

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 Tribal 21-10H					
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 ANTELOPE CREEK					
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME ANTELOPE CREEK					
6. NAME OF OPERATOR PETROGLYPH OPERATING CO						7. OPERATOR PHONE 208 685-7674					
8. ADDRESS OF OPERATOR 960 Broadway Ave, Ste 500, Bosie, ID, 83703						9. OPERATOR E-MAIL bwest@pgei.com					
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 14-20-H62-3516			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 checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>					
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')					
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						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 type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE		2028 FSL 784 FEL		NWSE	21	5.0 S	3.0 W	U			
Top of Uppermost Producing Zone		2528 FNL 619 FEL		SWNE	21	5.0 S	3.0 W	U			
At Total Depth		2528 FNL 619 FEL		SWNE	21	5.0 S	3.0 W	U			
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 84			23. NUMBER OF ACRES IN DRILLING UNIT 533					
25. DISTANCE TO NEAREST WELL IN SAME POOL (Approved For Drilling or Completed) 1004			26. PROPOSED DEPTH MD: 6040 TVD: 5970			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342					
27. ELEVATION - GROUND LEVEL 6304			28. BOND NUMBER LP4138153			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342					
<b>Hole, Casing, and Cement Information</b>											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
Cond	20	14	0 - 55	5.0	Unknown	10.0	Class G	25	1.17	15.8	
Surf	12.25	8.625	0 - 495	24.0	J-55 ST&C	10.0	Class G	227	1.17	15.8	
Prod	7.875	5.5	0 - 6040	15.5	J-55 LT&C	10.0	Class G	480	1.92	12.5	
							Class G	301	1.46	13.4	
<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 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 Ed Trotter				TITLE Agent				PHONE 435 789-4120			
SIGNATURE				DATE 07/02/2012				EMAIL edtrotter@easilink.com			
API NUMBER ASSIGNED 43013515340000				APPROVAL				 Permit Manager			

**CONFIDENTIAL**  
**NINE POINT DRILLING PLAN**  
**PETROGLYPH OPERATING COMPANY, INC**  
**UTE TRIBAL 21-10H**  
**NW SE, SEC 21, T5S, R3W**  
**DUCHESNE COUNTY, UTAH**

**1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:**

Formation		Subsea	TVD	MD
Rig KB~15' above GGL		6319	0	0
Surface Formation = Uinta				
Uinta		6304	15	15
Green River		4865	1454	1459
Trona		3524	2795	2843
Mahogany Shale		3385	2934	2986
"B" Marker	Waterflood Unit Interval	2298	4021	4091
"X" Marker		1815	4504	4574
Douglas Creek Marker		1672	4647	4717
"B" Limestone		1203	4021	5096
Base Castle Peak Limestone		732	5587	5657
BSCARB		316	0	0
Wasatch		43	NDE	NDE
Rig TD		349	5970	6040

**2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:**

Substance	Formation	Subsea	TVD	MD
Base of moderately saline ground water*	Uinta	5520	799	799
Oil/Gas	Douglas Creek	1672	4647	4717
Oil/Gas	Castle Peak	732	5587	5657

Any water encountered during drilling shall be sampled, analyzed and reported to the BLM Vernal office using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

Flow rate (or blowtest)	Temperature	pH	TDS
Dissolved Iron	Dissolved Magnesium	Dissolved Bicarb.	Dissolved Sulfate
Dissolved Calcium	Dissolved Sodium	Dissolved Carbonate	Dissolved Chloride

All depths through the "Base of moderately saline ground water"\*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

\*Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah



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**3. PROPOSED CASING PROGRAM:**

String	Hole	Casing	Top - MD	Bottom - MD	Weight lb/ft	Grade	Thread
Conductor	20"	14"	surface	54.5'	steel	Cond'r	none
Surface	12-1/4"	8-5/8"	surface	494.5'	24	J-55	STC
Production	7-7/8"	5-1/2"	surface	6040'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tensile
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	214,000 lb
Production	7-7/8"	5-1/2"	4,040 psi	4,810 psi	248,000 lb

- All casing will be new or inspected.
- The surface and production strings shall have a minimum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 4091' MD.

**4. PROPOSED CEMENTING PROGRAM:**

String	Top	Cement Description	Sacks	Excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
	Bottom		Vol (ft <sup>3</sup> )			
Conductor	0 ----- 54.5	Construction Grade Cement	Sufficient volumes to grout Conductor			
Surface	0 ----- 494.5	Class G +2% CaCl <sub>2</sub> +0.25 lb/sk Cello Flake	227 ----- 265	30%	15.8	1.17
Production Lead	0 ----- 4091	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR <sup>1</sup> / <sub>4</sub> (LCM)	480 ----- 922	30%	12.5	1.92
Production Tail	4091 ----- 6040	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR <sup>1</sup> / <sub>4</sub> (LCM)	301 ----- 439	30%	13.4	1.46

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, a remedial surface cementing operation shall be performed only if necessary to lift cement above the Surface Casing Shoe at 480' MD.

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**5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:**

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- A 2000 PSI Working Pressure Annular shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

**BOPE TESTING PROCEDURE:**

- The BOPE shall be tested by a professional tester to conform to Onshore Order #2.

**6. MUD PROGRAM:**

**A. SURFACE HOLE**

- The surface hole will be drilled with an air/mist system from 0' to 494.5'. All cutting shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-off valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator requests the following variances from Onshore Order 2 part E during drilling of the surface hole. Operator will use air drilling techniques only on surface hole:
  - Operator requests a variance to regulations requiring the blooie line discharge to be 100' from the wellbore. Due to reduced location size, the blooie line discharge will be approximately 75' from the wellbore and securely anchored.
  - Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. A mister shall be on the end of the blooie line.
  - Operator requests a variance to regulations requiring compressors be located in the opposite direction from the blooie line; a minimum of 100' from the wellbore. Due to the reduced location size, the compressors shall be located as close as is reasonable to the opposite direction from the blooie line and 75' from the wellbore.
  - Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl shall be utilized on the diverter system in place of a BOPE.



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**B. PRODUCTION HOLE**

- The production hole shall be drilled with a freshwater polymer system from 494.5' to 6040'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.8 lbs/gal. although mud weight up to 10lbs/gal may be used if necessary to prevent wellbore wall instability due to the planned inclination of the well.
- All cuttings and circulating medium shall be directed into the reserve pit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to allow for the mudweight to be raised to 10.5 lbs/gal should need arise.
- During drilling operations, pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location. Operator does not plan on using a gas detector on the mud return due to the fact that any abnormal pressure is the result of offset water injection.

**C. HAZARDOUS MATERIALS AND POLLUTANTS**

- Chromate additives **shall NOT** be used in the mud system on Indian lands without prior BLM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.



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**7. EVALUATION PROGRAM:**

Logs: Triple Combo TD to base of surface casing (AIT, DSN, CDL)  
 Base of surface casing to surface (GR)

Cores: None planned

DST: None planned

Testing: Operator plans no testing until the completion phase of the well.

**8. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

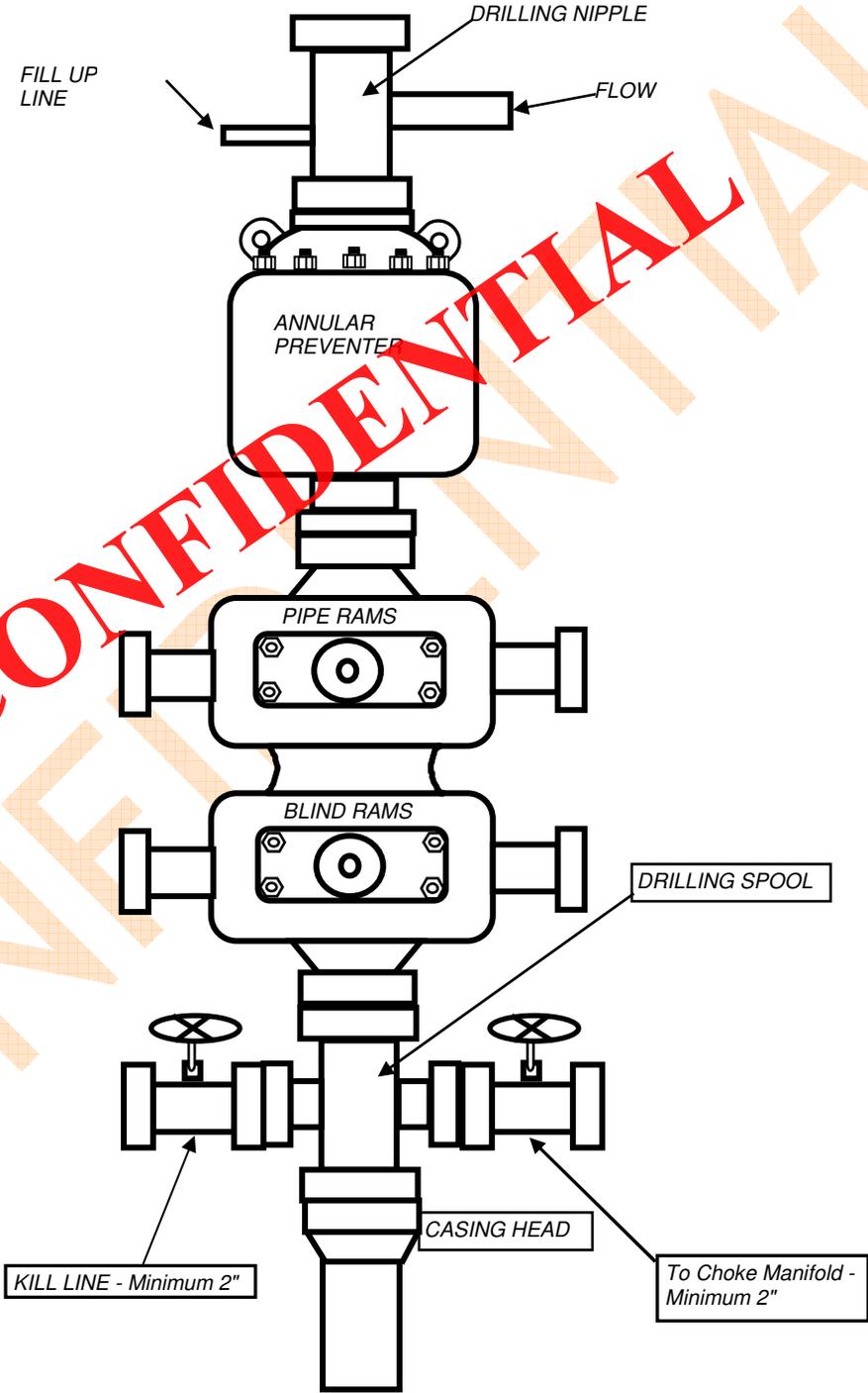
- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H<sub>2</sub>S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1510 PSI (0.25 PSI/ft gradient).
- This well is in the vicinity of active injection wells. Nearby active injection can cause pressures up to a 0.435 PSI/ft gradient (2615 PSI).

**9. DIRECTIONAL WELL PLAN:**

- Well shall be drilled directionally in order to limit surface disturbance.
- A Positive Displacement Motor with a bent sub of 1.25° to 1.75° will be used to control well path.
- A directional survey shall be taken at least one (1) time per 100' of drilling.
- Anti-collision equipment will not be used as there are no existing wells in the vicinity of the proposed well path.
- While cutting the Waterflood Unit Interval from 4091' to 0', the actual well path may be allowed to vary up to 100' horizontally from plan in order to prevent excessive slide drilling. Above and below the Waterflood Unit Interval, variances in excess 100' horizontally from plan may be allowed.
- Directional drilling plan is attached.

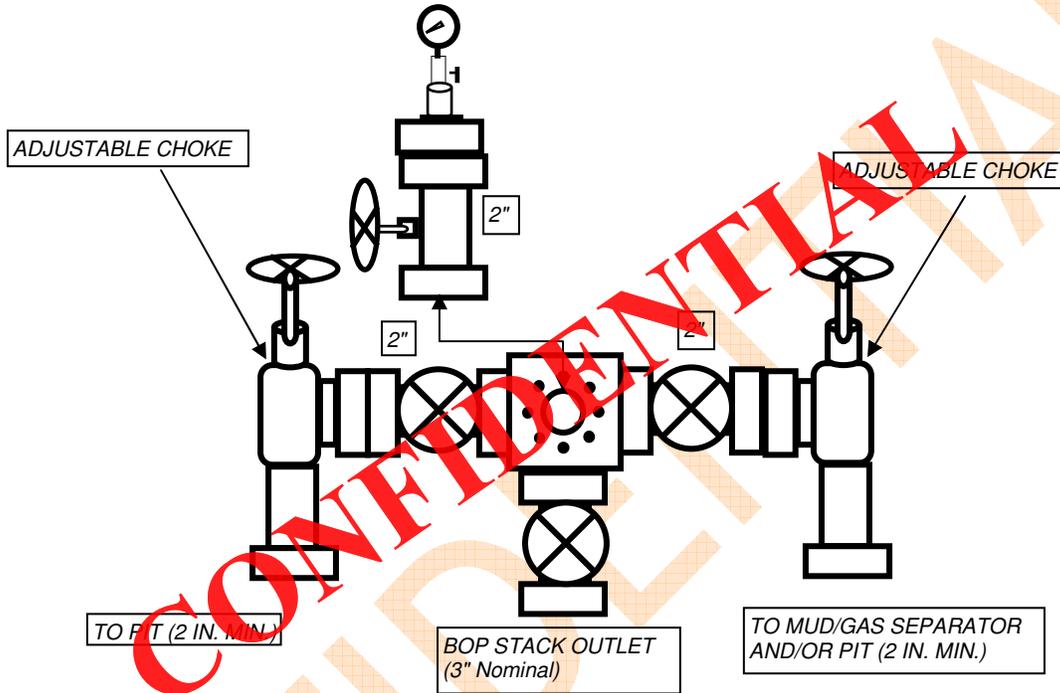
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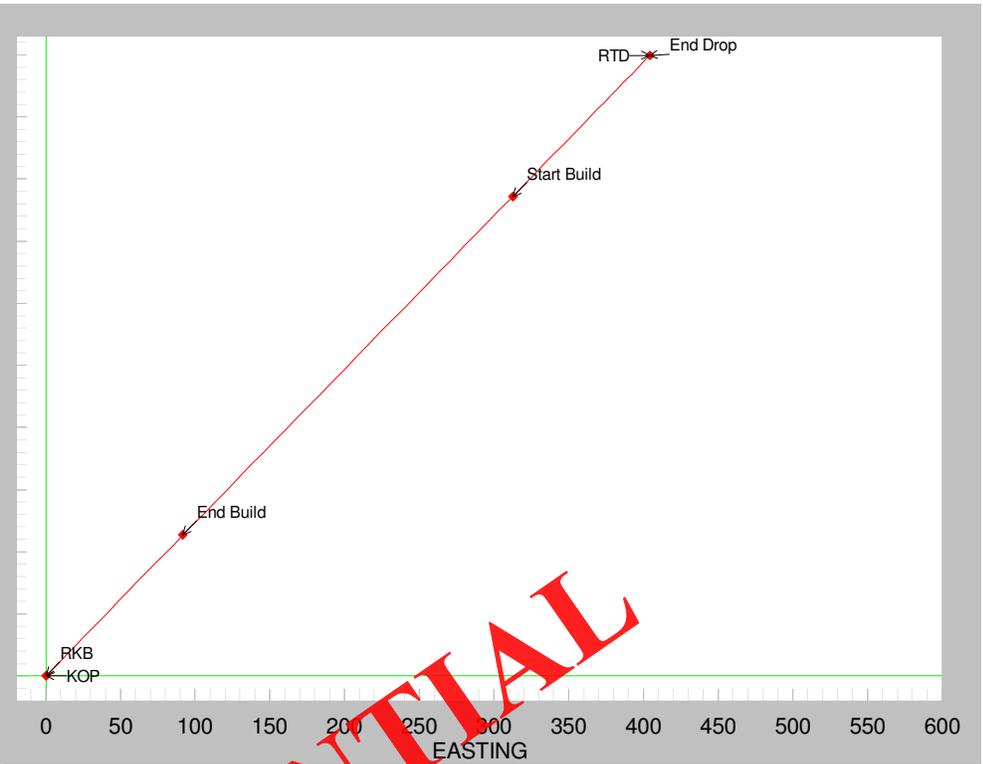
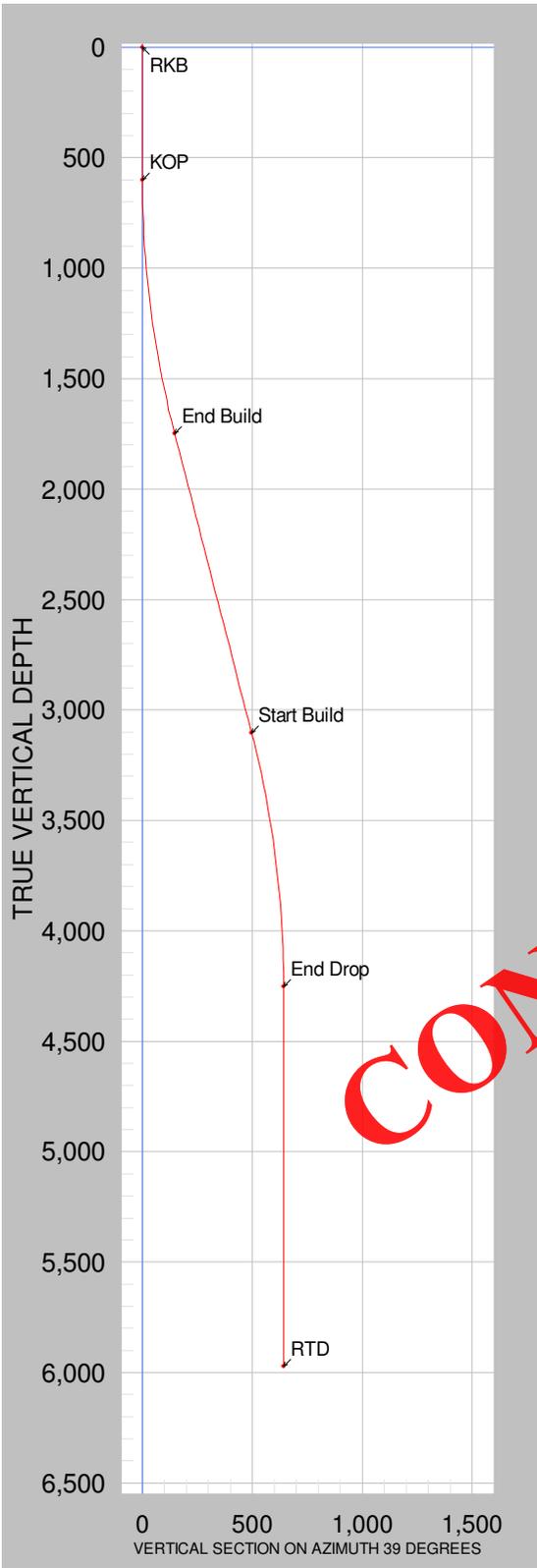
TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER



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**TYPICAL 2,000 p.s.i. CHOKE MANIFOLD**





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#	Reference	Type	MD	Inc	Azi	TVD	N	E	DLS	Vert S
0	RKB	Tie Point	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1	KOP	Vertical	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00
2	End Build	Build	1760.00	14.50	39.00	1747.66	113.46	91.88	1.25	146.00
3	Start Build	Tangent	3160.00	14.50	39.00	3103.06	385.88	312.48	0.00	496.53
4	End Drop	Drop	4320.00	0.00	0.00	4250.72	499.34	404.36	1.25	642.53
5	RTD	Vertical	6040.00	0.00	0.00	5970.72	499.34	404.36	0.00	642.53

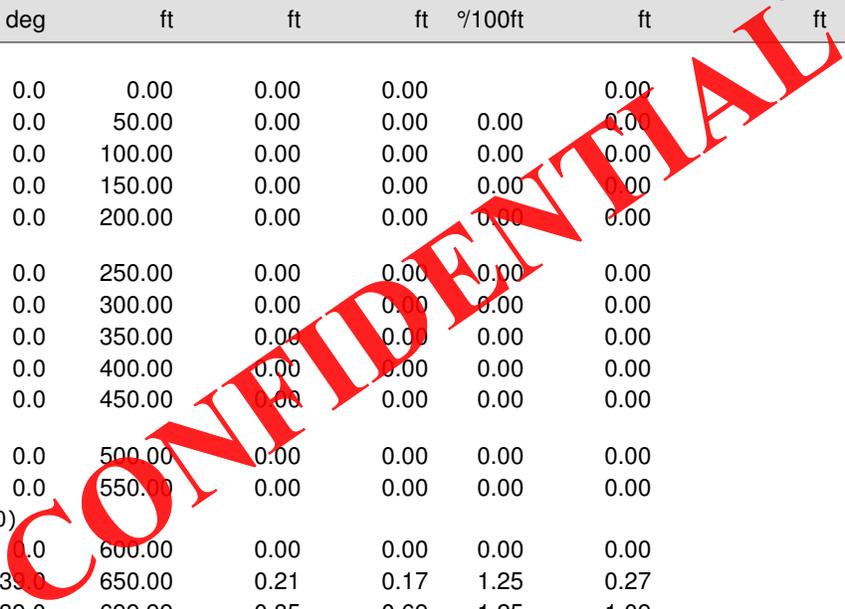
## 21-10H, Plan 1

<b>Operator</b>	<b>Units</b> feet, %/100ft	13:52 Wednesday, April 18, 2012 Page 1 of 4
<b>Field</b>	<b>County</b>	<b>Vertical Section Azimuth</b> 39
<b>Well Name</b> 21-10H	<b>State</b>	<b>Survey Calculation Method</b> Minimum Curvature
<b>Plan</b> 1	<b>Country</b>	<b>Database</b> Access

<b>Location</b>	<b>MapZone</b>	<b>Lat Long Ref</b>
<b>Site</b>	<b>SurfaceX</b>	<b>Surface Long</b>
<b>Slot Name</b>	<b>SurfaceY</b>	<b>Surface Lat</b>
<b>Well Number</b>	<b>Z Datum</b>	
<b>Project</b>	<b>Surface Z</b>	<b>Ground Level</b>

**DIRECTIONAL WELL PLAN**

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
*** RKB (at MD = 0.00)										
0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00		
50.00	0.00	0.0	50.00	0.00	0.00	0.00	0.00	0.00		
100.00	0.00	0.0	100.00	0.00	0.00	0.00	0.00	0.00		
150.00	0.00	0.0	150.00	0.00	0.00	0.00	0.00	0.00		
200.00	0.00	0.0	200.00	0.00	0.00	0.00	0.00	0.00		
250.00	0.00	0.0	250.00	0.00	0.00	0.00	0.00	0.00		
300.00	0.00	0.0	300.00	0.00	0.00	0.00	0.00	0.00		
350.00	0.00	0.0	350.00	0.00	0.00	0.00	0.00	0.00		
400.00	0.00	0.0	400.00	0.00	0.00	0.00	0.00	0.00		
450.00	0.00	0.0	450.00	0.00	0.00	0.00	0.00	0.00		
500.00	0.00	0.0	500.00	0.00	0.00	0.00	0.00	0.00		
550.00	0.00	0.0	550.00	0.00	0.00	0.00	0.00	0.00		
*** KOP (at MD = 600.00)										
600.00	0.00	0.0	600.00	0.00	0.00	0.00	0.00	0.00		
650.00	0.63	39.0	650.00	0.21	0.17	1.25	0.27			
700.00	1.25	39.0	699.99	0.85	0.69	1.25	1.09			
750.00	1.88	39.0	749.97	1.91	1.54	1.25	2.45			
800.00	2.50	39.0	799.94	3.39	2.75	1.25	4.36			
850.00	3.13	39.0	849.88	5.30	4.29	1.25	6.82			
900.00	3.75	39.0	899.79	7.63	6.18	1.25	9.81			
950.00	4.38	39.0	949.66	10.38	8.41	1.25	13.36			
1000.00	5.00	39.0	999.49	13.56	10.98	1.25	17.44			
1050.00	5.63	39.0	1049.28	17.15	13.89	1.25	22.07			
1100.00	6.25	39.0	1099.01	21.17	17.15	1.25	27.24			
1150.00	6.88	39.0	1148.68	25.61	20.74	1.25	32.96			
1200.00	7.50	39.0	1198.29	30.47	24.68	1.25	39.21			
1250.00	8.13	39.0	1247.82	35.76	28.96	1.25	46.01			
1300.00	8.75	39.0	1297.28	41.46	33.57	1.25	53.35			
1350.00	9.38	39.0	1346.66	47.58	38.53	1.25	61.22			
1400.00	10.00	39.0	1395.94	54.12	43.82	1.25	69.64			
1450.00	10.63	39.0	1445.14	61.07	49.46	1.25	78.59			
1500.00	11.25	39.0	1494.23	68.45	55.43	1.25	88.07			
1550.00	11.88	39.0	1543.21	76.23	61.73	1.25	98.10			
1600.00	12.50	39.0	1592.09	84.44	68.38	1.25	108.65			
1650.00	13.13	39.0	1640.84	93.05	75.35	1.25	119.74			



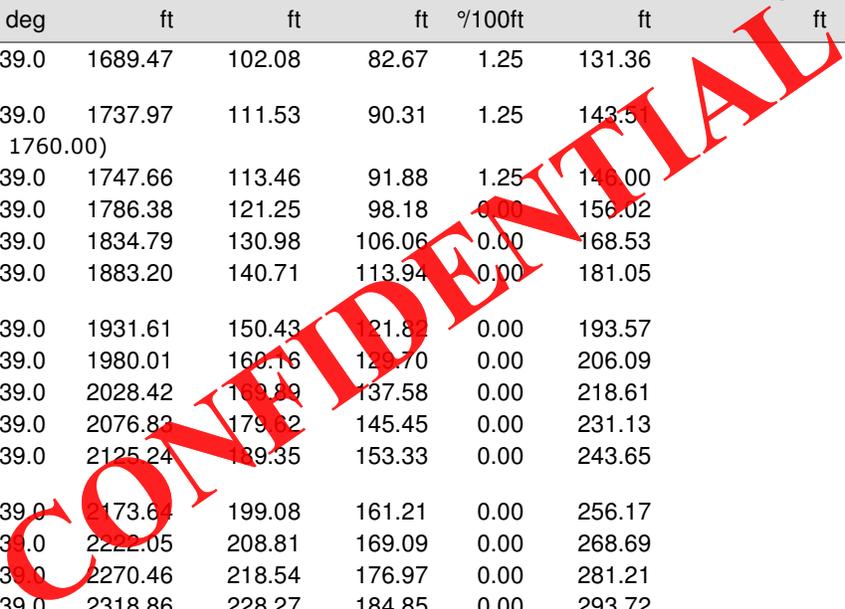
## 21-10H, Plan 1

<b>Operator</b>	<b>Units</b> feet, %/100ft	13:52 Wednesday, April 18, 2012 Page 2 of 4
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<b>Well Name</b> 21-10H	<b>State</b>	<b>Survey Calculation Method</b> Minimum Curvature
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<b>Well Number</b>	<b>Z Datum</b>	
<b>Project</b>	<b>Surface Z</b>	<b>Ground Level</b>

**DIRECTIONAL WELL PLAN**

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
1700.00	13.75	39.0	1689.47	102.08	82.67	1.25	131.36			
1750.00	14.38	39.0	1737.97	111.53	90.31	1.25	143.5			
*** END BUILD (at MD = 1760.00)										
1760.00	14.50	39.0	1747.66	113.46	91.88	1.25	146.00			
1800.00	14.50	39.0	1786.38	121.25	98.18	0.00	156.02			
1850.00	14.50	39.0	1834.79	130.98	106.06	0.00	168.53			
1900.00	14.50	39.0	1883.20	140.71	113.94	0.00	181.05			
1950.00	14.50	39.0	1931.61	150.43	121.82	0.00	193.57			
2000.00	14.50	39.0	1980.01	160.16	129.70	0.00	206.09			
2050.00	14.50	39.0	2028.42	169.89	137.58	0.00	218.61			
2100.00	14.50	39.0	2076.83	179.62	145.45	0.00	231.13			
2150.00	14.50	39.0	2125.24	189.35	153.33	0.00	243.65			
2200.00	14.50	39.0	2173.64	199.08	161.21	0.00	256.17			
2250.00	14.50	39.0	2222.05	208.81	169.09	0.00	268.69			
2300.00	14.50	39.0	2270.46	218.54	176.97	0.00	281.21			
2350.00	14.50	39.0	2318.86	228.27	184.85	0.00	293.72			
2400.00	14.50	39.0	2367.27	238.00	192.73	0.00	306.24			
2450.00	14.50	39.0	2415.68	247.73	200.60	0.00	318.76			
2500.00	14.50	39.0	2464.09	257.45	208.48	0.00	331.28			
2550.00	14.50	39.0	2512.49	267.18	216.36	0.00	343.80			
2600.00	14.50	39.0	2560.90	276.91	224.24	0.00	356.32			
2650.00	14.50	39.0	2609.31	286.64	232.12	0.00	368.84			
2700.00	14.50	39.0	2657.72	296.37	240.00	0.00	381.36			
2750.00	14.50	39.0	2706.12	306.10	247.87	0.00	393.88			
2800.00	14.50	39.0	2754.53	315.83	255.75	0.00	406.40			
2850.00	14.50	39.0	2802.94	325.56	263.63	0.00	418.91			
2900.00	14.50	39.0	2851.35	335.29	271.51	0.00	431.43			
2950.00	14.50	39.0	2899.75	345.02	279.39	0.00	443.95			
3000.00	14.50	39.0	2948.16	354.75	287.27	0.00	456.47			
3050.00	14.50	39.0	2996.57	364.47	295.15	0.00	468.99			
3100.00	14.50	39.0	3044.98	374.20	303.02	0.00	481.51			
3150.00	14.50	39.0	3093.38	383.93	310.90	0.00	494.03			
*** START BUILD (at MD = 3160.00)										
3160.00	14.50	39.0	3103.06	385.88	312.48	0.00	496.53			
3200.00	14.00	39.0	3141.83	393.53	318.67	1.25	506.38			



## 21-10H, Plan 1

<b>Operator</b>	<b>Units</b> feet, %/100ft	13:52 Wednesday, April 18, 2012 Page 3 of 4
<b>Field</b>	<b>County</b>	<b>Vertical Section Azimuth</b> 39
<b>Well Name</b> 21-10H	<b>State</b>	<b>Survey Calculation Method</b> Minimum Curvature
<b>Plan</b> 1	<b>Country</b>	<b>Database</b> Access

<b>Location</b>	<b>MapZone</b>	<b>Lat Long Ref</b>
<b>Site</b>	<b>SurfaceX</b>	<b>Surface Long</b>
<b>Slot Name</b>	<b>SurfaceY</b>	<b>Surface Lat</b>
<b>Well Number</b>	<b>Z Datum</b>	
<b>Project</b>	<b>Surface Z</b>	<b>Ground Level</b>

**DIRECTIONAL WELL PLAN**

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
3250.00	13.38	39.0	3190.41	402.72	326.12	1.25	518.21			
3300.00	12.75	39.0	3239.12	411.51	333.23	1.25	529.51			
3350.00	12.13	39.0	3287.95	419.88	340.01	1.25	540.20			
3400.00	11.50	39.0	3336.89	427.83	346.45	1.25	550.51			
3450.00	10.88	39.0	3385.94	435.37	352.56	1.25	560.22			
3500.00	10.25	39.0	3435.09	442.49	358.32	1.25	569.38			
3550.00	9.63	39.0	3484.34	449.20	363.75	1.25	578.01			
3600.00	9.00	39.0	3533.68	455.49	368.85	1.25	586.10			
3650.00	8.38	39.0	3583.10	461.35	373.60	1.25	593.65			
3700.00	7.75	39.0	3632.61	466.90	378.01	1.25	600.67			
3750.00	7.13	39.0	3682.19	471.93	382.08	1.25	607.14			
3800.00	6.50	39.0	3731.84	476.44	385.82	1.25	613.07			
3850.00	5.88	39.0	3781.54	480.63	389.21	1.25	618.46			
3900.00	5.25	39.0	3831.31	484.40	392.26	1.25	623.30			
3950.00	4.63	39.0	3881.12	487.74	394.97	1.25	627.61			
4000.00	4.00	39.0	3930.98	490.66	397.33	1.25	631.37			
4050.00	3.38	39.0	3980.88	493.16	399.36	1.25	634.58			
4100.00	2.75	39.0	4030.81	495.24	401.04	1.25	637.25			
4150.00	2.13	39.0	4080.76	496.89	402.38	1.25	639.38			
4200.00	1.50	39.0	4130.74	498.12	403.37	1.25	640.96			
4250.00	0.88	39.0	4180.72	498.93	404.02	1.25	642.00			
4300.00	0.25	39.0	4230.72	499.31	404.33	1.25	642.49			
*** END DROP (at MD = 4320.00)										
4320.00	0.00	0.0	4250.72	499.34	404.36	1.25	642.53			
4350.00	0.00	0.0	4280.72	499.34	404.36	0.00	642.53			
4400.00	0.00	0.0	4330.72	499.34	404.36	0.00	642.53			
4450.00	0.00	0.0	4380.72	499.34	404.36	0.00	642.53			
4500.00	0.00	0.0	4430.72	499.34	404.36	0.00	642.53			
4550.00	0.00	0.0	4480.72	499.34	404.36	0.00	642.53			
4600.00	0.00	0.0	4530.72	499.34	404.36	0.00	642.53			
4650.00	0.00	0.0	4580.72	499.34	404.36	0.00	642.53			
4700.00	0.00	0.0	4630.72	499.34	404.36	0.00	642.53			
4750.00	0.00	0.0	4680.72	499.34	404.36	0.00	642.53			
4800.00	0.00	0.0	4730.72	499.34	404.36	0.00	642.53			
4850.00	0.00	0.0	4780.72	499.34	404.36	0.00	642.53			



