

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Ute Tribal 18-02C				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> ANTELOPE CREEK				
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> ANTELOPE CREEK				
<b>6. NAME OF OPERATOR</b> PETROGLYPH OPERATING CO						<b>7. OPERATOR PHONE</b> 208 685-7674				
<b>8. ADDRESS OF OPERATOR</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703						<b>9. OPERATOR E-MAIL</b> bwest@pgei.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> 14-20-H62-3513			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Ute Indian Tribe			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>		
LOCATION AT SURFACE		801 FNL 1748 FEL		NWNE	18	5.0 S	3.0 W	U		
Top of Uppermost Producing Zone		1490 FNL 2600 FEL		SWNE	18	5.0 S	3.0 W	U		
At Total Depth		1490 FNL 2600 FEL		SWNE	18	5.0 S	3.0 W	U		
<b>21. COUNTY</b> DUCHESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 801			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 640				
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1252			<b>26. PROPOSED DEPTH</b> MD: 6054 TVD: 6054				
<b>27. ELEVATION - GROUND LEVEL</b> 5987			<b>28. BOND NUMBER</b> BO 4556			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 43-8342				
<b>Hole, Casing, and Cement Information</b>										
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Length</b>	<b>Weight</b>	<b>Grade &amp; Thread</b>	<b>Max Mud Wt.</b>	<b>Cement</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
Cond	18	14	0 - 40	5.0	Unknown	10.0	Class G	25	1.17	15.8
Surf	12.25	8.625	0 - 480	24.0	J-55 ST&C	10.0	Class G	220	1.17	15.8
Prod	8.75	5.5	0 - 6054	15.5	J-55 LT&C	10.0	Class G	516	1.91	12.5
							Class G	338	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 checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Ed Trotter				<b>TITLE</b> Agent			<b>PHONE</b> 435 789-4120			
<b>SIGNATURE</b>				<b>DATE</b> 06/01/2011			<b>EMAIL</b> edtrotter@easilink.com			
<b>API NUMBER ASSIGNED</b> 43013508040000				<b>APPROVAL</b>  Permit Manager						

CONFIDENTIAL  
EIGHT POINT PLAN

UTE TRIBAL 18-02C  
NW/NE, SEC. 18, T5S, R3W  
DUCHESNE COUNTY, UTAH

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

FORMATIONS	DEPTH	SUBSEA
Trona	2552	3474
Mahogany Shale	2703	3327
“B” Marker	3824	2233
“X” Marker	4324	1745
Douglas Creek	4469	1603
“B” Limestone	4862	1220
B/Castle Peak Limestone	5440	655
BSCARB	5857	248
Total Depth	6054	
Anticipated Maximum BHP	1900	

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Oil/Gas	Douglas Creek	4469	1603
Oil/Gas	B/Castle Peak	5440	655

Other mineral zones N/A

**3. PRESSURE CONTROL EQUIPMENT:** BOP Schematic Diagram attached.**4. CASING PROGRAM:**

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade	Thread
18”	14”	sfc	40’	steel	cond	none
12 ¼”	8 5/8”	sfc	480’	24.0	J-55	STC
8 ¾”	5 1/2”	sfc	6054’	15.5	J-55	LTC

Casing Strengths:				Collapse	Burst	Tensile
8 5/8”	24.0 lb.	J-55	STC	1,370 psi	2,950 psi	263,000 lb
5 1/2”	15.5 lb.	J-55	LTC	4,040 psi	4,810 psi	239,000 lb

All casing will be new or inspected.

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EIGHT POINT PLAN

UTE TRIBAL 18-02C  
NW/NE, SEC. 18, T5S, R3W  
DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

INTERVAL

0' - 480'  
480' - TD

MUD TYPE

Air/Aerated Water  
Water with DAP or DAP alternative  
Gel/polyacrylamide polymer w/5-10% LCM, LSND as conditions warrant

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

6. CEMENT PROGRAM:

**20" Conductor:**

Cement to surface with construction cement.

**8 5/8" Casing: sfc - 500'**

**Lead/Tail Slurry: 0' - 500':** 220 sks (257 cu ft) Class G cement + 0.25 lbsk Cello Flake + 2% CaCl<sub>2</sub>. Slurry wt: 15.8 ppg, Slurry yield: 1.17 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 30% excess. (Cement will be circulated to surface).

**5 1/2" Casing: sfc - 6054'**

**Lead Slurry: sfc - 4000':** 516 sks (986 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (12.5 PPG±, 1.91 ft<sup>3</sup>/sk) hole + 30% excess.

**Tail Slurry:**

**4000' - 6054':** 317 sx (463 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (13.4 ppg±, 1.46ft<sup>3</sup>/sk) hole + 30% excess. Cement will be circulated to surface.

7. VARIANCE REQUESTS:

- A. Petroglyph Operating Company, Inc. requests a variance to regulations requiring a straight run blooie line during drilling of surface hole.
- B. Petroglyph Operating Company, Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line during drilling of surface hole.

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EIGHT POINT PLAN

UTE TRIBAL 18-02C  
NW/NE, SEC. 18, T5S, R3W  
DUCHESNE COUNTY, UTAH

- C. Petroglyph Operating Company, Inc. requests a variance to regulations requiring 100' of blooie line discharge from the well head during drilling of surface hole.
- D. Petroglyph Operating Company, Inc. requests a variance to regulations for compressors to be 100' from well head during drilling of surface hole.

**8. EVALUATION PROGRAM:**

Logs: Platform Express TD to base of surface casing  
(DLL, MSFL, CNG, CDL, GR)  
Cores: None anticipated  
DST: None Programmed

Completion: To be submitted at a later date.

**9. ABNORMAL CONDITIONS:**

None anticipated.

