

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

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Ute Tribal 19-13M								
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-H62-3514			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		435 FSL 405 FWL		SWSW		19		5.0 S		3.0 W		U		
Top of Uppermost Producing Zone		1330 FSL 1160 FWL		NWSW		19		5.0 S		3.0 W		U		
At Total Depth		1330 FSL 1160 FWL		NWSW		19		5.0 S		3.0 W		U		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 405			23. NUMBER OF ACRES IN DRILLING UNIT 640								
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 869			26. PROPOSED DEPTH MD: 5659 TVD: 5480								
27. ELEVATION - GROUND LEVEL 6117			28. BOND NUMBER LP4138153			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342								
Hole, Casing, and Cement Information														
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	7.88	5.5	0 - 5659	15.5	J-55 LT&C		Class G	435	1.92	12.5				
							Class G	301	1.46	13.4				
ATTACHMENTS														
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES														
<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 07/03/2012				EMAIL edtrotter@easilink.com						
API NUMBER ASSIGNED 43013515500000				APPROVAL				 Permit Manager						

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 19-13M
SW SW, SEC 19, T5S, R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Formation		Subsea	TVD	MD
Rig KB~15' above GGL		6132	0	0
Surface Formation = Uinta				
Uinta		6117	15	15
Green River		5019	1113	1114
Trona		3739	2393	2441
Mahogany Shale		3588	2544	2603
"B" Marker	Waterflood Unit Interval	2509	3623	3757
"X" Marker		2026	4106	4268
Douglas Creek Marker		1883	4249	4417
"B" Limestone		1507	3623	4800
Base Castle Peak Limestone		943	5189	5368
BSCARB		514	0	0
Wasatch		267	NDE	NDE
Rig TD		652	5480	5659

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

Substance	Formation	Subsea	TVD	MD
Base of moderately saline ground water*	Uinta	6100	32	32
Oil/Gas	Douglas Creek	1883	4249	4417
Oil/Gas	Castle Peak	943	5189	5368

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	5659'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tensile
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	241,000 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 3757' MD.

4. PROPOSED CEMENTING PROGRAM:

String	Top	Cement Description	Sacks	Excess	Weight (ppg)	Yield (ft ³ /sk)
	Bottom		Vol (ft ³)			
Conductor	0 ----- 54.5	Construction Grade Cement	Sufficient volumes to grout Conductor			
Surface	0 ----- 494.5	Class G +2% CaCl ₂ +0.25 lb/sk Cello Flake	227 ----- 265	30%	15.8	1.17
Production Lead	0 ----- 3757	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	441 ----- 846	30%	12.5	1.92
Production Tail	3757 ----- 5659	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	293 ----- 429	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 Trona at 2441' 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 5659'. 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:

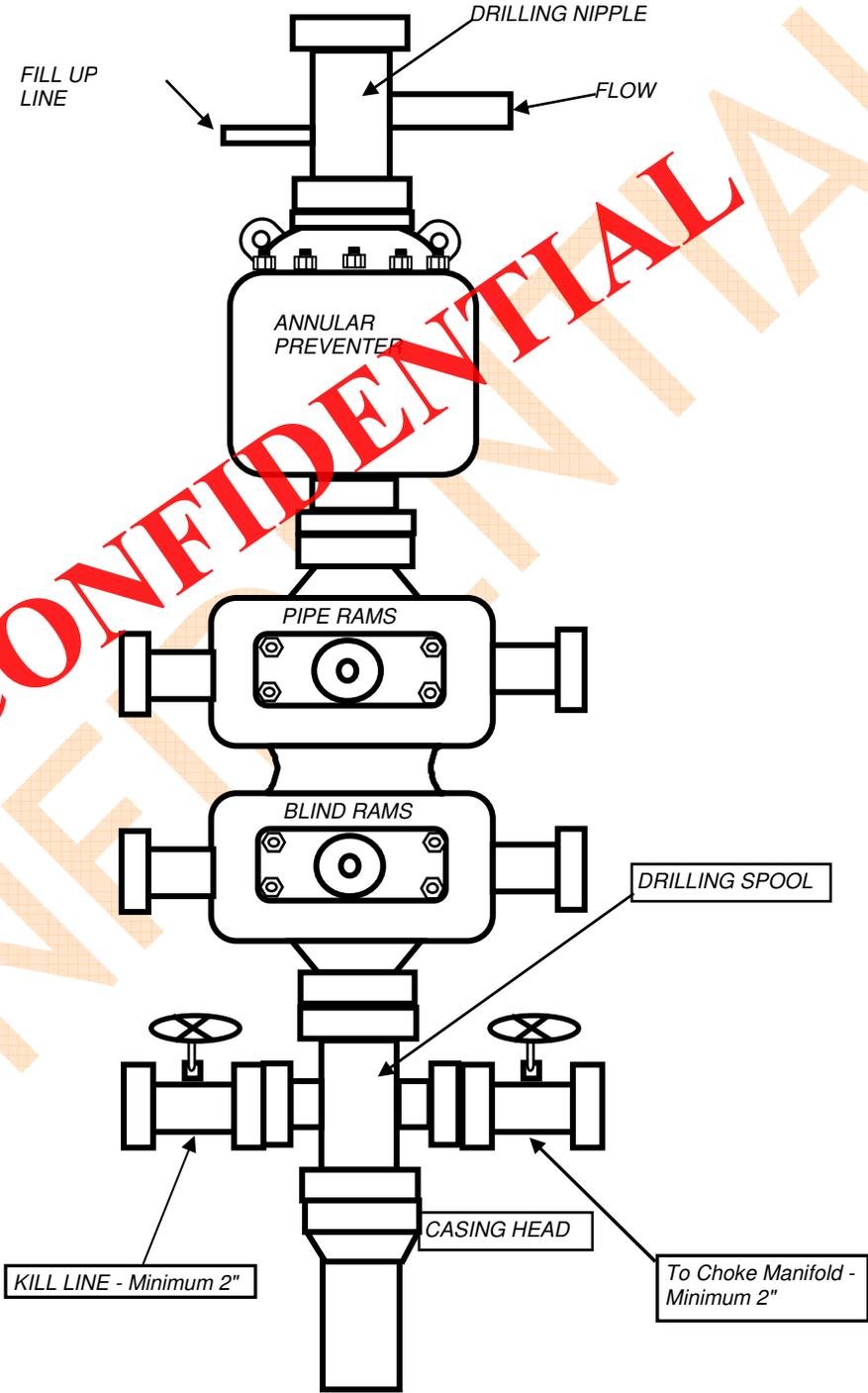
- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H₂S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1414.75 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(2450 PSI).

9. DIRECTIONAL WELL PLAN:

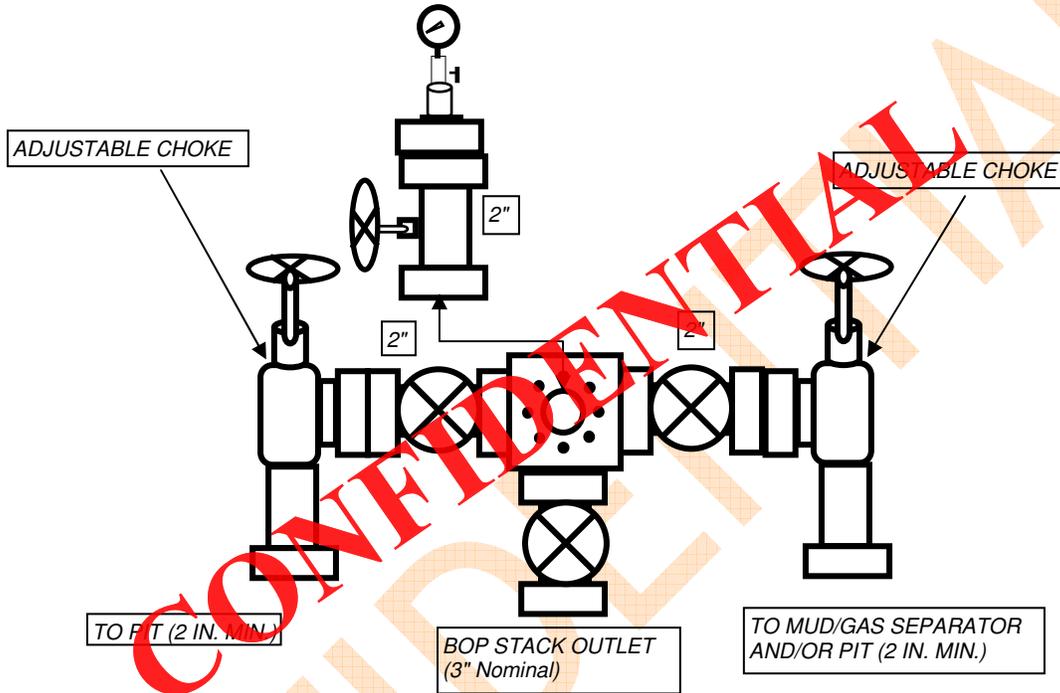
- Well shall be drilled directionally in order to limit surface disturbance.
- A Positive Displacement Motor with a bent sub of 1.25° to 1.75° will be used to control well path.
- A directional survey shall be taken at least one (1) time per 100' of drilling.
- Anti-collision equipment will not be used as there are no existing wells in the vicinity of the proposed well path.
- While cutting the Waterflood Unit Interval from 3757' 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.

