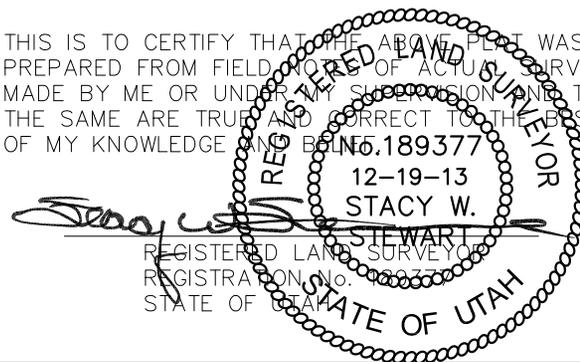
WELL LOCATION, UTE 13-1 SWD,  
 LOCATED AS SHOWN IN THE SW 1/4  
 SW 1/4 OF SECTION 13, T4S, R1E,  
 U.S.B.&M. UINTAH COUNTY, UTAH.



**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

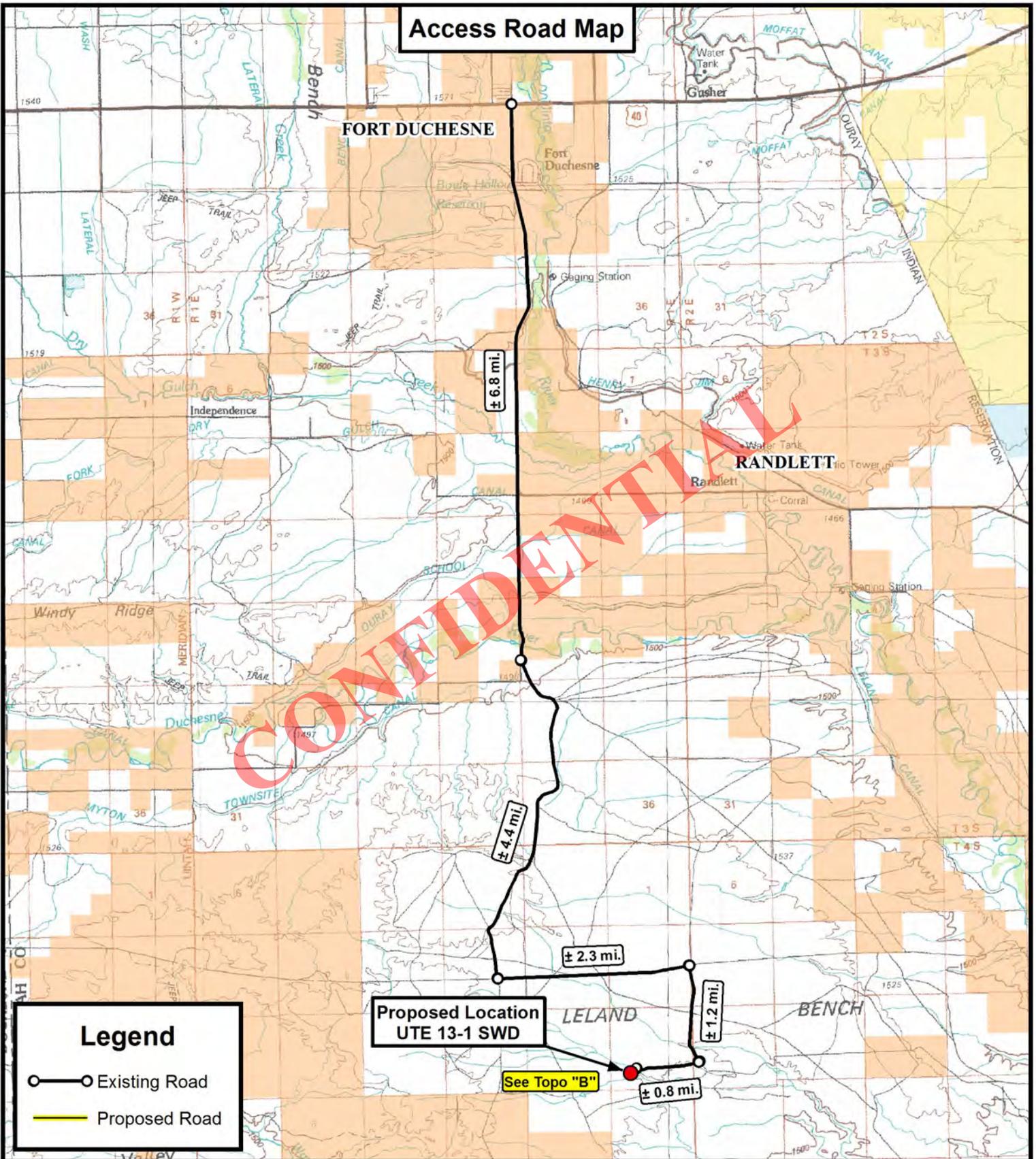
BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

**UTE 13-1 SWD**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 07' 51.07"  
 LONGITUDE = 109° 50' 08.85"

**TRI STATE LAND SURVEYING & CONSULTING**  
 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

DATE SURVEYED: 12-18-13	SURVEYED BY: S.H.
DATE DRAWN: 12-19-13	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'

**Access Road Map**



**Legend**

- Existing Road
- Proposed Road

**Proposed Location  
UTE 13-1 SWD**

See Topo "B"



**Tri State  
Land Surveying, Inc.**  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



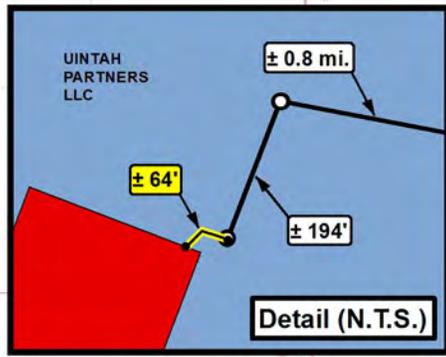
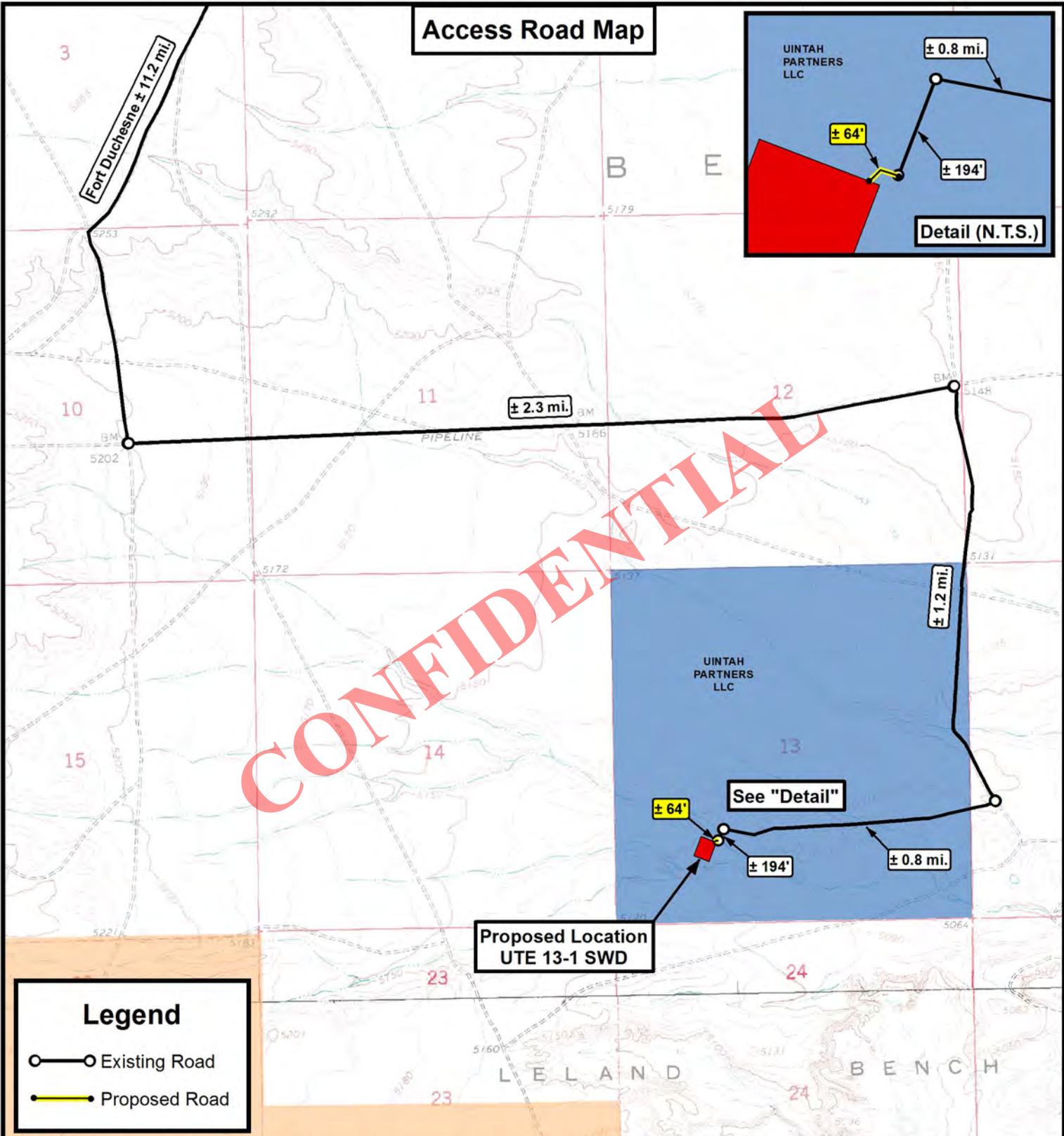
**FINLEY RESOURCES INC.**  
UTE 13-1 SWD  
Sec. 13, T4S, R1E, U.S.B.&M.  
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:
DATE:	12-20-2013	
SCALE:	1:100,000	

**TOPOGRAPHIC MAP**

SHEET  
**A**

**Access Road Map**



**Legend**

- Existing Road
- Proposed Road

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

**Tri State Land Surveying, Inc.**  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
 P: (435) 781-2501  
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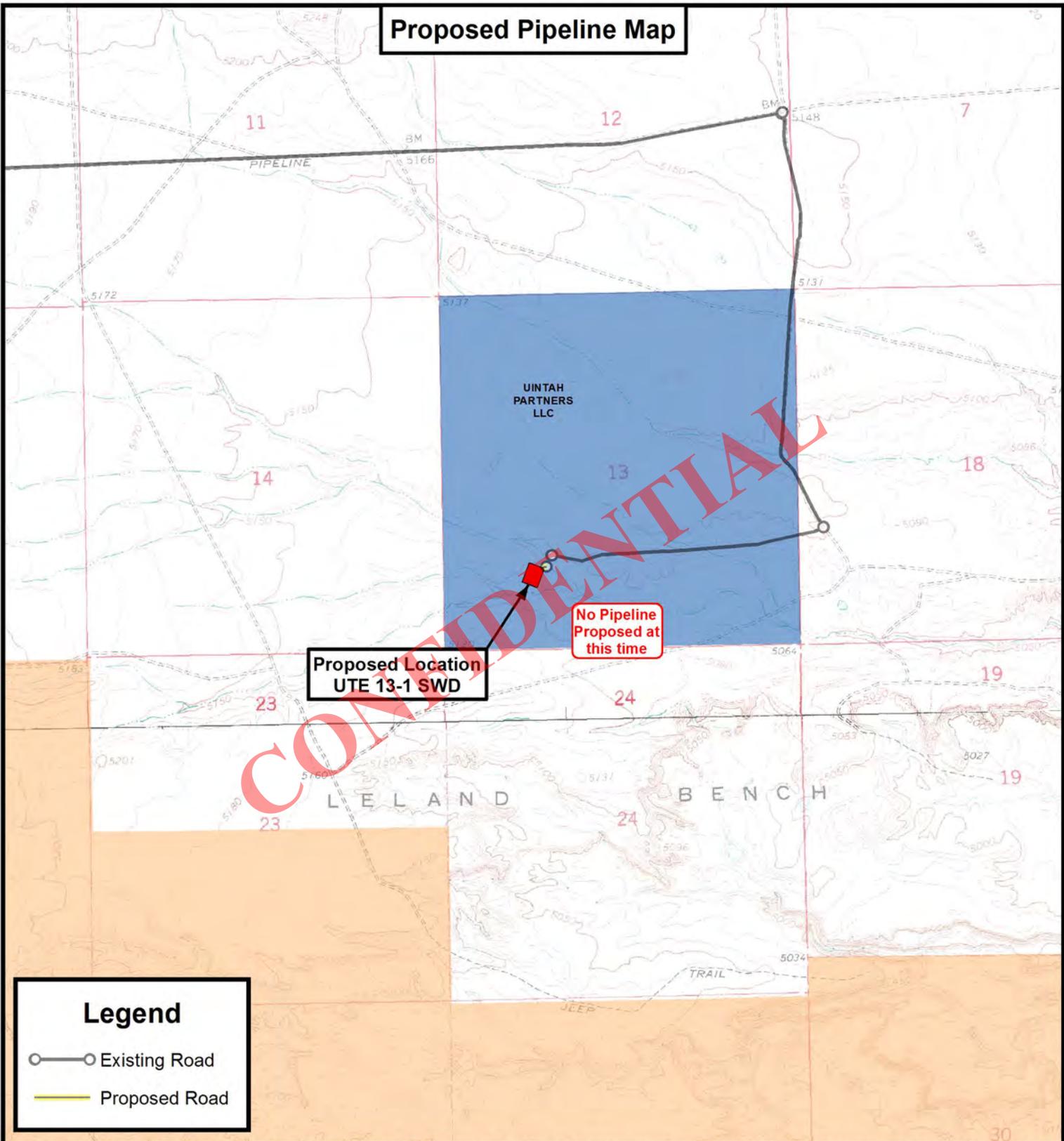
**FINLEY RESOURCES INC.**  
 UTE 13-1 SWD  
 Sec. 13, T4S, R1E, U.S.B.&M.  
 Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:
DATE:	12-20-2013	
SCALE:	1" = 2,000'	

**TOPOGRAPHIC MAP**

SHEET  
**B**

**Proposed Pipeline Map**



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 UTE 13-1 SWD  
 Sec. 13, T4S, R1E, U.S.B.&M.  
 Uintah County, UT.

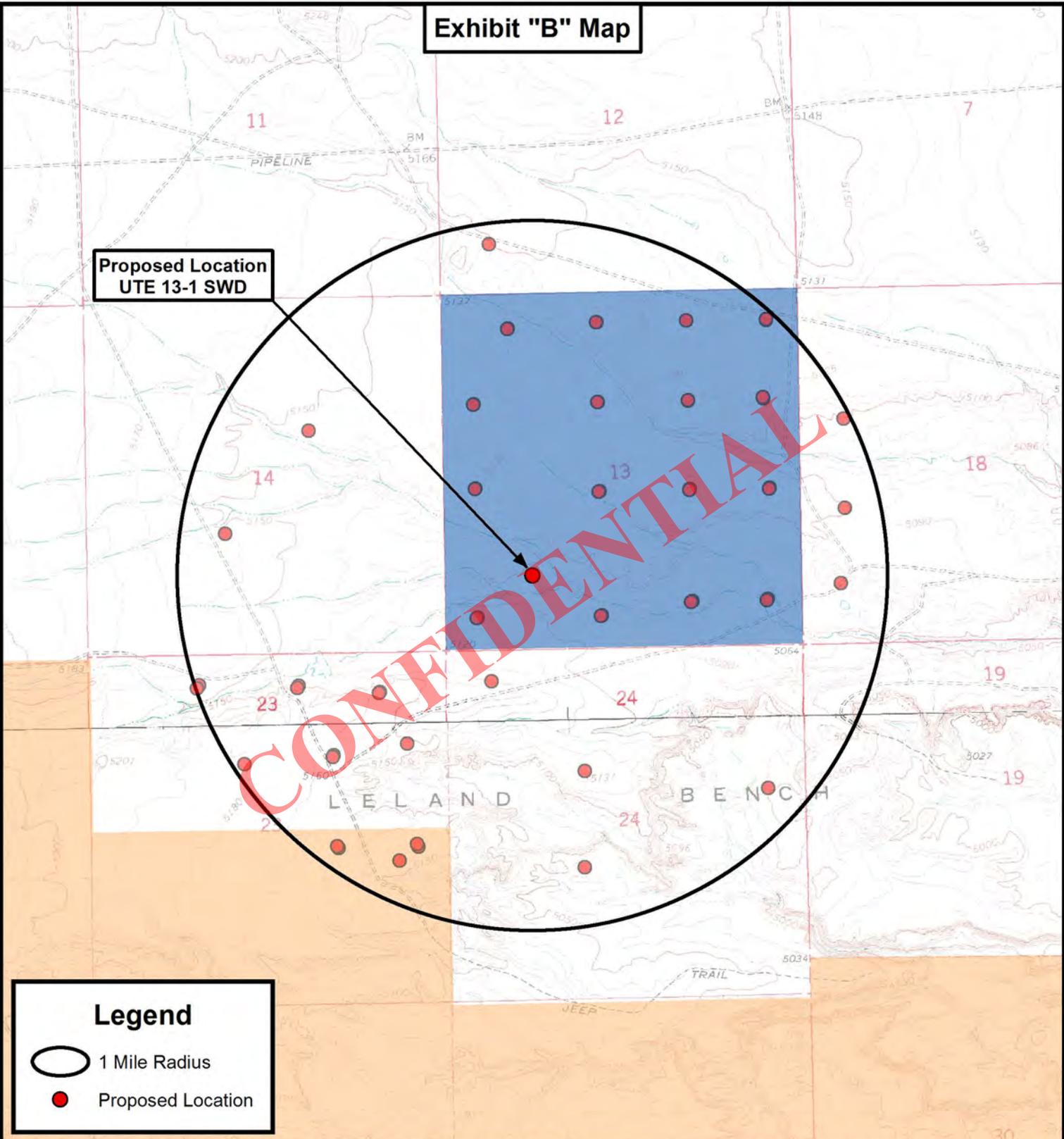
DRAWN BY:	A.P.C.	REVISED:
DATE:	12-20-2013	
SCALE:	1" = 2,000'	

**TOPOGRAPHIC MAP**

SHEET  
**C**

**Exhibit "B" Map**

**Proposed Location  
UTE 13-1 SWD**



**Legend**

- 1 Mile Radius
- Proposed Location

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

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Land Surveying, Inc.**  
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**FINLEY RESOURCES INC.**  
UTE 13-1 SWD  
Sec. 13, T4S, R1E, U.S.B.&M.  
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:
DATE:	12-20-2013	
SCALE:	1" = 2,000'	

**TOPOGRAPHIC MAP**

SHEET  
**D**

MEMORANDUM OF SURFACE USE AGREEMENT  
AND GRANT OF EASEMENTS

WHEREAS, Salradus, L.L.C., Bonnie Coleman managing member, whose address is 148 West Center Street, Heber City, UT 84032, Coleman Mountain Holdings, L.L.C., Mary Jo Coleman Adamson managing member, whose address is P.O. Box 610, Roosevelt, UT 84066, Joseph N. Coleman, Trustee of the Coleman Family Trust, dated June 7, 1991, whose address is 393 East Center, Heber City, UT 84032, and Leila Coleman, Trustee of the Coleman Family Trust dated June 28, 1991, whose address is 950 South 400 East #112, St. George, UT 84770 (hereinafter collectively referred to as "Coleman"), and Uintah Resources, Inc. whose address is 3165 E. Millrock Drive, Suite 550, Salt Lake City, UT 84121 ("Optionee") (Coleman and Optionee are hereinafter collectively referred to as "Owner") and Finley Resources, Inc., whose address is P.O. Box 2200, Fort Worth, Texas, 76113 ("Operator"), have entered into that certain Easement, Right-of-Way and Surface Use Agreement, hereinafter the "SUA", dated effective April 24<sup>th</sup>, 2012 covering the following lands owned by Owner in Uintah County, Utah, to wit:

Township 4 South, Range 1 East, U.S.M.  
Section 13: All  
Section 16: All  
Section 23: N/2

hereinafter the "Lands"

WHEREAS, in the SUA Owner grants and conveys unto Operator a non-exclusive right to enter upon and use the Lands and Owner's adjacent lands for certain oil and gas related purposes, together with a right-of-way across the Lands to maintain and construct access roads, well sites, holding tanks and other such related facilities necessary for Operator's oil and gas operations.

This Memorandum of Surface and Damage Agreement shall serve as notice of the agreement covering the Lands and that the SUA is binding upon Owner and Operator's respective successors and/or assigns.

The terms and provisions of the unrecorded SUA are referred to and incorporated herein, and made a part hereof to the same extent as though set out verbatim. Should any conflict arise between the terms of this Memorandum of Surface Use Agreement and Grant of Easements and the SUA, the terms of the SUA shall control.

Executed this 24<sup>th</sup> day of April, 2012.

**OWNER:**

  
Salradus, L.L.C.  
Bonnie S. Coleman, managing member  
148 West Center Street  
Heber City, UT 84032

Coleman Mountain Holdings, L.L.C.  
Mary Jo Coleman Adamson, Managing Member  
P.O. Box 610  
Roosevelt, UT 84066

*Joseph N. Coleman*

Coleman Family Trust  
Joseph N. Coleman, Trustee  
393 East Center  
Heber City, UT 84032

---

The Coleman Family Trust  
Leila Coleman, Trustee  
950 South 400 East #112  
St. George, UT 84770

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Uintah Resources, Inc.  
By: Todd Dana  
Its: President

**OPERATOR:**

*Clinton Koerth*

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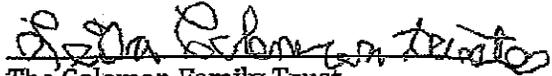
Finley Resources Inc.  
By: Clinton Koerth  
Its: Vice President

**CONFIDENTIAL**

  
Coleman Mountain Holdings, L.L.C.  
Mary Jo Coleman, managing member.  
610 N. Mesa Circle, PO Box 610  
Roosevelt, UT 84066

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Coleman Family Trust  
Joseph N. Coleman, Trustee  
393 East Center  
Heber City, UT 84032

  
The Coleman Family Trust  
Leila Coleman, Trustee  
950 South 400 East #112  
St. George, UT 84770

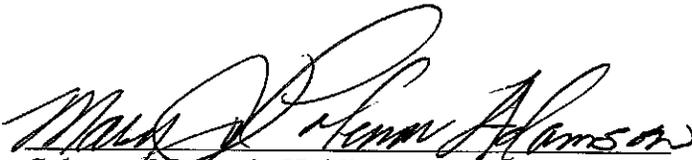
  
Uintah Resources, Inc.  
By: ~~Todd Dana~~ Vincent J Memmott  
Its: President

**OPERATOR:**

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Finley Resources Inc.  
By: Clinton Koerth  
Its: Vice President

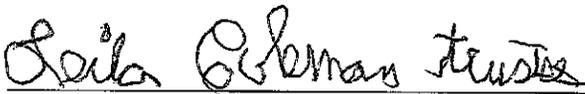
**CONFIDENTIAL**



Coleman Mountain Holdings, L.L.C.  
Mary Jo Coleman Adamson, Managing Member  
P.O. Box 610  
Roosevelt, UT 84066

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Coleman Family Trust  
Joseph N. Coleman, Trustee  
393 East Center  
Heber City, UT 84032



The Coleman Family Trust  
Leila Coleman, Trustee  
950 South 400 East #112  
St. George, UT 84770

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Uintah Resources, Inc.  
By: Todd Dana  
Its: President

**OPERATOR:**

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Finley Resources Inc.  
By: Clinton Koerth  
Its: Vice President

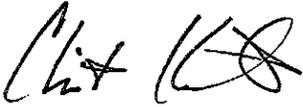
**CONFIDENTIAL**

API Well Completion 2047542560000  
Weila Coleman, Trustee  
950 South 400 East #112  
St. George, UT 84770

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Uintah Resources, Inc.  
By: Todd Dana  
Its: President

**OPERATOR:**

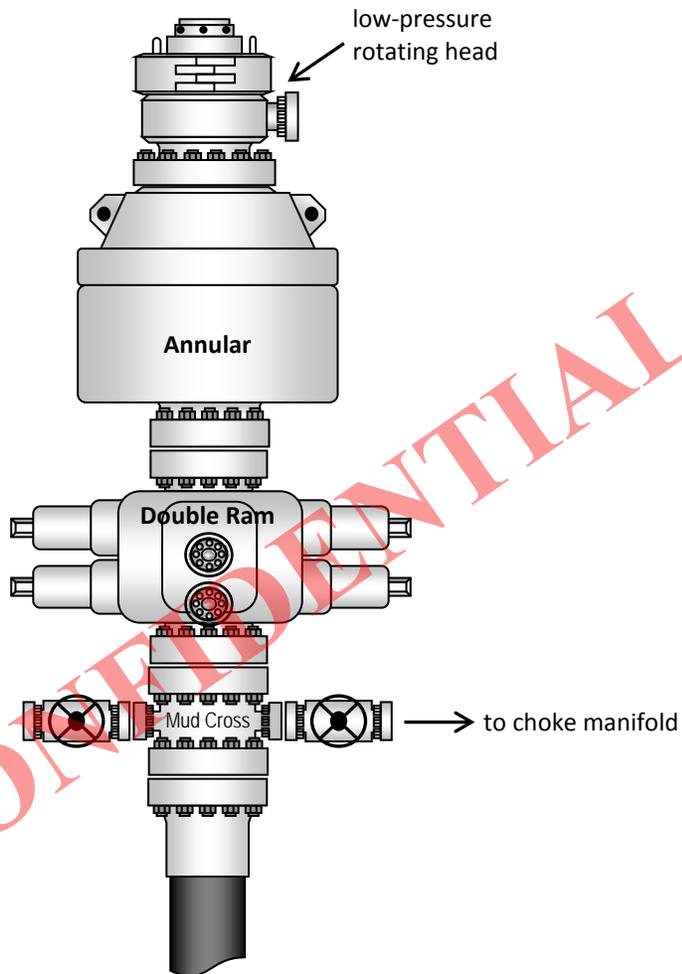


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Finley Resources Inc.  
By: Clinton Koerth  
Its: Vice President

**CONFIDENTIAL**

### Typical 5M BOP stack configuration





2580 Creekview Road  
Moab, Utah 84532  
435/719-2018

January 10, 2014

Mrs. Diana Mason  
State of Utah  
Division of Oil Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Request for Exception to Spacing – Finley Resources, Inc. – **Ute 13-1 SWD**  
1,075' FSL & 1,289' FWL, SW/4 SW/4, Section 13, T4S, R1E, USB&M  
Uintah County, Utah

Dear Diana:

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Finley Resources, Inc. respectfully submits this request for exception to spacing (R649-3-2) based on topography since the well is located less than 460 feet to the drilling unit boundary and is the second well proposed within the 40 acre drilling spacing unit. Finley Resources, Inc. is the only owner and operator within 460 feet of the surface and target location as well as all points along the intended well bore path and never intends production from the well bore with the well bore being drilled solely for the purpose of future UIC approval and water disposal. This well will not be capable of production.

Thank you very much for your timely consideration of this application. Please feel free to contact Zachary Archer of Finley Resources, Inc. at 817-231-8759 or myself should you have any questions or need additional information.

Sincerely,

Don Hamilton  
Agent for Finley Resources, Inc.

cc: Zachary Archer, Finley Resources, Inc.

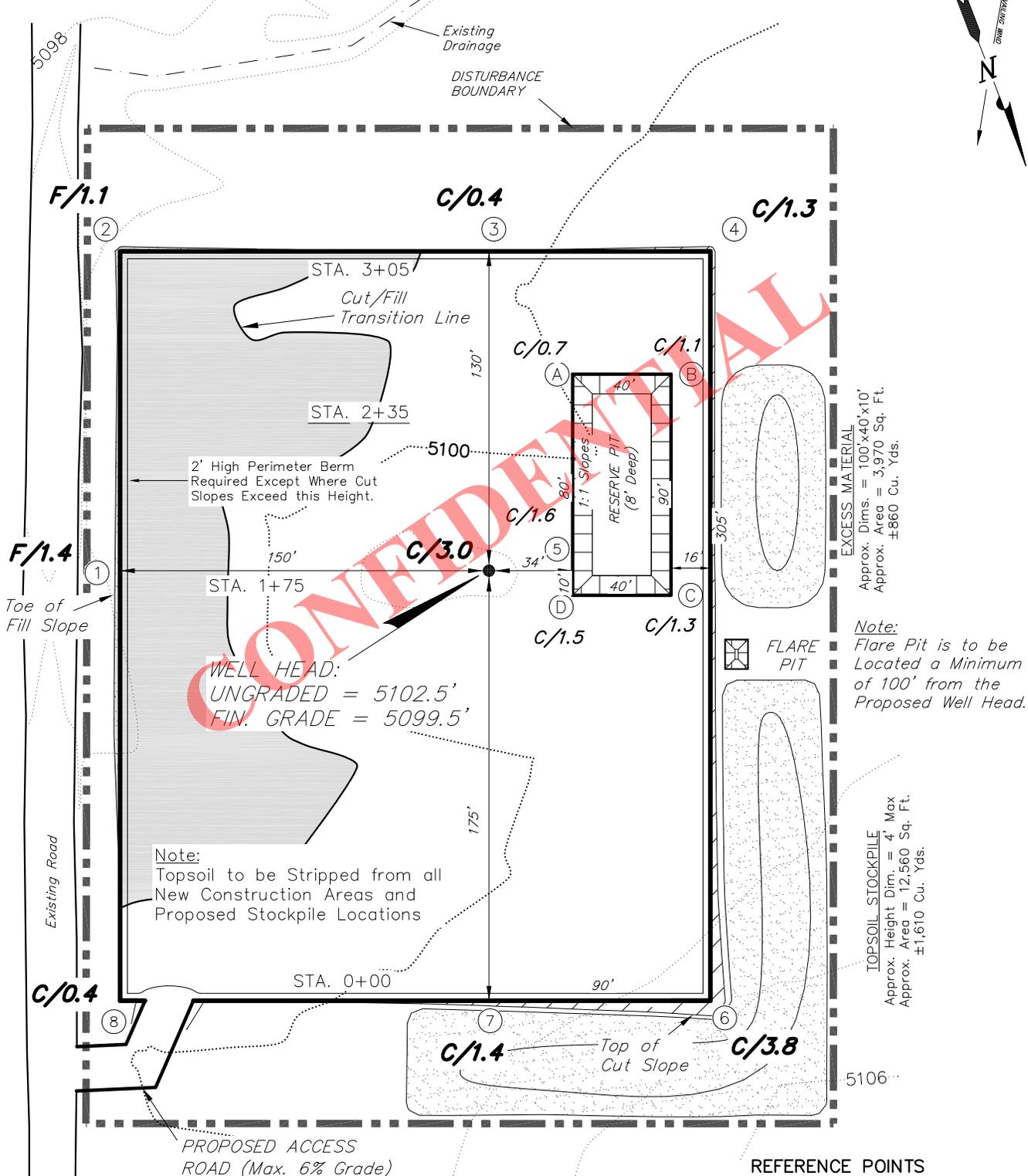
RECEIVED: January 27, 2014

# FINLEY RESOURCES INC.

## PROPOSED LOCATION LAYOUT

### UTE 13-1 SWD

Pad Location: SWSW Section 13, T4S, R1E, U.S.B.&M.



CONVEYANCE

**NOTE:**  
 The topsoil & excess material areas are calculated as being mounds containing 2,470 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

**REFERENCE POINTS**

- 180' SOUTHWESTERLY - 5098.9'
- 230' SOUTHWESTERLY - 5098.9'
- 225' NORTHEASTERLY - 5102.3'
- 275' NORTHEASTERLY - 5102.8'

SURVEYED BY:	S.H.	DATE SURVEYED:	12-18-13
DRAWN BY:	M.W.	DATE DRAWN:	12-19-13
SCALE:	1" = 60'	REVISED:	

(435) 781-2501

**Tri State**  
 Land Surveying, Inc.

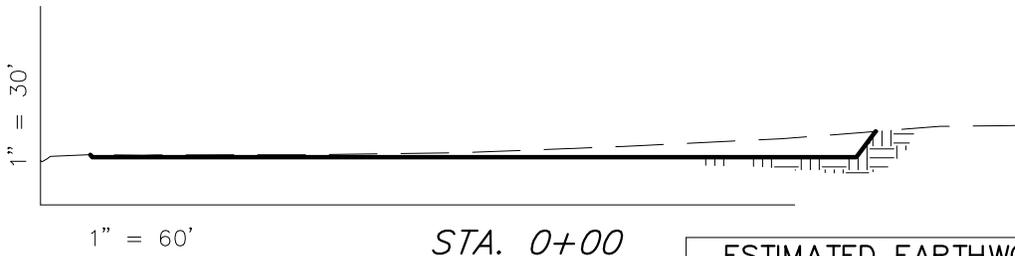
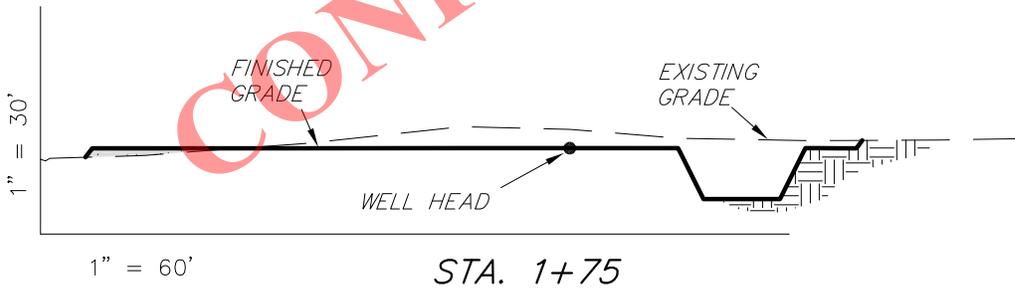
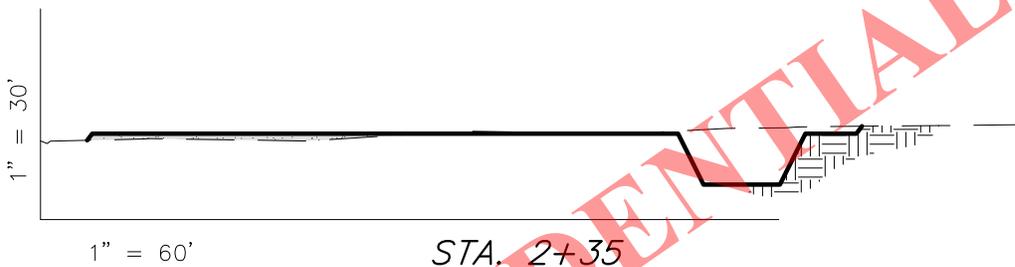
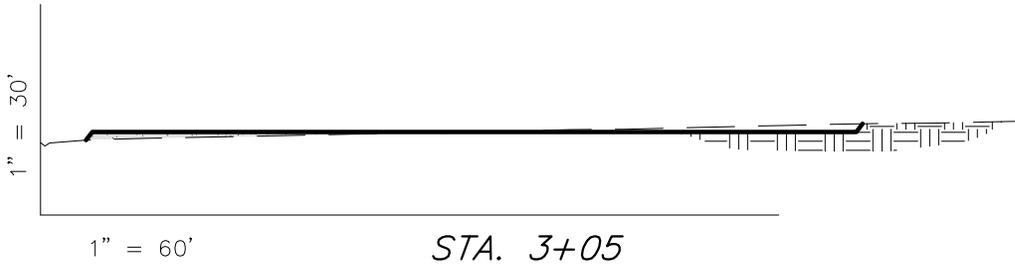
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# FINLEY RESOURCES INC.

## CROSS SECTIONS

### UTE 13-1 SWD

Pad Location: SWSW Section 13, T4S, R1E, U.S.B.&M.



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NOTE:  
UNLESS OTHERWISE  
NOTED ALL CUT/FILL  
SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	1,040	1,040	Topsoil is not included in Pad Cut Volume	0
PIT	780	0		780
TOTALS	1,820	1,040	1,470	780

SURVEYED BY:	S.H.	DATE SURVEYED:	12-18-13
DRAWN BY:	M.W.	DATE DRAWN:	12-19-13
SCALE:	1" = 60'	REVISED:	

(435) 781-2501

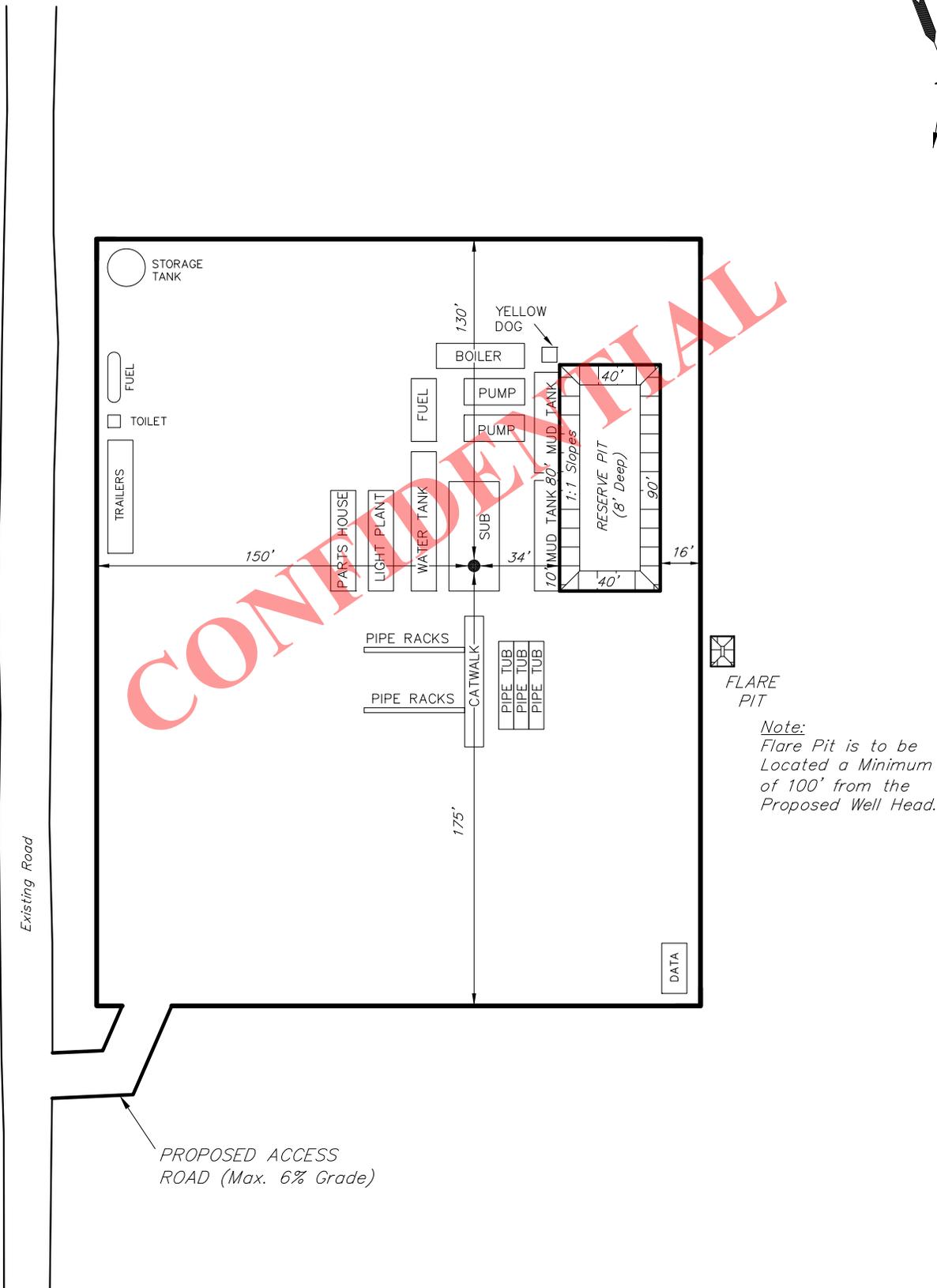
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# FINLEY RESOURCES INC.

## TYPICAL RIG LAYOUT

### UTE 13-1 SWD

Pad Location: SWSW Section 13, T4S, R1E, U.S.B.&M.



**FLARE PIT**

*Note:*  
Flare Pit is to be Located a Minimum of 100' from the Proposed Well Head.

SURVEYED BY:	S.H.	DATE SURVEYED:	12-18-13
DRAWN BY:	M.W.	DATE DRAWN:	12-19-13
SCALE:	1" = 60'	REVISED:	

**Tri State** (435) 781-2501  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078



# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** FINLEY RESOURCES INC  
**Well Name** Ute 13-1 SWD  
**API Number** 43047542560000      **APD No** 9314    **Field/Unit** WINDY RIDGE  
**Location: 1/4,1/4** SWSW    **Sec** 13    **Tw** 4.0S    **Rng** 1.0E    1075 FSL 1289 FWL  
**GPS Coord (UTM)** 599188 4442930      **Surface Owner** Uintah Partners LLC

### Participants

Jim Burns - Starpoint, Dayton Slauch - Tristate, Jim Simonton - Finley

### Regional/Local Setting & Topography

This location is in an area known as the Leland Bench. Most of the bench is fairly flat with some slight rolling hills and shallow ephemeral drainages. The Parriette wetlands are found below south. The town of Randlette is about 10 miles north. This Salt Water Disposal well is located in the center of producing oil wells operated by Finley resources

### Surface Use Plan

#### **Current Surface Use**

Grazing

**New Road  
Miles**

0

**Well Pad**

**Width** 200    **Length** 200

**Src Const Material**

Onsite

**Surface Formation**

UNTA

**Ancillary Facilities**

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

High desert shrubland ecosystem. Expected vegetation consists of black sagebrush, shadscale, Atriplex spp., mustard spp, rabbit brush, horsebrush, broom snakeweed, Opuntia spp and spring annuals.

Dominant vegetation;

Galletta and Globe Mallow

Wildlife;

Adjacent habitat contains forbs that may be suitable browse for deer, antelope, prairie dogs or rabbits, though none were observed.

#### **Soil Type and Characteristics**

light colored clays

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required? N****Berm Required? N****Erosion Sedimentation Control Required? N****Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? N    Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	100 to 200	5
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	300 to 1320	10
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>		0
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		30    1 Sensitivity Level

**Characteristics / Requirements**

Pit to be dug to a depth of 8'. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete

**Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 16    Pit Underlayment Required? N****Other Observations / Comments**

I would like to witness the step rate test

Chris Jensen  
Evaluator

2/5/2014  
Date / Time

**Application for Permit to Drill  
Statement of Basis  
Utah Division of Oil, Gas and Mining**

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
9314	43047542560000	LOCKED	WD	P	No
<b>Operator</b>	FINLEY RESOURCES INC		<b>Surface Owner-APD</b>	Uintah Partners LLC	
<b>Well Name</b>	Ute 13-1 SWD		<b>Unit</b>		
<b>Field</b>	WINDY RIDGE		<b>Type of Work</b>	DRILL	
<b>Location</b>	SWSW 13 4S 1E U 1075 FSL (UTM) 599184E 4442928N		1289 FWL	GPS Coord	

**Geologic Statement of Basis**

The mineral rights for the proposed well are owned by the Ute Tribe. The BLM will be the agency responsible for evaluating and approving the drilling, casing and cement programs.

Brad Hill  
APD Evaluator

3/4/2014  
Date / Time

**Surface Statement of Basis**

Location is proposed in a good location with no apparent risks from drainages. Access road enters the pad from the east. The landowner or its representative was not in attendance for the pre-site inspection.

The soil type and topography at present do combine to pose a significant threat to erosion or sediment/ pollution transport in these regional climate conditions.

Usual construction standards of the Operator appear to be adequate for the proposed purpose as submitted.

I recognize no special flora or animal species or cultural resources on site that the proposed action may harm. The Parriette wetland area can be found South of the site. The location was not previously surveyed for cultural and paleontological resources ( as the operator saw fit). I have advised the operator take all measures necessary to comply with ESA and MBTA and that actions insure no disturbance to species that may have not been seen during onsite visit.

Fencing around the reserve pit will be necessary to prevent wildlife and livestock from entering. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues.

Chris Jensen  
Onsite Evaluator

2/5/2014  
Date / Time

**Conditions of Approval / Application for Permit to Drill**

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues.

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 1/27/2014

API NO. ASSIGNED: 43047542560000

WELL NAME: Ute 13-1 SWD

OPERATOR: FINLEY RESOURCES INC (N3460)

PHONE NUMBER: 817-231-8759

CONTACT: Zachary Archer

PROPOSED LOCATION: SWSW 13 040S 010E

Permit Tech Review: 

SURFACE: 1075 FSL 1289 FWL

Engineering Review: 

BOTTOM: 1075 FSL 1289 FWL

Geology Review: 

COUNTY: UINTAH

LATITUDE: 40.13084

LONGITUDE: -109.83583

UTM SURF EASTINGS: 599184.00

NORTHINGS: 4442928.00

FIELD NAME: WINDY RIDGE

LEASE TYPE: 2 - Indian

LEASE NUMBER: 1420H624896

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - RLB0011294
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: R649-3-3
- Effective Date:
- Siting:
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - dmason  
4 - Federal Approval - dmason  
5 - Statement of Basis - bhll  
23 - Spacing - dmason



GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. HAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** Ute 13-1 SWD  
**API Well Number:** 43047542560000  
**Lease Number:** 1420H624896  
**Surface Owner:** FEE (PRIVATE)  
**Approval Date:** 3/5/2014

**Issued to:**

FINLEY RESOURCES INC , PO Box 2200, Fort Worth, TX 76113

**Authority:**

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being

drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**



For John Rogers  
Associate Director, Oil & Gas



## United States Department of the Interior



### BUREAU OF LAND MANAGEMENT

Green River District

Vernal Field Office

170 South 500 East

Vernal, UT 84078

<http://www.blm.gov/ut/st/en/fo/vernal.html>

AUG 05 2014

IN REPLY REFER TO:  
3160 (UTG011)

April Wilkerson  
Finley Resources, Inc.  
PO Box 2200  
Ft. Worth, TX 76113

43 047 54256

Re: Request to Return APD  
Well No. Ute 13-1 SWD  
SWSW, Sec. 13, T4S, R1E  
Uintah County, Utah  
Lease No. 14-20-H62-4896

RECEIVED

AUG 11 2014

DIV. OF OIL, GAS & MINING

Dear April:

The Application for Permit to Drill (APD) for the above referenced well received in this office on March 14, 2014, is being returned unapproved per request to this office in an email message to Land Law Examiner Robin R. Hansen received on June 23, 2014, from Don Hamilton. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding APD processing, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

/s/ Jerry Kenczka

Jerry Kenczka  
Assistant Field Manager  
Lands & Resource Minerals

#### Enclosures

cc: UDOGM  
Don Hamilton

bcc: Well File

FINLEY RESOURCES, INC. NOTIFICATION FORM—STATE, UTE TRIBE, BIA.,BLM

OPERATOR: FINLEY RESOURCES, INC. RIG NAME/CONST. CO: Pro-Petro

SUBMITTED BY: JIM SIMONTON PHONE #: 435-630-1023

WELL NAME/NUMBER: Ute 13-1 SWD

QTR/QTR: SWSW SEC.: 13 T: 4S R: 1 E

LEASE SN: Fee UTM: 599184E 4442928N

API #: 43-047-54256

**CONFIDENTIAL**

LOCATION CONSTRUCTION START DATE: 10/28/14

LOCATION CONSTRUCTION FINISH DATE: 10/31/14

CONDUCTOR SPUD NOTICE: DATE: 10/31/14 TIME: 10:00AM

SURFACE SPUD NOTICE: DATE: 11/1/14 TIME: 4:00PM

SURFACE CSG.CEMENT NOTICE: DATE: 11/2/14 TIME: noon

REMARKS: On 10/31/14 RU Pete Martin rat hole rig. Bucket drill 24" hole to 42' and ran 40' of 16" conductor and grout in. On 11/1/14 RU Pro-Petro air rig and spud 12-1/4" surface hole at 4:00PM. Air mist to 500'. Ran 10 jts.of new 9-5/8" 36# J-55 LT&C csg.to 425' on 11/2/14. Used 5 centralizers. RU cementers on 11/2/14 and cement surface csg.with 260 sxs.of 15.8 ppg "G" cement and displace plug with fresh water. Had 17 bbl.of good cement to surface. Hole standing full. RDUFA.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H624896
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE  <b>7.UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Water Disposal Well	<b>8. WELL NAME and NUMBER:</b> Ute 13-1 SWD
<b>2. NAME OF OPERATOR:</b> FINLEY RESOURCES INC	<b>9. API NUMBER:</b> 43047542560000
<b>3. ADDRESS OF OPERATOR:</b> PO Box 2200 , Fort Worth, TX, 76113	<b>PHONE NUMBER:</b> 817 231-8735 Ext
<b>9. FIELD and POOL or WILDCAT:</b> WINDY RIDGE	<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1075 FSL 1289 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 13 Township: 04.0S Range: 01.0E Meridian: U
	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 2/2/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Step Rate and MIT Testing"/>

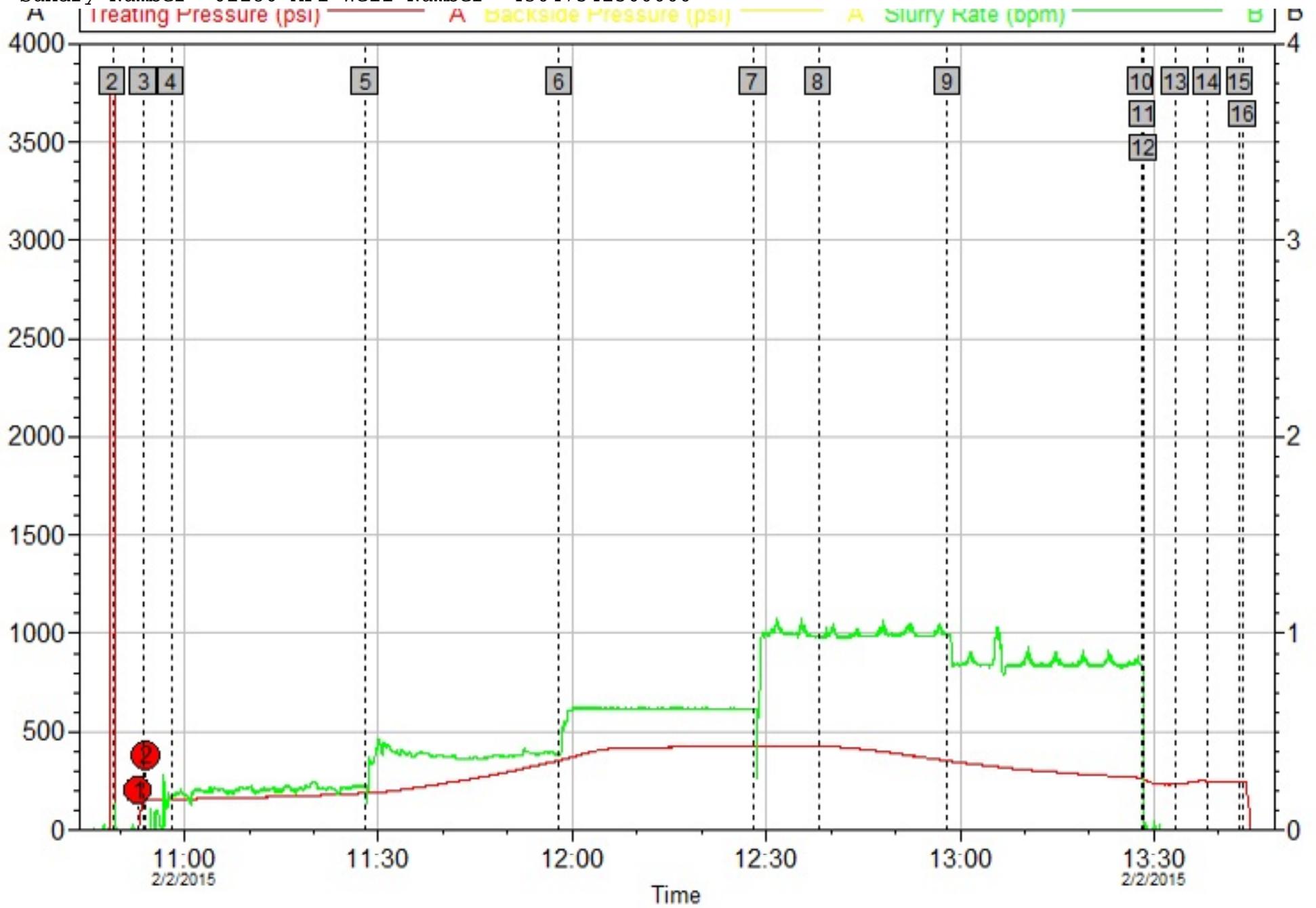
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Finley Resources, Inc. respectfully submits the attached Step Rate and MIT Test data and witness verification for the Ute 13-1 SWD.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 March 03, 2015

<b>NAME (PLEASE PRINT)</b> Don Hamilton	<b>PHONE NUMBER</b> 435 650-3866	<b>TITLE</b> Permitting Agent (Star Point Enterprises, Inc.)
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/3/2015	

Sundry Number: 61286 API Well Number: 43047542560000



Customer: FINLEY RESOURCES INC - EBUS  
Well Description: Ute 13-1-4-1 SWD

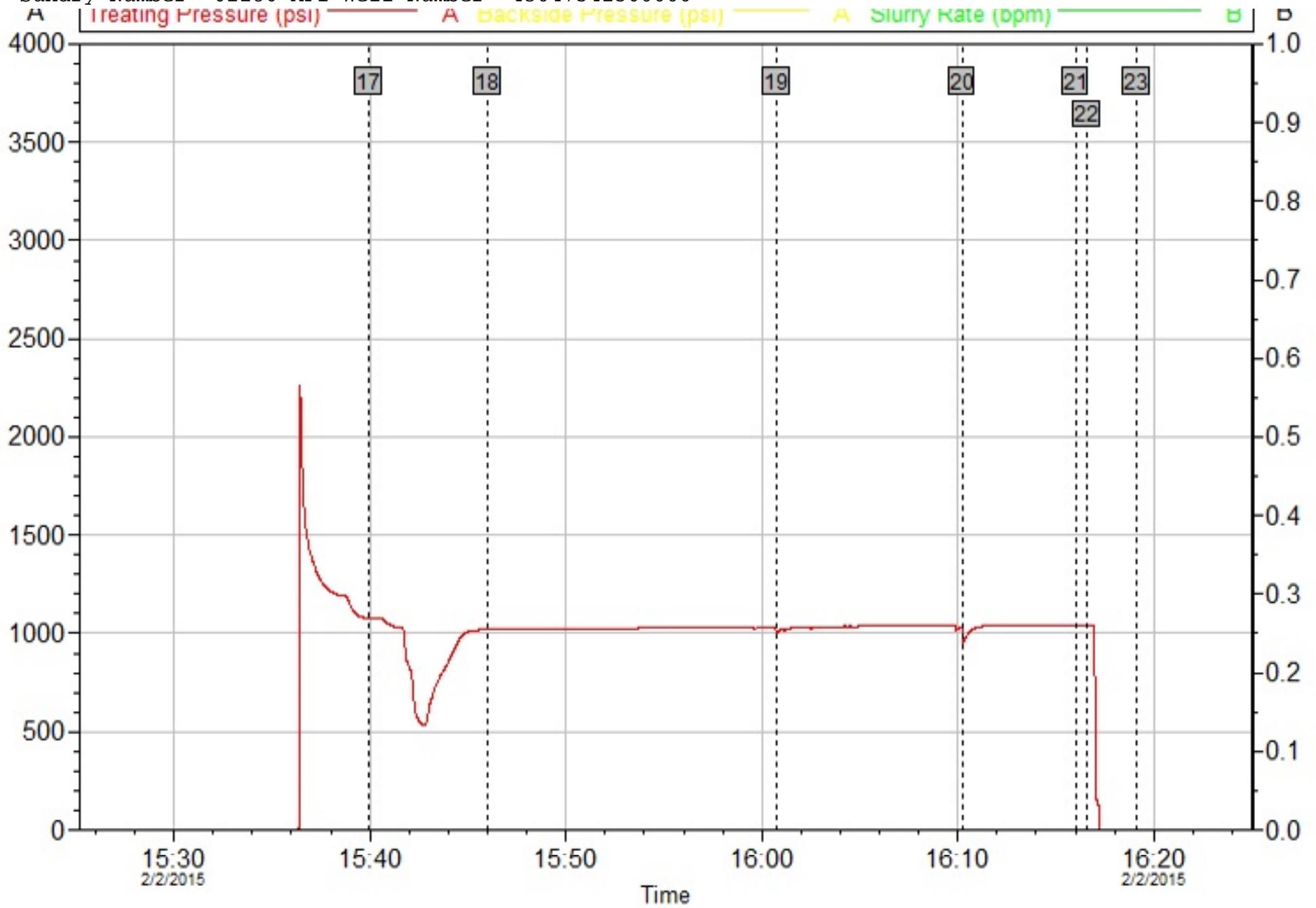
Job Date: 02-Feb-2015  
UWI:

Sales Order #: 0902095959

INSITE for Stimulation v4.5.1  
02-Feb-15 16:21

RECEIVED: Mar. 03, 2015

Sundry Number: 61286 API Well Number: 43047542560000



Customer: FINLEY RESOURCES INC - EBUS  
Well Description: Ute 13-1-4-1 SWD

Job Date: 02-Feb-2015  
UWI:

Sales Order #: 0902095959

INSITE for Stimulation v4.5.1  
02-Feb-15 16:23

RECEIVED: Mar. 03, 2015



# HALLIBURTON

## JOB SUMMARY

TICKET # 902095959	TICKET DATE February 2, 2015
REGION NORTH AMERICAN	NWA / COUNTRY ROCKY MOUNTAIN / USA
BDA / STATE Utah	COUNTY Duchesne
MBU ID / EML #	H.E.S. EMPLOYEE NAME / EMPLOYEE #
LOCATION VERNAL UT.	COMPANY Finley
TICKET AMOUNT	PSL DEPARTMENT PRODUCTION ENHANCMENT
WELL LOCATION LAND	CUSTOMER REP / PHONE
LEASE Ute	DEPARTMENT 5005
WELL # 13-1-4-1 SWL	SEC / TWP / RNG

H.E.S. EMP NAME / EMP # / (EXPOSURE HOURS)	HR	HR	HR	HR
Merrell, Brandon / 244956	8.0			
	8.0			
	8.0			
	8.0			
	8.0			
	8.0			
	8.0			

H.E.S. UNIT #S / (R / T MILES)	R / T MILES			
12251192	70			
	70			
	70			
	70			
	70			
	70			
	70			

Form. Name	Type:	Called Out	On Location	Job Started	Job Completed
Form. Thickness 328	From 3,238 To 3,566	Date 2/2/2015	Date 2/2/2015	Date 2/2/2015	Date 11/19/2014
Packer Type	Set At 3,177	Time 0500	Time 0900	Time 1052	Time 1617
Bottom Hole Temp.	Pressure 1,739	Misc. Data Total Depth			

Materials		Well Data					
	Density Lb/Gal	New/Used	Weight	Size	From	To	Max. Allow
Treat. Fluid			23.00	7.000	0	3,820	
Disp. Fluid	8.34						
Prop. Type	Sz Lb.						
Acid Type	Gal. %		12.75	4.500	0	3,198	
Surfactant	Gal. In						
Fluid Loss	Gal/Lb In				3238	3,566	Shots/Ft.
Gelling Agent	Gal. In						
Breaker	Gal/Lb In						
INHIBITOR	Gal/Lb In						
Bioballs	Qty.						
Biocide	Gal/Lb In						
Cross-linker	Gal/Lb In						

	Hours On Location		Operating Hours		Description of Job
	Date	Hours	Date	Hours	
		8.0		8.00	
<b>Total</b>		<b>8.0</b>	<b>Total</b>	<b>8.00</b>	

Job Leaders		Treating Personnel	
MBU LDR.	VAN	Merrell, Brandon / 244956	
TEAM LDR.	SAFTEY	Merrell, Brandon / 244956	
ENG.	DRIVER	Merrell, Brandon / 244956	
Hydraulic Horsepower			
Ordered	500	Avail.	500
		Used	5
Rates in BPM			
Max. Rate	1.1	Avg. Rate	0.7

Pressures			Volumes		
Circulating	Displacement	Preflush:	Gal - BBI	Type:	
Breakdown 428	Maximum 428	Load & Bkdn:	Gal - BBI	Pad:Bbl -Gal	
Average 300	Frac. Gradient 0.51	Treatment:	Gal - BBI	Disp:Bbl-Gal	
Shut In: Instant 264	5 Min. 233	15 Min. 246	Total Volume Gal - BBI	3,864	Gal 92.0 BBL

INSPECTION FORM

STATE OF UTAH  
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: U6 13-1 SWD API Number: 43-047-54256  
 Qtr/Dir: SWSW Section: 13 Township: 4S Range: 1E  
 Company Name: Finley Resources, Inc.  
 Lease: State \_\_\_\_\_ Fed Surface Federal \_\_\_\_\_ Indian \_\_\_\_\_  
 Inspector: Chris Jensen Date: 2/7/2015

Initial Conditions:

Tubing - Rate: 0 Pressure: 300 # psi

Casing/Tubing Annulus - Pressure: 10 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1020</u>	<u>300</u>
5	<u>1020</u>	<u>300</u>
10	<u>1020</u>	<u>11</u>
15	<u>1020</u>	<u>11</u>
20	<u>1020</u>	<u>11</u>
25	<u>1020</u>	<u>11</u>
30	<u>1020</u>	<u>300 #</u>

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 300 # psi

Casing/Tubing Annulus Pressure \_\_\_\_\_ psi

COMMENTS:

Witness Chris Jensen

Operator Representative

James A. Simonson 435-630-1023

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT  FORM 8  
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:

9. API NUMBER:

10 FIELD AND POOL, OR WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

12. COUNTY

13. STATE

**UTAH**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. TYPE OF WORK: NEW WELL  HORIZ. LATS.  DEEP-EN  RE-ENTRY  DIFF. RESVR.  OTHER \_\_\_\_\_

2. NAME OF OPERATOR:

3. ADDRESS OF OPERATOR: CITY STATE ZIP PHONE NUMBER:

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE:  
  
AT TOP PRODUCING INTERVAL REPORTED BELOW:  
  
AT TOTAL DEPTH:

14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: ABANDONED  READY TO PRODUCE  17. ELEVATIONS (DF, RKB, RT, GL):

18. TOTAL DEPTH: MD TVD 19. PLUG BACK T.D.: MD TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? \* 21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) 23. WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

**27. PERFORATION RECORD**

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

**29. ENCLOSED ATTACHMENTS:**

ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: \_\_\_\_\_

**30. WELL STATUS:**

**31. INITIAL PRODUCTION**

**INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL B (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL C (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL D (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**

**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**34. FORMATION (Log) MARKERS:**

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

**35. ADDITIONAL REMARKS (Include plugging procedure)**

**36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.**

NAME (PLEASE PRINT) \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
<b>1. TYPE OF WELL</b> Water Disposal Well	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H624896
<b>2. NAME OF OPERATOR:</b> FINLEY RESOURCES INC	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>3. ADDRESS OF OPERATOR:</b> PO Box 2200 , Fort Worth, TX, 76113	<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>PHONE NUMBER:</b> 817 231-8735 Ext	<b>8. WELL NAME and NUMBER:</b> Ute 13-1 SWD
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1075 FSL 1289 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 13 Township: 04.0S Range: 01.0E Meridian: U	<b>9. API NUMBER:</b> 43047542560000
	<b>9. FIELD and POOL or WILDCAT:</b> WINDY RIDGE
	<b>COUNTY:</b> UINTAH
	<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/25/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
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	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Initial Injection Report"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Finley Resources, Inc. initiated initial injection on March 25, 2015 following UIC permit approval. Initial day rate was 1068 bbl/day at a pressure of 100 psi. Average initial rate (3/25/15 to 3/31/15) was 945 bbl/day with an average well head pressure of 130 psi.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

Date: April 20, 2015

By: 

<b>NAME (PLEASE PRINT)</b> Don Hamilton	<b>PHONE NUMBER</b> 435 650-3866	<b>TITLE</b> Permitting Agent (Star Point Enterprises, Inc.)
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/9/2015	



Mark Reinbold <markreinbold@utah.gov>

**Finley Ute 13-1 SWD - Initial Injection Report**

10 messages

Star Point Enterprises, Inc. <starpoint@etv.net>

Thu, Apr 9, 2015 at 6:41 AM

Reply-To: starpoint@etv.net

To: Mark Reinbold <markreinbold@utah.gov>

Cc: Clay O'Neil <Clay@finleyresources.com>, James Terry <JTerry@finleyresources.com>

43, 047 54256  
13 AS IE

Mark;

Thank you for the reminder for this report. Attached please find the submitted initial injection report for the Ute 13-1 SWD submitted through the online system. Please let us know if you have any questions or require additional information.