**10. STANDARD REQUIRED EQUIPMENT:**

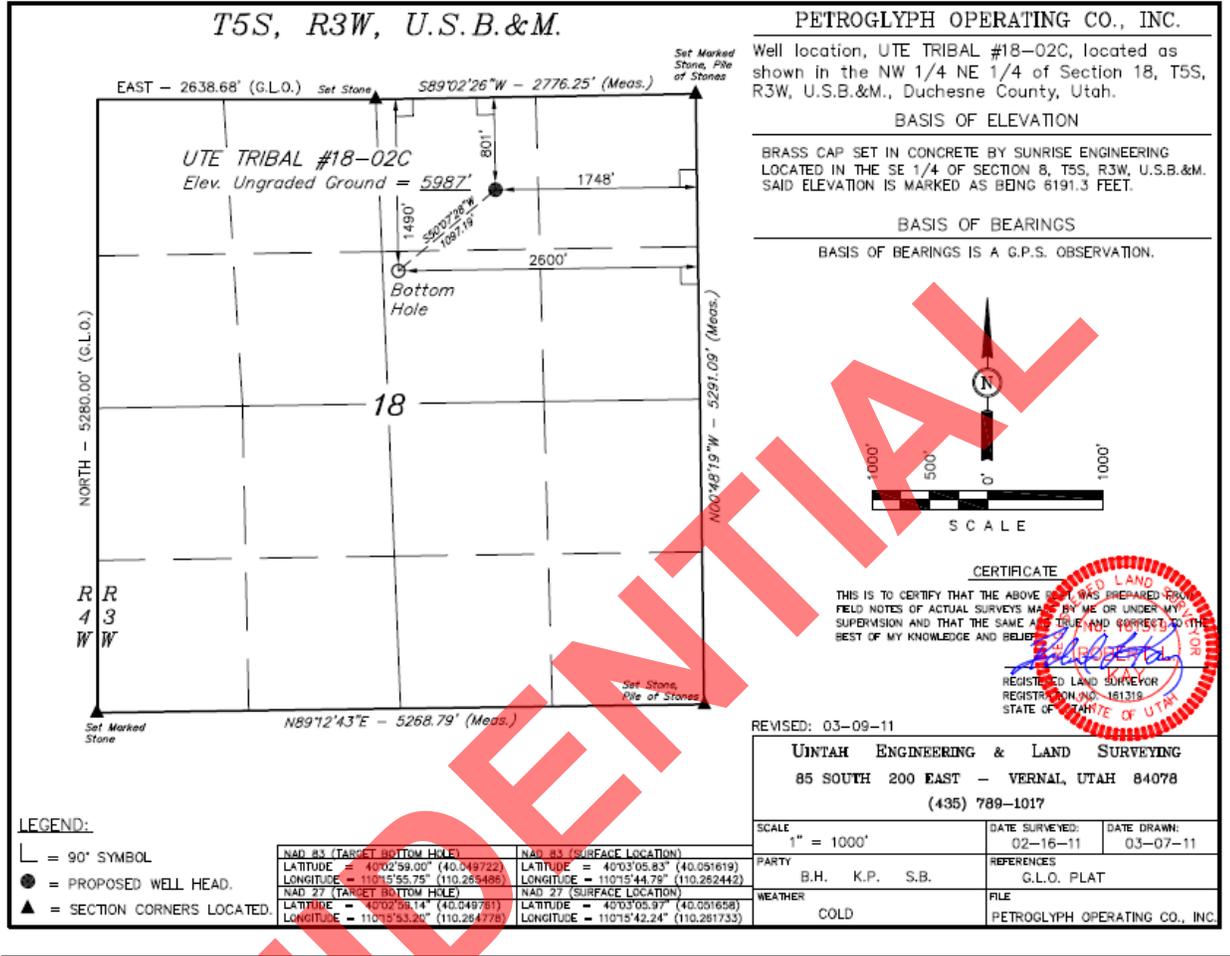
None Required

**11. HAZARDOUS CHEMICALS:**

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

(Attachment: BOP Schematic Diagram)

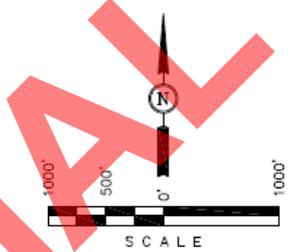
T5S, R3W, U.S.B.&M.



**PETROGLYPH OPERATING CO., INC.**  
 Well location, UTE TRIBAL #18-02C, located as shown in the NW 1/4 NE 1/4 of Section 18, 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 8, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6191.3 FEET.

**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 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.

*[Signature]*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 181318  
 STATE OF UTAH

- LEGEND:**
- └ = 90° SYMBOL
  - = PROPOSED WELL HEAD.
  - ▲ = SECTION CORNERS LOCATED.

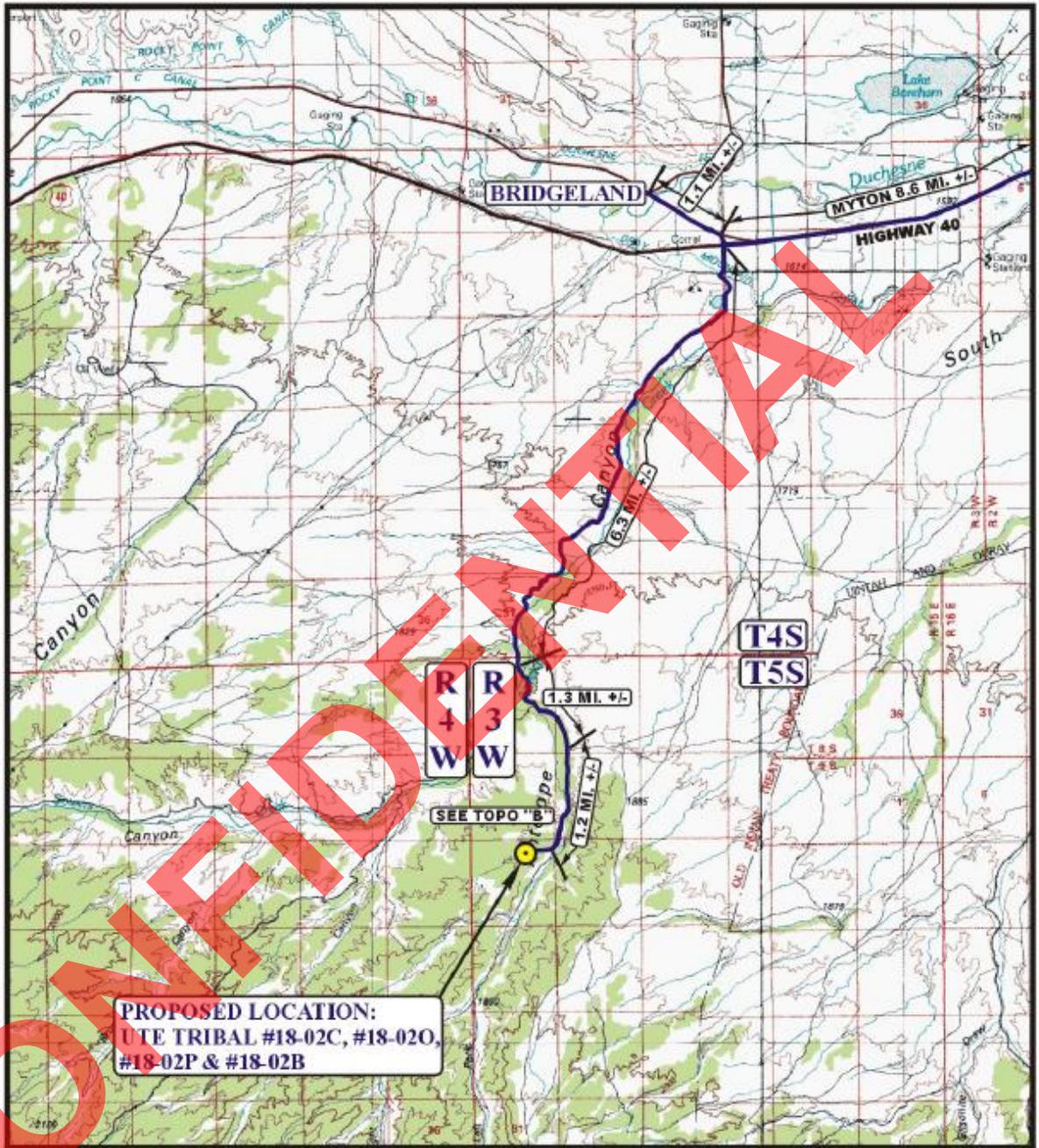
<b>NAD 83 (TARGET BOTTOM HOLE)</b> LATITUDE = 40°02'59.00" (40.049722) LONGITUDE = 110°15'55.75" (110.265486)	<b>NAD 83 (SURFACE LOCATION)</b> LATITUDE = 40°03'05.93" (40.051619) LONGITUDE = 110°15'44.79" (110.262442)
<b>NAD 27 (TARGET BOTTOM HOLE)</b> LATITUDE = 40°02'58.14" (40.048781) LONGITUDE = 110°15'53.20" (110.264778)	<b>NAD 27 (SURFACE LOCATION)</b> LATITUDE = 40°03'05.97" (40.051658) LONGITUDE = 110°15'42.24" (110.261733)