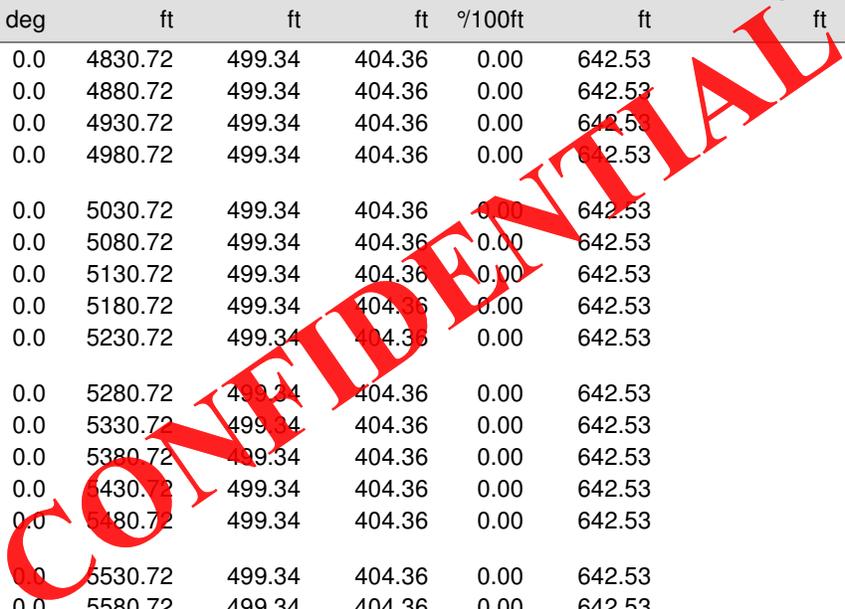
## 21-10H, Plan 1

<b>Operator</b>	<b>Units</b> feet, %/100ft	13:52 Wednesday, April 18, 2012 Page 4 of 4
<b>Field</b>	<b>County</b>	<b>Vertical Section Azimuth</b> 39
<b>Well Name</b> 21-10H	<b>State</b>	<b>Survey Calculation Method</b> Minimum Curvature
<b>Plan</b> 1	<b>Country</b>	<b>Database</b> Access

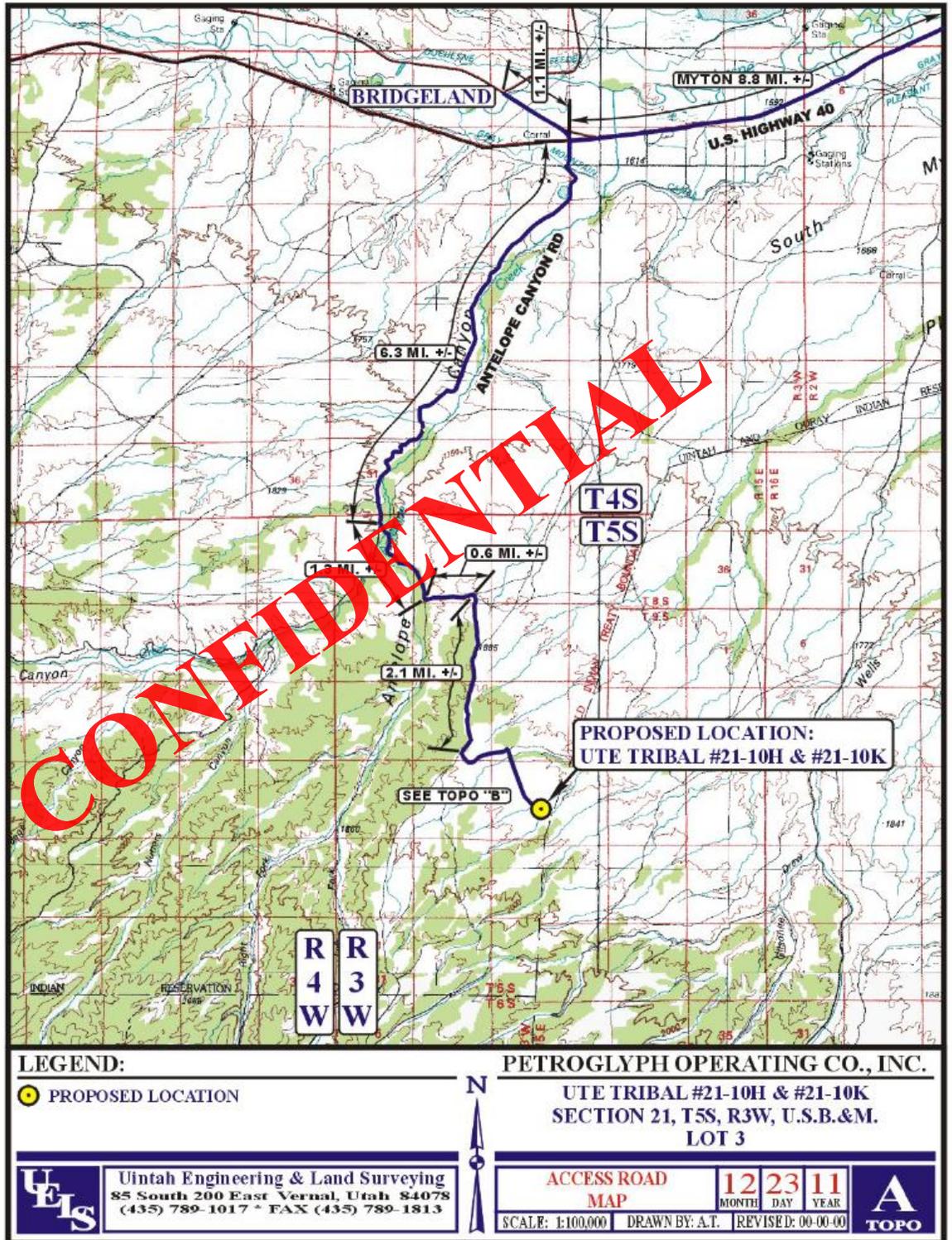
<b>Location</b>	<b>MapZone</b>	<b>Lat Long Ref</b>
<b>Site</b>	<b>SurfaceX</b>	<b>Surface Long</b>
<b>Slot Name</b>	<b>SurfaceY</b>	<b>Surface Lat</b>
<b>Well Number</b>	<b>Z Datum</b>	
<b>Project</b>	<b>Surface Z</b>	<b>Ground Level</b>

**DIRECTIONAL WELL PLAN**

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
4900.00	0.00	0.0	4830.72	499.34	404.36	0.00	642.53			
4950.00	0.00	0.0	4880.72	499.34	404.36	0.00	642.53			
5000.00	0.00	0.0	4930.72	499.34	404.36	0.00	642.53			
5050.00	0.00	0.0	4980.72	499.34	404.36	0.00	642.53			
5100.00	0.00	0.0	5030.72	499.34	404.36	0.00	642.53			
5150.00	0.00	0.0	5080.72	499.34	404.36	0.00	642.53			
5200.00	0.00	0.0	5130.72	499.34	404.36	0.00	642.53			
5250.00	0.00	0.0	5180.72	499.34	404.36	0.00	642.53			
5300.00	0.00	0.0	5230.72	499.34	404.36	0.00	642.53			
5350.00	0.00	0.0	5280.72	499.34	404.36	0.00	642.53			
5400.00	0.00	0.0	5330.72	499.34	404.36	0.00	642.53			
5450.00	0.00	0.0	5380.72	499.34	404.36	0.00	642.53			
5500.00	0.00	0.0	5430.72	499.34	404.36	0.00	642.53			
5550.00	0.00	0.0	5480.72	499.34	404.36	0.00	642.53			
5600.00	0.00	0.0	5530.72	499.34	404.36	0.00	642.53			
5650.00	0.00	0.0	5580.72	499.34	404.36	0.00	642.53			
5700.00	0.00	0.0	5630.72	499.34	404.36	0.00	642.53			
5750.00	0.00	0.0	5680.72	499.34	404.36	0.00	642.53			
5800.00	0.00	0.0	5730.72	499.34	404.36	0.00	642.53			
5850.00	0.00	0.0	5780.72	499.34	404.36	0.00	642.53			
5900.00	0.00	0.0	5830.72	499.34	404.36	0.00	642.53			
5950.00	0.00	0.0	5880.72	499.34	404.36	0.00	642.53			
6000.00	0.00	0.0	5930.72	499.34	404.36	0.00	642.53			
*** RTD (at MD = 6040.00)										
6040.00	0.00	0.0	5970.72	499.34	404.36	0.00	642.53			







**PETROGLYPH OPERATING CO., INC.**  
**P.O. BOX 607**  
**ROOSEVELT, UTAH 84066**

July 2, 2012

Ms. Diana Mason  
State of Utah  
Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11

Ute Tribal 21-10H: 2028' FSL & 784' FEL, Lot 3, (Surface Hole)  
2528' FNL & 619' FEL, SW/NE (Bottom Hole)  
Sec. 21, T5S, R3W, U.S.B.&M.,  
Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on July 2, 2012, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 21-10H is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and drilling directionally from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Ed Trotter,  
Agent  
P.O. Box 1910  
Vernal, UT 84078  
Phone: (435)789-4120  
Fax: (435)789-1420  
E-mail: edtrotter@easilink.com

**Certification**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 21-10H Well, located in Lot 3 of Section 21, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3516**; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #LP4138153.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Ed Trotter, as Agent for  
Petroglyph Operating Co., Inc.

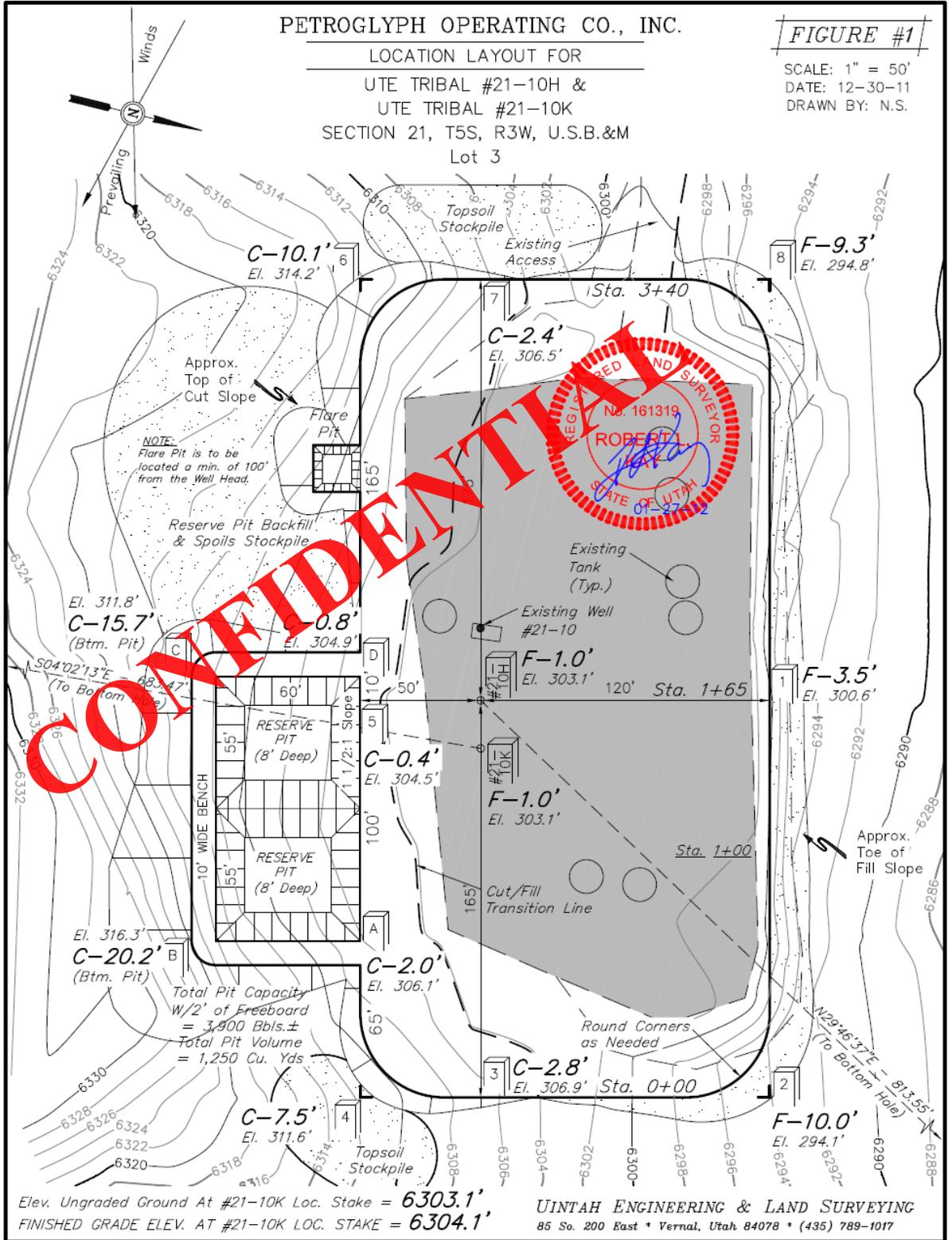
**CONFIDENTIAL**

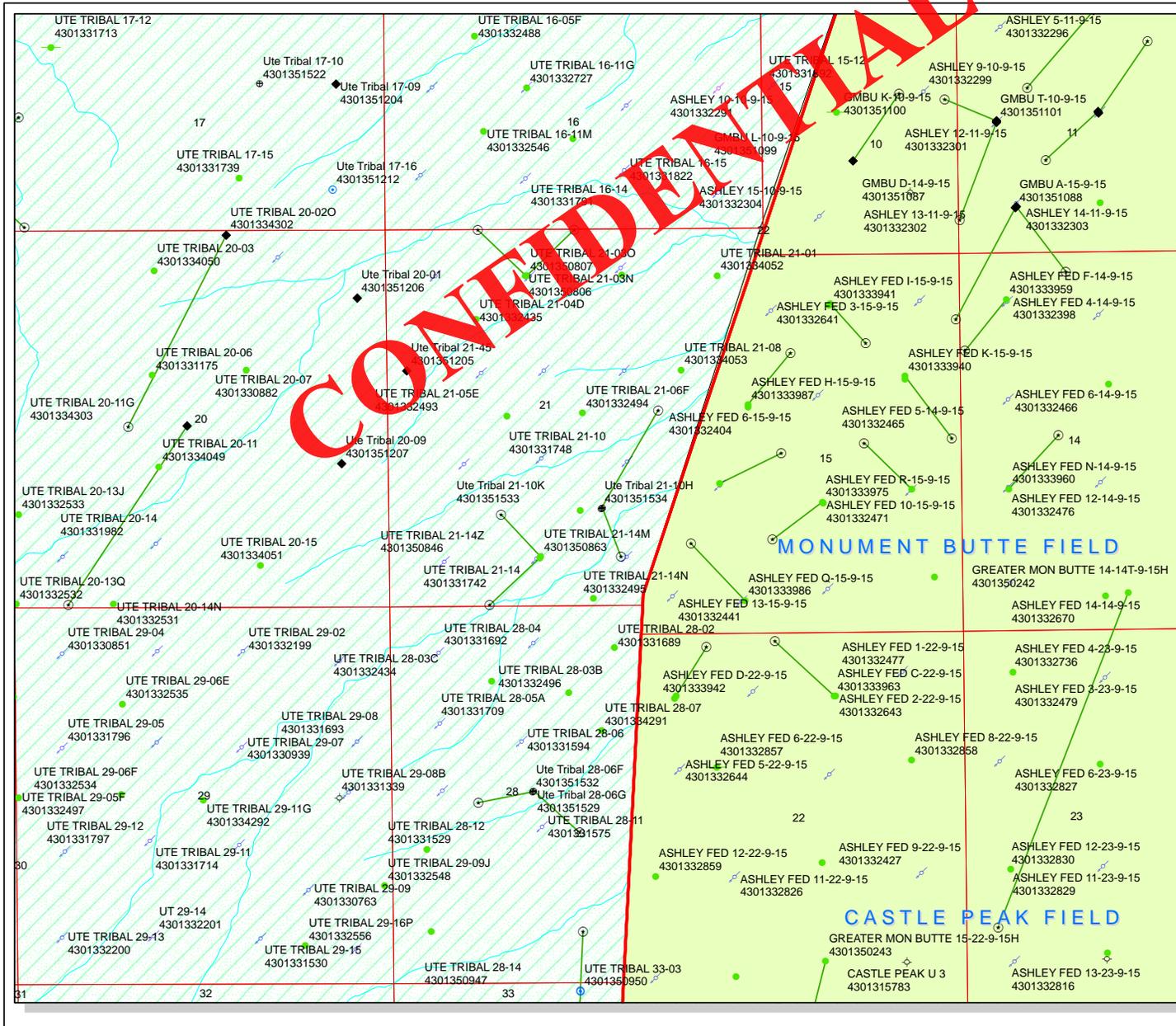
PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR  
UTE TRIBAL #21-10H &  
UTE TRIBAL #21-10K  
SECTION 21, T5S, R3W, U.S.B.&M  
Lot 3

FIGURE #1

SCALE: 1" = 50'  
DATE: 12-30-11  
DRAWN BY: N.S.