Don

Ute 13-1 SWD - Initial Injection Report (submitted package).pdf  
22K

Mark Reinbold <markreinbold@utah.gov>

Mon, Apr 20, 2015 at 9:16 AM

To: "Star Point Enterprises, Inc." <starpoint@etv.net>

Don,

Thanks for the report. Sorry it has taken me awhile to reply. I was on a family vacation in Puerto Rico April 9-17, so I just got back to the office this morning.

I have a question regarding the daily injection rate, based on the injection pressure. Our engineer Dustin Doucet prepared a graphic representation of pressure vs. injection rate, based on Finley's Step Rate Test (see attachments). From that graph, it appears that an injection pressure of 100 psi would correspond to an injection rate of about 0.12 BPM. That rate calculates to about 173 bbls/day. I am curious as to how Finley could be injecting 1068 bbls/day at 100 psi. Could you please check on it and get back to me? Thank you.

[Quoted text hidden]

--

Mark L. Reinbold, Environmental Scientist  
Utah Department of Natural Resources  
Division of Oil, Gas & Mining  
1594 W North Temple  
PO Box 145801  
Salt Lake City, UT 84114-5801  
Phone 801-538-5333  
Fax 801-539-3940

20150420085946.pdf  
257K

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**Clay O'Neil** <Clay@finleyresources.com>  
To: "Mark Reinbold (markreinbold@utah.gov)" <markreinbold@utah.gov>  
Cc: "starpoint@etv.net" <starpoint@etv.net>

Mon, Apr 20, 2015 at 12:42 PM

Mark,

As per our conversation this morning, here is an e-mail response to your question. When Finley did the MIT, the well had just been perforated and more than likely some of the perfs were not fully opened, also, as more fluid is pumped in the well it is natural for the pressures to drop and rates go up. This is due to near wellbore skin damage from the drilling fluid used to drill the well, as well as pushing fluid further into the formation and connecting more permeable sections. We have also run 4 ½" tbg in the well, which allows us to move more fluid with less friction pressure. If you have any other questions, please let me know. Currently, we are moving 1500-2000 BWPD at 150-190# IP.

Thanks

Clay O'Neil

817-713-9514

---

**From:** Star Point Enterprises, Inc. [mailto:starpoint@etv.net]  
**Sent:** Monday, April 20, 2015 10:43 AM  
**To:** Clay O'Neil; James Terry  
**Subject:** FW: Finley Ute 13-1 SWD - Initial Injection Report

Clay and James;

Need your help with the question below. I think the answer is that the well was not at steady state during the initial injection so it took some initial high-volume pumping to get the 100 psi but wanted your input before I responded to Mark.

Don

**From:** Mark Reinbold [mailto:markreinbold@utah.gov]  
**Sent:** Monday, April 20, 2015 9:17 AM  
**To:** Star Point Enterprises, Inc.  
**Subject:** Re: Finley Ute 13-1 SWD - Initial Injection Report

[Quoted text hidden]

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**Mark Reinbold** <markreinbold@utah.gov>  
To: "Doucet, Dustin" <dustindoucet@utah.gov>

Mon, Apr 20, 2015 at 1:33 PM

[Quoted text hidden]

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**Mark Reinbold** <markreinbold@utah.gov>  
To: Clay O'Neil <Clay@finleyresources.com>, "Doucet, Dustin" <dustindoucet@utah.gov>

Wed, Aug 19, 2015 at 9:37 AM

Clay,

Some time ago we asked you to perform another Step Rate Test (SRT) in order to establish a reliable minimum fracture pressure and maximum allowable injection pressure, which is consistent with the observed injection rate. Please let us know when you schedule the SRT so we may send a DOGM witness.

Thank you.

[Quoted text hidden]

---

**Clay O'Neil** <CO'Neil@finleyresources.com>  
To: Mark Reinbold <markreinbold@utah.gov>  
Cc: "Dustin Doucet (dustindoucet@utah.gov)" <dustindoucet@utah.gov>, "starpoint@etv.net" <starpoint@etv.net>

Wed, Aug 19, 2015 at 11:40 AM

Mark,

I have looked through all of our email exchanges and I'm not coming up with anything where we were asked to perform another step rate test. Maybe what I had got deleted or is hidden with another email chain that I'm not finding. Could you forward me whatever you have where that discussion took place? I can't recall ever having to do that before, either, on other injection wells. If we did do this, depending on what the data showed, would we be able to get a higher MAIP than 300#?

Thanks

Clay

**From:** Mark Reinbold [mailto:markreinbold@utah.gov]  
**Sent:** Wednesday, August 19, 2015 10:38 AM  
**To:** Clay O'Neil; Doucet, Dustin

[Quoted text hidden]

[Quoted text hidden]

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**Mark Reinbold** <markreinbold@utah.gov>  
To: "Doucet, Dustin" <dustindoucet@utah.gov>

Wed, Aug 19, 2015 at 11:49 AM

Dustin,

It is my understanding that you had a phone conversation with Clay, in which you requested the new SRT.

[Quoted text hidden]

**Dustin Doucet** <dustindoucet@utah.gov>

Wed, Aug 19, 2015 at 2:11 PM

To: Clay O'Neil <CO'Neil@finleyresources.com>

Cc: Mark Reinbold <markreinbold@utah.gov>, "starpoint@etv.net" <starpoint@etv.net>

Clay,

I think it goes back to our conversation in April in regards to the existing SRT and new injection rates and pressures we were seeing at that time. This is somewhat detailed in the correspondence below. I believe in that conversation I stated that a new SRT would be required but I would leave that up to you and Mark to work out the details. I had suggested that if it is taking fluid essentially on vacuum that you may be able to get us enough data at different injection rates that we felt comfortable with the data and existing rates and pressures but you would have to talk with Mark on the details. I had a similar discussion with Mark, but sounds like we all kind of forgot about it. I think if you did do a new SRT and the data showed a higher pressure was warranted, that you could get a higher injection pressure.

**Dustin**

[Quoted text hidden]

--

Dustin K. Doucet

Petroleum Engineer

Division of Oil, Gas and Mining

1594 West North Temple, Ste 1210

Salt Lake City, Utah 84116

801.538.5281 (ofc)

801.359.3940 (fax)

web: [www.ogm.utah.gov](http://www.ogm.utah.gov)

---

**Clay O'Neil** <CO'Neil@finleyresources.com>

Wed, Aug 19, 2015 at 2:26 PM

To: Dustin Doucet <dustindoucet@utah.gov>

Cc: "starpoint@etv.net" <starpoint@etv.net>, "Mark Reinbold (markreinbold@utah.gov)" <markreinbold@utah.gov>

Ok, thanks. My recollection of that conversation was that we could do another SRT if we wanted to see if we could get a higher MAIP, not that one would be required. I don't have notes to back that up, but, that was my understanding, that's why we haven't done another one. We are currently pumping 1500-1900 BPD at 280-290#, it has pretty much flat lined there. We can get another one done if that is what you want, just hate to have to spend any money right now. Looks like oil is headed down into the \$30's this week. We are planning to drill about 40 wells if oil gets back up to \$55(I might be retired before it does that) and would need some extra disposal volume at that time, which we might could get by doing another SRT and it shows we can go to a higher MAIP. Any chance we could wait until then to do that? The 13-1 SWD is handling all of our water needs where we are now. Let me know, we will do whatever you want done.

Thanks

Clay

**From:** Dustin Doucet [mailto:dustindoucet@utah.gov]

**Sent:** Wednesday, August 19, 2015 3:12 PM

**To:** Clay O'Neil

**Cc:** Mark Reinbold; starpoint@etv.net

[Quoted text hidden]

[Quoted text hidden]

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**Dustin Doucet** <dustindoucet@utah.gov>

Wed, Aug 19, 2015 at 2:49 PM

To: Clay O'Neil <CO'Neil@finleyresources.com>

Cc: "starpoint@etv.net" <starpoint@etv.net>, "Mark Reinbold (markreinbold@utah.gov)" <markreinbold@utah.gov>

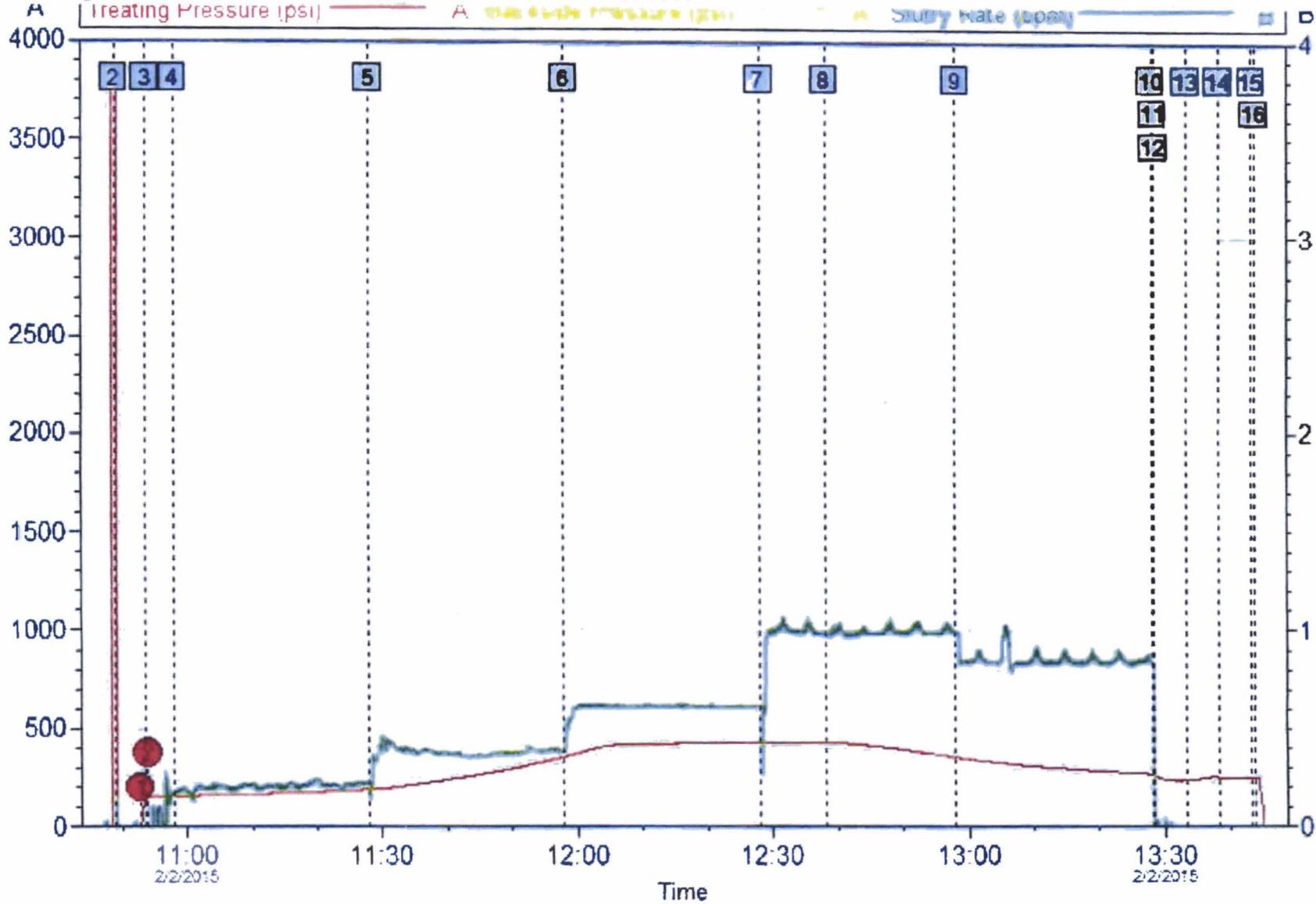
Have you been increasing injection rates on the well? If so, what has the pressure been increasing or remaining relatively flat, all friction? Or has the well been gradually pressuring up at the same rate? Overall I think we are comfortable that at 300 psi, there is no chance of fracturing. The initial SRT really didn't mean anything. Another one may not give us any more data either, but would be more representative of the actual conditions. I think I would want to see what data you do have from injecting before deciding anything. Could you answer the questions above and provide me with some rates vs. pressures that you have seen during injection if they seem consistent or would tell us anything? Thanks.

[Quoted text hidden]

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624896																														
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<input type="checkbox"/> DRILLING REPORT Report Date:	OTHER: <input type="text" value="Initial Injection Report"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Finley Resources, Inc. initiated initial injection on March 25, 2015 following UIC permit approval. Initial day rate was 1068 bbl/day at a pressure of 100 psi. Average initial rate (3/25/15 to 3/31/15) was 945 bbl/day with an average well head pressure of 130 psi.		
NAME (PLEASE PRINT) Don Hamilton	PHONE NUMBER 435 650-3866	TITLE Permitting Agent (Star Point Enterprises, Inc.)
SIGNATURE N/A	DATE 4/9/2015	

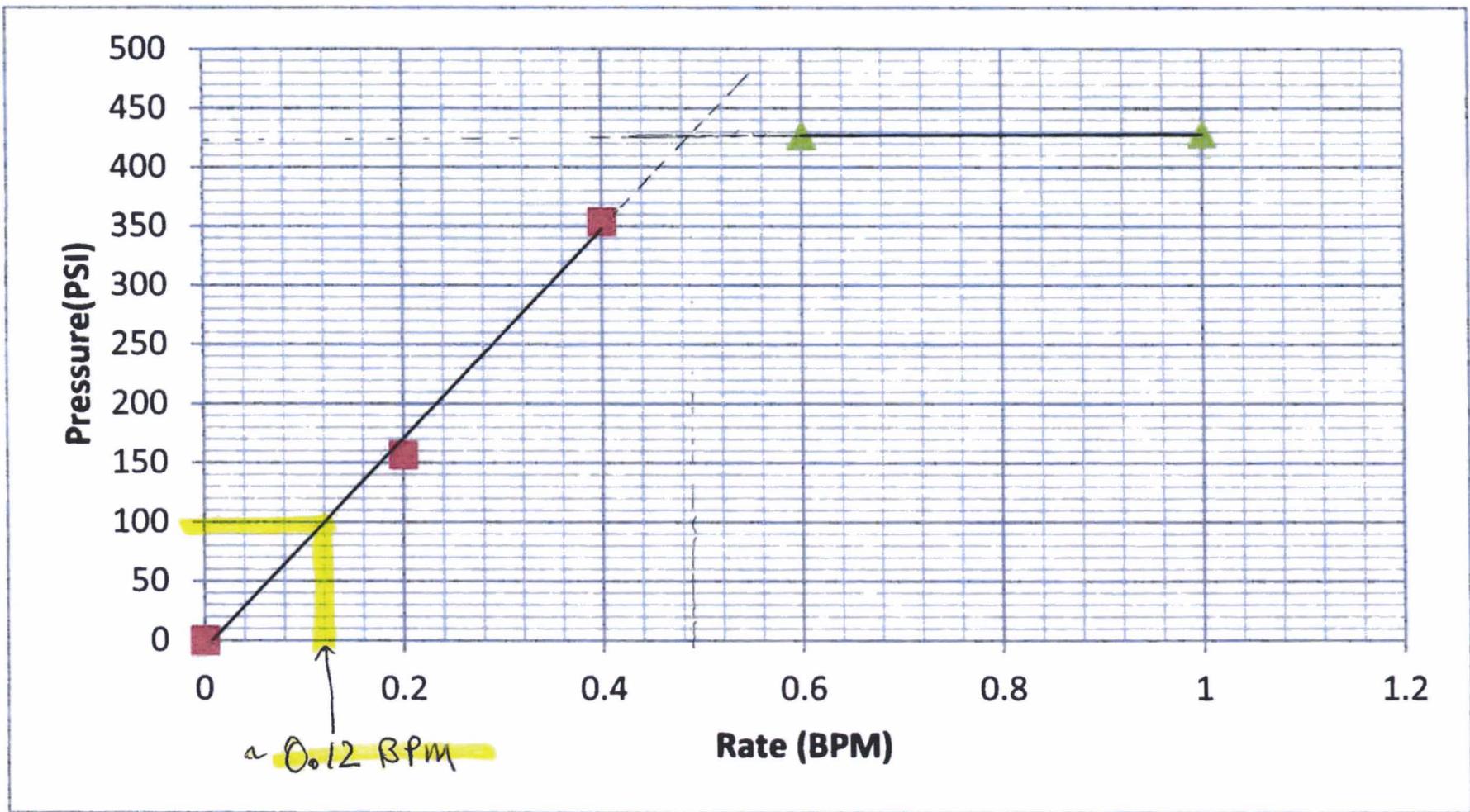
Sundry Number: 61286 API Well Number: 43047542560000



Customer: FINLEY RESOURCES INC - EBUS	Job Date: 02-Feb-2015	Sales Order #: 0902095959
Well Description: Ute 13-1 -4-1 SWD	UWI:	

NOTE for Simulation v4.5.1  
02-Feb-15 16:21

RECEIVED: Mar. 03, 2015



Initial injection pressure = 100 psi  
 Expected injection rate = ~ 0.12 BPM  
 $\frac{0.12 \text{ bbls}}{\text{min}} \times \frac{1440 \text{ min}}{\text{day}} \approx 173 \text{ bbls/day} @ 100 \text{ psi}$



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## UNDERGROUND INJECTION CONTROL PERMIT

Cause No. UIC-431

**Operator:** Finley Resources, Inc.  
**Well:** Ute 13-1 SWD  
**Location:** Section 13, Township 4 South, Range 1 East, USM  
**County:** Uintah  
**API No.:** 43-047-54256  
**Well Type:** Salt Water Disposal Well

### Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on March 19, 2015.
2. Maximum Allowable Injection Pressure: 300 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Birds Nest zone, Green River Formation (3,228' – 3,566')
5. A Monthly Injection Report shall be filed as required by R649-8-20, UIC Form 3.
6. A pressure gauge shall be installed to measure pressure in the casing-tubing annulus. This pressure is to be monitored and reported on the Monthly Injection Report.

Approved by:

  
John Rogers  
Associate Director

3-24-2015  
Date

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
Ute Indian Tribe  
Star Point Enterprises, Inc.  
Uintah County  
Well File

N:\O&G Permits\Injection Permits





GARY R. HERBERT  
Governor

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Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

March 19, 2015

Finley Resources, Inc.  
1308 Lake Street  
Fort Worth, TX 76113

Subject: Windy Ridge Well: Ute 13-1 SWD, Section 13, Township 4 South, Range 1 East, USM, Uintah County, Utah, API Well # 43-047-54256

Finley Resources, Inc.:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Finley Resources, Inc.
3. A casing/tubing pressure test shall be conducted prior to commencing injection.
4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.
5. The top of the injection interval shall be limited to a depth no higher than 3,228 feet in the Ute 13-1 SWD well.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Mark Reinbold at 801-538-5333 or Brad Hill at 801-538-5315.

Sincerely,

John Rogers  
Associate Director

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
Ute Indian Tribe  
Star Point Enterprises, Inc.  
Uintah County  
Well File

N:\O&G Permits\Injection Permits

1594 West North Temple, Suite 1210, Salt Lake City, UT 84116  
PO Box 145801, Salt Lake City, UT 84114-5801  
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • [www.ogm.utah.gov](http://www.ogm.utah.gov)



**UIC INJECTION PERMIT APPLICATION ANALYSIS FORM**

**WELL NAME: Ute 13-1 SWD, Sec 13-T4S, R1E, UBB&M, Windy Ridge Field, API #: 43-0047-54256**

R649-5-2. Requirements For Class II Injection Wells Including Water Disposal, Storage And Enhanced Recovery Wells.	Completed Items, Needed Items, & Comments
1. Injection wells shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.	1. OK
2. The application for an injection well shall include a properly completed UIC Form 1 and the following:	2. OK
2.1. A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.	2.1 OK, five producing oil wells located within one-half mile radius of proposed injection well.
2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.	2.2 OK
2.3. A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.	2.3 CBL rec'd via e-mail 2/16/2015.
2.4. Copies of logs already on file with the division should be referenced, but need not be refiled.	2.4 OK
2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.	2.5 OK
2.6. A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.	2.6 OK, produced water, est. max. 5000 BOPD, limited by injection rate.
2.7. Standard laboratory analyses of (1) the fluid to be injected, (2) the fluid in the formation into which the fluid is being injected, and (3) the compatibility of the fluids.	2.7 (1) Analyses of proposed injection fluids submitted with application. (2) Water sample taken from injection interval during completion and submitted to DOGM. (3) The water sample taken from injection interval during completion was of dubious quality, but another nearby Birds Nest sample verifies poor quality of the water in the aquifer, indicating that proposed injection fluids will not degrade the aquifer.
2.8. The proposed average and maximum injection pressures.	2.8 EPA max rate 300 psi. Step-Rate-Test (SRT) suggests max rate at 425 psi (breakover point).
2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.	2.9 SRT was performed during completion to determine fracture parting pressure through the proposed injection interval of Birds Nest zone in Green River Formation. Finley will abide by EPA max rate of 300 psi, thus assuring no fracturing.
2.10. Appropriate geological data on the injection interval and confining beds, and nearby Underground Sources of Drinking Water, including the geologic name, lithologic description, thickness, depth, water quality, and lateral extent; also information relative to geologic structure near the proposed well which may affect the conveyance and/or storage of the injected fluids.	2.10 OK
2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.	2.11 Five producing oil wells within the half-mile radius Area of Review. Wellbore diagrams and CBLs indicate adequate casing and cement.
2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners and surface owners within a one-half mile radius of the proposed injection well.	2.12 OK, included with application.
2.13. Any other additional information that the board or division may determine is necessary to adequately review the application.	2.13 OK



2580 Creekview Road  
Moab, Utah 84532  
435/650-3866

Revised edition  
**RECEIVED**

MAR 19 2015

DIV. OF OIL, GAS & MINING

February 13, 2015

Brad Hill – Oil & Gas Permitting Manager  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Application for Class II Injection Well – Ute 13-1 SWD – Finley Resources, Inc.

Dear Mr. Hill;

On behalf of Finley Resources, Inc., Star Point Enterprises, Inc. respectfully submits the attached Application for Injection Well (UIC Form 1) with supplemental information for conversion of the existing Ute 13-1 SWD to an Underground Injection Control Class II Injection Well. The Ute 13-1 SWD was recently drilled and is presently completed and capable of water disposal with expedited review and processing of this application requested. Following approval the well would be utilized exclusively for the purpose of subsurface injection of water from Finley Resources, Inc. (Finley) operations in the Uintah Basin with no commercial use proposed.

Thank you very much for your previous approval of our application. Please feel free to contact Clay O'Neil at [clay@finleyresources.com](mailto:clay@finleyresources.com) or 817-713-9514 myself at [starpoint@etv.net](mailto:starpoint@etv.net) or 435-650-3866 should you have any questions or need additional information.

Sincerely,

**Don Hamilton**

Digitally signed by Don Hamilton  
DN: cn=Don Hamilton, o=Star Point  
Enterprises, Inc., ou,  
email=starpoint@etv.net, c=US  
Date: 2015.03.19 09:34:56 -0600

Don Hamilton, Permitting Agent

cc: Clay O'Neil, Finley Resources, Inc.  
April Wilkerson, Finley Resources, Inc.

Revised edition  
**RECEIVED**

MAR 19 2015

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 1

**APPLICATION FOR INJECTION WELL**

Name of Operator Finley Resources, Inc.	Utah Account Number N 3460	Well Name and Number Ute 13-1 SWD
Address of Operator P.O. Box 2200      CITY Ft. Worth      STATE TX      ZIP 76113	Phone Number (817) 231-8735	API Number 4304754256
Location of Well Footage : 1075 FSL 1289 FWL      County : Uintah QQ, Section, Township, Range: SWSW 13 4S 1E      State : UTAH		Field or Unit Name Windy Ridge Lease Designation and Number 1420H624896

Is this application for expansion of an existing project?      Yes       No

Will the proposed well be used for:	Enhanced Recovery?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Disposal?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Storage?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Is this application for a new well to be drilled?      Yes       No

If this application is for an existing well, has a casing test been performed?      Yes       No   
Date of test: 2/2/2015

Proposed injection interval:      from 3,228      to 3,566

Proposed maximum injection:      rate 5,000      bpd      pressure 300      psig

Proposed injection zone contains oil , gas , and / or fresh water  within 1/2 mile of the well.

List of attachments: (see attached report with detailed attachment list)

**ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT  
UTAH OIL AND GAS CONSERVATION GENERAL RULES**

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Don Hamilton

Title Permitting Agent

Signature Don Hamilton

Date 2/13/2015

Digitally signed by Don Hamilton  
DN: cn=Don Hamilton, o=Star Point  
Enterprises, Inc., ou,  
email=starpoint@etv.net, c=US  
Date: 2015.03.19 09:34:45 -06'00'

**UNDERGROUND INJECTION CONTROL  
PERMIT APPLICATION**

**UIC CLASS II INJECTION WELL**



**UTE 13-1 SWD  
SWSW, SEC. 13, T4S, R1E, USB&M  
Uintah County, Utah  
API # 43-047-54256  
Lease # 1420H624896**

Prepared for:

**Brad Hill – Oil & Gas Permitting Manager  
Division of Oil, Gas and Mining  
1594 West North Temple  
Salt Lake City, Utah 84116**

**February 13, 2015  
(revised March 19, 2015)**

**Ute Tribal 13-1 SWD  
SWSW, Sec. 13, T4S, R1E, USB&M  
Uintah County, Utah**

**LIST OF FIGURES**

- Figure A1 Area Map with Topography, Wells and Surface Ownership Shading**
- Figure A2 Area Map with Land Ownership and Lease Operators**
- Figure B1 Ute 13-1 SWD Well Bore Diagram**
- Figure B2 Ute 13-1 SWD Cement Bond Log**
- Figure B3 Adjacent well Cement Bond Logs**
- Figure C1 Base of Moderately Saline Water Contour Map**
- Figure C2 Closest Water Well Map**
- Figure D1 Geologic Cross-Section of Confining Layers and Injection Zone**
- Figure D2 Structure Map of the Lower Confining Layer**
- Figure G1 List of Wells with Composition Source to Utilize Injection Well**
- Figure G2 Representative Injection Water Analysis**
- Figure G3 Representative Formation Water Analysis and Compatibility**
- Figure G4 Step Rate Test**
- Figure H1 Plugging & Abandonment (P&A) Procedure, P&A Wellbore Diagram**

## **EXECUTIVE SUMMARY**

The proposed Ute 13-1 SWD well is located in the SW/4 SW/4 (1,075 feet FSL and 1,289 feet FWL), of Section 13, Township 4 South, Range 1 East, in Uintah County, Utah. The well will be an Underground Injection Control (UIC) Class II injection well used exclusively for the purpose of subsurface injection of water from Finley Resources, Inc. (Finley) operations in the Uintah Basin. The permit to drill application for the Ute 13-1 SWD well was approved by the Utah Division of Oil, Gas and Mining (UDOGM) on March 5, 2014. The well was subsequently spud on December 12, 2014 and completed as an injection well on January 26, 2015.

The Ute 13-1 SWD has been drilled to a total depth of 3,830 feet below the ground surface (bgs) with a plug back total depth (pbtd) of 3,774 feet. The well has been perforated in the Green River Formation Birds Nest Aquifer with an isolation packer set above the aquifer at 3,177 feet.

The UDOGM database indicates there are five wells located within the one-half mile radius Area of Review (AOR) for the proposed Ute 13-1 SWD. A cement bond log (CBL) has been completed to verify there is an 80% or better bond across the proposed injection intervals and the upper and lower confining layers. Required logs have been run across the proposed injection zones to demonstrate well suitability, establish the true maximum allowable injection pressure, and verify zone isolation.

Regional geologic and hydrologic studies reflect the Green River Formation is designated as moderately saline groundwater. Samples have been collected and analyzed from the proposed injection interval to confirm the zones within the Green River Formation are not considered an underground source of drinking water (USDW). It is anticipated that the targeted Green River interval has sufficient storage capacity at the Ute 13-1 SWD area to accept all anticipated injected volumes.

The well will be used to inject approved Class II wastes brought to the surface including but not limited to drilling fluids, spent well completion fluids and treatment and stimulation fluids. The well will not be utilized for commercial brine or other fluid disposal operations. Injected fluids will be limited to fluids produced in connection with oil and gas production in the Uintah Basin by Finley.

**UIC WELL APPLICATION  
 UTE 13-1 SWD  
 API 43047542560000**

The following document contains information provided in support of the application for new construction of the Ute 13-1 SWD to be utilized as a Class II injection well.

The Ute 13-1 injection well has been constructed following State of Utah approval. Finley plans to utilize the Ute 13-1 SWD well as an injection well for disposal of produced fluids from Finley wells operated in the Uintah Basin. The well has been perforated to inject into the Birds Nest Aquifer (located at depth ranging from 3,238 to 3,566 feet bgs) with an isolation packer installed at 3,177 feet.

The Ute 13-1 SWD well falls within the Indian Country boundary but the EPA has previously been notified and determined that the UIC application, review and approval would fall under the direction of the UDOGM.

Finley's business address and phone number is provided below:

Finley Resources Inc.  
 1308 Lake Street Fort Worth, Texas 76113  
 817.336.1924

**AREA OF REVIEW**

Enclosed as **Figure A1** is a map reflecting the area surrounding the proposed Ute 13-1 SWD well. The legal location for the Ute 13-1 SWD well is 1,075' FSL & 1,289' FWL, SWSW, Section 13, T4S, R1E, USB&M, Uintah County, Utah. This map includes a one-half mile radius Area of Review (AOR) centered on the proposed Ute 13-1 SWD well. Finley is required to investigate all wells for mechanical integrity within the AOR. There are five wells located within the AOR that are operated by Finley (Ute 13-11A-4-1, Ute 13-12A-4-1, Ute 13-13A-4-1, Ute 13-14A-4-1 and Ute 13-15A-4-1). All five wells have recently been drilled and completed. Refer to **Table A-1** for details of the wells located within the AOR.

**Table A-1: AOR Well Details**

<b>Well Details</b>			<b>Surface Casing</b>			<b>Production Casing</b>		
<b>Well</b>	<b>Well Status</b>	<b>Distance from Injector (feet)</b>	<b>Size (inches)</b>	<b>Depth (feet)</b>	<b>Cement Top</b>	<b>Size (inches)</b>	<b>Depth (feet)</b>	<b>Estimated Cement Top (feet)</b>
Ute 13-1 SWD	Completed SWD	0	9 5/8	424	Surface	7	3,818	Surface
Ute 13-10A-4-1	Producing Oil	1613	8 5/8	505	Surface	5 1/2	7,730	270
Ute 13-11A-4-1	Producing Oil	1613	8 5/8	505	Surface	5 1/2	7,663	230
Ute 13-12A-4-1	Producing Oil	1541	8 5/8	502	Surface	5 1/2	7,775	270
Ute 13-13A-4-1	Producing Oil	1056	8 5/8	502	Surface	5 1/2	7,654	180
Ute 13-14A-4-1	Producing Oil	1162	8 5/8	502	Surface	5 1/2	7,654	270
Ute 13-15A-4-1	Producing Oil	2417	8 5/8	502	Surface	5 1/2	7,618	200

**Figure A-2** identifies surface ownership and the lease operator of those lands within a one-half mile radius of the Ute 13-1 SWD, the owners thereof, which must be provided notice of this application. Below is a listing of the names and addresses of all owners of record of land within a one-half mile radius of the proposed Ute 13-1 SWD injection well. The Ute Tribe (910 South 7500 East, Fort Duchesne, UT 84026) owns the mineral rights within one-half mile of the proposed injection well. Also included as **Figure A-3** is the Affidavit of Mailing.

**Table A-2: List of Surface Owners within the AOR**

**Sections 13 & 14 (all)**

Uintah Partners LLC  
C/O Troy Dana  
2825 E Cottonwood Parkway, #555  
Salt Lake City, Utah 84121

**Section 23 (N/2), 24 (all)**

Salradus LLC  
C/O Bonnie Coleman, Managing Member  
362 N. Main Street  
Heber City, Utah 84032

Coleman Mountain Holdings, LLC  
C/O Mary Jo Coleman  
3940E Hidden Springs Drive  
Washington, Utah 84780

Coleman Family Trust, dated June 7, 1991  
C/O Joseph N. Coleman, Trustee  
393 East Center  
Heber City, Utah 84032

Coleman Family Trust, dated June 28, 1991  
C/O Leila Coleman, Trustee  
950 South 400 East #104  
St. George, Utah 84770

**WELL DATA**

The **Ute 13-1 SWD** well has been drilled and completed as an injection well within the Birds Nest aquifer of the Green River Formation. The proposed injection zone is located from 3,238 feet to 3,566 feet bgs. Finley proposes to utilize the Ute 13-1 SWD well for disposal of produced water from wells that Finley has working interest or operated wells located in Uintah County. **Figure B1** reflects a completed well bore diagram for the Ute 13-1 SWD well. Gamma ray and other open-hole logs, as well as, a cement bond log for the proposed injection well have previously been submitted to the UDOGM. The existing five oil production wells within a one-half mile radius of the proposed injection well have been reviewed in detail for mechanical integrity with no corrective actions identified. Copies of all regulatory filings regarding activities related to the physical state of these wells can be accessed at the Utah Division of Oil, Gas and Mining (UDOGM) online information system website.

## **NAME AND DEPTHS OF USDW's**

A map of the Base of Moderately Saline Water (BMSW) (Plate1: BMSW Elevation Contour Map, Uinta Basin, Utah [DNR, 2012]<sup>1</sup>, shows the elevation to the BMSW (3,000 to 10,000 mg/L TDS) to be approximately 4,200 feet above mean sea level (amsl) at the location of the proposed UIC well. The surveyed ground elevation (ungraded) at Ute 13-1 SWD is 5,103 feet amsl. Based on Plate 1 and the surveyed ground elevation; the BMSW occurs at a depth of approximately 903 feet at the proposed Ute 13-1 SWD location. The top of the uppermost proposed injection interval is approximately 2,330 feet below the approximate BMSW depth. **Figure C1** contains a figure which shows the location of the injection well on Plate 1.

A search of Division of Water Rights records shows one water right within a 10,000 foot radius of the Ute 13-1 SWD well location. **Figure C2** shows the closest known potential Underground Source of Drinking Water (USDW) to the proposed UIC well at approximately 1.6 miles to the south. Division of Water Rights records indicates the closet well (ID: 43-10596) was drilled to a depth of 2,000 feet below the ground surface. The well is located very near the existing Finley 26-1 SWI well. A note in the Division files indicates a cap was welded on top of the casing while the owner (Synder Oil) decided if they wanted to complete the well. The regional and district Division offices were contacted inquiring additional information for this well. In both cases, no additional information from what is stated on the Division database was obtained.

## **GEOLOGY OF INJECTION AND CONFINING ZONES**

The injection and confining intervals for the AOR are listed in the following table and are gross geologic intervals:

**Table D-1 Estimated Tops of Important Geologic Markers**

<u>Formation</u>	<u>Depth in feet</u>
Uinta	0 to 2,264
Base of Moderately Saline GW	903
Green River	2,264
Top Bird's Nest	3,222
Base Bird's Nest	3,589
<b>TD</b>	<b>3,830</b>
Mahogany Bench	3,885

<sup>1</sup> Moderately Saline Groundwater in the Uinta Basin, Utah: Special Study 144, Utah Geological Survey, Division of Utah Department of Natural Resources, 2012.

## General Geology

**Uinta Formation:** Estimated surface to 2,264' in the Ute 13-1 SWD area.

The Uinta Formation overlies the Green River Formation. The Uinta consists mostly of alluvial plain sediments deposited after Lake Uinta and the Uinta Basin began to fill with sediments derived from surrounding uplands. Uinta sediments consist mostly of interbedded brown mudstones and siltstones with some interbedded light tan very fine grained fluvial sandstones. At the location of the Ute 13-1 SWD well, the Uinta Formation is approximately 2,270 feet thick and is present at the surface just below the Quaternary/Holocene surficial deposits.

**Green River Formation:** Estimated 2,264' to 7,000' in the Ute 13-1 SWD area.

The Green River Formation (Eocene) is a complex mixture of clastics, carbonates and organic rich mudstones deposited in an alluvial to lacustrine depositional system. The Green River interfingers with both the overlying Uinta and underlying Wasatch Formations. The Green River Formation is subdivided into upper and lower members, which in ascending order are: Douglas Creek Member and Parachute Creek Member.

The Douglas Creek Member consists of alternating beds of light gray, fine grained calcareous sandstone, limestone, dolomite, and gray-brown brittle shale as well as organic rich black shale. The Parachute Creek Member directly overlies the Douglas Creek Member and is overlain by the Uinta Formation. The Parachute Creek Member was deposited as a complex sequence of lacustrine and marginal lacustrine sediments consisting of laminated carbonate mudstones interbedded with light gray-brown shale, siltstones, and sandstones. The most organic rich shales, including the Mahogany Oil Shale Zone, are located within the Parachute Creek Member with the top of the Mahogany zone estimated to be 3,890 feet bgs in the area of the Ute 13-1 SWD. The Bird's Nest Aquifer was deposited near the top of the Green River Formation within the Parachute Creek Member. The Bird's Nest was deposited in the deeper part of Lake Uinta as the lake dried and became a restricted evaporitic basin. Sediments of the Bird's Nest are characterized as very fine-grained siltstones and mudstones interbedded with dark brown, laminated organic-rich carbonate mudstones and evaporate beds. The lake waters became concentrated with salts, primarily sodium bicarbonate, during this regressive phase. An important characteristic of the Bird's Nest is that large numbers of post depositional nahcolite crystals grew in the Bird's Nest sediments. Nahcolite crystals with diameters of one foot have been reported. Later dissolution of the nahcolite crystals and beds resulted in high-permeability vugular porosities.

### Upper Confining Layer:

The upper confining zone is composed of very fine grained organic lean oil shale and lacustrine marlstone in the Parachute Creek member of the Green River formation. The gross thickness of the upper confining zone averages between 275 and 300 feet. The average thickness of the upper confining zone in the area of the proposed Ute Tribal 13-1 SWD is 285 feet.

### Injection Zone:

The proposed injection zones are between 3,238 to 3,566 feet located in the Birds Nest zone of the Parachute Creek Member of the Green River formation. These intervals are composed of porous and permeable carbonate oil shale with large vugular porosity connected through an extensive fracture network. The combined thickness of the proposed injection zones is 328 feet.

### Lower Confining Layer:

The lower confining zone is composed of very fine grained organic lean oil shale and lacustrine marlstone in the Parachute Creek member of the Green River formation. The gross thickness of the lower confining zone averages between 300 and 350 feet. The average thickness of the lower confining zone in the area of the proposed Ute Tribal 13-1 SWD is 330 feet.

**Figure D1** is a cross-section of wells in the AOR showing the correlation of the upper confining zone, injection zone and lower confining zone. **Figure D2** is a structure map for the top of the lower confining zone.

## **OPERATING DATA**

The daily volumetric disposal for the Ute Tribal 13-1 injection well will vary depending upon water production rates from producing wells in the vicinity. Finley anticipates a maximum injection volume of 5,000 barrels of water per day (BWPD). Injection rate will be constrained by the maximum allowable injection pressure (MAIP) at the surface. The EPA has established a set injection pressure for all Birds Nest Aquifer disposal wells. Injection pressure of 300 pounds per square inch (psi) is equivalent to a formation fracture gradient of 0.62 psi per foot (psi/ft). This established fracture gradient is lower than known fracture pressures in the Uinta basin to ensure that 300 psi injection will not cause fractures in the Birds Nest.

## **STIMULATION PROCEDURES**

No stimulation is planned for this project.

## **INJECTION PROCEDURES**

Injection fluids are planned to be trucked or piped to the site for disposal. The injected fluid will consist of produced water from the Uintah Basin wells operated by Finley. No fluid of any type from outside-operated wells will be injected. **Figure G1** is a list of current wells with water composition that will utilize the injection well. Finley reserves the right to add wells as they are drilled and completed within the project area.

**Figure G2** contains water analysis reports for produced water collected from the Ute Tribal 13-08A, Ute Tribal 13-11A-4-1 wells. These analyses represent typical water which will be injected. The average TDS concentration of the two wells is 49,359.17 mg/l. The details and results for the injection formation samples and injection water

samples are summarized in **Table G-1**.

**Table G-1: Summary of TDS Concentrations Analyzed**

Well Name	Sample Date	Sample Site	TDS (mg/l)
Ute 13-1 SWD	1/28/2015	Well	177,851.53
Ute Tribal 13-08A	3/29/2013	Well	51,321.78
Ute Tribal 13-11A-4-1	3/11/2013	Treater	47,396.56

**Figure G3** reflects formation water analysis and a compatibility report with the injection fluids summarized in **Table G-1** above. Finley is requesting maximum injection rate of 5,000 BWPD based on the attached **Figure G4** reflecting a step rate test completed on the injection interval; however, the actual injection rate will be established based on the MAIP at the surface. Injection will not begin until corrective action has been taken and the regulatory agencies have issued authorization to inject.

Finley plans to install monitoring equipment, as required by the DOGM. At a minimum, the well will be installed with pressure gauges, calibrated at all times to industry standards and manufacturer's specifications, on the tubing and on the casing-tubing annulus. If any non-compliant situation is found, the well will be immediately shut-in and regulatory agencies notified. Injection will not resume until corrective action has been taken and the regulatory agencies have issued authorization to inject.

### **PLUGGING AND ABANDONMENT PLAN**

The Plugging & Abandonment (P&A) procedure for the Ute 13-1 SWD well will be conducted in accordance with UDOGM guideline requirements. **Figure H1** includes:

- P&A Procedure
- Schematic of proposed P&A plan

### **FINANCIAL RESPONSIBILITY DEMONSTRATION**

Finley is required to maintain financial responsibility and resources to close, plug and abandon the underground injection operation in a manner prescribed by the UDOGM. The permittee has shown evidence of such financial responsibility to the UDOGM by the submission of a surety bond acceptable to the UDOGM.

### **AQUIFER EXEMPTION**

An aquifer exemption is not expected at the proposed Ute 13-1 SWD well. The average concentration of TDS for injected water is 49,360 mg/L with injection formation concentration at 177,851.53 mg/L. The Ute 13-1 SWD is located approximately 1.6 miles from the closest known potential USDW.

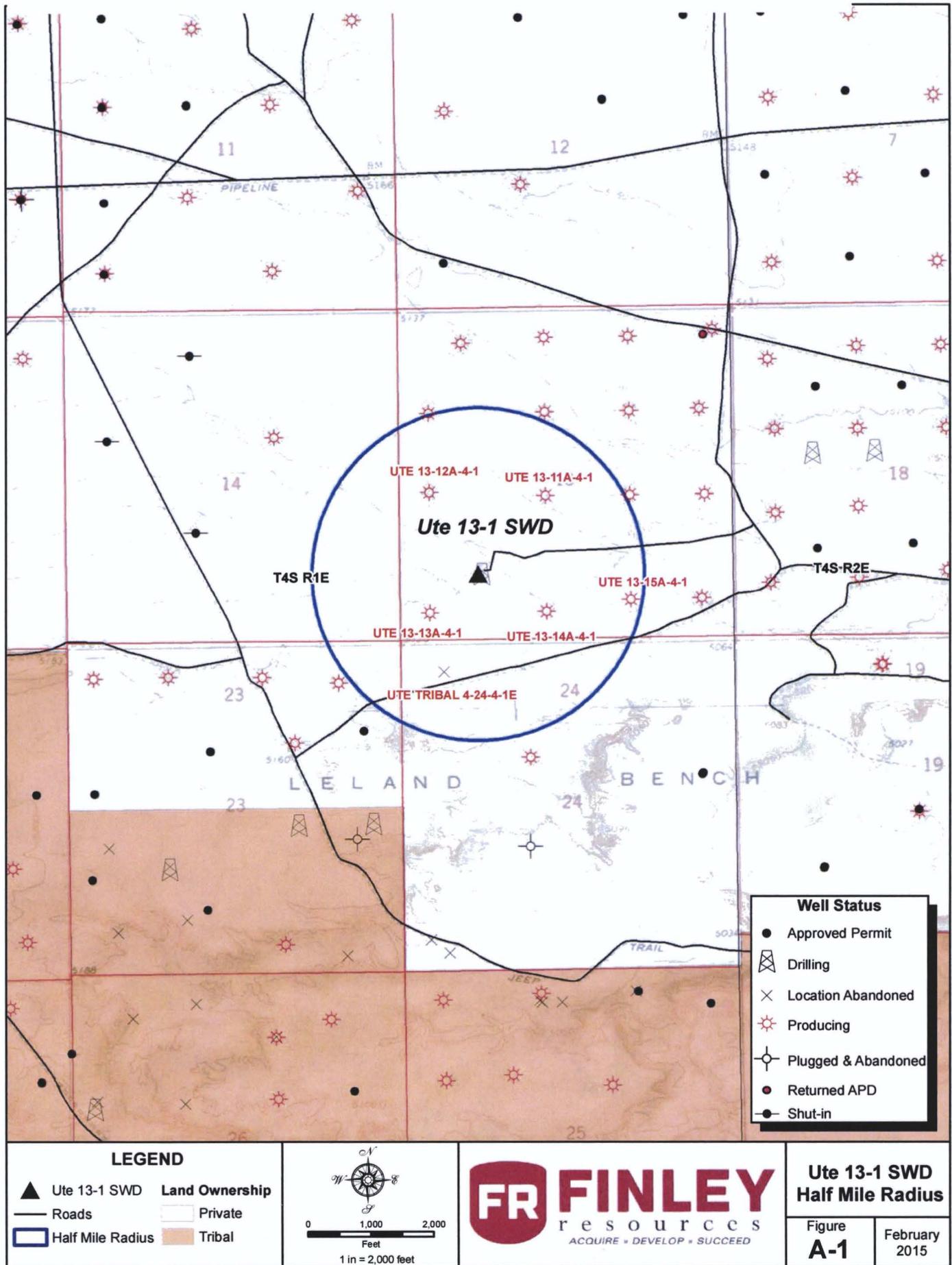
### **EXISTING UIC AUTHORIZATIONS**

Finley has two EPA issued permits

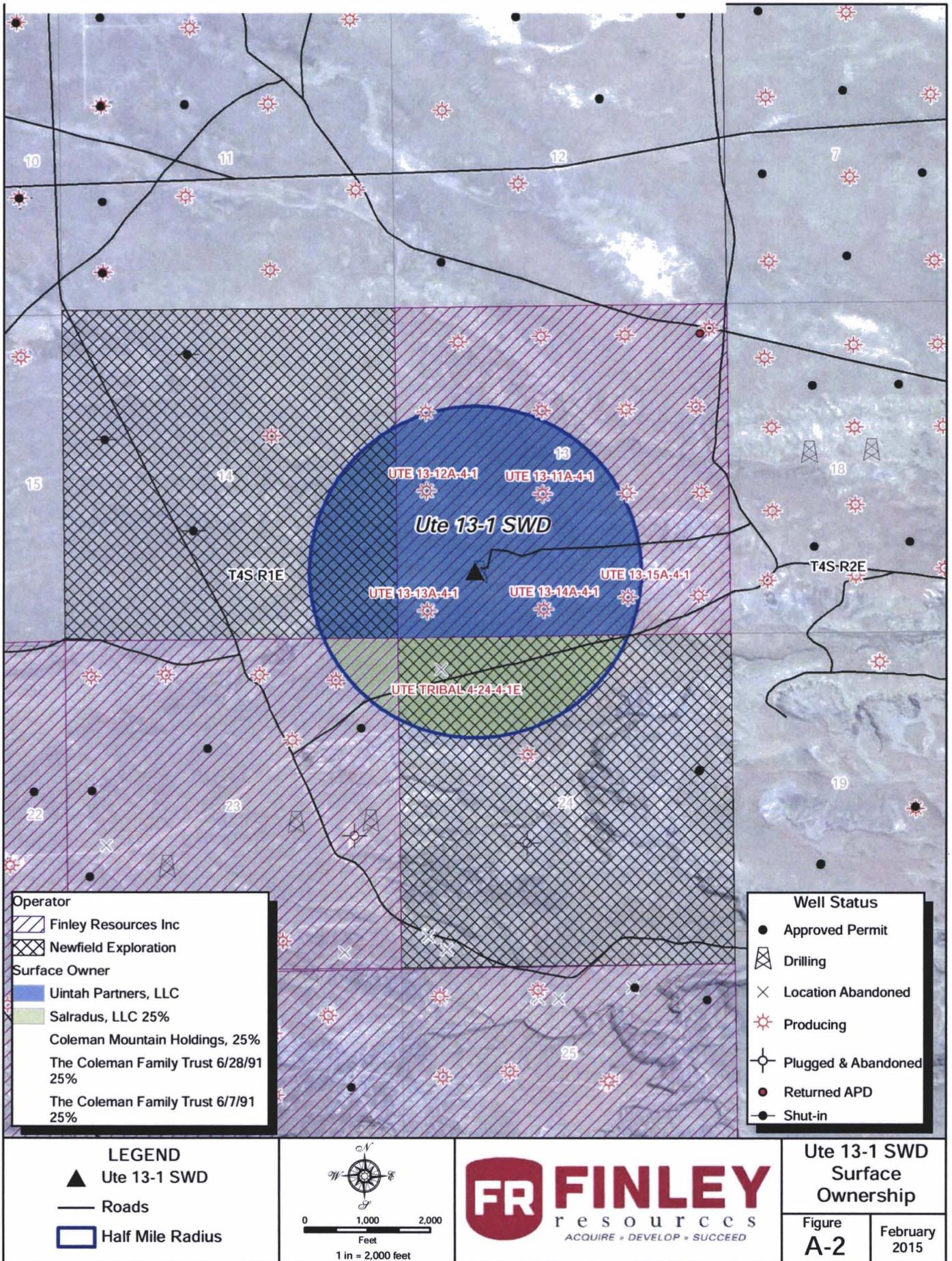
Ute Tribe 26-1 SWI  
UIC Permit UT2780-04280  
Uintah County, Utah

Ute Tribal 22-2 SWI  
UIC Permit UT22266-29945  
Uintah County, Utah

**Figure A1** Area Map with Topography, Wells and Surface Ownership Shading



**Figure A2** Area Map with Land Ownership and Lease Operators



## AFFIDAVIT OF MAILING

Finley Resources Inc, 1308 Lake Street, Fort Worth, Texas 76113 has identified all of the operators, owners, and surface owners within a one-half mile radius of the proposed injection well.

I, Anthony Actis, Professional, Kleinfelder, Inc., being first duly sworn, depose and state as follows; On May 20, 2014 I caused to be mailed by certified mail, postage prepaid, return receipt requested, an affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-quarter mile radius of the proposed injection well

Dated this 20th day of May, 2014

  
\_\_\_\_\_  
Anthony Actis  
Professional  
Kleinfelder, Inc.

The forgoing affidavit was subscribed and sworn to before me by Brad A. Woodard.  
This 20<sup>th</sup> day of May, 2014

LISA L MOONEYHAM  
Notary Public  
State of Colorado  
My Commission Expires May 09, 2016

  
\_\_\_\_\_  
Colorado, Notary Public

**Figure B1 Ute 13-1 SWD Well Bore Diagram**

# Ute 13-1 SWD

Spud Date: 12-21-14  
 Completion Date: 01-26-15  
 GL: 5103' KB: 5116'

**SURFACE CASING**

CSG SIZE: 9-5/8"  
 GRADE: J-55  
 WEIGHT: 36#  
 LENGTH: 10 jts. (424')  
 DEPTH LANDED: 424'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 260 sxs Class "G" cmt

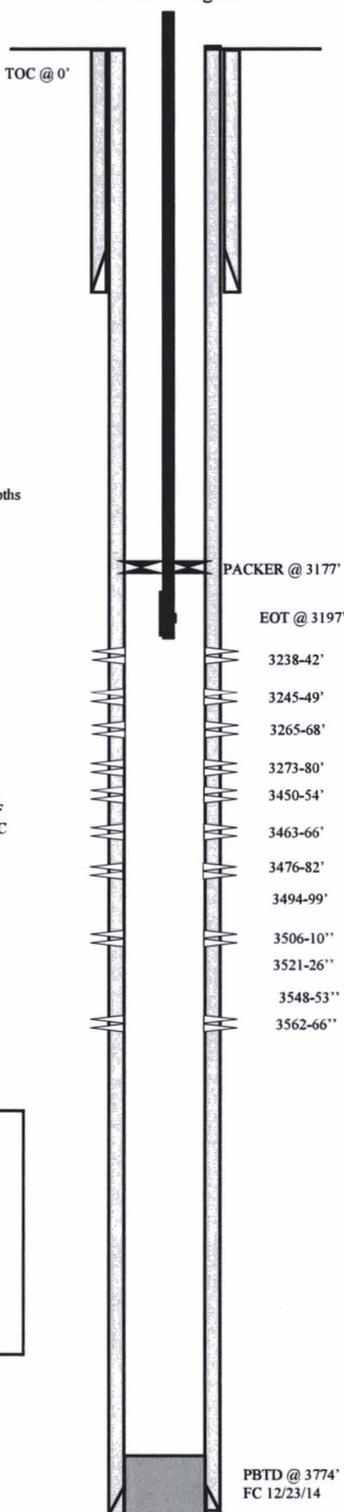
**PRODUCTION CASING**

CSG SIZE: 7"  
 GRADE: J-55  
 WEIGHT: 23.0#  
 LENGTH: 90 jts. (3820') (shoe set at 3818'); (FC @ 3774') KB Depths  
 HOLE SIZE: 8-3/4"  
 TOTAL DEPTH: 3830'  
 CEMENT DATA: 100 sxs 10.0 ppg lead and 625 sxs 14.0 ppg tail  
 CEMENT TOP AT: 200' per CBL 01/06/14

**TUBING (01-23-2014)**

SIZE/GRADE/WT.: 4-1/2" / J-55-N-80 12.75#  
 NO. OF JOINTS: 99 jts (3161.05')  
 TUBING PACKER: SET AT 3177.47' KB  
 TUBING DETAIL: TOP TO BOTTOM: KB=(13.0'); HANGER (0.50'); 11 JTS. 4-1/2" TBG-N-80 (357.13'); 88 JTS. OF 4-1/2" TBG. J-55 (2803.92'); 4-1/2" X3-1/2" X-OVER (0.96'); 7" X3-1/2" ON-OFF TOOL WITH 2.81" PROFILE (1.96'); 7" X3-1/2" DHL HYDRAULIC PACKER (6.32'); 3-1/2" N-80 PUP JT. (6.30'); 2.81" XN NIPPLE (1.0'); 3-1/2" N-80 PUP JT. (6.30'); 3-1/2" PUMP OUT PLUG/RE-ENTRY GUIDE (.044')  
 TOTAL STRING LENGTH: EOT @ 3197.83' KB'

**Wellbore Diagram**



FRAC JOB—no stimulation of perfs at present

**PERFORATION RECORD**

3238-3242'	6 JSPF	24 holes
3245-3249'	6 JSPF	24 holes
3265-3268'	6 JSPF	18 holes
3273-3280'	6 JSPF	42 holes
3450-3454'	6 JSPF	24 holes
3463-3466'	6 JSPF	18 holes
3476-3482'	6 JSPF	36 holes
3494-3499'	6 JSPF	30 holes
3506-3510'	6 JSPF	24 holes
3521-3526'	6 JSPF	30 holes
3548-3553'	6 JSPF	30 holes
3562-3566'	6 JSPF	24 holes

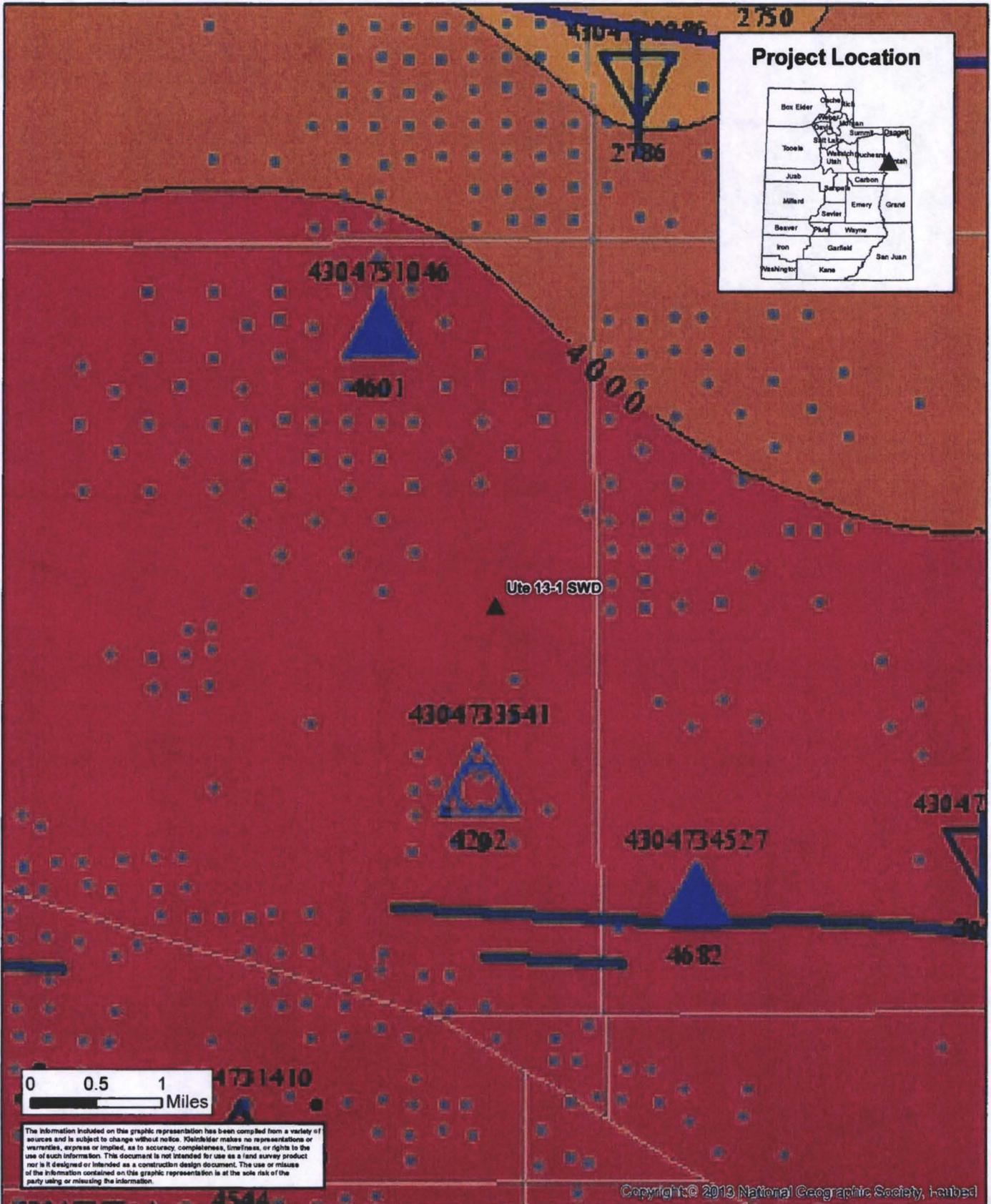
**FINLEY RESOURCES, INC.**

**Ute 13-1-4-1**  
 1075' FSL & 1289' FWL (SW/SW)  
 Section 13, T4S, R1E  
 Uintah Co. Utah  
 API # 43-047-54256; Lease # 14-20-H62-4896

PBTB @ 3774'  
 FC 12/23/14

TD @ 3830'