REVISED: 03-09-11

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

SCALE 1" = 1000'	DATE SURVEYED: 02-16-11	DATE DRAWN: 03-07-11
PARTY B.H. K.P. S.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE PETROGLYPH OPERATING CO., INC.	

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**PROPOSED LOCATION:**  
 UTE TRIBAL #18-02C, #18-02O,  
 #18-02P & #18-02B

**LEGEND:**  
 ● PROPOSED LOCATION

**PETROGLYPH OPERATING CO., INC.**  
 UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B  
 SECTION 18, T5S, R3W, U.S.B.&M.  
 NW 1/4 NE 1/4

**U&L S** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**ACCESS ROAD MAP**  
 02 22 11  
 MONTH DAY YEAR  
 SCALE: 1:100,000 DRAWN BY: S.F. REVISED: 00-00-00 **TOPO**

# **Petroglyph Operating Co. Inc.**

Duchesne County, UT NAD83

UTE Tribal 18-02C

UT 18-02C

Wellbore #1

Plan: Plan #1

## **Standard Planning Report**

12 April, 2011

**CONFIDENTIAL**

**Scientific Drilling International, Inc.**  
 Planning Report

<b>Database:</b>	EDM-R5000-JanieCooke-Local	<b>Local Co-ordinate Reference:</b>	Well UT 18-02C
<b>Company:</b>	Petroglyph Operating Co. Inc.	<b>TVD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Project:</b>	Duchesne County, UT NAD83	<b>MD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Site:</b>	UTE Tribal 18-02C	<b>North Reference:</b>	True
<b>Well:</b>	UT 18-02C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	Duchesne County, UT NAD83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	UTE Tribal 18-02C				
<b>Site Position:</b>		<b>Northing:</b>	7,189,922.75 usft	<b>Latitude:</b>	40° 3' 5.830 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,986,829.89 usft	<b>Longitude:</b>	110° 15' 44.790 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.79 °

<b>Well</b>	UT 18-02C, 801 FNL & 1748 FEL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	7,189,922.75 usft	<b>Latitude:</b>	40° 3' 5.830 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	1,986,829.89 usft	<b>Longitude:</b>	110° 15' 44.790 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	0.00 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	4/7/2011	11.42	65.77	52,260

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	230.96	

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,503.09	12.54	230.96	1,495.11	-68.85	-84.91	1.25	1.25	0.00	230.96	
6,053.52	12.54	230.96	5,937.00	-691.06	-852.24	0.00	0.00	0.00	0.00	UT 18-02C Target

Scientific Drilling International, Inc.