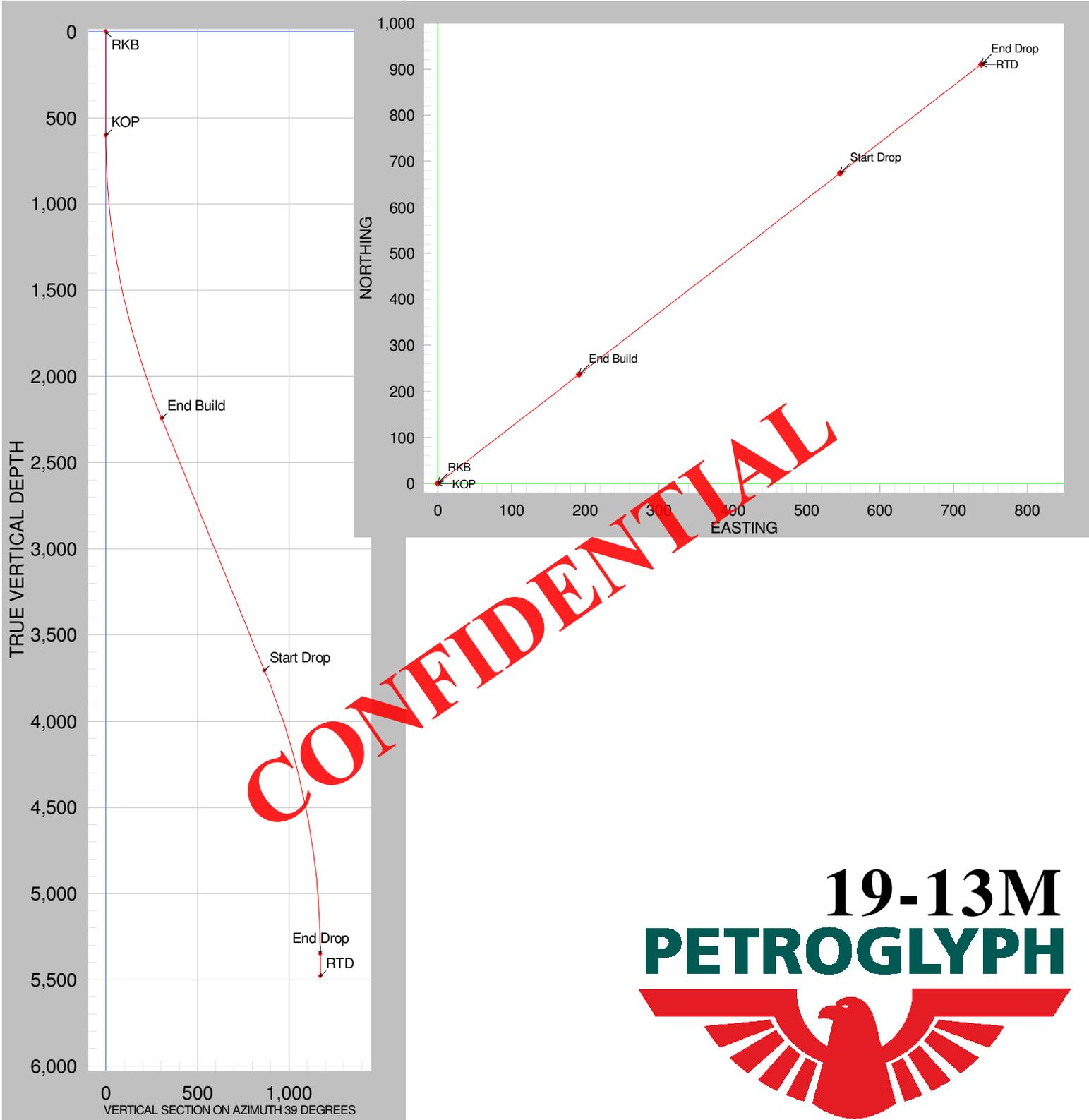
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TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER



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





19-13M PETROGLYPH



#	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	2280.00	21.00	39.00	2242.64	236.60	191.59	1.25	304.44
3	Start Drop	Tangent	3850.00	21.00	39.00	3708.36	673.85	545.67	0.00	867.08
4	End Drop	Drop	5529.20	0.01	39.00	5350.20	910.45	737.27	1.25	1171.53
5	RTD	Vertical	5659.20	0.01	39.00	5480.20	910.47	737.28	0.00	1171.55

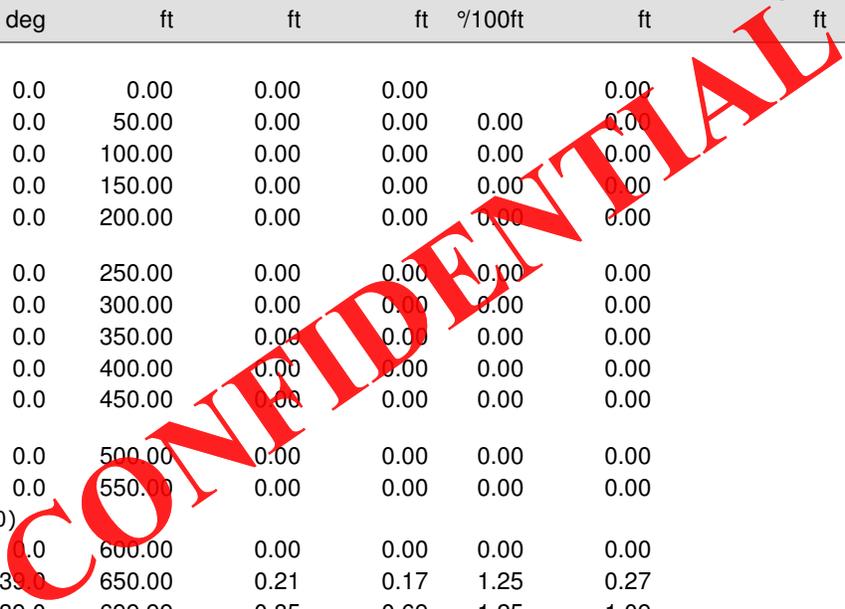
19-13M, Plan 1

Operator	Units feet, %/100ft	12:54 Wednesday, April 18, 2012 Page 1 of 4
Field	County	Vertical Section Azimuth 39
Well Name 19-13M	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access

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

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			



19-13M, Plan 1

Operator	Units feet, %/100ft	12:54 Wednesday, April 18, 2012 Page 2 of 4
Field	County	Vertical Section Azimuth 39
Well Name 19-13M	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access