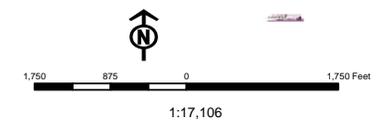




**API Number: 4301351534**  
**Well Name: Ute Tribal 21-10H**  
**Township T05.0S Range R03.0W Section 21**  
**Meridian: UBM**  
**Operator: PETROGLYPH OPERATING CO**

Map Prepared:  
 Map Produced by Diana Mason

- |                      |                                     |
|----------------------|-------------------------------------|
| <b>Units STATUS</b>  | <b>Wells Query Status</b>           |
| ACTIVE               | APD - Approved Permit               |
| EXPLORATORY          | DRIL - Spudded (Drilling Commenced) |
| GAS STORAGE          | GIW - Gas Injection                 |
| NF PP OIL            | GS - Gas Storage                    |
| NF SECONDARY         | LOC - New Location                  |
| PI OIL               | OPS - Operation Suspended           |
| PP GAS               | PA - Plugged Abandoned              |
| PP GEOTHERMAL        | PGW - Producing Gas Well            |
| PP OIL               | POW - Producing Oil Well            |
| SECONDARY            | SGW - Shut-in Gas Well              |
| TERMINATED           | SOW - Shut-in Oil Well              |
| <b>Fields STATUS</b> | TA - Temp. Abandoned                |
| Unknown              | TW - Test Well                      |
| ABANDONED            | WDW - Water Disposal                |
| ACTIVE               | WW - Water Injection Well           |
| COMBINED             | WSW - Water Supply Well             |
| INACTIVE             | Bottom Hole Location - Oil/Gas/Dls  |
| STORAGE              |                                     |
| TERMINATED           |                                     |



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/2/2012

**API NO. ASSIGNED:** 43013515340000

**WELL NAME:** Ute Tribal 21-10H

**OPERATOR:** PETROGLYPH OPERATING CO (N3800)

**PHONE NUMBER:** 435 789-4120

**CONTACT:** Ed Trotter

**PROPOSED LOCATION:** NWSE 21 050S 030W

**Permit Tech Review:**

**SURFACE:** 2028 FSL 0784 FEL

**Engineering Review:**

**BOTTOM:** 2528 FNL 0619 FEL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 40.03035

**LONGITUDE:** -110.22688

**UTM SURF EASTINGS:** 565966.00

**NORTHINGS:** 4431202.00

**FIELD NAME:** ANTELOPE CREEK

**LEASE TYPE:** 2 - Indian

**LEASE NUMBER:** 14-20-H62-3516

**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

**SURFACE OWNER:** 2 - Indian

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- PLAT
- Bond: INDIAN - LP4138153
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 43-8342
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

**Commingling Approved**

**LOCATION AND SITING:**

- R649-2-3.
- Unit: ANTELOPE CREEK
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 214-2
- Effective Date: 6/9/2000
- Siting: Suspends General Siting
- R649-3-11. Directional Drill

**Comments:** Presite Completed  
IRR SEC:

**Stipulations:** 4 - Federal Approval - dmason  
15 - Directional - dmason



GARY R. HERBERT  
Governor

GREGORY S. BELL  
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

## Permit To Drill

\*\*\*\*\*

**Well Name:** Ute Tribal 21-10H  
**API Well Number:** 43013515340000  
**Lease Number:** 14-20-H62-3516  
**Surface Owner:** INDIAN  
**Approval Date:** 7/16/2012

### Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Ave, Ste 500, Bosie, ID 83703

### 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 Cause 214-2. 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

### 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.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

### 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:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

AUG 21 2012

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

CONFIDENTIAL

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 1420H623516
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator PETROGLYPH OPERATING CO., INC. Contact: ED H TROTTER Email: edtrotter@easilink.com		7. If Unit or CA Agreement, Name and No. 1420H624650
3a. Address P.O. BOX 607 ROOSEVELT, UT 84066	3b. Phone No. (include area code) Ph: 435-789-4120 Fx: 435-789-1420	8. Lease Name and Well No. UTE TRIBAL 21-10H
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface Lot 3 2028FSL 784FEL At proposed prod. zone SWNE 2528FNL 619FEL		9. API Well No. 43013 51534
14. Distance in miles and direction from nearest town or post office* 20.73 MILES SOUTHWEST OF MYTON, UT		10. Field and Pool, or Exploratory ANTELOPE CREEK
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 784'	16. No. of Acres in Lease 533.33	11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T5S R3W Mer UBM
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1004'	19. Proposed Depth 6040 MD 5970 TVD	12. County or Parish DUCHESNE
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6304 GL	22. Approximate date work will start 10/15/2012	13. State UT
23. Estimated duration 45 DAYS		17. Spacing Unit dedicated to this well
20. BLM/BIA Bond No. on file LPM4138335		24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) LESTER FARNSWORTH Ph: 435-722-2531	Date 08/21/2012
Title DISTRICT MANAGER		
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	Date MAR 18 2013
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

Additional Operator Remarks (see next page)

MAR 22 2013

Electronic Submission #146834 verified by the BLM Well Information System OF OIL, GAS & MINING  
For PETROGLYPH OPERATING CO., INC., sent to the Vernal  
Committed to AFMSS for processing by LESLIE ROBINSON on 08/29/2012 ()

NOTICE OF APPROVAL

UDOGM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: PERTROGLYPH OPERATING CO.  
Well No: UTE TRIBAL 21-10H  
API No: 43-013-51534

Location: LOT 3, Sec. 21, T5S, R3W  
Lease No: 14-20-H62-3516  
Agreement: N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

Additional Stipulations:

- 1) All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- 2) The conditions as set forth by those owners and/or agencies.

General Conditions of Approval:

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department and the BLM will be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel will refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Gamma Ray Log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.
- Cement for the surface casing will be circulated to the surface.
- Cement for long-string shall be circulated 200' above surface casing shoe.
- Variances Granted
- Variance for Air-drilling is granted per APD

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location ( $\frac{1}{4}\frac{1}{4}$ , Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<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>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-3516
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute In
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO		<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 21-10H
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500 , Boise, ID, 83703		<b>9. API NUMBER:</b> 43013515340000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2028 FSL 0784 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 21 Township: 05.0S Range: 03.0W Meridian: U		<b>9. FIELD and POOL or WILDCAT:</b> ANTELOPE CREEK
		<b>COUNTY:</b> DUCHESNE
		<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 type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 4/9/2013	<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 type="checkbox"/> OTHER	OTHER: <input type="text"/>

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

We spudded the referenced well on 04/09/2013 at approximately 10:00A.M. We set 40' of 16" Conductor using a Bucket Rig provided by Craig's Roustabout Service, Vernal UT. For additional information please contact our office at (435) 722-2531.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
April 10, 2013**

<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/10/2013	

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# ProPetro/Air rig  
Submitted By Rodrigo Jurado Phone Number 435-722-5302  
Well Name/Number Ute Tribal 21-10H  
Qtr/Qtr Lot 3 Section 21 Township 5S Range 3W  
Lease Serial Number 14-20-H62-3516  
API Number 43-013-51534

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 4/15/2013 5:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

RECEIVED  
APR 15 2013  
DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM  PM

Remarks We intend to run +/- 500' of 8-5/8" 24 # J-55 Casing at the time indicated. (Sent 4/15/2013 @ 9:00 A.M.)

RECEIVED

APR 18 2013

DIV OF OIL GAS & MINING

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

RECEIVED  
APR 18 2013  
DIV OF OIL, GAS & MINING

FORM 6

ENTITY ACTION FORM

Operator: Petroglyph Operating Company Operator Account Number: N 3800  
 Address: P.O. Box 607  
city Roosevelt  
state UT zip 84066 Phone Number: (435) 722-2531

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351533	Ute Tribal 21-10K		Lot3	21	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12050	4/10/2013			25-April-2013 <del>CONFIDENTIAL</del>	
Comments: Please add to existing Ute Tribal 21-14 Tank Battery. GRRV							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351534	Ute Tribal 21-10H		Lot3	21	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	9999	12050	4/9/2013			25-April-2013 <del>CONFIDENTIAL</del>	
Comments: Please add well to existing Ute Tribal 21-14 Tank Battery. GRRV							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rodrigo Jurado

Name (Please Print)

*Rodrigo Jurado*  
Signature

Regulatory Compliance Spc

4/18/2013

Title

Date

<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> 14-20-H62-3516
<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 In  <b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 21-10H
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	<b>9. API NUMBER:</b> 43013515340000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	<b>PHONE NUMBER:</b> 208 685-7685 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2044 FSL 0803 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 21 Township: 05.0S Range: 03.0W Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> ANTELOPE CREEK  <b>COUNTY:</b> DUCHESNE  <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: <b>4/9/2013</b>	<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="Revised WH Location"/>

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

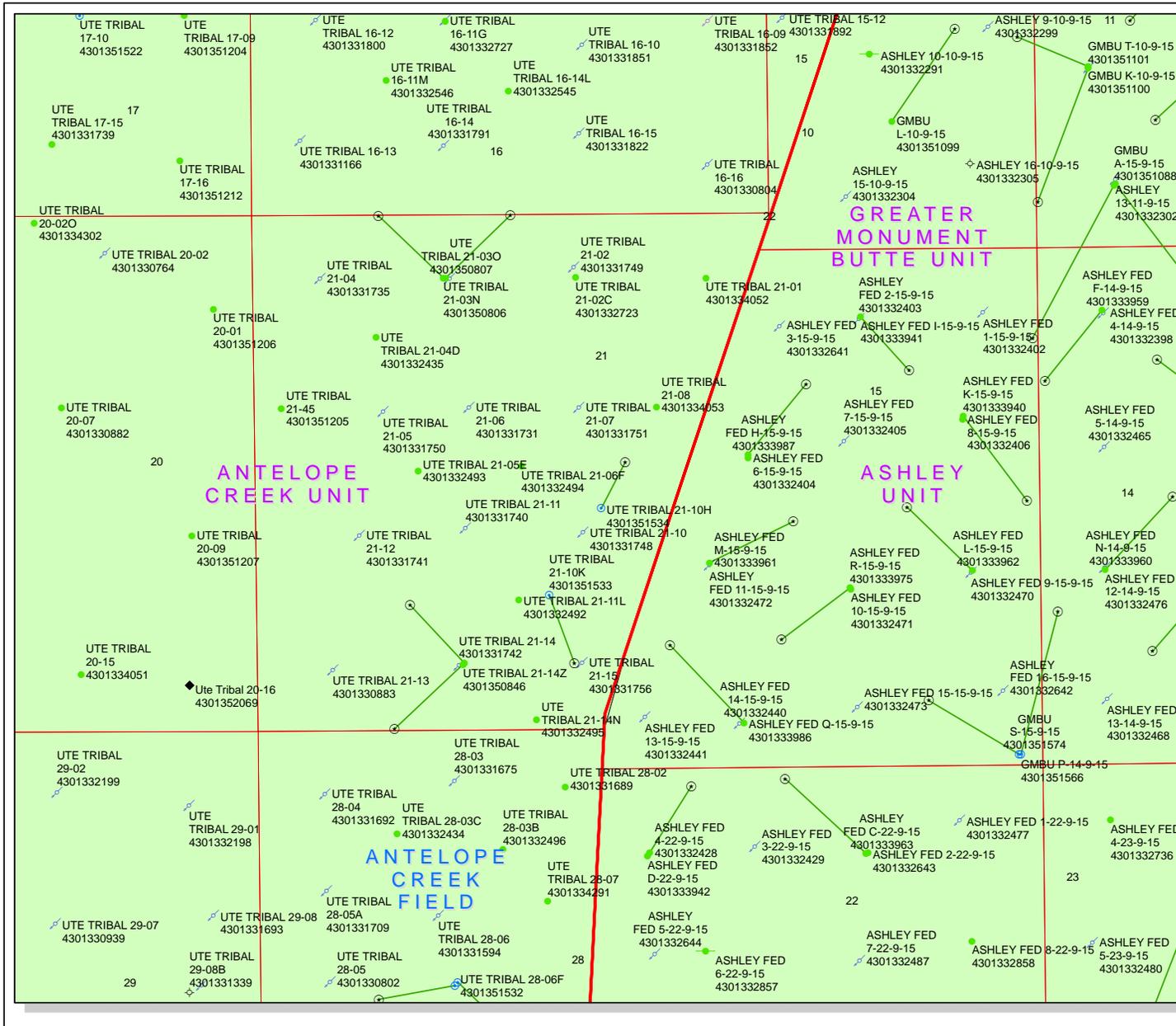
We have revised the we head location of the wel referenced above. The revised location will facilitate the footprint of our drill rig and also future workovers due to a more efficient well site layout. The Bottom Hole Location will remain unchanged. Please see the attached plats. The revised wellhead location is 2044' FSL, 803' FEL Lot 3 Sec 21, T5S, R3W, Duchesne County Utah.

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

**Date:** May 01, 2013

**By:** 

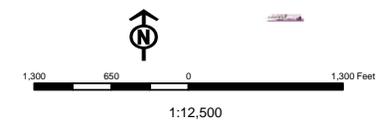
<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/22/2013	



**API Number: 4301351534**  
**Well Name: UTE TRIBAL 21-10H**  
**Township T05.0S Range R03.0W Section 21**  
**Meridian: UBM**  
**Operator: PETROGLYPH OPERATING CO**

Map Prepared:  
 Map Produced by Diana Mason

- Units STATUS**
- ACTIVE
  - EXPLORATORY
  - GAS STORAGE
  - NF PP OIL
  - NF SECONDARY
  - PI OIL
  - PP GAS
  - PP GEOTHERMAL
  - PP OIL
  - SECONDARY
  - TERMINATED
- Fields STATUS**
- Unknown
  - ABANDONED
  - ACTIVE
  - COMBINED
  - INACTIVE
  - STORAGE
  - TERMINATED



# PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #21-10H & #21-10K

LOCATED IN DUCHESNE COUNTY, UTAH

SECTION 21, T5S, R3W, U.S.B.&M.