Planning Report

<b>Database:</b>	EDM-R5000-JanieCooke-Local	<b>Local Co-ordinate Reference:</b>	Well UT 18-02C
<b>Company:</b>	Petroglyph Operating Co. Inc.	<b>TVD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Project:</b>	Duchesne County, UT NAD83	<b>MD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Site:</b>	UTE Tribal 18-02C	<b>North Reference:</b>	True
<b>Well:</b>	UT 18-02C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	1.25	230.96	599.99	-0.69	-0.85	1.09	1.25	1.25	0.00
700.00	2.50	230.96	699.94	-2.75	-3.39	4.36	1.25	1.25	0.00
800.00	3.75	230.96	799.79	-6.18	-7.62	9.81	1.25	1.25	0.00
900.00	5.00	230.96	899.49	-10.99	-13.55	17.44	1.25	1.25	0.00
1,000.00	6.25	230.96	999.01	-17.16	-21.16	27.24	1.25	1.25	0.00
1,100.00	7.50	230.96	1,098.29	-24.70	-30.46	39.21	1.25	1.25	0.00
1,200.00	8.75	230.96	1,197.28	-33.60	-41.44	53.35	1.25	1.25	0.00
1,300.00	10.00	230.96	1,295.94	-43.86	-54.09	69.64	1.25	1.25	0.00
1,400.00	11.25	230.96	1,394.23	-55.47	-68.41	88.07	1.25	1.25	0.00
1,500.00	12.50	230.96	1,492.09	-68.43	-84.39	108.65	1.25	1.25	0.00
1,503.09	12.54	230.96	1,495.11	-68.85	-84.91	109.32	1.25	1.25	0.00
1,600.00	12.54	230.96	1,589.70	-82.10	-101.26	130.36	0.00	0.00	0.00
1,700.00	12.54	230.96	1,687.32	-95.78	-118.12	152.07	0.00	0.00	0.00
1,800.00	12.54	230.96	1,784.93	-109.45	-134.98	173.78	0.00	0.00	0.00
1,900.00	12.54	230.96	1,882.55	-123.12	-151.84	195.49	0.00	0.00	0.00
2,000.00	12.54	230.96	1,980.16	-136.80	-168.71	217.20	0.00	0.00	0.00
2,100.00	12.54	230.96	2,077.78	-150.47	-185.57	238.91	0.00	0.00	0.00
2,200.00	12.54	230.96	2,175.39	-164.15	-202.43	260.62	0.00	0.00	0.00
2,300.00	12.54	230.96	2,273.01	-177.82	-219.29	282.33	0.00	0.00	0.00
2,400.00	12.54	230.96	2,370.62	-191.49	-236.16	304.04	0.00	0.00	0.00
2,500.00	12.54	230.96	2,468.24	-205.17	-253.02	325.75	0.00	0.00	0.00
2,600.00	12.54	230.96	2,565.85	-218.84	-269.88	347.46	0.00	0.00	0.00
2,700.00	12.54	230.96	2,663.47	-232.51	-286.75	369.17	0.00	0.00	0.00
2,800.00	12.54	230.96	2,761.08	-246.19	-303.61	390.88	0.00	0.00	0.00
2,900.00	12.54	230.96	2,858.70	-259.86	-320.47	412.59	0.00	0.00	0.00
3,000.00	12.54	230.96	2,956.31	-273.53	-337.33	434.30	0.00	0.00	0.00
3,100.00	12.54	230.96	3,053.93	-287.21	-354.20	456.01	0.00	0.00	0.00
3,200.00	12.54	230.96	3,151.54	-300.88	-371.06	477.72	0.00	0.00	0.00
3,300.00	12.54	230.96	3,249.16	-314.55	-387.92	499.43	0.00	0.00	0.00
3,400.00	12.54	230.96	3,346.77	-328.23	-404.79	521.14	0.00	0.00	0.00
3,500.00	12.54	230.96	3,444.39	-341.90	-421.65	542.85	0.00	0.00	0.00
3,600.00	12.54	230.96	3,542.00	-355.57	-438.51	564.56	0.00	0.00	0.00
3,700.00	12.54	230.96	3,639.62	-369.25	-455.37	586.27	0.00	0.00	0.00
3,800.00	12.54	230.96	3,737.23	-382.92	-472.24	607.98	0.00	0.00	0.00
3,900.00	12.54	230.96	3,834.85	-396.59	-489.10	629.69	0.00	0.00	0.00
4,000.00	12.54	230.96	3,932.46	-410.27	-505.96	651.40	0.00	0.00	0.00
4,100.00	12.54	230.96	4,030.08	-423.94	-522.83	673.11	0.00	0.00	0.00
4,200.00	12.54	230.96	4,127.69	-437.62	-539.69	694.82	0.00	0.00	0.00
4,300.00	12.54	230.96	4,225.31	-451.29	-556.55	716.53	0.00	0.00	0.00
4,400.00	12.54	230.96	4,322.92	-464.96	-573.41	738.24	0.00	0.00	0.00
4,500.00	12.54	230.96	4,420.54	-478.64	-590.28	759.95	0.00	0.00	0.00
4,600.00	12.54	230.96	4,518.15	-492.31	-607.14	781.66	0.00	0.00	0.00
4,700.00	12.54	230.96	4,615.77	-505.98	-624.00	803.37	0.00	0.00	0.00
4,800.00	12.54	230.96	4,713.38	-519.66	-640.87	825.08	0.00	0.00	0.00
4,900.00	12.54	230.96	4,811.00	-533.33	-657.73	846.79	0.00	0.00	0.00
5,000.00	12.54	230.96	4,908.61	-547.00	-674.59	868.50	0.00	0.00	0.00
5,100.00	12.54	230.96	5,006.23	-560.68	-691.45	890.21	0.00	0.00	0.00
5,200.00	12.54	230.96	5,103.84	-574.35	-708.32	911.92	0.00	0.00	0.00

Scientific Drilling International, Inc.

Planning Report

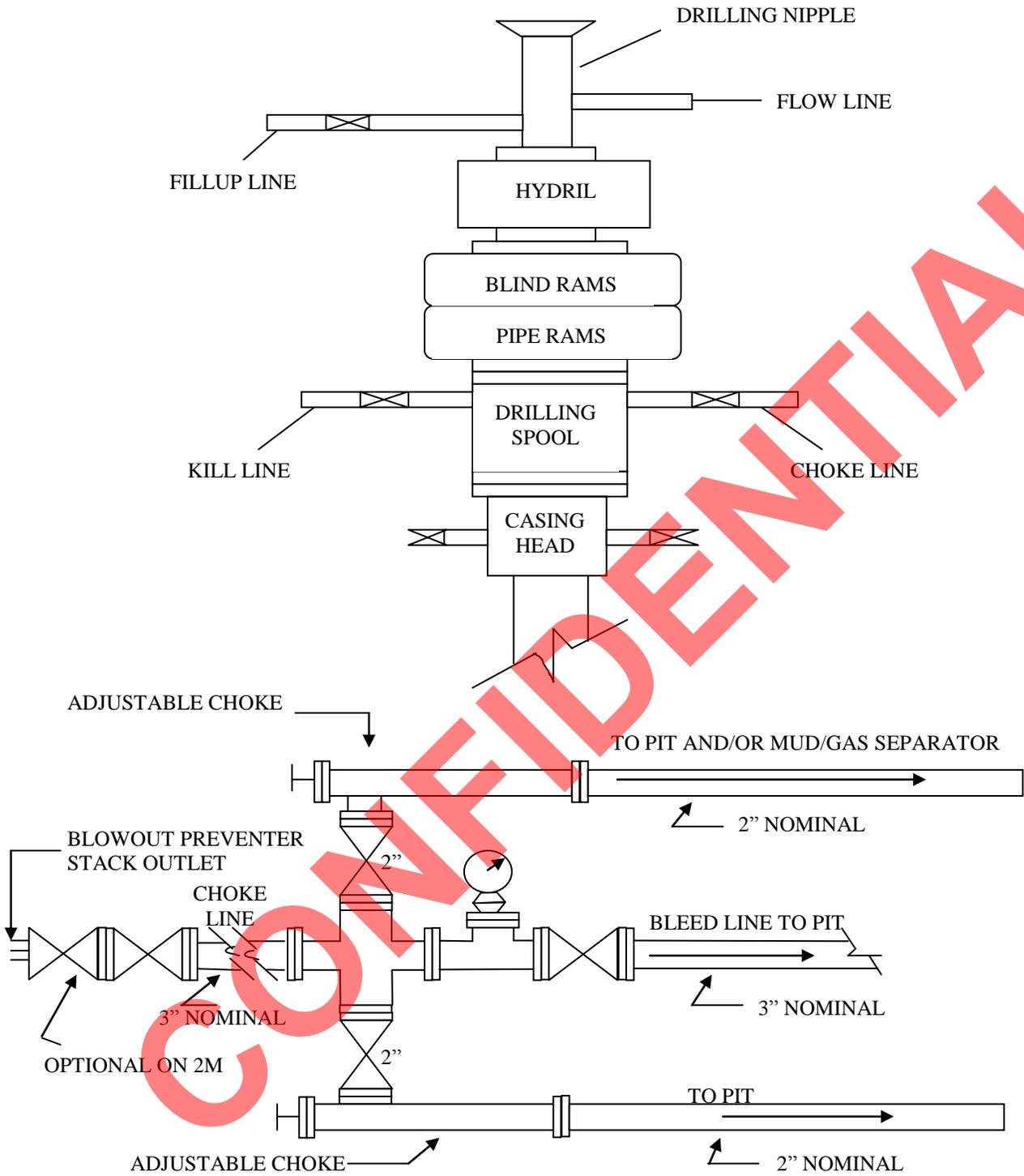
<b>Database:</b>	EDM-R5000-JanieCooke-Local	<b>Local Co-ordinate Reference:</b>	Well UT 18-02C
<b>Company:</b>	Petroglyph Operating Co. Inc.	<b>TVD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Project:</b>	Duchesne County, UT NAD83	<b>MD Reference:</b>	WELL @ 5987.00ft (Original Well Elev)
<b>Site:</b>	UTE Tribal 18-02C	<b>North Reference:</b>	True
<b>Well:</b>	UT 18-02C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	12.54	230.96	5,201.46	-588.02	-725.18	933.63	0.00	0.00	0.00
5,400.00	12.54	230.96	5,299.07	-601.70	-742.04	955.34	0.00	0.00	0.00
5,500.00	12.54	230.96	5,396.69	-615.37	-758.90	977.05	0.00	0.00	0.00
5,600.00	12.54	230.96	5,494.30	-629.04	-775.77	998.75	0.00	0.00	0.00
5,700.00	12.54	230.96	5,591.91	-642.72	-792.63	1,020.46	0.00	0.00	0.00
5,800.00	12.54	230.96	5,689.53	-656.39	-809.49	1,042.17	0.00	0.00	0.00
5,900.00	12.54	230.96	5,787.14	-670.06	-826.36	1,063.88	0.00	0.00	0.00
6,000.00	12.54	230.96	5,884.76	-683.74	-843.22	1,085.59	0.00	0.00	0.00
6,053.52	12.54	230.96	5,937.00	-691.06	-852.24	1,097.21	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
UT 18-02C Target - hit/miss target - Shape - Point	0.00	0.00	5,937.00	-691.06	-852.24	7,189,219.97	1,985,987.29	40° 2' 59.000 N	110° 15' 55.750 W