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

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			
1800.00	15.00	39.0	1786.34	121.38	98.29	1.25	156.18			
1850.00	15.63	39.0	1834.56	131.64	106.60	1.25	169.39			
1900.00	16.25	39.0	1882.64	142.31	115.24	1.25	183.12			
1950.00	16.88	39.0	1930.57	153.39	124.21	1.25	197.37			
2000.00	17.50	39.0	1978.33	164.87	133.51	1.25	212.15			
2050.00	18.13	39.0	2025.94	176.75	143.1	1.25	227.44			
2100.00	18.75	39.0	2073.37	189.04	153.08	1.25	243.25			
2150.00	19.38	39.0	2120.63	201.73	163.36	1.25	259.58			
2200.00	20.00	39.0	2167.70	214.83	173.96	1.25	276.43			
2250.00	20.63	39.0	2214.00	228.31	184.89	1.25	293.79			
*** END BUILD (at MD = 2280.00)										
2280.00	21.00	39.0	2242.64	236.60	191.59	1.25	304.44			
2300.00	21.00	39.0	2261.31	242.17	196.10	0.00	311.61			
2350.00	21.00	39.0	2307.99	256.09	207.38	0.00	329.53			
2400.00	21.00	39.0	2354.67	270.02	218.66	0.00	347.45			
2450.00	21.00	39.0	2401.35	283.94	229.93	0.00	365.37			
2500.00	21.00	39.0	2448.03	297.87	241.21	0.00	383.29			
2550.00	21.00	39.0	2494.70	311.79	252.49	0.00	401.20			
2600.00	21.00	39.0	2541.38	325.72	263.76	0.00	419.12			
2650.00	21.00	39.0	2588.06	339.64	275.04	0.00	437.04			
2700.00	21.00	39.0	2634.74	353.57	286.32	0.00	454.96			
2750.00	21.00	39.0	2681.42	367.50	297.59	0.00	472.88			
2800.00	21.00	39.0	2728.10	381.42	308.87	0.00	490.80			
2850.00	21.00	39.0	2774.78	395.35	320.14	0.00	508.71			
2900.00	21.00	39.0	2821.46	409.27	331.42	0.00	526.63			
2950.00	21.00	39.0	2868.14	423.20	342.70	0.00	544.55			
3000.00	21.00	39.0	2914.82	437.12	353.97	0.00	562.47			
3050.00	21.00	39.0	2961.49	451.05	365.25	0.00	580.39			
3100.00	21.00	39.0	3008.17	464.97	376.53	0.00	598.31			
3150.00	21.00	39.0	3054.85	478.90	387.80	0.00	616.23			
3200.00	21.00	39.0	3101.53	492.82	399.08	0.00	634.14			
3250.00	21.00	39.0	3148.21	506.75	410.36	0.00	652.06			
3300.00	21.00	39.0	3194.89	520.67	421.63	0.00	669.98			

19-13M, Plan 1

Operator	Units feet, %/100ft	12:54 Wednesday, April 18, 2012	Page 3 of 4
Field	County	Vertical Section Azimuth 39	
Well Name 19-13M	State	Survey Calculation Method Minimum Curvature	
Plan 1	Country	Database Access	

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

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
3350.00	21.00	39.0	3241.57	534.60	432.91	0.00	687.90			
3400.00	21.00	39.0	3288.25	548.52	444.19	0.00	705.82			
3450.00	21.00	39.0	3334.93	562.45	455.46	0.00	723.74			
3500.00	21.00	39.0	3381.61	576.37	466.74	0.00	741.65			
3550.00	21.00	39.0	3428.28	590.30	478.01	0.00	759.57			
3600.00	21.00	39.0	3474.96	604.22	489.29	0.00	777.49			
3650.00	21.00	39.0	3521.64	618.15	500.57	0.00	795.41			
3700.00	21.00	39.0	3568.32	632.07	511.84	0.00	813.33			
3750.00	21.00	39.0	3615.00	646.00	523.12	0.00	831.25			
3800.00	21.00	39.0	3661.68	659.92	534.40	0.00	849.16			
*** START DROP (at MD = 3850.00)										
3850.00	21.00	39.0	3708.36	673.85	545.67	0.00	867.08			
3900.00	20.38	39.0	3755.03	687.58	556.79	1.25	884.75			
3950.00	19.75	39.0	3802.10	700.91	567.58	1.25	901.90			
4000.00	19.13	39.0	3849.25	713.84	578.05	1.25	918.54			
4050.00	18.50	39.0	3896.58	726.37	588.20	1.25	934.66			
4100.00	17.88	39.0	3944.08	738.50	598.02	1.25	950.27			
4150.00	17.25	39.0	3991.75	750.22	607.52	1.25	965.35			
4200.00	16.63	39.0	4039.58	761.54	616.68	1.25	979.92			
4250.00	16.00	39.0	4087.57	772.46	625.52	1.25	993.96			
4300.00	15.38	39.0	4135.71	782.96	634.03	1.25	1007.48			
4350.00	14.75	39.0	4183.99	793.06	642.21	1.25	1020.48			
4400.00	14.13	39.0	4232.41	802.75	650.05	1.25	1032.94			
4450.00	13.50	39.0	4280.96	812.02	657.56	1.25	1044.88			
4500.00	12.88	39.0	4329.64	820.89	664.74	1.25	1056.29			
4550.00	12.25	39.0	4378.45	829.34	671.59	1.25	1067.16			
4600.00	11.63	39.0	4427.36	837.38	678.10	1.25	1077.50			
4650.00	11.00	39.0	4476.39	845.00	684.27	1.25	1087.31			
4700.00	10.38	39.0	4525.53	852.21	690.10	1.25	1096.59			
4750.00	9.75	39.0	4574.76	859.00	695.60	1.25	1105.32			
4800.00	9.13	39.0	4624.08	865.37	700.76	1.25	1113.52			
4850.00	8.50	39.0	4673.49	871.32	705.58	1.25	1121.18			
4900.00	7.88	39.0	4722.98	876.85	710.06	1.25	1128.30			
4950.00	7.25	39.0	4772.54	881.97	714.20	1.25	1134.88			
5000.00	6.63	39.0	4822.18	886.66	718.00	1.25	1140.92			



19-13M, Plan 1

Operator	Units feet, %100ft	12:54 Wednesday, April 18, 2012 Page 4 of 4
Field	County	Vertical Section Azimuth 39
Well Name 19-13M	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access

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

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
5050.00	6.00	39.0	4871.87	890.93	721.46	1.25	1146.42			
5100.00	5.38	39.0	4921.63	894.78	724.58	1.25	1151.37			
5150.00	4.75	39.0	4971.43	898.21	727.36	1.25	1155.76			
5200.00	4.13	39.0	5021.28	901.22	729.79	1.25	1159.65			
5250.00	3.50	39.0	5071.17	903.80	731.89	1.25	1162.98			
5300.00	2.88	39.0	5121.09	905.96	733.64	1.25	1165.76			
5350.00	2.25	39.0	5171.04	907.70	735.04	1.25	1167.99			
5400.00	1.63	39.0	5221.01	909.02	736.11	1.25	1169.68			
5450.00	1.00	39.0	5271.00	909.91	736.83	1.25	1170.83			
5500.00	0.38	39.0	5321.00	910.27	737.20	1.25	1171.43			
*** END DROP (at MD = 5529.20)										
5529.20	0.01	39.0	5350.20	910.45	737.27	1.25	1171.53			
5550.00	0.01	39.0	5371.00	910.45	737.27	0.00	1171.53			
5600.00	0.01	39.0	5421.00	910.46	737.27	0.00	1171.54			
5650.00	0.01	39.0	5471.00	910.46	737.28	0.00	1171.55			
*** RTD (at MD = 5659.20)										
5659.20	0.01	39.0	5480.20	910.47	737.28	0.00	1171.55			



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

PETROGLYPH OPERATING CO., INC.

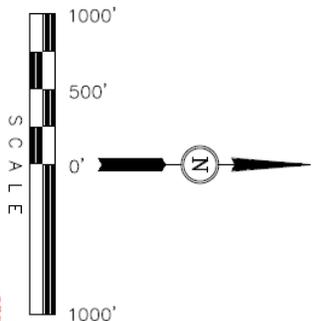
Well location, UTE TRIBAL #19-13M, located as shown in the SW 1/4 SW 1/4 of Section 19, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

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.