Figure C1 Base of Moderately Saline Water Contour Map



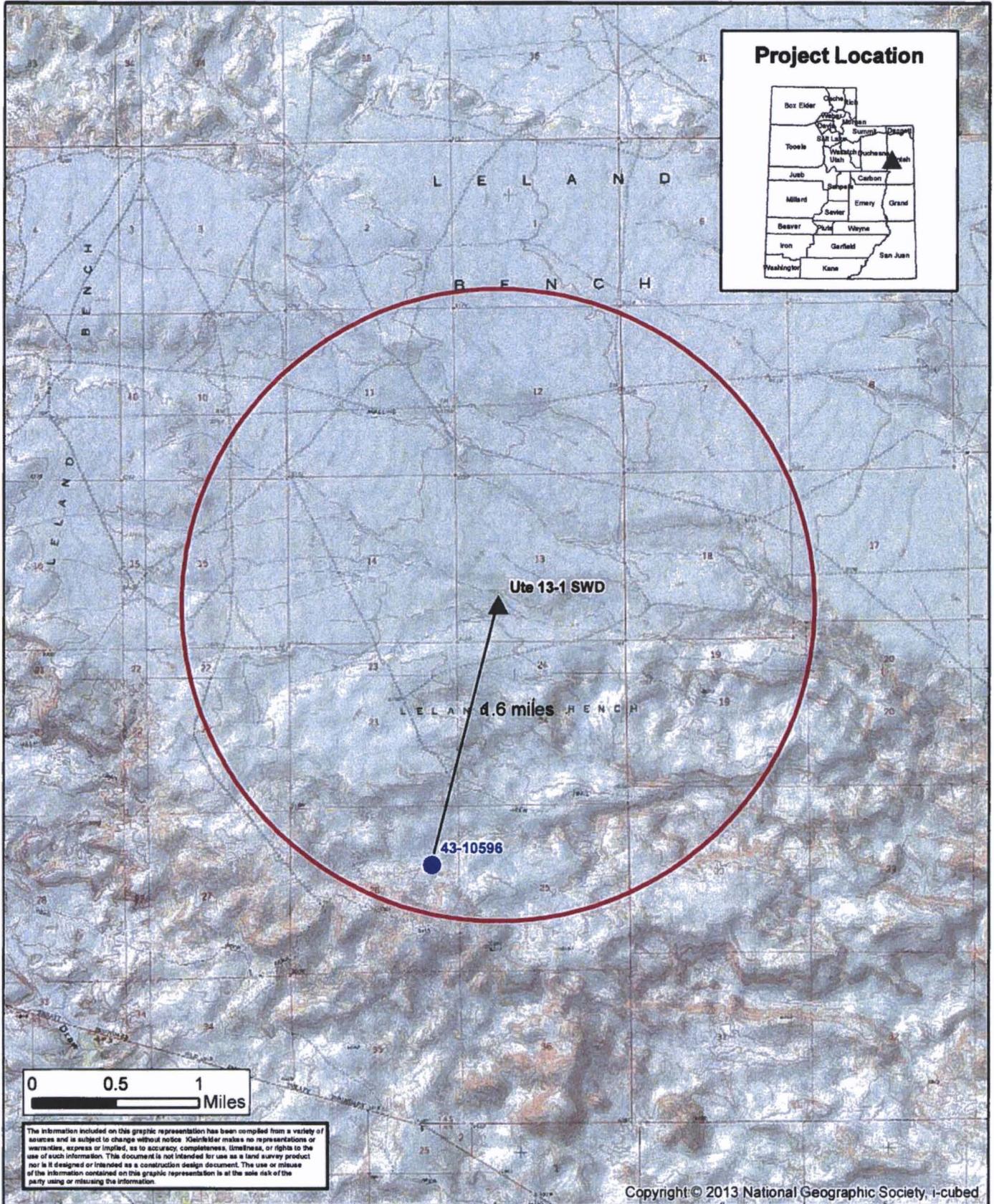
0 0.5 1 Miles

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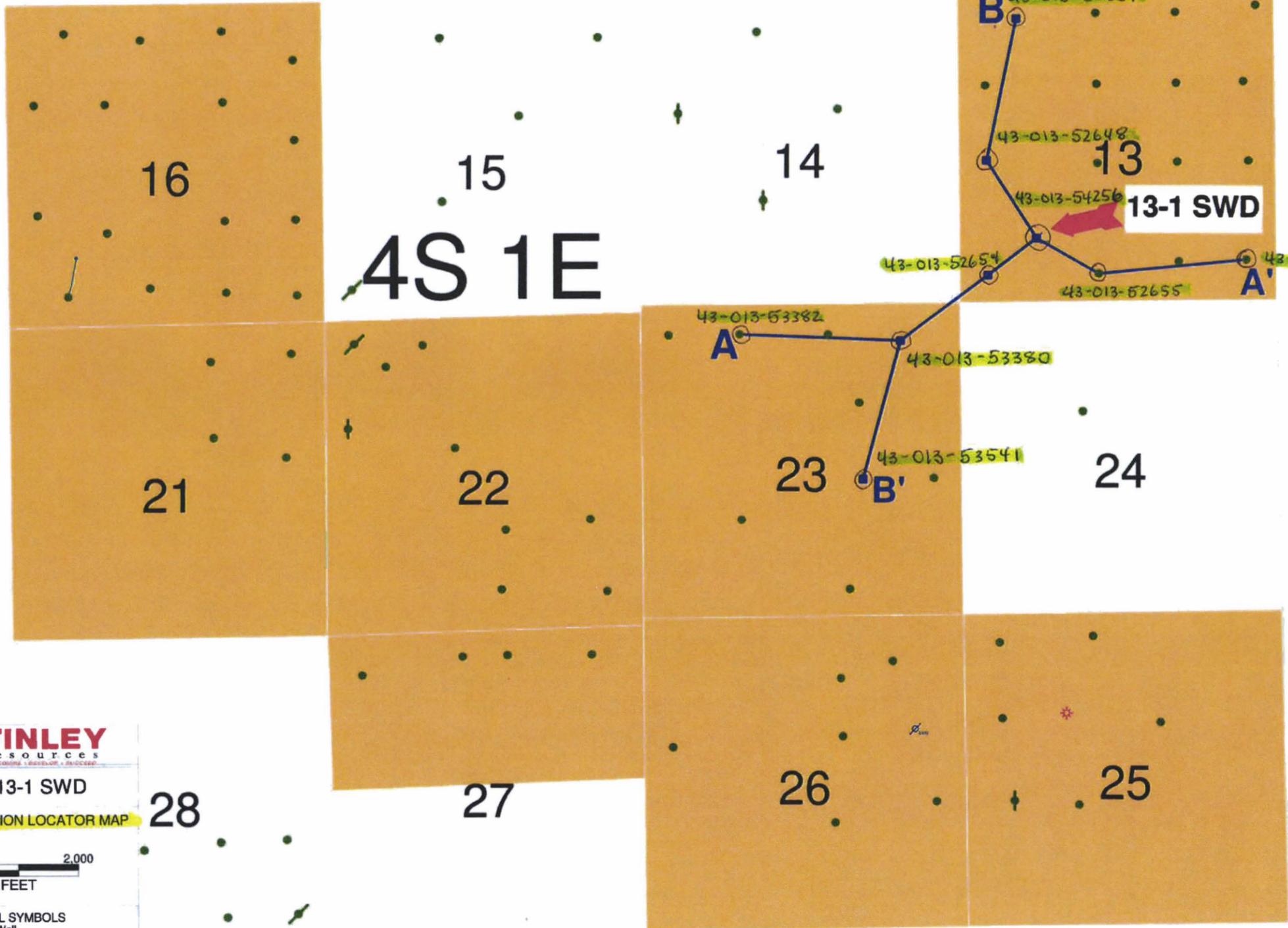
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	<b>Legend</b>  Well Location  4000 Contour	PROJECT NO. 130394 DRAWN: 3/27/2014 DRAWN BY: A. Leonard	<b>Finley Resources Inc.</b>
		CHECKED BY: B. Woodard	
		FILE NAME: FigC1_BMSW.mxd	FIGURE <b>C1</b>
			

**Figure C2** Nearby Drinking Water Sources Map



<p><b>KLEINFELDER</b> Bright People. Right Solutions. www.kleinfelder.com</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>▲ Well Location</li> <li>● Closest Water Well</li> <li>○ 10,000' radius</li> </ul>	<p>N</p>	PROJECT NO. 130394	<p><b>Finley Resources Inc.</b></p>
			DRAWN: 3/27/2014	
			DRAWN BY: A.Leonard	
			CHECKED BY: B.Woodard	
<p>FILE NAME: FigC2_WaterWells.mxd</p>			Ute 13-1 SWD Water Wells	FIGURE <b>C2</b>



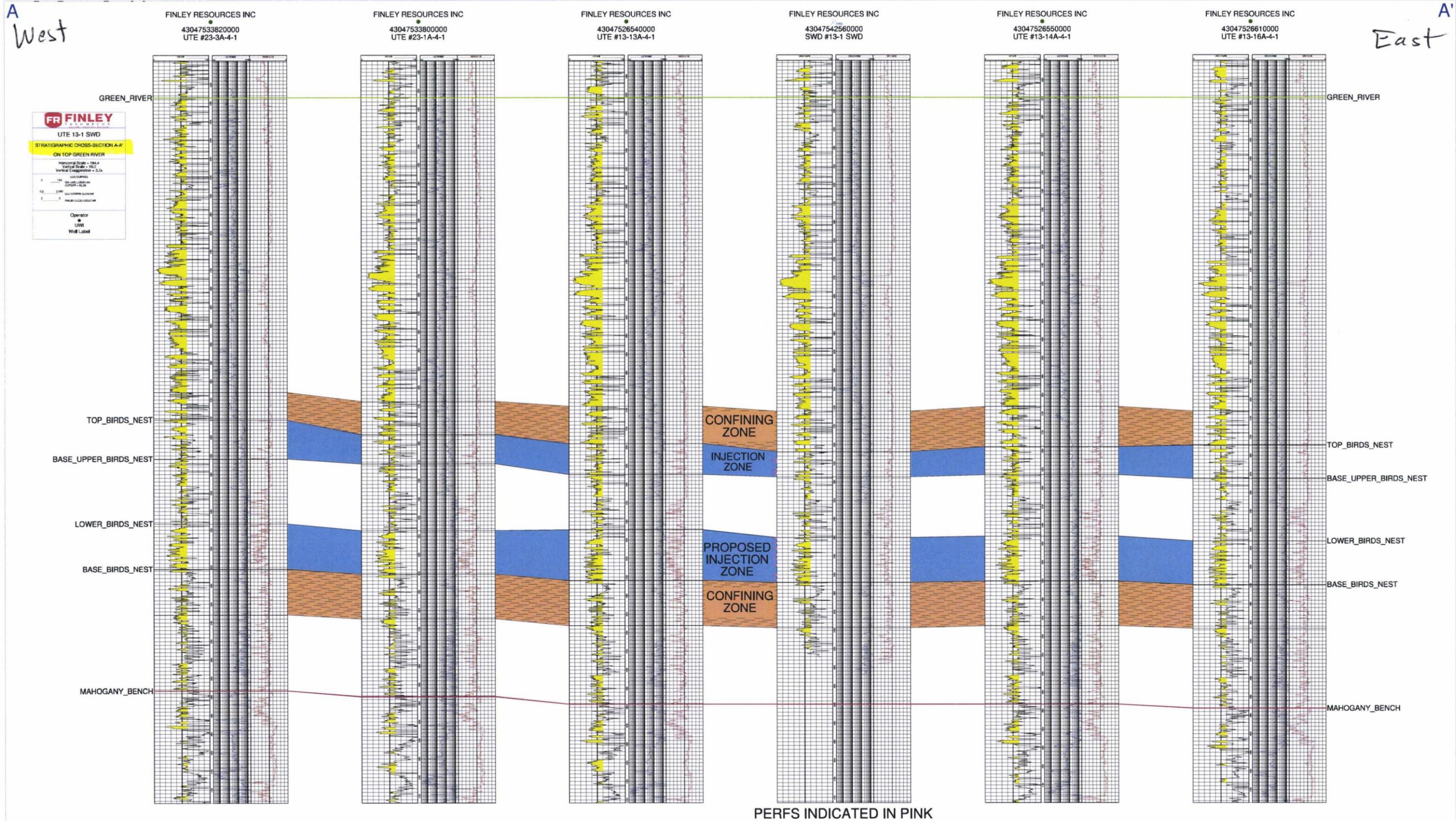
UTE 13-1 SWD

CROSS SECTION LOCATOR MAP

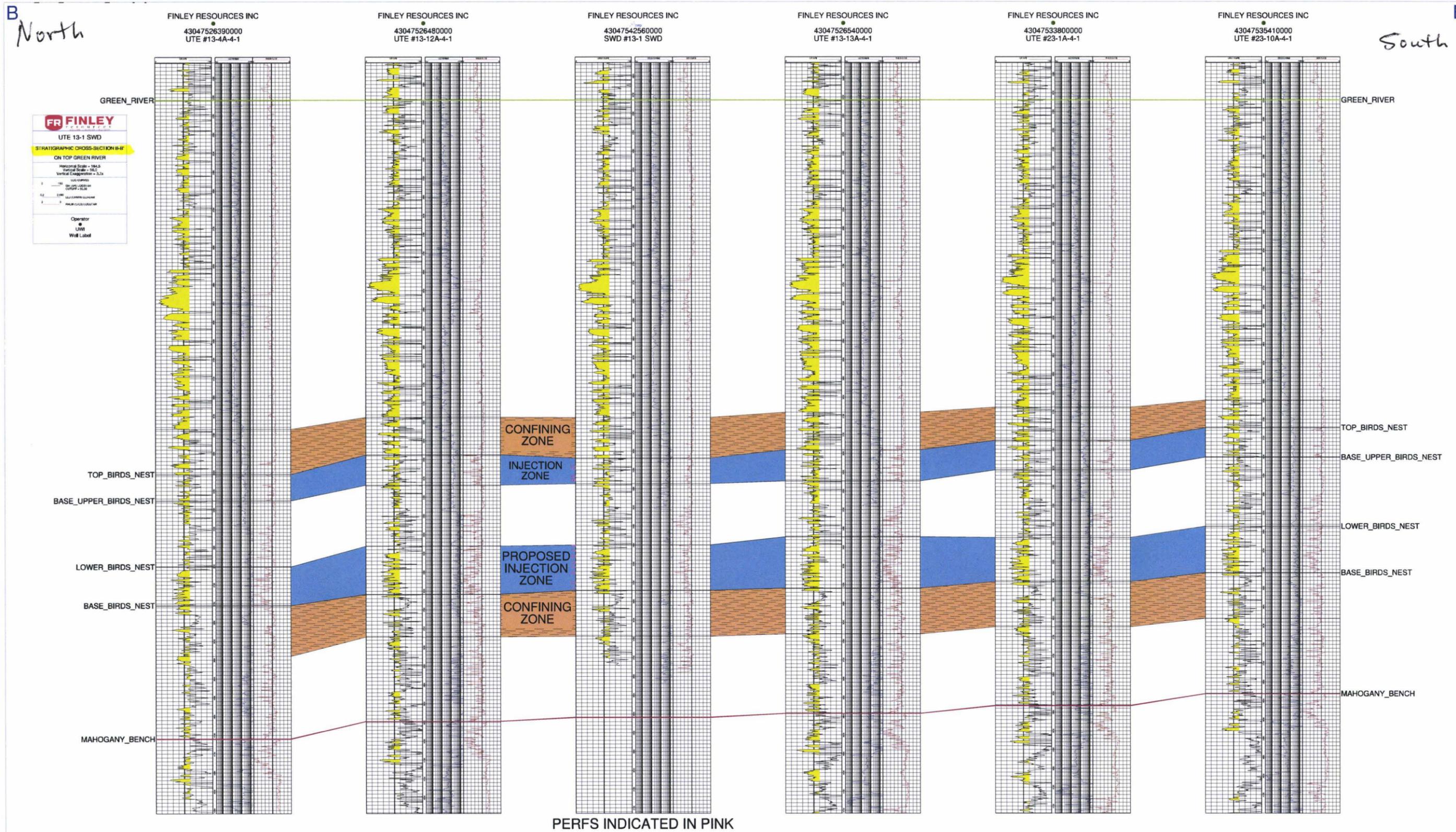


- WELL SYMBOLS
- Oil Well
  - Gas Well
  - Plugged and Abandoned
  - Shut In Oil Well
  - Salt-Water Disposal Well

# STRATIGRAPHIC CROSS-SECTION A-A'



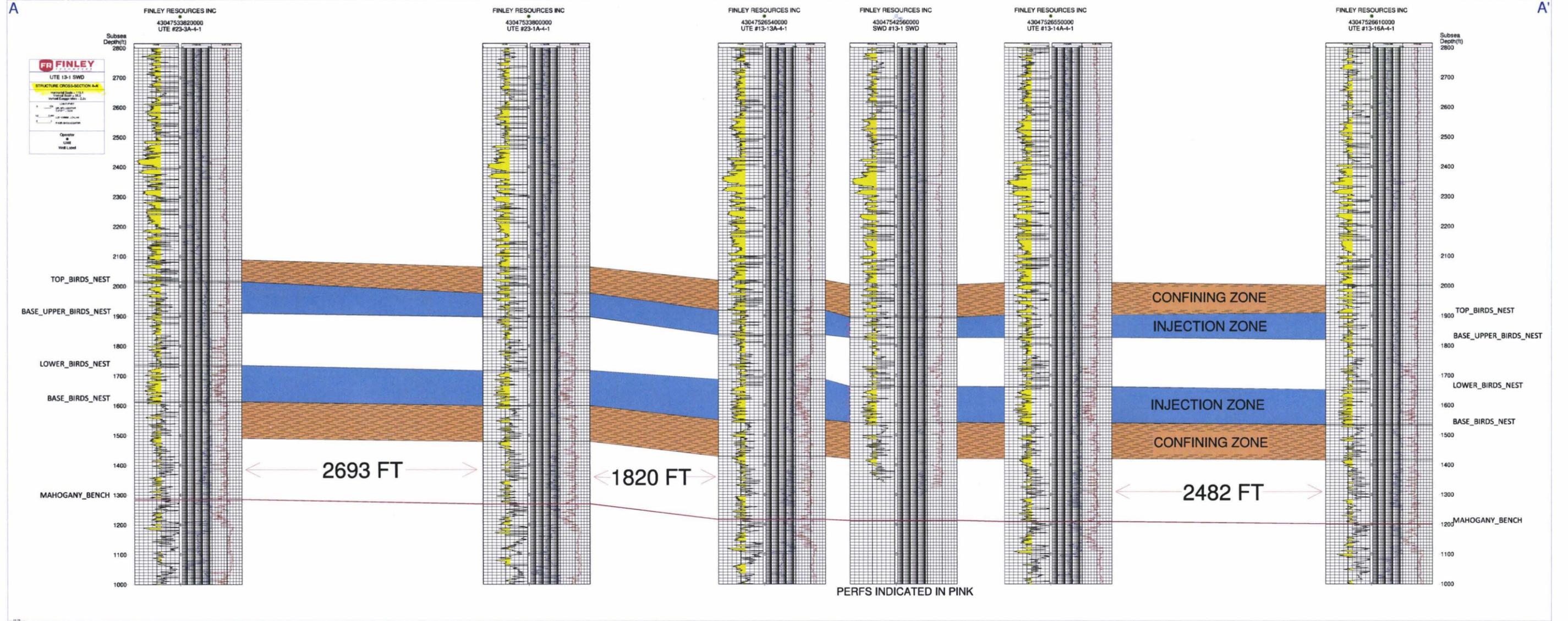
# STRATIGRAPHIC CROSS-SECTION B-B'



# STRUCTURE CROSS-SECTION A-A'

West

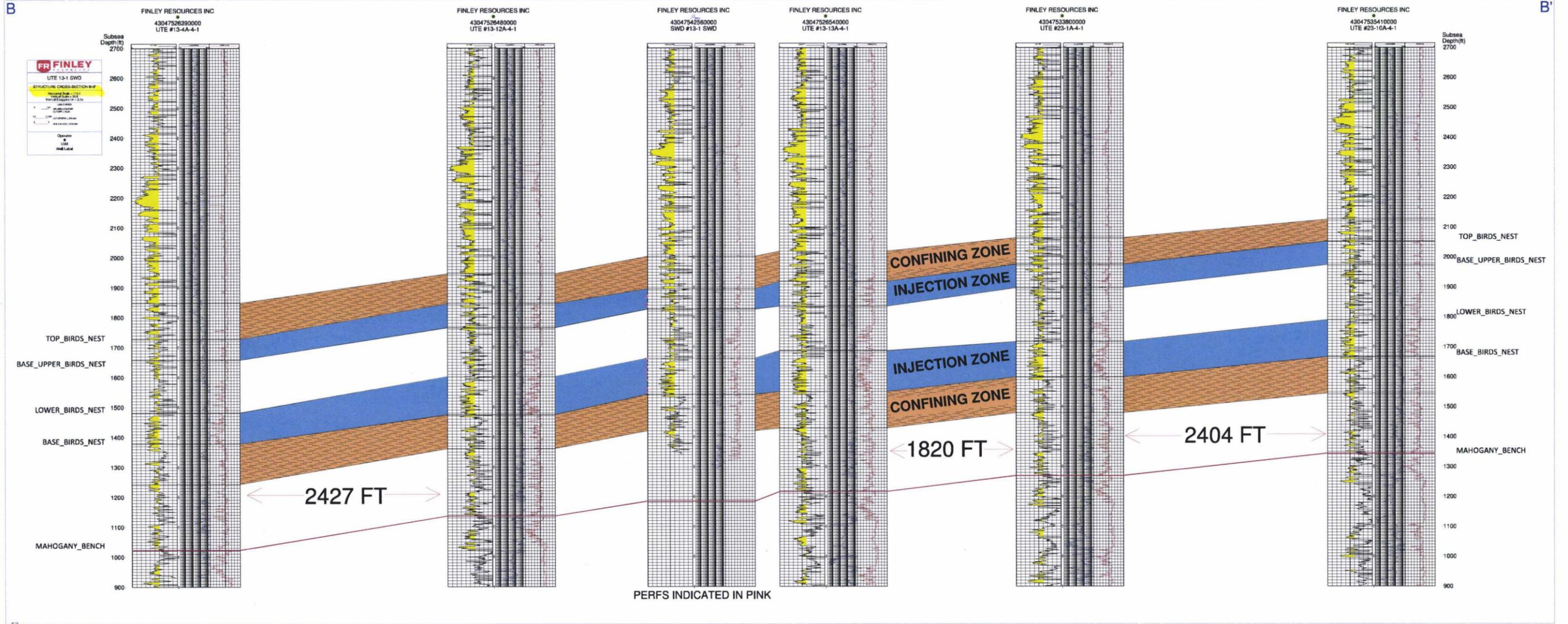
East



# STRUCTURE CROSS-SECTION B-B'

North

South





13-1 SWD

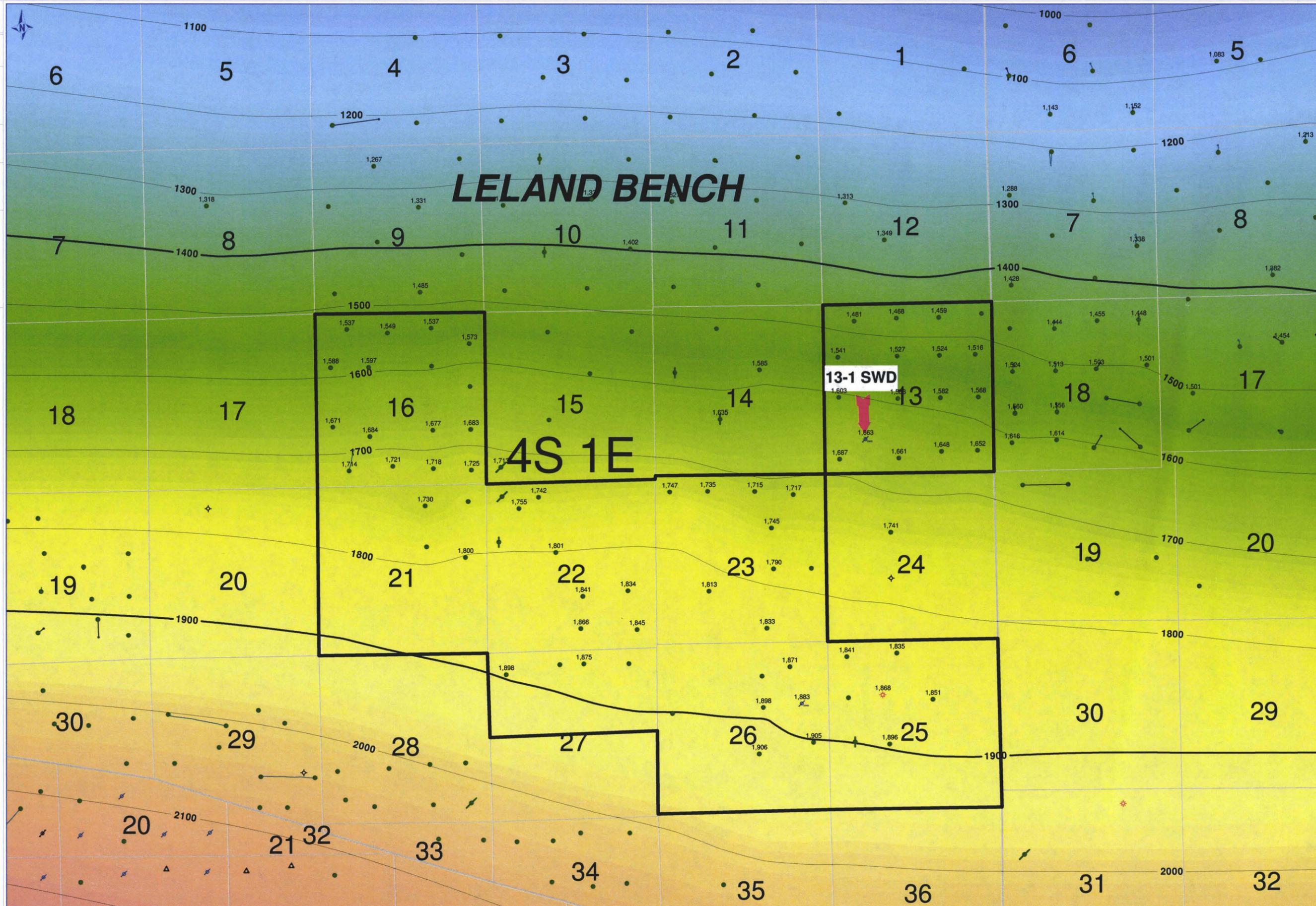
STRUCTURE CONTOUR

T/LOWER BIRD'S NEST



POSTED WELL DATA  
TOP LOWER BIRDS NEST (SS) (FEET)

- WELL SYMBOLS
- Oil Well
  - Gas Well
  - Dry Hole
  - Plugged and Abandoned
  - Plugged & Abandoned Oil Well
  - Shut In Oil Well
  - Salt-Water Disposal Well
  - Active Intention Well
  - Service Well
  - Junked



# Figure G1 List of Wells with Composition Source to Utilize Injection Well

## Lab Monitoring Summary Report

Finley RMR

No Results for the following lab reports (in Red) for date range requested:

Bacteria | Cold Finger | Coupon | Metals | Millipores | Oil | Oil&Grease | Residuals | Solids | Water



Spt 2014 - Feb 2015

Sample Information						Results																				
Injection Point Name	T	ID	Sample ID	Sample Point	SampleDate	CO2 Ac	HCO3 M	Lead	H2S Gas	H2S Aq	pH	Density	TDS	Calcium	Barium	Iron	Magnesium	Manganese	Sodium	Sulfate	Chloride	Zn	K	Sr	CO3	Notes
BAR -F- 25-3A-4-2,UINTAH	*	(S)3361200	WA-298436	Treater/Mi1	1/21/2015	0.00	9028.00	0.00		20.00	8.70	1.0122	22867.69	5.19	0.45	3.64	2.47	0.14	5608.19	164.00	8000.00	0.27	34.64	1.50		B=47.72 Al=.09 Li=22.42
BAR -F- 25-3A-4-2,UINTAH	*	(S)3361200	WA-296188	Treater Mo 1	12/15/2014	0.00	8540.00	0.17		3.00	9.00	1.0174	29125.41	20.60	0.93	13.45	8.46	0.20	9984.06	456.00	10000.00	0.92	55.41	2.63		B=88.62 Al=.18 Li=32.57
GARDNER 36-10A-3-2,UINTAH	*	(S)3539077	WA-299648	TREATER	2/5/2015	160.00	5002.00	0.21		5.00	8.00	1.0158	28383.09	41.88	5.26	8.06	16.43	0.77	8091.23	126.00	15000.00	0.19	43.15	14.17		B=36.85 Al=0 Li=17.02
GARDNER 36-10A-3-2,UINTAH	*	(S)3539077	WA-298431	Treater/Mi1	1/21/2015	0.00	3904.00	0.00		0.00	8.10	1.0098	21481.28	26.33	3.09	21.32	32.87	0.59	3281.51	142.00	14000.00	0.10	28.47	18.69		B=24.64 Al=0 Li=8.42
GARDNER 36-10A-3-2,UINTAH	*	(S)3539077	WA-298324	TREATER	1/19/2015	200.00	3050.00	0.12		0.50	7.10	1.0165	29309.28	155.71	4.40	21.48	73.96	0.65	8556.99	228.00	17000.00	0.02	152.19	28.74		B=41.53 Al=0 Li=16.81
HACKFORD 14-10A-4-2,UINTAH	*	(S)3530792	WA-298430	Treater/Mi1	1/21/2015	0.00	2440.00	0.00		2.00	6.80	1.0116	25274.48	71.14	3.00	10.92	57.07	1.00	3222.43	384.00	19000.00	0.29	12.25	36.66		B=15.07 Al=0 Li=1.56
HACKFORD 14-7A-4-2,UINTAH	*	(S)3530762	WA-298434	Treater/Mi1	1/21/2015	0.00	1708.00	0.00		2.00	8.10	1.0143	29291.66	33.51	21.73	6.42	42.98	0.65	5237.11	147.00	22000.00	0.15	7.16	65.33		B=9.71 Al=0 Li=1.92
HACKFORD 14-7A-4-2,UINTAH	*	(S)3530762	WA-296189	Treater Mo 1	12/15/2014	280.00	1708.00	0.16		1.50	7.90	1.0252	40658.23	365.21	15.22	67.21	105.58	1.86	15098.00	88.00	23000.00	0.63	71.75	73.47		B=29.23 Al=.06 Li=6.31
UTE 12-15A-4-1 (217263)	*	(S)217263	WA-293670	Treater-Mo 3	11/17/2014	0.00	1464.00	0.00		10.00	8.50	1.0182	29650.31	13.43	0.06	1.61	5.42	0.07	12607.60	501.00	15000.00	0.18	32.58	2.27		B=14.75 Al=.06 Li=1.53
UTE 12-15A-4-1 (217263)	*	(S)217263	WA-290522	Treater MO 2	10/16/2014	0.00	1342.00	0.00		1.50	8.30	1.0153	28120.05	166.35	3.04	15.30	42.10	0.87	7968.05	471.00	18000.00	0.51	92.04	18.79		B=10.35 Al=.14 Li=4.27
UTE 12-15A-4-1 (217263)	*	(S)217263	WA-287369	TREATER	9/16/2014	0.00	10492.00	0.43		20.00	9.00	1.0274	43951.56	14.96	0.93	2.86	7.25	0.21	15684.80	591.00	17000.00	0.97	134.64	4.51		B=11.73 Al=0 Li=3.2
UTE 16-12A-4-1	*	4304752671	WA-299440	Treater	1/30/2015	0.00	1708.00	0.11		20.00	8.40	1.0055	12658.66	22.71	9.99	46.05	5.54	0.81	3681.46	85.00	7000.00	0.34	46.91	4.96		B=14.97 Al=.15 Li=2.1
UTE 16-13A-4-1	*	4304752674	WA-299429	Treater	1/30/2015	0.00	3660.00	0.31		30.00	8.60	1.009	17969.09	32.20	12.82	18.74	10.51	0.27	5027.69	124.00	9000.00	0.43	38.44	7.52		B=40.58 Al=.08 Li=2.02
UTE 16-13A-4-1	*	4304752674	WA-286604	TREATER	9/9/2014	0.00	3660.00	0.00		15.00	9.00	1.0096	18728.37	32.62	6.21	8.37	6.41	0.30	5612.25	193.00	9000.00	0.12	203.87	5.22		B=54.97 Al=0 Li=2.45
UTE 16-5A-4-1	*	43047526640	WA-299436	Treater	1/30/2015	0.00	1342.00	0.43		25.00	8.40	1.0126	22709.55	44.17	76.81	12.87	18.84	0.19	8038.82	77.00	13000.00	0.30	43.38	15.61		B=12.52 Al=.23 Li=2.78
UTE 22-10A-4-1 (214016)	*	(S)214016	WA-290517	Treater MO 3	10/16/2014	120.00	1586.00	0.00		5.00	8.10	1.0176	31699.31	97.37	1.16	12.45	30.95	1.09	9227.73	638.00	20000.00	0.32	83.99	20.25		B=6.94 Al=.03 Li=4.05
UTE 22-10A-4-1 (214016)	*	(S)214016	WA-287370	TREATER Mo 2	9/16/2014	0.00	6100.00	0.00		150.00	9.50	1.0279	44680.26	61.02	0.77	0.66	36.94	0.13	17169.00	1178.00	20000.00	0.05	98.14	19.98		B=9.63 Al=0 Li=4.33
UTE 22-10A-4-1 (214016)	*	(S)214016	WA-286751	WELLHEAD	9/10/2014	0.00	6222.00	0.00		125.00	9.00	1.0301	47253.99	194.04	1.00	0.38	42.40	0.34	18412.60	1229.00	21000.00	0.44	120.47	31.32		B=9.2 Al=0 Li=4.36
UTE 22-10A-4-1 (214016)	*	(S)214016	WA-285991	TREATER	9/2/2014	200.00	1952.00	0.29		220.00	9.00	1.0243	39540.54	248.33	1.70	16.14	55.33	1.00	14957.90	1063.00	21000.00	0.39	171.82	37.43		B=10.55 Al=.58 Li=5.2
UTE 22-15A-4-1,UINTAH	*	(S)3147057	WA-295318	Treater Mo 3	11/17/2014	0.00	1464.00	0.00		10.00	8.50	1.0182	29650.31	13.43	0.06	1.61	5.42	0.07	12607.60	501.00	15000.00	0.18	32.58	2.27		B=14.75 Al=.06 Li=1.53
UTE 22-16A-4-1 (221742)	*	(S)221742	WA-298429	Treater/Mi1	1/21/2015	0.00	3416.00	0.00		80.00	9.00	1.0087	19909.75	7.79	2.45	1.26	13.68	0.21	2966.99	459.00	13000.00	0.00	8.76	11.26		B=14.59 Al=.01 Li=1.24
UTE 22-16A-4-1 (221742)	*	(S)221742	WA-296191	TREATER	12/15/2014	0.00	2684.00	0.17		30.00	9.00	1.0159	27187.37	126.52	3.23	2.79	43.70	0.58	9909.51	284.00	14000.00	0.17	56.72	19.74		B=36.48 Al=.05 Li=4.04
UTE 22-16A-4-1 (221742)	*	(S)221742	WA-291079	Treater	10/22/2014	128.00	3416.00	0.27		15.00	8.10	1.0119	21272.15	136.93	9.10	0.82	28.84	0.33	7233.16	290.00	10000.00	0.13	65.53	16.42		B=31.45 Al=0 Li=3.08
UTE 22-3A-4-1 (214004)	*	(S)214004	WA-299438	Treater	1/30/2015	0.00	2828.00	0.36		150.00	8.60	1.0163	27773.80	113.24	1.03	19.71	34.94	0.50	10090.30	441.00	14000.00	0.72	91.61	14.49		B=32.19 Al=.02 Li=3.99
UTE 22-3A-4-1 (214004)	*	(S)214004	WA-293668	Treater-Mo 3	11/17/2014	0.00	2440.00	0.00		50.00	9.00	1.0187	29435.87	21.83	0.11	2.88	7.03	0.19	13487.50	411.00	13000.00	0.15	36.95	3.06		B=15.55 Al=0 Li=3.02
UTE 22-3A-4-1 (214004)	*	(S)214004	WA-290520	Treater MO 2	10/16/2014	200.00	1708.00	0.00		25.00	8.30	1.0126	24116.46	80.83	2.86	0.99	29.34	0.38	6667.25	417.00	15000.00	0.25	198.13	11.43		B=29.78 Al=.11 Li=3.59
UTE 22-3A-4-1 (214004)	*	(S)214004	WA-287367	TREATER Mo 1	9/16/2014	0.00	3660.00	0.35		25.00	8.50	1.0117	21255.87	165.58	2.88	4.77	32.90	0.57	6899.41	324.00	10000.00	0.27	127.94	13.76		B=46.72 Al=0 Li=3.5
UTE 22-3A-4-1 (214004)	*	(S)214004	WA-286753	WELLHEAD	9/10/2014	120.00	1952.00	0.00		10.00	7.50	1.0098	18521.33	196.08	3.30	0.64	36.31	0.32	5948.98	164.00	10000.00	0.13	206.43	13.14		B=37.68 Al=0 Li=4.05
UTE 22-4A-4-1	*	(S)214008	WA-299435	Treater	1/30/2015	0.00	2440.00	0.25		45.00	8.50	1.0062	13733.60	31.49	5.78	27.62	8.07	0.40	3895.08	222.00	7000.00	2.11	57.62	5.60		B=28.5 Al=.5 Li=1.81
UTE 22-4A-4-1	*	(S)214008	WA-290516	Treater MO 3	10/16/2014	0.00	2074.00	0.00		5.00	8.30	1.0077	16041.77	48.44	5.78	1.95	13.79	0.18	4505.86	237.00	9000.00	0.20	144.62	9.95		B=27.09 Al=.13 Li=3.17 ***SURFACE TENSION 52.67 mN/m***

UTE 22-4A-4-1	*	(S)214006	WA-287362	TREATER Mo 2	9/16/2014 0.00	2928.00	0.32	4.50	8.50	1.0086	17335.33	78.21	9.44	3.26	15.72	0.19	4943.99	183.00	9000.00	0.19	151.11	1.31	B=38.34	AI=0	LI=2.85
UTE 22-4A-4-1	*	(S)214008	WA-286754	WELLHEAD	9/10/2014 120.00	4148.00	0.00	15.00	7.50	1.0087	17346.20	63.02	8.19	0.74	13.56	0.11	4723.19	182.00	8000.00	0.32	200.21	6.86	B=43.33	AI=0	LI=2.75
UTE 22-4A-4-1	*	(S)214008	WA-285983	TREATER	9/2/2014 120.00	2440.00	0.21	10.00	7.50	1.0067	13553.87	69.39	6.49	16.17	15.86	0.53	4556.04	202.00	6000.00	0.14	170.17	38.33	B=40.71	AI=26	LI=2.72
UTE 22-6A-4-1 (214012)	*	(S)214012	WA-299434	Treater	1/30/2015 0.00	8540.00	0.15	100.00	9.30	1.0306	48208.26	58.24	0.39	259.57	6.34	13.48	18366.10	855.00	20000.00	0.97	59.08	6.05	B=6.69	AI=74	LI=2.78
UTE 22-6A-4-1 (214012)	*	(S)214012	WA-290515	Treater MO 3	10/16/2014 0.00	8052.00	0.00	60.00	9.00	1.0298	50703.89	16.28	0.56	1.19	6.64	0.46	14881.90	1623.00	26000.00	0.34	116.42	5.10	B=6.8	AI=16	LI=3.95
UTE 22-6A-4-1 (214012)	*	(S)214012	WA-287363	TREATER	9/16/2014 0.00	8052.00	0.47	45.00	9.00	1.0272	42693.86	20.59	1.23	1.31	7.83	0.39	16719.80	728.00	17000.00	0.14	139.18	5.28	B=11.75	AI=0	LI=3.45
UTE 22-6A-4-1 (214012)	*	(S)214012	WA-286752	WELLHEAD	9/10/2014 0.00	5856.00	0.00	50.00	8.30	1.0237	38652.02	37.72	1.77	3.91	10.29	21.14	13888.00	670.00	18000.00	0.39	155.97	6.83	B=14.4	AI=0	LI=4.01
UTE 22-6A-4-1 (214012)	*	(S)214012	WA-285992	TREATER	9/2/2014 0.00	9516.00	0.32	5.00	9.00	1.0243	39805.22	37.72	1.48	19.90	10.37	1.69	13391.40	599.00	16000.00	0.46	174.35	16.93	B=9.63	AI=09	LI=3.49
UTE 23-11A-4-1, UINTAH	*	(S)3147055	WA-298432	Treater/Mi1	1/21/2015 0.00	2684.00	0.00	2.00	7.90	1.0044	12465.32	27.89	2.80	2.89	17.64	0.76	1543.74	80.00	8000.00	0.07	62.71	8.74	B=25.78	AI=0	LI=1.46
UTE 23-1A-4-1	*	4304753380	WA-286596	TREATER	9/9/2014 0.00	3416.00	0.00	20.00	9.70	1.0164	28740.32	57.28	0.82	42.98	9.24	0.95	9845.61	288.00	15000.00	0.23	70.92	8.29	B=56.14	AI=0	LI=5.68
UTE 23-2A-4-1	*	(S)206726	WA-286599	TREATER	9/9/2014 0.00	3050.00	0.00	10.00	8.70	1.0078	15884.54	87.58	4.00	581.88	13.70	8.96	3823.46	223.00	8000.00	10.00	76.62	5.34	B=16.35	AI=3.81	LI=2.89
UTE 23-3A-4-1	*	4304753383	WA-286602	TREATER	9/9/2014 0.00	4270.00	0.00	20.00	9.00	1.0104	20782.64	20.69	2.40	6.95	2.09	0.17	5262.57	160.00	11000.00	0.52	54.65	2.60	B=55.97	AI=0	LI=2.64
UTE 23-7A-4-1	*	4304753384	WA-286600	TREATER	9/9/2014 80.00	3172.00	0.00	20.00	8.40	1.0072	15381.06	43.86	2.97	224.62	4.71	2.71	3731.58	132.00	8000.00	5.30	58.16	3.15	B=56.59	AI=3.18	LI=3.36
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-298435	Treater/Mi1	1/21/2015 0.00	3172.00	0.00	10.00	8.50	1.0075	17878.38	23.08	2.10	1.65	20.40	0.59	2463.07	148.00	12000.00	0.00	8.18	18.73	B=22.87	AI=04	LI=1.51
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-296190	TREATER	12/15/2014 0.00	2562.00	0.10	10.00	8.70	1.023	37456.23	331.52	1.24	2.89	96.98	1.04	13686.90	624.00	20000.00	0.14	70.42	30.90	B=46.34	AI=06	LI=5.42
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-293281	WELL HEAD	11/10/2014 280.00	6588.00	0.03	5.00	8.30	1.0144	24273.65	428.03	1.26	21.96	100.10	1.59	7548.71	1393.00	8000.00	0.21	117.12	35.53			
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-291922	Treater	10/29/2014 240.00	1952.00	0.10	2.00	7.00	1.0303	50317.00	201.00	0.90	87.00	79.00	1.20	16582.00	1351.00	30000.00	0.10	37.00	25.70			
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-291928	Well Head	10/29/2014 160.00	2928.00	0.10	2.00	7.00	1.0288	46257.30	200.00	0.80	112.00	83.00	1.40	16777.00	1090.00	25000.00	0.20	37.00	25.50			
UTE 25-3A-4-1 (221744)	*	(S)221744	WA-289020	FRAC TANK	9/25/2014 40.00	244.00	0.00	0.00	6.00	0.998	1439.04	46.46	1.70	9.51	18.62	0.77	24.88	83.00	1000.00	0.62	2.21	0.36	B=.1	AI=0	LI=0
UTE 26-5A-4-1 (221746)	*	(S)221746	WA-298433	Treater/Mi1	1/21/2015 0.00	3172.00	0.00	10.00	8.10	1.0056	14354.43	30.41	2.90	4.13	16.66	1.20	2041.92	29.00	9000.00	0.01	13.83	12.65	B=17.44	AI=0	LI=1.7
UTE 26-5A-4-1 (221746)	*	(S)221746	WA-291920	FRAC TANK	10/29/2014 8.00	244.00	0.03	0.00	6.00	0.998	1418.95	69.04	0.05	4.26	18.53	0.70	40.71	30.00	1000.00	0.02	4.28	0.49	B=.14	AI=06	LI=0
UTE 27-1A-4-1	*	4304753536	WA-293669	Treater-Mo 3	11/17/2014 0.00	9394.00	0.00	100.00	10.00	1.019	35192.02	35.79	0.24	2.34	12.25	0.10	8582.15	1094.00	16000.00	0.15	49.52	4.20	B=15.88	AI=07	LI=1.49
UTE 27-1A-4-1	*	4304753536	WA-290521	Treater MO 2	10/16/2014 0.00	5734.00	0.00	110.00	9.00	1.0211	38206.39	41.14	0.49	26.64	12.40	0.99	9653.19	1617.00	21000.00	0.49	113.17	6.88	B=23.93	AI=.14	LI=3.36
UTE 27-1A-4-1	*	4304753536	WA-287368	TREATER	9/16/2014 0.00	3660.00	0.42	10.00	8.50	1.0108	19789.30	167.38	3.81	10.12	29.53	0.68	6369.13	333.00	9000.00	0.42	175.06	13.20	B=46.24	AI=0	LI=3.67
UTE 27-2A-4-1 (217269)	*	(S)217269	WA-290518	Treater MO 2	10/16/2014 0.00	2684.00	0.00	3.00	8.50	1.0169	30941.63	68.39	1.32	3.18	31.34	0.41	8580.82	487.00	19000.00	0.29	75.29	9.58	B=30.62	AI=.03	LI=3.82
UTE 27-2A-4-1 (217269)	*	(S)217269	WA-287365	TREATER Mo 1	9/16/2014 0.00	4148.00	0.39	25.00	8.70	1.0214	35084.58	93.36	0.79	1.95	39.95	1.52	12959.10	722.00	17000.00	0.31	88.87	12.03	B=30.96	AI=0	LI=4.11
UTE 27-2A-4-1 (217269)	*	(S)217269	WA-286746	WELLHEAD	9/9/2014 0.00	4026.00	0.00	20.00	8.00	1.0211	34686.66	63.25	1.01	0.15	41.89	0.05	12607.40	836.00	17000.00	0.72	99.23	10.86	B=24.69	AI=0	LI=4.06
UTE 27-2A-4-1 (217269)	*	(S)217269	WA-285990	TREATER	9/2/2014 160.00	1952.00	0.14	5.00	8.00	1.0173	29377.85	188.99	1.29	121.28	46.79	1.58	10263.20	619.00	16000.00	0.13	130.99	14.43	B=35.49	AI=.03	LI=3.9
UTE 27-3A-4-1 (217265)	*	(S)217265	WA-293667	Treater-Mo 3	11/17/2014 0.00	7808.00	0.00	100.00	9.50	1.014	29301.63	113.01	0.75	2.35	13.02	0.27	4042.92	1134.00	16000.00	0.09	107.12	9.75	B=6.71	AI=.02	LI=1.34
UTE 27-3A-4-1 (217265)	*	(S)217265	WA-290519	Treater MO 2	10/16/2014 0.00	7076.00	0.00	75.00	9.00	1.0233	41883.54	22.21	0.54	4.56	12.75	0.59	10403.60	1233.00	23000.00	0.13	123.97	6.19	B=27.06	AI=.06	LI=6.89
UTE 27-3A-4-1 (217265)	*	(S)217265	WA-287366	TREATER	9/16/2014 0.00	4392.00	0.52	5.00	8.70	1.0145	24794.04	69.36	1.89	22.52	26.13	0.50	8924.50	202.00	11000.00	0.60	122.51	11.77	B=52.92	AI=0	LI=9.12
UTE 27-3A-4-1 (217265)	*	(S)217265	WA-286750	WELLHEAD	9/9/2014 240.00	4880.00	0.00	5.00	7.50	1.0185	32825.04	116.92	3.66	70.87	27.31	1.24	7221.39	0.00	19000.00	0.63	99.02	1404.00	B=44.51	AI=0	LI=8.47
UTE 27-3A-4-1 (217265)	*	(S)217265	WA-286517	TREATER	9/5/2014 320.00	6344.00	0.00	10.00	7.50	1.0143	25149.65	107.70	6.90	279.30	22.20	4.60	7171.70	71.00	11000.00	0.65	85.90	11.50			
UTE TRIBAL 13-02A 4-1	*	4304752637	WA-294797	Treater	11/25/2014 0.00	2684.00	0.00	5.00	8.70	1.0234	39367.39	331.56	3.34	15.64	84.05	0.60	13012.10	95.00	23000.00	0.20	50.31	38.93	B=25.44	AI=.11	LI=12.8
UTE TRIBAL 13-02A 4-1	*	4304752637	WA-288603	TREATER	9/9/2014 0.00	2684.00	0.00	5.00	8.50	1.0228	37768.89	48.35	8.24	15.38	25.65	0.19	13822.20	50.00	21000.00	0.09	89.72	25.07	B=22.49	AI=0	LI=13.44
UTE TRIBAL 13-03A 4-1	*	4304752638	WA-294776	Treater	11/25/2014 160.00	3416.00	0.02	2.00	8.30	1.0267	46076.70	238.35	0.24	6.58	73.95	0.30	13156.90	1079.00	28000.00	0.21	37.62	18.78	B=57.46	AI=.06	LI=16.59
UTE TRIBAL 13-03A 4-1	*	4304752638	WA-290075	Treater BOTTOM	10/8/2014 0.00	6832.00	0.00	20.00	8.70	1.032	53911.43	43.00	1.00	5.60	37.00	0.14	16239.00	1825.00	29000.00	0.01	99.00	7.00	B=62	AI=.01	LI=16
UTE TRIBAL 13-03A 4-1	*	4304752638	WA-286595	TREATER	9/9/2014 0.00	2928.00	0.00	5.00	8.80	1.0287	44636.26	280.78	1.70	56.96	55.79	0.95	18244.50	952.00	22000.00	0.31	93.35	21.92	B=70.86	AI=0	LI=21.51

UTE TRIBAL 13-04A 4-1	*	4304752639	WA-294777	Treater	11/25/2014 0.00	6588.00	0.00	5.00	8.30	1.0187	32590.44	30.62	0.46	9.58	17.22	0.18	9530.49	347.00	18000.00	0.28	26.21	8.24	B=76.59	AI=08	LI=36.13	
UTE TRIBAL 13-04A 4-1	*	4304752639	WA-286592	TREATER	9/9/2014 0.00	8540.00	0.00	5.00	8.50	1.0204	33180.40	177.54	4.13	719.84	24.38	9.57	10390.30	226.00	13000.00	5.84	61.90	20.90	B=86.94	AI=0	LI=42.23	
UTE TRIBAL 13-05A 4-1	*	4304752640	WA-294773	Treater	11/25/2014 0.00	3660.00	0.00	4.00	9.00	1.0117	18044.65	44.71	0.46	8.08	21.57	0.24	9861.12	360.00	4000.00	0.29	37.39	10.24	B=47.97	AI=13	LI=21.12	
UTE TRIBAL 13-05A 4-1	*	4304752640	WA-286605	TREATER	9/9/2014 0.00	5856.00	0.00	5.00	8.80	1.0183	30806.70	326.04	3.00	23.02	38.68	0.77	10200.00	250.00	14000.00	0.27	73.16	35.76	B=59.76	AI=0	LI=29.29	
UTE TRIBAL 13-06A 4-1	*	4304752641	WA-294778	Treater	11/25/2014 0.00	2684.00	0.00	3.00	9.00	1.0164	29264.17	61.91	3.50	4.89	22.54	0.85	9279.86	83.00	17000.00	0.45	51.86	15.27	B=34.78	AI=11	LI=9.89	
UTE TRIBAL 13-07A 4-1	*	4304752643	WA-294779	Treater	11/25/2014 80.00	976.00	0.00	4.00	7.40	1.0348	57368.43	415.50	2.45	31.46	121.07	1.25	19295.20	328.00	36000.00	0.23	48.85	89.53	B=16.79	AI=05	LI=9.4	
UTE TRIBAL 13-07A 4-1	*	4304752643	WA-286591	TREATER	9/9/2014 0.00	2196.00	0.00	5.00	8.00	1.0227	34938.82	934.56	3.94	1854.7	78.53	27.17	11287.10	408.00	18000.00	14.22	68.09	66.56	B=33.61	AI=9.03	LI=16.26	
UTE TRIBAL 13-08A 4-1	*	4304752644	WA-294781	Treater	11/25/2014 0.00	1708.00	0.02	2.50	8.30	1.0323	53960.64	197.99	16.88	17.41	86.92	0.78	17748.10	26.00	34000.00	0.60	42.74	81.64	B=17.37	AI=12	LI=9.74	
UTE TRIBAL 13-09A 4-1	*	4304752645	WA-294782	Treater	11/25/2014 0.00	2196.00	0.00	7.50	9.00	1.021	36348.33	98.11	24.41	13.82	52.79	0.37	11761.40	80.00	22000.00	0.59	46.59	31.15	B=12.15	AI=08	LI=6.26	
UTE TRIBAL 13-09A 4-1	*	4304752645	WA-286594	TREATER	9/9/2014 80.00	1464.00	0.00	10.00	8.00	1.0228	37165.75	128.81	37.61	135.08	44.63	0.98	14153.00	75.00	21000.00	0.81	86.12	39.71	B=11.51	AI=0	LI=7.38	
UTE TRIBAL 13-10A 4-1	*	4304752647	WA-294806	Treater	11/25/2014 80.00	1220.00	0.00	2.50	8.30	1.0333	54901.66	93.75	8.68	4.82	42.54	0.12	19397.50	14.00	34000.00	0.36	41.22	42.13	B=15.03	AI=06	LI=7.36	
UTE TRIBAL 13-10A 4-1	*	4304752647	WA-286590	TREATER	9/9/2014 80.00	2562.00	0.00	5.00	8.50	1.0383	58985.78	140.33	16.40	2.80	35.63	0.12	25031.70	45.00	31000.00	0.39	94.41	57.20	B=14.03	AI=0	LI=8.78	
UTE TRIBAL 13-12A 4-1	*	4304752648	WA-294816	Treater	11/25/2014 0.00	2684.00	0.00	7.50	8.50	1.0264	45195.03	103.53	2.17	2.03	45.05	0.13	14079.30	182.00	28000.00	0.15	40.93	35.82	B=32.9	AI=01	LI=9.31	
UTE TRIBAL 13-12A 4-1	*	4304752648	WA-286588	TREATER	9/9/2014 80.00	1852.00	0.00	10.00	8.00	1.0166	27735.22	310.96	1.33	460.81	33.70	6.54	9809.72	40.00	15000.00	4.69	84.13	31.34	B=20.13	AI=81	LI=7.82	
UTE TRIBAL 13-13A 4-1	*	4304752654	WA-294813	Treater	11/25/2014 0.00	2146.00	0.00	7.00	8.50	1.029	49048.67	109.62	0.34	1.21	63.83	0.16	15557.80	1067.00	30000.00	0.11	48.20	16.01	B=19.06	AI=0	LI=5.88	
UTE TRIBAL 13-13A 4-1	*	4304752654	WA-286589	TREATER	9/9/2014 0.00	3904.00	0.00	5.00	8.00	1.0328	51990.24	321.08	1.27	57.45	71.89	1.54	19303.80	1180.00	27000.00	0.15	117.56	31.90	B=25.91	AI=0	LI=7.16	
UTE TRIBAL 13-14A 4-1	*	4304752655	WA-294782	Treater	11/25/2014 0.00	6832.00	0.00	37.50	8.70	1.0291	50092.28	25.36	0.56	0.69	27.80	0.15	14066.20	1056.00	28000.00	0.05	38.25	7.02	B=22.33	AI=01	LI=5.72	
UTE TRIBAL 13-14A 4-1	*	4304752655	WA-287364	TREATER	9/16/2014 0.00	7564.00	0.51	50.00	8.70	1.0282	45067.37	192.14	1.19	3.78	36.91	0.45	16332.70	805.00	20000.00	0.12	91.36	22.67	B=29.9	AI=0	LI=6.77	
UTE TRIBAL 13-14A 4-1	*	4304752655	WA-286598	TREATER	9/9/2014 0.00	6588.00	0.00	75.00	8.60	1.0282	44618.05	354.80	1.63	29.01	4.10	1.13	16475.10	1049.00	20000.00	0.14	89.07	25.97	B=25.14	AI=0	LI=6.86	
UTE TRIBAL 13-15A 4-1	*	4304752656	WA-294780	Treater	11/25/2014 80.00	2940.00	0.00	7.50	8.30	1.0156	27940.14	67.13	7.09	8.46	29.05	0.82	8739.78	50.00	18000.00	0.91	38.23	17.86	B=28.93	AI=11	LI=6.96	
UTE TRIBAL 13-15A 4-1	*	4304752656	WA-286587	TREATER	9/9/2014 80.00	3660.00	0.00	5.00	8.00	1.0175	30115.40	69.34	2.88	87.06	28.48	1.28	9903.25	282.00	18000.00	0.86	79.60	20.55	B=28.27	AI=0	LI=8.3	
UTE TRIBAL 13-16A 4-1	*	4304752661	WA-294801	Treater	11/25/2014 0.00	2196.00	0.00	2.50	8.30	1.0136	24510.40	60.26	2.75	11.93	20.98	0.32	8040.14	86.00	14000.00	0.21	35.45	11.13	B=27.1	AI=07	LI=8.51	
UTE TRIBAL 13-16A 4-1	*	4304752661	WA-286606	TREATER	9/9/2014 0.00	2562.00	0.00	5.00	8.30	1.0162	31044.55	60.27	36.89	5.58	16.22	0.25	7219.52	56.00	21000.00	0.79	73.58	13.45	B=26.9	AI=0	LI=10.02	
UTE TRIBAL 16-01A 4-1	*	(S)155356	WA-299442	Treater	1/30/2015 0.00	4392.00	0.14	25.00	9.00	1.0127	23644.09	18.94	6.25	19.50	4.08	0.33	7074.15	41.00	12000.00	1.02	39.17	5.97	B=61.63	AI=06	LI=8.91	
UTE TRIBAL 16-01A 4-1	*	(S)155356	WA-296444	Treater	12/23/2014 0.00	3660.00	2.60	65.00	9.00	1.0148	26240.75	28.00	4.50	1.70	14.00	0.55	8520.00	453.00	13000.00	2.50	464.00	8.90	AI	5.7	LI	35
UTE TRIBAL 16-01A 4-1	*	(S)155356	WA-290077	Treater	10/10/2014 0.00	3050.00	0.00	40.00	9.00	1.014	26447.62	20.00	24.00	0.52	7.20	0.08	7248.00	6.00	16000.00	0.00	58.00	6.00	B=80	AI=0	LI=1.9	
UTE TRIBAL 16-02A 4-1	*	4304732663	WA-299445	Treater	1/30/2015 0.00	1220.00	0.06	20.00	7.70	1.0259	42385.18	141.22	19.27	10.11	51.94	0.16	15754.70	8.00	25000.00	0.12	64.44	78.75	B=17.34	AI=0	LI=5.11	
UTE TRIBAL 16-03A 4-1	*	4304752657	WA-299432	Treater	1/30/2015 0.00	976.00	0.16	15.00	8.60	1.0071	14987.05	51.71	4.30	46.58	12.05	0.41	4672.35	99.00	9000.00	0.41	38.95	7.68	B=20.8	AI=31	LI=2.74	
UTE TRIBAL 16-04A 4-1	*	4304752658	WA-299441	Treater	1/30/2015 160.00	1586.00	0.10	15.00	7.70	1.0181	30387.86	145.77	37.01	73.20	40.40	1.00	11267.30	73.00	17000.00	0.38	68.08	54.02	B=13.08	AI=02	LI=5.6	
UTE TRIBAL 16-06A 4-1	*	4304752659	WA-299444	Treater	1/30/2015 80.00	1708.00	0.39	20.00	7.60	1.0101	18702.70	47.54	44.42	192.67	14.50	1.38	6513.72	69.00	10000.00	1.05	49.84	12.99	B=16.36	AI=3	LI=2.69	
UTE TRIBAL 16-07A 4-1	*	4304752665	WA-299437	Treater	1/30/2015 0.00	6222.00	3.05	45.00	9.00	1.0112	21341.06	12.71	6.30	40.61	3.94	0.44	5952.68	21.00	8000.00	2.34	34.68	4.05	B=126.0	AI=18	LI=8.5	
UTE TRIBAL 16-08A 4-1	*	4304752667	WA-299439	Treater	1/30/2015 160.00	2928.00	0.57	25.00	8.40	1.0162	25073.87	84.05	5.77	659.78	41.40	5.19	11169.10	47.00	10000.00	6.33	64.42	8.96	B=51.33	AI=3.38	LI=5.81	
UTE TRIBAL 16-09A 4-1	*	4304752660	WA-286755	WELLHEAD	9/10/2014 80.00	5368.00	0.00	45.00	8.00	1.0095	18605.10	9.49	27.36	4.07	1.51	0.20	5122.22	17.00	8000.00	0.31	52.28	2.96	B=68.83	AI=0	LI=2.04	
UTE TRIBAL 16-09A 4-1	*	4304752660	WA-286585	TREATER	9/9/2014 0.00	4392.00	0.00	5.00	8.00	1.0075	17725.06	5.50	13.70	4.81	0.60	0.15	2277.35	4.00	11000.00	0.01	25.52	1.42	B=39.37	AI=0	LI=1.03	
UTE TRIBAL 16-10A 4-1	*	4304752668	WA-299431	Treater	1/30/2015 0.00	3904.00	0.20	25.00	8.50	1.009	17535.75	8.14	7.43	9.77	4.81	0.16	5426.04	105.00	8000.00	0.33	31.22	2.92	B=61.07	AI=14	LI=4.83	
UTE TRIBAL 16-10A 4-1	*	4304752668	WA-286596	TREATER	9/9/2014 0.00	6344.00	0.00	20.00	8.50	1.01	20066.23	18.52	7.92	14.46	3.65	0.20	4584.26	48.00	9000.00	0.17	43.57	3.48	B=65.88	AI=0	LI=5.44	
UTE TRIBAL 16-11A 4-1	*	4304752668	WA-289443	Treater	1/30/2015 0.00	2496.00	0.10	45.00	8.90	1.0068	14823.45	23.44	6.67	15.93	6.18	0.20	4145.29	50.00	8000.00	0.34	30.99	4.05	B=44.96	AI=3	LI=2.82	
UTE TRIBAL 16-11A 4-1	*	4304752666	WA-286593	TREATER	9/9/2014 0.00	3050.00	0.00	0.00	8.70	1.0069	15034.32	25.50	5.33	17.00	2.13	0.23	3886.80	0.00	8000.00	0.34	43.34	3.65	B=50.96	AI=0	LI=3.54	

UTE TRIBAL 16-14A 4-1	*	4304752670	WA-299428	Treater	1/30/2015 0.00	2440.00	0.22	40.00	8.80	1.0077	16735.04	10.94	3.77	24.62	3.49	0.20	4118.78	66.00	10000.00	5.01	26.65	3.10	B=31.84	AJ=1	LI=1.87
UTE TRIBAL 16-15A 4-1	*	4304752669	WA-299433	Treater	1/30/2015 0.00	3782.00	0.26	55.00	8.60	1.0096	18106.09	10.23	4.64	9.28	3.39	0.16	6115.31	105.00	8000.00	0.29	37.07	3.02	B=118.44	AJ=.25	LI=5.91
UTE TRIBAL 21-02H	*	(S)40411	WA-290076	Treater	10/10/2014 80.00	1220.00	0.01	5.00	7.90	1.0192	34115.03	89.00	14.00	21.00	22.00	0.30	10425.00	88.00	22000.00	1.80	212.00	17.00	B=10	AJ=0	LI=3.4
UTE TRIBAL 23-04A 4-1	*	(S)179890	WA-286801	TREATER	9/9/2014 0.00	8418.00	0.00	40.00	8.90	1.0219	36301.09	9.71	0.73	8.13	2.72	0.43	12285.30	516.00	15000.00	0.23	58.24	2.60	B=60.65	AJ=0	LI=7.76
UTE TRIBAL 26-01 SWD	*	(S)16373	WA-296321	AFTER FILTERS	12/18/2014 0.00	7198.00	0.00	200.00	8.70	1.0254	43628.14	85.41	0.74	6.97	39.74	0.70	12672.80	481.00	23000.00	0.09	39.82	27.69	B=45.63	AJ=.12	LI=14.19
UTE TRIBAL 26-01 SWD	*	(S)16373	WA-296324	BEFORE FILTERS	12/18/2014 0.00	7198.00	0.01	140.00	8.70	1.028	46864.93	78.59	0.76	6.75	39.23	0.75	12542.70	895.00	22000.00	0.04	4031.00	27.24	B=45.47	AJ=.08	LI=14.28
UTE TRIBAL 26-01 SWD	*	(S)16373	WA-287425	Wellhead	9/17/2014 240.00	2562.00	0.00	5.00	8.40	1.0227	36457.08	138.32	7.31	5.53	42.94	0.45	14504.30	41.00	19000.00	0.12	91.84	43.38	B=24.4	AJ=1.14	LI=9.35

# Figure G2 Representative Injection Water Analysis

Multi-Chem Analytical Laboratory  
 1553 East Highway 40  
 Vernal, UT 84078



Units of Measurement: **Standard**

## Water Analysis Report

Production Company: **FINLEY RESOURCES**  
 Well Name: **UTE TRIBAL 13-11A-4-1**  
 Sample Point: **Treater**  
 Sample Date: **3/11/2013**  
 Sample ID: **WA-236479**

Sales Rep: **James Patry**  
 Lab Tech: **Layne Wilkerson**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
Test Date:	3/20/2013	<i>Cations</i>		<i>Anions</i>	
System Temperature 1 (°F):	60.00	<i>mg/L</i>		<i>mg/L</i>	
System Pressure 1 (psig):	1300.0000	Sodium (Na):	17728.25	Chloride (Cl):	27000.00
System Temperature 2 (°F):	180.00	Potassium (K):	106.00	Sulfate (SO4):	557.00
System Pressure 2 (psig):	14.7000	Magnesium (Mg):	73.00	Bicarbonate (HCO3):	1512.80
Calculated Density (g/ml):	1.029	Calcium (Ca):	339.00	Carbonate (CO3):	
pH:	8.20	Strontium (Sr):	46.00	Acetic Acid (CH3COO)	
Calculated TDS (mg/L):	47398.56	Barium (Ba):	1.70	Propionic Acid (C2H5COO)	
CO2 in Gas (%):		Iron (Fe):	2.70	Butanoic Acid (C3H7COO)	
Dissolved CO2 (mg/L):	80.00	Zinc (Zn):	0.10	Isobutyric Acid ((CH3)2CHCOO)	
H2S in Gas (%):		Lead (Pb):	0.09	Fluoride (F):	
H2S in Water (mg/L):	15.00	Ammonia NH3:		Bromine (Br):	
		Manganese (Mn):	0.42	Silica (SiO2):	31.50