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### SCHEMATIC DIAGRAM OF 2000 PSI BOP STACK



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

May 23, 2011

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 18-02C: 801' FNL & 1748' FEL, NW/NE (Surface)  
1490' FNL & 2600' FEL, SW/NE (Bottom Hole)  
Sec.18, 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 May 23, 2011, 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 18-02C 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 directionally drilling 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**

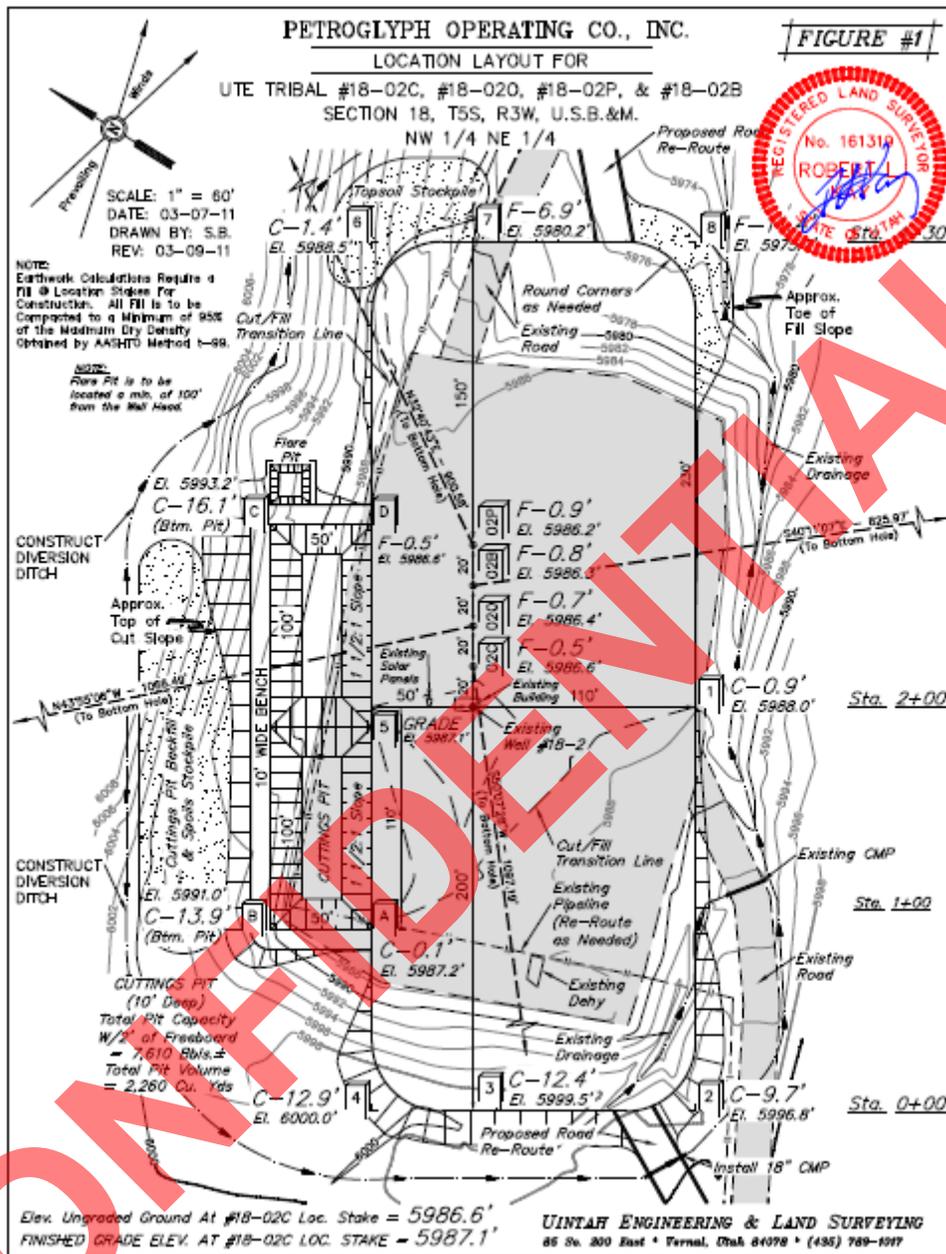
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with 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.