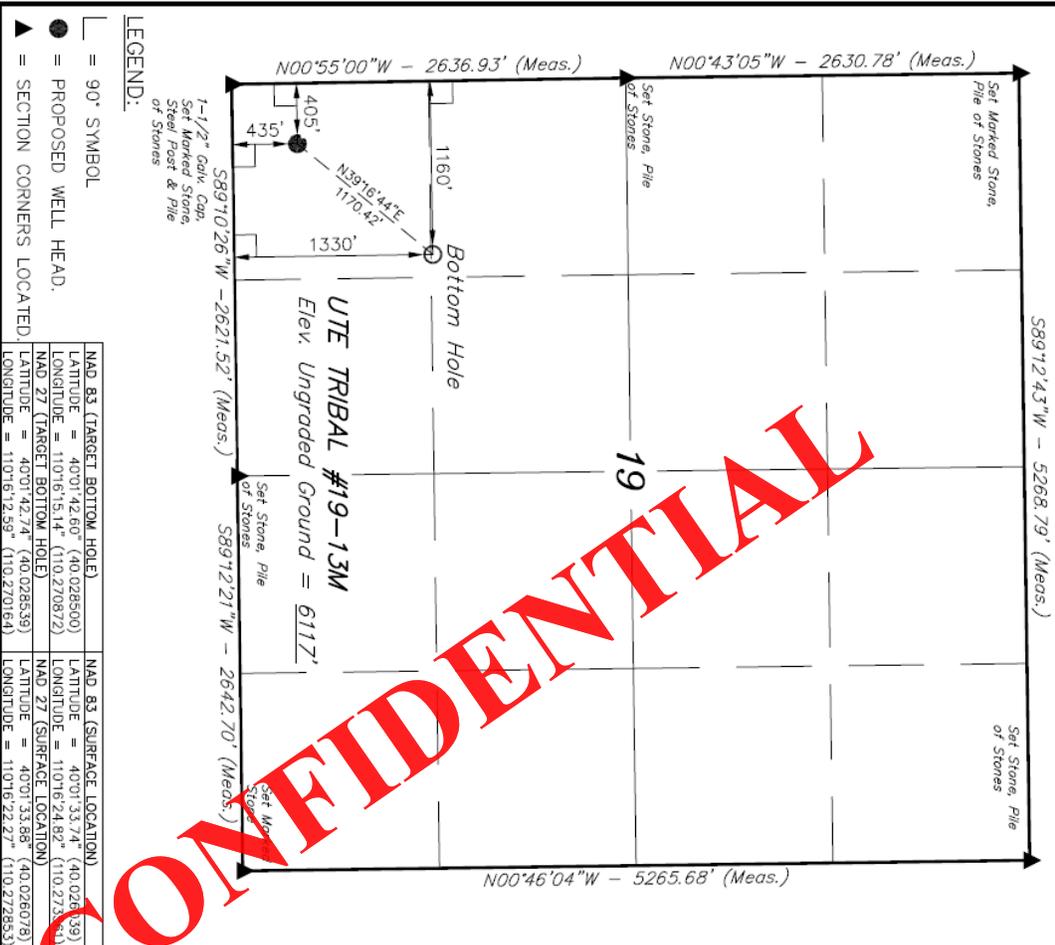
CERTIFICATE

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

ROBERT KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

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

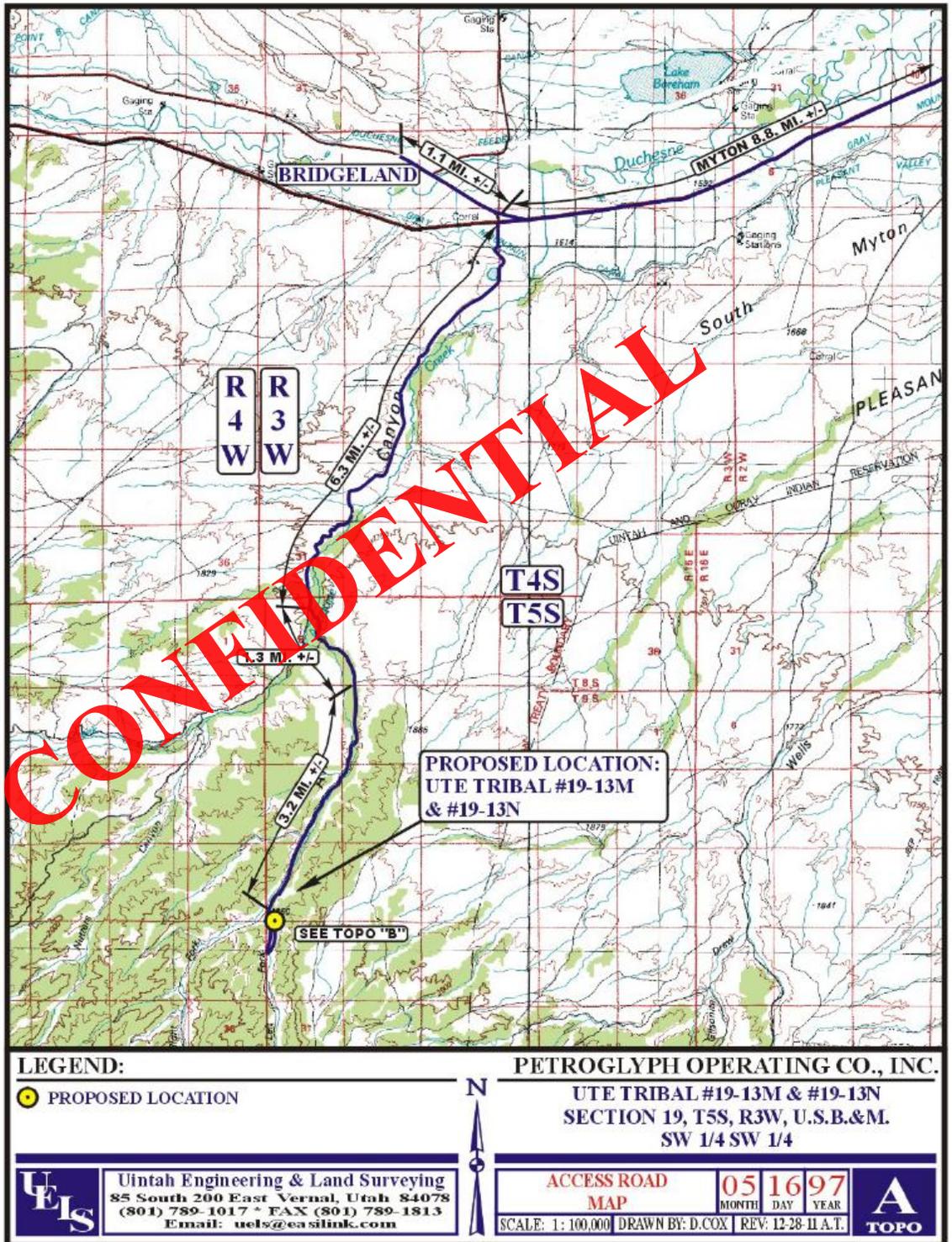
SCALE	1" = 1000'	DATE SURVEYED:	12-20-11	DATE DRAWN:	12-29-11
PROPERTY	A.F. J.M. N.S.	REFERENCES	G.L.O. PLAT		
WEATHER	COLD	FILE	PETROGLYPH OPERATING CO., INC.		



LEGEND:
 = 90° SYMBOL
 ● = PROPOSED WELL HEAD.
 ▲ = SECTION CORNERS LOCATED

NAD 83 (TARGET BOTTOM HOLE)	LATITUDE = 40°01'42.60" (40.028500)	LONGITUDE = 110°16'15.14" (110.270872)
NAD 27 (TARGET BOTTOM HOLE)	LATITUDE = 40°01'42.74" (40.028539)	LONGITUDE = 110°16'14.99" (110.270914)
NAD 83 (SURFACE LOCATION)	LATITUDE = 40°01'33.72" (40.026139)	LONGITUDE = 110°16'24.82" (110.273821)
NAD 27 (SURFACE LOCATION)	LATITUDE = 40°01'33.89" (40.026078)	LONGITUDE = 110°16'22.27" (110.272853)

CONFIDENTIAL



LEGEND:
 PROPOSED LOCATION

PETROGLYPH OPERATING CO., INC.
 UTE TRIBAL #19-13M & #19-13N
 SECTION 19, T5S, R3W, U.S.B.&M.
 SW 1/4 SW 1/4

UELS
 Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (801) 789-1017 * FAX (801) 789-1813
 Email: uels@easilink.com



ACCESS ROAD MAP
 05 MONTH 16 DAY 97 YEAR
 SCALE: 1: 100,000 DRAWN BY: D.COX REV: 12-28 11 A.T. **TOPO**

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

July 3, 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 19-13M: 435' FSL & 405' FWL, SW/SW, (Surface Hole)
1330' FSL & 1160' FWL, NW/SW, (Bottom Hole)
Sec. 19, 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 3, 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 19-13M 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