Notes:  
 B=20 Al=13

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4 2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	14.00	2.15	218.20	0.39	0.60	2.89	1.49	1.96	1.94	0.00	0.00	0.00	0.00	0.00	0.00	8.37	0.05
166.00	157.00	2.05	183.43	0.43	0.63	2.86	1.49	1.86	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.05
153.00	300.00	2.00	174.08	0.48	0.67	2.89	1.49	1.80	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.64	0.05
140.00	443.00	1.96	165.07	0.53	0.72	2.93	1.49	1.74	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.83	0.05
126.00	585.00	1.91	156.39	0.60	0.76	2.98	1.49	1.68	1.92	0.00	0.00	0.00	0.00	0.00	0.00	9.02	0.05
113.00	728.00	1.87	148.11	0.67	0.80	3.05	1.49	1.61	1.91	0.00	0.00	0.00	0.00	0.00	0.00	9.24	0.05
100.00	871.00	1.83	140.31	0.76	0.83	3.13	1.49	1.54	1.90	0.00	0.00	0.00	0.00	0.00	0.00	9.47	0.05
86.00	1014.00	1.80	133.02	0.85	0.87	3.22	1.49	1.46	1.89	0.00	0.00	0.00	0.00	0.00	0.00	9.72	0.05
73.00	1157.00	1.77	126.29	0.96	0.90	3.34	1.49	1.39	1.88	0.00	0.00	0.00	0.00	0.00	0.00	9.99	0.05
60.00	1300.00	1.74	120.05	1.08	0.93	3.47	1.49	1.31	1.86	0.00	0.00	0.00	0.00	0.00	0.00	10.29	0.05

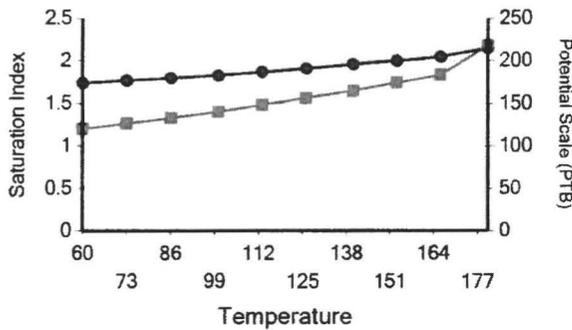
Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.04	9.60	0.04	6.07	37.45	3.59	18.98	8.37	2.10
166.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	9.81	0.04	5.28	34.53	3.11	17.74	7.77	2.09
153.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	10.09	0.04	4.77	32.19	2.82	16.88	7.46	2.09
140.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.40	0.04	4.25	29.29	2.53	15.82	7.14	2.09
126.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.72	0.04	3.72	26.06	2.24	14.55	6.82	2.09
113.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.07	0.04	3.19	22.67	1.95	13.13	6.51	2.09
100.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.45	0.04	2.66	19.24	1.66	11.57	6.21	2.08
86.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86	0.04	2.12	15.77	1.37	9.92	5.91	2.08
73.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.31	0.04	1.59	12.25	1.09	8.19	5.63	2.07
60.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.79	0.04	1.07	8.63	0.82	6.42	5.37	2.06

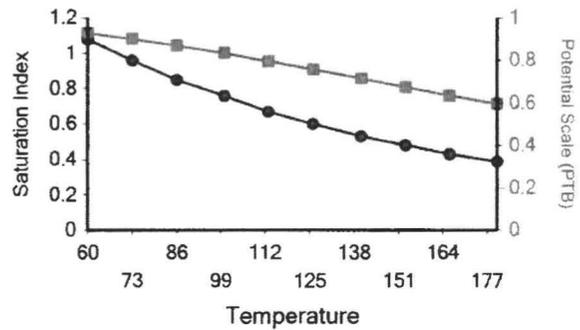
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

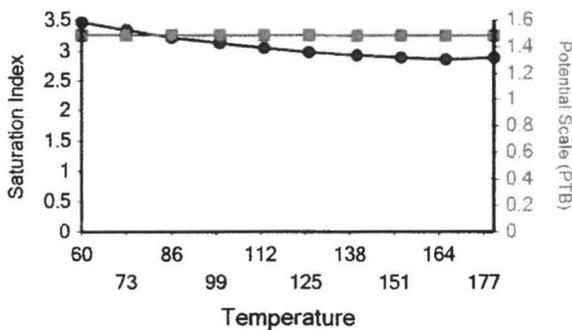
Calcium Carbonate



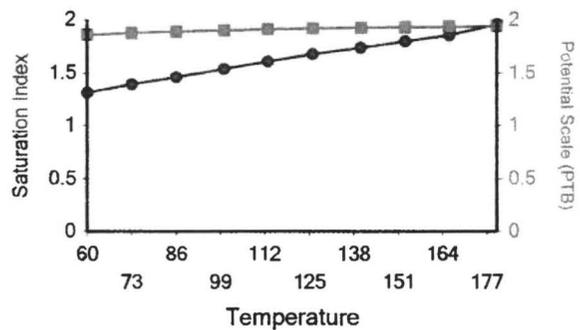
Barium Sulfate



Iron Sulfide

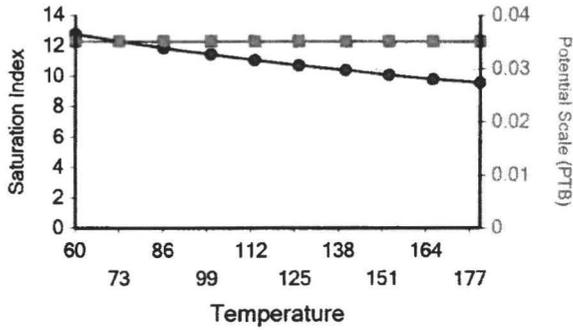


Iron Carbonate

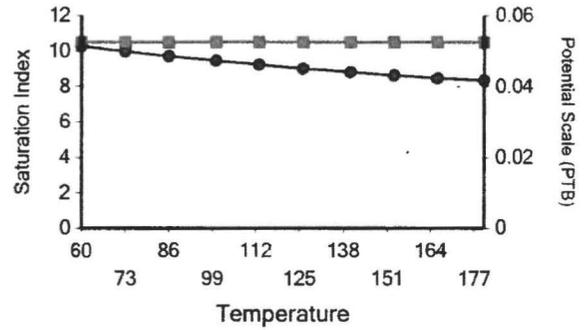


Water Analysis Report

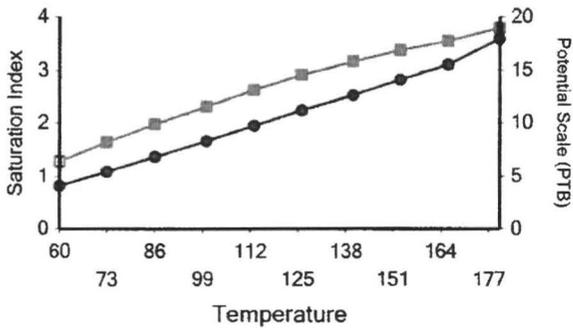
Lead Sulfide



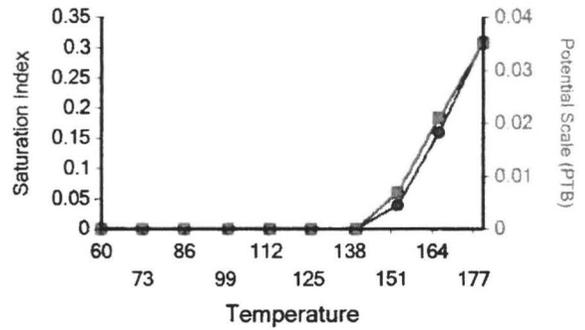
Zinc Sulfide



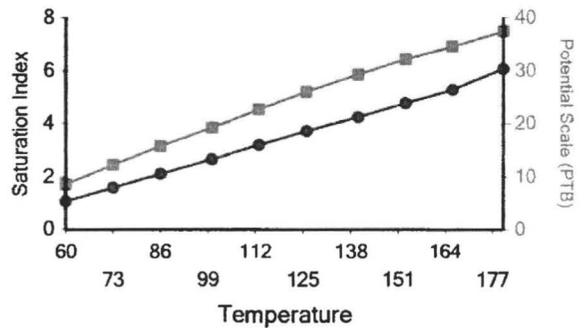
Ca Mg Silicate



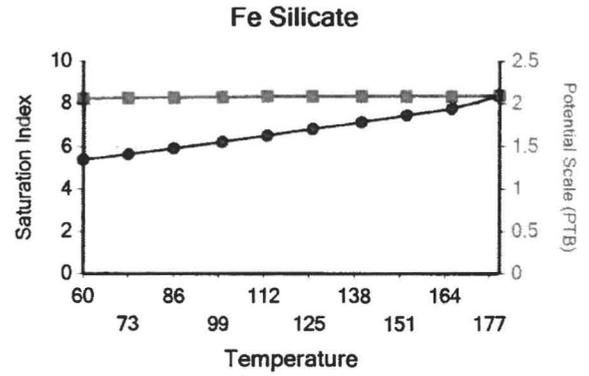
Zinc Carbonate



Mg Silicate



Water Analysis Report



Units of Measurement: **Standard**

Water Analysis Report

Production Company: **FINLEY RESOURCES**  
 Well Name: **UTE TRIBAL 13-08A**  
 Sample Point: **Well**  
 Sample Date: **3/18/2013**  
 Sample ID: **WA-237681**

Sales Rep: **James Patry**  
 Lab Tech: **Layne Wilkerson**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
Test Date:	3/27/2013	Cations		Anions	
		mg/L		mg/L	
System Temperature 1 (°F):	60.00	Sodium (Na):	18406.46	Chloride (Cl):	29000.00
System Pressure 1 (psig):	1300.0000	Potassium (K):	63.00	Sulfate (SO4):	4.00
System Temperature 2 (°F):	190.00	Magnesium (Mg):	76.00	Bicarbonate (HCO3):	2562.00
System Pressure 2 (psig):	14.7000	Calcium (Ca):	643.00	Carbonate (CO3):	
Calculated Density (g/ml):	1.032	Strontium (Sr):		Acetic Acid (CH3COO)	
pH:	8.10	Barium (Ba):	40.00	Propionic Acid (C2H5COO)	
Calculated TDS (mg/L):	51321.78	Iron (Fe):	523.00	Butanoic Acid (C3H7COO)	
CO2 in Gas (%):		Zinc (Zn):	0.40	Isobutyric Acid ((CH3)2CHCOO)	
Dissolved CO2 (mg/L):	80.00	Lead (Pb):	0.02	Fluoride (F):	
H2S in Gas (%):		Ammonia NH3:		Bromine (Br):	
H2S in Water (mg/L):	8.00	Manganese (Mn):	3.90	Silica (SiO2):	

Notes:

(PTB = Pounds per Thousand Barrels)

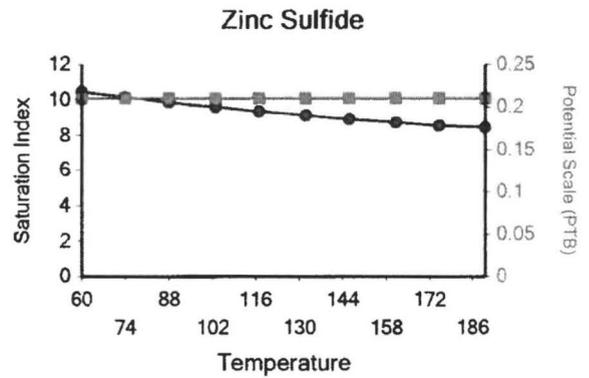
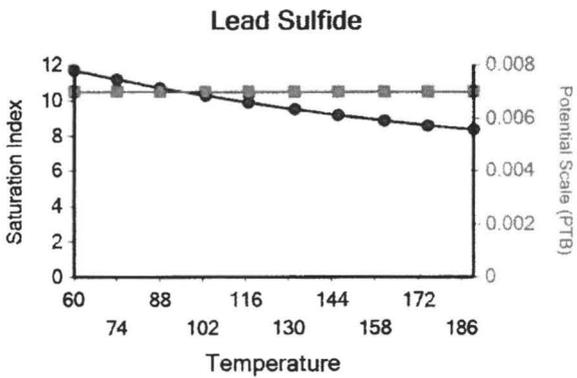
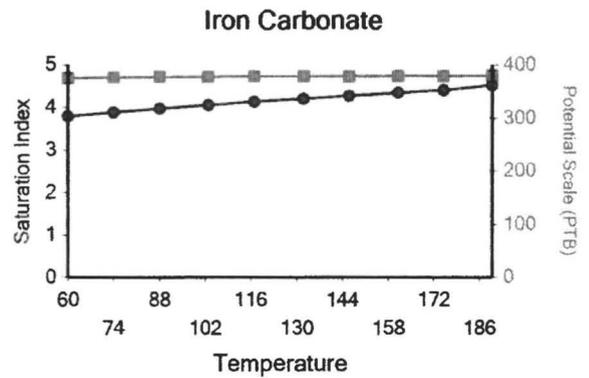
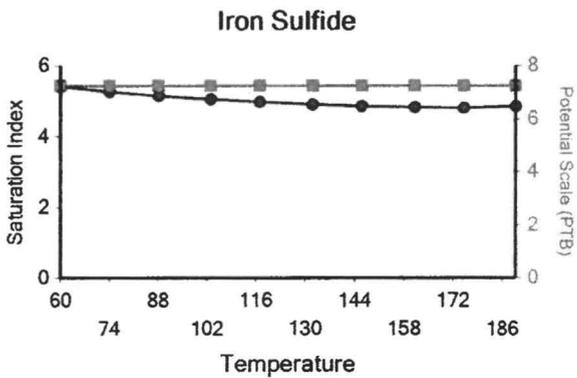
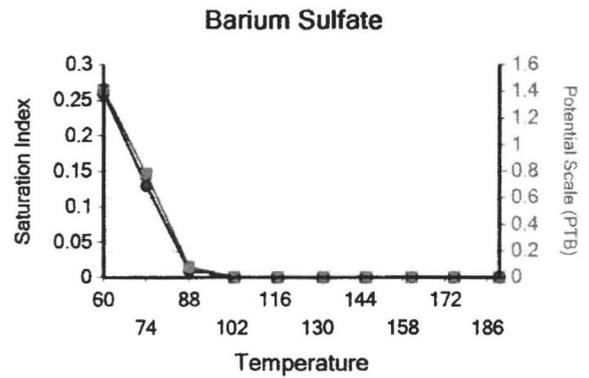
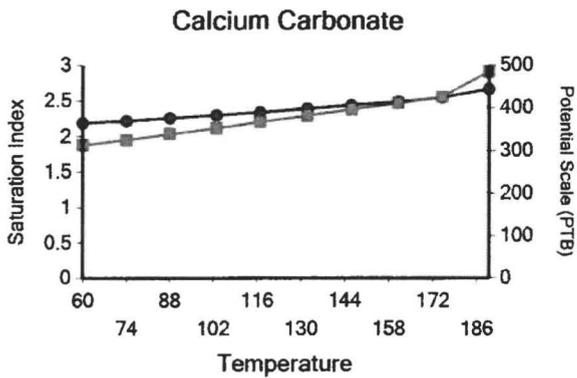
Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
190.00	14.00	2.67	485.87	0.00	0.00	4.86	7.25	4.53	380.13	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.21
175.00	157.00	2.55	426.70	0.00	0.00	4.81	7.25	4.41	379.79	0.00	0.00	0.00	0.00	0.00	0.00	8.57	0.21
161.00	300.00	2.49	411.47	0.00	0.00	4.83	7.25	4.35	379.63	0.00	0.00	0.00	0.00	0.00	0.00	8.75	0.21
146.00	443.00	2.44	396.64	0.00	0.00	4.86	7.25	4.28	379.43	0.00	0.00	0.00	0.00	0.00	0.00	8.93	0.21
132.00	585.00	2.39	381.83	0.00	0.00	4.91	7.25	4.21	379.17	0.00	0.00	0.00	0.00	0.00	0.00	9.14	0.21
117.00	728.00	2.34	367.22	0.00	0.00	4.98	7.25	4.14	378.82	0.00	0.00	0.00	0.00	0.00	0.00	9.36	0.21
103.00	871.00	2.30	352.93	0.00	0.00	5.06	7.25	4.06	378.36	0.00	0.00	0.00	0.00	0.00	0.00	9.60	0.21
88.00	1014.00	2.26	339.09	0.01	0.08	5.15	7.25	3.98	377.74	0.00	0.00	0.00	0.00	0.00	0.00	9.87	0.21
74.00	1157.00	2.22	325.80	0.13	0.78	5.27	7.25	3.89	376.91	0.00	0.00	0.00	0.00	0.00	0.00	10.16	0.21
60.00	1300.00	2.19	313.02	0.26	1.41	5.42	7.25	3.80	375.81	0.00	0.00	0.00	0.00	0.00	0.00	10.48	0.21

Temp (°F)	PSI	Hemihydrate CaSO4~0.5H2O		Anhydrite CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
190.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.25	8.38	0.01	0.00	0.00	0.00	0.00	0.00	0.00
175.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.24	8.59	0.01	0.00	0.00	0.00	0.00	0.00	0.00
161.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.23	8.87	0.01	0.00	0.00	0.00	0.00	0.00	0.00
146.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.22	9.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00
132.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.20	9.52	0.01	0.00	0.00	0.00	0.00	0.00	0.00
117.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.16	9.89	0.01	0.00	0.00	0.00	0.00	0.00	0.00
103.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.11	10.29	0.01	0.00	0.00	0.00	0.00	0.00	0.00
88.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	10.72	0.01	0.00	0.00	0.00	0.00	0.00	0.00
74.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.20	0.01	0.00	0.00	0.00	0.00	0.00	0.00
60.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.72	0.01	0.00	0.00	0.00	0.00	0.00	0.00

Water Analysis Report

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide



# Figure G3 Representative Formation Water Analysis and Compatibility

Multi-Chem Analytical Laboratory

1553 East Highway 40

Vernal, UT 84078



A HALLIBURTON SERVICE

Units of Measurement: **Standard**

## Water Analysis Report

Production Company: **FINLEY RESOURCES-EBUS**

Sales Rep: **James Patry**

Well Name: **UTE 13-1 SWD,UINTAH**

Lab Tech: **Gary Winegar**

Sample Point: **Rig-Last Swab Run**

Sample Date: **1/27/2015**

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample ID: **WA-298864**

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	1/28/2015	Sodium (Na):	39722.90	Chloride (Cl):	120000.00
System Temperature 1 (°F):	190	Potassium (K):	732.80	Sulfate (SO4):	168.00
System Pressure 1 (psig):	1300	Magnesium (Mg):	80.06	Bicarbonate (HCO3):	17080.00
System Temperature 2 (°F):	60	Calcium (Ca):	1.96	Carbonate (CO3):	
System Pressure 2 (psig):	15	Strontium (Sr):	0.32	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.0971	Barium (Ba):	0.19	Propionic Acid (C2H5COO)	
pH:	9.20	Iron (Fe):	38.63	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	177851.53	Zinc (Zn):	1.27	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	1.46	Fluoride (F):	
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.19	Silica (SiO2):	23.75
H2S in Water (mg/L):	0.00				

**Notes:**

**B=93.72 Al=.74 Li=.31**

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	1.55	1.67	0.00	0.00	0.00	0.00	4.38	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74.00	157.00	1.57	1.67	0.00	0.00	0.00	0.00	4.44	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	300.00	1.58	1.67	0.00	0.00	0.00	0.00	4.49	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	443.00	1.59	1.67	0.00	0.00	0.00	0.00	4.53	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	585.00	1.59	1.67	0.00	0.00	0.00	0.00	4.57	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.00	728.00	1.60	1.67	0.00	0.00	0.00	0.00	4.59	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146.00	871.00	1.60	1.67	0.00	0.00	0.00	0.00	4.61	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161.00	1014.00	1.61	1.67	0.00	0.00	0.00	0.00	4.62	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.00	1157.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	1300.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

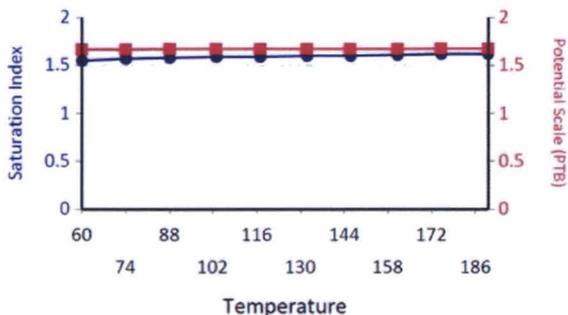
Temp (°F)	PSI	Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.80	0.00	0.00	9.59	28.80	3.90	3.71	16.56	25.75
74.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.82	0.00	0.00	9.94	28.80	4.03	3.71	16.63	25.75
88.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.83	0.00	0.00	10.28	28.80	4.16	3.71	16.72	25.75
103.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.84	0.00	0.00	10.63	28.80	4.29	3.71	16.82	25.75
117.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.84	0.00	0.00	10.97	28.80	4.43	3.71	16.93	25.75
132.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.84	0.00	0.00	11.31	28.80	4.57	3.71	17.04	25.75
146.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	2.14	0.85	0.00	0.00	11.65	28.80	4.72	3.71	17.15	25.75
161.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.85	0.00	0.00	11.97	28.80	4.87	3.71	17.26	25.75
175.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.85	0.00	0.00	12.30	28.80	5.01	3.71	17.37	25.75
190.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.85	0.00	0.00	12.61	28.80	5.16	3.71	17.48	25.75

Water Analysis Report

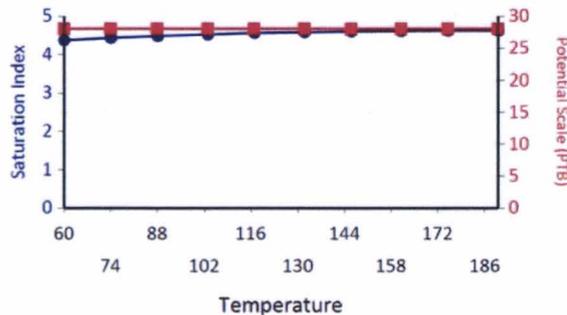
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

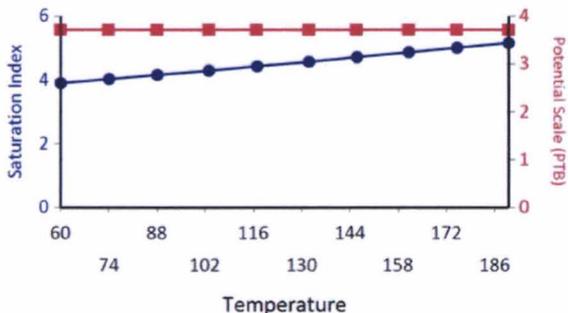
Calcium Carbonate



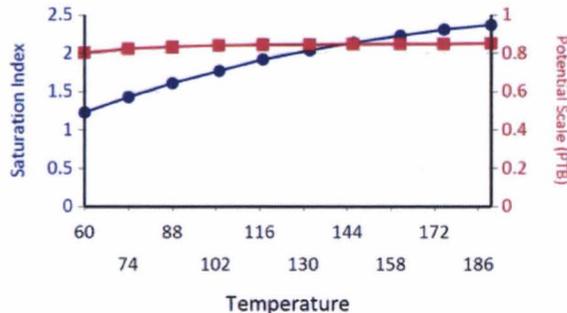
Iron Carbonate



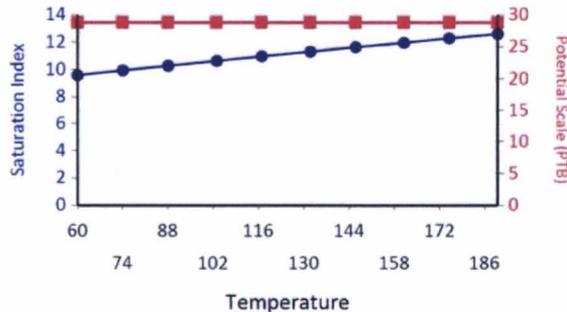
Ca Mg Silicate



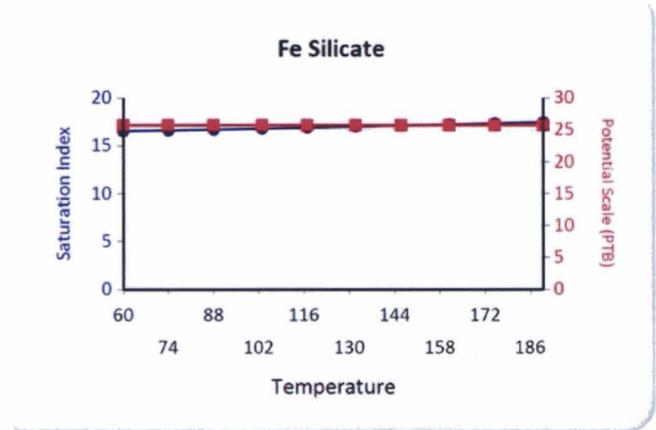
Zinc Carbonate

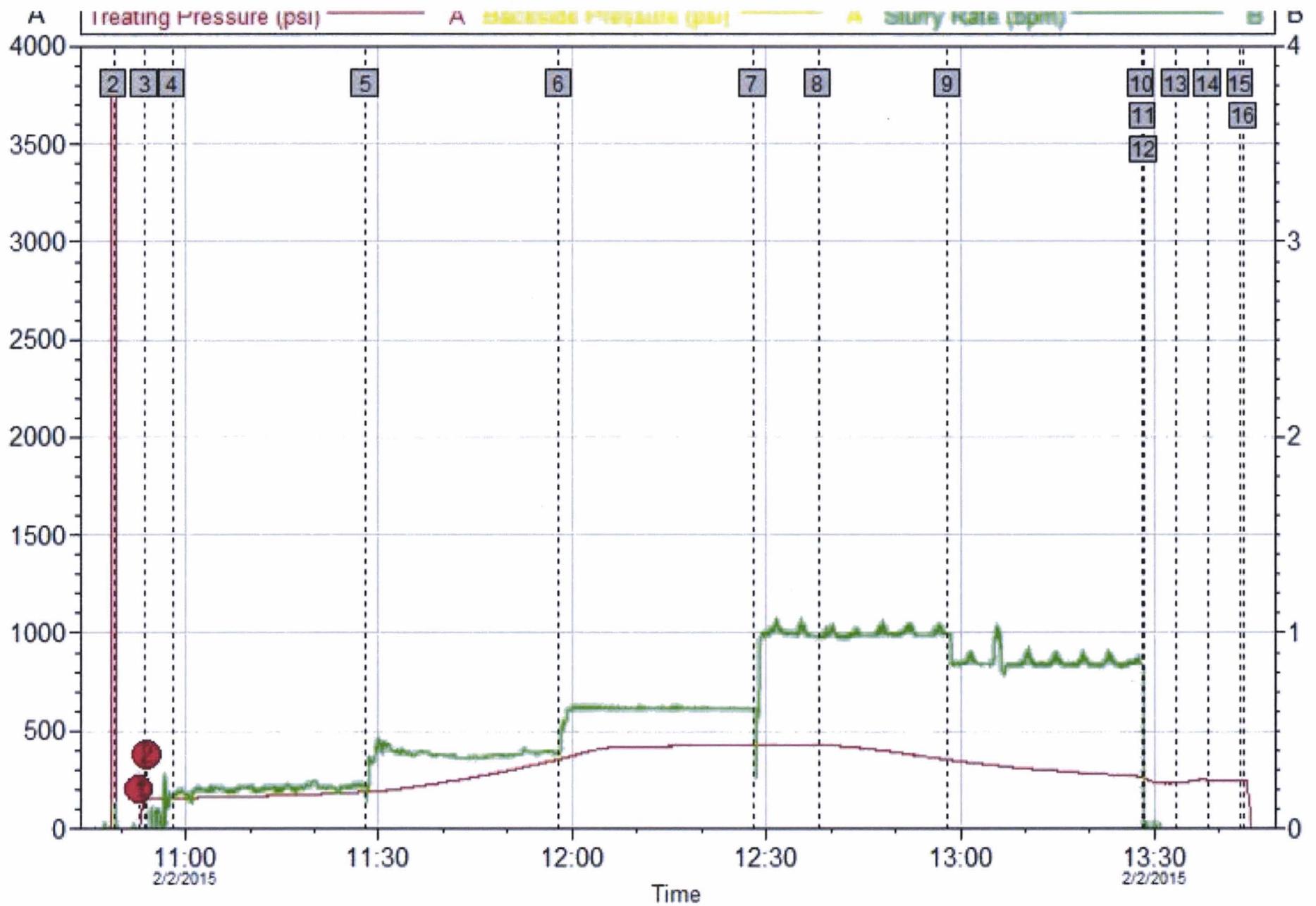


Mg Silicate



Water Analysis Report





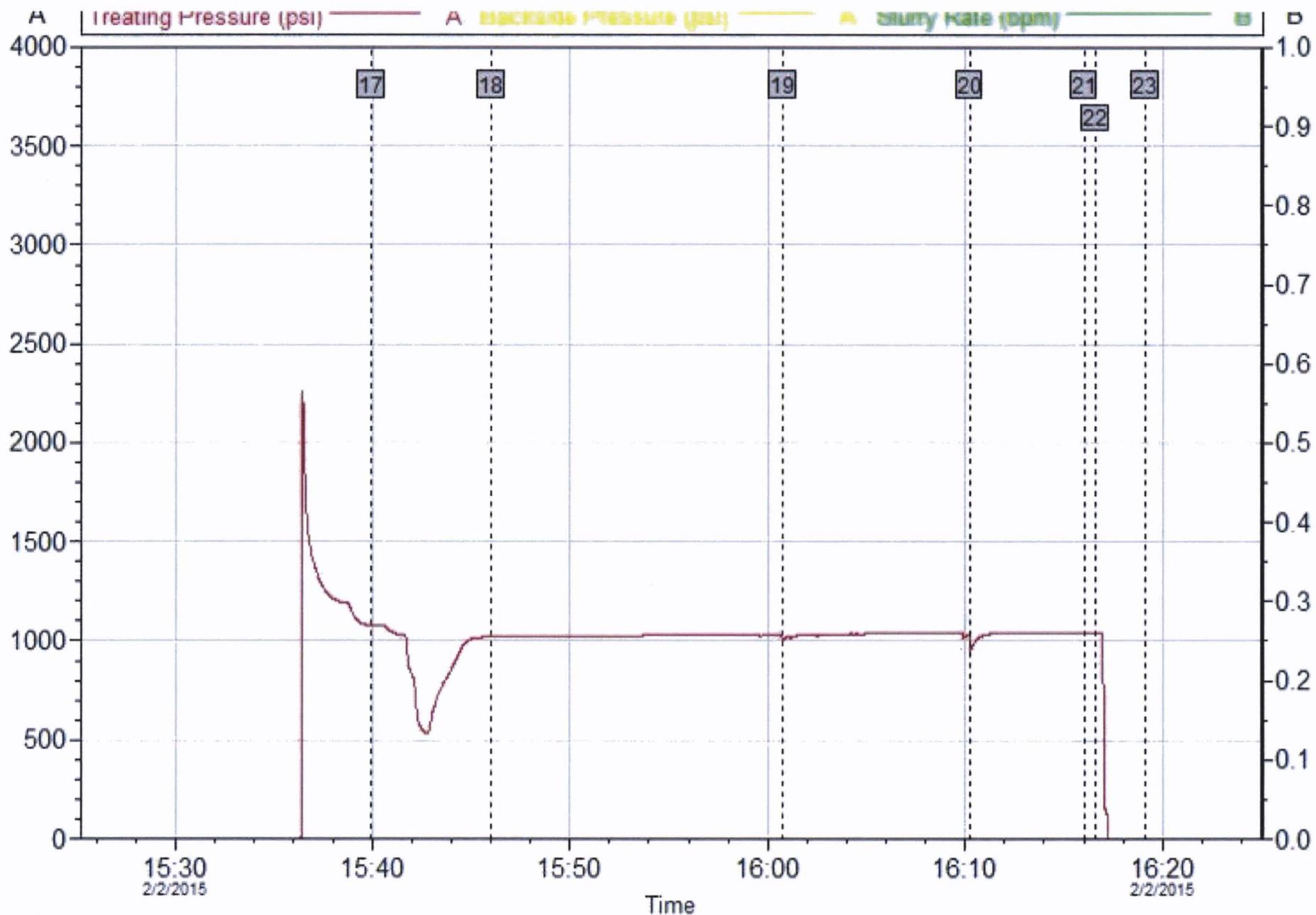
Customer: FINLEY RESOURCES INC - EBUS  
Well Description: Ute 13-1 -4-1 SWD

Job Date: 02-Feb-2015  
UWI:

Sales Order #: 0902095959

INSITE for Stimulation v4.5.1  
02-Feb-15 16:21

**Figure G4** Step Rate Test



Customer: FINLEY RESOURCES INC - EBUS

Job Date: 02-Feb-2015

Sales Order #: 0902095959

Well Description: Ute 13-1 -4-1 SWD

UWI:

INSITE for Stimulation v4.5.1  
02-Feb-15 16:23



# HALLIBURTON

## JOB SUMMARY

TICKET #	902095959	TICKET DATE	February 2, 2015
REGION	NORTH AMERICAN	NMA / COUNTRY	ROCKY MOUNTAIN / USA
BDA / STATE	Utah	COUNTY	Duchesne
MBU ID / EMTL #		H.E.S. EMPLOYEE NAME / EMPLOYEE #	
PSL DEPARTMENT	PRODUCTION ENHANCEMENT		
LOCATION	VERNAL UT.	COMPANY	Finley
CUSTOMER REP / PHONE			
TICKET AMOUNT		WELL TYPE	
WELL CATEGORY		APLUM #	
WELL LOCATION	LAND	DEPARTMENT	5005
JOB PURPOSE CODE			
LEASE	WELL #	SEC / TMP / RNG	
Ute	13-1-4-1 SWL		

H.E.S. EMP NAME / EMP # / (EXPOSURE HOURS)	HRS	HRS	HRS	HRS
Merrell, Brandon / 244956	8.0			
	8.0			
	8.0			
	8.0			
	8.0			
	8.0			
	8.0			
	8.0			

H.E.S. UNIT #S / (R / T MILES)	R / T MILES			
12251192	70			
	70			
	70			
	70			
	70			
	70			
	70			

Form. Name _____ Type: _____	Form. Thickness 328 From 3,238 To 3,566	Called Out	On Location	Job Started	Job Completed
Packer Type _____ Set At 3,177	Bottom Hole Temp. _____ Pressure 1,739	Date 2/2/2015	Date 2/2/2015	Date 2/2/2015	Date 11/19/2014
Misc. Data _____ Total Depth _____		Time 0500	Time 0900	Time 1052	Time 1617

Materials			Well Data						
Treat. Fluid	Density	Lb/Gal	New/Used	Weight	Size	From	To	Max. Allow	
Disp. Fluid	8.34	Lb/Gal		23.00	7.000	0	3,820		
Prop. Type	Sz	Lb.							
Acid Type	Gal.	%		12.75	4.500	0	3,198		
Surfactant	Gal.	In							
Fluid Loss	Gal/Lb	In				3238	3,566	Shots/Ft.	
Gelling Agent	Gal	In							
Breaker	Gal/Lb	In							
INHIBITOR	Gal/Lb	In							
Bioballs	Qty.								
Biocide	Gal/Lb	In							
Cross-linker	Gal/Lb	In							
Clay Contol	Gal/Lb	In							
Buffer	Gal/Lb	In							
Foamer	Gal/Lb	In							
Catalyst	Gal/Lb	In							
Other	Gal/Lb	In							
Other	Gal/Lb	In							
Other	Gal/Lb	In							
Other	Gal/Lb	In							

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
	8.0		8.00	
<b>Total</b>	<b>8.0</b>	<b>Total</b>	<b>8.00</b>	

Job Leaders		Treating Personnel	
MBU LDR.		VAN	Merrell, Brandon / 244956
TEAM LDR.	Merrell, Brandon / 244956	SAFTEY	
ENG.	Merrell, Brandon / 244956	DRIVER	Merrell, Brandon / 244956

Hydraulic Horsepower			
Ordered	500	Avail.	500
		Used	5

Rates in BPM			
Max. Rate	1.1	Avg. Rate	0.7

Summary			
Circulating	Displacement	Preflush:	Gal - BBI
Breakdown	428	Maximum	428
Average	300	Frac. Gradient	0.51
Shut In: Instant	264	5 Min.	233
		15 Min.	246

Volumes			
Load & Bkdn:	Gal - BBI	Pad:Bbl -Gal	
Treatment:	Gal - BBI	Disp:Bbl-Gal	
Total Volume	Gal - BBI	Gal	92.0 BBL

INSPECTION FORM

STATE OF UTAH  
DIVISION OF OIL GAS AND MINING  
INJECTION WELL - PRESSURE TEST

Well Name: U6 13-1 SWD API Number: 43-047-54256  
 Qtr/Dir: SWSW Section: 13 Township: 4S Range: 1E  
 Company Name: Finley Resources, Inc.  
 Lease: State \_\_\_\_\_ Fee: Surface Federal \_\_\_\_\_ Indian \_\_\_\_\_  
 Inspector: Chris Jensen Date: 2/7/2015

Initial Conditions:

Tubing - Rate: 0 Pressure: 300 # psi  
 Casing/Tubing Annulus - Pressure: 10 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1020</u>	<u>300</u>
5	<u>1020</u>	<u>300</u>
10	<u>1020</u>	<u>11</u>
15	<u>1020</u>	<u>11</u>
20	<u>1020</u>	<u>11</u>
25	<u>1020</u>	<u>11</u>
30	<u>1020</u>	<u>300 #</u>

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 300 # psi  
 Casing/Tubing Annulus Pressure: \_\_\_\_\_ psi

COMMENTS:

Witness Chris Jensen

Operator Representative

James A. Simonson 435-630-1023

**Figure H1 Plugging & Abandonment (P&A) Procedure, P&A Wellbore Diagram**

**P&A Procedure**

Ute Tribal 13-1C  
Leland Bench Field – Uintah County, Utah

Date: 3-5-2014

AFE No.:

AFE Cost: \$ Est. Cost to date : \$

Purpose: P&A injection well.

Elevation: GL 5103' KB 5115' TD: 3789' PBTD: 3700'.

	OD. IN	ID. IN	WT. #/FT	GRADE	DEPTH. FT.	CMT. SKS.	EST. TOC. FT	CAP. BBL/FT	BURST. PSI	COLLAPSE PSI
Surface	9 5/8"	8.75	36#	J-55, STC	358'		surf			
Production Tubing	7"	6.366	23	N80, LTC	3789'	545	surf	0.0394	6340	3830

**Safety Considerations. Notify all agencies of P&A.**

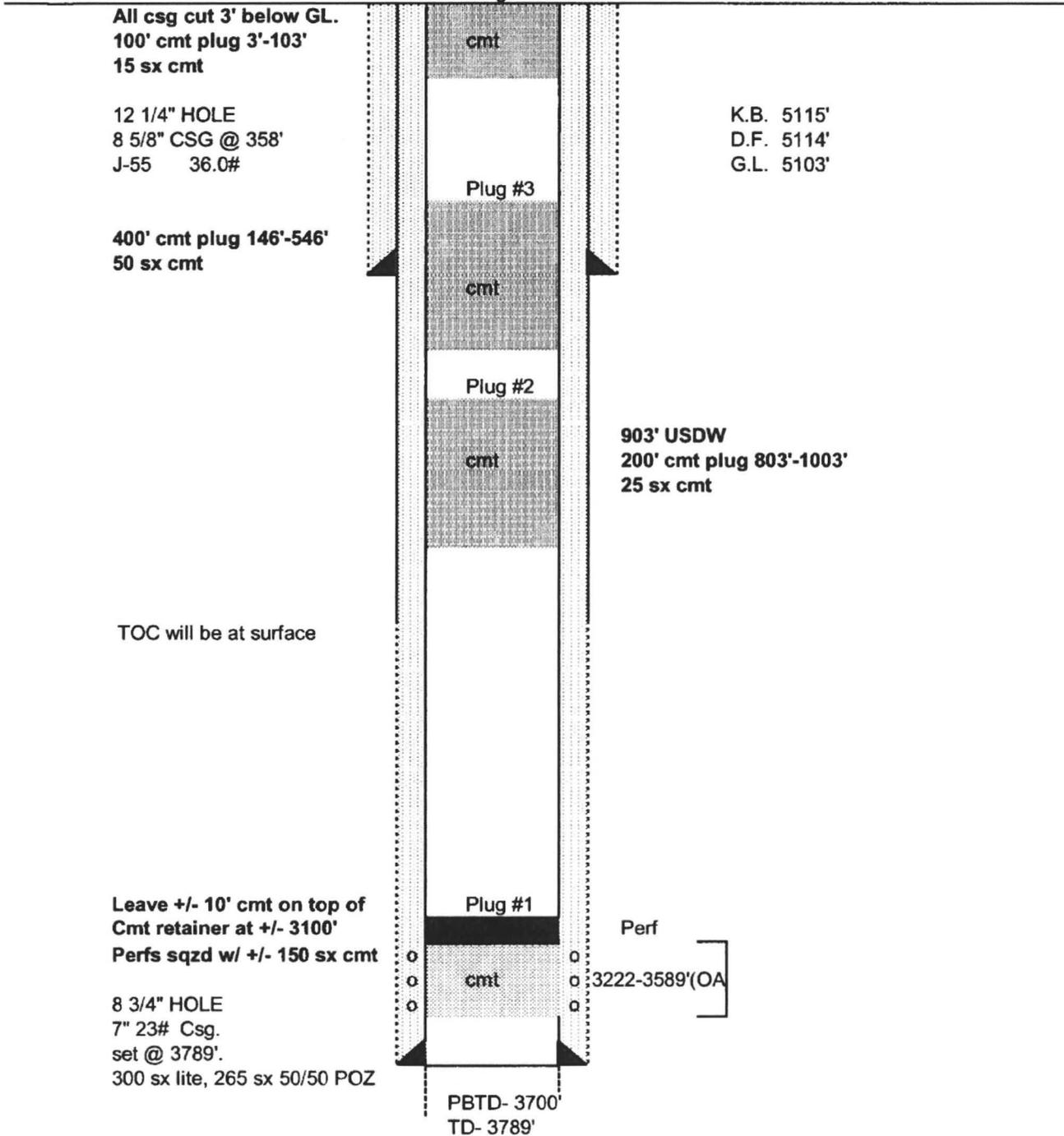
**Procedure:**

1. MIRU CU. Kill well, ND WH, NU BOP, test same. Release pkr. Strap OOH w/ tbg, rack back tbg, LD pkr.
2. PU cmt retainer and tbg, TIH, set retainer at +/- 3100'.
3. RU cmt/pump truck, establish injection rate. Sqz perms w/75 sx cmt, sting out of retainer and spot 10' cmt on top. TOOH (PLUG #1).
4. POOH w/ tbg to +/- 1000', spot 25 sx balanced plug inside 7" csg 1,003'-803', wait 24 hrs, tag plug (PLUG #2).
5. POOH w/ tbg to +/- 546', spot 50 sx balanced plug inside 7" csg 546'-146', wait 24 hrs, tag plug (PLUG#3).
6. POOH w/tbg to +/- 103', spot 20 sx cmt plug 103'-3'. Cut off csg 3' below GL (PLUG #4).

LCO 3/5/14.

**Finley Resources, Inc.**

**Ute 13-1 SWD  
Uintah County, Utah  
P&A Schematic  
Plug #4**



All csg cut 3' below GL.  
100' cmt plug 3'-103'  
15 sx cmt

12 1/4" HOLE  
8 5/8" CSG @ 358'  
J-55 36.0#

400' cmt plug 146'-546'  
50 sx cmt

TOC will be at surface

Leave +/- 10' cmt on top of  
Cmt retainer at +/- 3100'  
Perfs sqzd w/ +/- 150 sx cmt

8 3/4" HOLE  
7" 23# Csg.  
set @ 3789'.  
300 sx lite, 265 sx 50/50 POZ

PBSD- 3700'  
TD- 3789''

K.B. 5115'  
D.F. 5114'  
G.L. 5103'

903' USDW  
200' cmt plug 803'-1003'  
25 sx cmt

Perf  
3222-3589'(OA)



Mark Reinbold <markreinbold@utah.gov>

---

**Ute 26-1 SWD Birds Nest water sample**

---

**Clay O'Neil** <Clay@finleyresources.com>  
To: "Mark Reinbold (markreinbold@utah.gov)" <markreinbold@utah.gov>  
Cc: "starpoint@etv.net" <starpoint@etv.net>

Mon, Mar 16, 2015 at 7:11 AM

Mark,

Attached is the water sample analysis done by MultiChem on the Birds Nest sample from the Ute 26-1 SWD located +/- 1.5 miles S by SW of our 13-1 SWD. This well was granted a permit by the EPA on 10/8/2014(#UT20780-04280). As you can see the chlorides and TDS are in the same ballpark as the water sample we submitted for the 13-1 SWD. If you require anything further, please let me know.

Thanks

Clay O'Neil

Operations Manager- Mid Continent Division

Finley Resources, Inc.

817-713-9514

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 **2010663-1 Finley Ute Tribal 26-1-4-1SWD.pdf**  
91K

# HALLIBURTON

## VERNAL DISTRICT LABORATORY WATER ANALYSIS REPORT

Company: Finley  
Well Name: Ute Tribal  
Well Number: 26-1-4-1SWD  
Formation: Bird's Nest  
Perforations: 2964' - 3318'

Water Type: Produced  
Project No.: 2010663-1  
Date Tested: 14-Nov-2014

	Units	Result
Specific Gravity	~	1.086
Temperature	°F	68
pH	~	7.72
Resistivity	Ω*m	0.092
Chloride (Cl)	mg/L	74700.00
Calcium (Ca)	mg/L	560.03
Magnesium (Mg)	mg/L	243.18
Iron (Fe)	mg/L	0.27
Potassium (K)	mg/L	7500.00
Bicarbonate (HCO <sub>3</sub> )	mg/L	16592.00
Carbonate (CO <sub>3</sub> )	mg/L	0.00
Hydroxides (OH)*	mg/L	0.0089217
Sulfate (SO <sub>4</sub> )	mg/L	650.00
Sodium (Na)*	mg/L	49458.34
Total Dissolved Solids (TDS)*	mg/L	149703.82

\*Sodium & TDS are calculated

### Test Comments


This report is the property of Halliburton services and neither it nor any part thereof may be published or disclosed without first securing the express written approval of laboratory management. It may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Services.

**NOTICE:** This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether due to act or omission, resulting from such report or its use.

# Figure G3 Representative Formation Water Analysis and Compatibility

Multi-Chem Analytical Laboratory

1553 East Highway 40  
Vernal, UT 84078



Units of Measurement: **Standard**

## Water Analysis Report

Production Company: **FINLEY RESOURCES-EBUS**  
Well Name: **UTE 13-1 SWD,UINTAH**  
Sample Point: **Rig-Last Swab Run**  
Sample Date: **1/27/2015**  
Sample ID: **WA-298864**

Sales Rep: **James Patry**  
Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	1/28/2015	Sodium (Na):	39722.90	Chloride (Cl):	120000.00
System Temperature 1 (°F):	190	Potassium (K):	732.80	Sulfate (SO4):	168.00
System Pressure 1 (psig):	1300	Magnesium (Mg):	80.06	Bicarbonate (HCO3):	17080.00
System Temperature 2 (°F):	60	Calcium (Ca):	1.96	Carbonate (CO3):	
System Pressure 2 (psig):	15	Strontium (Sr):	0.32	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.0971	Barium (Ba):	0.19	Propionic Acid (C2H5COO)	
pH:	9.20	Iron (Fe):	38.63	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	177851.53	Zinc (Zn):	1.27	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	1.46	Fluoride (F):	
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.19	Silica (SiO2):	23.75
H2S in Water (mg/L):	0.00				

**Notes:**

B=93.72 Al=.74 Li=.31

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	1.55	1.67	0.00	0.00	0.00	0.00	4.38	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74.00	157.00	1.57	1.67	0.00	0.00	0.00	0.00	4.44	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	300.00	1.58	1.67	0.00	0.00	0.00	0.00	4.49	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	443.00	1.59	1.67	0.00	0.00	0.00	0.00	4.53	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	585.00	1.59	1.67	0.00	0.00	0.00	0.00	4.57	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.00	728.00	1.60	1.67	0.00	0.00	0.00	0.00	4.59	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146.00	871.00	1.60	1.67	0.00	0.00	0.00	0.00	4.61	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161.00	1014.00	1.61	1.67	0.00	0.00	0.00	0.00	4.62	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.00	1157.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	1300.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Temp (°F)	PSI	Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.80	0.00	0.00	9.59	28.80	3.90	3.71	16.56	25.75
74.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.82	0.00	0.00	9.94	28.80	4.03	3.71	16.63	25.75
88.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.83	0.00	0.00	10.28	28.80	4.16	3.71	16.72	25.75
103.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.84	0.00	0.00	10.63	28.80	4.29	3.71	16.82	25.75
117.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.84	0.00	0.00	10.97	28.80	4.43	3.71	16.93	25.75
132.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.84	0.00	0.00	11.31	28.80	4.57	3.71	17.04	25.75
146.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	2.14	0.85	0.00	0.00	11.65	28.80	4.72	3.71	17.15	25.75
161.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.85	0.00	0.00	11.97	28.80	4.87	3.71	17.26	25.75
175.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.85	0.00	0.00	12.30	28.80	5.01	3.71	17.37	25.75
190.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.85	0.00	0.00	12.61	28.80	5.16	3.71	17.48	25.75

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

**PERMIT STATEMENT OF BASIS**

**Applicant:** Finley Resources, Inc.

**Well:** Ute 13-1 SWD

**Location:** Sec 13, T4S, R1E, Uintah Co., UT

**API:** 43-047-54256

**Ownership Issues:**

Within the one-half (1/2) mile radius Area of Review (AOR), all the surface is in private ownership. The proposed injection well is located on surface privately owned by Uintah Partner LLC. Other surface owners within the AOR include Salradus LLC, Coleman Mountain Holdings LLC, and Coleman Family Trusts. Mineral rights are owned by the Ute Tribe. Finley Resources and Newfield are the operators within the AOR. An affidavit of notification of operators, mineral owners, and surface owners located within a one-half (1/2) mile radius has been provided.

**Well Integrity:**

The Ute 13-1 SWD well has been constructed specifically for the purpose of a water disposal well. The permit to drill was approved by DOGM 3/5/2014. The well was spudded 12/12/2014 and completed as an injection well 1/26/2015. The well has been perforated for disposal in the Birds Nest Aquifer of the Green River Formation.

Description of the Casings and Cement:

CASING PROGRAM

<u>String Type</u>	<u>Hole Size</u>	<u>Depth</u>	<u>Feet</u>	<u>Casing Diameter</u>	<u>Weight</u>	<u>Grade</u>
Conductor	17.5"	60'		13.375"	48#	H-40 ST&C
Surface	12.25"	424'	424'	9.625"	36#	J-55 ST&C
Production	8.75"	3,818'	3,820'	7"	23#	J-55 LT&C

CEMENT PROGRAM

<u>String Type</u>	<u>DV Depth</u>	<u>Stage Lead/Tail</u>	<u>Cement Bottom</u>	<u>Cement Top</u>	<u>Number Sacks</u>	<u>Cement Type</u>	<u>Cement Weight</u>
Surface			424'	Surface	200	Class G	
Production		Lead Tail	3,818'	Surface	100 625	Class H+add's Class H+add's	10.0 ppg 14.0 ppg

Finley Resources proposes to inject produced water from its own oil and gas production from the Wasatch and Green River Formations in the Uintah Basin. Initially, this is expected to be primarily from the Leland Bench and Windy Ridge Fields. Finley plans to deliver injection fluids to the disposal well via trucks or a pipeline. A current list of sources, consisting of 55 wells, is included with the UIC Permit Application (Figure G1), but additional wells are being added routinely, with new development. Finley will submit an annual list of sources for the prior year with the annual fluid injection report and fluid analyses.

A cement bond log (run by The Perforators, LLC on 1/6/2015) demonstrates good cement bond in this well up to about 1094 feet depth. The proposed injection interval is 3228 to 3566 feet, in the Birds Nest zone in the Parachute

Creek Member of the upper Green River Formation. The base of moderately saline groundwater (3000-10,000 mg/l TDS) is at a depth of approximately 900 feet, as interpreted from the Depth of the BMSW map (Plate 4) of Utah Geological Survey Special Study 144, Moderately Saline Groundwater in the Uinta Basin, Utah (Paul B. Anderson, et al, 2012). The top of the proposed injection interval is about 2,300 feet below the base of moderately saline groundwater.

The proposed injection well has surface casing set at 424 feet and has a cement top to surface. A 7-inch production casing is set to a depth of 3,818 feet, and a 4 ½ tubing extends to a depth of 3,198 feet, with a packer set at 3,177 feet. Perforations are between 3,238 feet and 3,566 feet. Within the (0.5 mile radius) AOR there are five producing oil wells, all vertically drilled. Based on casing records and cement bond logs, all of these existing wells have adequate casing and cement for the proposed injection interval.

A mechanical integrity test (MIT), with advance notification to DOGM, was run on the well on 2/2/2015. The MIT was witnessed by Chris Jensen of DOGM, and a copy of the field report is included in the UIC Application. The annulus pressure was maintained at 1020 psi for 30 minutes, and the tubing pressure stayed consistent at 300 psi. Finley submitted a Sundry Report to DOGM on 3/3/2015, including the Step Rate Test (SRT) and MIT. The Sundry Report was accepted For Record Only by DOGM on 3/3/2015.

In the UIC application, Finley proposed a maximum injection rate of 5000 barrels per day. The daily volume will vary depending on water production rates from the producing wells in the vicinity. The injection rate will be constrained by the maximum allowable injection pressure (MAIP) at the surface. As stated in Finley's application, EPA has established a set injection pressure for all Birds Nest Aquifer disposal

wells. Injection pressure of 300 psi is equivalent to a formation fracture gradient of 0.62 psi/ft. This established fracture gradient is less than known fracture gradients in the Uinta Basin to ensure that injection at 300 psi will not cause fractures in the Birds Nest. In accordance with the EPA regulation, Finley proposes a maximum injection pressure of 300 psi. A Step Rate Test (SRT) was conducted on 2/2/2015. The injection test was pumped down 4-1/2" diameter, J-55 and N-80, 12.75# tubing, with a top packer set at 3177' . A plot of injection pressure (psi) versus injection rate (barrels per minute) of Finley' s Step Rate Test suggests a breakover point at about 425 psi with an injection rate less than 0.5 BPM. Injection at a rate of 300 psi should not initiate any new fractures or propagate existing fractures. However, the maximum allowed injection pressure will limit the maximum injection rate. At 300 psi, the injection rate would be only about 0.35 BPM. This would allow a daily injection rate of only about 500 barrels per day.

Update: The Ute 13-1 SWD initiated injection on 03/25/2015. This was documented in a Sundry Notice received by DOGM 04/09/2015. As reported by the Sundry, the initial day rate was 1068 barrels/day at a pressure of 100 psi, and the average initial rate (03/25/2015 to 03/31/2015) was 945 barrels/day, with an average wellhead pressure of 130 psi. This injection rate is much higher than would be expected based on the Step Rate Test conducted on 2/2/2015.

#### **Ground Water Protection:**

In the Area of Review (0.5 mile radius), no water rights are shown by the Utah Division of Water Rights. As indicated in Finley' s application, the nearest water right, approximately 1.6 miles south-southwest, was granted to Snyder Oil, for the purpose of an injection well for water flooding. However, at the time of this inquiry (2/24/2015), the status of this water right is listed as Expired. Otherwise, the nearest water rights are nearly four miles to the southwest. The Bureau of Land

Management has surface water rights for purposes of livestock and wildlife watering and irrigation.

The application submitted by Finley Resources includes standard laboratory water analyses of connate water from the proposed injection well (Figure G3), as well as produced water from 53 nearby wells (Figure G1), and 1 nearby well, which Finley considers representative injection water (Figure G2). All these wells are operated by Finley and produce water from the Green River and/or Wasatch Formations. Finley presents a Summary of TDS Concentrations Analyzed (Table G-1). Two producing wells in Table G-1 indicate produced water TDS analyses, averaging 49,359 mg/l. These two wells' water samples have pH values of 8.1 and 8.2 and density values of 1.032 and 1.029. All 53 wells listed in Figure G1 have TDS values ranging from 12,465 to 58,986 mg/l; pH values ranging from 6.8 (excluding FRAC tank samples) to 10.0; and density values ranging from 1.0044 (excluding FRAC tank samples) to 1.0383.

A swab sample was taken from Ute 13-1 SWD (reportedly from the Birds Nest zone) on 1/27/2015 and subsequently submitted for lab analysis. The analysis report is included as Figure G3 with the UIC application. The analysis report indicates a TDS of 177,852 mg/l. Among anions, the reported chloride is very high at 120,000 mg/l, and bicarbonate is 17,080 mg/l. The only substantial cations are sodium at 39,723 mg/l and potassium at 733 mg/l. Based on subsequent conversations with Finley, it is concluded that the sample was probably contaminated with excess chlorides from fluids used in the completion procedure and may not be truly representative of the formation water. On 3/16/2015 Finley submitted, for comparison, an analysis report for a swab sample taken from the Birds Nest zone in the Ute 26-1-4-1 SWD (43-047-31822), permitted by EPA on 10/8/2014. The well is located approximately 1 ½ miles south-southwest of the Ute 13-1 SWD. This sample is also quite high in TDS, at 149,704 mg/l. Among anions, it is also very high in chlorides, at 74,700 mg/l, with

bicarbonate at 16,592 mg/l. The only substantial cations are sodium, at 49,458 mg/l and potassium, at 7,500 mg/l. Inasmuch as this sample is of similar quality to the questionable sample from Ute 13-1 SWD, it is concluded by DOGM that the injection should cause no diminution of the quality of the already generally poor quality water in the Birds Nest injection zone. After injection ceases, increased pressure around the wellbore will abate over time. No long term negative impacts to surface or ground water are anticipated as a result of the proposed injection operation.

### **Geology:**

The Uinta Formation is the near surface bedrock unit in the area of the Ute 13-1 SWD well. At this location it extends to a depth of 2,264 feet. It is overlain, in part, by Quaternary surface deposits. The Uinta consists largely of alluvial sediments deposited after Lake Uinta and the Uinta Basin began to fill with sediments derived from surrounding uplands. The formation consists largely of interbedded brown mudstone and siltstone, with some light tan, very fine-grained fluvial sandstone.

The Green River Formation underlies the Uinta Formation. In the Ute13-1 SWD well the formation top is picked at 2,264 feet. In the area, the Green River Formation extends to a depth of about 7,000 feet, although it is not fully penetrated in the Ute 13-1 SWD well. The formation is a complex mixture of clastics, carbonates, and organic-rich mudstones, deposited in an alluvial to lacustrine depositional system. The Green River lithologies interfinger with those of the underlying Wasatch Formation and the overlying Uinta Formation. The upper portion of the Green River is the Parachute Creek Member. The Parachute Creek was deposited as a complex sequence of lacustrine and marginal lacustrine sediments, consisting of laminated carbonate mudstones interbedded with light gray-brown shale, siltstones, and sandstones. The most organic rich shales, including the Mahogany Oil Shale Zone,

are located within the Parachute Creek Member, with the top of the Mahogany zone estimated to be at a depth of 3,890 feet in the area of the Ute 13-1 SWD. The lower portion of the Green River Formation is the Douglas Creek Member, consisting of alternating beds of light gray, fine-grained calcareous sandstone, limestone, dolomite, and gray-brown brittle shale, as well as organic-rich black shale.

Finley proposes to dispose produced water into the Birds Nest zone within the upper part of the Parachute Creek Member in the upper Green River Formation. The Birds Nest was deposited in the deeper part of Lake Uinta as the lake dried and became a restricted evaporitic basin. The Birds Nest consists of very fine-grained siltstones and mudstones, interbedded with dark brown, laminated organic-rich carbonate mudstones and evaporate beds. The lake waters became concentrated with salts, primarily sodium bicarbonate, during this regressive phase. An important characteristic of the Birds Nest is that large numbers of post-depositional nahcolite crystals grew in the Birds Nest sediments. Nahcolite crystals with diameters of one foot have been reported. Later dissolution of the nahcolite crystals and beds resulted in high-permeability vugular porosities. The proposed injection zones are between 3,238 to 3,566 feet located in the Birds Nest zone. These intervals are composed of porous and permeable carbonate oil shale with large vugular porosity, connected through an extensive fracture network. The combined thickness of the proposed injection zones is 328 feet. The upper confining zone is composed of very fine grained organic lean oil shale and lacustrine overlying the injection zone. The gross thickness of the upper confining zone averages between 275 and 300 feet. The average thickness of the upper confining zone in the area of the proposed Ute Tribal 13-1 SWD is 285 feet. The lower confining zone is composed of very fine-grained organic lean oil shale and lacustrine marlstone underlying the injection zone. The gross thickness of the lower confining zone averages between 300 and 350 feet. The average thickness of the lower confining zone in the area of the proposed Ute 13-1 SWD is 330 feet.

As a supplement to the application, Finley includes a local structure contour map in the area of the Windy Ridge and Leland Bench Fields. The mapped structural horizon is the top of the lower Birds Nest interval in the Green River Formation. This map indicates that the Ute 13-1 SWD well is located in an area of fairly gentle and relatively uniform dip northward to north-northeastward toward the axis of the Uinta Basin. In the area, the dip varies from about 100 feet to 250 feet per mile. In the immediate vicinity of the Ute 13-1 SWD well, the dip is about 200 feet per mile toward the north-northeast. Cross-sections prepared by Finley show the correlations of the injection zone, as well as the confining zones. No faults are indicated in the area.

#### **Oil/Gas & Other Mineral Resources Protection:**

The Ute 13-1 SWD well is located in the Windy Ridge Field, located in T4S, R1E. The Windy Ridge Field, as currently comprised, was established in March 2002, with the combining of the Windy Ridge, Windy Ridge East, and Windy Ridge West Fields. With recent boundary adjustments, the field covers approximately 23 square miles and currently has about 130 producing wells. Each of the three previously existing fields was established in 1988. The discovery well for the Windy Ridge Field was Pariette Draw 28-44 (43-047-31408), which first produced from the Green River Formation on 3/1/1984. It was subsequently plugged and abandoned 11/28/2007. The discovery well for the Windy Ridge East Field was the Ute Tribal 26-1-C (43-047-31738), which first produced from the Green River 11/4/1986. Finally, the discovery well for the Windy Ridge West Field was the Ute 21-1 (43-047-31821), which first produced from the Green River on 5/20/1988. The combined Windy Ridge Field produced oil at its highest level in 2014, almost 0.8 million barrels of oil, and has produced nearly 4.0 million barrels in the field's lifetime. Gas production also peaked at more than 1.2 million MCF in 2014, with a lifetime production more

than 5.6 million MCF. Production is primarily from the Green River Formation, with some from the Wasatch Formation. Production depths are generally between 4500 and 8000 feet.