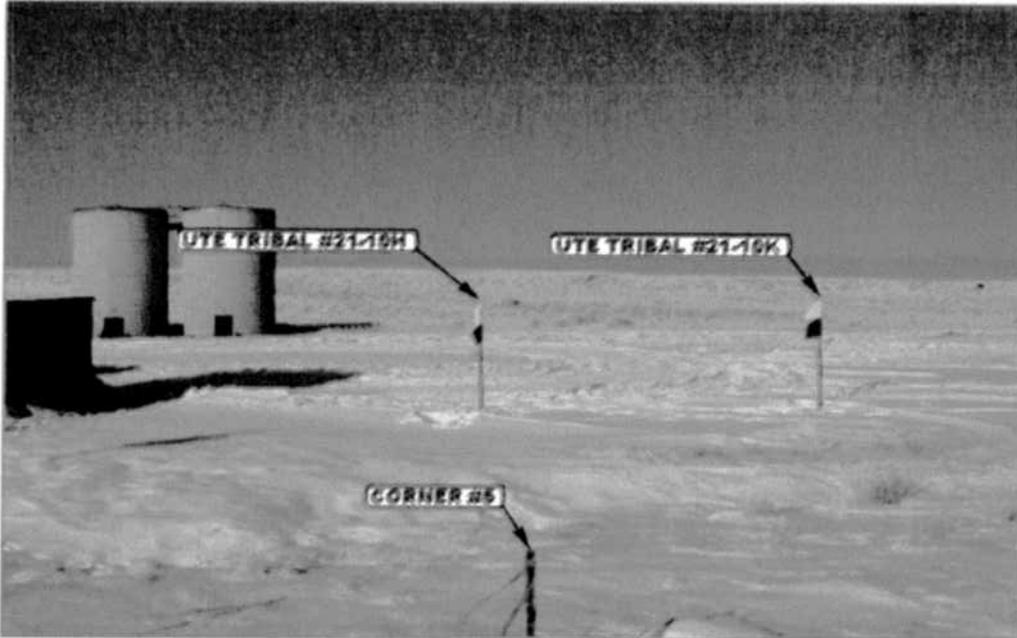


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHWESTERLY



**UELS**

Utah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

(435) 789-1017 \* FAX (435) 789-1813

LOCATION PHOTOS

12 23 11  
MONTH DAY YEAR

PHOTO

TAKEN BY: G.O. DRAWN BY: A.L. REVISED: 00-00-00

**T5S, R3W, U.S.B.&M.**

**PETROGLYPH OPERATING CO., INC.**

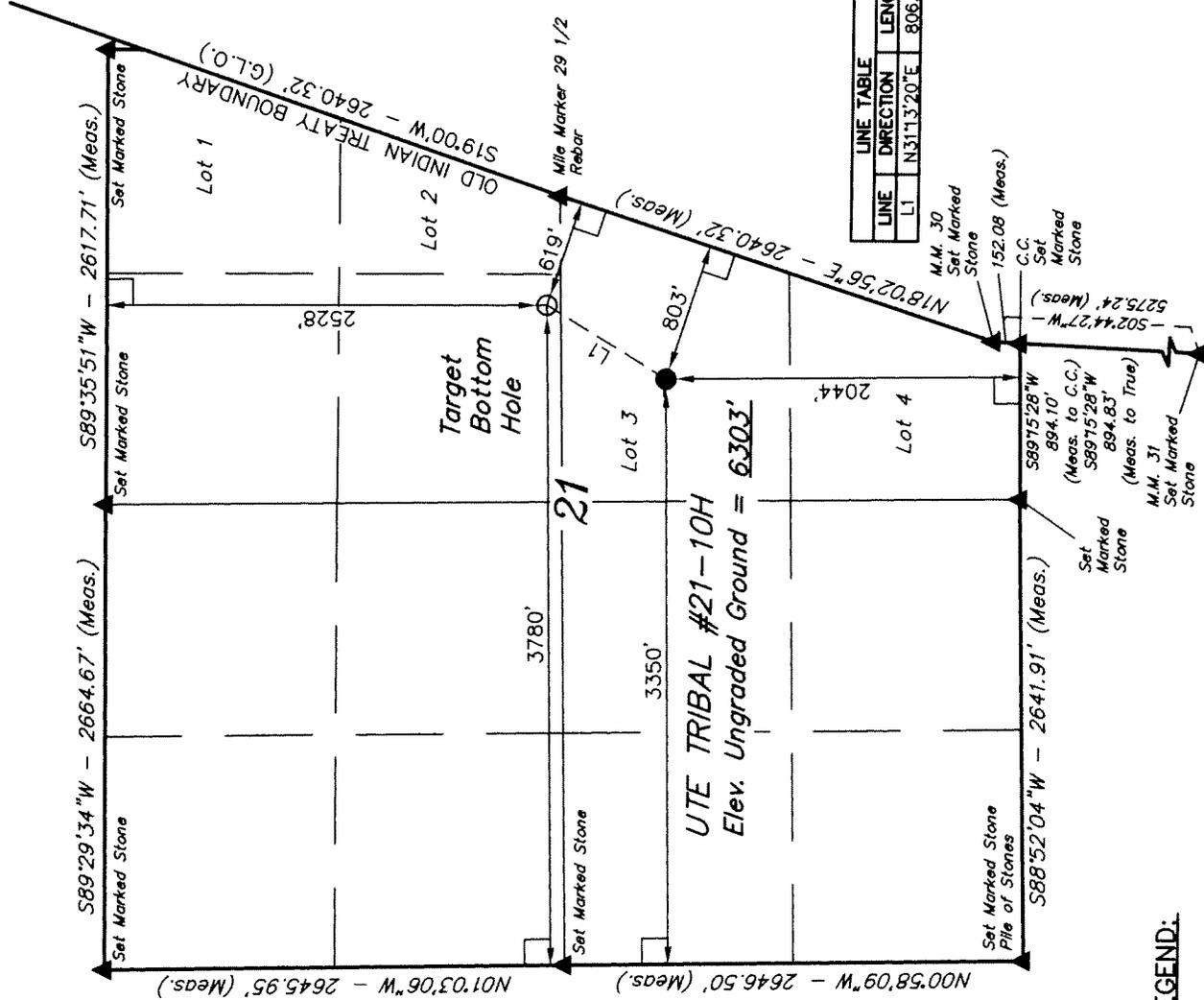
Well location, UTE TRIBAL #21-10H, located as shown in Lot 3 of Section 21, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

**BASIS OF ELEVATION**

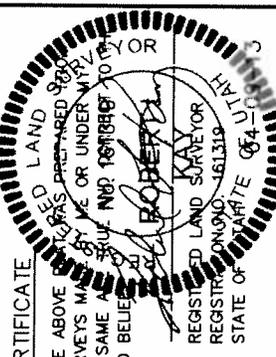
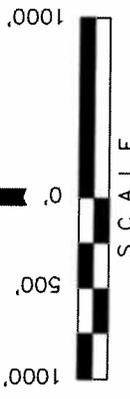
BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 16, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6281.9 FEET.

**BASIS OF BEARINGS**

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



LINE	DIRECTION	LENGTH
L1	N311°3'20\"E	806.96'



CERTIFICATE  
THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED LAND SURVEY WAS PREPARED BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REV: 04-09-13 B.D.H.

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE	1" = 1000'	DATE SURVEYED:	12-20-11	DATE DRAWN:	12-30-11
PARTY	G.O. J.C. N.S.	REFERENCES	G.L.O. PLAT		
WEATHER	COLD	FILE	PETROGLYPH OPERATING CO., INC.		

POINT	COORDINATES
NAD 83 (TARGET BOTTOM HOLE)	LATITUDE = 40°01'56.07" (40.032242) LONGITUDE = 110°13'28.26" (110.223962)
NAD 27 (TARGET BOTTOM HOLE)	LATITUDE = 40°01'56.21" (40.032281) LONGITUDE = 110°13'23.71" (110.223253)
NAD 83 (SURFACE LOCATION)	LATITUDE = 40°01'49.31" (40.030364) LONGITUDE = 110°13'31.77" (110.225492)
NAD 27 (SURFACE LOCATION)	LATITUDE = 40°01'49.45" (40.0304403) LONGITUDE = 110°13'29.22" (110.224783)

**LEGEND:**

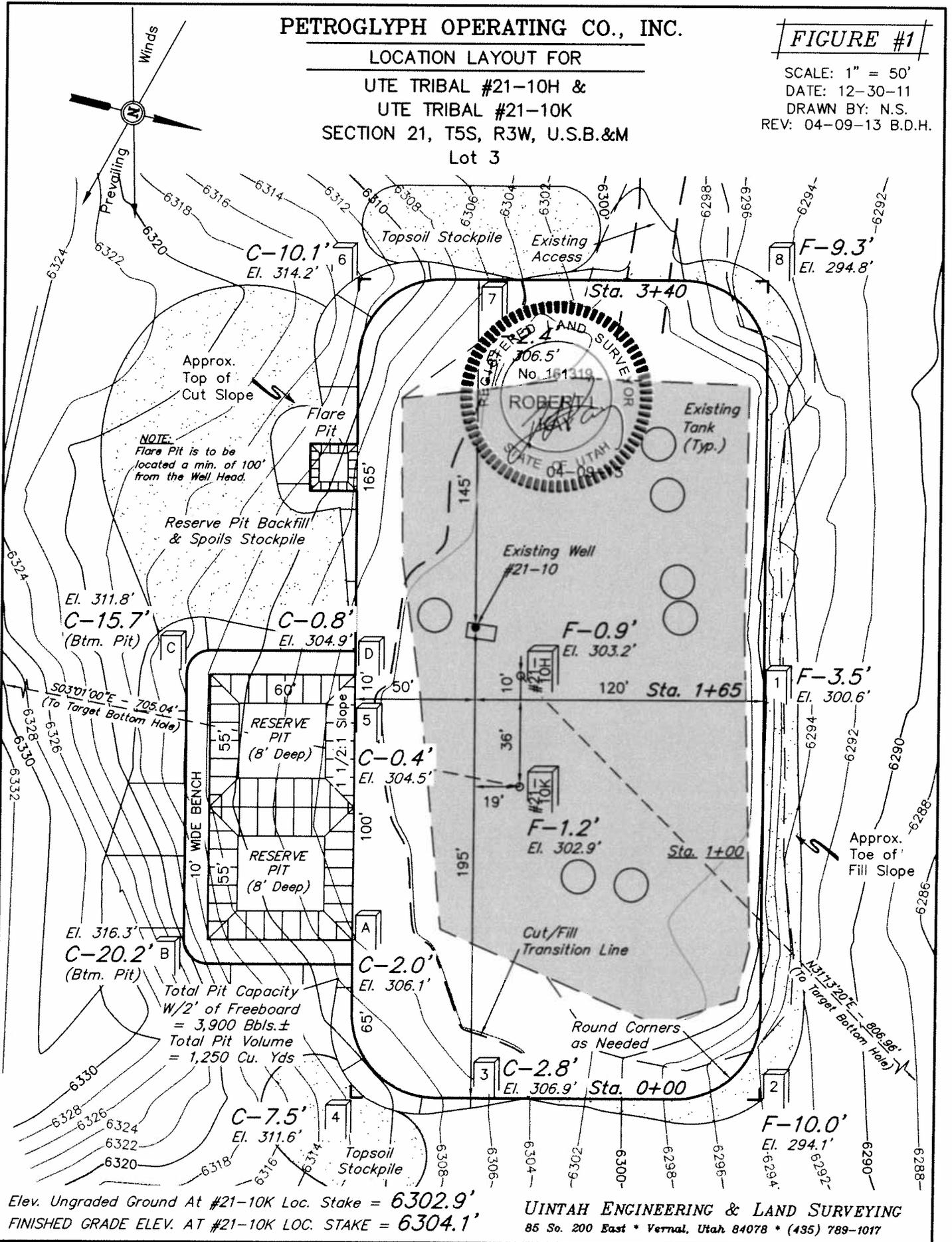
- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**PETROGLYPH OPERATING CO., INC.**

LOCATION LAYOUT FOR  
 UTE TRIBAL #21-10H &  
 UTE TRIBAL #21-10K  
 SECTION 21, T5S, R3W, U.S.B.&M  
 Lot 3

**FIGURE #1**

SCALE: 1" = 50'  
 DATE: 12-30-11  
 DRAWN BY: N.S.  
 REV: 04-09-13 B.D.H.



Elev. Ungraded Ground At #21-10K Loc. Stake = 6302.9'  
 FINISHED GRADE ELEV. AT #21-10K LOC. STAKE = 6304.1'

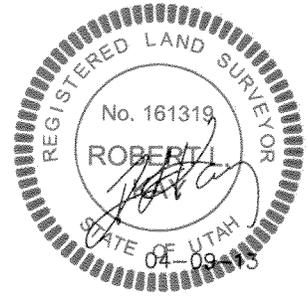
**UINTAH ENGINEERING & LAND SURVEYING**  
 85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

**PETROGLYPH OPERATING CO., INC.**

**FIGURE #2**

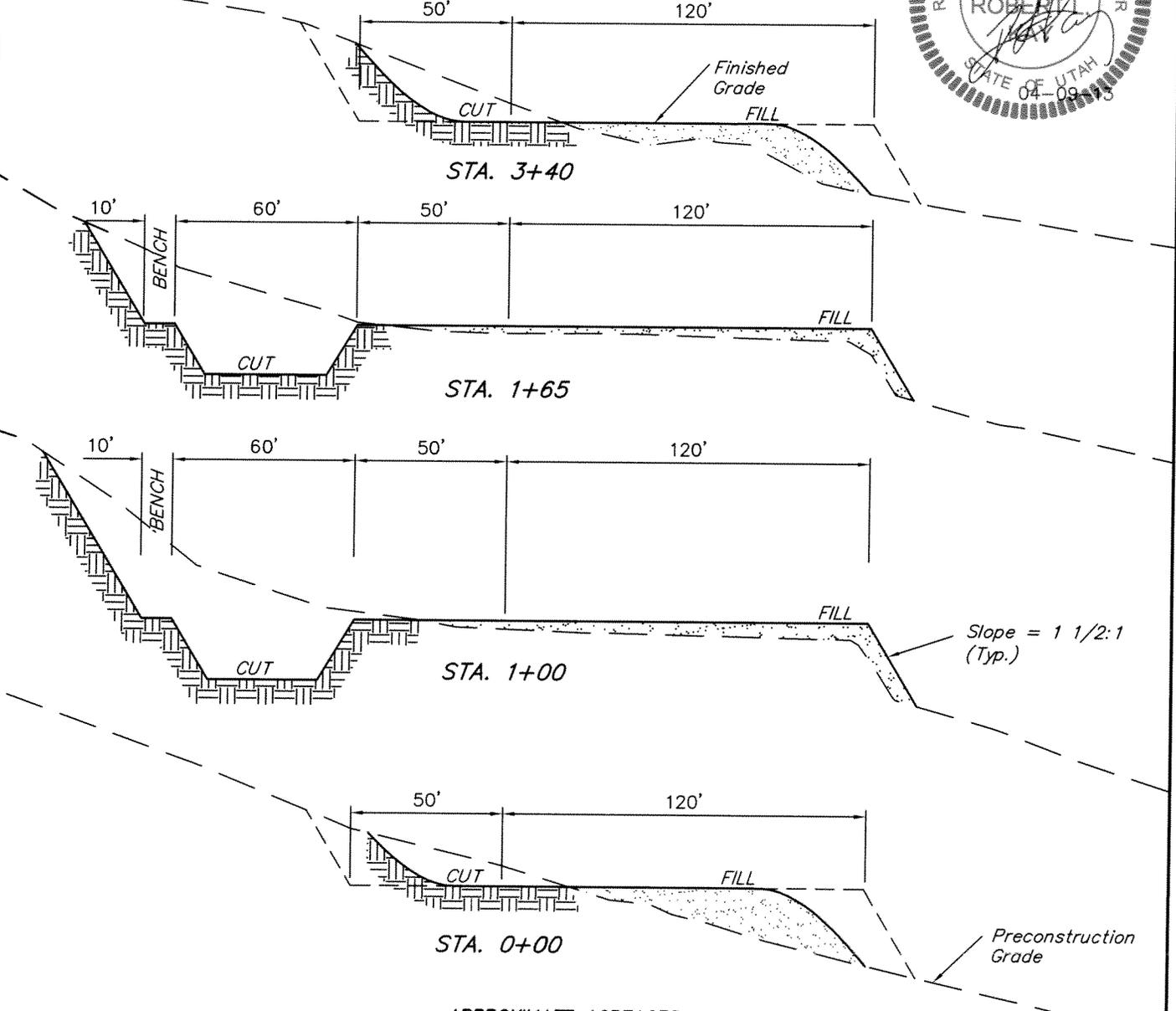
**TYPICAL CROSS SECTIONS FOR**

UTE TRIBAL #21-10H &  
UTE TRIBAL #21-10K  
SECTION 21, T5S, R3W, U.S.B.&M  
Lot 3



1" = 20'  
X-Section Scale  
1" = 50'

DATE: 12-30-11  
DRAWN BY: N.S.  
REV: 04-09-13 B.D.H.