RECEIVED: July 03, 2012

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 19-13M Well, located in the SW/SW of Section 19, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3514;** 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

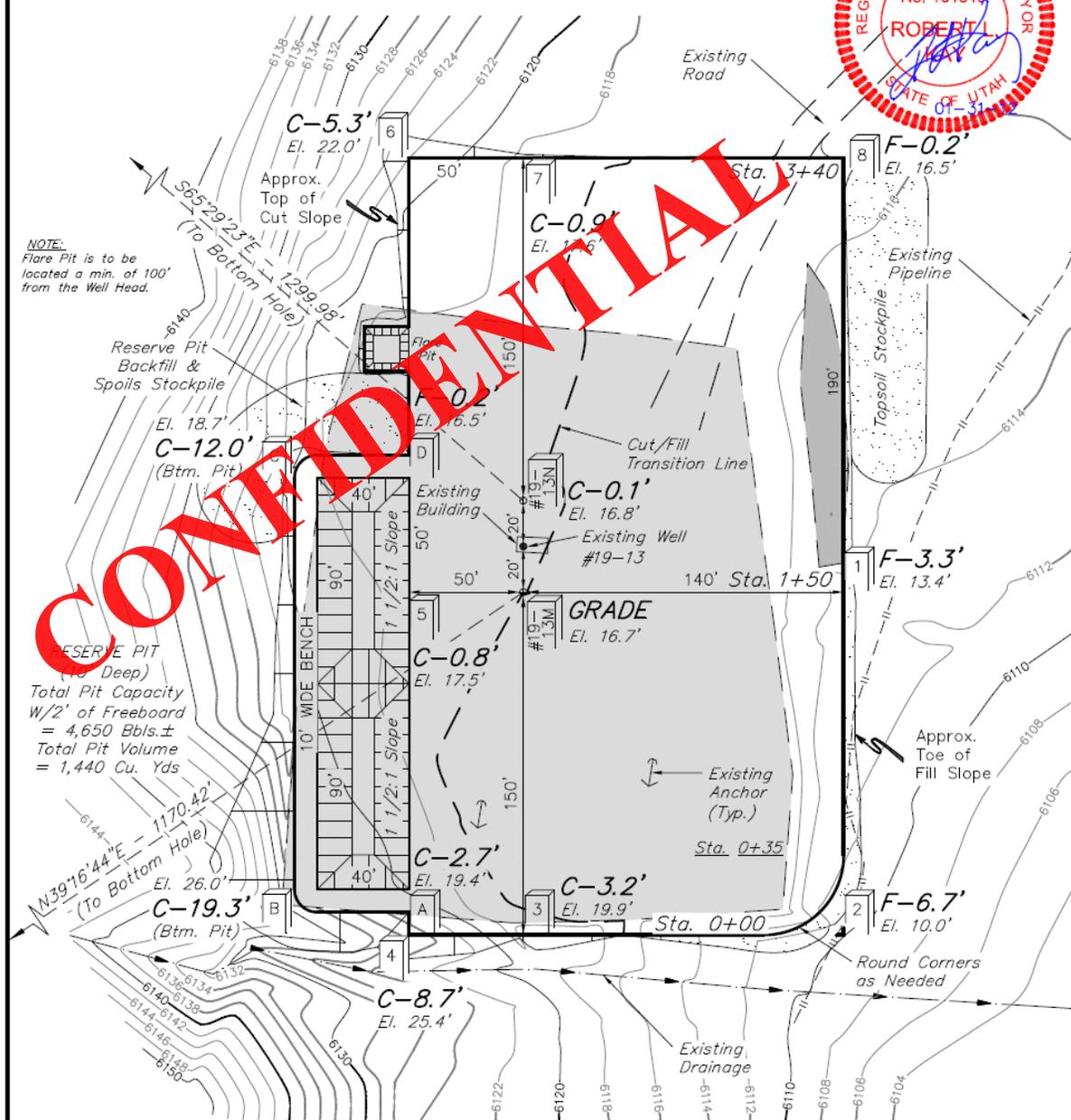
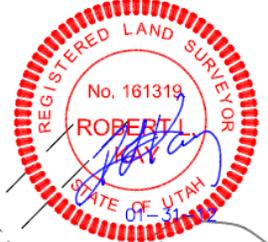
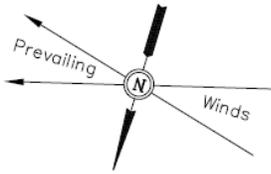
PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #19-13M &
 UTE TRIBAL #19-13N
 SECTION 19, T5S, R3W, U.S.B.&M.
 SW 1/4 SW 1/4

FIGURE #1

SCALE: 1" = 60'
 DATE: 12-30-11
 DRAWN BY: N.S.



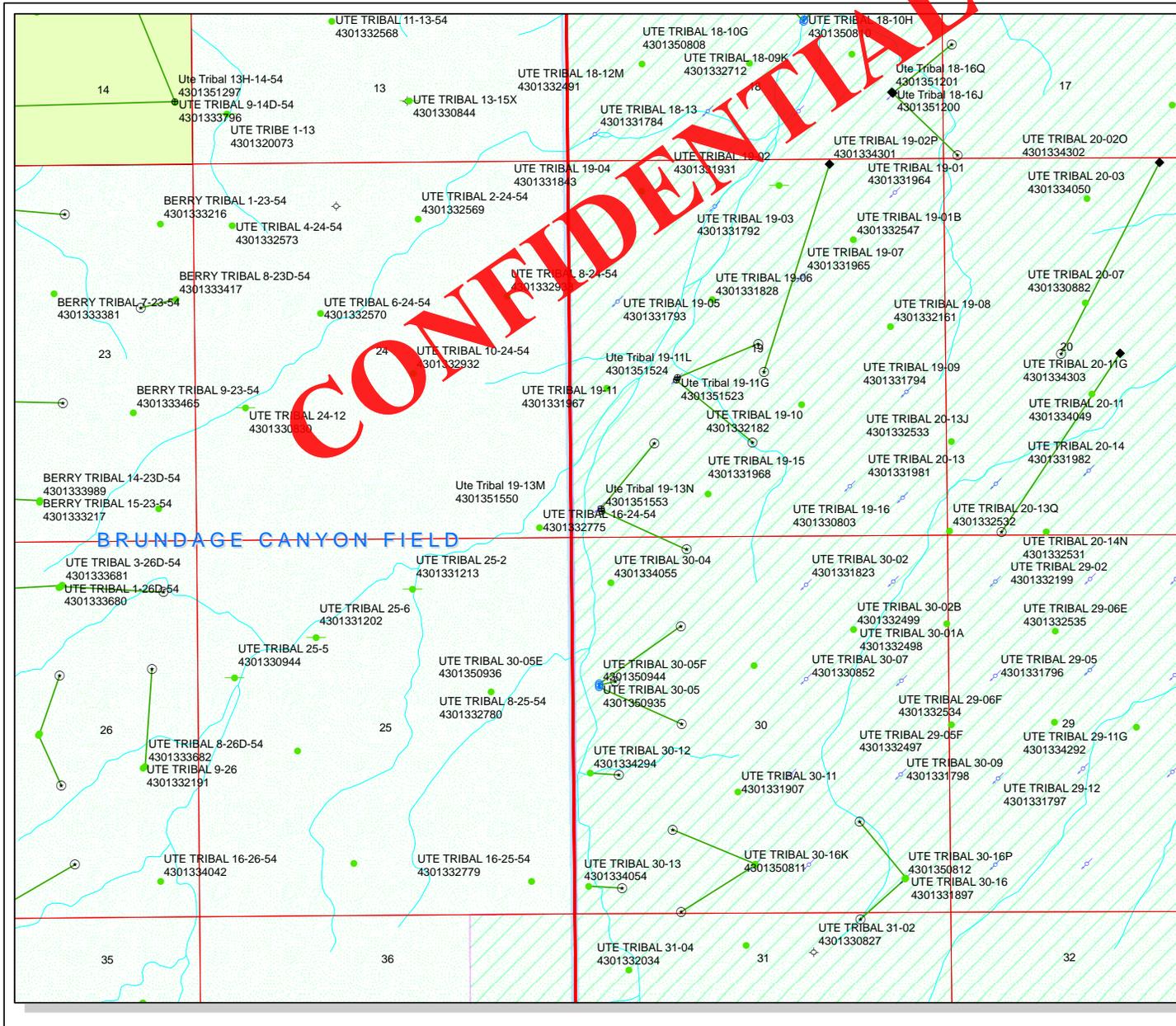
NOTE:
 Flare Pit is to be located a min. of 100' from the Well Head.