The Leland Bench Field was established in 1989. The western boundary of the field is only  $\frac{1}{4}$  mile east of the Ute 13-1 SWD well. The field is almost entirely in T4S, R2E, with a  $\frac{1}{2}$  mile wide strip along the east edge T4S, R1E. The field covers an area of about 17 square miles and currently has about 107 producing wells. The discovery well for the field was the Ute 13-1 C, located only about one mile northeast of the Ute 13-1 SWD. The well was completed in the Green River and first produced on 11/15/1988. It currently remains as a producing well from the Green River. An application to convert the well to an SWD was received from Finley on 6/10/2013. However, the application was voluntarily withdrawn by Finley on 11/5/2013. The Leland Bench Field has risen rapidly in production in recent years, peaking at nearly 1.5 million barrels of oil in 2014, with a lifetime production of more than 3.4 million barrels. Gas production also peaked in 2014, at more than 1.2 million MCF. Lifetime gas production from the field is nearly 2.9 million MCF. Production is from the Green River Formation and Wasatch Formation. Production depths are generally between 4800 and 9400 feet.

No other known potentially producible mineral or hydrocarbon zones are reported in the area.

**Bonding:**

Finley Resources, Inc. has a \$150,000 statewide blanket surety bond in place with the Bureau of Land Management. Finley is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the UDOGM.

**Actions Taken and Further Approvals Needed:**

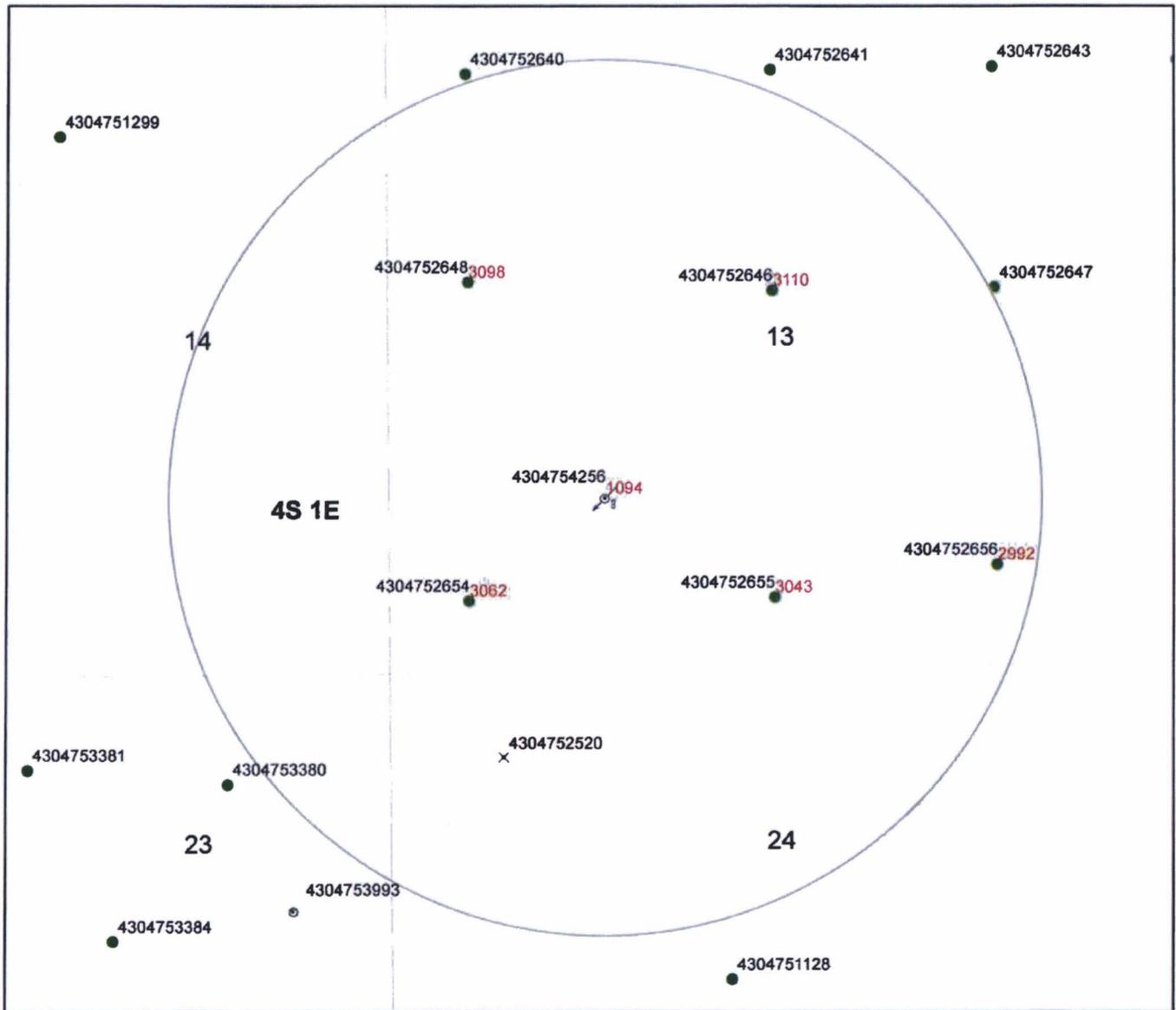
Notice of this application was published in the Salt Lake Tribune and the Uintah Basin Standard. In addition, copies of the notice were provided to the Environmental Protection Agency (EPA), Bureau of Land Management, the Ute Indian Tribe, Uintah County Planning, and the Operator.

A properly designed and constructed water disposal well, combined with periodic mechanical integrity tests, poses no threat to fresh or useable groundwater supplies.

The Division staff recommends approval of this application contingent upon no additional or unforeseen information being presented that is relevant to this analysis or modifies the data presented herein.

Reviewer(s): Mark L. Reinbold

Date: 3/9/2015 (with subsequent updates)



**Legend**

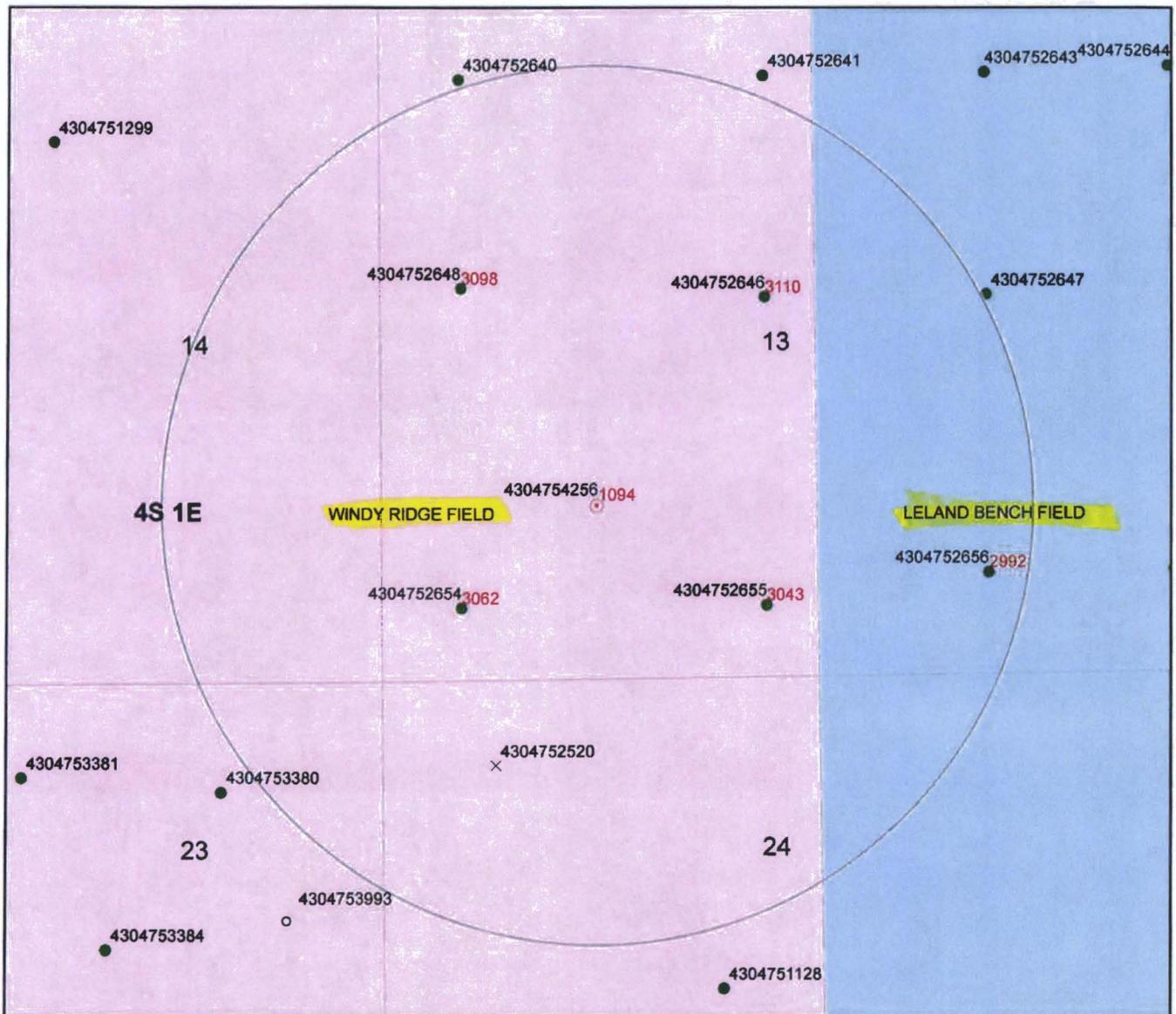
**Oil & Gas Well Type**

- APD-Approved Permit
- ⊙ DRL-Spudded (Drilling Commenced)
- ⚡ GIW-Gas Injection Well
- <sub>GS</sub> GSW-Gas Storage Well
- × LA-Location Abandoned
- LOC-New Location Well
- OPS-Drilling Operations Suspended
- ⊙ PA-Pugged & Abandoned
- ⚡ PGW-Producing Gas Well
- POW-Producing Oil Well
- ▲ RET-Returned APD
- ⚡ SGW-Shut-in Gas Well
- SOW-Shut-in Oil Well
- ⊗ TA-Temp Abandoned
- TW-Test Well
- ⚡ WDW-Water Disposal Well
- ▲ WIW-Water Injection Well
- WSW-Water Supply Well

- 4585 Depth to top of suitable cement bond
- Well Bottom Hole Location
- Oil & Gas Wells Hole Directional Path
- Wells-CbitopsMaster 1-31-13
- DNR Oil Gas Wells Buffer
- County Boundaries
- PLSS Sections
- PLSS Townships

**Cement Bond Tops**  
**Ute 13-1 SWD**  
**API #43-047-54256**  
**UIC-431.1**



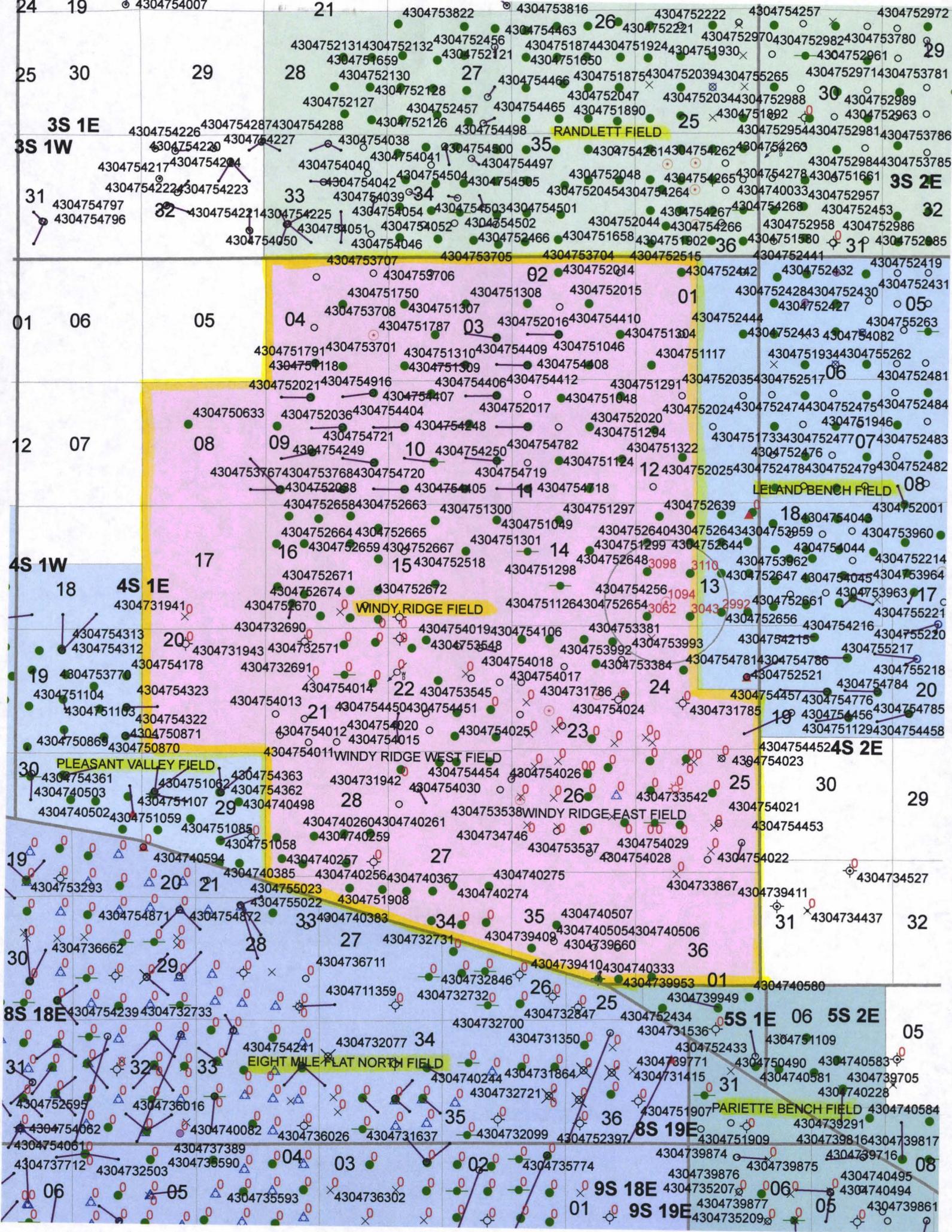


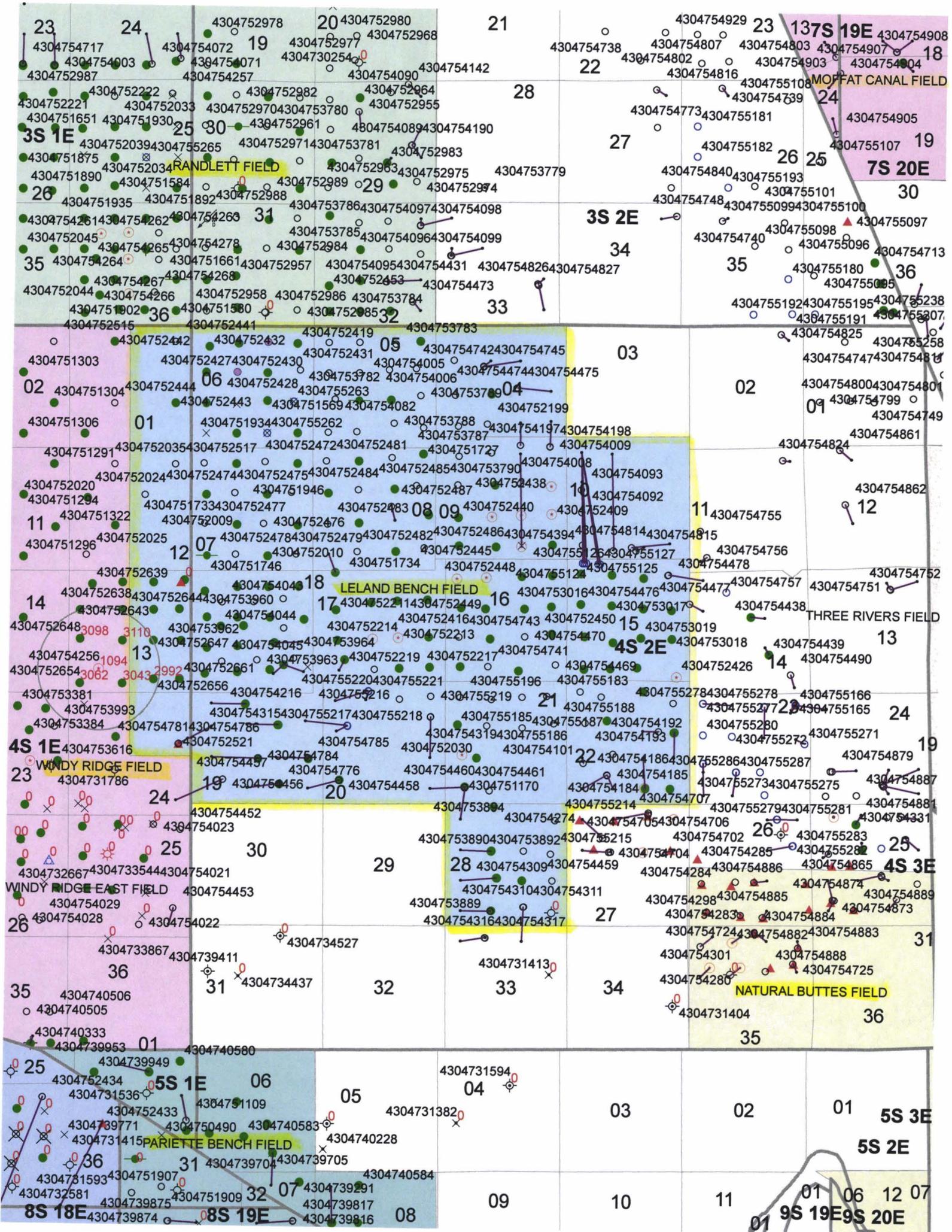
- Legend**
- Oil & Gas Well Type**
- APD-Approved Permit
  - ⊙ DRL-Spudded (Drilling Commenced)
  - ⊕ GIW-Gas Injection Well
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  - × LA-Location Abandoned
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  - ⊙ PA-Pugged & Abandoned
  - ⊙ PGW-Producing Gas Well
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  - ⊙ TA-Temp Abandoned
  - TW-Test Well
  - ⊙ WDW-Water Disposal Well
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  - WSW-Water Supply Well

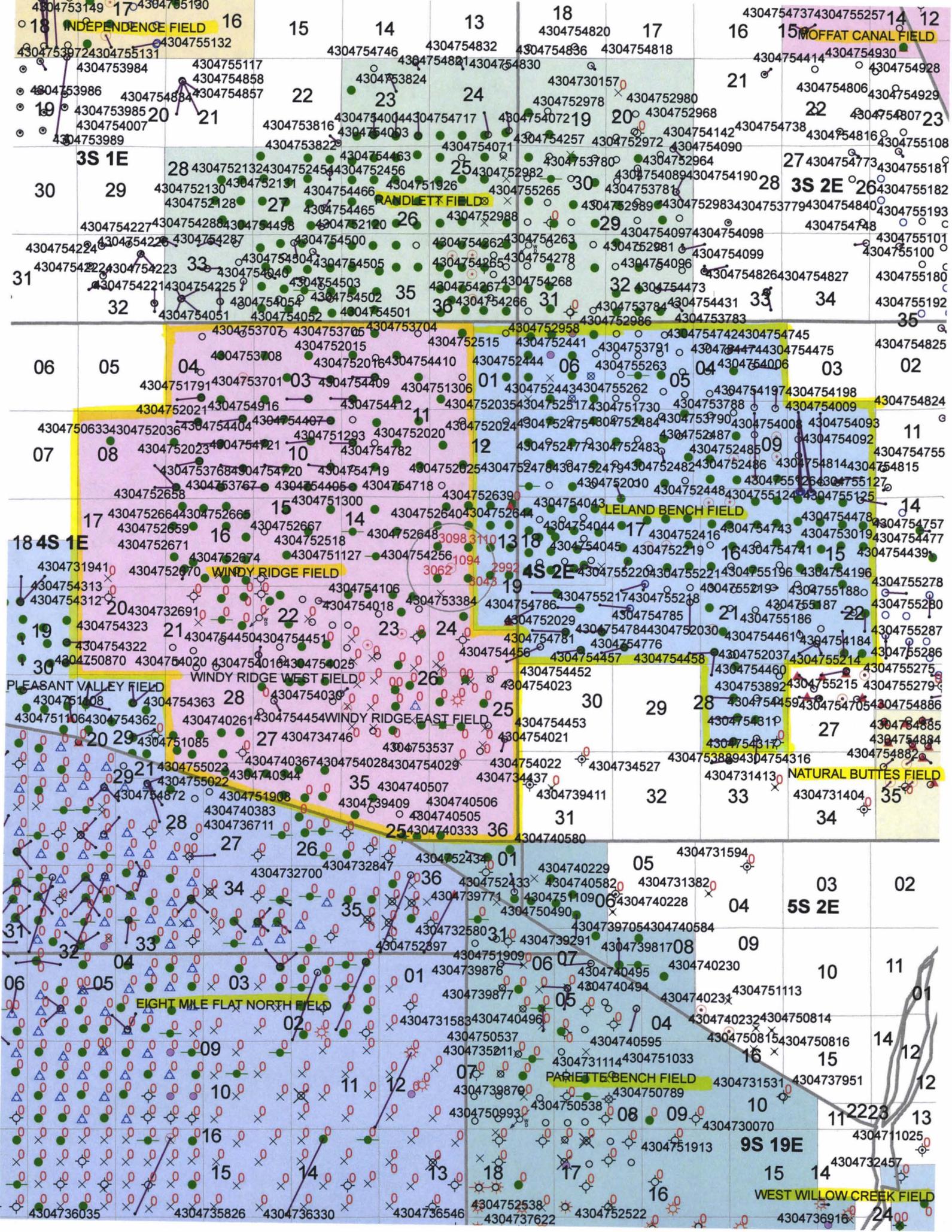
**Cement Bond Tops**  
**Ute 13-1 SWD**  
**API #43-047-54256**  
**UIC-431.1**



- 4585 Depth to top of suitable cement bond
- Well Bottom Hole Location
- Oil & Gas Wells Hole Directional Path  
Wells-CbitopsMaster 1-31-13
- DNR Oil Gas Wells Buffer
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4304752659 16 4304752667 4304752518 4304752648 3098 3110 13 18 4304754044 17 4304752416 4304754743 4304753019 4304754477  
4304752671 4304752674 4304751127 4304754256 1094 13 18 4304754045 4304752219 16 4304754741 15 4304754439  
4304731941 4304752970 WINDY RIDGE FIELD 4304755220 4304755221 4304755196 4304754196 4304755278  
4304754313 20 4304732691 22 4304754106 4304753384 4304754786 4304755217 4304755218 4304755219 4304755188 4304755280  
4304754312 20 4304754018 4304753384 4304754786 4304752029 4304754785 21 4304755186 22 4304755280  
19 4304754323 21 4304754450 4304754451 4304754781 4304754776 4304754461 4304754184 4304755286  
4304754322 21 4304754020 4304754016 4304754025 4304754456 4304754457 4304754458 4304752037 4304755214 4304755275  
30 4304750870 4304754020 4304754016 4304754025 4304754452 4304754452 4304754460 4304755275  
PLEASANT VALLEY FIELD WINDY RIDGE WEST FIELD 4304754023 4304754023 4304753892 4304755215 4304755279  
4304751408 4304754363 28 4304754030 25 30 29 28 4304754459 4304754705 4304754886  
4304751106 4304754362 4304740261 4304754454 WINDY RIDGE EAST FIELD 4304754453 430475431P 27 4304754885  
4304751085 27 4304734746 4304753537 4304754021 430475431P 27 4304754884  
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4304755022 4304740344 35 4304740507 4304734437 4304739411 32 33 4304731413 NATURAL BUTTES FIELD  
4304754872 4304754908 4304739409 4304740506 4304739411 32 33 4304731413 NATURAL BUTTES FIELD  
4304740383 4304740505 31 31 34 4304731404 35  
4304736711 25 4304740333 36 4304740580 34 34 4304731404 35

06 05 04 03 02  
4304732700 4304732847 01 4304740229 05 4304731594  
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4304739771 4304751090 06 4304740228 04 5S 2E  
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4304737622 4304752522 16 16 14 4304736916 24

06 05 04 03 02  
4304736035 4304735826 4304736330 4304736546 4304737622 4304752522 4304752522 4304736916 24

Units of Measurement: **Standard**

Water Analysis Report

Production Company: **FINLEY RESOURCES-EBUS**  
 Well Name: **UTE 13-1 SWD,UINTAH**  
 Sample Point: **WELLHEAD**  
 Sample Date: **3/2/2015**  
 Sample ID: **WA-302204**

Sales Rep: **John Castor**  
 Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	3/6/2015	Sodium (Na):	1357.00	Chloride (Cl):	7000.00
System Temperature 1 (°F):	80	Potassium (K):	1186.00	Sulfate (SO4):	123.00
System Pressure 1 (psig):	15	Magnesium (Mg):	5.90	Bicarbonate (HCO3):	732.00
System Temperature 2 (°F):	160	Calcium (Ca):	20.40	Carbonate (CO3):	
System Pressure 2 (psig):		Strontium (Sr):	1.30	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.0034	Barium (Ba):	0.24	Propionic Acid (C2H5COO)	
pH:	6.50	Iron (Fe):	17.00	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	10446.27	Zinc (Zn):	0.04	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	0.00	Fluoride (F):	
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.27	Silica (SiO2):	3.12
H2S in Water (mg/L):	0.00				

Notes:

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
160.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	11.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	11.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	11.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	11.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.00	14.00	0.00	0.00	0.03	0.01	0.00	0.00	0.86	10.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	14.00	0.00	0.00	0.10	0.03	0.00	0.00	0.77	10.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80.00	14.00	0.00	0.00	0.18	0.05	0.00	0.00	0.68	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

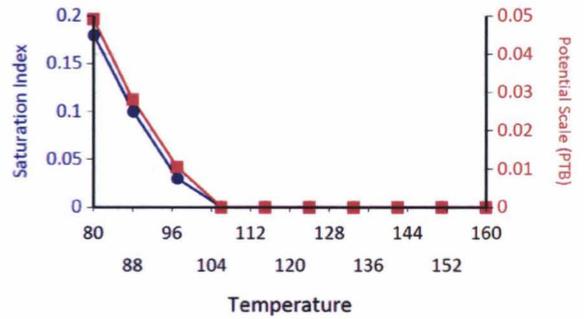
Temp (°F)	PSI	Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
160.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	1.91
151.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	1.09
142.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water Analysis Report

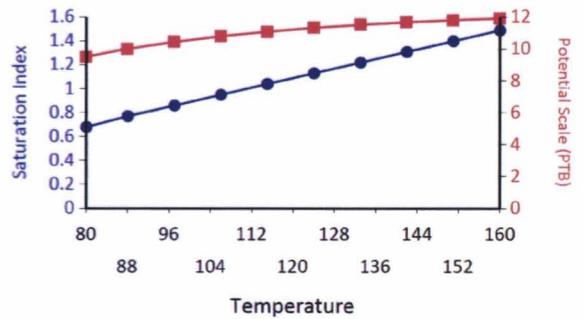
These scales have positive scaling potential under initial temperature and pressure: Iron Carbonate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Barium Sulfate Iron Carbonate

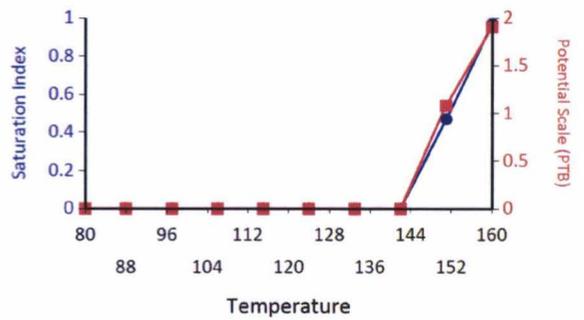
Barium Sulfate



Iron Carbonate



Fe Silicate





Mark Reinbold <markreinbold@utah.gov>

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## UIC well application - Ute 13-1 SWD - Finley Resources, Inc

1 message

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**Shea Atkins** <SATkins@finleyresources.com>  
To: "markreinbold@utah.gov" <markreinbold@utah.gov>

Mon, Mar 2, 2015 at 1:39 PM

Hi Mark,

I'm emailing with regards to your recent question through Don Hamilton regarding the stratigraphy in our 13-1 SWD well. Attached is Figure 4 from Vanden Berg et al., 2013, Geological Characterization of the Bird's Nest Aquifer, Uinta Basin, Utah, Special Study 147 Utah Geological Survey. This was used to identify the **Bird's Nest interval as within the Parachute Creek Member**. Also, yes the Uinta Formation is present in this area with the Duchesne River Formation at the surface.

Please feel free to give me a call to answer any remaining questions you have as timely as possible.

Thanks,

**Shea Atkins**

Geologist

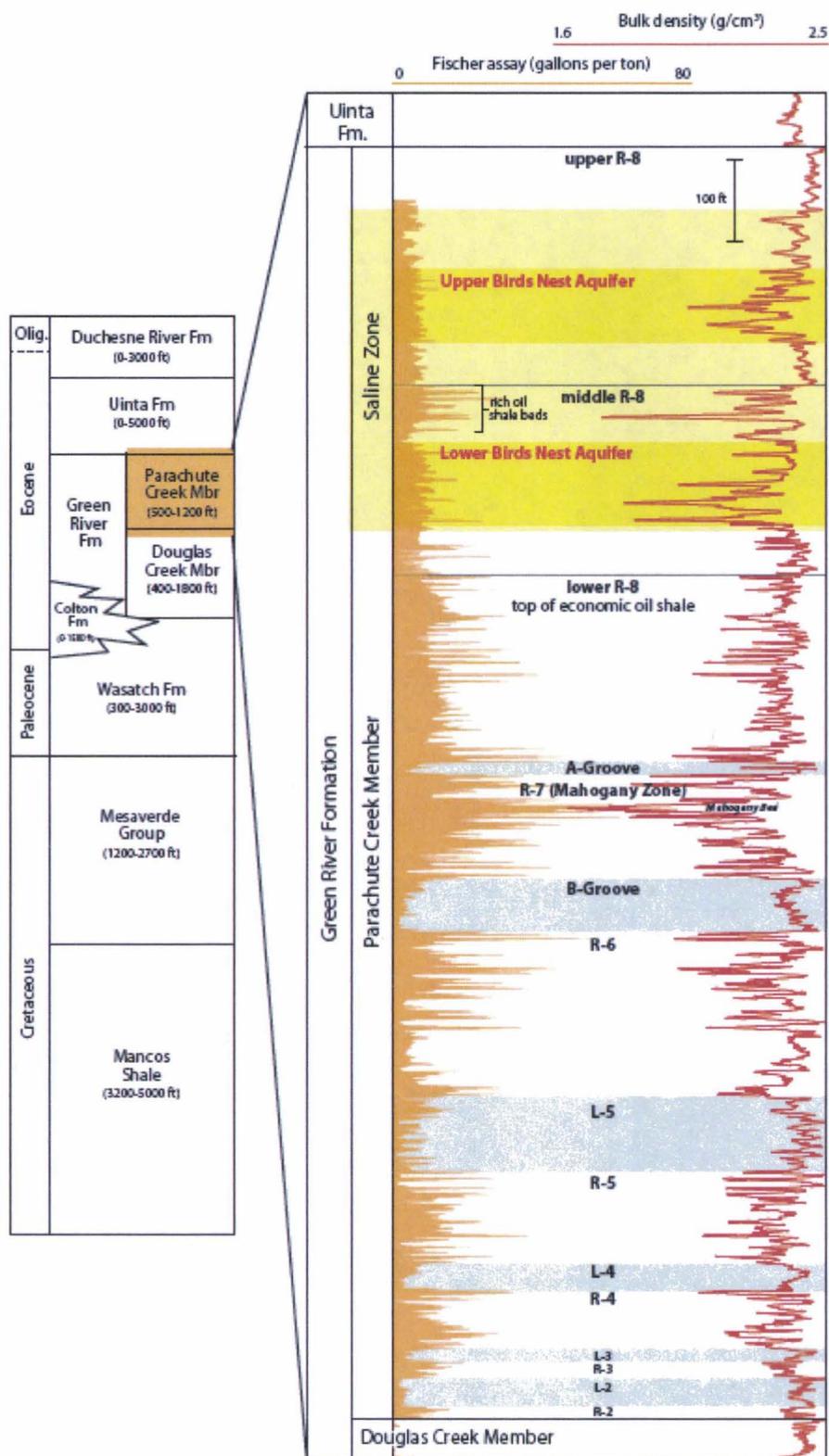
Finley Resources Inc.

Office: 817-231-8773

Cell: 615-497-1940



**Stratigraphy.PNG**  
57K





Units of Measurement: **Standard**

Water Analysis Report

Production Company: **FINLEY RESOURCES-EBUS**  
 Well Name: **UTE 13-1 SWD,UINTAH**  
 Sample Point: **WELLHEAD**  
 Sample Date: **2/9/2015**  
 Sample ID: **WA-300281**

Sales Rep: **James Patry**  
 Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	2/11/2015	Sodium (Na):	1248.35	Chloride (Cl):	12000.00
System Temperature 1 (°F):	190	Potassium (K):	3304.16	Sulfate (SO4):	345.00
System Pressure 1 (psig):	1300	Magnesium (Mg):	24.60	Bicarbonate (HCO3):	1586.00
System Temperature 2 (°F):	60	Calcium (Ca):	71.53	Carbonate (CO3):	
System Pressure 2 (psig):	15	Strontium (Sr):	3.82	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.0081	Barium (Ba):	0.84	Propionic Acid (C2H5COO)	
pH:	7.80	Iron (Fe):	31.33	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	18626.66	Zinc (Zn):	0.18	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	0.00	Fluoride (F):	
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	1.02	Silica (SiO2):	9.83
H2S in Water (mg/L):	0.00				

Notes:  
 B=2.22 Al=.03 Li=.93

(PTB = Pounds per Thousand Barrels)

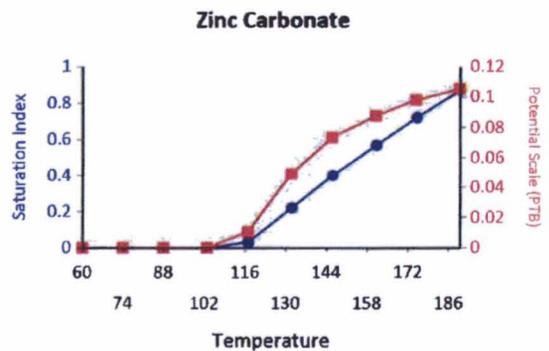
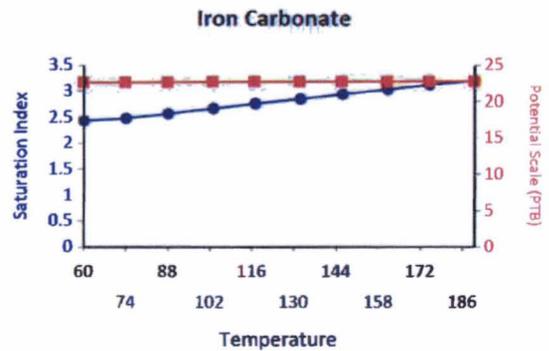
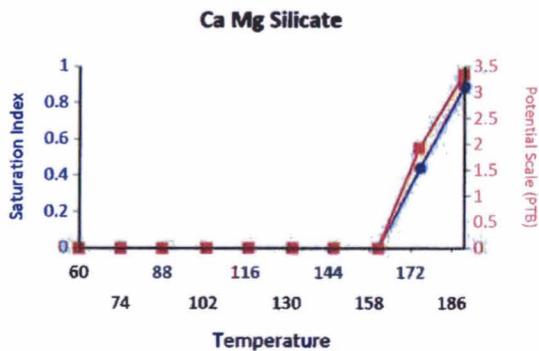
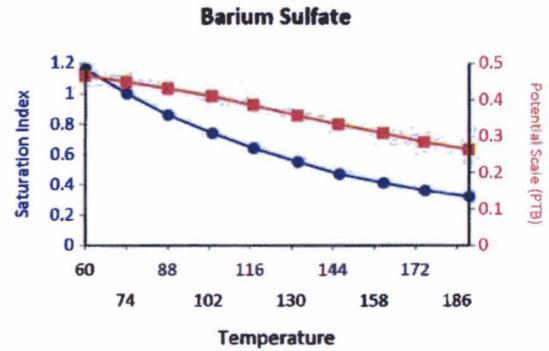
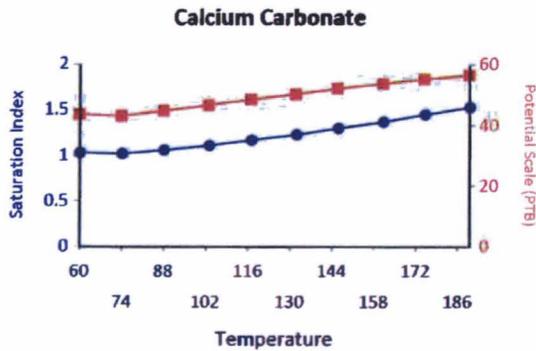
Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	1.03	43.66	1.16	0.47	0.00	0.00	2.43	22.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74.00	157.00	1.02	43.13	1.00	0.45	0.00	0.00	2.48	22.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	300.00	1.06	44.79	0.86	0.43	0.00	0.00	2.57	22.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	443.00	1.11	46.57	0.74	0.41	0.00	0.00	2.67	22.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	585.00	1.17	48.41	0.64	0.39	0.00	0.00	2.76	22.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.00	728.00	1.23	50.23	0.55	0.36	0.00	0.00	2.85	22.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146.00	871.00	1.30	52.00	0.47	0.33	0.00	0.00	2.94	22.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161.00	1014.00	1.37	53.65	0.41	0.31	0.00	0.00	3.03	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.00	1157.00	1.45	55.15	0.36	0.28	0.00	0.00	3.12	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	1300.00	1.53	56.50	0.32	0.26	0.00	0.00	3.20	22.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Temp (°F)	PSI	Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.85	10.54
74.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.97	10.55
88.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.39	10.59
103.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	10.62
117.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	7.34	10.64
132.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.05	0.00	0.00	0.00	0.00	0.00	0.00	7.85	10.65
146.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.07	0.00	0.00	0.61	3.12	0.00	0.00	8.38	10.66
161.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.09	0.00	0.00	1.38	6.37	0.00	0.00	8.93	10.66
175.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.10	0.00	0.00	2.14	8.85	0.44	1.93	9.48	10.66
190.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.11	0.00	0.00	2.89	10.43	0.89	3.35	10.03	10.66

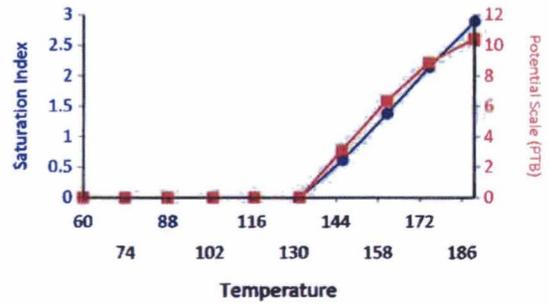
Water Analysis Report

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Fe Silicate

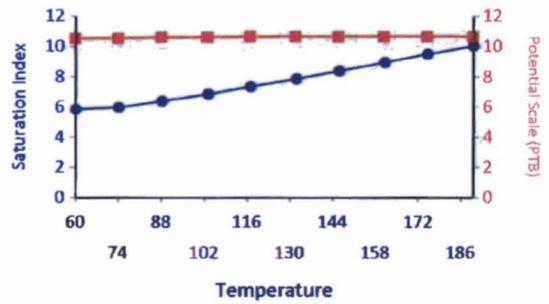
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate



**Mg Silicate**



**Fe Silicate**



BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-431

IN THE MATTER OF THE APPLICATION OF FINLEY RESOURCES, INC. FOR ADMINISTRATIVE APPROVAL OF A WELL LOCATED IN SECTION 13, TOWNSHIP 4 SOUTH, RANGE 1 EAST, USB&M, Uintah County, Utah, AS A CLASS II INJECTION WELL.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Finley Resources, Inc., 1308 Lake Street, Fort Worth, Texas 76113, telephone 817-336-1924, for administrative approval of the following well located in Uintah County, Utah, for conversion to a Class II injection well:

Windy Ridge Field:

Ute 13-1 SWD well located in SW/4 SW/4, Section 13, Township 4 South, Range 1 East  
API 43-047-54256

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Finley Resources, Inc.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 19th day of February, 2015

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING



Brad Hill  
Permitting Manager

**Finley Resources, Inc.**

**UTE 13-1 SWD**

**Cause No. UIC-431**

Publication Notices were sent to the following:

Clay O'Neil  
Finley Resources, Inc.  
1308 Lake Street  
Fort Worth, TX 76113

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066  
via e-mail [ubslegals@ubmedia.biz](mailto:ubslegals@ubmedia.biz)

Salt Lake Tribune  
P O Box 45838  
Salt Lake City, UT 84145  
via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

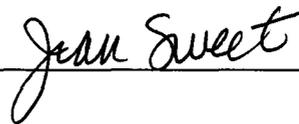
Vernal Office  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

Ute Indian Tribe  
P.O. Box 190  
Fort Duchesne, UT 84026

Uintah County Planning  
152 E 100 N  
Vernal, UT 84078

Bruce Suchomel  
US EPA Region 8  
MS 8P-W-GW  
1595 Wynkoop Street  
Denver, CO 80202-1129

Don Hamilton  
Star Point Enterprises, Inc.  
2580 Creekview Road  
Moab, UT 84532

  
\_\_\_\_\_



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

February 23, 2015

Via e-mail: [ubslegals@ubmedia.biz](mailto:ubslegals@ubmedia.biz)

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066

Subject: Notice of Agency Action – Finley Resources, Inc. Cause No. UIC-431

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure





GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

February 23, 2015

VIA E-MAIL [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Salt Lake Tribune  
P. O. Box 45838  
Salt Lake City, UT 84145

Subject: Notice of Agency Action – Finley Resources, Inc. Cause No. UIC-431

To Whom It May Concern:

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Please send proof of publication and billing for **account #9001402352** to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure





**Order Confirmation for Ad #0001013839-01**

<b>Client</b>	DIV OF OIL-GAS & MINING	<b>Payor Customer</b>	DIV OF OIL-GAS & MINING
<b>Client Phone</b>	801-538-5340	<b>Payor Phone</b>	801-538-5340
<b>Account#</b>	9001402352	<b>Payor Account</b>	9001402352
<b>Address</b>	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154 USA	<b>Payor Address</b>	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154
<b>Fax</b>	801-359-3940	<b>Ordered By</b>	<b>Acct. Exec</b>
<b>Email</b>	juliecarter@utah.gov	<b>Jean</b>	<b>mfulzt</b>

<b>Total Amount</b>	<b>\$220.04</b>			
<b>Payment Amt</b>	<b>\$0.00</b>			
<b>Amount Due</b>	<b>\$220.04</b>	<b>Tear Sheets</b>	<b>Proofs</b>	<b>Affidavits</b>
		0	0	1
<b>Payment Method</b>		<b>PO Number</b>	UIC-431	

**Confirmation Notes:**  
Text: Jean

<b>Ad Type</b>	<b>Ad Size</b>	<b>Color</b>
Legal Liner	2.0 X 64 Li	<NONE>

<b>Product</b>	<b>Placement</b>	<b>Position</b>
Salt Lake Tribune::	Legal Liner Notice - 0998	998-Other Legal Notices
<b>Scheduled Date(s):</b>	2/25/2015	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
Deseret News::	Legal Liner Notice - 0998	998-Other Legal Notices
<b>Scheduled Date(s):</b>	2/25/2015	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
utahlegals.com::	utahlegals.com	utahlegals.com
<b>Scheduled Date(s):</b>	2/25/2015	

**Ad Content Proof Actual Size**

**BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-431**

IN THE MATTER OF THE APPLICATION OF FINLEY RESOURCES, INC. FOR ADMINISTRATIVE APPROVAL OF A WELL LOCATED IN SECTION 13, TOWNSHIP 4 SOUTH, RANGE 1 EAST, USB&M, UTAH COUNTY, UTAH, AS A CLASS II INJECTION WELL.  
THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Finley Resources, Inc., 1308 Lake Street, Fort Worth, Texas 76113, telephone 817-336-1924, for administrative approval of the following well located in Uintah County, Utah, for conversion to a Class II injection well:

**Windy Ridge Field:**  
Ute 13-1 SWD well located in SW/4 SW/4, Section 13, Township 4 South, Range 1 East  
API 43-047-54256

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Finley Resources, Inc.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 19th day of February, 2015

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING  
/s/  
Brad Hill  
Permitting Manager  
1013839

UPA:LP



Jean Sweet <[jsweet@utah.gov](mailto:jsweet@utah.gov)>

---

**Re: Notice of Agency Action – Finley Resources, Inc. Cause No. UIC-431**

1 message

---

**Cindy Kleinfelter** <[ckleinfelter@ubmedia.biz](mailto:ckleinfelter@ubmedia.biz)>

Wed, Feb 25, 2015 at 2:24 PM

To: Jean Sweet <[jsweet@utah.gov](mailto:jsweet@utah.gov)>

This will publish March 3.  
Thank you,  
Cindy

On 2/23/2015 9:52 AM, Jean Sweet wrote:

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining

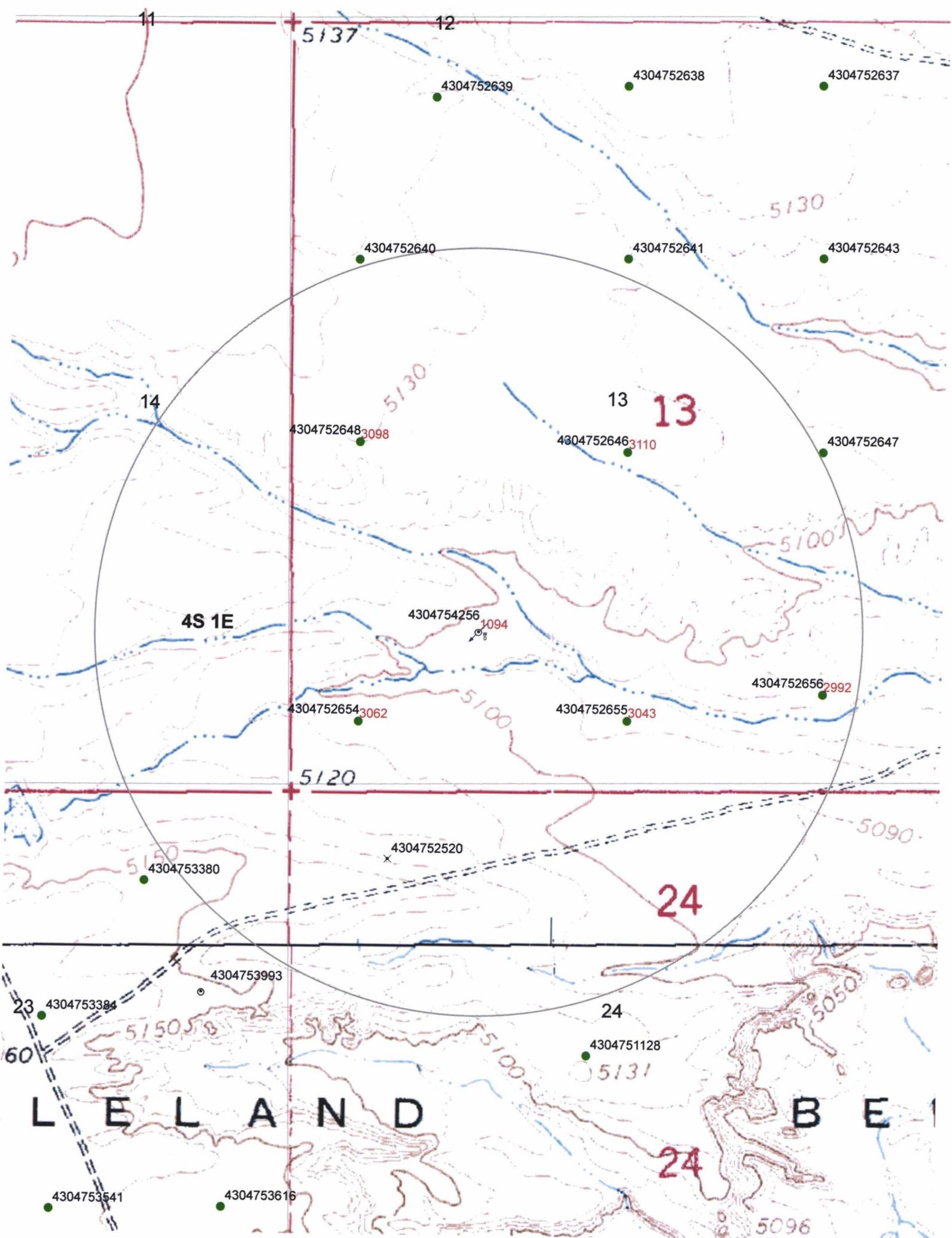
PO Box 145801

Salt Lake City, UT 84114-5801

Sincerely,

–

Jean Sweet  
Executive Secretary  
Utah Division of Oil, Gas and Mining  
801-538-5329



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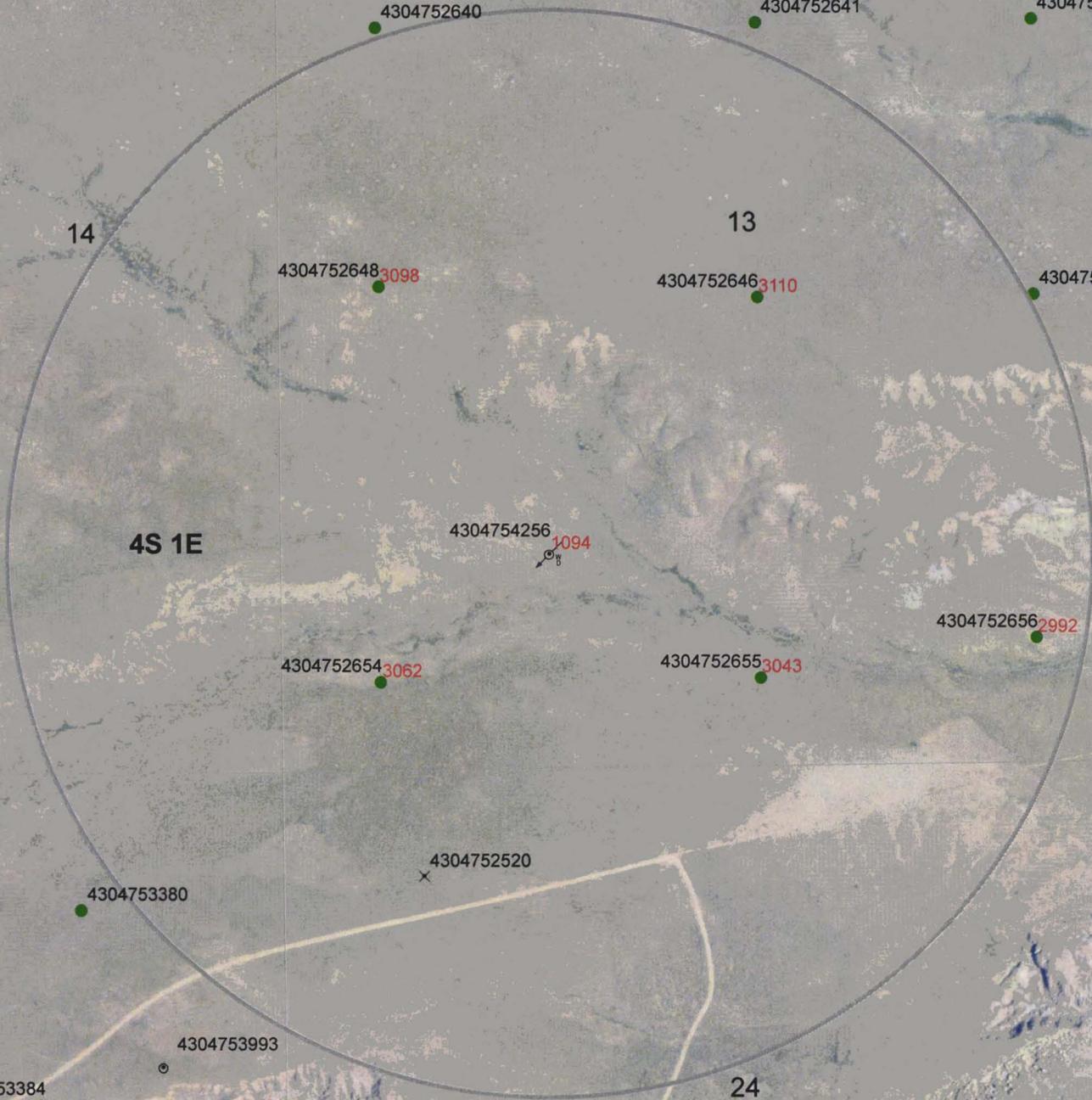
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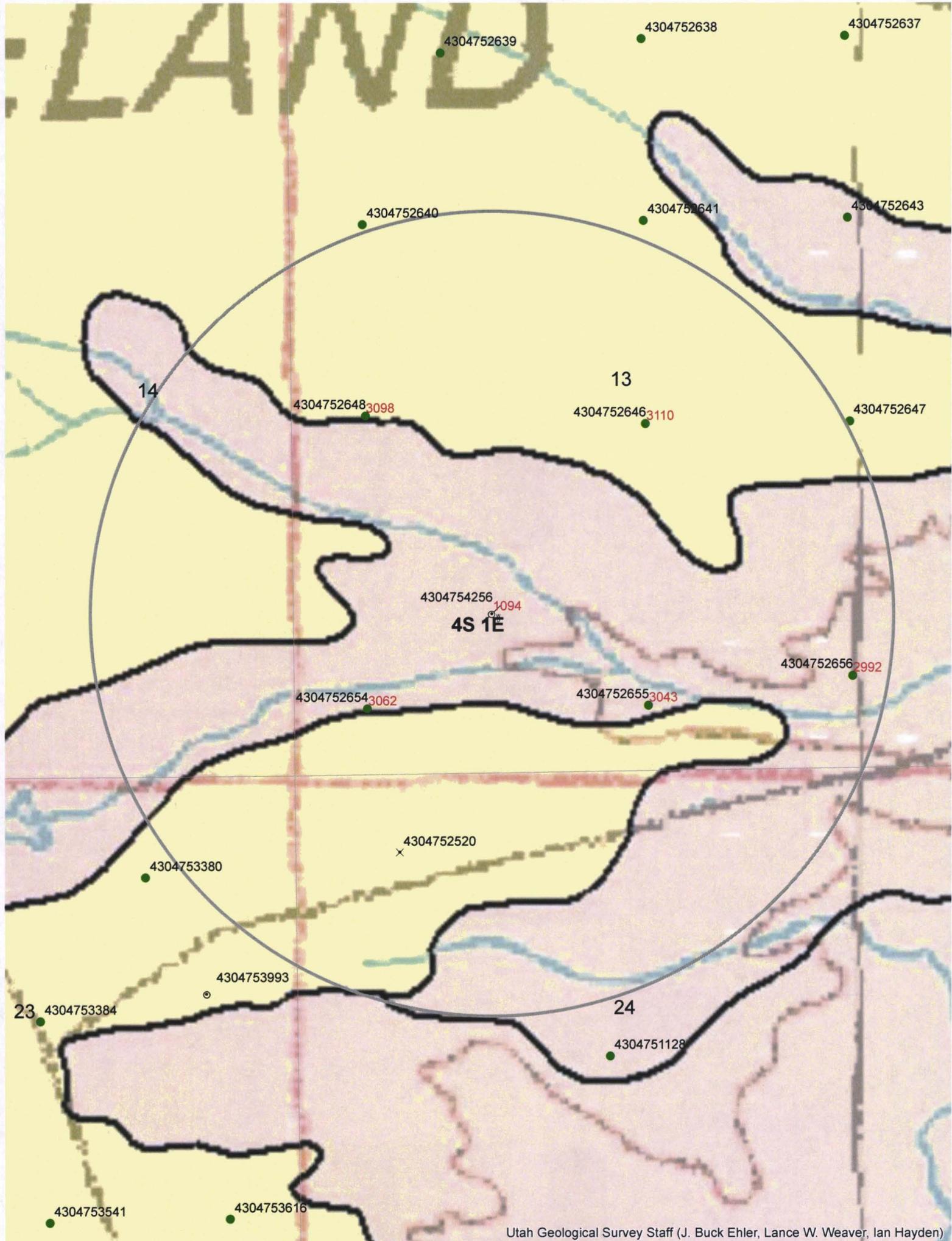
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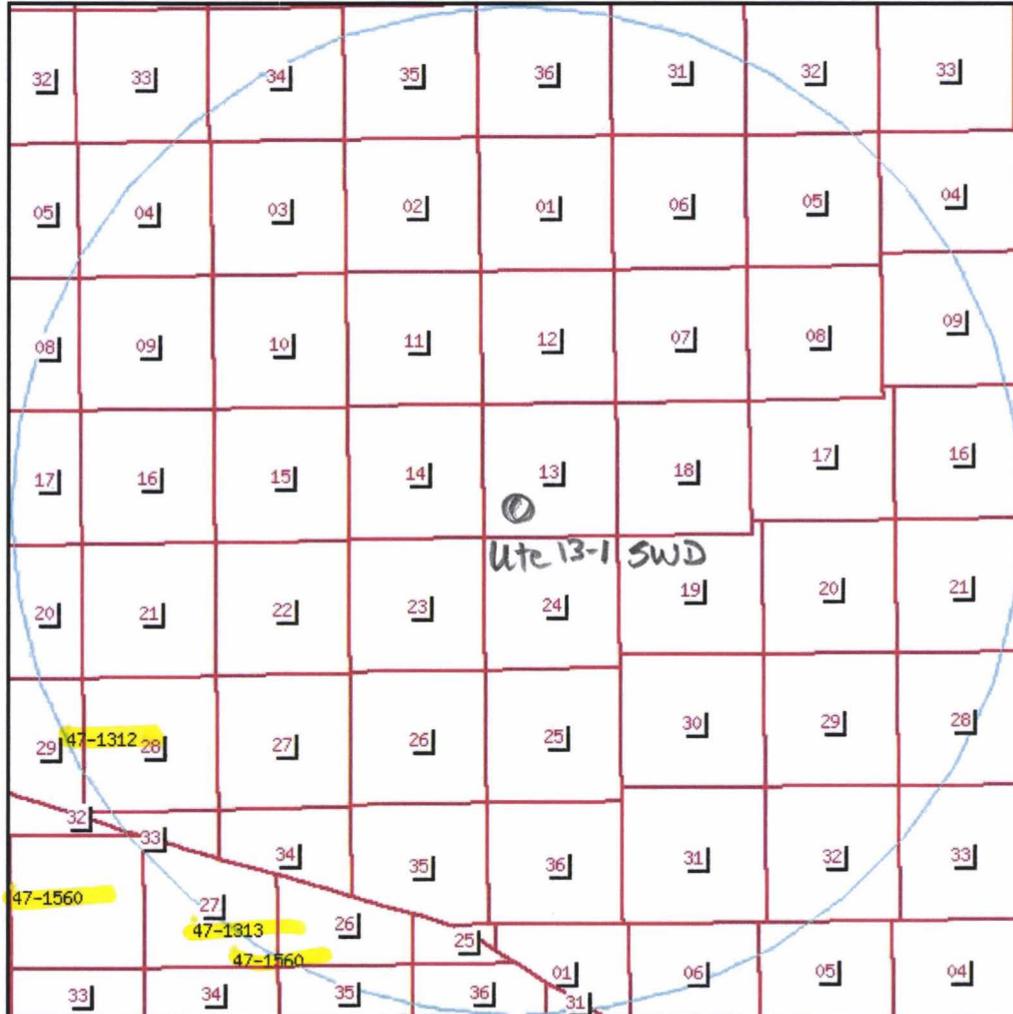


# Utah Division of Water Rights

## Output Listing

Version: 2014.01.09.00    Rundate: 02/19/2015 09:48 AM

Radius search of 20000 feet from a point N1075 E1289 from the SW corner, section 13, Township 4S, Range 1E, US  
 b&m Criteria:wrtypes=W,C,E podtypes=S,U,D,Sp,P,R,T status=U,A,P usetypes=all



## Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Owner Name
<a href="#">47-1312</a>	Point to Point N660 W660 E4 29 4S 1E US		P	1885		0.000	0.000	USA BUREAU OF LAND MANAGEMENT  2370 SOUTH 2300 WEST

<u>47-1313</u>	Point to Point	P	1885	S	0.000	0.000	USA BUREAU OF LAND MANAGEMENT
	S660 E1980 W4 27 8S 18E SL						2370 SOUTH 2300 WEST
<u>47-1560</u>	Surface	U	19770915	IO	10.000	4000.000	USA BUREAU OF LAND MANAGEMENT
	S2000 E200 NW 28 8S 18E SL						2370 SOUTH 2300 WEST
<u>47-1560</u>	Surface	U	19770915	IO	10.000	4000.000	USA BUREAU OF LAND MANAGEMENT
	N700 W1800 SE 27 8S 18E SL						2370 SOUTH 2300 WEST

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240  
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)


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[Agency List](#)
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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/24/2015

The Paper Fileroom File for this Water Right has been DESTROYED!!!

WATER RIGHT: **43-10596** APPLICATION/CLAIM NO.: **T69921** CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: Snyder Oil Corporation  
 ADDR: c/o W. R. Guice  
 1625 Broadway Suite 2200  
 Denver CO 80202

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? No COUNTY TAX ID#:  
 FILED: 05/13/1996|PRIORITY: 05/13/1996|PUB BEGAN: |PUB ENDED: |NEWSPAPER:  
 ProtestEnd: |PROTESTED: [No ]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:08/16/1996|PROOF DUE:  
 EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: 08/16/1997|LAPS LETTER:  
 RUSH LETTR:05/16/1996|RENOVATE: |RECON REQ: |TYPE: [ ]  
 PD BOOK: [ 43- ]|MAP: [ ]|PUB DATE:  
 \*TYPE -- DOCUMENT -- STATUS--

Type of Right: **Temporary Application** Source of Info: Application to Appropriate Status: **Expired**

LOCATION OF WATER RIGHT\*\*(Points of Diversion: Click on Location to access PLAT Program.)\*\*\*\*\*[MAP VIEWER](#)\*\*[GOOGLE VIEW](#)\*

FLOW: 0.03 cfs  
 SOURCE: Underground Water Well (existing)  
 COUNTY: Uintah COMMON DESCRIPTION: 2 miles northwest of Ouray

POINT OF DIVERSION -- UNDERGROUND: (Click Well ID# link for more well data.)  
 (1) S 1881 ft W 824 ft from NE cor, Sec 26, T 4S, R 1E, USBM  
 DIAMETER OF WELL: 10 ins. DEPTH: 0 to 2000 ft. YEAR DRILLED: WELL LOG? No WELL ID#: 11948

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO.: **213495.**

OIL EXPLORATION: Injection well for water flooding. PERIOD OF USE: 01/01 TO 12/31  
 Acre Feet Contributed by this Right for this Use: 21.7194

###PLACE OF USE: \*-----NORTH WEST QUARTER-----\*-----NORTH EAST QUARTER-----\*-----SOUTH WEST QUARTER-----\*-----SOUTH EAST  
 \* NW | NE | SW | SE \* NW | NE | SW | SE \* NW | NE | SW | SE \* NW | NE |  
 Sec 26 T 4S R 1E USBM \* | | | | \* | | | | X \* | | | | \* | | | |

DIVERSION & DEPLETION ESTIMATES\*\*\*\*\*

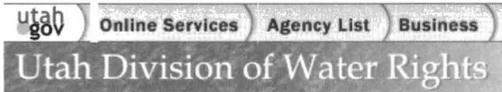
(All values in acre-feet, Growing Season in days)  
 IRRIGATION STOCK DOMESTIC MUNICIPAL MINING POWER OTHER MANUALLY ACRE-FEET DIVERSION DEPLETION GROWING WATER-USE  
 DIV: EVALUATED EXPORTED DUTY DUTY SEASON REPORTING  
 DEP: Yes

OTHER COMMENTS\*\*\*\*\*

The land where the well will be drilled is being leased by the applicant from the Ute Tribe.