**NOTE:**  
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

**APPROXIMATE ACREAGES**

<u>EXISTING DISTURBANCE</u>	
WITHIN PROPOSED WELL SITE	= ± 0.783 ACRES
REMAINING PROPOSED	
WELL SITE DISTURBANCE	= ± 2.550 ACRES
<b>TOTAL</b>	<b>= ± 3.333 ACRES</b>

**\* NOTE:**  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

**APPROXIMATE YARDAGES**

(12") Topsoil Stripping (New Construction Only)	= 1,230 Cu. Yds.
Remaining Location	= 5,190 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 6,420 CU.YDS.</b>
<b>FILL</b>	<b>= 4,230 CU.YDS.</b>

EXCESS MATERIAL	= 2,190 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,860 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 330 Cu. Yds.

**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

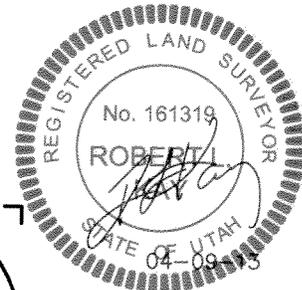
**PETROGLYPH OPERATING CO., INC.**

TYPICAL RIG LAYOUT FOR

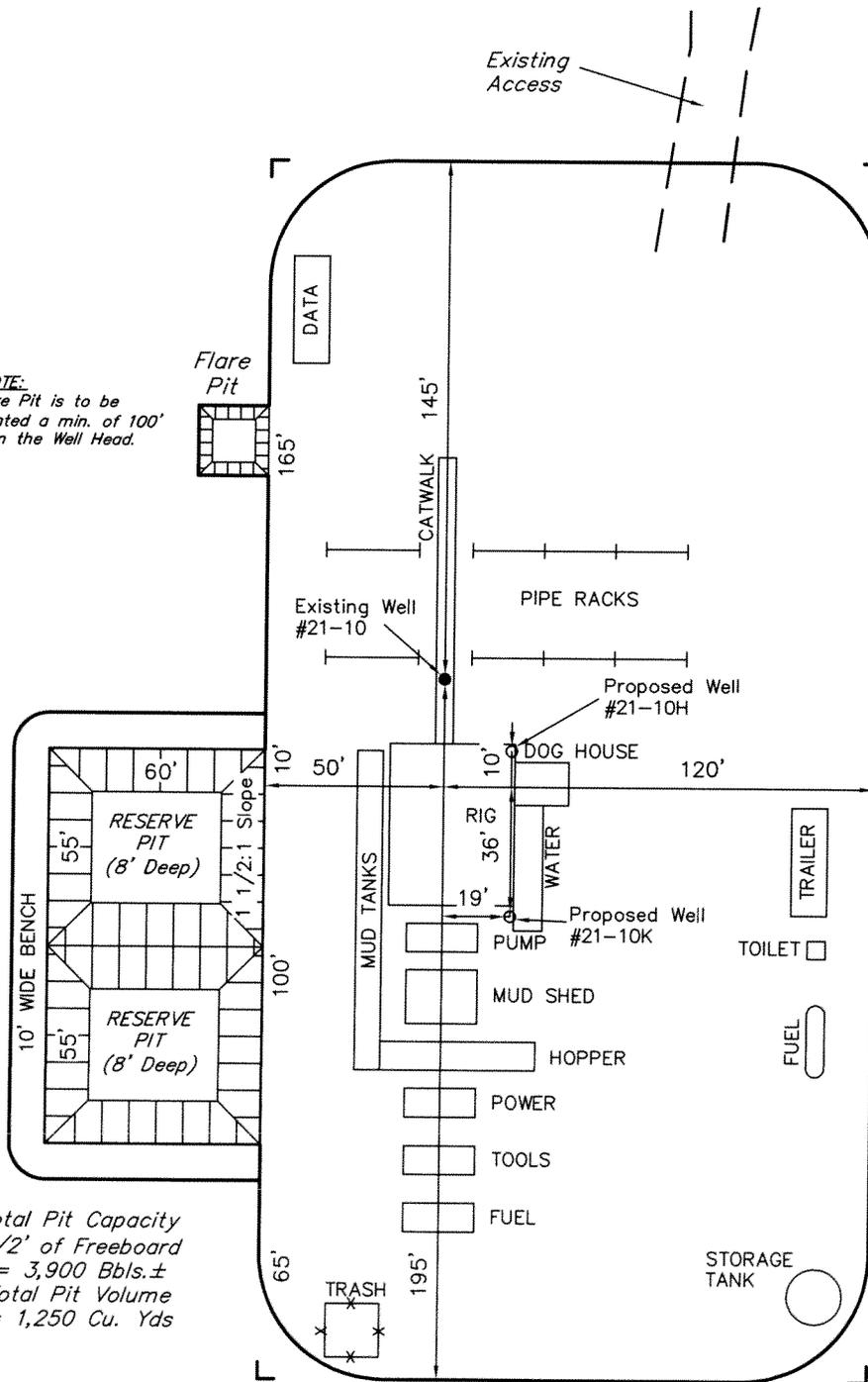
UTE TRIBAL #21-10H &  
 UTE TRIBAL #21-10K  
 SECTION 21, T5S, R3W, U.S.B.&M  
 Lot 3

**FIGURE #3**

SCALE: 1" = 50'  
 DATE: 12-30-11  
 DRAWN BY: N.S.  
 REV: 04-09-13 B.D.H.



**NOTE:**  
 Flare Pit is to be located a min. of 100' from the Well Head.



Total Pit Capacity  
 W/2' of Freeboard  
 = 3,900 Bbls.±  
 Total Pit Volume  
 = 1,250 Cu. Yds

PETROGLYPH OPERATING CO., INC.

**LOCATION SURFACE USE AREA,  
PIPELINE RIGHT-OF-WAY &  
ROAD RIGHT-OF-WAY ON UTE  
TRIBAL LANDS**

(For UTE TRIBAL #21-10H &  
UTE TRIBAL #21-10K)  
LOCATED IN  
SECTION 21, T5S, R3W,  
U.S.B.&M., DUCHESNE COUNTY, UTAH



BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

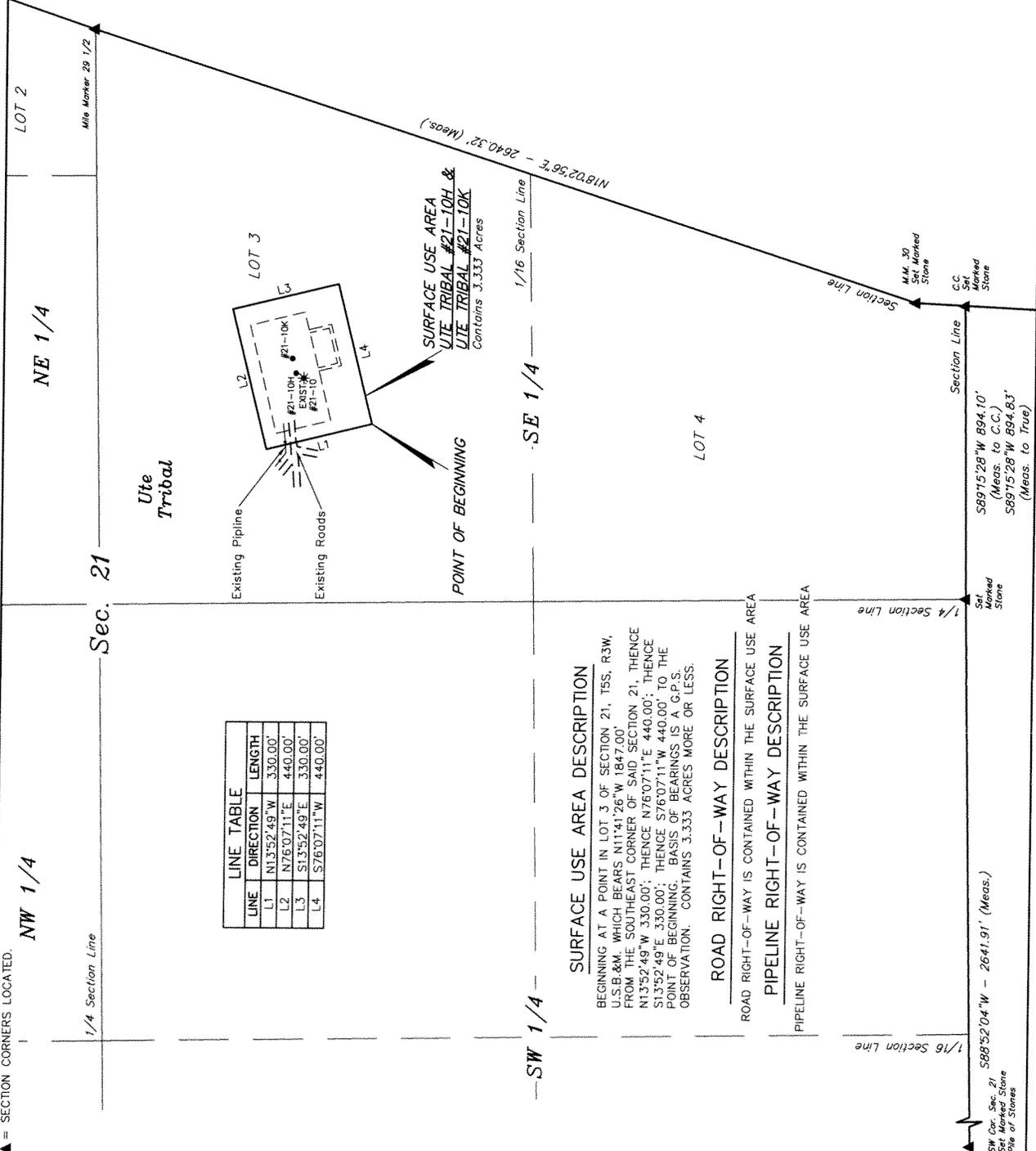


CERTIFICATE  
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD MEASUREMENTS MADE UNDER MY  
SUPERVISION AND THAT THE SAME WERE MADE TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.  
REGISTERED LAND SURVEYOR  
STATE OF UTAH, No. 181319

REV: 04-09-13 B.D.H.

**UTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH - 200 EAST • (435) 789-1017  
VERNAL, UTAH - 84078

SCALE	1" = 300'	DATE	01-09-12
PARTY	G.O. J.C. N.S.	REFERENCES	G.L.O. PLAT
WEATHER	COLD	FILE	51509



LINE	DIRECTION	LENGTH
L1	N13°52'49"W	330.00'
L2	N76°07'11"E	440.00'
L3	S13°52'49"E	330.00'
L4	S76°07'11"W	440.00'

**SURFACE USE AREA DESCRIPTION**

BEGINNING AT A POINT IN LOT 3 OF SECTION 21, T5S, R3W, U.S.B.&M. WHICH BEARS N11°41'26"W 1847.00' FROM THE SOUTHEAST CORNER OF SAID SECTION 21, THENCE N13°52'49"W 330.00'; THENCE N76°07'11"E 440.00'; THENCE S13°52'49"E 330.00'; THENCE S76°07'11"W 440.00' TO THE POINT OF BEGINNING. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 3.333 ACRES MORE OR LESS.

**ROAD RIGHT-OF-WAY DESCRIPTION**

ROAD RIGHT-OF-WAY IS CONTAINED WITHIN THE SURFACE USE AREA

**PIPELINE RIGHT-OF-WAY DESCRIPTION**

PIPELINE RIGHT-OF-WAY IS CONTAINED WITHIN THE SURFACE USE AREA

SW Cor. Sec. 21  
Set Marked Stone  
File of Stones  
S88°52'04"W - 2641.91' (Meas.)

S89°15'28"W 894.10'  
(Meas. to C.C.)  
S89°15'28"W 894.83'  
(Meas. to True)

M.M. 30  
Set Marked Stone

C.C.  
Set Marked Stone

N18°02'56"E - 2640.32' (Meas.)

1/16 Section Line

SE 1/4

LOT 4

LOT 2

Mile Marker 29 1/2

NE 1/4

Sec. 21

NW 1/4

1/4 Section Line

1/16 Section Line

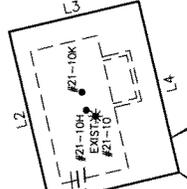
Set Marked Stone

Section Line

Section Line

POINT OF BEGINNING

SURFACE USE AREA  
UTE TRIBAL #21-10H &  
UTE TRIBAL #21-10K  
Contains 3.333 Acres



Ute Tribal

Existing Pipeline  
Existing Roads

▲ = SECTION CORNERS LOCATED.

PETROGLYPH OPERATING CO., INC.  
UTE TRIBAL #21-10H &  
UTE TRIBAL #21-10K  
ROAD RIGHT-OF-WAY, PIPELINE  
RIGHT-OF-WAY & SURFACE USE AREA  
SECTION 21, T5S, R3W, U.S.B.&M.

TOTAL ROAD RIGHT-OF-WAY ON UTE TRIBAL LANDS

ROAD RIGHT-OF-WAY IS CONTAINED WITHIN THE SURFACE USE AREA

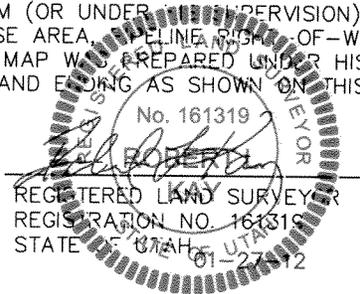
TOTAL PIPELINE RIGHT-OF-WAY ON UTE TRIBAL LANDS

PIPELINE RIGHT-OF-WAY IS CONTAINED WITHIN THE SURFACE USE AREA

ENGINEER'S AFFIDAVIT

STATE OF UTAH            )  
                                  ) SS  
COUNTY OF UTAH        )

ROBERT L. KAY, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR PETROGLYPH OPERATING CO., INC., THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE SURFACE USE AREA, PIPELINE RIGHT-OF-WAY AND ROAD RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.



ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN BEFORE ME THIS \_\_\_\_ DAY OF \_\_\_\_\_ 2012.