RESERVE PIT
 (10' Deep)
 Total Pit Capacity
 W/2' of Freeboard
 = 4,650 Bbls. ±
 Total Pit Volume
 = 1,440 Cu. Yds

Elev. Ungraded Ground At #19-13M Loc. Stake = 6116.7'
 FINISHED GRADE ELEV. AT #19-13M LOC. STAKE = 6116.7'

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

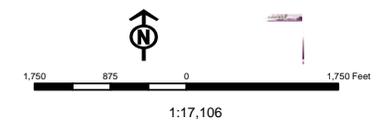
CONFIDENTIAL



API Number: 4301351550
Well Name: Ute Tribal 19-13M
Township T05.0S Range R03.0W Section 19
Meridian: UBM
 Operator: PETROGLYPH OPERATING CO

Map Prepared:
 Map Produced by Diana Mason

- | | |
|----------------------|------------------------------------|
| Units STATUS | Wells Query Status |
| ACTIVE | APD - Approved Permit |
| EXPLORATORY | DRL - 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 GEOTHERM. | PGW - Producing Gas Well |
| PP OIL | POW - Producing Oil Well |
| SECONDARY | SGW - Shut-in Gas Well |
| TERMINATED | SOW - Shut-in Oil Well |
| Fields STATUS | TA - Temp. Abandoned |
| Unknown | TW - Test Well |
| ABANDONED | WDW - Water Disposal |
| ACTIVE | WW - Water Injection Well |
| COMBINED | WSW - Water Supply Well |
| INACTIVE | |
| STORAGE | |
| TERMINATED | |
| | Bottom Hole Location - Oil/Gas/Dls |



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/3/2012

API NO. ASSIGNED: 4301351550000

WELL NAME: Ute Tribal 19-13M

OPERATOR: PETROGLYPH OPERATING CO (N3800)

PHONE NUMBER: 435 789-4120

CONTACT: Ed Trotter

PROPOSED LOCATION: SWSW 19 050S 030W

Permit Tech Review:

SURFACE: 0435 FSL 0405 FWL

Engineering Review:

BOTTOM: 1330 FSL 1160 FWL

Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.02597

LONGITUDE: -110.27348

UTM SURF EASTINGS: 561992.00

NORTHINGS: 4430892.00

FIELD NAME: ANTELOPE CREEK

LEASE TYPE: 2 - Indian

LEASE NUMBER: 14-20-H62-3514

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

Commingle 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

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 19-13M
API Well Number: 4301351550000
Lease Number: 14-20-H62-3514
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 faint, illegible stamp or background.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3514
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: UTE TRIBAL 19-13M	
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. API NUMBER: 4301351550000	
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500 , Bosie, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0435 FSL 0405 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 19 Township: 05.0S Range: 03.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 12/22/2012 <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 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.		
This well was spud on 12/22/2012. We set 40' of 16" Conductor.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY December 31, 2012		
NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 12/27/2012	

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		CONFIDENTIAL		5. Lease Serial No. 1420H623514
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 UTE TRIBAL 19-13M
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		8. Lease Name and Well No. UTE TRIBAL 19-13M
3a. Address P.O. BOX 607 ROOSEVELT, UT 84066		3b. Phone No. (include area code) Ph: 435-789-4120 Fx: 435-789-1420		9. API Well No. 43-013-51550
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSW 435FSL 405FWL At proposed prod. zone NWSW 1330FSL 1160FWL		10. Field and Pool, or Exploratory ANTELOPE CREEK		11. Sec., T., R., M., or Blk. and Survey or Area Sec 19 T5S R3W Mer UBM
14. Distance in miles and direction from nearest town or post office* 20.8 MILES SOUTHWEST OF MYTON, UT		12. County or Parish DUCHESNE		13. State UT
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 405'		16. No. of Acres in Lease 640.00		17. Spacing Unit dedicated to this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 869'		19. Proposed Depth 5659 MD 5480 TVD		20. BLM/BIA Bond No. on file LPM4138335
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6117 GL		22. Approximate date work will start 10/15/2012		23. Estimated duration 45 DAYS

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) <i>Johnny P. Bowen</i>	Name (Printed/Typed) Johnny P. Bowen	Date 12-20-2012
Title Assistant Field Manager		
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.

Additional Operator Remarks (see next page)

Electronic Submission #146850 verified by the BLM Well Information System
For PETROGLYPH OPERATING CO., INC., sent to the Vernal
Committed to AFMSS for processing by LESLIE ROBERTSON 12/29/2012 ()

NOTICE OF APPROVAL

RECEIVED

UDOGM

JAN 07 2013

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

12RRH2180A

NOS-3/21/12



**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: Petroglyph Operating Co. Inc.
Well No: UTE TRIBAL 19-13M
API No: 43-013-51550

Location: SWSW, Sec. 19, T5S, R3W
Lease No: 14-20-H62-3514
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: blm_ut_vn_opreport@blm.gov .
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)**

- 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.
- All Production Equipment will be painted Covert Green to help blend into the surrounding vegetation and meet VRM type objectives.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- 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.
- Petroglyph Operating Company will implement a "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, COA'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.
- The personnel from the Ute Tribe Energy & Minerals Department should be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- 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.
- Variance 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.
- 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 (¼¼, 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.

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Co. Rig Name/# Aztec 673
Submitted By Geno Rowland Phone Number 970-361-3271
Well Name/Number Ute Tribal 19-13M
Qtr/Qtr SW/SW Section 19 Township 5S Range 3W
Lease Serial Number 14-20-H62-3514
API Number 43-013-51550

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 01/08/2013 13:00 AM PM

BOPE

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

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JAN 08 2013

DIV. OF OIL, GAS & MINING

Date/Time _____ AM PM

Remarks Running 5-1/2" Prod. Casing to a shoe depth of 5883' MD

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Air rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number Ute Tribal 19-13M
Qtr/Qtr SWSW Section 19 Township 5S Range 3W
Lease Serial Number 14-20-H62-3514
API Number 43-013-51550

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

Date/Time 12/22/2012 9:00 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

Date/Time _____ AM PM

Remarks We intend to spud at the time indicated, We plan to run 40' of 16" Conductor. (Sent 12/21/2012 @ 9:00 A.M.)

RECEIVED
DEC 21 2012
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND 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
4301351875	Ute Tribal 10-04		NWNA	10	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	9393	12/21/2012			12/28/2012	
Comments: Please add well to existing Ute Tribal 09-01 Tank Battery. GRRV							CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351550	Ute Tribal 19-13M		SWSW	19	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	17577	12/22/2012			12/28/2012	
Comments: Please add well to existing Ute Tribal 30-04 Tank Battery. GRRV BHL: nwsu							CONFIDENTIAL

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351553	Ute Tribal 19-13N		SWSW	19	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	17577	12/24/2012			12/28/2012	
Comments: Please add well to existing Ute Tribal 30-04 Tank Battery. GRRV BHL: S30 new							CONFIDENTIAL

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)

Signature

Regulatory Compliance Spc.

12/27/2012

Title

Date

RECEIVED

DEC 27 2012

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Co. Rig Name/# Aztec 673
 Submitted By Geno Rowland Phone Number 970-361-3271
 Well Name/Number Ute Tribal 19-13M
 Qtr/Qtr SW/SW Section 19 Township 5S Range 3W
 Lease Serial Number 14-20-H62-3514
 API Number 43-013-51550

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

JAN 04 2013

DIV. OF OIL, GAS & MINING

Date/Time 01/04/2013 2:00 AM PM

Remarks Testing an 11" x 3K Townsend BOP at Surface Casing Point.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3514
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In 7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: UTE TRIBAL 19-13M
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. API NUMBER: 4301351550000
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	PHONE NUMBER: 208 685-7685 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0435 FSL 0405 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 19 Township: 05.0S Range: 03.0W Meridian: U	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK COUNTY: DUCHESNE STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/4/2013 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <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 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 3/4/2013, depending on equipment availability, we intend to perforate and fracture treat the following intervals: 3923-40, 4002-09, 4040-42, 4193-4202, 4205-14, 4294-97, 4318-20, 4448-50, 4593-96, 4602-10, 4672-75, 4678-82, 4684-96, 4732-34, 4965-78, 5005-20, 5154-58, 5344-48, 5385-89, 5391-5401, 5405-12 & 5432-38. 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 plan to fracture treat using Delta 140 15# gelled fluid containing 20/40 mesh sand. Volumes and amounts will be reported at a later date.