Use of the well is to be injected into Green River formation through wellbore of Ute Tribal 26-1 for waterflooding.

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*



Search



Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/24/2015

WATER RIGHT: 47-1312 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: USA Bureau of Land Management
ADDR: 2370 South 2300 West
Salt Lake City UT 84119
INTEREST: 100%

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: / /1885|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No ]|HEARNG HLD: |SE ACTION: [ |ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]
PD BOOK: [47- ]|MAP: [258c ]|PUB DATE:
\*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT\*\*(Points of Diversion: Click on Location to access PLAT Program.)\*\*\*\*\*MAP VIEWER\*\*GOOGLE VIEW\*

FLOW:
SOURCE: Pleasant Valley Creek
COUNTY: Duchesne COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:
( 1)Stockwatering directly on stream from a point at S 660 ft. E 660 ft. from W4 corner, Sec 20, T4S, R1E, USBM,
to a point at N 660 ft. W 660 ft. from E4 corner, Sec 29, T4S, R1E, USBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO.: 225462.

OTHER COMMENTS\*\*\*\*\*

USES: Provides water, when present, for sheep trail herds.
\*\*\*\*\*END OF DATA\*\*\*\*\*


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Utah Division of Water Rights

 Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/24/2015

WATER RIGHT: **47-1313** APPLICATION/CLAIM NO.: CERT. NO.:

=====

OWNERSHIP\*\*\*\*\*

=====

NAME: USA Bureau of Land Management  
 ADDR: 2370 South 2300 West  
 Salt Lake City UT 84119  
 INTEREST: 100%

=====

DATES, ETC.\*\*\*\*\*

=====

LAND OWNED BY APPLICANT?	COUNTY TAX ID#:			
FILED:	PRIORITY: / /1885	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No ]	HEARNG HLD:	SE ACTION: [ ]	ActionDate:
EXTENSION:	ELEC/PROOF: [ ]	ELEC/PROOF:	CERT/WUC:	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [ ]	LAPS LETTER:
PD BOOK: [47-	MAP: [282b	PUB DATE:		

\*TYPE -- DOCUMENT -- STATUS-----\*

**Type of Right: Diligence Claim** Source of Info: Proposed Determination **Status:**

=====

LOCATION OF WATER RIGHT\*\*\* (Points of Diversion: Click on Location to access PLAT Program.)\*\*\*\*\*[MAP VIEWER](#)\*\*\*[GOOGLE VIEW](#)\*

=====

FLOW:  
 SOURCE: Pleasant Valley Creek  
 COUNTY: Uintah COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:  
 ( 1) Stockwatering directly on stream from a point at ,  
 to a point at S 660 ft. E 1980 ft. from W4 corner, Sec 27, T8S, R18E, SLBM.  
 COMMENT: Administratively updated by State Engineer.

=====

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

=====

SUPPLEMENTAL GROUP NO.: 225457. Water Rights Appurtenant to the following use(s):  
47-1299(DIL), 1300(DIL), 1313(DIL), 1318(DIL)

.....

STOCKWATER: Beneficial Use Amt: UNEVALUATED ELUs Group Total: 801.0000 PERIOD OF USE: 11/16 TO 04/15  
 Myton Unit - Eight Mile Flat Allotment

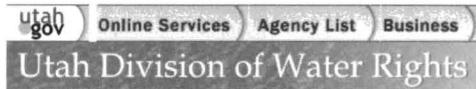
=====

PLACE OF USE for STOCKWATERING\*\*\*\*\*

=====

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE			
Sec 27 T 8S R 18E SLBM	* : : : *	* : : : *	* : X: : *	* : : : *
Sec 27 T 8S R 18E SLBM	*LOT 4			

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*



Search



Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/24/2015

WATER RIGHT: 47-1560 APPLICATION/CLAIM NO.: A50236 CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: USA Bureau of Land Management
ADDR: 2370 South 2300 West
Salt Lake City UT 84119

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: 09/15/1977|PRIORITY: 09/15/1977|PUB BEGAN: 11/24/1977|PUB ENDED: 12/08/1977|NEWSPAPER: Vernal Express
ProtestEnd:01/07/1978|PROTESTED: [No ]|HEARING HLD: [SE ACTION: [ ]|ActionDate: [PROOF DUE:
EXTENSION: [ELEC/PROOF: [ ]|ELEC/PROOF: [CERT/WUC: [LAP, ETC: [LAPS LETTER:
RUSH LETTR: [RENOVATE: [ ]|RECON REQ: [TYPE: [ ]
PD BOOK: [ 47- ]|MAP: [ ]|PUB DATE:
\*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Application to Appropriate Status: Unapproved

LOCATION OF WATER RIGHT\*\*\* (Points of Diversion: Click on Location to access PLAT Program.)\*\*\*\*\*MAP VIEWER\*\*\*GOOGLE VIEW\*

FLOW: 10.0 cfs OR 4000.0 acre-feet
SOURCE: Pariette Draw
COUNTY: Uintah COMMON DESCRIPTION:

- POINTS OF DIVERSION -- SURFACE:
(1) N 2600 ft E 1700 ft from SW cor, Sec 25, T 8S, R 17E, SLBM
Diverting Works: Source:
(2) N 1500 ft 0 ft from SE cor, Sec 26, T 8S, R 17E, SLBM
Diverting Works: Source:
(3) N 700 ft W 1800 ft from SE cor, Sec 27, T 8S, R 18E, SLBM
Diverting Works: Source:
(4) S 2000 ft E 200 ft from NW cor, Sec 28, T 8S, R 18E, SLBM
Diverting Works: Source:
(5) N 2500 ft E 1300 ft from SW cor, Sec 29, T 8S, R 18E, SLBM
Diverting Works: Source:
(6) S 1800 ft E 600 ft from NW cor, Sec 29, T 8S, R 18E, SLBM
Diverting Works: Source:
(7) N 2000 ft W 2300 ft from SE cor, Sec 35, T 8S, R 18E, SLBM
Diverting Works: Source:
(8) N 100 ft W 1700 ft from SE cor, Sec 06, T 9S, R 19E, SLBM
Diverting Works: Source:
(9) N 1800 ft W 900 ft from SE cor, Sec 08, T 9S, R 19E, SLBM
Diverting Works: Source:

Stream Alt Required?: No

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO.: 225515.

IRRIGATION: 340.0 acres PERIOD OF USE: 04/01 TO 10/31
WILDLIFE: To develop wildlife habitat for a variety of species deer, antelope, waterfowl PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

Table with columns for PLACE OF USE, NORTH WEST QUARTER, NORTH EAST QUARTER, SOUTH WEST QUARTER, SOUTH EAST QUARTER. Rows list sections like Sec 25 T 8S R 17E SLBM.

PLACE OF USE for STOCKWATERING\*\*\*\*\*

Table with columns for NORTH-WEST, NORTH-EAST, SOUTH-WEST, SOUTH-EAST. Rows list sections like Sec 25 T 8S R 17E SLBM.

\*\*\*\*\* E N D O F D A T A \*\*\*\*\*

\*\*\*\*\*

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240  
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/24/2015

WATER RIGHT: 47-1560 APPLICATION/CLAIM NO.: A50236 CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: USA Bureau of Land Management
ADDR: 2370 South 2300 West
Salt Lake City UT 84119

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: 09/15/1977|PRIORITY: 09/15/1977|PUB BEGAN: 11/24/1977|PUB ENDED: 12/08/1977|NEWSPAPER: Vernal Express
ProtestEnd:01/07/1978|PROTESTED: [No ]|HEARNG HLD: |SE ACTION: [ ]|ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]
PD BOOK: [ 47- ]|MAP: [ ]|PUB DATE:

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FLOW: 10.0 cfs OR 4000.0 acre-feet
SOURCE: Pariette Draw
COUNTY: Uintah COMMON DESCRIPTION:

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(1) N 2600 ft E 1700 ft from SW cor, Sec 25, T 8S, R 17E, SLBM
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Diverting Works: Source:
(3) N 700 ft W 1800 ft from SE cor, Sec 27, T 8S, R 18E, SLBM
Diverting Works: Source:
(4) S 2000 ft E 200 ft from NW cor, Sec 28, T 8S, R 18E, SLBM
Diverting Works: Source:
(5) N 2500 ft E 1300 ft from SW cor, Sec 29, T 8S, R 18E, SLBM
Diverting Works: Source:
(6) S 1800 ft E 600 ft from NW cor, Sec 29, T 8S, R 18E, SLBM
Diverting Works: Source:
(7) N 2000 ft W 2300 ft from SE cor, Sec 35, T 8S, R 18E, SLBM
Diverting Works: Source:
(8) N 100 ft W 1700 ft from SE cor, Sec 06, T 9S, R 19E, SLBM
Diverting Works: Source:
(9) N 1800 ft W 900 ft from SE cor, Sec 08, T 9S, R 19E, SLBM
Diverting Works: Source:

Stream Alt Required?: No

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO.: 225515.

IRRIGATION: 340.0 acres PERIOD OF USE: 04/01 TO 10/31

WILDLIFE: To develop wildlife habitat for a variety of species deer, antelope, waterfowl PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

Table with columns for PLACE OF USE, NORTH WEST QUARTER, NORTH EAST QUARTER, SOUTH WEST QUARTER, SOUTH EAST QUARTER and rows for various sections (Sec 25 T 8S R 17E SLBM, etc.)

PLACE OF USE for STOCKWATERING\*\*\*\*\*

Table with columns for NORTH-WEST, NORTH-EAST, SOUTH-WEST, SOUTH-EAST and rows for various sections (Sec 25 T 8S R 17E SLBM, etc.)

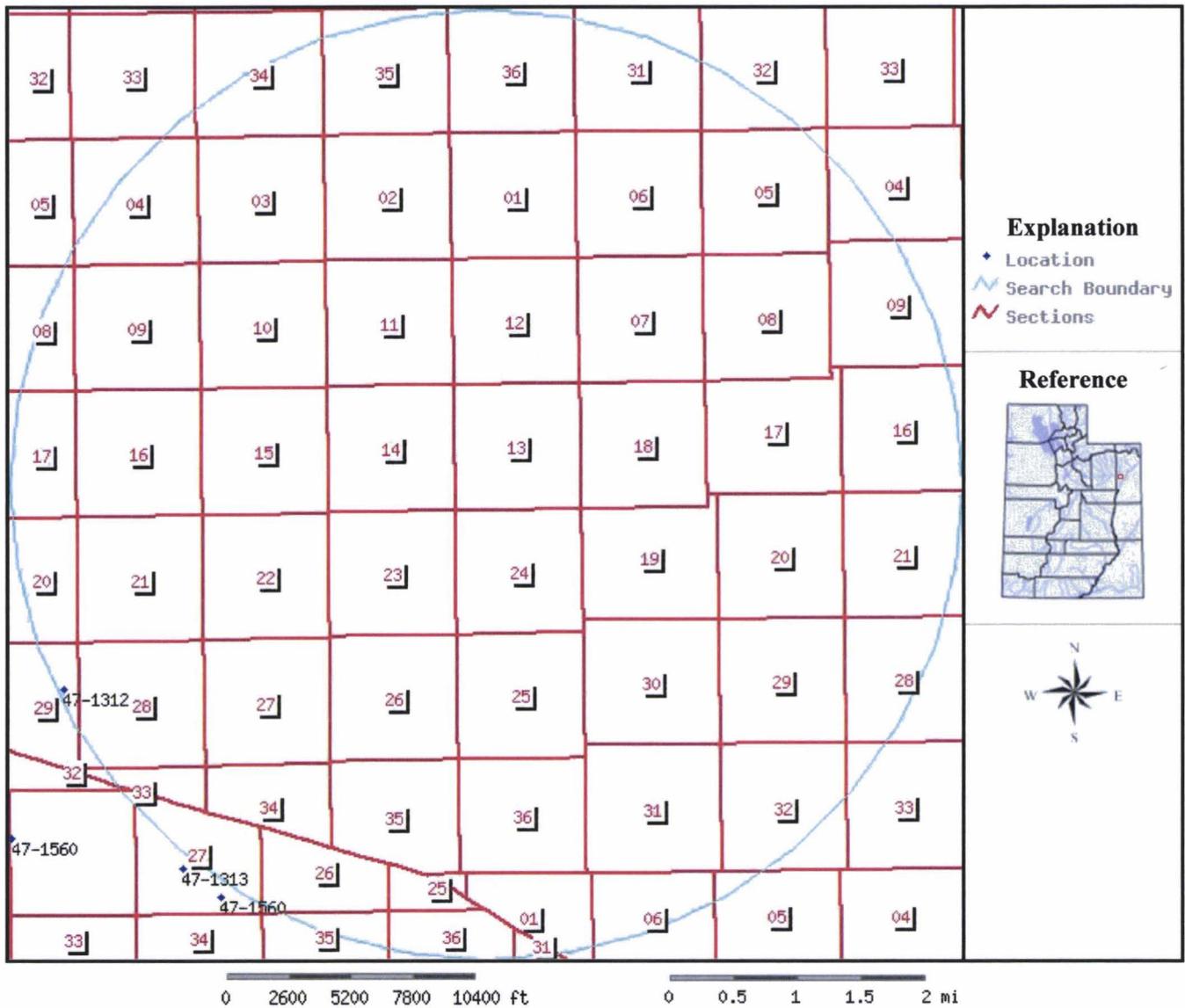
\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

\*\*\*\*\*

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Central Search

# Utah Division of Water Rights



See 14  
70 ft. well

43-047-54256

1075 fsl  
1289 FW2

13-45-1E  
LWS



2580 Creekview Road  
Moab, Utah 84532  
435/650-3866

*Original Submittal*  
**RECEIVED**

**FEB 16 2015**

**DIV. OF OIL, GAS & MINING**

February 13, 2015

Brad Hill – Oil & Gas Permitting Manager  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Application for Class II Injection Well – Ute 13-1 SWD – Finley Resources, Inc.

Dear Mr. Hill;

On behalf of Finley Resources, Inc., Star Point Enterprises, Inc. respectfully submits the attached Application for Injection Well (UIC Form 1) with supplemental information for conversion of the existing Ute 13-1 SWD to an Underground Injection Control Class II Injection Well. The Ute 13-1 SWD was recently drilled and is presently completed and capable of water disposal with expedited review and processing of this application requested. Following approval the well would be utilized exclusively for the purpose of subsurface injection of water from Finley Resources, Inc. (Finley) operations in the area of the Leland Bench and Windy Ridge Fields with no commercial use proposed.

Thank you very much for your previous approval of our application. Please feel free to contact Clay O'Neil at [clay@finleyresources.com](mailto:clay@finleyresources.com) or 817-713-9514 myself at [starpoin@etv.net](mailto:starpoin@etv.net) or 435-650-3866 should you have any questions or need additional information.

Sincerely,

*Don Hamilton*  
Don Hamilton, Permitting Agent

cc: Clay O'Neil, Finley Resources, Inc.  
April Wilkerson, Finley Resources, Inc.

Original Submittal RECEIVED

FEB 16 2015

UIC FORM 1

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
DIV. OF OIL, GAS & MINING

APPLICATION FOR INJECTION WELL

Name of Operator Finley Resources, Inc.	Utah Account Number N 3460	Well Name and Number Ute 13-1 SWD
Address of Operator P.O. Box 2200 CITY Ft. Worth STATE TX ZIP 76113	Phone Number (817) 231-8735	API Number 4304754256
Location of Well Footage : 1075 FSL 1289 FWL County : Uintah QQ, Section, Township, Range: SWSW 13 4S 1E State : UTAH		Field or Unit Name Windy Ridge Lease Designation and Number 1420H624896

Is this application for expansion of an existing project? Yes  No

Will the proposed well be used for:	Enhanced Recovery?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Disposal?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Storage?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Is this application for a new well to be drilled? Yes  No

If this application is for an existing well, has a casing test been performed? Yes  No   
Date of test: 2/2/2015

Proposed injection interval: from 3,228 to 3,566

Proposed maximum injection: rate 5,000 bpd pressure 300 psig

Proposed injection zone contains oil , gas , and / or fresh water  within 1/2 mile of the well.

List of attachments: (see attached report with detailed attachment list)

ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT  
UTAH OIL AND GAS CONSERVATION GENERAL RULES

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Don Hamilton  
Signature Don Hamilton

Title Permitting Agent  
Date 2/13/2015

**UNDERGROUND INJECTION CONTROL  
PERMIT APPLICATION**

**UIC CLASS II INJECTION WELL**

**RECEIVED**

**FEB 16 2015**

**DIV. OF OIL, GAS & MINING**



**UTE 13-1 SWD  
SWSW, SEC. 13, T4S, R1E, USB&M  
Uintah County, Utah  
API # 43-047-54256  
Lease # 1420H624896**

Prepared for:

**Brad Hill – Oil & Gas Permitting Manager  
Division of Oil, Gas and Mining  
1594 West North Temple  
Salt Lake City, Utah 84116**

**February 13, 2015**

Ute Tribal 13-1 SWD  
SWSW, Sec. 13, T4S, R1E, USB&M  
Uintah County, Utah

**LIST OF FIGURES**

- Figure A1 Area Map with Topography, Wells and Surface Ownership Shading
- Figure A2 Area Map with Land Ownership and Lease Operators
- Figure A3 Affidavit of Mailing
- Figure B1 Ute 13-1 SWD Well Bore Diagram
- Figure B2 Ute 13-1 SWD Cement Bond Log
- Figure B3 Adjacent well Cement Bond Logs
- Figure C1 Base of Moderately Saline Water Contour Map
- Figure C2 Nearby Drinking Water Sources Map
- Figure D1 Geologic Cross-Section of Confining Layers and Injection Zone
- Figure D2 Structure Map of the Lower Confining Layer
- Figure G1 List of Wells with Composition Source to Utilize Injection Well
- Figure G2 Representative Injection Water Analysis
- Figure G3 Representative Formation Water Analysis and Compatibility
- Figure G4 Step Rate Test
- Figure H1 Plugging & Abandonment (P&A) Procedure, P&A Wellbore Diagram

## **EXECUTIVE SUMMARY**

The proposed Ute 13-1 SWD well is located in the SW/4 SW/4 (1,075 feet FSL and 1,289 feet FWL), of Section 13, Township 4 South, Range 1 East, in Uintah County, Utah. The well will be an Underground Injection Control (UIC) Class II injection well used exclusively for the purpose of subsurface injection of water from Finley Resources, Inc. (Finley) operations in the area of the Leland Bench and Windy Ridge Fields. The permit to drill application for the Ute 13-1 SWD well was approved by the Utah Division of Oil, Gas and Mining (UDOGM) on March 5, 2014. The well was subsequently spud on December 12, 2014 and completed as an injection well on January 26, 2015.

The Ute 13-1 SWD has been drilled to a total depth of 3,830 feet below the ground surface (bgs) with a plug back total depth (pbtd) of 3,774 feet. The well has been perforated in the Green River Formation Birds Nest Aquifer with an isolation packer set above the aquifer at 3,177 feet.

The UDOGM database indicates there are five wells located within the one-half mile radius Area of Review (AOR) for the proposed Ute 13-1 SWD. A cement bond log (CBL) has been completed to verify there is an 80% or better bond across the proposed injection intervals and the upper and lower confining layers. Required logs have been run across the proposed injection zones to demonstrate well suitability, establish the true maximum allowable injection pressure, and verify zone isolation.

Regional geologic and hydrologic studies reflect the Green River Formation is designated as moderately saline groundwater. Samples have been collected and analyzed from the proposed injection interval to confirm the zones within the Green River Formation are not considered an underground source of drinking water (USDW). It is anticipated that the targeted Green River interval has sufficient storage capacity at the Ute 13-1 SWD area to accept all anticipated injected volumes.

The well will be used to inject approved Class II wastes brought to the surface including but not limited to drilling fluids, spent well completion fluids and treatment and stimulation fluids. The well will not be utilized for commercial brine or other fluid disposal operations. Injected fluids will be limited to fluids produced in connection with oil and gas production in the Leland Bench and Windy Ridge Field by Finley.

**UIC WELL APPLICATION  
 UTE 13-1 SWD  
 API 43047542560000**

The following document contains information provided in support of the application for new construction of the Ute 13-1 SWD to be utilized as a Class II injection well.

The Ute 13-1 injection well has been constructed following State of Utah approval. Finley plans to utilize the Ute 13-1 SWD well as an injection well for disposal of produced fluids from Finley wells operated in the Leland Bench and Windy Ridge Field. The well has been perforated to inject into the Birds Nest Aquifer (located at depth ranging from 3,238 to 3,566 feet bgs) with an isolation packer installed at 3,177 feet.

The Ute 13-1 SWD well falls within the Indian Country boundary but the EPA has previously been notified and determined that the UIC application, review and approval would fall under the direction of the UDOGM.

Finley's business address and phone number is provided below:

Finley Resources Inc.  
 1308 Lake Street Fort Worth, Texas 76113  
 817.336.1924

**AREA OF REVIEW**

Enclosed as **Figure A1** is a map reflecting the area surrounding the proposed Ute 13-1 well. The legal location for the Ute 13-1 SWD well is 1,075' FSL & 1,289' FWL, SWSW, Section 13, T4S, R1E, USB&M, Uintah County, Utah. This map includes a one-half mile radius Area of Review (AOR) centered on the proposed Ute 13-1 SWD well. Finley is required to investigate all wells for mechanical integrity within the AOR. There are five wells located within the AOR that are operated by Finley (Ute 13-11A-4-1, Ute 13-12A-4-1, Ute 13-13A-4-1, Ute 13-14A-4-1 and Ute 13-15A-4-1). All five wells have recently been drilled and completed. Refer to **Table A-1** for details of the wells located within the AOR.

**Table A-1: AOR Well Details**

<b>Well Details</b>			<b>Surface Casing</b>			<b>Production Casing</b>		
<b>Well</b>	<b>Well Status</b>	<b>Distance from Injector (feet)</b>	<b>Size (inches)</b>	<b>Depth (feet)</b>	<b>Cement Top</b>	<b>Size (inches)</b>	<b>Depth (feet)</b>	<b>Estimated Cement Top (feet)</b>
Ute 13-1 SWD	Completed SWD	0	9 5/8	358	Surface	7	3,789	Surface
Ute 13-11A-4-1	Producing Oil	1613	8 5/8	508	Surface	5 1/2	7,680	242
Ute 13-12A-4-1	Producing Oil	1541	8 5/8	505	Surface	5 1/2	7,773	256
Ute 13-13A-4-1	Producing Oil	1056	8 5/8	502	Surface	5 1/2	7,665	180
Ute 13-14A-4-1	Producing Oil	1162	8 5/8	502	Surface	5 1/2	7,664	270
Ute 13-15A-4-1	Producing Oil	2417	8 5/8	529	Surface	5 1/2	7,618	234

**Figure A-2** identifies surface ownership and the lease operator of those lands within a one-half mile radius of the Ute 13-1 SWD, the owners thereof, which must be provided notice of this application. Below is a listing of the names and addresses of all owners of record of land within a one-half mile radius of the proposed Ute 13-1 SWD injection well. The Ute Tribe (910 South 7500 East, Fort Duchesne, UT 84026) owns the mineral rights within one-half mile of the proposed injection well. Also included as **Figure A-3** is the Affidavit of Mailing.

**Table A-2: List of Surface Owners within the AOR**

**Sections 13 & 14 (all)**

Uintah Partners LLC  
C/O Troy Dana  
2825 E Cottonwood Parkway, #555  
Salt Lake City, Utah 84121

**Section 23 (N/2), 24 (all)**

Salradus LLC  
C/O Bonnie Coleman, Managing Member  
362 N. Main Street  
Heber City, Utah 84032

Coleman Mountain Holdings, LLC  
C/O Mary Jo Coleman  
3940E Hidden Springs Drive  
Washington, Utah 84780

Coleman Family Trust, dated June 7, 1991  
C/O Joseph N. Coleman, Trustee  
393 East Center  
Heber City, Utah 84032

Coleman Family Trust, dated June 28, 1991  
C/O Leila Coleman, Trustee  
950 South 400 East #104  
St. George, Utah 84770

**WELL DATA**

The **Ute 13-1 SWD** well has been drilled and completed as an injection well within the Birds Nest aquifer of the Green River Formation. The proposed injection zone is located from 3,238 feet to 3,566 feet bgs. Finley proposes to utilize the Ute 13-1 SWD well for disposal of produced water from wells that Finley has working interest or operated wells located in Uintah County. **Figure B1** reflects a completed well bore diagram for the Ute 13-1 SWD well. Gamma ray and other open-hole logs, as well as, a cement bond log for the proposed injection well have previously been submitted to the UDOGM. The existing five oil production wells within a one-half mile radius of the proposed injection well have been reviewed in detail for mechanical integrity with no corrective actions identified. Copies of all regulatory filings regarding activities related to the physical state of these wells can be accessed at the Utah Division of Oil, Gas and Mining (UDOGM) online information system website.

## **NAME AND DEPTHS OF USDW's**

A map of the Base of Moderately Saline Water (BMSW) (Plate1: BMSW Elevation Contour Map, Uinta Basin, Utah [DNR, 2012]<sup>1</sup>, shows the elevation to the BMSW (3,000 to 10,000 mg/L TDS) to be approximately 4,200 feet above mean sea level (amsl) at the location of the proposed UIC well. The surveyed ground elevation (ungraded) at Ute 13-1 SWD is 5,103 feet amsl. Based on Plate 1 and the surveyed ground elevation; the BMSW occurs at a depth of approximately 903 feet at the proposed Ute 13-1 SWD location. The top of the uppermost proposed injection interval is approximately 2,330 feet below the approximate BMSW depth. **Figure C1** contains a figure which shows the location of the injection well on Plate 1.

A search of Division of Water Rights records shows one water right within a 10,000 foot radius of the Ute 13-1 SWD well location. **Figure C2** shows the closest known potential Underground Source of Drinking Water (USDW) to the proposed UIC well at approximately 1.6 miles to the south. Division of Water Rights records indicates the closet well (ID: 43-10596) was drilled to a depth of 2,000 feet below the ground surface. The well is located very near the existing Finley 26-1 SWI well. A note in the Division files indicates a cap was welded on top of the casing while the owner (Synder Oil) decided if they wanted to complete the well. The regional and district Division offices were contacted inquiring additional information for this well. In both cases, no additional information from what is stated on the Division database was obtained.

## **GEOLOGY OF INJECTION AND CONFINING ZONES**

The injection and confining intervals for the AOR are listed in the following table and are gross geologic intervals:

**Table D-1 Estimated Tops of Important Geologic Markers**

<u>Formation</u>	<u>Depth in feet</u>
Duchesne River	0 to 2,278
Base of Moderately Saline GW	903
Green River	2,278
Top Bird's Nest	3,222
Base Bird's Nest	3,589
<b>TD</b>	<b>3,830</b>
Mahogany Bench	3,885

<sup>1</sup> Moderately Saline Groundwater in the Uinta Basin, Utah: Special Study 144, Utah Geological Survey, Division of Utah Department of Natural Resources, 2012.

## General Geology

**Duchesne River Formation:** Estimated surface to 2,278' in the Ute 13-1 SWD area.

The Duchesne River Formation (Eocene) consists of conglomerates, sandstones, siltstones and claystones with horizontal bedding and uniformly spaced joints characterizing the unit. Approximately 50 percent of the formation is comprised of sandstone. The Duchesne River Formation ranges in color from red to grayish-red and is commonly cross stratified.

**Green River Formation:** Estimated 2,278' to 7,000' in the Ute 13-1 SWD area.

The Green River Formation (Eocene) is a complex mixture of clastics, carbonates and organic rich claystones deposited in an alluvial to lacustrine depositional system. The Green River interfingers with both the overlying Uinta and underlying Wasatch Formations. The Green River Formation is subdivided into four members, which in ascending order are: Douglas Creek Member, Garden Gulch Member, Parachute Creek Member and Evacuation Creek Member.

- The Douglas Creek Member consists of light gray alternating beds of calcareous sandstone and dark gray to brown brittle shale with minor amounts of oil shale, dolomite and limestone.
- The Garden Gulch Member directly overlies the Douglas Creek Member and consists primarily of dark colored shales and very fine grained sandstones. Shale intervals are thicker than those of the Douglas Creek Member and organic rich.
- The Parachute Creek Member directly overlies the Garden Gulch Member and consists of a thick succession of dark brown, dark gray, light green and red shales with occasional fine grained sandstones. The Parachute Creek Member contains the most organic rich oil shales, including the Mahogany Oil Shale Zone. The top of the Mahogany zone is estimated to be 3,890 feet bgs in the area of the Ute 13-1 SWD.
- The Evacuation Creek Member directly overlies the Parachute Creek Member and is overlain by the Uinta Formation. The Evacuation Creek Member is composed primarily of light gray-green shale, tan marl and interbedded thin brown sandstones. The upper portion of the Evacuation Creek Member contains the informally named "Birds Nest" zone. The Birds Nest was deposited during a regressive lacustrine phase. The lake waters in the deeper portion of the lake became concentrated in salts, primarily sodium bicarbonate during this regressive phase.

## Upper Confining Layer:

The upper confining zone is composed of very fine grained organic lean oil shale and lacustrine marlstone in the Parachute Creek member of the Green River formation. The

gross thickness of the upper confining zone averages between 275 and 300 feet. The average thickness of the upper confining zone in the area of the proposed Ute Tribal 13-1 SWD is 285 feet.

#### Injection Zone:

The proposed injection zones are between 3,238 to 3,566 feet located in the Birds Nest zone of the Evacuation Creek Member of the Green River formation. These intervals are composed of porous and permeable carbonate oil shale with large vugular porosity connected through an extensive fracture network. The combined thickness of the proposed injection zones is 328 feet.

#### Lower Confining Layer:

The lower confining zone is composed of very fine grained organic lean oil shale and lacustrine marlstone in the Parachute Creek member of the Green River formation. The gross thickness of the lower confining zone averages between 300 and 350 feet. The average thickness of the lower confining zone in the area of the proposed Ute Tribal 13-1 SWD is 330 feet.

**Figure D1** is a cross-section of wells in the AOR showing the correlation of the upper confining zone, injection zone and lower confining zone. **Figure D2** is a structure map for the top of the lower confining zone.

### **OPERATING DATA**

The daily volumetric disposal for the Ute Tribal 13-1 injection well will vary depending upon water production rates from producing wells in the vicinity. Finley anticipates an additional injection volume of 5,000 barrels of water per day (BWPD). Injection rate will be constrained by the maximum allowable injection pressure (MAIP) at the surface. The EPA has established a set injection pressure for all Birds Nest Aquifer disposal wells. Injection pressure of 300 pounds per square inch (psi) is equivalent to a formation fracture gradient of 0.62 psi per foot (psi/ft). This established fracture gradient is lower than known fracture pressures in the Uinta basin to ensure that 300 psi injection will not cause fractures in the Birds Nest.

### **STIMULATION PROCEDURES**

No stimulation is planned for this project.

### **INJECTION PROCEDURES**

Injection fluids are planned to be trucked or piped to the site for disposal. The injected fluid will consist of produced water from the Leland Bench and Windy Ridge wells operated by Finley. No fluid of any type from outside-operated wells will be injected. **Figure G1** is a list of current wells with water composition that will utilize the injection well. Finley reserves the right to add wells as they are drilled and completed within the project area.

**Figure G2** contains water analysis reports for produced water collected from the Ute Tribal 13-08A, Ute Tribal 13-11A-4-1 wells. These analyses represent typical water which will be injected. The average TDS concentration of the two wells is 49,359.17 mg/l. The details and results for the injection formation samples and injection water samples are summarized in **Table G-1**.

**Table G-1: Summary of TDS Concentrations Analyzed**

Well Name	Sample Date	Sample Site	TDS (mg/l)
Ute 13-1 SWD	1/28/2015	Well	177,851.53
Ute Tribal 13-08A	3/29/2013	Well	51,321.78
Ute Tribal 13-11A-4-1	3/11/2013	Treater	47,396.56

**Figure G3** reflects formation water analysis and a compatibility report with the injection fluids summarized in **Table G-1** above. Finley is requesting an average injection rate of 5,000 BWPD based on the attached **Figure G4** reflecting a step rate test completed on the injection interval; however, the actual injection rate will be established based on the MAIP at the surface. Injection will not begin until corrective action has been taken and the regulatory agencies have issued authorization to inject.

Finley plans to install monitoring equipment, as required by the DOGM. At a minimum, the well will be installed with pressure gauges, calibrated at all times to industry standards and manufacturer’s specifications, on the tubing and on the casing-tubing annulus. If any non-compliant situation is found, the well will be immediately shut-in and regulatory agencies notified. Injection will not resume until corrective action has been taken and the regulatory agencies have issued authorization to inject.

**PLUGGING AND ABANDONMENT PLAN**

The Plugging & Abandonment (P&A) procedure for the Ute 13-1 SWD well will be conducted in accordance with UDOGM guideline requirements. **Figure H1** includes:

- P&A Procedure
- Schematic of proposed P&A plan

**FINANCIAL RESPONSIBILITY DEMONSTRATION**

Finley is required to maintain financial responsibility and resources to close, plug and abandon the underground injection operation in a manner prescribed by the UDOGM. The permittee has shown evidence of such financial responsibility to the UDOGM by the submission of a surety bond acceptable to the UDOGM.

## **AQUIFER EXEMPTION**

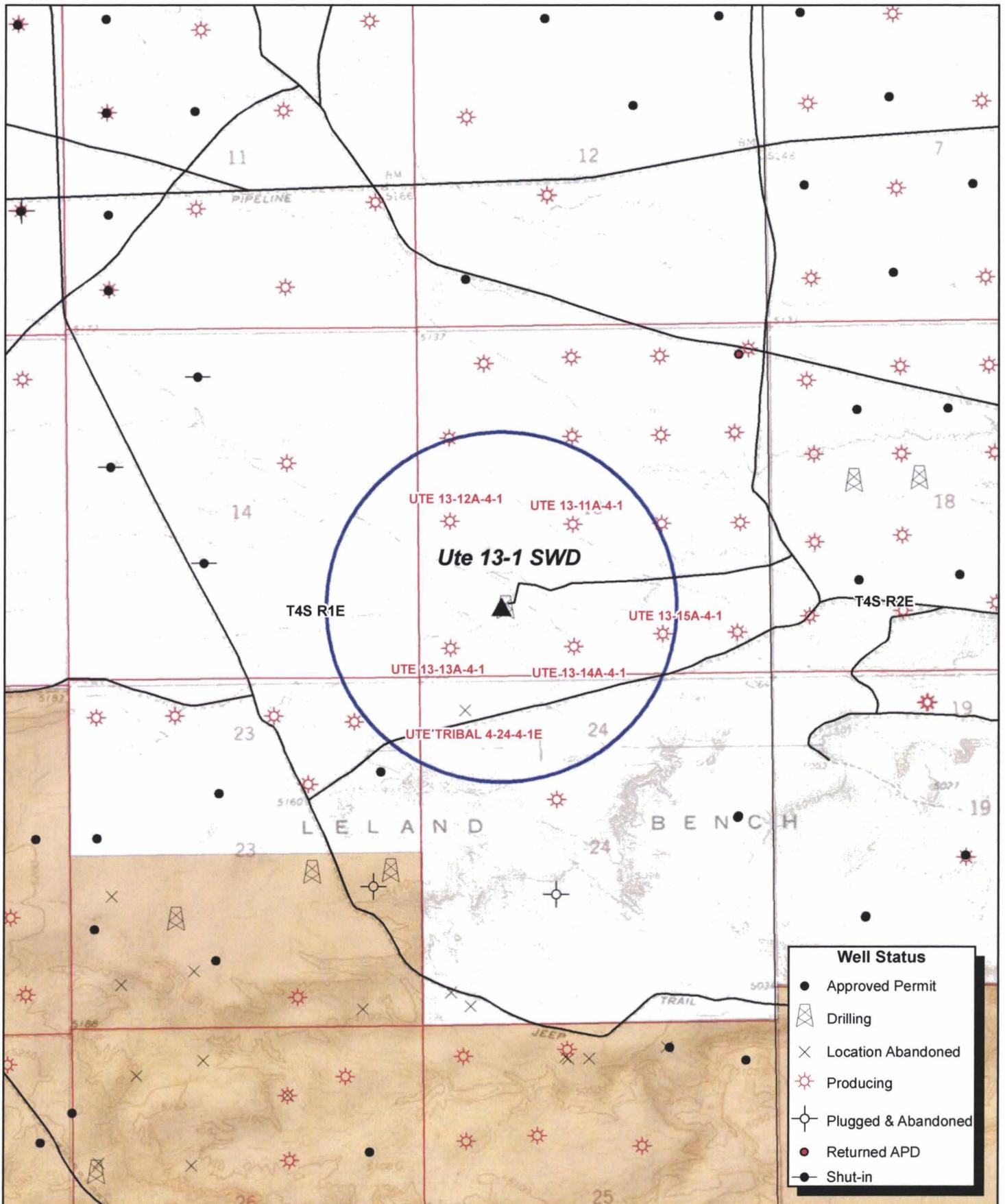
An aquifer exemption is not expected at the proposed Ute 13-1 SWD well. The average concentration of TDS for injected water is 49,360 mg/L with injection formation concentration at 177,851.53 mg/L. The Ute 13-1 SWD is located approximately 1.6 miles from the closest known potential USDW.

## **EXISTING UIC AUTHORIZATIONS**

Finley has two EPA issued permits

Ute Tribe 26-1 SWI  
UIC Permit UT2780-04280  
Uintah County, Utah

Ute Tribal 22-2 SWI  
UIC Permit UT22266-29945  
Uintah County, Utah



**Well Status**

- Approved Permit
- △ Drilling
- × Location Abandoned
- ☀ Producing
- ⊗ Plugged & Abandoned
- Returned APD
- Shut-in

**LEGEND**

- ▲ Ute 13-1 SWD
- Roads
- Half Mile Radius

**Land Ownership**

- Private
- Tribal

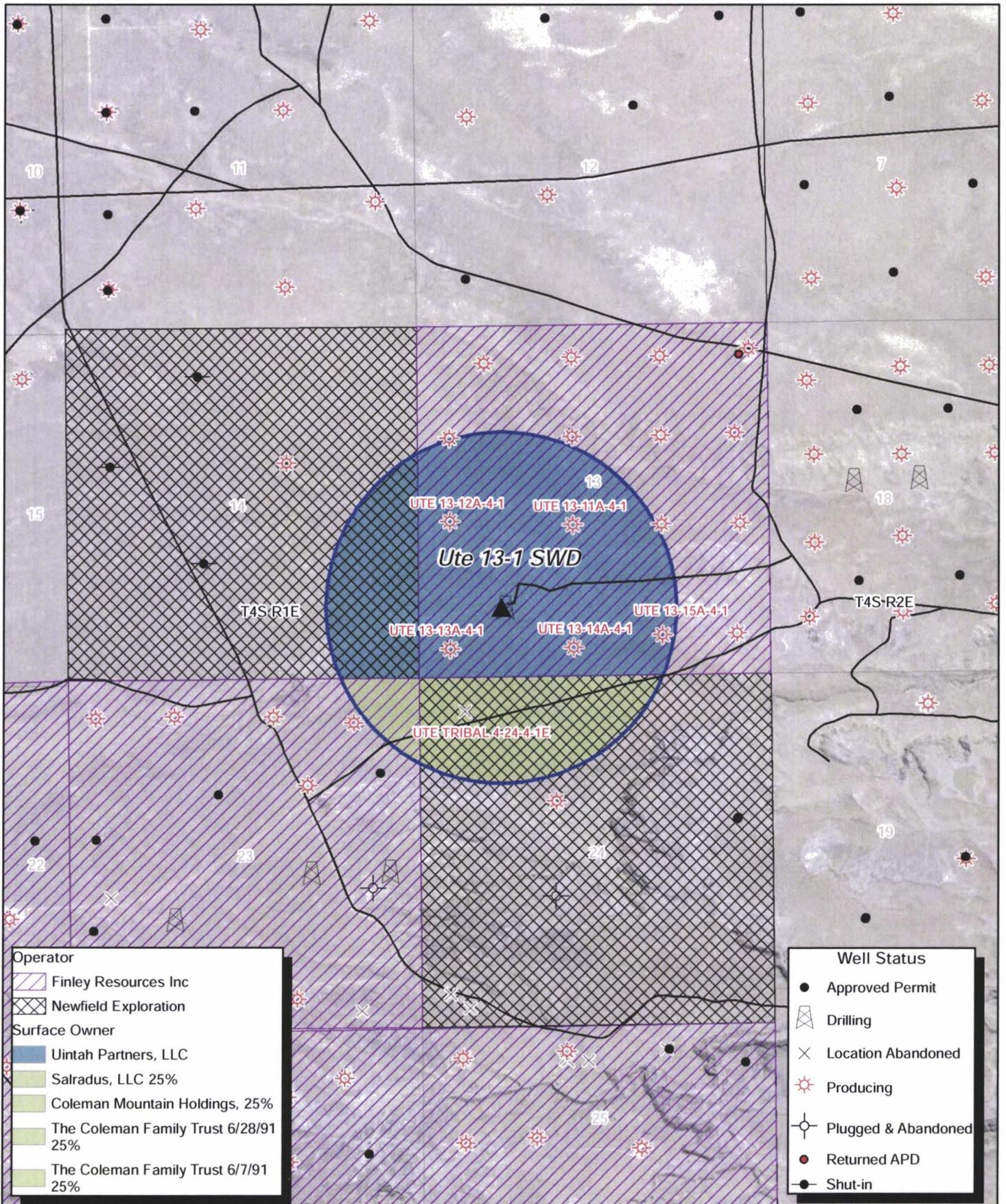
0 1,000 2,000  
Feet  
1 in = 2,000 feet

**FR FINLEY**  
resources  
ACQUIRE • DEVELOP • SUCCEED

**Ute 13-1 SWD  
Half Mile Radius**

Figure  
**A-1**

February  
2015



**LEGEND**

- ▲ Ute 13-1 SWD
- Roads
- Half Mile Radius

0 1,000 2,000  
Feet  
1 in = 2,000 feet

**FR FINLEY**  
resources  
ACQUIRE • DEVELOP • SUCCEED

**Ute 13-1 SWD  
Surface  
Ownership**

Figure  
**A-2**

February  
2015

## AFFIDAVIT OF MAILING

Finley Resources Inc, 1308 Lake Street, Fort Worth, Texas 76113 has identified all of the operators, owners, and surface owners within a one-half mile radius of the proposed injection well.

I, Anthony Actis, Professional, Kleinfelder, Inc., being first duly sworn, depose and state as follows; On May 20, 2014 I caused to be mailed by certified mail, postage prepaid, return receipt requested, an affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-quarter mile radius of the proposed injection well

The attached list contains the names of all parties who were notified.

Dated this 20th day of May, 2014



Anthony Actis  
Professional  
Kleinfelder, Inc.

The forgoing affidavit was subscribed and sworn to before me by Brad A. Woodard.

This 20<sup>th</sup> day of May, 2014

LISA L MOONEYHAM  
Notary Public  
State of Colorado

My Commission Expires May 09, 2016



Colorado, Notary Public

# Ute 13-1 SWD

Spud Date: 12-21-14  
 Completion Date: 01-26-15  
 GL: 5103' KB: 5116'

## Wellbore Diagram

FRAC JOB---no stimulation of  
 perms at present

### SURFACE CASING

CSG SIZE: 9-5/8"  
 GRADE: J-55  
 WEIGHT: 36#  
 LENGTH: 10 jts. (424')  
 DEPTH LANDED: 424'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 260 sxs Class "G" cmt

### PRODUCTION CASING

CSG SIZE: 7"  
 GRADE: J-55  
 WEIGHT: 23.0#  
 LENGTH: 90 jts. (3820') (shoe set at 3818'); (FC @ 3774') KB Depths  
 HOLE SIZE: 8-3/4"  
 TOTAL DEPTH: 3830'  
 CEMENT DATA: 100 sxs 10.0 ppg lead and 625 sxs 14.0 ppg tail  
 CEMENT TOP AT: 200' per CBL 01/06/14

### TUBING (01-23-2014)

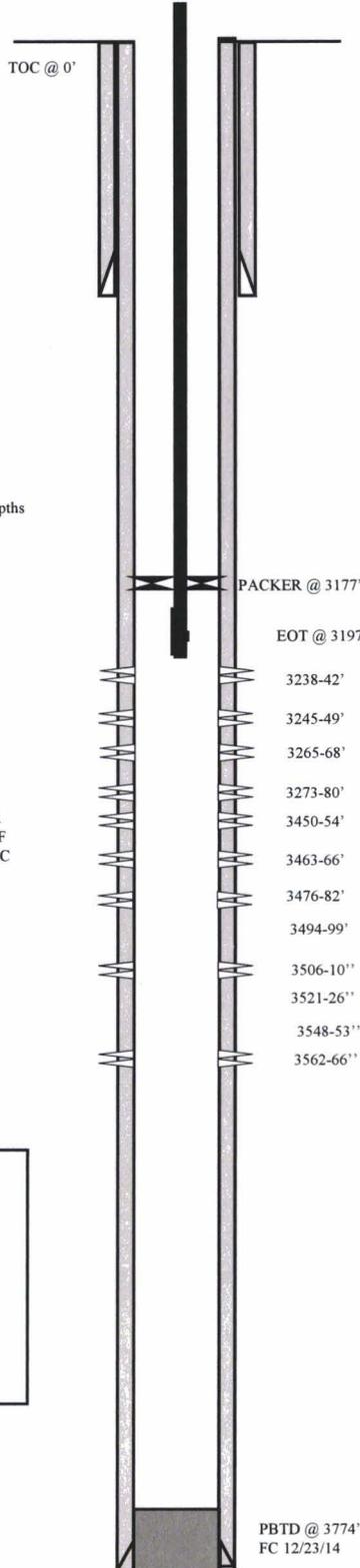
SIZE/GRADE/WT.: 4-1/2" / J-55-N-80 12.75#

NO. OF JOINTS: 99 jts (3161.05')

TUBING PACKER: SET AT 3177.47' KB

TUBING DETAIL: TOP TO BOTTOM: KB=(13.0'); HANGER (0.50'); 11 JTS 4-1/2" TBG -N-80 (357.13'); 88 JTS OF 4-1/2" TBG. J-55 (2803.92'); 4-1/2" X3-1/2" X-OVER (0.96'); 7" X3-1/2" ON-OFF TOOL WITH 2.81" PROFILE (1.96'); 7" X3-1/2" DHL HYDRAULIC PACKER (6.32'); 3-1/2" N-80 PUP JT (6.30'); 2.81" XN NIPPLE (1.0'); 3-1/2" N-80 PUP JT (6.30'); 3-1/2" PUMP OUT PLUG/RE-ENTRY GUIDE (.044')

TOTAL STRING LENGTH: EOT @ 3197.83' KB'



### PERFORATION RECORD

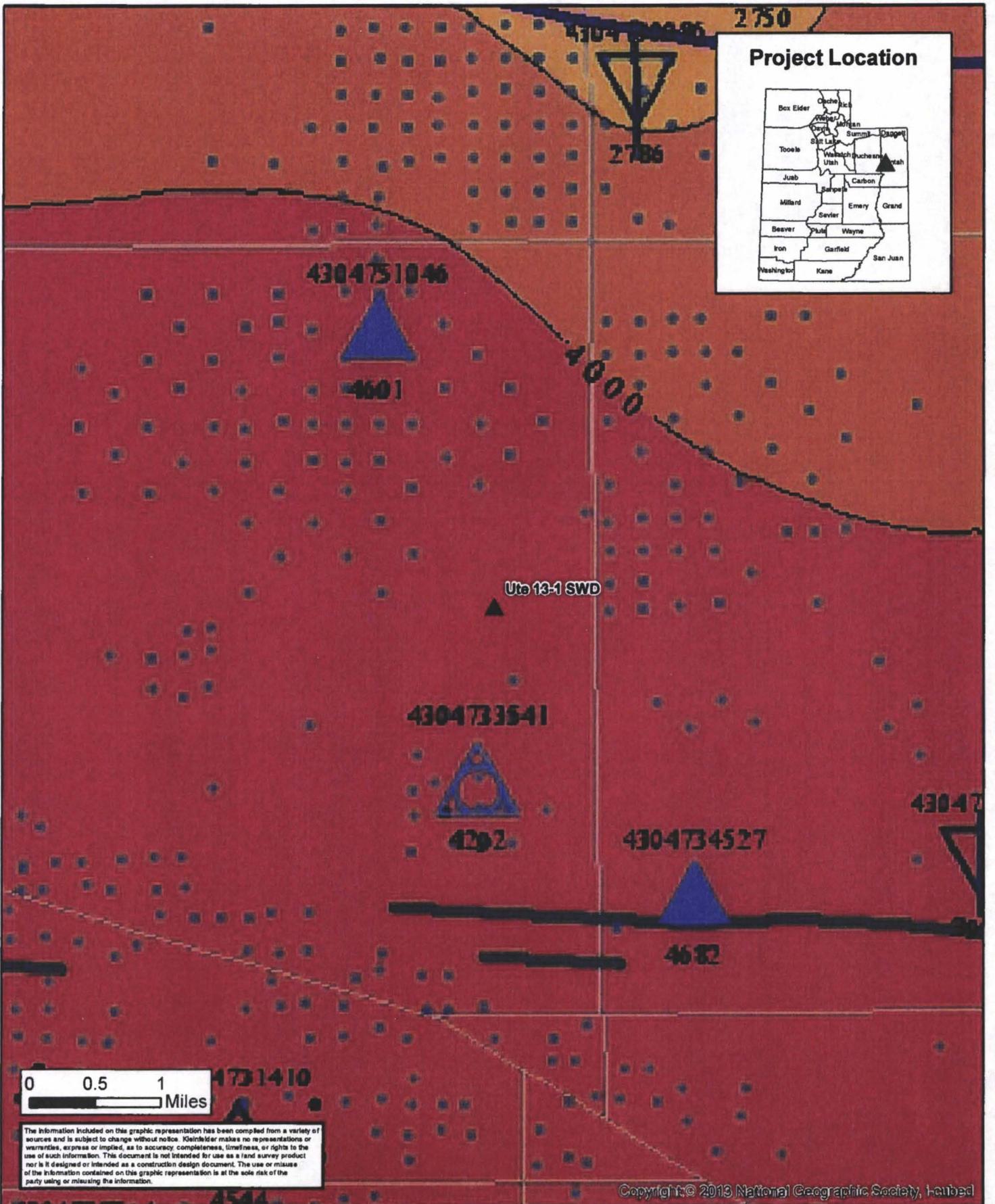
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3245-3249'	6 JSPF	24 holes
3265-3268'	6 JSPF	18 holes
3273-3280'	6 JSPF	42 holes
3450-3454'	6 JSPF	24 holes
3463-3466'	6 JSPF	18 holes
3476-3482'	6 JSPF	36 holes
3494-3499'	6 JSPF	30 holes
3506-3510'	6 JSPF	24 holes
3521-3526'	6 JSPF	30 holes
3548-3553'	6 JSPF	30 holes
3562-3566'	6 JSPF	24 holes

## FINLEY RESOURCES, INC.

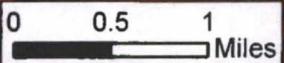
**Ute 13-1-4-1**  
 1075' FSL & 1289' FWL (SW/SW)  
 Section 13, T4S, R1E  
 Uintah Co. Utah  
 API # 43-047-54256; Lease # 14-20-H62-4896

PBTD @ 3774'  
 FC 12/23/14

TD @ 3830'



### Project Location



The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

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### Legend

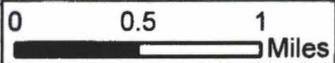
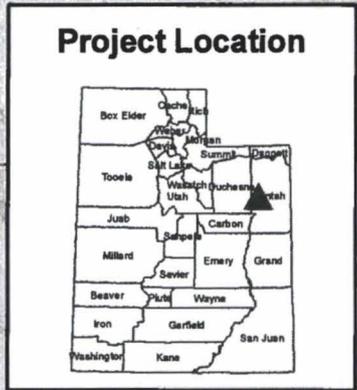
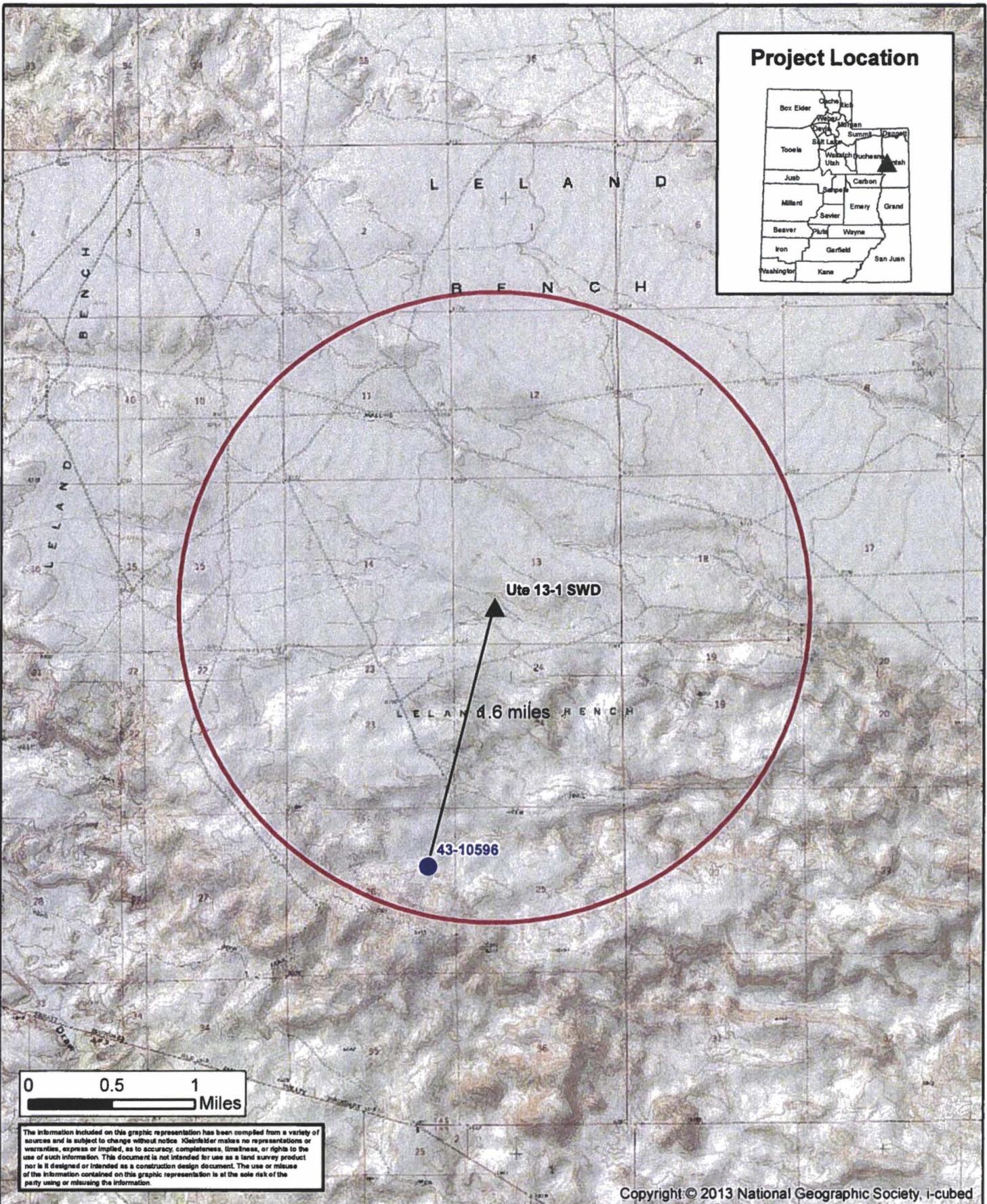
- Well Location
- 4000- Contour

PROJECT NO.	130394
DRAWN:	3/27/2014
DRAWN BY:	A. Leonard
CHECKED BY:	B. Woodard
FILE NAME:	FigC1_BMSW.mxd

**Finley Resources Inc.**

Ute Tribal 13-1 SWD  
Plate 1  
BMSW Elevation Contour

FIGURE  
**C1**



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**Legend**

- Well Location
- Closest Water Well
- 10,000' radius



PROJECT NO.	130394
DRAWN:	3/27/2014
DRAWN BY:	A. Leonard
CHECKED BY:	B. Woodard
FILE NAME:	FigC2_WaterWells.mxd

**Finley Resources Inc.**

**Ute 13-1 SWD  
Water Wells**

FIGURE  
**C2**

No Results for the following lab reports (in Red) for date range requested:

Bacteria | Cold Finger | Coupon | Metals | Millipores | Oil | Oil&Grease | Residuals | Solids | Water

Sample Information					Results																						
T	ID	Sample ID	Sample Point	SampleDate	CO2 Ac	HCO3 M	Lead	H2S Gas	H2S Aq	pH	Density	TDS	Calcium	Barium	Iron	Magnesium	Manganese	Sodium	Sulfate	Chloride	Zn	K	Sr	CO3	Notes		
*	(S)3361200	WA-298436	Treater/Mi1	1/21/2015	0.00	9028.00	0.00		20.00	8.70	1.0122	22867.69	5.19	0.45	3.64	2.47	0.14	5608.19	164.00	8000.00	0.27	34.64	1.50		B=47.72	Al=.09	L
*	(S)3361200	WA-296188	Treater Mo 1	12/15/2014	0.00	8540.00	0.17		3.00	9.00	1.0174	29125.41	20.60	0.93	13.45	8.46	0.20	9984.06	456.00	10000.00	0.92	55.41	2.63		B=88.62	Al=.18	
*	(S)3539077	WA-299648	TREATER	2/5/2015	160.00	5002.00	0.21		5.00	8.00	1.0158	28383.09	41.88	5.26	8.06	16.43	0.77	8091.23	126.00	15000.00	0.19	43.15	14.17		B=36.85	Al=0	Li
*	(S)3539077	WA-298431	Treater/Mi1	1/21/2015	0.00	3904.00	0.00		0.00	8.10	1.0098	21481.28	26.33	3.09	21.32	32.87	0.59	3281.51	142.00	14000.00	0.10	28.47	18.69		B=24.64	Al=0	Li
*	(S)3539077	WA-298324	TREATER	1/19/2015	200.00	3050.00	0.12		0.50	7.10	1.0165	29309.28	155.71	4.40	21.48	73.96	0.65	8556.99	228.00	17000.00	0.02	152.19	28.74		B=41.53	Al=0	Li
*	(S)3530792	WA-298430	Treater/Mi1	1/21/2015	0.00	2440.00	0.00		2.00	6.80	1.0116	25274.48	71.14	3.00	10.92	57.07	1.00	3222.43	384.00	19000.00	0.29	12.25	36.66		B=15.07	Al=0	Li
*	(S)3530762	WA-298434	Treater/Mi1	1/21/2015	0.00	1708.00	0.00		2.00	8.10	1.0143	29291.66	33.51	21.73	6.42	42.98	0.65	5237.11	147.00	22000.00	0.15	7.16	65.33		B=9.71	Al=0	Li
*	(S)3530762	WA-296189	Treater Mo 1	12/15/2014	280.00	1708.00	0.16		1.50	7.90	1.0252	40658.23	365.21	15.22	67.21	105.58	1.86	15098.00	88.00	23000.00	0.63	71.75	73.47		B=29.23	Al=.06	
*	(S)217263	WA-293670	Treater-Mo 3	11/17/2014	0.00	1464.00	0.00		10.00	8.50	1.0182	29650.31	13.43	0.06	1.61	5.42	0.07	12607.60	501.00	15000.00	0.18	32.58	2.27		B=14.75	Al=.06	
*	(S)217263	WA-290522	Treater MO 2	10/16/2014	0.00	1342.00	0.00		1.50	8.30	1.0153	28120.05	166.35	3.04	15.30	42.10	0.87	7968.05	471.00	18000.00	0.51	92.04	18.79		B=10.35	Al=.14	L
*	(S)217263	WA-287369	TREATER	9/16/2014	0.00	10492.00	0.43		20.00	9.00	1.0274	43951.56	14.96	0.93	2.86	7.25	0.21	15684.80	591.00	17000.00	0.97	134.64	4.51		B=11.73	Al=0	Li
*	4304752671	WA-299440	Treater	1/30/2015	0.00	1708.00	0.11		20.00	8.40	1.0055	12658.66	22.71	9.99	46.05	5.54	0.81	3681.46	85.00	7000.00	0.34	46.91	4.96		B=14.97	Al=.15	
*	4304752674	WA-299429	Treater	1/30/2015	0.00	3660.00	0.31		30.00	8.60	1.009	17969.09	32.20	12.82	18.74	10.51	0.27	5027.69	124.00	9000.00	0.43	38.44	7.52		B=40.58	Al=.08	L
*	4304752674	WA-286604	TREATER	9/9/2014	0.00	3660.00	0.00		15.00	9.00	1.0096	18728.37	32.62	6.21	8.37	6.41	0.30	5612.25	193.00	9000.00	0.12	203.87	5.22		B=54.97	Al=0	Li
*	43047526640	WA-299436	Treater	1/30/2015	0.00	1342.00	0.43		25.00	8.40	1.0126	22709.55	44.17	76.81	12.87	18.84	0.19	8038.82	77.00	13000.00	0.30	43.38	15.61		B=12.52	Al=.23	
*	(S)214016	WA-290517	Treater MO 3	10/16/2014	120.00	1586.00	0.00		5.00	8.10	1.0176	31699.31	97.37	1.16	12.45	30.95	1.09	9227.73	638.00	20000.00	0.32	83.99	20.25		B=6.94	Al=.03	Li
*	(S)214016	WA-287370	TREATER Mo 2	9/16/2014	0.00	6100.00	0.00		150.00	9.50	1.0279	44680.26	61.02	0.77	0.66	36.94	0.13	17169.00	1178.00	20000.00	0.05	98.14	19.98		B=9.63	Al=0	Li
*	(S)214016	WA-286751	WELLHEAD	9/10/2014	0.00	6222.00	0.00		125.00	9.00	1.0301	47253.99	194.04	1.00	0.38	42.40	0.34	18412.60	1229.00	21000.00	0.44	120.47	31.32		B=9.2	Al=0	Li=4
*	(S)214016	WA-285991	TREATER	9/2/2014	200.00	1952.00	0.29		220.00	9.00	1.0243	39540.54	248.33	1.70	16.14	55.33	1.00	14957.90	1063.00	21000.00	0.39	171.82	37.43		B=10.55	Al=.58	
*	(S)3147057	WA-295318	Treater Mo 3	11/17/2014	0.00	1464.00	0.00		10.00	8.50	1.0182	29650.31	13.43	0.06	1.61	5.42	0.07	12607.60	501.00	15000.00	0.18	32.58	2.27		B=14.75	Al=.06	
*	(S)221742	WA-298429	Treater/Mi1	1/21/2015	0.00	3416.00	0.00		80.00	9.00	1.0087	19909.75	7.79	2.45	1.26	13.68	0.21	2966.99	459.00	13000.00	0.00	8.76	11.26		B=14.59	Al=.01	
*	(S)221742	WA-296191	TREATER	12/15/2014	0.00	2684.00	0.17		30.00	9.00	1.0159	27187.37	126.52	3.23	2.79	43.70	0.58	9909.51	284.00	14000.00	0.17	56.72	19.74		B=36.48	Al=.05	
*	(S)221742	WA-291079	Treater	10/22/2014	128.00	3416.00	0.27		15.00	8.10	1.0119	21272.15	136.93	9.10	0.82	28.84	0.33	7233.16	290.00	10000.00	0.13	65.53	16.42		B=31.45	Al=0	Li
*	(S)214004	WA-299438	Treater	1/30/2015	0.00	2928.00	0.36		150.00	8.60	1.0163	27773.80	113.24	1.03	19.71	34.94	0.50	10090.30	441.00	14000.00	0.72	91.61	14.49		B=32.19	Al=.02	
*	(S)214004	WA-293668	Treater-Mo 3	11/17/2014	0.00	2440.00	0.00		50.00	9.00	1.0187	29435.87	21.83	0.11	2.88	7.03	0.19	13487.50	411.00	13000.00	0.15	36.95	3.06		B=15.55	Al=0	L
*	(S)214004	WA-290520	Treater MO 2	10/16/2014	200.00	1708.00	0.00		25.00	8.30	1.0126	24116.46	80.83	2.86	0.99	29.34	0.38	6667.25	417.00	15000.00	0.25	198.13	11.43		B=29.78	Al=.11	
*	(S)214004	WA-287367	TREATER Mo 1	9/16/2014	0.00	3660.00	0.35		25.00	8.50	1.0117	21255.87	165.58	2.88	4.77	32.90	0.57	6899.41	324.00	10000.00	0.27	127.94	13.76		B=46.72	Al=0	Li
*	(S)214004	WA-286753	WELLHEAD	9/10/2014	120.00	1952.00	0.00		10.00	7.50	1.0098	18521.33	196.08	3.30	0.64	36.31	0.32	5948.98	164.00	10000.00	0.13	206.43	13.14		B=37.68	Al=0	Li
*	(S)214008	WA-299435	Treater	1/30/2015	0.00	2440.00	0.25		45.00	8.50	1.0062	13733.60	31.49	5.78	27.62	8.07	0.40	3895.08	222.00	7000.00	2.11	57.62	5.60		B=28.5	Al=.5	Li=1
*	(S)214008	WA-290516	Treater MO 3	10/16/2014	0.00	2074.00	0.00		5.00	8.30	1.0077	16041.77	48.44	5.78	1.95	13.79	0.18	4505.86	237.00	9000.00	0.20	144.62	9.95		B=27.09	Al=.13	L