MY COMMISSION EXPIRES \_\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC  
VERNAL, UTAH

APPLICANT'S CERTIFICATE

I, ED TROTTER, DO HEREBY CERTIFY THAT I AM THE AGENT FOR PETROGLYPH OPERATING CO., INC., HEREINAFTER DESIGNATED THE APPLICANT; THAT ROBERT L. KAY WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS SURFACE USE AREA, PIPELINE RIGHT-OF-WAY AND ROAD RIGHT-OF-WAY, BEGINNING AND ENDING AS SHOWN, THAT SAID SURFACE USE AREA, PIPELINE RIGHT-OF-WAY AND ROAD RIGHT-OF-WAY ARE ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

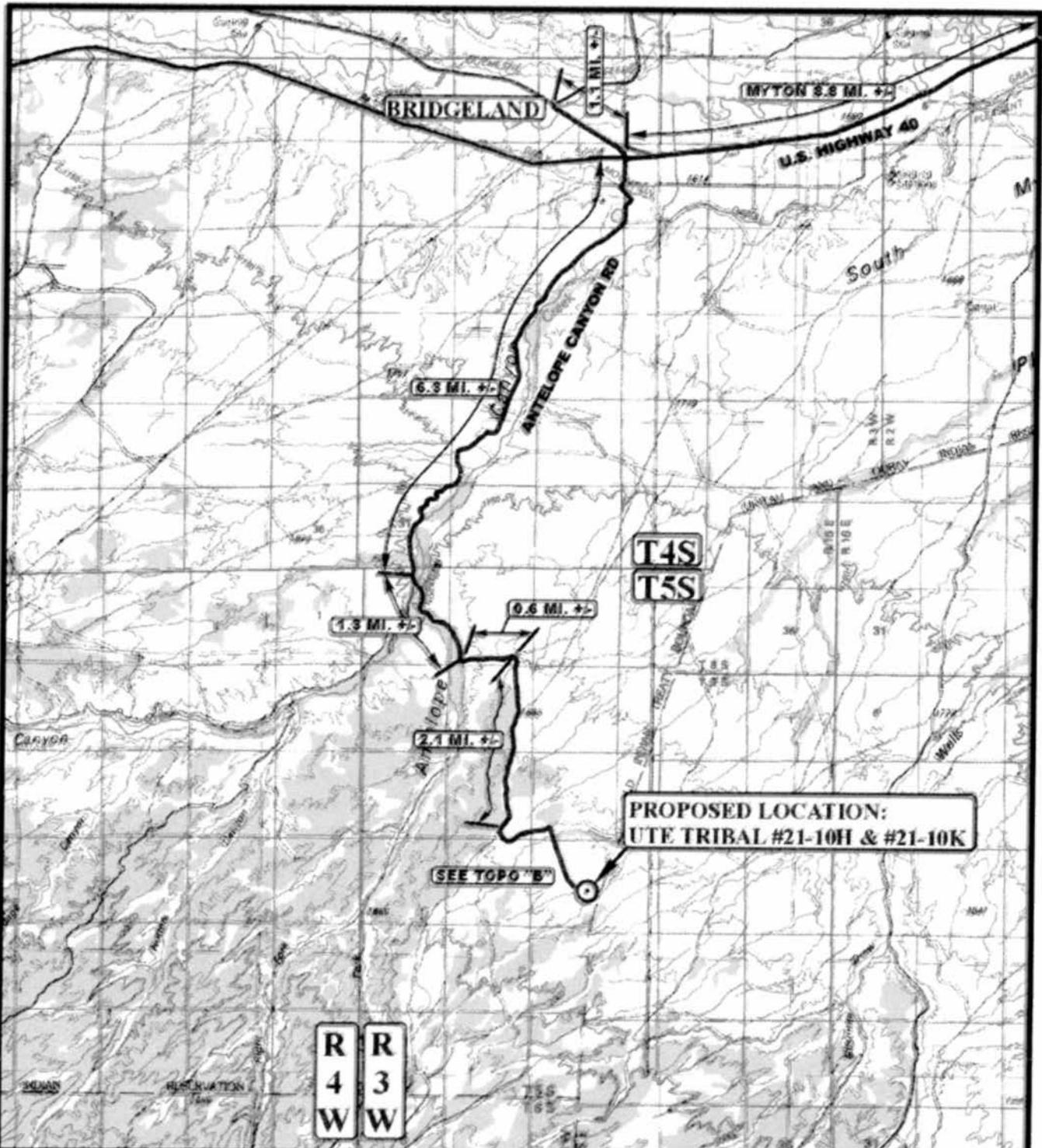
\_\_\_\_\_  
APPLICANT

\_\_\_\_\_  
TITLE

PETROGLYPH OPERATING CO., INC.  
UTE TRIBAL #21-10H & #21-10K  
SECTION 21, T5S, R3W, U.S.B.&M.

PROCEED IN A SOUTHWESTERLY DIRECTION FROM MYTON, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 8.8 MILES TO THE JUNCTION OF THIS ROAD AND ANTELOPE CANYON ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION ALONG ANTELOPE CANYON ROAD APPROXIMATELY 6.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 2.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND THE BEGINNING OF THE EXISTING ACCESS ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 150' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM MYTON, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 20.7 MILES.



**LEGEND:**

⊙ PROPOSED LOCATION

N

**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #21-10H & #21-10K  
SECTION 21, T5S, R3W, U.S.B.&M.  
LOT 3



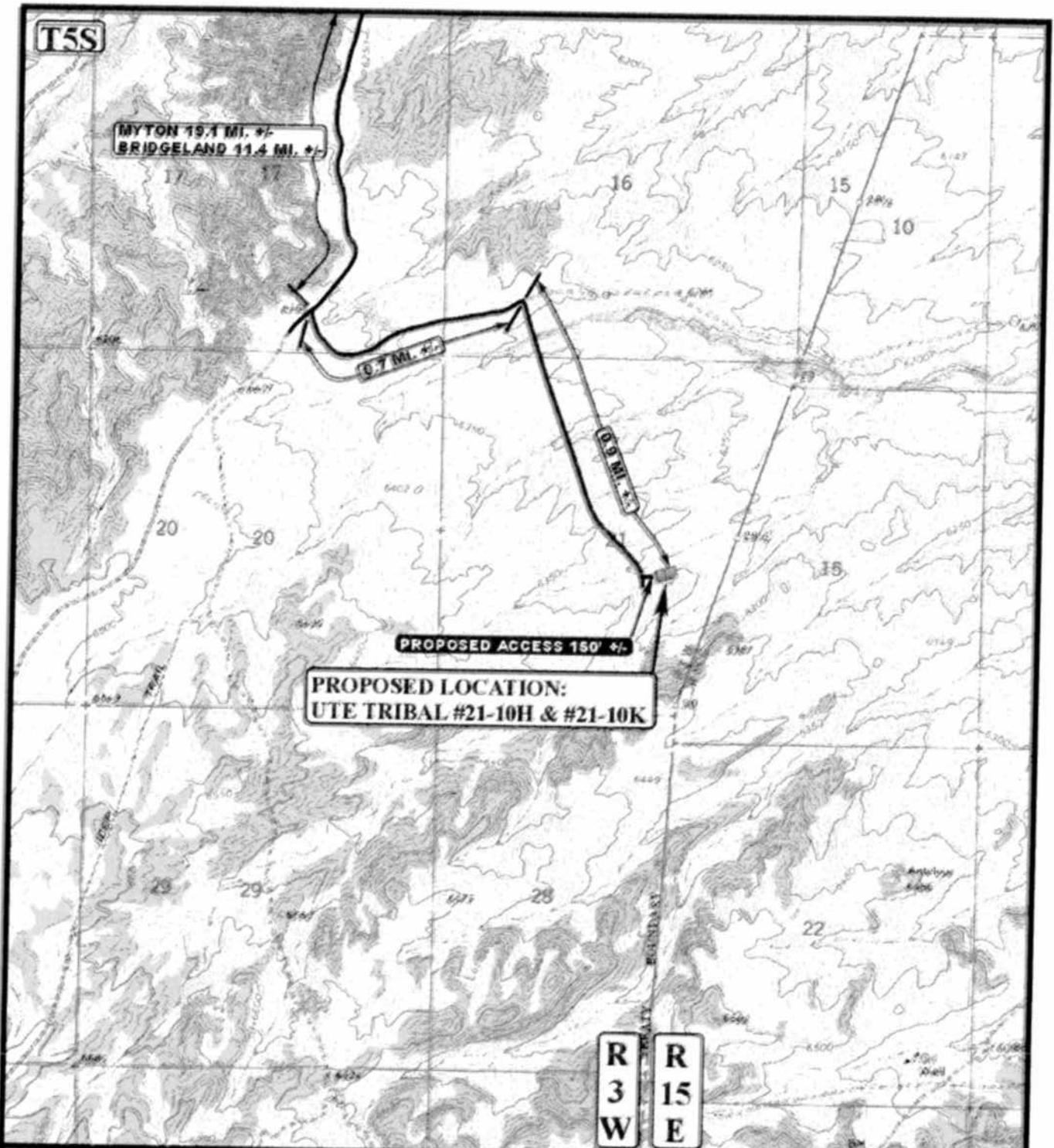
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 • FAX (435) 789-1813

ACCESS ROAD  
MAP

12	23	11
MONTH	DAY	YEAR



SCALE: 1:100,000 DRAWN BY: A.L. REVISED: 00-00-06



**T5S**

MYTON 19.1 MI. +/-  
BRIDGELAND 11.4 MI. +/-

0.7 MI. +/-

0.9 MI. +/-

PROPOSED ACCESS 150' +/-

PROPOSED LOCATION:  
UTE TRIBAL #21-10H & #21-10K

**R  
3  
W**   **R  
15  
E**

**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD

**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #21-10H & #21-10K  
SECTION 21, T5S, R3W, U.S.B.&M.  
LOT 3



Uintah Engineering & Land Surveying  
85 South 200 East Vernal Utah 84078  
(435) 789-1017 - FAX (435) 789-1813

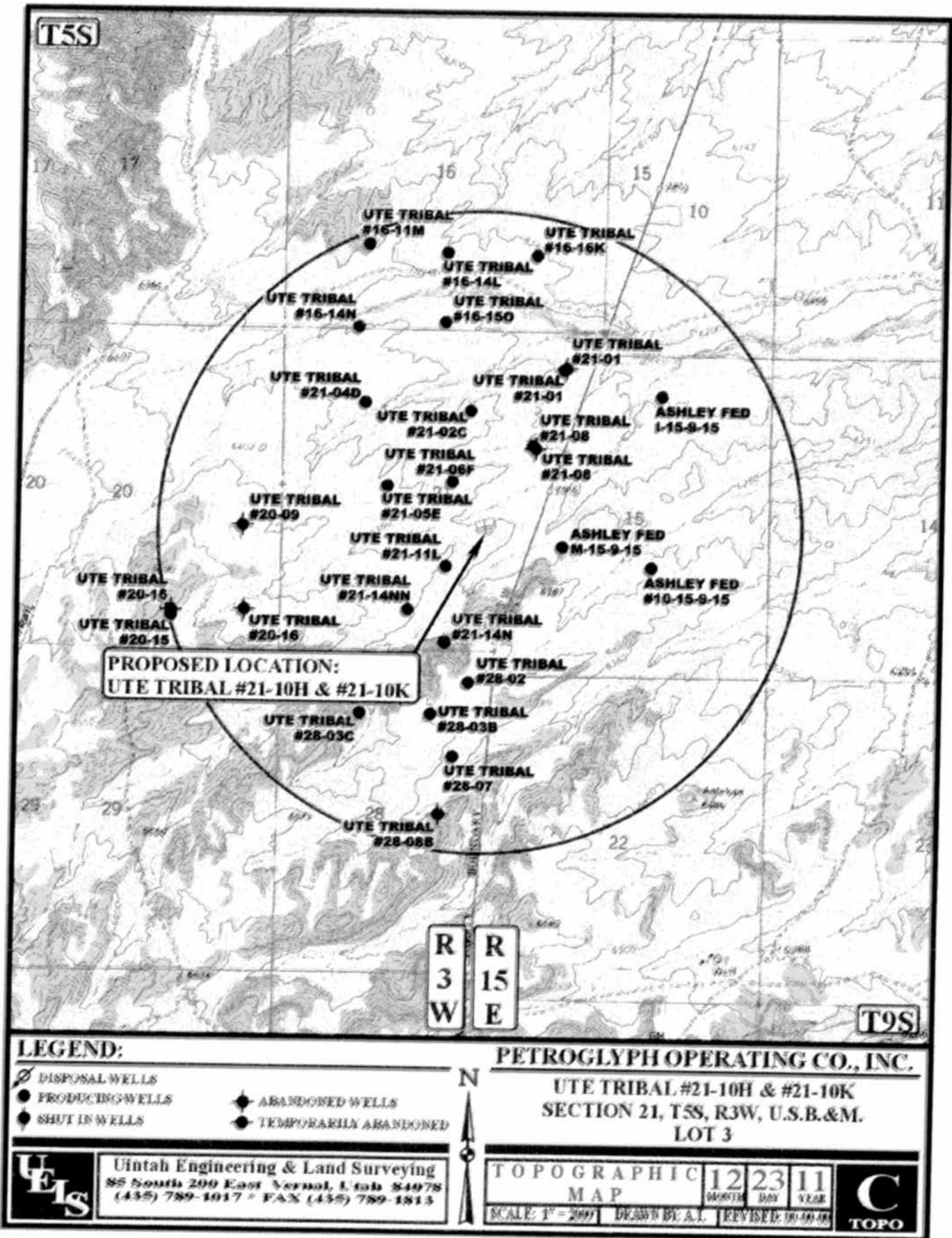


ACCESS ROAD  
MAP

12	23	11
MONTH	DAY	YEAR

**B**  
TOPO

SCALE: 1" = 2000'   DRAWN BY: A.L.   REVISED: 06/09/07



BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673  
 Submitted By Kenny Gray Phone Number 970-361-3271  
 Well Name/Number UT 21-10H  
 Qtr/Qtr Lot 3 Section 21 Township 5S Range 3W  
 Lease Serial Number 14-20-H62-3516  
 API Number 43-013-51534

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

RECEIVED  
 MAY 07 2013  
 DIV. OF OIL, GAS & MINING

Date/Time 05/08/2013 10:00 AM  PM

Remarks \_\_\_\_\_

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673  
 Submitted By Kenny Gray Phone Number 970-361-3271  
 Well Name/Number Ute Tribal 21-10H  
 Qtr/Qtr ~~Let 3~~ <sup>NWSE</sup> Section 21 Township 5S Range 3W  
 Lease Serial Number 14-20-H62-3516  
 API Number 43-013-51534

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 05/12/2013 8:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

**RECEIVED**

**MAY 11 2013**

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM  PM

Remarks TD 6125

<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> 14-20-H62-3516
<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 In  <b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 21-10H
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	<b>9. API NUMBER:</b> 43013515340000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	<b>PHONE NUMBER:</b> 208 685-7685 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2044 FSL 0803 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 21 Township: 05.0S Range: 03.0W Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> ANTELOPE CREEK  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>6/3/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

On or around 6/3/2013, depending on equipment availability, Petroglyph Operating Company, Inc. plans on perforating and fracture treating the following: 4155-62, 4294-4303, 4450-52, 4504-07, 4545-48, 4552-54, 4774-82, 4791-96, 4905-07, 4926-28, 4937-38, 4947-50, 5172-87, 5231-36, 5294-5300, 5506-13, 5580-92, 5594--5610, 5810-13, 5822-36, 5998-6004 & 6029-34. We intend to perforate using Titan 3-1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54"TTP @ 4 spf @ 120\* phased. We will frac using Delta 140 15# gelled fluid containing 20/40 mesh sand. Zones will isolate using Halliburton 8K composite plugs. All plugs will be drilled out and cleaned out and the well swabbed until a good oil cut is seen.

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

**Date:** May 29, 2013

**By:** *Dark Ount*

<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/23/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<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>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-3516	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute In	
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK	
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO		<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 21-10H	
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500 , Boise, ID, 83703		<b>9. API NUMBER:</b> 43013515340000	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2044 FSL 0803 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 21 Township: 05.0S Range: 03.0W Meridian: U		<b>9. FIELD and POOL or WILDCAT:</b> ANTELOPE CREEK	
		<b>COUNTY:</b> DUCHESNE	
		<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 checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/23/2013  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input checked="" type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
The date of first production for this well was 6/23/2013.			
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 12, 2013</b>			
<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado		<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A		<b>DATE</b> 6/25/2013	

<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> 14-20-H62-3516	
<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 In	
<b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK	
<b>1. TYPE OF WELL</b> Oil Well	
<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 21-10H	
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	
<b>9. API NUMBER:</b> 43013515340000	
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	
<b>PHONE NUMBER:</b> 208 685-7685 Ext	
<b>9. FIELD and POOL or WILDCAT:</b> ANTELOPE CREEK	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2044 FSL 0803 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 21 Township: 05.0S Range: 03.0W Meridian: U	
<b>COUNTY:</b> DUCHESNE	
<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"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <b>6/25/2013</b>			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

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

Please see attached.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 August 30, 2013**

<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/1/2013	

**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: <b>14-20-H62-3516</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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>Ute Indian Tribe</b>
		7. UNIT or CA AGREEMENT NAME: <b>14-20-H62-4650</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: <b>Ute Tribal 21-10H</b>	
2. NAME OF OPERATOR: <b>Petroglyph Operating Company Inc.</b>		9. API NUMBER: <b>4301351534</b>
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY <b>Roosevelt</b> STATE <b>UT</b> ZIP <b>84066</b>	PHONE NUMBER: <b>(435) 722-2531</b>	10. FIELD AND POOL, OR WILDCAT: <b>Antelope Creek</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>2044' FSL 803' FEL</b>		COUNTY: <b>Duchesne</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSE 21 5S 3W U</b>		STATE: <b>UTAH</b>

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"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input checked="" 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/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"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: <b>6/25/2013</b>			

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

On 5/30/2013 Petroglyph Operating ran GR/CBL and found ETOC @ Surface', then perforated the following: 6029-34, 5998-6004, 5822-36, 5810-13, 5594-5610, 5580-92, 5506-13, 5294-5300, 5231-36, 5172-87, 4947-50, 4937-38, 4926-28, 4905-06, 4791-96, 4774-82, 4552-54, 4545-48, 4504-07, 4450-52, 4294-4303 & 4155-62. We isolated and fracture treated the following intervals:

5,998'-6,034': 502 Bbbs of fluid containing 32,000#'s of sand,  
 5,810'-5,836': 560 Bbbs of fluid containing 43,000#'s of sand,  
 5,506'-5,513': 586 Bbbs of fluid containing 51,320#'s of sand,  
 5,172'-5,300': 753 Bbbs of fluid containing 70,100#'s of sand,  
 4,905'-4,950': 403 Bbbs of fluid containing 29,000#'s of sand,  
 4,774'-4,796': 433 Bbbs of fluid containing 34,000#'s of sand,  
 4,450'-4,554': 412 Bbbs of fluid containing 27,500#'s of sand,  
 4,294'-4,303': 366 Bbbs of fluid containing 22,000#'s of sand,  
 4,155'-4,162': 342 Bbbs of fluid containing 26,430#'s of sand.