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

Date: March 05, 2013

By: *Derek Quist*

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 2/25/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3514
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
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.		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
		8. WELL NAME and NUMBER: UTE TRIBAL 19-13M
1. TYPE OF WELL Oil Well	9. API NUMBER: 4301351550000	
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK	
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0435 FSL 0405 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 19 Township: 05.0S Range: 03.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/15/2013 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <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 03/15/2013.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 22, 2013		
NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 3/22/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3514
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: UTE TRIBAL 19-13M	
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. API NUMBER: 4301351550000	
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500 , Boise, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0435 FSL 0405 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 19 Township: 05.0S Range: 03.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/15/2013 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <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. Please see the attached form.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 02, 2013		
NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 5/1/2013	

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS			5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3514
			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe
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.			7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650
			8. WELL NAME and NUMBER: Ute Tribal 19-13M
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	2. NAME OF OPERATOR: Petroglyph Operating Company Inc.		9. API NUMBER: 4301351550
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		PHONE NUMBER: (435) 722-2531	10. FIELD AND POOL, OR WILDCAT: Antelope Creek
4. LOCATION OF WELL FOOTAGES AT SURFACE: 435' FSL, 405' FWL			COUNTY: Duchesne
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 19 5S 3W U			STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 3/15/2013	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

On 2/20/13 Petroglyph Operating ran GR/CBL and found ETOC@ Surface. On 3/4/2013 we perforated the following: 5432-38, 5405-12, 5391-5401, 5385-89, 5344-48, 5154-58, 5005-20, 4965-78, 4732-34, 4684-96, 4678-82, 4672-75, 4602-10, 4593-96, 4448-50, 4318-20, 4294-97, 4205-14, 4193-4202, 4040-42, 4002-09, 3923-40. Using Halliburton 8K Composite plugs for isolation, we frac'd and treated the following:
 5344-5438: 922 Bbls fluid cont 80,060#'s of sand,
 4965-5158: 853 Bbls fluid cont 81,110#'s of sand,
 4672-4734: 721 Bbls fluid cont 65,150#'s of sand,
 4593-4610: 777 Bbls fluid cont 33,180#'s of sand,
 4294-4450: 406 Bbls fluid cont 18,000#'s of sand,
 4193-4214: 534 Bbls fluid cont 44,570#'s of sand,
 3923-4042: 553 Bbls fluid cont 46,630#'s of sand.
 We frac'd using Delta 140 15# gelled fluid containing 20/40 Mesh Sand. We perforated using Titan 3-1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 spf @ 120* phased. All plugs were drilled out and cleaned out to 5811', PBTD. The well was _____ then put to pump on 3/15/2013.

NAME (PLEASE PRINT) <u>Rodrigo Jurado</u>	TITLE <u>Regulatory Compliance Spc.</u>
SIGNATURE <u><i>Rodrigo Jurado</i></u>	DATE <u>5/1/2013</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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME 14-20-H62-4650	
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: Ute Tribal 19-13M	
2. NAME OF OPERATOR: Petroglyph Operating Company, Inc.		9. API NUMBER: 4301351550	
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		PHONE NUMBER: (435) 722-2531	
10. FIELD AND POOL, OR WILDCAT Antelope Creek		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 19 5S 3W U	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 435' FSL 405' FWL AT TOP PRODUCING INTERVAL REPORTED BELOW: 1124' FSL 954' FWL AT TOTAL DEPTH: 1372' FSL 1180' FWL NWSW Sec19 T5S R3W		12. COUNTY Duchesne	
		13. STATE UTAH	

14. DATE SPUDDED: 12/24/2012	15. DATE T.D. REACHED: 1/7/2013	16. DATE COMPLETED: 3/19/2013	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): 6131' RKB
18. TOTAL DEPTH: MD 5,892 TVD 5,712	19. PLUG BACK T.D.: MD 5,811 TVD 5,631	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, Borehole Volume Plot, Cement Bond Log			23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (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	94					Conductor
12.25	8.625 J-55	24	0	469		G 680	139	0	
7.875	5.5 J-55	15.5	0	5,883		G 755	239	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	5,458							

26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) Green River	3,923	5,438	3,780	5,252	3,923 5,438	0.42	616	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
3,923'-5,438'	4,766 Bbls Delta 140 15# gelled fluid containing 368,700#'s of 20/40 Mesh Sand.

29. ENCLOSED ATTACHMENTS: <input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> DST REPORT <input checked="" type="checkbox"/> OTHER: UDOGM Form 7	30. WELL STATUS: POW
--	------------------------------------

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 3/15/2013		TEST DATE: 4/23/2013		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 80	GAS – MCF: 40	WATER – BBL: 60	PROD. METHOD: Rod Pump
CHOKE SIZE: 32/64	TBG. PRESS. 300	CSG. PRESS. 272	API GRAVITY 39.70	BTU – GAS 1	GAS/OIL RATIO 500	24 HR PRODUCTION RATES: →	OIL – BBL: 80	GAS – MCF: 40	WATER – BBL: 60	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:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

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	2,404
				Mahogany	2,565
				Garden Gulch	3,314
				B Marker	3,740
				X Marker	4,252
				Y Marker	4,298
				Douglas Creek	4,405
				B Lime	4,797
				Castle Peak	5,367
				Basal Carbonate	5,794

35. ADDITIONAL REMARKS (Include plugging procedure)

All Frac and Perf info is condensed. Please see NOI and Subsequent Frac Sundry for a 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 5/3/2013

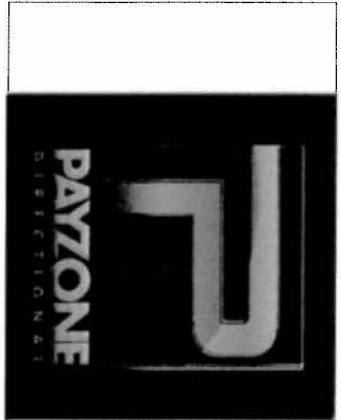
This report must be submitted within 30 days of

- 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 Phone: 801-538-5340
 1594 West North Temple, Suite 1210
 Box 145801 Fax: 801-359-3940
 Salt Lake City, Utah 84114-5801



Job Number: UT131000
 Company: PETROGLYPH
 Lease/Well: Ute Tribal 19-13M
 Location: Section 19 T5S, R3W
 Rig Name: Aztec Drilling 673
 RKB: 6131
 G.L. or M.S.L.: GL-6117

State/Country: UT/USA
 Declination: 11.20
 Grid: True
 File name: C:\DOCUME~1\HUSER\DESKTOP\UTETRI-2\UT131000.SVY
 Date/Time: 07-Jan-13 / 23:12
 Curve Name: Ute Tribal_19-13M_Actual

Payzone Directional

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 40.20
 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	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
497.00	1.85	278.65	496.91	1.21	-7.93	-4.20	8.02	278.65	.37
557.00	2.37	304.62	556.87	2.06	-9.91	-4.83	10.12	281.73	1.79
619.00	3.20	341.98	618.81	4.43	-11.50	-4.04	12.32	291.07	3.14
680.00	4.04	8.78	679.69	8.17	-11.70	-1.31	14.27	304.94	3.06
741.00	4.35	17.00	740.52	12.51	-10.69	2.65	16.46	319.47	1.11
802.00	4.53	22.36	801.34	16.95	-9.10	7.07	19.24	331.76	.74
863.00	5.49	25.57	862.11	21.81	-6.93	12.19	22.88	342.38	1.64
925.00	5.67	31.55	923.81	27.10	-4.04	18.09	27.40	351.51	.98
987.00	5.76	35.63	985.51	32.23	-1.63	24.22	32.24	358.88	.67