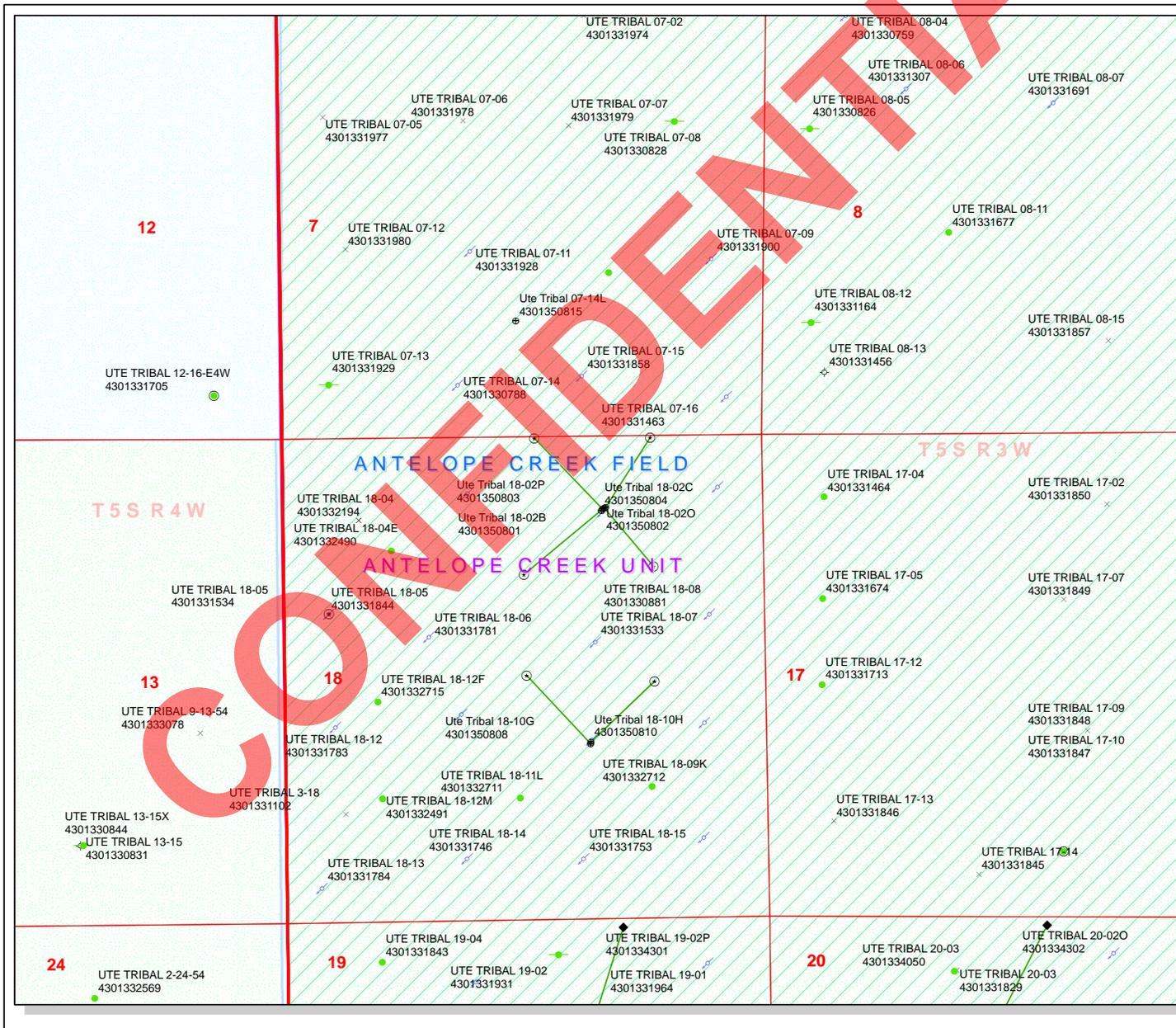
Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 18-02C Well, located in the NW/NE of Section 18, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3513**; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #BO 4556.

\_\_\_\_\_  
Date

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

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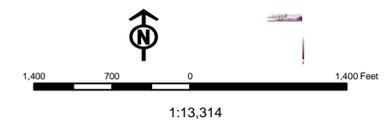




**API Number: 4301350804**  
**Well Name: Ute Tribal 18-02C**  
**Township T0.5 . Range R0.3 . Section 18**  
**Meridian: UBM**  
 Operator: PETROGLYPH OPERATING CO

Map Prepared:  
 Map Produced by Diana Mason

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



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 6/1/2011

**API NO. ASSIGNED:** 43013508040000

**WELL NAME:** Ute Tribal 18-02C

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

**PHONE NUMBER:** 435 789-4120

**CONTACT:** Ed Trotter

**PROPOSED LOCATION:** NWNE 18 050S 030W

**Permit Tech Review:**

**SURFACE:** 0801 FNL 1748 FEL

**Engineering Review:**

**BOTTOM:** 1490 FNL 2600 FEL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 40.05163

**LONGITUDE:** -110.26197

**UTM SURF EASTINGS:** 562953.00

**NORTHINGS:** 4433538.00

**FIELD NAME:** ANTELOPE CREEK

**LEASE TYPE:** 2 - Indian

**LEASE NUMBER:** 14-20-H62-3513

**PROPOSED PRODUCING FORMATION(S):** CASTLE PEAK

**SURFACE OWNER:** 2 - Indian

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- PLAT
- Bond: INDIAN - BO 4556
- 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

**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 18-02C  
**API Well Number:** 43013508040000  
**Lease Number:** 14-20-H62-3513  
**Surface Owner:** INDIAN  
**Approval Date:** 6/7/2011

**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 CASTLE PEAK 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	
<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-H62-3513	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE	
<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 18-02C	
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703		<b>9. API NUMBER:</b> 43013508040000	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0801 FNL 1748 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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"/> SUBSEQUENT REPORT Date of Work Completion:  <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 2/23/2012  <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.			
We spud this well on 2/23/2012. We set 40' of 14" Conductor.			
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 01, 2012</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> 2/27/2012	

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**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company; PETROGLYPH OPERATING COMPANY