Isolation plugs used were Halliburton 8K Composite Plugs, fluid used was Dyna HT 22 15# gelled fluid, sand used was 20/40 Mesh Premium White Sand and guns used were Titan 3-1/8", containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 SPF @ 120\* Phased. All plugs were drilled out and cleaned out to PBSD, 6,180'. The well was swabbed until a good oil cut was see, then ran a pump on 6/25/2013 and put to pump.

NAME (PLEASE PRINT) <u>Rodrigo Jurado</u>	TITLE <u>Regulatory Compliance Specialist</u>
SIGNATURE	DATE <u>8/1/2013</u>

(This space for State use only)

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

AMENDED REPORT  FORM 8  
(highlight changes)

**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: **Petroglyph Operating Company, Inc.**

3. ADDRESS OF OPERATOR: **P.O. Box 607** CITY **Roosevelt** STATE **UT** ZIP **84066** PHONE NUMBER: **(435) 722-2531**

4. LOCATION OF WELL (FOOTAGES):  
AT SURFACE: **2044' FSL 803' FEL**  
AT TOP PRODUCING INTERVAL REPORTED BELOW: **2618' FSL, 3830' FWL**  
AT TOTAL DEPTH: **2703'FSL, 3894'FWL SWNE Sec 21**

5. LEASE DESIGNATION AND SERIAL NUMBER: **1420H623516**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: **Ute Indian Tribe**

7. UNIT or CA AGREEMENT NAME: **1420H624650**

8. WELL NAME and NUMBER: **Ute Tribal 21-10H**

9. API NUMBER: **4301351534**

10. FIELD AND POOL, OR WILDCAT: **Antelope Creek**

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **NWSE 21 5S 3W U**

12. COUNTY: **Duchesne** 13. STATE: **UTAH**

14. DATE SPUDDED: **4/9/2013** 15. DATE T.D. REACHED: **5/11/2013** 16. DATE COMPLETED: **6/25/2013** ABANDONED  READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL): **6328' RKB**

18. TOTAL DEPTH: MD **6,250** TVD **6,158** 19. PLUG BACK T.D.: MD **6,180** TVD **6,072** 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): **ACTR, SDDSN, Cement Bond Log, Borehole Volume Plot**

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
26	16 J-55	75	0	75				0	Conductor
12.25	8.625 J-55	24	0	511		G 350	72	0	
7.875	5.5 J-55	15.5	0	6,241		G 830	254	0' CBL	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	6,033							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Green River	4,155	6,034	4,068	5,942	4,155 6,034	0.42	544	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
4,155'-6,034'	4,357 Bbls of Dyna HT 22 15# gelled fluid containing 335,350#'s of 20/40 Mesh Sand

29. ENCLOSED ATTACHMENTS:  ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: **UDOGM Form 7**

30. WELL STATUS: **POW**

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 6/25/2013	TEST DATE: 7/15/2013	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL - BBL: 38	GAS - MCF: 11	WATER - BBL: 132	PROD. METHOD: Rod Pump
CHOKESIZE: 38/64	TBG. PRESS. 190	CSG. PRESS. 180	API GRAVITY 40.60	BTU - GAS 1	GAS/OIL RATIO 289	24 HR PRODUCTION RATES: →	INTERVAL STATUS: Open

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:
CHOKESIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	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:
CHOKESIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	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:
CHOKESIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

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

Used for Fuel

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)
				Trona	2,830
				Mahogany	2,975
				Garden Gulch	3,699
				B Marker	4,100
				X Marker	4,590
				Y Marker	4,627
				Douglas Creek	4,736
				B Lime	5,113
				Castle Peak	5,628
				Basal Carbonate	6,096

35. ADDITIONAL REMARKS (Include plugging procedure)

All Frac and Perf info is condensed. Please see NOI and Subsequent Frac Sundry for detailed record.

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

NAME (PLEASE PRINT) Rodrigo Jurado TITLE Regulatory Compliance Specialist  
 SIGNATURE  DATE 8/16/13

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- 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

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

**REPORT OF WATER ENCOUNTERED DURING DRILLING**

Well name and number: Ute Tribal 21-10H

API number: 4301351534

Well Location: QQ NWSE Section 21 Township 5S Range 3W County Duchesne

Well operator: Petroglyph Operating Company, Inc.

Address: P.O. Box 607

city Roosevelt state UT zip 84066

Phone: (435) 722-2531

Drilling contractor: ProPetro Services

Address: 1422 East 1500 South

city Vernal state UT zip 84078

Phone: (435) 789-1735

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
0	510	0	No Water Encountered

Formation tops:                    1 \_\_\_\_\_                    2 \_\_\_\_\_                    3 \_\_\_\_\_  
 (Top to Bottom)                    4 \_\_\_\_\_                    5 \_\_\_\_\_                    6 \_\_\_\_\_  
                                              7 \_\_\_\_\_                    8 \_\_\_\_\_                    9 \_\_\_\_\_  
                                              10 \_\_\_\_\_                    11 \_\_\_\_\_                    12 \_\_\_\_\_

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

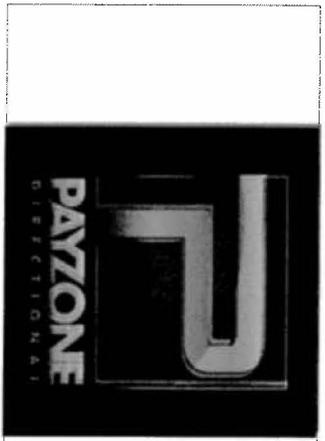
I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo Jurado

TITLE Regulatory Compliance Specialist

SIGNATURE 

DATE 4/19/2013



Job Number: UT131008  
 Company: Petroglyph  
 Lease/Well: Ute Tribal\_21-10H  
 Location: Sec. 21, T5S, R3W  
 Rig Name: Aztec #673  
 RKB: 6319'  
 G.L. or M.S.L.: GL\_6304'

State/Country: Utah/USA  
 Declination: 11.14  
 Grid: True  
 File name: C:\DOCUME~1\PAYZONE\DESKTOP\UTETRI-2\UT131008.SVY  
 Date/Time: 11-May-13 / 19:20  
 Curve Name: Ute Tribal\_21-10H\_Actual

**Payzone Directional Services LLC**

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 40.07  
 Vertical Section Referenced to Wellhead  
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
527.00	.57	141.92	526.99	-2.06	1.62	.00	2.62	141.92	.11
588.00	.62	70.64	587.99	-2.19	2.12	-.32	3.05	136.03	1.14
649.00	1.80	53.30	648.97	-1.51	3.19	.90	3.53	115.31	2.00
710.00	3.12	42.08	709.92	.29	5.08	3.49	5.08	86.69	2.29
771.00	4.09	46.74	770.80	3.02	7.77	7.31	8.34	68.79	1.66
831.00	4.48	46.74	830.63	6.09	11.04	11.76	12.61	61.11	.65
892.00	5.41	45.99	891.40	9.72	14.84	16.99	17.74	56.78	1.53
954.00	6.64	41.20	953.06	14.45	19.30	23.48	24.11	53.19	2.14
1016.00	7.20	41.02	1014.61	20.08	24.21	30.95	31.46	50.34	.90

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
1078.00	7.70	38.12	1076.08	26.28	29.33	38.99	39.38	48.14	1.01
1140.00	8.66	36.54	1137.45	33.29	34.67	47.80	48.07	46.16	1.59
1202.00	9.18	37.42	1198.70	40.97	40.46	57.40	57.58	44.64	.87
1263.00	9.00	37.68	1258.93	48.61	46.33	67.02	67.15	43.62	.30
1325.00	9.63	36.94	1320.12	56.60	52.41	77.05	77.14	42.80	1.03
1387.00	10.02	36.23	1381.21	65.09	58.72	87.61	87.66	42.05	.66
1449.00	10.37	37.46	1442.23	73.87	65.30	98.56	98.59	41.47	.66
1511.00	10.60	38.03	1503.19	82.79	72.20	109.84	109.85	41.09	.41
1573.00	11.38	38.43	1564.06	92.08	79.52	121.65	121.66	40.81	1.26
1635.00	11.70	38.52	1624.80	101.79	87.24	134.05	134.05	40.60	.52
1697.00	11.60	37.42	1685.52	111.66	94.94	146.56	146.56	40.37	.39
1759.00	12.04	38.00	1746.21	121.70	102.71	159.25	159.25	40.16	.74
1822.00	13.01	38.43	1807.71	132.43	111.16	172.90	172.90	40.01	1.55
1884.00	13.70	39.15	1868.03	143.60	120.13	187.22	187.22	39.92	1.14
1946.00	13.70	38.70	1928.27	155.02	129.36	201.90	201.90	39.84	.17
2008.00	14.20	38.39	1988.44	166.71	138.67	216.84	216.85	39.75	.82
2070.00	14.30	38.25	2048.53	178.68	148.14	232.10	232.10	39.66	.17
2132.00	14.81	40.06	2108.54	190.76	157.98	247.67	247.68	39.63	1.10
2194.00	15.16	39.79	2168.43	203.06	168.26	263.71	263.71	39.65	.58
2256.00	15.21	39.62	2228.27	215.55	178.64	279.95	279.95	39.65	.11
2318.00	15.25	39.97	2288.09	228.06	189.06	296.23	296.24	39.66	.16
2380.00	14.59	40.14	2348.00	240.28	199.34	312.20	312.20	39.68	1.07
2442.00	14.55	38.39	2408.01	252.36	209.21	327.79	327.80	39.66	.71
2505.00	14.99	39.27	2468.93	264.87	219.28	343.85	343.86	39.62	.78
2567.00	14.99	39.97	2528.82	277.22	229.50	359.88	359.89	39.62	.29
2629.00	14.63	41.42	2588.76	289.24	239.84	375.73	375.74	39.67	.83
2691.00	14.94	41.86	2648.70	301.06	250.35	391.54	391.55	39.75	.53
2753.00	14.94	43.26	2708.61	312.83	261.16	407.51	407.51	39.86	.58
2815.00	15.29	42.78	2768.46	324.65	272.19	423.66	423.66	39.98	.60
2877.00	14.68	42.43	2828.35	336.45	283.04	439.67	439.67	40.07	.99
2939.00	14.28	41.55	2888.39	347.97	293.41	455.17	455.17	40.14	.74
3001.00	14.46	41.07	2948.45	359.53	303.57	470.55	470.55	40.18	.35
3063.00	15.60	40.01	3008.32	371.75	314.02	486.63	486.63	40.19	1.89
3125.00	15.25	38.74	3068.09	384.50	324.48	503.11	503.11	40.16	.78

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
3187.00	15.78	38.43	3127.83	397.46	334.82	519.69	519.69	40.11	.87
3250.00	15.91	38.30	3188.44	410.95	345.50	536.89	536.89	40.05	.21
3312.00	15.47	39.13	3248.13	424.03	355.98	553.65	553.65	40.01	.80
3374.00	15.47	38.47	3307.88	436.92	366.34	570.18	570.18	39.98	.28
3436.00	15.12	39.44	3367.68	449.64	376.63	586.53	586.53	39.95	.70
3498.00	14.77	41.31	3427.59	461.82	386.98	602.52	602.52	39.96	.96
3560.00	14.46	41.24	3487.58	473.58	397.30	618.16	618.16	39.99	.50
3622.00	14.46	39.92	3547.62	485.33	407.37	633.64	633.64	40.01	.53
3684.00	14.00	38.39	3607.72	497.15	416.99	648.88	648.88	39.99	.96
3746.00	13.75	36.06	3667.91	508.98	425.99	663.72	663.73	39.93	.99
3808.00	13.23	34.34	3728.20	520.80	434.33	678.13	678.14	39.83	1.06
3870.00	12.66	37.38	3788.62	532.06	442.46	691.98	691.99	39.75	1.43
3932.00	11.30	41.60	3849.27	542.00	450.61	704.84	704.85	39.74	2.61
3994.00	10.50	43.18	3910.15	550.66	458.51	716.55	716.56	39.78	1.38
4056.00	9.84	42.96	3971.18	558.66	465.99	727.48	727.49	39.83	1.07
4118.00	9.58	42.17	4032.29	566.36	473.06	737.93	737.94	39.87	.47
4181.00	8.96	42.17	4094.47	573.88	479.88	748.07	748.08	39.90	.98
4243.00	8.50	41.90	4155.75	580.87	486.18	757.48	757.48	39.93	.74
4305.00	7.87	40.80	4217.12	587.49	492.01	766.30	766.30	39.95	1.05
4367.00	7.34	40.85	4278.57	593.70	497.37	774.51	774.51	39.95	.85
4429.00	6.70	40.15	4340.10	599.46	502.30	782.08	782.08	39.96	1.04
4491.00	6.59	38.17	4401.69	605.02	506.83	789.26	789.26	39.95	.41
4553.00	6.55	40.36	4463.28	610.51	511.32	796.35	796.35	39.95	.41
4615.00	6.86	41.73	4524.86	615.97	516.07	803.59	803.59	39.96	.56
4677.00	5.93	42.87	4586.47	621.08	520.72	810.49	810.49	39.98	1.51
4739.00	5.19	45.24	4648.18	625.40	524.89	816.48	816.48	40.01	1.25
4801.00	4.92	41.29	4709.94	629.38	528.63	821.93	821.93	40.03	.71
4863.00	4.35	41.42	4771.73	633.14	531.94	826.94	826.94	40.04	.92
4925.00	3.87	40.80	4833.57	636.49	534.86	831.38	831.38	40.04	.78
4987.00	3.38	40.58	4895.45	639.46	537.42	835.30	835.30	40.04	.79
5049.00	3.16	42.56	4957.35	642.10	539.76	838.83	838.83	40.05	.40
5111.00	2.72	42.91	5019.27	644.44	541.92	842.01	842.01	40.06	.71
5173.00	2.20	35.00	5081.21	646.49	543.61	844.67	844.67	40.06	1.00
5235.00	1.89	30.78	5143.17	648.35	544.81	846.86	846.86	40.04	.56

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
5297.00	1.67	32.01	5205.14	649.99	545.81	848.76	848.76	40.02	.36
5359.00	1.32	34.26	5267.12	651.35	546.69	850.37	850.37	40.01	.57
5421.00	1.27	25.29	5329.10	652.56	547.39	851.74	851.74	39.99	.34
5483.00	1.00	19.93	5391.09	653.69	547.87	852.92	852.92	39.97	.47
5546.00	1.10	17.12	5454.08	654.78	548.23	853.99	853.99	39.94	.18
5608.00	1.23	2.70	5516.07	656.02	548.44	855.07	855.07	39.90	.52
5670.00	1.00	359.36	5578.06	657.22	548.47	856.00	856.01	39.85	.39
5732.00	.92	337.92	5640.05	658.22	548.27	856.65	856.66	39.79	.59
5794.00	.66	327.77	5702.04	658.99	547.89	856.99	857.00	39.74	.47
5856.00	.62	321.79	5764.04	659.55	547.50	857.16	857.18	39.70	.13
5918.00	.70	299.90	5826.03	660.01	546.96	857.17	857.19	39.65	.42
5980.00	.62	287.51	5888.03	660.30	546.31	856.97	857.00	39.60	.26
6043.00	.70	262.68	5951.03	660.35	545.61	856.56	856.59	39.56	.47
6105.00	.57	258.29	6013.02	660.24	544.93	856.04	856.07	39.53	.22
6167.00	.57	231.53	6075.02	659.98	544.39	855.49	855.53	39.52	.43
6195.00	.83	227.31	6103.02	659.76	544.13	855.15	855.19	39.51	.95
<b>Project to Bit</b> 6250.00	.83	227.31	6158.01	659.22	543.54	854.36	854.40	39.51	.00

Job Number: UT131008  
Company: Petroglyph  
Lease/Well: Ute Tribal 21-10H  
Location: Sec. 21, T5S, R3W  
Rig Name: Aztec #673  
State/Country: Utah/USA

Declination: 11.14  
Grid: True