\*\*\*SURFACE TENSIC mN/m\*\*\*

*	(S)214008	WA-287362	TREATER Mo 2	9/16/2014	0.00	2928.00	0.32	4.50	8.50	1.0086	17335.33	78.21	9.44	3.26	15.72	0.19	4943.99	183.00	9000.00	0.19	151.11	1.31	B=39.34	AI=0	Li=
*	(S)214008	WA-286754	WELLHEAD	9/10/2014	120.00	4148.00	0.00	15.00	7.50	1.0087	17346.20	63.02	8.19	0.74	13.56	0.11	4723.19	182.00	8000.00	0.32	200.21	6.86	B=43.33	AI=0	Li=
*	(S)214008	WA-285993	TREATER	9/2/2014	120.00	2440.00	0.21	10.00	7.50	1.0067	13553.87	69.39	6.49	16.17	15.66	0.53	4556.04	202.00	6000.00	0.14	170.17	38.33	B=40.71	AI=.26	
*	(S)214012	WA-299434	Treater	1/30/2015	0.00	8540.00	0.15	100.00	9.30	1.0306	48208.26	58.24	0.39	259.57	6.34	13.48	18366.10	855.00	20000.00	0.97	59.08	6.05	B=6.69	AI=.74	L
*	(S)214012	WA-290515	Treater MO 3	10/16/2014	0.00	8052.00	0.00	60.00	9.00	1.0298	50703.89	16.28	0.56	1.19	6.64	0.46	14881.90	1623.00	26000.00	0.34	116.42	5.10	B=6.8	AI=.16	Li
*	(S)214012	WA-287363	TREATER	9/16/2014	0.00	8052.00	0.47	45.00	9.00	1.0272	42693.86	20.59	1.23	1.31	7.83	0.39	16719.80	728.00	17000.00	0.14	139.18	5.28	B=11.75	AI=0	L
*	(S)214012	WA-286752	WELLHEAD	9/10/2014	0.00	5856.00	0.00	50.00	8.30	1.0237	38652.02	37.72	1.77	3.91	10.29	21.14	13888.00	670.00	18000.00	0.39	155.97	6.83	B=14.4	AI=0	Li=
*	(S)214012	WA-285992	TREATER	9/2/2014	0.00	9516.00	0.32	5.00	9.00	1.0243	39805.22	37.72	1.48	19.90	10.37	1.69	13391.40	599.00	16000.00	0.46	174.35	16.93	B=9.63	AI=.09	L
*	(S)3147055	WA-298432	Treater/Mi1	1/21/2015	0.00	2684.00	0.00	2.00	7.90	1.0044	12465.32	27.89	2.80	2.69	17.64	0.76	1543.74	80.00	8000.00	0.07	62.71	8.74	B=25.78	AI=0	Li=
*	4304753380	WA-286596	TREATER	9/9/2014	0.00	3416.00	0.00	20.00	9.70	1.0164	28740.32	57.28	0.82	42.98	9.24	0.95	9845.61	288.00	15000.00	0.23	70.92	8.29	B=56.14	AI=0	Li=
*	(S)206726	WA-286599	TREATER	9/9/2014	0.00	3050.00	0.00	10.00	8.70	1.0078	15884.54	87.58	4.00	581.88	13.70	8.96	3823.46	223.00	8000.00	10.00	76.62	5.34	B=16.35	AI=3.81	
*	4304753383	WA-286602	TREATER	9/9/2014	0.00	4270.00	0.00	20.00	9.00	1.0104	20782.64	20.69	2.40	6.95	2.09	0.17	5262.57	160.00	11000.00	0.52	54.65	2.60	B=55.97	AI=0	Li=
*	4304753384	WA-286600	TREATER	9/9/2014	80.00	3172.00	0.00	20.00	8.40	1.0072	15381.06	43.86	2.97	224.62	4.71	2.71	3731.58	132.00	8000.00	5.30	58.16	3.15	B=56.59	AI=3.18	
*	(S)221744	WA-298435	Treater/Mi1	1/21/2015	0.00	3172.00	0.00	10.00	8.50	1.0075	17878.38	23.08	2.10	1.65	20.40	0.59	2463.07	148.00	12000.00	0.00	8.18	18.73	B==22.87	AI=.04	
*	(S)221744	WA-296190	TREATER	12/15/2014	0.00	2562.00	0.10	10.00	8.70	1.023	37456.23	331.52	1.24	2.89	96.98	1.04	13686.90	624.00	20000.00	0.14	70.42	30.90	B=46.34	AI=.08	L
*	(S)221744	WA-293281	WELL HEAD	11/10/2014	280.00	6588.00	0.03	5.00	8.30	1.0144	24273.65	428.03	1.26	21.96	100.10	1.59	7548.71	1393.00	8000.00	0.21	117.12	35.53			
*	(S)221744	WA-291922	Treater	10/29/2014	240.00	1952.00	0.10	2.00	7.00	1.0303	50317.00	201.00	0.90	87.00	79.00	1.20	16582.00	1351.00	30000.00	0.10	37.00	25.70			
*	(S)221744	WA-291928	Well Head	10/29/2014	160.00	2928.00	0.10	2.00	7.00	1.0288	46257.30	200.00	0.80	112.00	83.00	1.40	16777.00	1060.00	25000.00	0.20	37.00	25.50			
*	(S)221744	WA-289020	FRAC TANK	9/25/2014	40.00	244.00	0.00	0.00	6.00	0.998	1439.04	46.46	1.70	9.51	18.62	0.77	24.88	83.00	1000.00	0.62	2.21	0.36	B=.1	AI=0	Li=0
*	(S)221746	WA-298433	Treater/Mi1	1/21/2015	0.00	3172.00	0.00	10.00	8.10	1.0056	14354.43	30.41	2.90	4.13	16.66	1.20	2041.92	29.00	9000.00	0.01	13.83	12.65	B=17.44	AI=0	Li=
*	(S)221746	WA-291920	FRAC TANK	10/29/2014	8.00	244.00	0.03	0.00	6.00	0.998	1418.95	69.04	0.05	4.26	18.53	0.70	40.71	30.00	1000.00	0.02	4.28	0.49	B=.14	AI=.08	Li=
*	43047353536	WA-293669	Treater-Mo 3	11/17/2014	0.00	9394.00	0.00	100.00	10.00	1.019	35192.02	35.79	0.24	2.34	12.25	0.10	8582.15	1094.00	16000.00	0.15	49.52	4.20	B=15.88	AI=.07	
*	43047353536	WA-290521	Treater MO 2	10/16/2014	0.00	5734.00	0.00	110.00	9.00	1.0211	38206.39	41.14	0.49	26.64	12.40	0.99	9653.19	1617.00	21000.00	0.49	113.17	6.88	B=23.93	AI=.14	
*	43047353536	WA-287368	TREATER	9/16/2014	0.00	3660.00	0.42	10.00	8.50	1.0108	19789.30	167.38	3.81	10.12	29.53	0.68	6369.13	333.00	9000.00	0.42	175.08	13.20	B=46.24	AI=0	Li=
*	(S)217269	WA-290518	Treater MO 2	10/16/2014	0.00	2684.00	0.00	3.00	8.50	1.0169	30941.63	68.39	1.32	3.19	31.34	0.41	8580.82	487.00	19000.00	0.29	75.29	9.58	B=30.62	AI=.03	
*	(S)217269	WA-287365	TREATER Mo 1	9/16/2014	0.00	4148.00	0.39	25.00	8.70	1.0214	35084.58	93.36	0.79	1.95	39.95	1.52	12959.10	722.00	17000.00	0.31	88.87	12.03	B=30.96	AI=0	Li
*	(S)217269	WA-286746	WELLHEAD	9/9/2014	0.00	4026.00	0.00	20.00	8.00	1.0211	34686.66	63.25	1.01	0.15	41.89	0.05	12607.40	836.00	17000.00	0.72	99.23	10.96	B=24.69	AI=0	Li=
*	(S)217269	WA-285990	TREATER	9/2/2014	160.00	1952.00	0.14	5.00	8.00	1.0173	29377.85	188.99	1.29	121.28	46.79	1.58	10263.20	619.00	16000.00	0.13	130.99	14.43	B=35.49	AI=.03	
*	(S)217265	WA-293667	Treater-Mo 3	11/17/2014	0.00	7808.00	0.00	100.00	9.50	1.014	29301.63	113.01	0.75	2.35	13.02	0.27	4042.92	1134.00	16000.00	0.09	107.12	9.75	B=6.71	AI=.02	L
*	(S)217265	WA-290519	Treater MO 2	10/16/2014	0.00	7076.00	0.00	75.00	9.00	1.0233	41883.54	22.21	0.54	4.56	12.75	0.59	10403.60	1233.00	23000.00	0.13	123.97	6.19	B=27.08	AI=.06	
*	(S)217265	WA-287366	TREATER	9/16/2014	0.00	4392.00	0.52	5.00	8.70	1.0145	24794.04	69.36	1.89	22.52	26.13	0.50	8924.50	202.00	11000.00	0.60	122.51	11.77	B=52.92	AI=0	Li=
*	(S)217265	WA-286750	WELLHEAD	9/9/2014	240.00	4880.00	0.00	5.00	7.50	1.0185	32825.04	116.92	3.66	70.87	27.31	1.24	7221.39	0.00	19000.00	0.63	99.02	1404.00	B=44.51	AI=0	Li
*	(S)217265	WA-286517	TREATER	9/5/2014	320.00	6344.00	0.00	10.00	7.50	1.0143	25149.65	107.70	6.90	279.30	22.20	4.60	7171.70	71.00	11000.00	0.65	85.90	11.50			
*	4304752637	WA-294797	Treater	11/25/2014	0.00	2684.00	0.00	5.00	8.70	1.0234	39367.39	331.56	3.34	15.64	84.05	0.60	13012.10	95.00	23000.00	0.20	50.31	38.93	B=25.44	AI=.11	
*	4304752637	WA-286603	TREATER	9/9/2014	0.00	2684.00	0.00	5.00	8.50	1.0228	37768.89	48.35	8.24	15.38	25.65	0.19	13822.20	50.00	21000.00	0.09	89.72	25.07	B=22.49	AI=0	Li=
*	4304752638	WA-294776	Treater	11/25/2014	160.00	3416.00	0.02	2.00	8.30	1.0267	46076.70	238.35	0.24	6.58	73.95	0.30	13156.90	1079.00	28000.00	0.21	37.62	18.78	B=57.46	AI=.06	
*	4304752638	WA-290075	Treater BOTTOM	10/8/2014	0.00	6832.00	0.00	20.00	8.70	1.032	53911.43	43.00	1.00	5.60	37.00	0.14	16239.00	1625.00	29000.00	0.01	99.00	7.00	B=62	AI=.01	Li=1
*	4304752638	WA-286595	TREATER	9/9/2014	0.00	2928.00	0.00	5.00	8.80	1.0287	44636.26	280.78	1.70	56.96	55.79	0.95	18244.50	952.00	22000.00	0.31	93.35	21.92	B=70.86	AI=0	Li=

*	4304752639	WA-294777	Treater	11/25/2014	0.00	6588.00	0.00	5.00	8.30	1.0187	32590.44	30.62	0.46	9.58	17.22	0.18	9530.49	347.00	16000.00	0.28	26.21	8.24	B=76.59	AI=.08	L	
*	4304752639	WA-286592	TREATER	9/9/2014	0.00	8540.00	0.00	5.00	8.50	1.0204	33180.40	177.54	4.13	719.84	24.38	9.57	10390.30	226.00	13000.00	5.84	61.90	20.90	B=86.94	AI=0	Li	
*	4304752640	WA-294773	Treater	11/25/2014	0.00	3660.00	0.00	4.00	9.00	1.0117	18044.65	44.71	0.46	8.08	21.57	0.24	9861.12	360.00	4000.00	0.29	37.39	10.24	B=47.97	AI=.13		
*	4304752640	WA-286605	TREATER	9/9/2014	0.00	5856.00	0.00	5.00	8.80	1.0183	30806.70	326.04	3.00	23.02	38.68	0.77	10200.00	250.00	14000.00	0.27	73.16	35.76	B=59.76	AI=0	Li	
*	4304752641	WA-294778	Treater	11/25/2014	0.00	2684.00	0.00	3.00	9.00	1.0164	29264.17	61.91	3.50	4.89	22.54	0.85	9279.86	93.00	17000.00	0.45	51.66	15.27	B=34.78	AI=.11		
*	4304752643	WA-294779	Treater	11/25/2014	80.00	976.00	0.00	4.00	7.40	1.0348	57368.43	415.50	2.45	31.46	121.07	1.25	19295.20	328.00	36000.00	0.23	48.85	89.53	B=16.79	AI=.05		
*	4304752643	WA-286591	TREATER	9/9/2014	0.00	2196.00	0.00	5.00	8.00	1.0227	34938.92	934.56	3.94	1854.7	78.53	27.17	11287.10	408.00	18000.00	14.22	68.09	66.56	B=33.61	AI=9.03		
*	4304752644	WA-294781	Treater	11/25/2014	0.00	1708.00	0.02	2.50	8.30	1.0323	53960.64	197.99	16.88	17.41	86.92	0.78	17748.10	26.00	34000.00	0.60	42.74	81.64	B=17.37	AI=.12		
*	4304752645	WA-294792	Treater	11/25/2014	0.00	2196.00	0.00	7.50	9.00	1.021	36348.33	98.11	24.41	13.82	52.79	0.37	11761.40	80.00	22000.00	0.59	46.59	31.15	B=12.15	AI=.08	L	
*	4304752645	WA-286594	TREATER	9/9/2014	80.00	1464.00	0.00	10.00	8.00	1.0228	37165.75	128.81	37.61	135.08	44.63	0.98	14153.00	75.00	21000.00	0.81	86.12	39.71	B=11.51	AI=0	Li	
*	4304752647	WA-294806	Treater	11/25/2014	80.00	1220.00	0.00	2.50	8.30	1.0333	54901.66	93.75	8.68	4.62	42.54	0.12	19397.50	14.00	34000.00	0.36	41.22	42.13	B=15.03	AI=.06	L	
*	4304752647	WA-286590	TREATER	9/9/2014	80.00	2562.00	0.00	5.00	8.50	1.0383	58985.78	140.33	16.40	2.60	35.63	0.12	25031.70	45.00	31000.00	0.39	94.41	57.20	B=14.03	AI=0	Li	
*	4304752648	WA-294816	Treater	11/25/2014	0.00	2684.00	0.00	7.50	8.50	1.0264	45195.03	103.53	2.17	2.03	45.05	0.13	14079.30	182.00	28000.00	0.15	40.93	35.62	B=32.9	AI=.01	L	
*	4304752648	WA-286588	TREATER	9/9/2014	80.00	1952.00	0.00	10.00	8.00	1.0166	27735.22	310.96	1.33	460.81	33.70	6.54	9809.72	40.00	15000.00	4.69	84.13	31.34	B=20.13	AI=.81		
*	4304752654	WA-294813	Treater	11/25/2014	0.00	2146.00	0.00	7.00	8.50	1.029	49048.67	109.62	0.34	1.21	63.83	0.16	15557.80	1067.00	30000.00	0.11	48.20	16.01	B=19.06	AI=0	Li	
*	4304752654	WA-286589	TREATER	9/9/2014	0.00	3904.00	0.00	5.00	8.00	1.0328	51990.24	321.08	1.27	57.45	71.69	1.54	19303.60	1180.00	27000.00	0.15	117.56	31.90	B=25.91	AI=0	L	
*	4304752655	WA-294782	Treater	11/25/2014	0.00	6832.00	0.00	37.50	8.70	1.0291	50092.28	25.36	0.56	0.69	27.60	0.15	14066.20	1056.00	28000.00	0.05	38.25	7.02	B=22.33	AI=.01		
*	4304752655	WA-287364	TREATER	9/16/2014	0.00	7584.00	0.51	50.00	8.70	1.0282	45067.37	192.14	1.19	3.78	36.91	0.45	16332.70	805.00	20000.00	0.12	91.36	22.67	B=29.9	AI=0	Li	
*	4304752655	WA-286598	TREATER	9/9/2014	0.00	6588.00	0.00	75.00	8.60	1.0282	44618.05	354.90	1.63	29.01	4.10	1.13	16475.10	1049.00	20000.00	0.14	89.07	25.97	B=25.14	AI=0	Li	
*	4304752656	WA-294780	Treater	11/25/2014	80.00	2940.00	0.00	7.50	8.30	1.0156	27940.14	67.13	7.09	8.46	29.05	0.82	8739.78	50.00	16000.00	0.91	38.23	17.86	B=28.93	AI=.11	L	
*	4304752656	WA-286587	TREATER	9/9/2014	80.00	3660.00	0.00	5.00	8.00	1.0175	30115.40	69.34	2.88	87.06	28.48	1.28	9903.25	262.00	16000.00	0.96	79.60	20.55	B=28.27	AI=0	Li	
*	4304752661	WA-294801	Treater	11/25/2014	0.00	2196.00	0.00	2.50	8.30	1.0135	24510.40	60.26	2.75	11.93	20.98	0.32	8040.14	86.00	14000.00	0.21	35.45	11.13	B=27.1	AI=.07	L	
*	4304752661	WA-286606	TREATER	9/9/2014	0.00	2562.00	0.00	5.00	8.30	1.0162	31044.55	60.27	36.89	5.58	16.22	0.25	7219.52	56.00	21000.00	0.79	73.58	13.45	B=26.9	AI=0	Li=1	
*	(S)155356	WA-299442	Treater	1/30/2015	0.00	4392.00	0.14	25.00	9.00	1.0127	23644.09	18.94	6.25	19.50	4.08	0.33	7074.15	41.00	12000.00	1.02	39.17	5.97	B=61.63	AI=.06		
*	(S)155356	WA-296444	Treater	12/23/2014	0.00	3660.00	2.60	65.00	9.00	1.0148	26240.75	28.00	4.50	1.70	14.00	0.55	8520.00	453.00	13000.00	2.50	464.00	8.90	AI	5.7	Li	35
*	(S)155356	WA-290077	Treater	10/10/2014	0.00	3050.00	0.00	40.00	9.00	1.014	26447.62	20.00	24.00	0.52	7.20	0.08	7248.00	6.00	16000.00	0.00	58.00	6.00	B=60	AI=0	Li=1	
*	4304732663	WA-299445	Treater	1/30/2015	0.00	1220.00	0.06	20.00	7.70	1.0259	42385.18	141.22	19.27	10.11	51.94	0.16	15754.70	8.00	25000.00	0.12	64.44	78.75	B=17.34	AI=0	Li	
*	4304752657	WA-299432	Treater	1/30/2015	0.00	976.00	0.16	15.00	8.60	1.0071	14987.05	51.71	4.30	46.58	12.05	0.41	4672.35	99.00	9000.00	0.41	38.95	7.68	B=20.8	AI=.31	L	
*	4304752658	WA-299441	Treater	1/30/2015	160.00	1586.00	0.10	15.00	7.70	1.0181	30387.86	145.77	37.01	73.20	40.40	1.00	11267.30	73.00	17000.00	0.38	68.08	54.02	B=13.08	AI=.02		
*	4304752659	WA-299444	Treater	1/30/2015	80.00	1708.00	0.39	20.00	7.60	1.0101	18702.70	47.54	44.42	192.67	14.50	1.38	6513.72	69.00	10000.00	1.05	49.84	12.99	B=16.36	AI=.3	L	
*	4304752665	WA-299437	Treater	1/30/2015	0.00	6222.00	3.05	45.00	9.00	1.0112	21341.06	12.71	6.30	40.61	3.94	0.44	5952.68	21.00	9000.00	2.34	34.68	4.05	B=126.0	AI=.18		
*	4304752667	WA-299439	Treater	1/30/2015	160.00	2928.00	0.57	25.00	8.40	1.0162	25073.87	84.05	5.77	659.78	41.40	5.19	11169.10	47.00	10000.00	6.33	64.42	8.96	B=51.33	AI=3.38		
*	4304752660	WA-286755	WELLHEAD	9/10/2014	80.00	5368.00	0.00	45.00	8.00	1.0095	18605.10	9.49	27.36	4.07	1.51	0.20	5122.22	17.00	8000.00	0.31	52.28	2.66	B=68.63	AI=0	Li	
*	4304752660	WA-286585	TREATER	9/9/2014	0.00	4392.00	0.00	5.00	8.00	1.0075	17725.06	5.50	13.70	4.81	0.60	0.15	2277.35	4.00	11000.00	0.01	25.52	1.42	B=39.37	AI=0	Li	
*	4304752668	WA-299431	Treater	1/30/2015	0.00	3904.00	0.20	25.00	8.50	1.009	17535.75	8.14	7.43	9.77	4.81	0.16	5426.04	105.00	8000.00	0.33	31.22	2.92	B=61.07	AI=.14		
*	4304752668	WA-286586	TREATER	9/9/2014	0.00	6344.00	0.00	20.00	8.50	1.01	20066.23	18.52	7.92	14.46	3.65	0.20	4584.26	46.00	9000.00	0.17	43.57	3.48	B=65.88	AI=0	Li	
*	4304752666	WA-299443	Treater	1/30/2015	0.00	2496.00	0.10	45.00	8.90	1.0068	14823.45	23.44	6.67	15.93	6.18	0.20	4145.29	50.00	8000.00	0.34	30.99	4.05	B=44.96	AI=.3	L	
*	4304752666	WA-286593	TREATER	9/9/2014	0.00	3050.00	0.00	0.00	8.70	1.0069	15034.32	25.50	5.33	17.00	2.13	0.23	3886.80	0.00	8000.00	0.34	43.34	3.65	B=50.96	AI=0	Li	

*	4304752670	WA-299428	Treater	1/30/2015 0.00	2440.00	0.22	40.00	8.80	1.0077	16735.04	10.94	3.77	24.62	3.49	0.20	4119.78	66.00	10000.00	5.01	26.65	3.10	B=31.94	AI=.1	Li=
*	4304752669	WA-299433	Treater	1/30/2015 0.00	3782.00	0.26	55.00	8.60	1.0096	18106.09	10.23	4.64	9.28	3.39	0.16	6115.31	105.00	8000.00	0.29	37.07	3.02	B=118.44	AI=.25	Li=
*	(S)40411	WA-290076	Treater	10/10/2014 80.00	1220.00	0.01	5.00	7.90	1.0192	34115.03	89.00	14.00	21.00	22.00	0.30	10425.00	88.00	22000.00	1.80	212.00	17.00	B=10	AI=0	Li=3.4
*	(S)179890	WA-286601	TREATER	9/9/2014 0.00	8418.00	0.00	40.00	8.90	1.0219	36301.09	9.71	0.73	8.13	2.72	0.43	12285.30	515.00	15000.00	0.23	58.24	2.60	B=60.65	AI=0	Li=
*	(S)16373	WA-296321	AFTER FILTERS	12/18/2014 0.00	7198.00	0.00	200.00	8.70	1.0254	43628.14	85.41	0.74	6.97	39.74	0.70	12672.80	481.00	23000.00	0.09	39.62	27.69	B=45.63	AI=.12	Li=
*	(S)16373	WA-296324	BEFORE FILTERS	12/18/2014 0.00	7198.00	0.01	140.00	8.70	1.028	46864.93	78.59	0.76	6.75	39.23	0.75	12542.70	895.00	22000.00	0.04	4031.00	27.24	B=45.47	AI=.08	Li=
*	(S)16373	WA-287425	Wellhead	9/17/2014 240.00	2562.00	0.00	5.00	8.40	1.0227	36457.08	138.32	7.31	5.53	42.94	0.45	14504.30	41.00	19000.00	0.12	91.84	43.38	B=24.4	AI=1.14	Li=

Units of Measurement: **Standard**

Water Analysis Report

Production Company: **FINLEY RESOURCES**  
 Well Name: **UTE TRIBAL 13-11A-4-1**  
 Sample Point: **Treater**  
 Sample Date: **3/11/2013**  
 Sample ID: **WA-236479**

Sales Rep: **James Patry**  
 Lab Tech: **Layne Wilkerson**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	3/20/2013	Sodium (Na):	17728.25	Chloride (Cl):	27000.00
System Temperature 1 (°F):	60.00	Potassium (K):	106.00	Sulfate (SO4):	557.00
System Pressure 1 (psig):	1300.0000	Magnesium (Mg):	73.00	Bicarbonate (HCO3):	1512.80
System Temperature 2 (°F):	180.00	Calcium (Ca):	339.00	Carbonate (CO3):	
System Pressure 2 (psig):	14.7000	Strontium (Sr):	46.00	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.029	Barium (Ba):	1.70	Propionic Acid (C2H5COO)	
pH:	8.20	Iron (Fe):	2.70	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	47398.56	Zinc (Zn):	0.10	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	0.09	Fluoride (F):	
Dissolved CO2 (mg/L):	80.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.42	Silica (SiO2):	31.50
H2S in Water (mg/L):	15.00				

Notes:

B=20 AI=.13

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	14.00	2.15	218.20	0.39	0.60	2.89	1.49	1.96	1.94	0.00	0.00	0.00	0.00	0.00	0.00	8.37	0.05
166.00	157.00	2.05	183.43	0.43	0.63	2.86	1.49	1.86	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.05
153.00	300.00	2.00	174.08	0.48	0.67	2.89	1.49	1.80	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.64	0.05
140.00	443.00	1.96	165.07	0.53	0.72	2.93	1.49	1.74	1.93	0.00	0.00	0.00	0.00	0.00	0.00	8.83	0.05
126.00	585.00	1.91	156.39	0.60	0.76	2.98	1.49	1.68	1.92	0.00	0.00	0.00	0.00	0.00	0.00	9.02	0.05
113.00	728.00	1.87	148.11	0.67	0.80	3.05	1.49	1.61	1.91	0.00	0.00	0.00	0.00	0.00	0.00	9.24	0.05
100.00	871.00	1.83	140.31	0.76	0.83	3.13	1.49	1.54	1.90	0.00	0.00	0.00	0.00	0.00	0.00	9.47	0.05
86.00	1014.00	1.80	133.02	0.85	0.87	3.22	1.49	1.46	1.89	0.00	0.00	0.00	0.00	0.00	0.00	9.72	0.05
73.00	1157.00	1.77	126.29	0.96	0.90	3.34	1.49	1.39	1.88	0.00	0.00	0.00	0.00	0.00	0.00	9.99	0.05
60.00	1300.00	1.74	120.05	1.08	0.93	3.47	1.49	1.31	1.86	0.00	0.00	0.00	0.00	0.00	0.00	10.29	0.05

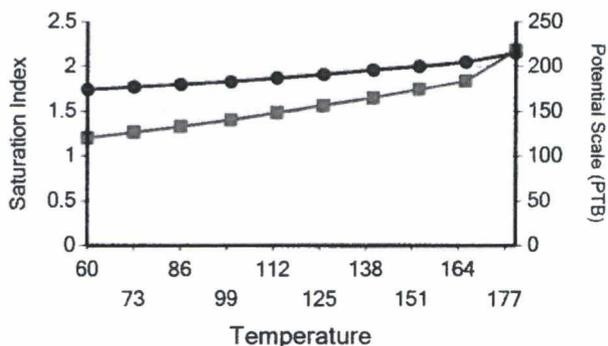
Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.04	9.60	0.04	6.07	37.45	3.59	18.98	8.37	2.10
166.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	9.81	0.04	5.28	34.53	3.11	17.74	7.77	2.09
153.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	10.09	0.04	4.77	32.19	2.82	16.88	7.46	2.09
140.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.40	0.04	4.25	29.29	2.53	15.82	7.14	2.09
126.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.72	0.04	3.72	26.06	2.24	14.55	6.82	2.09
113.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.07	0.04	3.19	22.67	1.95	13.13	6.51	2.09
100.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.45	0.04	2.66	19.24	1.66	11.57	6.21	2.08
86.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86	0.04	2.12	15.77	1.37	9.92	5.91	2.08
73.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.31	0.04	1.59	12.25	1.09	8.19	5.63	2.07
60.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.79	0.04	1.07	8.63	0.82	6.42	5.37	2.06

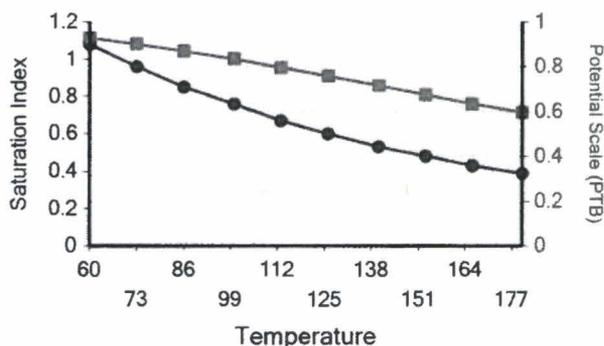
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

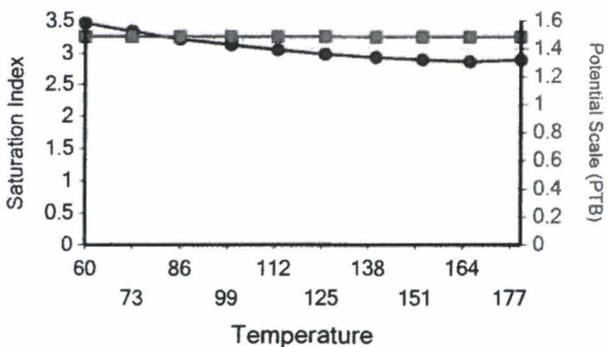
Calcium Carbonate



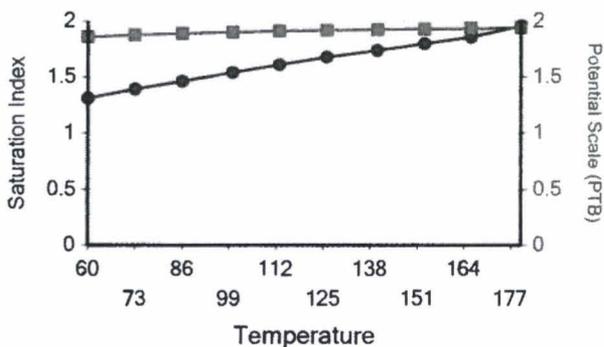
Barium Sulfate



Iron Sulfide

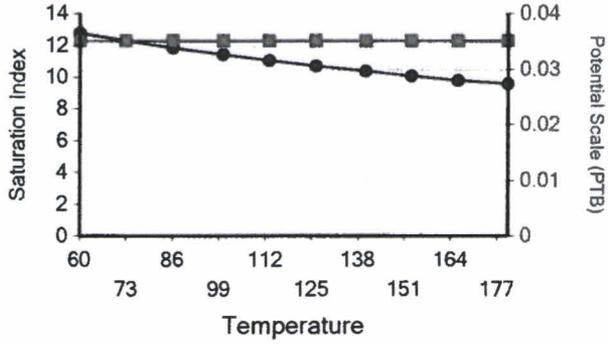


Iron Carbonate

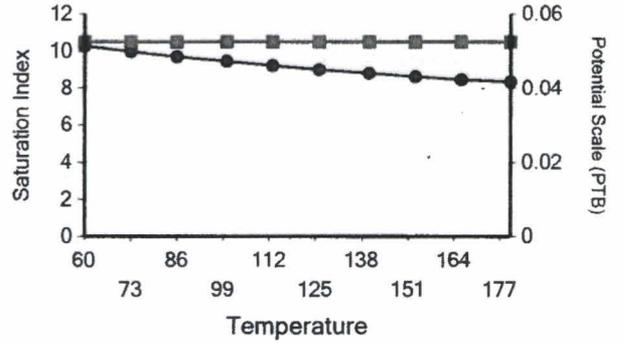


Water Analysis Report

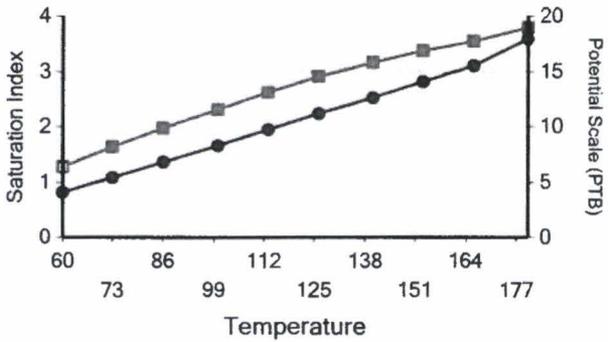
Lead Sulfide



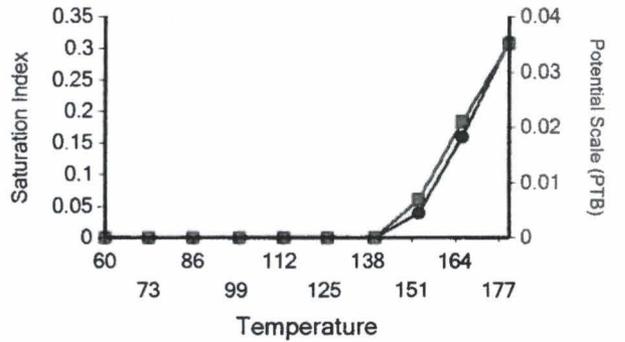
Zinc Sulfide



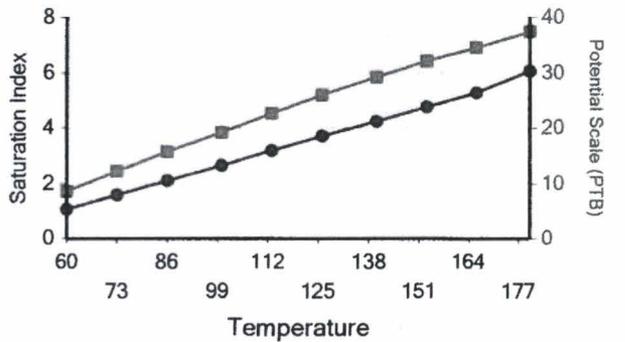
Ca Mg Silicate



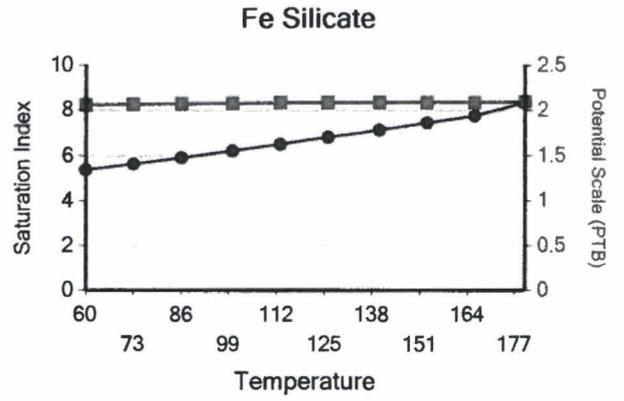
Zinc Carbonate



Mg Silicate



Water Analysis Report



Units of Measurement: **Standard**

Water Analysis Report

Production Company: **FINLEY RESOURCES**

Well Name: **UTE TRIBAL 13-08A**

Sample Point: **Well**

Sample Date: **3/18/2013**

Sample ID: **WA-237681**

Sales Rep: **James Patry**

Lab Tech: **Layne Wilkerson**

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
Test Date:	3/27/2013	Cations		Anions	
		mg/L		mg/L	
System Temperature 1 (°F):	60.00	Sodium (Na):	18406.46	Chloride (Cl):	29000.00
System Pressure 1 (psig):	1300.0000	Potassium (K):	63.00	Sulfate (SO <sub>4</sub> ):	4.00
System Temperature 2 (°F):	190.00	Magnesium (Mg):	76.00	Bicarbonate (HCO <sub>3</sub> ):	2562.00
System Pressure 2 (psig):	14.7000	Calcium (Ca):	643.00	Carbonate (CO <sub>3</sub> ):	
Calculated Density (g/ml):	1.032	Strontium (Sr):		Acetic Acid (CH <sub>3</sub> COO)	
pH:	8.10	Barium (Ba):	40.00	Propionic Acid (C <sub>2</sub> H <sub>5</sub> COO)	
Calculated TDS (mg/L):	51321.78	Iron (Fe):	523.00	Butanoic Acid (C <sub>3</sub> H <sub>7</sub> COO)	
CO <sub>2</sub> in Gas (%):		Zinc (Zn):	0.40	Isobutyric Acid ((CH <sub>3</sub> ) <sub>2</sub> CHCOO)	
Dissolved CO <sub>2</sub> (mg/L):	80.00	Lead (Pb):	0.02	Fluoride (F):	
H <sub>2</sub> S in Gas (%):		Ammonia NH <sub>3</sub> :		Bromine (Br):	
H <sub>2</sub> S in Water (mg/L):	8.00	Manganese (Mn):	3.90	Silica (SiO <sub>2</sub> ):	

Notes:

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Celestite SrSO <sub>4</sub>		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
190.00	14.00	2.67	485.87	0.00	0.00	4.86	7.25	4.53	380.13	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.21
175.00	157.00	2.55	426.70	0.00	0.00	4.81	7.25	4.41	379.79	0.00	0.00	0.00	0.00	0.00	0.00	8.57	0.21
161.00	300.00	2.49	411.47	0.00	0.00	4.83	7.25	4.35	379.63	0.00	0.00	0.00	0.00	0.00	0.00	8.75	0.21
146.00	443.00	2.44	396.64	0.00	0.00	4.86	7.25	4.28	379.43	0.00	0.00	0.00	0.00	0.00	0.00	8.93	0.21
132.00	585.00	2.39	381.83	0.00	0.00	4.91	7.25	4.21	379.17	0.00	0.00	0.00	0.00	0.00	0.00	9.14	0.21
117.00	728.00	2.34	367.22	0.00	0.00	4.98	7.25	4.14	378.82	0.00	0.00	0.00	0.00	0.00	0.00	9.36	0.21
103.00	871.00	2.30	352.93	0.00	0.00	5.06	7.25	4.06	378.36	0.00	0.00	0.00	0.00	0.00	0.00	9.60	0.21
88.00	1014.00	2.26	339.09	0.01	0.08	5.15	7.25	3.98	377.74	0.00	0.00	0.00	0.00	0.00	0.00	9.87	0.21
74.00	1157.00	2.22	325.80	0.13	0.78	5.27	7.25	3.89	376.91	0.00	0.00	0.00	0.00	0.00	0.00	10.16	0.21
60.00	1300.00	2.19	313.02	0.26	1.41	5.42	7.25	3.80	375.81	0.00	0.00	0.00	0.00	0.00	0.00	10.48	0.21

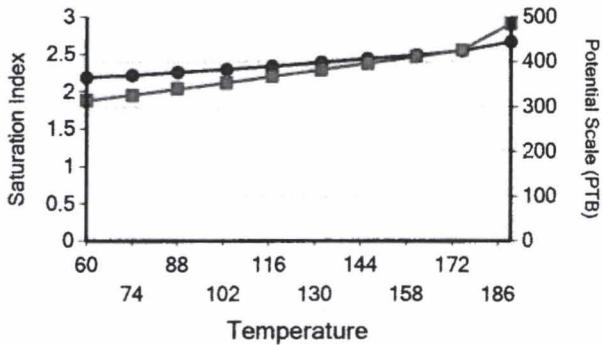
Temp (°F)	PSI	Hemihydrate CaSO <sub>4</sub> ·0.5H <sub>2</sub> O		Anhydrate CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
190.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.25	8.38	0.01	0.00	0.00	0.00	0.00	0.00	0.00
175.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.24	8.59	0.01	0.00	0.00	0.00	0.00	0.00	0.00
161.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.23	8.87	0.01	0.00	0.00	0.00	0.00	0.00	0.00
146.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.22	9.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00
132.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.20	9.52	0.01	0.00	0.00	0.00	0.00	0.00	0.00
117.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.16	9.89	0.01	0.00	0.00	0.00	0.00	0.00	0.00
103.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.11	10.29	0.01	0.00	0.00	0.00	0.00	0.00	0.00
88.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	10.72	0.01	0.00	0.00	0.00	0.00	0.00	0.00
74.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.20	0.01	0.00	0.00	0.00	0.00	0.00	0.00
60.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.72	0.01	0.00	0.00	0.00	0.00	0.00	0.00

Water Analysis Report

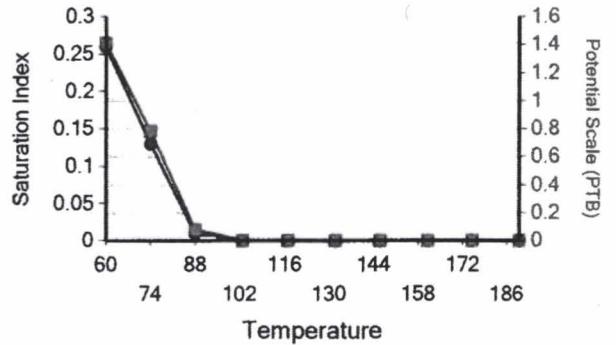
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide

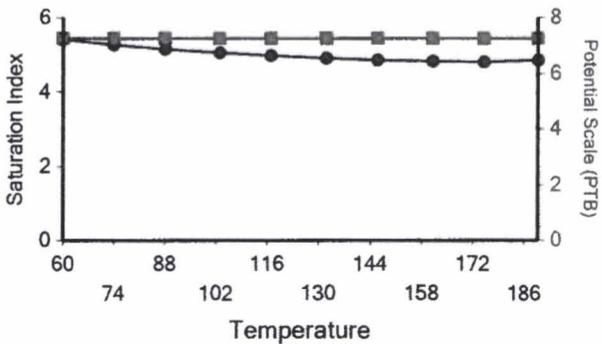
Calcium Carbonate



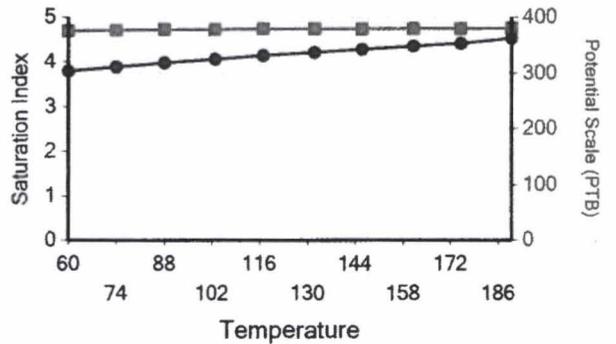
Barium Sulfate



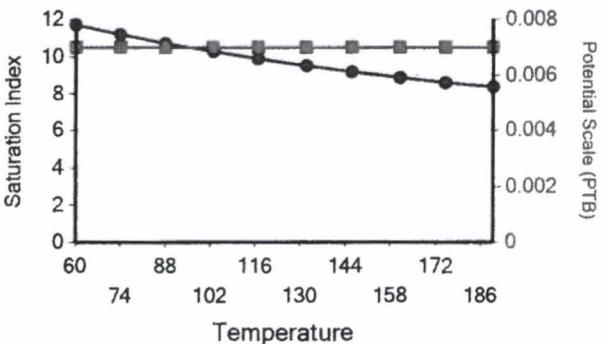
Iron Sulfide



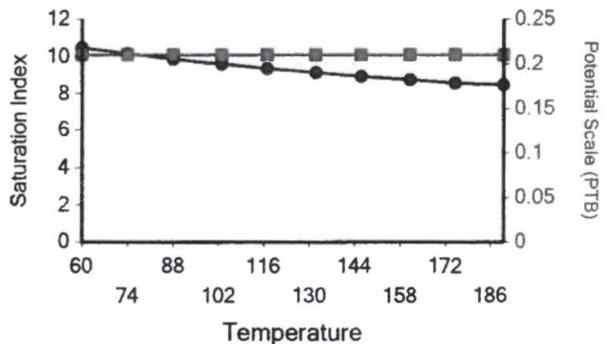
Iron Carbonate



Lead Sulfide



Zinc Sulfide



Units of Measurement: **Standard**

**Water Analysis Report**

Production Company: **FINLEY RESOURCES-EBUS**  
 Well Name: **UTE 13-1 SWD,UINTAH**  
 Sample Point: **Rig-Last Swab Run**  
 Sample Date: **1/27/2015**  
 Sample ID: **WA-298864**

Sales Rep: **James Patry**  
 Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	1/28/2015	Sodium (Na):	39722.90	Chloride (Cl):	120000.00
System Temperature 1 (°F):	190	Potassium (K):	732.80	Sulfate (SO4):	168.00
System Pressure 1 (psig):	1300	Magnesium (Mg):	80.06	Bicarbonate (HCO3):	17080.00
System Temperature 2 (°F):	60	Calcium (Ca):	1.96	Carbonate (CO3):	
System Pressure 2 (psig):	15	Strontium (Sr):	0.32	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.0971	Barium (Ba):	0.19	Propionic Acid (C2H5COO)	
pH:	9.20	Iron (Fe):	38.63	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	177851.53	Zinc (Zn):	1.27	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	1.46	Fluoride (F):	
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.19	Silica (SiO2):	23.75
H2S in Water (mg/L):	0.00				

**Notes:**

**B=93.72 Al=.74 Li=.31**

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	1.55	1.67	0.00	0.00	0.00	0.00	4.38	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74.00	157.00	1.57	1.67	0.00	0.00	0.00	0.00	4.44	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	300.00	1.58	1.67	0.00	0.00	0.00	0.00	4.49	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	443.00	1.59	1.67	0.00	0.00	0.00	0.00	4.53	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	585.00	1.59	1.67	0.00	0.00	0.00	0.00	4.57	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.00	728.00	1.60	1.67	0.00	0.00	0.00	0.00	4.59	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146.00	871.00	1.60	1.67	0.00	0.00	0.00	0.00	4.61	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161.00	1014.00	1.61	1.67	0.00	0.00	0.00	0.00	4.62	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.00	1157.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	1300.00	1.62	1.68	0.00	0.00	0.00	0.00	4.63	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

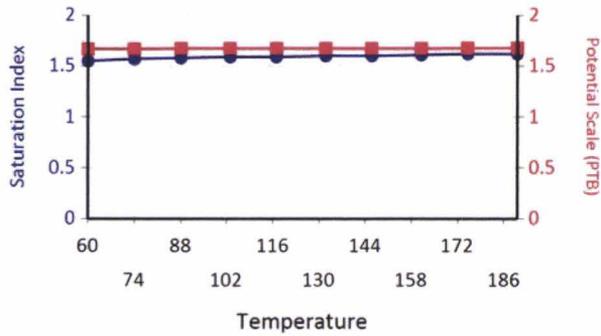
Temp (°F)	PSI	Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.80	0.00	0.00	9.59	28.80	3.90	3.71	16.56	25.75
74.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.82	0.00	0.00	9.94	28.80	4.03	3.71	16.63	25.75
88.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.83	0.00	0.00	10.28	28.80	4.16	3.71	16.72	25.75
103.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.84	0.00	0.00	10.63	28.80	4.29	3.71	16.82	25.75
117.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.84	0.00	0.00	10.97	28.80	4.43	3.71	16.93	25.75
132.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.84	0.00	0.00	11.31	28.80	4.57	3.71	17.04	25.75
146.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	2.14	0.85	0.00	0.00	11.65	28.80	4.72	3.71	17.15	25.75
161.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.85	0.00	0.00	11.97	28.80	4.87	3.71	17.26	25.75
175.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.85	0.00	0.00	12.30	28.80	5.01	3.71	17.37	25.75
190.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.85	0.00	0.00	12.61	28.80	5.16	3.71	17.48	25.75

Water Analysis Report

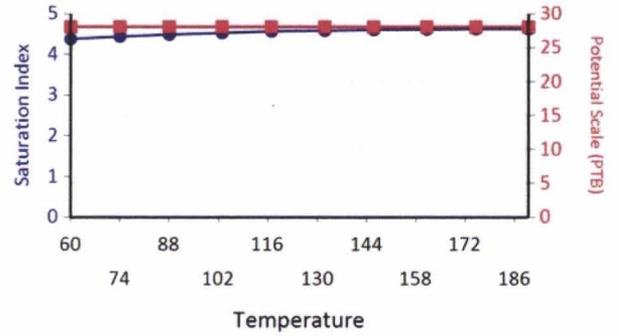
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

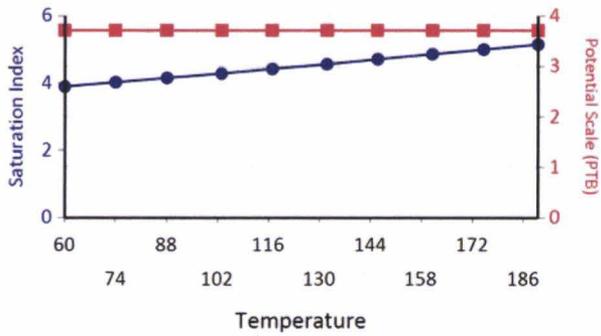
Calcium Carbonate



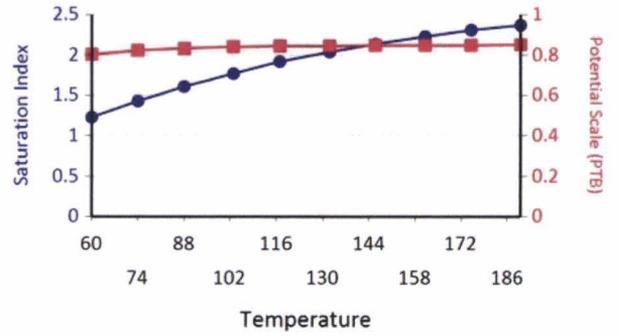
Iron Carbonate



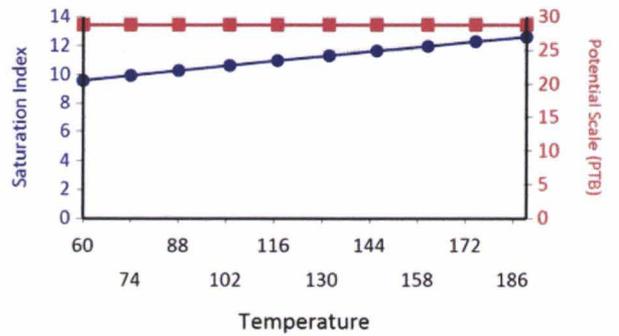
Ca Mg Silicate



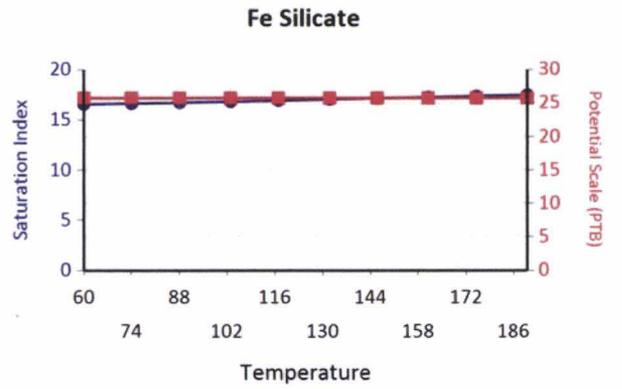
Zinc Carbonate

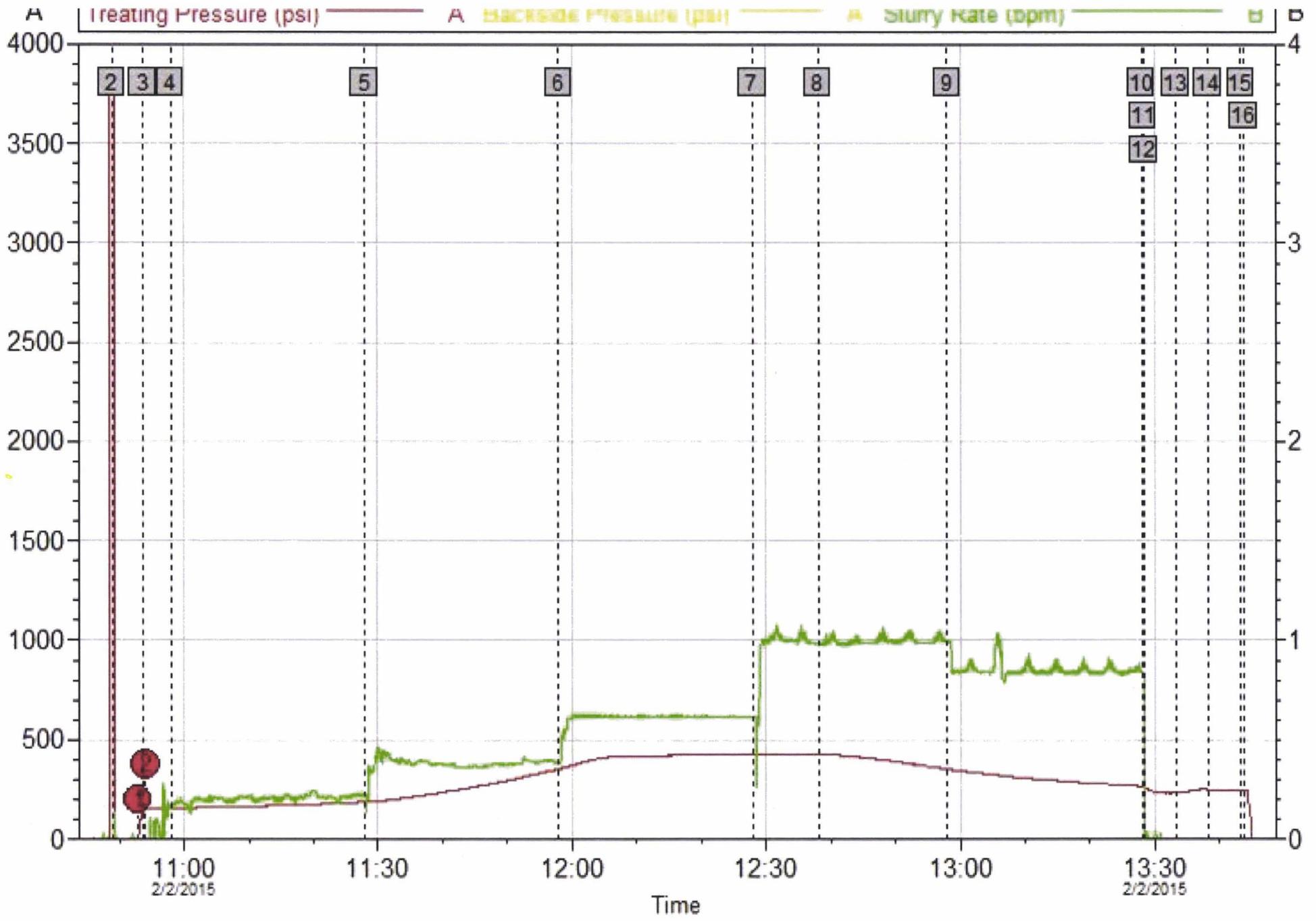


Mg Silicate

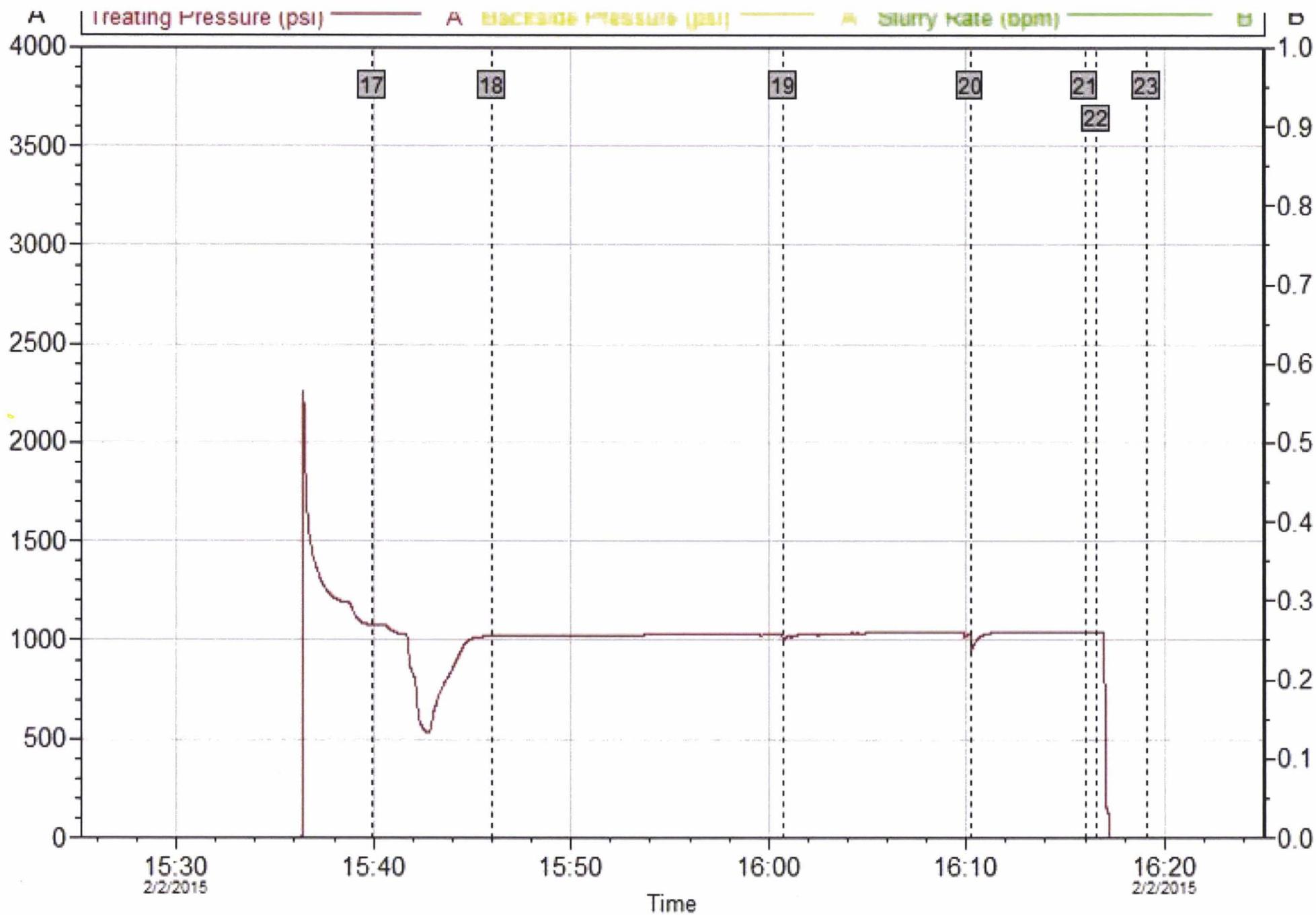


Water Analysis Report





Customer: FINLEY RESOURCES INC - EBUS	Job Date: 02-Feb-2015	Sales Order #: 0902095959
Well Description: Ute 13-1 -4-1 SWD	UWI:	



Customer: FINLEY RESOURCES INC - EBUS  
 Well Description: Ute 13-1 -4-1 SWD

Job Date: 02-Feb-2015  
 UWI:

Sales Order #: 0902095959

INSITE for Stimulation v4.5.1  
 02-Feb-15 16:23





INSPECTION FORM

STATE OF UTAH  
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: Ute 13-1 SWD API Number: 43-047-54256  
 Qtr/Dir: SWSW Section: 13 Township: 4S Range: 1E  
 Company Name: Finley Resources, Inc.  
 Lease: State \_\_\_\_\_ For Surface Federal \_\_\_\_\_ Indian \_\_\_\_\_  
 Inspector: Chris Jensen Date: 2/7/2015

Initial Conditions:

Tubing - Rate: 0 Pressure: 300# psi

Casing/Tubing Annulus - Pressure: 10 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	1020	300
5	1020	300
10	1020	10
15	1020	10
20	1020	10
25	1020	10
30	1020	300#

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 300# psi

Casing/Tubing Annulus Pressure \_\_\_\_\_ psi

COMMENTS:

Witness Chris Jensen

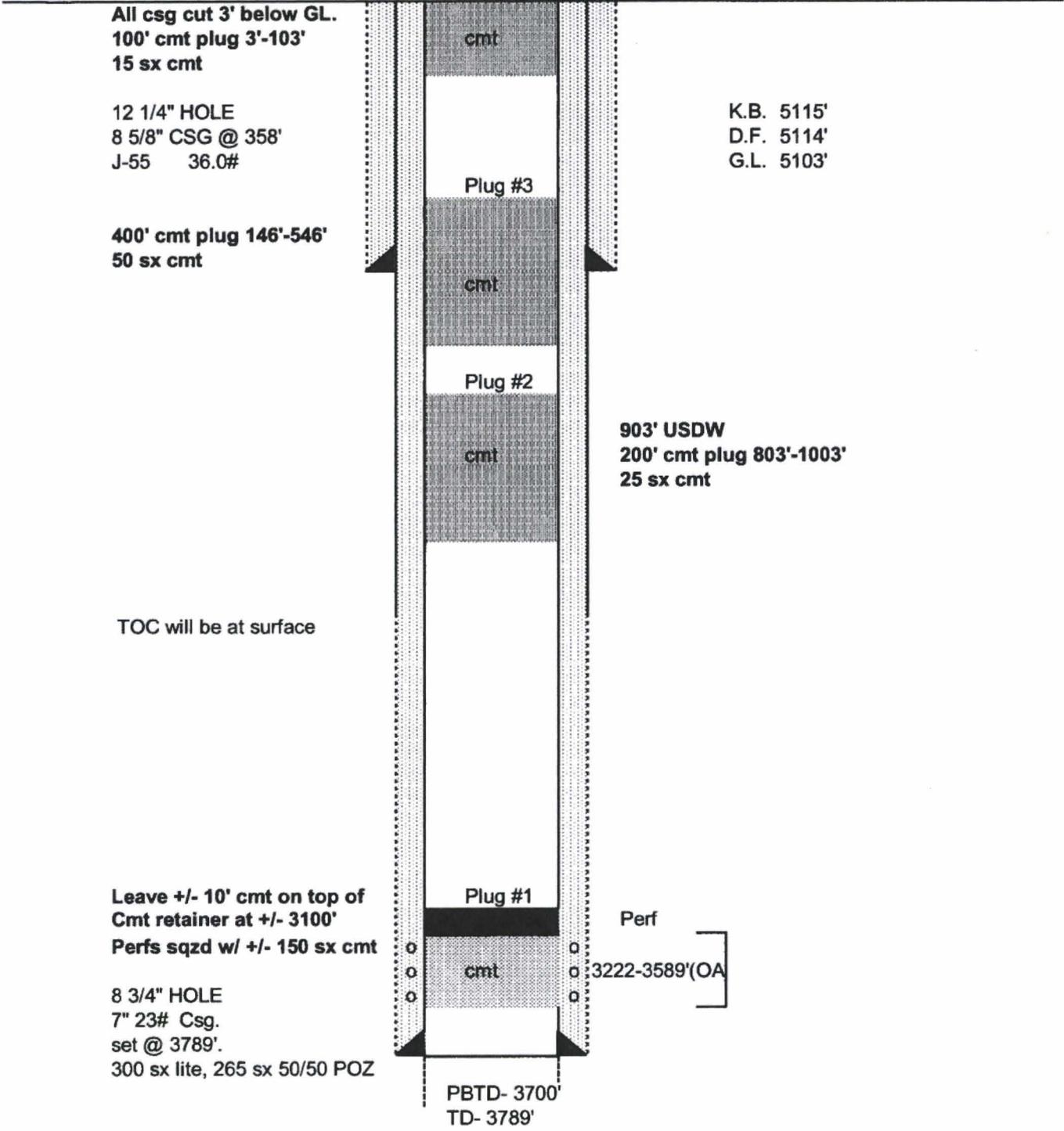
Operator Representative

James A. Simonson 435-630-1023



**Finley Resources, Inc.**

**Ute 13-1 SWD  
Uintah County, Utah  
P&A Schematic  
Plug #4**



# Ute Tribal 13-10A-4-1

Spud Date: 10/18/13  
 Completion Date: 11/08/13  
 GL: 5117' KB:5130'

## Wellbore Diagram

## FRAC JOB

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (505')  
 DEPTH LANDED: 505'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

### PRODUCTION CASING

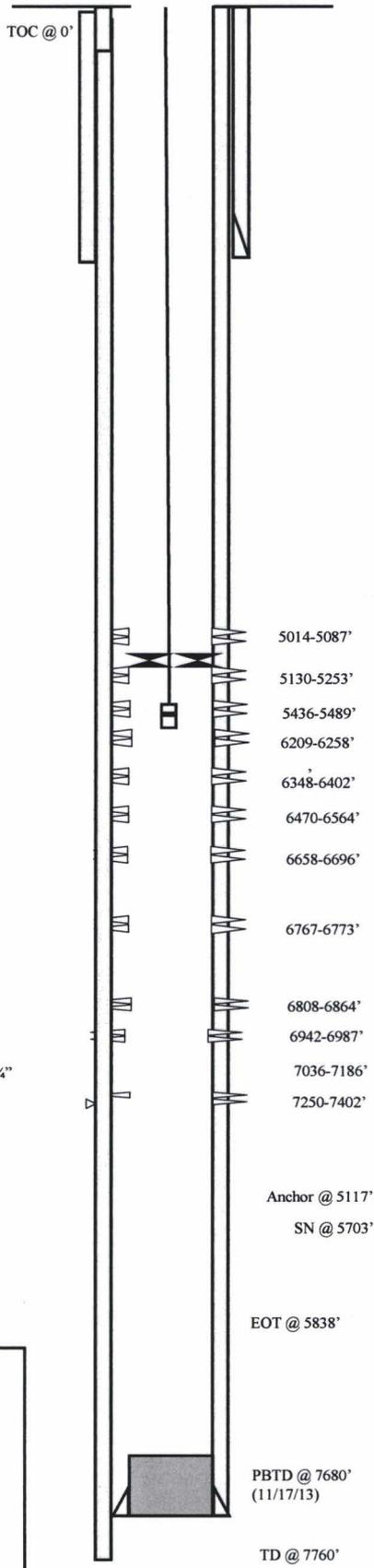
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 183 jts.(7730') (FC@7687')  
 HOLE SIZE: 7-7/8"  
 TOTAL DEPTH: (7760')  
 CEMENT DATA: 400 sxs 10.0 ppg & 700 sxs 12.0 ppg  
 CEMENT TOP AT: 270' per CBL dated 10/30/13

### TUBING ( 11/18/2013 )

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 157 jts (5114.86')  
 TUBING ANCHOR: 5117.55'  
 NO. OF JOINTS: 18 jts (584.49')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 5703.14' KB  
 Perf.sub: 4.2'  
 No. OF JOINTS: 4 jts (129.95')  
 2-7/8" Bull Plug (0.72')  
 TOTAL STRING LENGTH: EOT @ 5837.99' KB'

### SUCKER RODS (10/15/13)

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 1-2' x 7/8" pony rods, 86 x 7/8" plain rods, 118 x 3/4" plain rods; 10x3/4" guided rods; 10 x 1-1/2" weight bars; 11-4"x1" stabilizers  
 PUMP SIZE: 2-1/2 x 1-3/4" x 16' RHAC  
 STROKE LENGTH: 149"  
 PUMP SPEED, SPM:  
 PUMPING UNIT:



Date	Interval	Fluid
11-07-13	7250-52; 7353-55'; 7396-7402'	<b>Frac Wasatch sand as follows:</b> Frac with 50M# 20/40 sand with 20# Lightning fluid and 744 bbl.
11-07-13	7036-39'; 7132-36'; 7184-86'	<b>Frac Wasatch sand as follows:</b> Frac with 45M# 20/40 sand in 1730 bbls Lightning 20# fluid.
11-07-13	6942-44'; 6955-58'; 6962-65'; 6977-79' z7 6984-87';	<b>Frac Uteland Butte zones</b> with 50M# of sand in 2340 bbl. Lightning 20# fluid (HYBRID)
11-08-13	6808-12'; 6824-26'; 6830-32'; 6843-47' & 6860-64';	<b>Frac Castle Peak sands</b> with 80M# 20/40 Lightning 17# fluid in 1800 bbl. (HYBRID)
11-08-13	6767-6773'	<b>Frac Castle Peak zones with</b> 51M#20/40 sand in 690 bbls. Lightning 17 fluid.
11-08-13	6658-64'; 6692-96'.	<b>Frac Castle Peak sands</b> with 61M# 20/40 sand in 825 bbl. Lightning 17# fluid
11-08-13	6470-72'; 6531-34'; 6542-45'; 6560-64'	<b>Frac Black Shale/Castle Peak</b> with 81M# 20/40 sand in 970 bbl. with Lightning 17# fluid
11-09-13	6348-54'; 6364-66'; 6382-86' & 6400-02'.	<b>Frac Black Shale zones</b> with 71M# 20/40 sand in 830 bbl. Lightning 17# fluid
11-9-13:	6209-11'; 6221-24'; 6233-36' & 6256-58'.	<b>Frac Douglas Creek zones</b> with 50M# 20/40 sand in 1300 bbl. Lightning 17# fluid (HYBRID)
11-9-13:	5436-38'; 5447-49'; 5472-76'; 5480-82' & 5487-89'	<b>Frac Garden Gulch zones</b> with 80M# 20/40 sand in 1850 bbl. Lightning 17# fluid (HYBRID)
11-9-13:	5130-34'; 5144-47'; 5184-86'; 5239-41' & 5251-53.	<b>Frac Garden Gulch zones</b> with 60M# 20/40 sand in 1380 bbl. Lightning 17# fluid (HYBRID)
11-9-13:	5014-16'; 5020-24' 5239-41' & 5251-53'	<b>Frac Garden Gulch/Green River</b> with 57M# 20/40 in 720 bbl. 17# gel

### PERFORATION RECORD

Interval	JSPF	Holes	Zone
7250-7402'	4 JSPF	40 Holes	Zone #1
7036-7186'	4 JSPF	36 Holes	Zone #2
6942-6987'	3 JSPF	39 Holes	Zone #3
6808-6864'	3 JSPF	48 Holes	Zone #4
6767-6773'	3 JSPF	18 Holes	Zone #5
6658-6696'	3 JSPF	30 Holes	Zone #6
6470-6564'	3 JSPF	36 Holes	Zone #7
6348-6402'	3 JSPF	42 Holes	Zone #8
6209-6258'	3JSPF	30 Holes	Zone #9
5436-5489'	3JSPF	36 Holes	Zone #10
5130-5253'	3JSPF	39 Holes	Zone #11
5014-5087'	3 JSPF	30 Holes	Zone #12

## FINLEY RESOURCES, INC.

### Ute Tribal 13-10A-4-1

2310'FSL & 1650'FEL (NW/SE)

Section 13, T4S, R1E

Uintah Co, Utah

API # 43-047-52647; Lease # 14-20-H62-4896

# Ute Tribal 13-11A-4-1

Spud Date: 12/1/12  
 Completion Date: 1/24/13  
 GL: 5127' KB: 5140'

## Wellbore Diagram

## FRAC JOB

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (505')  
 DEPTH LANDED: 505'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

### PRODUCTION CASING

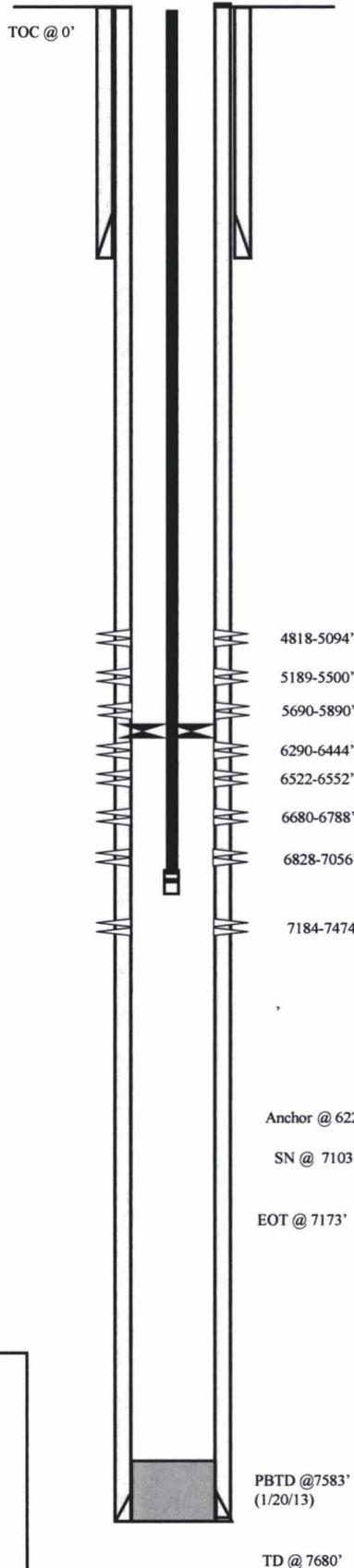
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 181 jts. (7663' shoe) (FC@7621')  
 HOLE SIZE: 7-7/8"  
 TOTAL DEPTH: (7680")  
 CEMENT DATA: 400 sxs 10.5 ppg & 700 sxs 12.0 ppg  
 CEMENT TOP AT: 230' per CBL 12/10/12

### TUBING ( 1/24/13)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 191 jts (6206.59') 13' KB; 1.34' stretch  
 TUBING ANCHOR: 6223.73'  
 NO. OF JOINTS: 27 jts (878.47')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 7103.30' KB  
 PERF. SUB: 4.16'  
 No. OF JOINTS: 2 jts (65.15')  
 2-7/8" BULL PLUG: (0.74')  
 TOTAL STRING LENGTH: EOT @ 7173.35' KB'

### SUCKER RODS (01/22/13)

POLISHED ROD: 1-1/2" x 30'  
 SUCKER RODS: 2', 4', x 7/8" pony rods; 115x 7/8" plain rods,  
 150 x 3/4" plain rods; 10x3/4" guided rods; 6 x 1-1/2" weight bars;  
 7-4'x1" stabilizers  
 PUMP SIZE: 2-1/2 x 1-1/2" x 12x16x18' RHAC w/ 3' screen  
 STROKE LENGTH: 141"  
 PUMP SPEED, SPM:  
 PUMPING UNIT:



01-10-13 7184-98 & 7464-74'. Tagged w/ Iridium	<b>Frac Wasatch sands w/ 73M# 20/40 sand in 805 bbl. Delta 140 fluid.</b>
01-10-13 6828-14'; 6850-56; 6868-71'; 6884-86'; 6914-18'; 6954-57'; 6967-70'; 6975-78'; 6990-92'; 6997-7000'; 7007-10'; 7054-56'. Tagged with Scandium	<b>Frac Castle Peak/ Uteland Buttes with 75M# 20/40 sand in 1200 bbls Delta 140 fluid.</b>
01-10-13 6680-83'; 6700-06' & 6776-88'.	<b>Frac Castle Peak zones with 63M# 20/40 sand in 600 bbls - Delta 140 fluid.</b>
01-10-13 6522-25'; 6532-34'; 6539-42' & 6546-52'.	<b>Frac Black Shale sands with 42M# 20/40 sand in 715 bbls Delta 140 fluid.</b>
01-10-13 6290-96'; 6313-19'; 6367-70; 6392-98'; 6412-15' & 6434-44'. 6496-99' & 6516-23'.	<b>Frac Black Shale zones with 97M# 20/40 sand in 960 bbls Delta 140 fluid.</b>
01-10-13 5690-94'; 5714-18'; 5846-50' & 5886-90'.	<b>Frac Douglas Creek /Garden Gulch w/ 48M # 20/40 sand in 520 bbl. Delta 140 fluid</b>
01-10-13 5189-92'; 5244-47'; 5343-47'; 5480-84'; 5488-92' & 5496-5500'.	<b>Frac Garden Gulch zones with 63,600# 20/40 sand in 655 bbl. w/ Delta 140 fluid</b>
01-10-13 4818-20'; 4852-56'; 4871-78'; 5055-59' & 5089-94'.	<b>Frac Garden Gulch/Green River w/ 71M# 20/40 in 925 bbl. Delta 140 fluid</b>

Halliburton performed the frac work.

## PERFORATION RECORD

7184-7474'	3 JSPP	72 holes	Zone #1
6828-7056'	3 JSPP	114holes	Zone #2
6680-6788'	3 JSPP	63 holes	Zone #3
6522-6552'	3 JSPP	42 holes	Zone #4
6290-6444'	3 JSPE	96 holes	Zone #5
5690-5890'	3 JSPE	48 holes	Zone #6
5189-5500'	3 JSPE	63 holes	Zone #7
4818-5094'	3 JSPE	72 holes	Zone #8

## FINLEY RESOURCES, INC.

**Ute Tribal 13-11A-4-1**  
 2310' FSL & 2310' FWL (NE/SW)  
 Section 13, T4S, R1E  
 Uintah Co, Utah

API # 43-047-52646; Lease # 14-20-H62-4896

# Ute 13-12A-4-1

Spud Date: 9-26-13  
 Completion Date: 10-25-13  
 GL: 5130' KB: 5143'

## Wellbore Diagram

## FRAC JOB

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (502')  
 DEPTH LANDED: 502'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

### PRODUCTION CASING

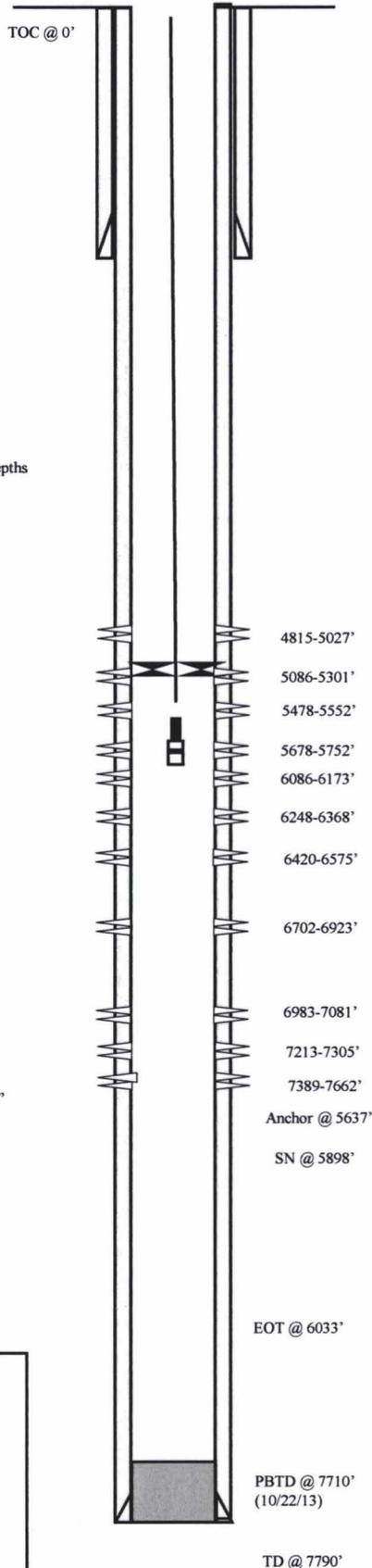
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 187 jts. (7762') (shoe set at 7775'); (FC @ 7730') KB Depths  
 HOLE SIZE: 7-7/8"  
 TOTAL DEPTH: 7790'  
 CEMENT DATA: 400 sxs 10.5 ppg lead and 700 sxs 12.0 ppg tail  
 CEMENT TOP AT: 270' per CBL 10/9/13

### TUBING (10-25-2013)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 173 jts (5634.71')  
 TUBING ANCHOR: 5637.41'  
 NO. OF JOINTS: 8 jts (260.08')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 5898.59' KB  
 PERF. SUB: 4.25  
 NO. OF JOINTS: 4 jts (130.01')  
 BULL PLUG: 2-7/8" (0.75')  
 TOTAL STRING LENGTH: EOT @ 6033.60' KB'

### SUCKER RODS (10/23/13)

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 2', 4' x 7/8" pony rods, 93 x 7/8" slick rods, 123 x 3/4" slick rods, 10-3/4" guided rods, 10 x 1-1/2" weight bars, 11-4' x 1" weight bars  
 PUMP SIZE: 2-1/2 x 1-1/2" x 16" with 21' dip tube  
 STROKE LENGTH: 149"  
 PUMP SPEED, SPM:  
 PUMPING UNIT:



10-14-13 7389-91'; 7541-43; 7600-02'; 7628-32' & 7658-62'	Frac Wasatch zones with 60M# 20/40 in 900 bbl. 20#
10-14-13 7213-15'; 7242-44'; 7283-85' & 7302-05'	Frac Wasatch zones with 40M# 20/40 in 685 bbls in a 20# system
10-14-13 6983-85'; 6989-91'; 6998-7000'; 7006-08'; 7016-18'; 7063-65' & 7079-81'	Frac Wasatch/Uteland Buttes with 75M# of sand and 1817 bbl. (20#) (HYBRID)
10-14-13 6702-04'; 6782-84'; 6818-22'; 6839-41'; 6855-58'; 6872-76'; 6892-94' & 6923-25'	Frac.Castle Peak/Uteland Butte with 120M# and 2690 bbl. (17#) (HYBRID)
10-15-13 6420-22'; 6428-30'; 6445-47'; 6459-61'; 6474-76'; 6482-84'; 6523-25'; 6538-40'; 6555-57' & 6573-75'	Frac Black Shale/Castle Peak w/ 120M# sand in 2635 bbl.(17#) (HYBRID)
10-15-13 6248-50' & 6362-68'	Frac Douglas Creek zones w/ 81M# sand in 990 bbl.—17#
10-15-13 6086-90'; 6146-52' & 6165-73'	Frac Douglas Creek zones w/ 101M# sand in 1260 bbl. (17#)
10-15-13 5678-82'; 5687-89'; 5694-96'; 5706-08' & 5750-52'	Frac Garden Gulch zones w/ 60M# sand in 1440 bbl. 17# (HYBRID)
10-15-13 5478-80'; 5493-96' & 5548-52'	Frac Garden Gulch zones w/ 60M# in 780 bbl.(17#)
10-15-13 5086-88'; 5132-36'; 5147-50'; 5186-88'; 5240-42'; 5254-56' & 5299-5301'	Frac Garden Gulch zones w/ 70M# in 2015 bbl. (17# HYBRID)
10-15-13 4815-17'; 4852-55'; 4870-73'; 4883-85'; 4895-97'; 5012-14'; 5014-18' & 5025-27'	Frac Mahogany Bench zones w/ 100M# in 2200 bbl. (17# HYBRID)

## PERFORATION RECORD

7389-7662'	3 JSFP	52 holes
7213-7305'	3 JSFP	27 holes
6983-7081'	3 JSFP	42 holes
6702-6923'	3 JSFP	63 holes
6420-6575'	3 JSPE	60 holes
6248-6368'	3 JSPE	24 holes
6086-6173'	3 JSPE	54 holes
5678-5752'	3 JSPE	36 holes
5478-5552'	3 JSPE	27 holes
5086-5301'	3 JSPE	51 holes
4815-5027'	3 JSPE	60 holes

## FINLEY RESOURCES, INC.

### Ute 13-12A-4-1

2383' FSL & 468' FWL (NW/SW)  
 Section 13, T4S, R1E  
 Uintah Co. Utah

API # 43-047-52648; Lease # 14-20-H62-4896

# Ute 13-13A-4-1

Spud Date: 10-03-13  
 Completion Date: 10-31-13  
 GL: 5109' KB: 5122'

## Wellbore Diagram

## FRAC JOB

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (502')  
 DEPTH LANDED: 502'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

### PRODUCTION CASING

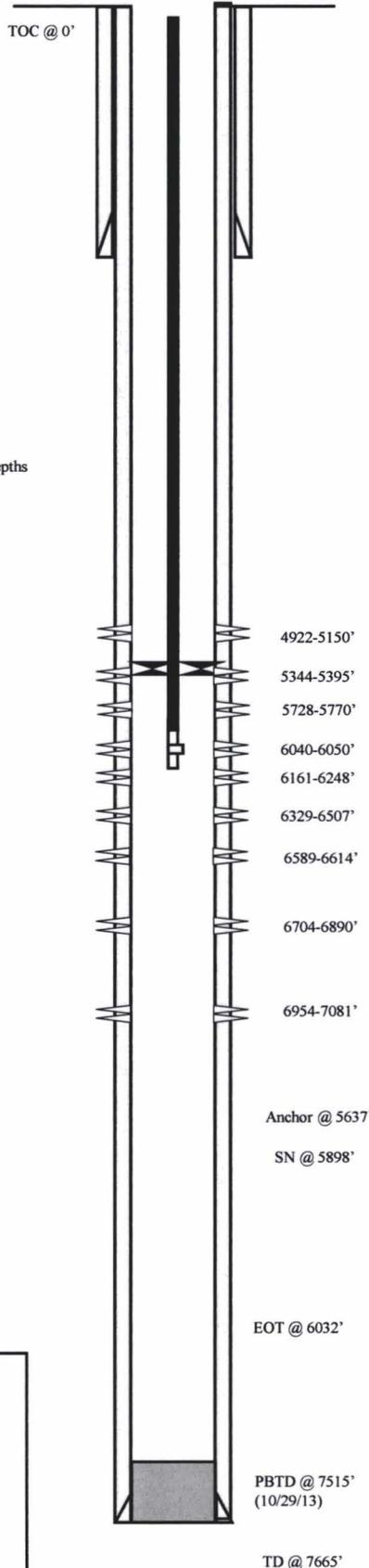
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 187 jts. (7611') (shoe set at 7654'); (FC @ 7609') KB Depths  
 HOLE SIZE: 7-7/8"  
 TOTAL DEPTH: 7665'  
 CEMENT DATA: 400 sxs 10.5 ppg lead and 700 sxs 12.0 ppg tail  
 CEMENT TOP AT: 180' per CBL 10/15/13

### TUBING (10-31-2013)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 173 jts (5619.61')  
 TUBING ANCHOR: 5636.58'  
 NO. OF JOINTS: 8 jts (260.03')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 6032.50' KB  
 PERF.SUB: 4.22'  
 NO. OF JOINTS: 4 jts (130.01')  
 BULL PLUG: 2-7/8" (0.71')  
 TOTAL STRING LENGTH: EOT @ 6033.60' KB'

### SUCKER RODS (10/31/13)

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 4' x 7/8" pony rod, 88 x 7/8" slick rods, 124 x 3/4" slick rods; 10-3/4" guided rods; 10 x 1-1/2" weight bars; 10-4"x1" weight bars  
 PUMP SIZE: 2-1/2 x 1-3/4" x 16' with 21' dip tube  
 STROKE LENGTH: 142"  
 PUMP SPEED, SPM:  
 PUMPING UNIT:



10-23-13 6954'-58'; 6996-98; 7015-19'; 7078-81'	Frac Wasatch zones with 50M# 20/40 in 700 bbl. 20# system
10-23-13 6704-06'; 6731-33'; 6738-40'; 6745-47'; 6764-66; 6812-14'; 6862-64'; 6873-75' & 6888-90'.	Frac Castle Peak/Uteland Butte w/ 100M# 20/40 in 2385 bbls 17# (HYBRID) system
10-23-13 6589-91'; 6597-99' & 6612-14'	Frac Castle Peak zones with 30M# of sand and 500 bbl. 17# system
10-23-13 6329-31'; 6344-46'; 6358-60'; 6372-74'; 6435-37'; 6454-56'; 6464-66'; 6492-94' & 6505-07'	Frac. Black Shale/Castle Peak with 100M# and 2170 bbl. (17#) (HYBRID)
10-23-13 6161-63'; 6170-72'; 6188-90'; 6204-07' & 6246-48'.	Frac Douglas Creek zones w/ 50M# sand in 1260 bbl. (17#) (HYBRID)
10-24-13 6040-50'	Frac Douglas Creek zone w/ 106M# sand in 1265 bbl.—17#
10-24-13 5728-32'; 5762-64' & 5768-70'.	Frac Douglas Creek zones w/ 40M# sand in 595 bbl. (17#)
10-24-13 5344-46'; 5382-84' & 5392-95';	Frac Garden Gulch zones w/ 60M# sand in 1380 bbl. 17# (HYBRID)
10-24-13 4922-24'; 4941-43'; 4956-58'; 4988-90'; 5033-35'; 5051-53'; 5079-81'; 5091-93' & 5146-50'.	Frac Garden Gulch zones w/ 115M# in 2200 bbl. (17#) (HYBRID)

## PERFORATION RECORD

6954-7081'	3 JSFP	42 holes
6704-6890'	3 JSFP	54 holes
6589-6614'	3 JSFP	18 holes
6329-6507'	3 JSFP	54 holes
6161-6248'	3 JSPE	33 holes
6040-6050'	3 JSPE	30 holes
5728-5770'	3 JSPE	24 holes
5344-5395'	3 JSPE	21 holes
4922-5150'	3 JSPE	54 holes

## FINLEY RESOURCES, INC.

### Ute 13-13A-4-1

462' FSL & 462' FWL (SW/SW)

Section 13, T4S, R1E

Uintah Co. Utah

API # 43-047-52654; Lease # 14-20-H62-4896

# Ute 13-14A-4-1

Spud Date: 10-10-13  
 Completion Date: 6/5/14  
 update

GL: 5109' KB: 5122'

## SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (502')  
 DEPTH LANDED: 502'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

## PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 181 jts. (shoe set at 7654'); (FC @ 7609') KB Depths  
 HOLE SIZE: 7-7/8"  
 DEPTH LANDED: 7654'  
 TOTAL DEPTH: 7664'  
 CEMENT DATA: 400 sxs 10.5 ppg lead and 700 sxs 12.0 ppg tail  
 CEMENT TOP AT: 270' per CBL 10/22/13

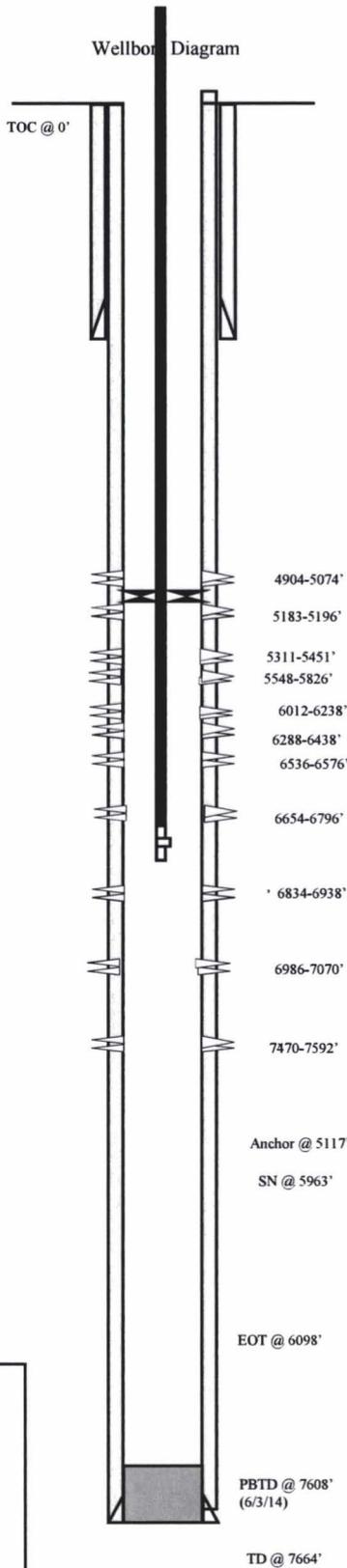
## TUBING (6/5/14) update

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 157 jts (5100.82')  
 TUBING ANCHOR: 5117.67'  
 NO. OF JOINTS: 26 jts (844.87')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 5963.64' KB  
 PERF.SUB: 4.26'  
 NO. OF JOINTS: 4 jts (129.98')  
 BULL PLUG: 2-7/8" (0.72')  
 TOTAL STRING LENGTH: EOT @ 6098.60' KB'

## SUCKER RODS (6/5/14)

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 2', 4', 8 x 7/8" pony rod, 87 x 7/8" slick rods,  
 125 x 3/4" slick rods, 10-3/4" guided rods, 12 x 1-1/2" weight bars,  
 13-4"x1" weight bars  
 PUMP SIZE: 2-1/2 x 1-1/2" x 16" with 21" dip tube  
 STROKE LENGTH: 148"  
 PUMP SPEED, SPM:  
 PUMPING UNIT:

## Wellbore Diagram



## FRAC JOB

10-28-13 7470-74' & 7588-92'.	Frac Wasatch zones with 36,500# 20/40 in 980 bbl. 20# system
10-28-13 6986-90' & 7066-70'.	Frac Wasatch zones with w/ 165M# 20/40 in 1730 bbls 20# system
5/28/14 6834-36'; 6847-49'; 6854-56'; 6861-63'; 6868-70'; 6876-78'; 6886-88'; 6901-03' & 6936-38'.	Frac Uteland Butte with 69M# of 20/40 in 1690 bbl. 20# Hybrid (Halliburton)
5/28/14 6654-56'; 6661-63'; 6683-85'; 6691-93'; 6714-16'; 6729-31'; 6749-51'; 6756-58'; 6764-66' & 6794-96'.	Frac Castle Peak/Uteland Butte with 101M# 20/40 in 2300 bbl. 17# HYBRID
5/28/14: 6536-40' & 6572-76'.	Frac Castle Peak with 65M# 20/40 in 690 bbl. 17#
5/28/14: 6288-90'; 6298-6300'; 6313-15'; 6328-30'; 6352-54'; 6367-69'; 6395-97'; 6401-03'; 6417-19' & 6436-38'.	Frac Black Shale/Castle Peak with 104M# 20/40 in 1900 bbl. 17# HYBRID
5/29/14: 6012-14'; 6115-17'; 6176-78'; 6226-30' & 6234-38'.	Frac Douglas Creek with 71M# 20/40 in 770 bbl. 17#
5/29/14: 5548-50' & 5822-26'.	Frac Garden Gulch/Douglas Creek with 40M# 20/40 in 495 bbl. 17#.
5/29/14: 5311-13'; 5376-79' & 5449-51'.	Frac Garden Gulch with 40M# 20/40 in 505 bbl. 17#
5/29/14: 5183-86' & 5192-96'.	Frac Garden Gulch w/ 40M# in 515 bbl. 17# x-link
5/29/14: 4904-06'; 4923-25'; 4972-74'; 4976-78'; 5032-36'; 5060-62' & 5072-74'.	Frac Mahogany Bench/Garden Gulch with 84M# 20/40 in 1035 bbl. 17# x-link

## PERFORATION RECORD

7470-7592'	3 JSPF	24 holes
6986-7070'	3 JSPF	24 holes
6834-6938'	3 JSPF	54 holes
6654-6796'	3 JSPF	60 holes
6536-6576'	3 JSPF	24 holes
6288-6438'	3 JSPF	60 holes
6012-6238'	3 JSPF	36 holes
5548-5826'	3 JSPF	18 holes
5311-5451'	3 JSPF	30 holes
5183-5196'	3 JSPF	21 holes
4904-5074'	3 JSPF	48 holes

## FINLEY RESOURCES, INC.

Ute 13-14A-4-1  
 462' FSL & 2310' FWL (SE/SW)  
 Section 13, T4S, R1E  
 Uintah Co. Utah  
 API # 43-047-52655; Lease # 14-20-H62-4896

# Ute 13-15A-4-1

Spud Date: 10-24-13  
 Completion Date: 11-25-13  
 GL: 5078' KB: 5091'

## Wellbore Diagram

## FRAC JOB

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 12 jts. (502')  
 DEPTH LANDED: 502'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 360 sxs Class "G" cmt

### PRODUCTION CASING

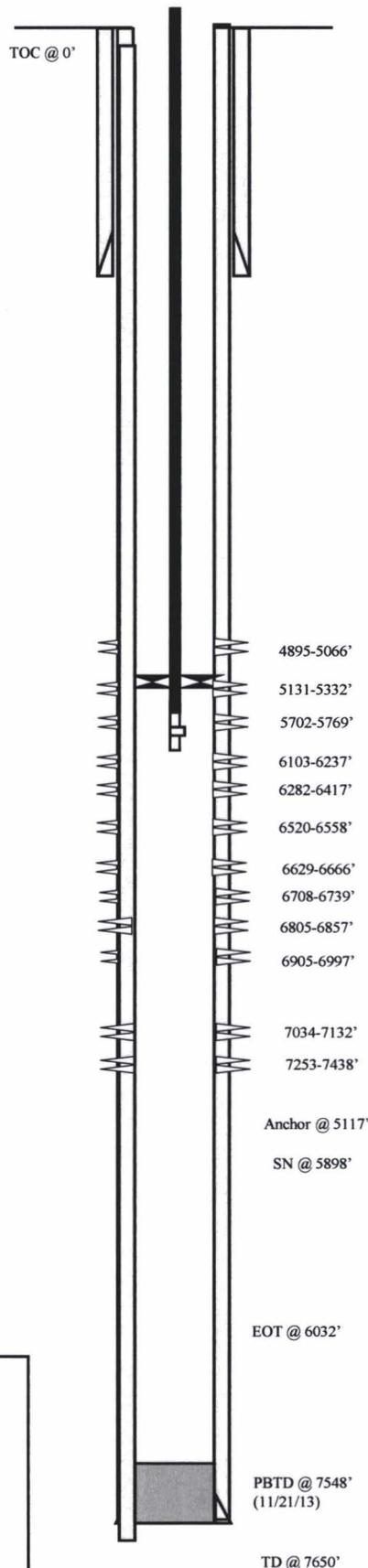
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 180 jts. (shoe set at 7618'); (FC @ 7576') KB Depths  
 HOLE SIZE: 7-7/8"  
 TOTAL DEPTH: 7650'  
 CEMENT DATA: 400 sxs 10.5 ppg lead and 700 sxs 12.0 ppg tail  
 CEMENT TOP AT: 1' per CBL /13

### TUBING (11-25-2013)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 157 jts (5101.02')  
 TUBING ANCHOR: 5117.88'  
 NO. OF JOINTS: 24 jts (778.71')  
 SEATING NIPPLE: 2-7/8" (1.1')  
 SN LANDED: 5897.69' KB  
 PERF SUB: 4.16'  
 NO. OF JOINTS: 4 jts (129.90')  
 BULL PLUG: 2-7/8" (0.73')  
 TOTAL STRING LENGTH: EOT @ 6032.48' KB'

### SUCKER RODS (11/23/13)

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 58 x 7/8" slick rods, 124 x 3/4" slick rods; 10-3/4" guided rods; 10 x 1-1/2" weight bars; 11-4'x1" weight bars  
 PUMP SIZE: 2-1/2 x 1-3/4' x 16'  
 STROKE LENGTH: "  
 PUMP SPEED, SPM:  
 PUMPING UNIT:



11-15-13 7253'-57; 7300-02' & 7434-38'.	<b>Frac Wasatch zones with 34,500# 20/40 in 630 bbl. 20#</b>
11-15-13 7034-40'; 7078-82' & 7126-32'.	<b>Frac Wasatch zones with w/ 100M# 20/40 in 1300 bbls 20#</b>
11-15-13 6905-07'; 6933-35'; 6956-60' & 6994-97'.	<b>Frac Wasatch zones with with 40M# of sand and 665 bbl. 20#</b>
11-15-13 6805-07'; 6818-20'; 6825-27'; 6832-34'; 6839-41'; 6847-49' & 6855-57'. (HYBRID)	<b>Frac Uteland Butte zones with 52M# and 1325 bbl. (17#) (HYBRID)</b>
11-16-13 6708-12'; 6727-30' & 6736-39';	<b>Frac Castle Peak zones (HYBRID) w/ 57M# sand in 1780 bbl. (17#)</b>
11-16-13 6629-35' & 6662-66'.	<b>Frac Castle Peak zone (HYBRID) 80M# sand in 955 bbl.—17#</b>
11-16-13 6520-25'; 6554-58'.	<b>Frac Castle Peak zones w/ 61M# sand in 800 bbl. (17#)</b>
11-16-13 6282-86'; 6314-16'; 6340-42'; 6368-70'; 6387-89'; 6395-97'; 6406-09' & 6414-17'	<b>Frac Black Shale/Castle Peak w/ 100M# sand in 2300 bbl. 17# (HYBRID)</b>
11-16-13 6103-05'; 6115-17'; 6168-70'; 6178-82'; 6198-6202' & 6235-37';	<b>Frac Black Shale zones w/ 80M# in 1900 bbl. (17#) (HYBRID)</b>
11-16-13 5702-05'; 5740-42' & 5765-69'.	<b>Frac Douglas Creek zones w/ 60M# in 700 bbl. (17#).</b>
11-17-13 5131-33'; 5218-20'; 5291-93'; 5314-16'; 5322-24' & 5330-32'.	<b>Frac Garden Gulch zones w/ 50,500# in 1200 bbl. (HYBRID) 17#</b>
11-17-13 4895-97'; 4915-17'; 4943-45'; 5011-15'; 5025-28' & 5064-66'.	<b>Frac Mahogany Bench/Garden Gulch zones w/ 58M# in 1395 Bbl. (HYBRID) 17#</b>

## PERFORATION RECORD

7253-7438'	4 JSPF	40 holes
7034-7132'	4 JSPF	54 holes
6905-6997'	3 JSPF	33 holes
6805-6857'	3 JSPF	42 holes
6708-6739'	3 JSPE	30 holes
6629-6666'	3 JSPE	30 holes
6520-6558'	3 JSPE	27 holes
6282-6417'	3 JSPE	60 holes
6103-6237'	3 JSPE	48 holes
5702-5769'	3 JSPE	27 holes
5131-5332'	3 JSPE	36 holes
4895-5066'	3 JSPE	45 holes

## FINLEY RESOURCES, INC.

### Ute 13-15A-4-1

643' FSL & 1648' FEL (SW/SE)  
 Section 13, T4S, R1E  
 Uintah Co. Utah

API # 43-047-52656; Lease # 14-20-H62-4896



PROOF OF PUBLICATION

CUSTOMER'S COPY

CUSTOMER NAME AND ADDRESS	ACCOUNT NUMBER	DATE
DIV OF OIL-GAS & MINING, Fose Nolton 1594 W NORTH TEMPLE STE 1210  SALT LAKE CITY UT 84116	9001402352	2/25/2015
	43 047 54256 13 AS IE	

ACCOUNT NAME	
DIV OF OIL-GAS & MINING,	
TELEPHONE	ADORDER# / INVOICE N
8015385340	0001013839 /
SCHEDULE	
Start 02/25/2015	End 02/25/2015
CUST. REF. NO.	
UIC-431	
CAPTION	
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATU	
SIZE	
58 Lines	2.00 COLUMN
TIMES	RATE
3	
MISC. CHARGES	AD CHARGES
TOTAL COS	
220.04	

**BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH NOTICE OF AGENCY ACTION CAUSE NO. UIC-431**

IN THE MATTER OF THE APPLICATION OF FINLEY RESOURCES, INC. FOR ADMINISTRATIVE APPROVAL OF A WELL LOCATED IN SECTION 13, TOWNSHIP 4 SOUTH, RANGE 1 EAST, USB&M, UTAH COUNTY, UTAH, AS A CLASS II INJECTION WELL.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Finley Resources, Inc., 1308 Lake Street, Fort Worth, Texas 76113, telephone 817-336-1924, for administrative approval of the following well located in Uintah County, Utah, for conversion to a Class II injection well:

Windy Ridge Field:  
 Ute 13-1 SWD well located in SW/4 SW/4, Section 13, Township 4 South, Range 1 East  
 API 43-047-54256

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Finley Resources, Inc.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative, procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 19th day of February, 2015

STATE OF UTAH  
 DIVISION OF OIL, GAS & MINING  
 /s/ Brad Hill  
 Permitting Manager  
 1013839

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH LEGAL BOOKER, I CERTIFY THAT THE ATTACHED ADVERTISEMENT OF **BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH NOTICE OF AGENCY ACTION CAUSE NO. UIC-431 IN THE MATTER OF THE APPLICA FOR DIV OF OIL-GAS & MINING**, WAS PUBLISHED BY THE NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH, AGENT FOR THE SALT LAKE TRIBUNE AND DESERET NEWS, DAILY NEWSPAPERS PRINTED IN THE ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH AND PUBLISHED IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH. NOTICE IS ALSO POSTED ON UTAHLEGAL.S.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON UTAHLEGAL.S.COM INDEFINATELY. COMPLIES WITH UTAH DIGITAL SIGNATURE ACT UTAH CODE 46-2-101: 46-3-104.

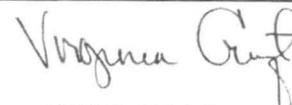
PUBLISHED ON Start 02/25/2015 End 02/25/2015

SIGNATURE 

DATE 2/25/2015

THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"  
PLEASE PAY FROM BILLING STATEMENT

**VIRGINIA CRAFT**  
 NOTARY PUBLIC, STATE OF UTAH  
 My Comm. Exp. 01.12.2018  
 Commission # 672963

  
 NOTARY SIGNATURE

# AFFIDAVIT OF PUBLICATION

County of Duchesne,  
STATE OF UTAH

I, Cynthia Kleinfelter, on oath, say that I am the Legals Manager of the Uintah Basin Standard, a weekly newspaper of general circulation, published at Roosevelt, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue such newspaper for 1 consecutive issues, and that the first publication was on the 3 day of March, 2015, and that the last publication of such notice was in the issue of such newspaper dated the 3 day of March, 2015, and that said notice was published on Utahlegals.com on the same day as the first newspaper publication and the notice remained on Utahlegals.com until the end of the scheduled run.

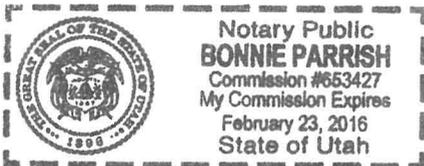
Cynthia Kleinfelter  
LEGALS MANAGER

Subscribed and sworn to before me on this

4 day of March, 2015

by Cynthia Kleinfelter.

Bonnie Parrish  
Notary Public



**BEFORE THE  
DIVISION  
OF OIL, GAS  
AND MINING  
DEPART-  
MENT OF  
NATURAL  
RESOURCES  
STATE OF  
UTAH  
NOTICE OF  
AGENCY  
ACTION  
CAUSE NO.  
UIC-431**

IN THE MATTER  
OF THE APPLICA-  
TION OF FINLEY  
RESOURCES, INC.  
FOR ADMINISTRA-  
TIVE APPROVAL  
OF A WELL LO-  
CATED IN SEC-  
TION 13, TOWN-  
SHIP 4 SOUTH,  
RANGE 1 EAST,  
USB&M, UINTAH  
COUNTY, UTAH,  
AS A CLASS II  
INJECTION WELL.  
THE STATE OF

UTAH TO ALL  
PERSONS INTER-  
ESTED IN THE  
ABOVE ENTITLED  
MATTER.

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Windy Ridge  
Field:  
Ute 13-1 SWD  
well located in SW/4  
SW/4, Section 13,  
Township 4 South,  
Range 1 East

API 43-047-54256  
The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Finley Resources, Inc.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this

notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 19th day of February, 2015

STATE OF UTAH  
DIVISION OF  
OIL, GAS & MIN-  
ING

/s/

Brad Hill  
Permitting Man-  
ager

Published in the  
Uintah Basin Stan-  
dard March 3, 2015.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624896
1. TYPE OF WELL Water Disposal Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: FINLEY RESOURCES INC	7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: PO Box 2200 , Fort Worth, TX, 76113	8. WELL NAME and NUMBER: Ute 13-1 SWD
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1075 FSL 1289 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 13 Township: 04.0S Range: 01.0E Meridian: U	9. API NUMBER: 43047542560000
5. ADDRESS OF OPERATOR: PO Box 2200 , Fort Worth, TX, 76113	9. FIELD and POOL or WILDCAT: WINDY RIDGE
6. PHONE NUMBER: 817 231-8735 Ext	COUNTY: Uintah
7. STATE: UTAH	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/22/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Step Rate Test"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Based on the test rates and pressures recorded from the second step rate test, Finley Resources Inc. respectfully requests an increase from 300# MAIP to 440# MAIP. All charts and a current wellbore schematic are attached.  
 \*\*\*\*\*APPROVAL FOR A 400# MAIP - SEE CONDITIONS (ATTACHED) DKD\*\*\*\*\*

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: January 20, 2016  
 By: *D. K. Morgan*

**Please Review Attached Conditions of Approval**

NAME (PLEASE PRINT) Josh Morgan	PHONE NUMBER 817 231-8756	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 1/11/2016	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43047542560000**

**It appears that after the formation broke, there was a stabilized extension pressure of approximately 440 psig. Consequently, DOGM is approving an increase in the MAIP from 300 psig to 400 psig which accounts for an approximate 10% safety factor.**

### STEP RATE TEST DATA

Well: Ute 13-1-4-1 SWD Date: 12/22/15 Operator Finley Resources

**STEP #1 Test Rate** ( 5% of maximum rate) \_\_\_\_\_ (bbl/min)

BPM

0.15	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	0	259	263	259	255	255	252

**STEP #2 Test Rate** ( 10% of maximum rate) \_\_\_\_\_ (bbl/min)

0.30	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	255	255	255	255	255	255	255

**STEP #3 Test Rate** ( 20% of maximum rate) \_\_\_\_\_ (bbl/min)

0.60	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	263	266	266	266	266	263	259

**STEP #4 Test Rate** ( 40% of maximum rate) \_\_\_\_\_ (bbl/min)

1.2	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	263	298	302	298	291	298	295

**STEP #5 Test Rate** ( 60% of maximum rate) \_\_\_\_\_ (bbl/min)

1.8	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	377	393	402	413	427	438	445

**STEP #6 Test Rate** ( 80% of maximum rate) \_\_\_\_\_ (bbl/min)

2.4	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	509	606	670	710	728	810	838

**STEP #7 Test Rate** ( 100% of maximum rate) \_\_\_\_\_ (bbl/min)

3.0	Time (min) :	0	5	10	15	20	25	30
	Pressure (psi):	427	455	456	459	466	470	441

**ISIP :** Vacuum (psi)

Test Run / Witnessed By: Jim Simons Jim Simons Finley Resources

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624896
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Injection</u>			7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: Finley Resources, Inc			8. WELL NAME and NUMBER: UTE 13-1 SWD
3. ADDRESS OF OPERATOR: 1308 Lake Street                      CITY Fort Worth                      STATE TX                      ZIP 76102		PHONE NUMBER: (817) 231-8735	9. API NUMBER: 4304754256
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1075 FSL 1289 FWL			10. FIELD AND POOL, OR WILDCAT: WINDY RIDGE
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 13 4S 1E U			COUNTY: UINTAH STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: <u>12/22/2015</u>	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Step Rate Test</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

See attached description and charts.

NAME (PLEASE PRINT) <u>Josh Morgan</u>	TITLE <u>Regulatory Analyst</u>
SIGNATURE	DATE <u>1/11/2016</u>

(This space for State use only)

On 12/22/15, Finley Resources performed a second step rate test on the Ute 13-1 SWD after receiving permission from the state of Utah to do so. Weatherford Pumping Services was employed to do the step rate test. The test was done as follows, using 2% KCL for fluid and following state of Utah guidelines:

MIRU Weatherford pump truck

Establish inj rate .2 BPM for 30 minutes – final PIP 242#

Establish inj rate .3 BPM for 30 minutes – final PIP 255#

Establish inj rate .6 BPM for 30 minutes – final PIP 259#

Establish inj rate 1.2 BPM for 30 minutes – final PIP 295#

Establish inj rate 1.8 BPM for 30 minutes – final PIP 445#

Establish inj rate 2.4 BPM for 30 minutes – final PIP 838# formation apparently broke at 838#

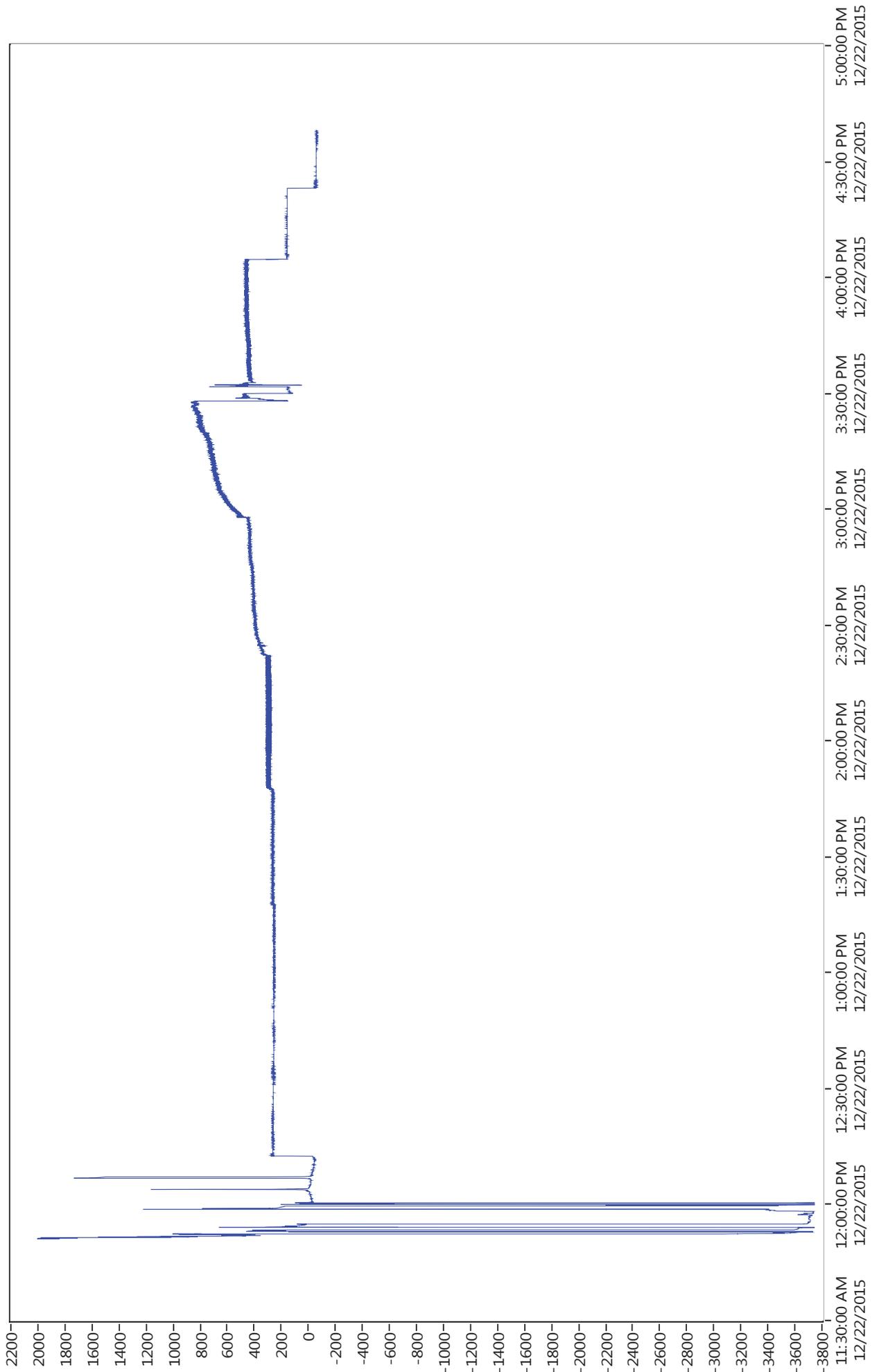
Establish inj rate 3 BPM for 30 minutes – final PIP 441#

A total of 370 BF was pumped.

Based on the test rates and pressures, it appears that there is possible formation damage that caused the high breakdown pressure of 838#. This is indicated by the upward slope (increasing pressure) of the curve during the 2.4 BPM stage. The actual formation breakdown pressure is probably less than 838# and greater than the final 3 BPM pressure of 441# (pressure was steady during this stage, indicating that fluid was filling pore spaces and not breaking down formation). Based on this data, Finley Resources respectfully requests an increase from 300# MAIP to 440# MAIP. All charts and a current wellbore schematic are attached with this sundry. If you have any questions, please call Clay O'Neil at 817-713-9514.

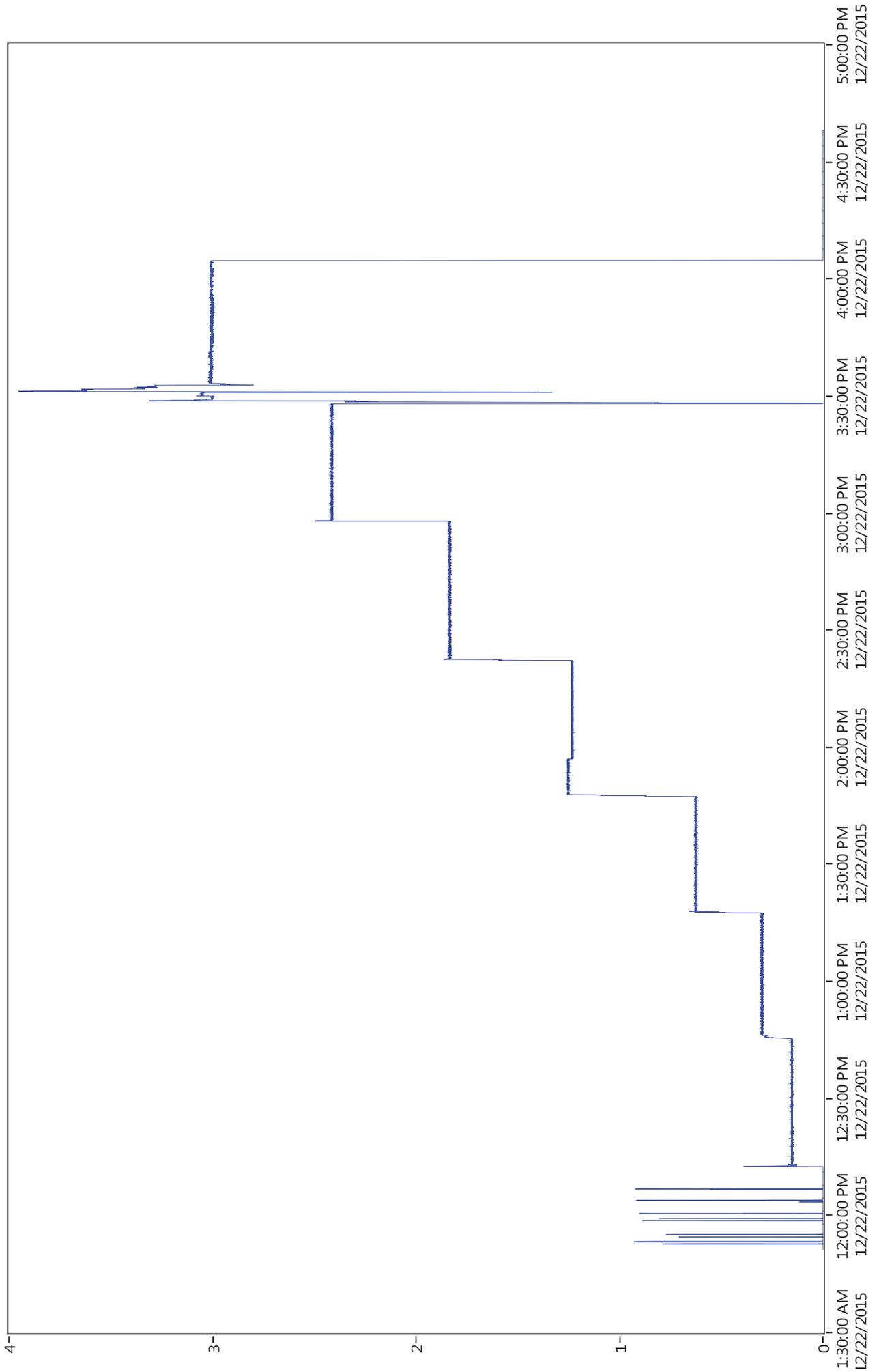
# Ute Tribal 13-1-4-1 Step Test Pressure

(All Times are EASTERN STANDARD)



# Ute Tribal 13-1-4-1 Step Test Rate

(All Times are EASTERN STANDARD)



# Ute 13-1-4-1 SWD

Spud Date: 12-21-14  
 Completion Date: 01-26-15  
 GL: 5103' KB: 5116'

## Wellbore Diagram

FRAC JOB---no stimulation of perfs at present

### SURFACE CASING

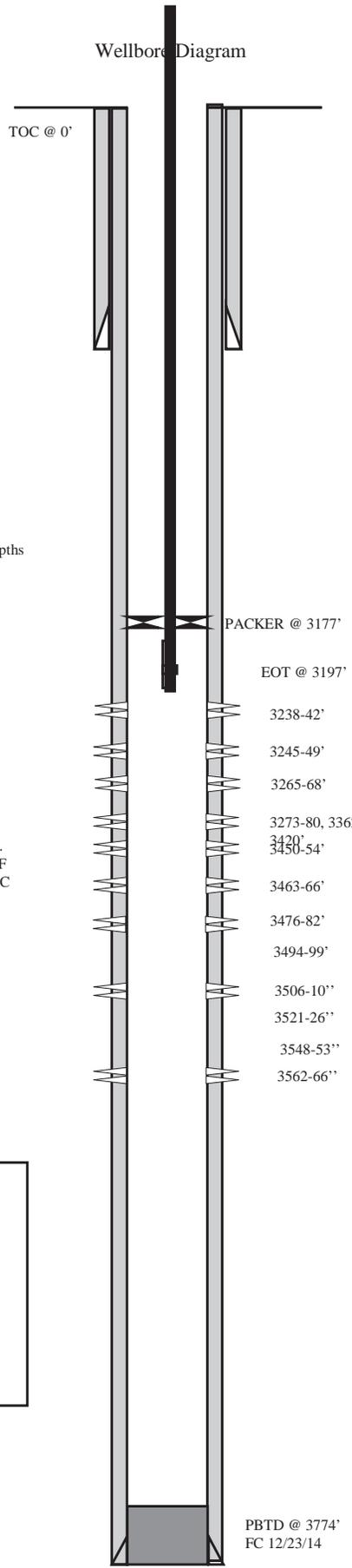
CSG SIZE: 9-5/8"  
 GRADE: J-55  
 WEIGHT: 36#  
 LENGTH: 10 jts. (424')  
 DEPTH LANDED: 424'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 260 sxs Class "G" cmt

### PRODUCTION CASING

CSG SIZE: 7"  
 GRADE: J-55  
 WEIGHT: 23.0#  
 LENGTH: 90 jts. (3820') (shoe set at 3818'); (FC @ 3774') KB Depths  
 HOLE SIZE: 8-3/4"  
 TOTAL DEPTH: 3830'  
 CEMENT DATA: 100 sxs 10.0 ppg lead and 625 sxs 14.0 ppg tail  
 CEMENT TOP AT: 200' per CBL 01/06/14

### TUBING (01-23-2015)

SIZE/GRADE/WT.: 4-1/2" / J-55-N-80 12.75#  
 NO. OF JOINTS: 99 jts (3161.05')  
 TUBING PACKER: SET AT 3177.47' KB  
 TUBING DETAIL: TOP TO BOTTOM: KB=(13.0'); HANGER (0.50'); 11 JTS. 4-1/2" TBG.-N-80 (357.13'); 88 JTS. OF 4-1/2" TBG. J-55 (2803.92'); 4-1/2" X3-1/2" X-OVER (0.96'); 7" X3-1/2" ON-OFF TOOL WITH 2.81" PROFILE (1.96'); 7" X3-1/2" DHL HYDRAULIC PACKER (6.32'); 3-1/2" N-80 PUP JT. (6.30'); 2.81" XN NIPPLE (1.0'); 3-1/2" N-80 PUP JT. (6.30'); 3-1/2" PUMP OUT PLUG/RE-ENTRY GUIDE (.044')  
 TOTAL STRING LENGTH: EOT @ 3197.83' KB'



### PERFORATION RECORD

3238-3242'	6 JSPF	24 holes
3245-3249'	6 JSPF	24 holes
3265-3268'	6 JSPF	18 holes
3273-3280'	6 JSPF	42 holes
3362-3365'	6 JSPF	18 holes
3371-3375'	6 JSPF	24 holes
3383-3387'	6 JSPF	36 holes
3395-3403'	6 JSPF	42 holes
3410-3414'	6 JSPF	24 holes
3417-3420'	6 JSPF	18 holes
3450-3454'	6 JSPF	24 holes
3463-3466'	6 JSPF	18 holes
3476-3482'	6 JSPF	36 holes
3494-3499'	6 JSPF	30 holes
3506-3510'	6 JSPF	24 holes
3521-3526'	6 JSPF	30 holes
3548-3553'	6 JSPF	30 holes
3562-3566'	6 JSPF	24 holes

### FINLEY RESOURCES, INC.

#### Ute 13-1-4-1

1075' FSL & 1289' FWL (SW/SW)

Section 13, T4S, R1E

Uintah Co. Utah

API # 43-047-54256; Lease # 14-20-H62-4896

UTM: 599184E & 4442928N

40\*07'51.07" by 109850'08.85"

PBT @ 3774'  
 FC 12/23/14

TD @ 3830'