Well Name: UTE TRIBAL 18-02C

Api No: 43-013-50804 Lease Type INDIAN

Section 18 Township 05S Range 03W County DUCHESNE

Drilling Contractor \_\_\_\_\_ RIG # \_\_\_\_\_

**SPUDDED:**

Date 02/23/2012

Time \_\_\_\_\_

How DRY

**Drilling will  
Commence:** \_\_\_\_\_

Reported by GENO ROLAND

Telephone # (970) 361-3271

Date 02/29 /2012 Signed CHD

**RECEIVED**  
AUG 08 2011  
Original 8/15/11

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

UNITED STATES  
DEPARTMENT OF THE INTERIOR **BLM**  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>14-20-H62-3513</b>
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 <b>UTE INDIAN TRIBE</b>
2. Name of Operator <b>PETROGLYPH OPERATING CO., INC.</b>		7. If Unit or CA Agreement, Name and No. <b>14-20-H62-4650</b>
3a. Address <b>P.O. BOX 1910 VERNAL, UT 84078</b>		8. Lease Name and Well No. <b>UTE TRIBAL 18-02C</b>
3b. Phone No. (Include area code) <b>(435)789-4120</b>		9. API Well No. <b>43-013-50804</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>801' FNL, 1748' FEL, NW/NE, Sec. 18, T5S, R3W</b> Bottom Hole: <b>1490' FNL, 2600' FEL, SW/NE, Sec. 18, T5S, R3W</b> At proposed prod. Zone		10. Field and Pool, or Exploratory <b>ANTELOPE CREEK</b>
14. Distance in miles and direction from nearest town or post office* <b>17.4 MILES SOUTHWEST OF MYTON, UTAH</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>SEC. 18, T5S, R3W, U.S.B.&amp;M.</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. Unit line, if any) <b>801'</b>	16. No. of Acres in lease <b>640</b>	12. County or Parish <b>DUCHESNE</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>See Topo Map "C"</b>	19. Proposed Depth <b>5937' MVD 6054' TMD</b>	13. State <b>UTAH</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5987.1 FEET GRADED GROUND</b>	22. Approximate date work will start* <b>UPON APPROVAL</b>	17. Spacing Unit dedicated to this well
23. Estimated duration <b>10 DAYS</b>		20. BLM/BIA Bond No. on file <b>BO 4556</b>

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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 BLM.

25. Signature 	Name (Printed/Typed) <b>Ed Trotter</b>	<b>RECEIVED</b> <b>FEB 28 2012</b>	Date <b>May 23, 2011</b>
Title <b>Agent</b>			

Approved by (Signature) 	Name (Printed/Typed) <b>Jerry Kenczka</b>	Date <b>FEB 21 2012</b>
Title <b>Assistant Field Manager Lands &amp; Mineral Resources</b>	Office <b>VERNAL FIELD OFFICE</b>	

Application approval does not warrant or certify that 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.

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.

\*(Continued on page 2)

**NOTICE OF APPROVAL**  
**CONDITIONS OF APPROVAL ATTACHED**

11550639A

NOS 4/20/11

**UDCGM**



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 18-02C  
API No: 43-013-50804

Location: NWNE, Sec. 18, T5S, R3W  
Lease No: 14-20-H62-3513  
Agreement: Antelope Creek Agreement

**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**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify 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 Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify 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)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

#### **SITE SPECIFIC COA's**

##### 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:**

- Production casing cement shall be brought up and into the surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 75 feet.  
All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.

**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 in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. 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 (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.

<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-H62-3513
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE  <b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 18-02C
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	<b>9. API NUMBER:</b> 43013508040000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703	<b>PHONE NUMBER:</b> 208 685-7674 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0801 FNL 1748 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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>4/15/2012</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 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 checked="" 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.

All produced water will be trucked or pumped through pipe line to a water injection pump station for injection. Water injection pump stations are located at the following: Ute Tribal 21-11 NESW Section 21, T5S, R3W Duchesne County, Utah Ute Tribal 18-08 SENE Section 18, T5S, R3W Duchesne County, Utah Ute Tribal 31-12D3 NWSW Section 34, T4S, R3W Duchesne County, Utah

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 March 09, 2012**

<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> 2/28/2012	

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

FORM 6

**ENTITY ACTION FORM**

Operator: Petroglyph Operating Company  
Address: P.O. Box 607  
city Roosevelt  
state UT zip 84066

Operator Account Number: N 3800  
Phone Number: (435) 722-2531

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350804	Ute Tribal 18-02C		NWNE	18	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12245	2/23/2012			3/1/2012	
Comments: <u>GRRV BHL: sure</u> <u>3/20/2012</u> <b>CONFIDENTIAL</b>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350802	Ute Tribal 18-02O		NWNE	18	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12245	2/23/2012			3/1/2012	
Comments: <u>GRRV BHL: none</u> <u>3/20/2012</u> <b>CONFIDENTIAL</b>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350801	Ute Tribal 18-02B		NWNE	18	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12245	2/24/2012			3/1/2012	
Comments: <u>GRRV BHL: none</u> <u>3/20/2012</u> <b>CONFIDENTIAL</b>							

**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

2/28/2012

Title

Date

**RECEIVED**

FEB 28 2012

DIV. OF OIL, GAS & MINING

<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-H62-3513
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE  <b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 18-02C
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	<b>9. API NUMBER:</b> 43013508040000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703	<b>PHONE NUMBER:</b> 208 685-7674 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FNL 1746 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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>2/23/2012</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: <span style="border: 1px solid black; padding: 2px;">Increased Well Head Spacing</span>

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

In order to facilitate the available drill rig, Petroglyph Operating has increased the well head spacing from 20' to 23' between the well referenced above and others on the same location. This well is One of Four being drilled on an existing well pad. The original spacing did not provide enough room for the drilling rig we have hired to drill these wells for us. The revised spacing will not require us to disturb any additional surface area. The new location of the well head is the following: 800'FNL, 1746'FEL NWNE Sec. 18, T5S, R3W Duchesne County, Utah. Please see the attached revised plats.