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
1049.00	5.89	33.88	1047.19	37.40	2.96	30.48	37.52	4.52	.35
1111.00	6.20	33.88	1108.84	42.83	6.60	36.97	43.33	8.76	.50
1173.00	6.77	33.92	1170.44	48.64	10.50	43.93	49.76	12.19	.92
1235.00	7.87	36.20	1231.94	55.10	15.05	51.80	57.11	15.28	1.83
1297.00	8.61	37.17	1293.30	62.22	20.36	60.66	65.47	18.12	1.21
1359.00	9.18	36.25	1354.55	69.91	26.09	70.23	74.61	20.47	.95
1421.00	9.98	39.06	1415.69	78.07	32.40	80.54	84.52	22.54	1.49
1483.00	10.85	41.61	1476.67	86.60	39.66	91.74	95.25	24.61	1.59
1545.00	11.47	42.53	1537.49	95.51	47.70	103.74	106.76	26.54	1.04
1607.00	12.00	42.45	1598.20	104.80	56.22	116.34	118.93	28.21	.86
1669.00	12.30	40.86	1658.81	114.56	64.89	129.38	131.66	29.53	.72
1731.00	13.10	41.17	1719.29	124.84	73.83	143.01	145.04	30.60	1.29
1793.00	14.02	41.13	1779.56	135.79	83.40	157.54	159.35	31.56	1.48
1856.00	15.07	40.34	1840.54	147.78	93.72	173.36	174.99	32.38	1.70
1918.00	16.04	39.41	1900.27	160.54	104.38	189.99	191.49	33.03	1.62
1980.00	16.74	38.58	1959.75	174.14	115.38	207.48	208.89	33.53	1.19
2042.00	17.57	38.50	2018.99	188.44	126.78	225.76	227.12	33.93	1.34
2104.00	18.33	38.09	2077.97	203.44	138.62	244.86	246.17	34.27	1.24
2166.00	19.20	37.48	2136.68	219.20	150.84	264.78	266.08	34.53	1.44
2228.00	20.61	37.00	2194.97	236.01	163.61	285.86	287.17	34.73	2.29
2290.00	20.83	37.96	2252.96	253.41	176.95	307.77	309.08	34.93	.65
2352.00	21.45	37.83	2310.79	271.06	190.69	330.11	331.41	35.13	1.00
2414.00	21.97	38.05	2368.39	289.14	204.79	353.03	354.32	35.31	.85
2476.00	21.88	40.03	2425.91	307.12	219.37	376.17	377.42	35.54	1.20
2538.00	22.06	41.43	2483.41	324.70	234.50	399.37	400.53	35.84	.89
2600.00	22.28	41.96	2540.82	342.17	250.07	422.75	423.81	36.16	.48
2662.00	22.59	42.36	2598.13	359.71	265.95	446.40	447.34	36.48	.56
2724.00	22.46	42.27	2655.40	377.27	281.94	470.14	470.98	36.77	.22
2786.00	22.24	41.83	2712.74	394.78	297.73	493.70	494.46	37.02	.45
2848.00	22.15	40.91	2770.15	412.35	313.21	517.12	517.82	37.22	.58

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
2910.00	21.97	41.43	2827.61	429.88	328.54	540.40	541.05	37.39	.43
2972.00	21.53	42.45	2885.20	446.97	343.89	563.36	563.95	37.57	.94
3034.00	21.58	41.92	2942.86	463.85	359.18	586.13	586.66	37.75	.32
3097.00	21.49	41.57	3001.46	481.10	374.58	609.24	609.73	37.90	.25
3159.00	21.14	41.70	3059.22	497.95	389.55	631.77	632.22	38.04	.57
3221.00	20.21	41.52	3117.23	514.31	404.09	653.66	654.07	38.16	1.50
3345.00	19.91	40.29	3233.71	546.46	431.94	696.18	696.56	38.32	.42
3407.00	19.64	41.04	3292.05	562.37	445.61	717.16	717.51	38.39	.60
3469.00	19.38	40.47	3350.49	578.05	459.13	737.86	738.20	38.46	.52
3531.00	19.34	39.41	3408.98	593.81	472.32	758.41	758.75	38.50	.57
3593.00	19.07	39.11	3467.53	609.60	485.23	778.81	779.14	38.52	.46
3655.00	19.12	39.90	3526.12	625.25	498.13	799.09	799.42	38.54	.42
3717.00	19.95	39.41	3584.55	641.21	511.36	819.82	820.15	38.57	1.36
3779.00	19.38	38.67	3642.94	657.42	524.50	840.68	841.01	38.58	1.00
3841.00	18.90	38.05	3701.51	673.35	537.12	860.99	861.34	38.58	.84
3903.00	18.11	38.01	3760.30	688.85	549.24	880.66	881.02	38.57	1.27
3965.00	17.53	38.49	3819.33	703.76	560.99	899.62	899.99	38.56	.97
4027.00	17.27	39.11	3878.49	718.21	572.61	918.16	918.53	38.56	.52
4089.00	16.74	38.14	3937.78	732.37	583.93	936.28	936.66	38.57	.97
4152.00	16.48	38.80	3998.15	746.47	595.13	954.28	954.67	38.56	.51
4214.00	16.17	41.96	4057.65	759.74	606.41	971.70	972.08	38.60	1.52
4276.00	15.60	41.48	4117.28	772.41	617.71	988.67	989.03	38.65	.94
4338.00	15.29	40.51	4177.05	784.87	628.54	1005.17	1005.52	38.69	.65
4400.00	14.46	40.03	4236.97	797.01	638.83	1021.09	1021.43	38.71	1.35
4462.00	14.02	39.81	4297.06	808.71	648.61	1036.34	1036.68	38.73	.72
4524.00	13.36	39.28	4357.30	820.02	657.96	1051.01	1051.35	38.74	1.08
4585.00	12.92	41.52	4416.70	830.58	666.94	1064.88	1065.21	38.76	1.10
4647.00	12.30	43.52	4477.21	840.56	676.08	1078.40	1078.72	38.81	1.22
4710.00	11.87	45.39	4538.81	849.98	685.32	1091.55	1091.84	38.88	.92
4771.00	11.25	45.08	4598.57	858.59	694.00	1103.73	1103.99	38.95	1.02

Measured Depth FT	Incl Angle Deg	Drift Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
4833.00	10.63	44.55	4659.45	866.93	702.29	1115.46	1115.70	39.01	1.01
4896.00	10.24	44.07	4721.41	875.10	710.26	1126.84	1127.06	39.06	.63
4959.00	9.49	43.94	4783.47	882.86	717.76	1137.61	1137.81	39.11	1.19
5021.00	8.92	43.32	4844.67	890.04	724.60	1147.51	1147.70	39.15	.93
5083.00	8.26	43.02	4905.98	896.79	730.94	1156.76	1156.94	39.18	1.07
5145.00	7.47	42.14	4967.40	903.03	736.68	1165.23	1165.41	39.21	1.29
5207.00	6.81	42.71	5028.91	908.72	741.88	1172.93	1173.10	39.23	1.07
5269.00	6.28	43.19	5090.51	913.90	746.69	1179.99	1180.15	39.25	.86
5331.00	5.67	43.68	5152.17	918.58	751.13	1186.43	1186.59	39.27	.99
5393.00	5.45	43.10	5213.88	922.95	755.26	1192.43	1192.58	39.29	.37
5455.00	5.23	42.49	5275.61	927.18	759.18	1198.20	1198.34	39.31	.37
5517.00	4.53	48.99	5337.39	930.87	762.93	1203.44	1203.58	39.34	1.44
5579.00	2.81	55.63	5399.26	933.34	766.04	1207.32	1207.45	39.38	2.85
5641.00	2.46	57.34	5461.19	934.91	768.41	1210.06	1210.17	39.42	.58
5703.00	2.11	62.04	5523.14	936.17	770.54	1212.39	1212.49	39.46	.64
5765.00	1.63	74.04	5585.11	936.94	772.40	1214.18	1214.27	39.50	1.00
5827.00	1.19	93.55	5647.09	937.15	773.89	1215.30	1215.38	39.55	1.04
5831.00	1.14	95.27	5651.09	937.14	773.97	1215.35	1215.43	39.55	1.53
Project to Bit									
5892.00	1.14	95.27	5712.08	937.03	775.18	1216.04	1216.11	39.60	.00

Job Number: UT131000
Company: PETROGLYPH
Lease/Well: Ute Tribal 19-13M
Location: Section 19 T5S, R3W
Rig Name: Aztec Drilling 673
State/Country: UT/USA