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

**Date:** April 18, 2012

**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> 4/3/2012	

**PETROGLYPH OPERATING CO., INC.**  
**UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B**  
**LOCATED IN DUCHESNE COUNTY, UTAH**  
**SECTION 18, T5S, R3W, U.S.B.&M.**



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ROAD RE-ROUTE

CAMERA ANGLE: SOUTHWESTERLY



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

<b>LOCATION PHOTOS</b>	<b>02</b>	<b>22</b>	<b>11</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: B.H.	DRAWN BY: S.F.		REVISED:00-00-00	

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

## PETROGLYPH OPERATING CO., INC.

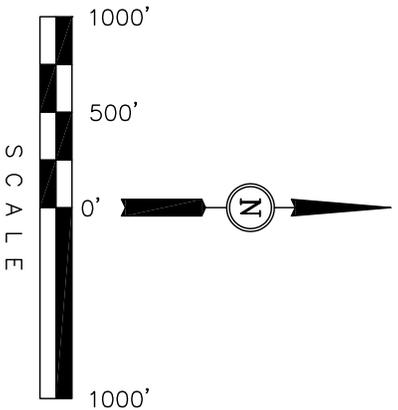
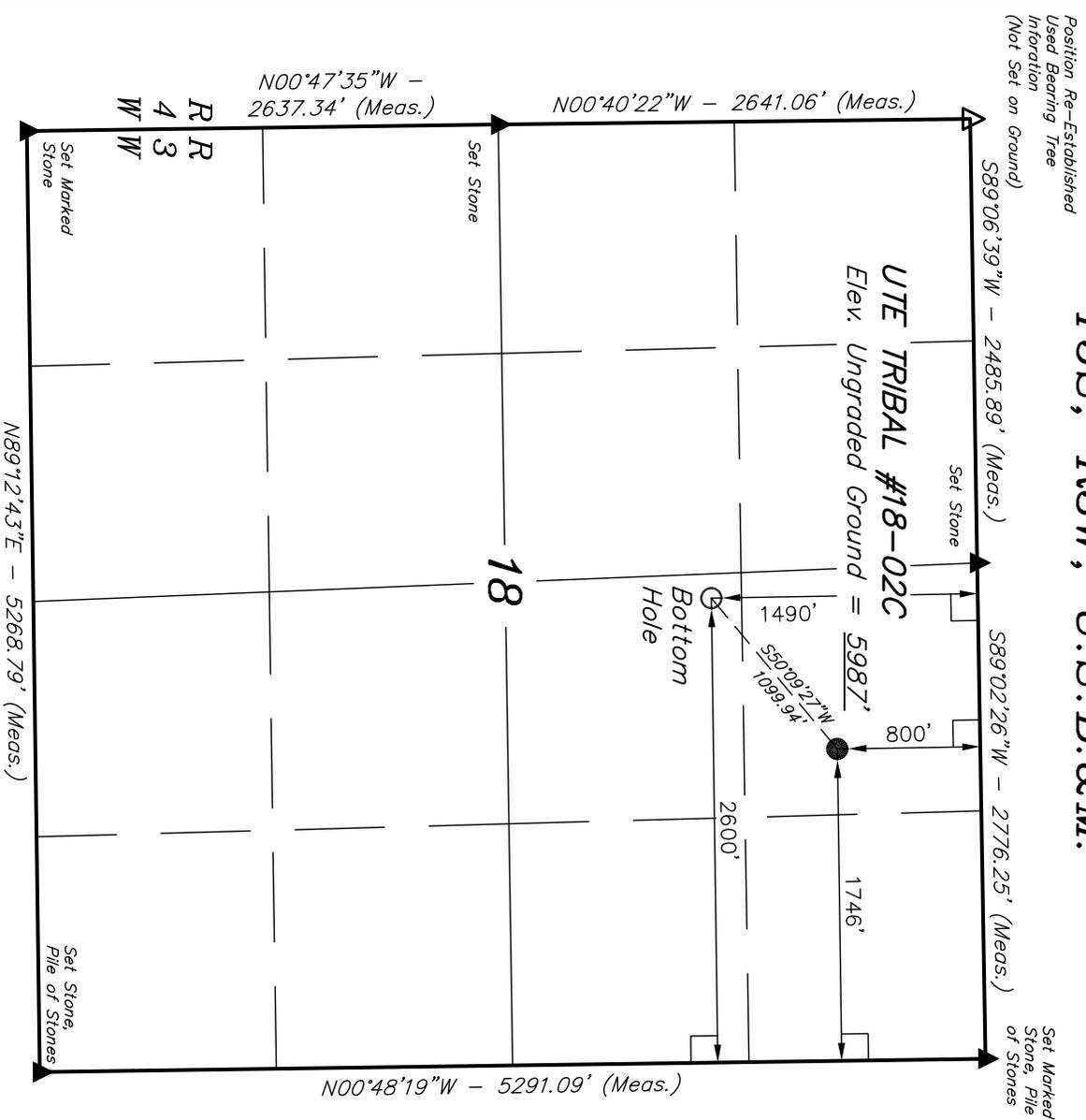
Well location, UTE TRIBAL #18-02C, located as shown in the NW 1/4 NE 1/4 of Section 18, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

### BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6191.3 FEET.

### BASIS OF BEARINGS

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



CERTIFICATE  
 THIS IS TO CERTIFY THAT THE ABOVE POINT 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.

REV. 03-22-12 Z.L.  
 REVISED: 03-09-11

**KAY ROBERTS**  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH  
 03-28-12

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

SCALE 1" = 1000'  
 DATE SURVEYED: 02-16-11  
 DATE DRAWN: 03-07-11

PARTY	B.H. K.P. S.B.	REFERENCES	G.I.O. PLAT
WEATHER	COLD	FILE	PETROGLYPH OPERATING CO., INC.

- LEGEND:**
- ◻ = 90° SYMBOL
  - = PROPOSED WELL HEAD.
  - ▲ = SECTION CORNERS LOCATED.
  - △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

<b>NAD 83 (TARGET BOTTOM HOLE)</b>		<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE = 40°02'59.00" (40.049722)	LONGITUDE = 110°15'55.75" (110.265486)	LATITUDE = 40°03'05.84" (40.051622)	LONGITUDE = 110°15'44.76" (110.262433)
<b>NAD 27 (TARGET BOTTOM HOLE)</b>		<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE = 40°02'59.14" (40.049761)	LONGITUDE = 110°15'53.20" (110.264778)	LATITUDE = 40°03'05.98" (40.051661)	LONGITUDE = 110°15'42.21" (110.261725)

**PETROGLYPH OPERATING CO., INC.**

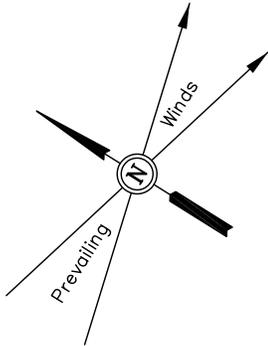
LOCATION LAYOUT FOR

UTE TRIBAL #18-02C, #18-02O, #18-02P, & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.

NW 1/4 NE 1/4

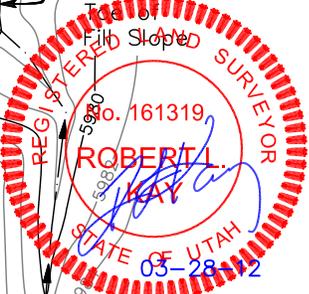
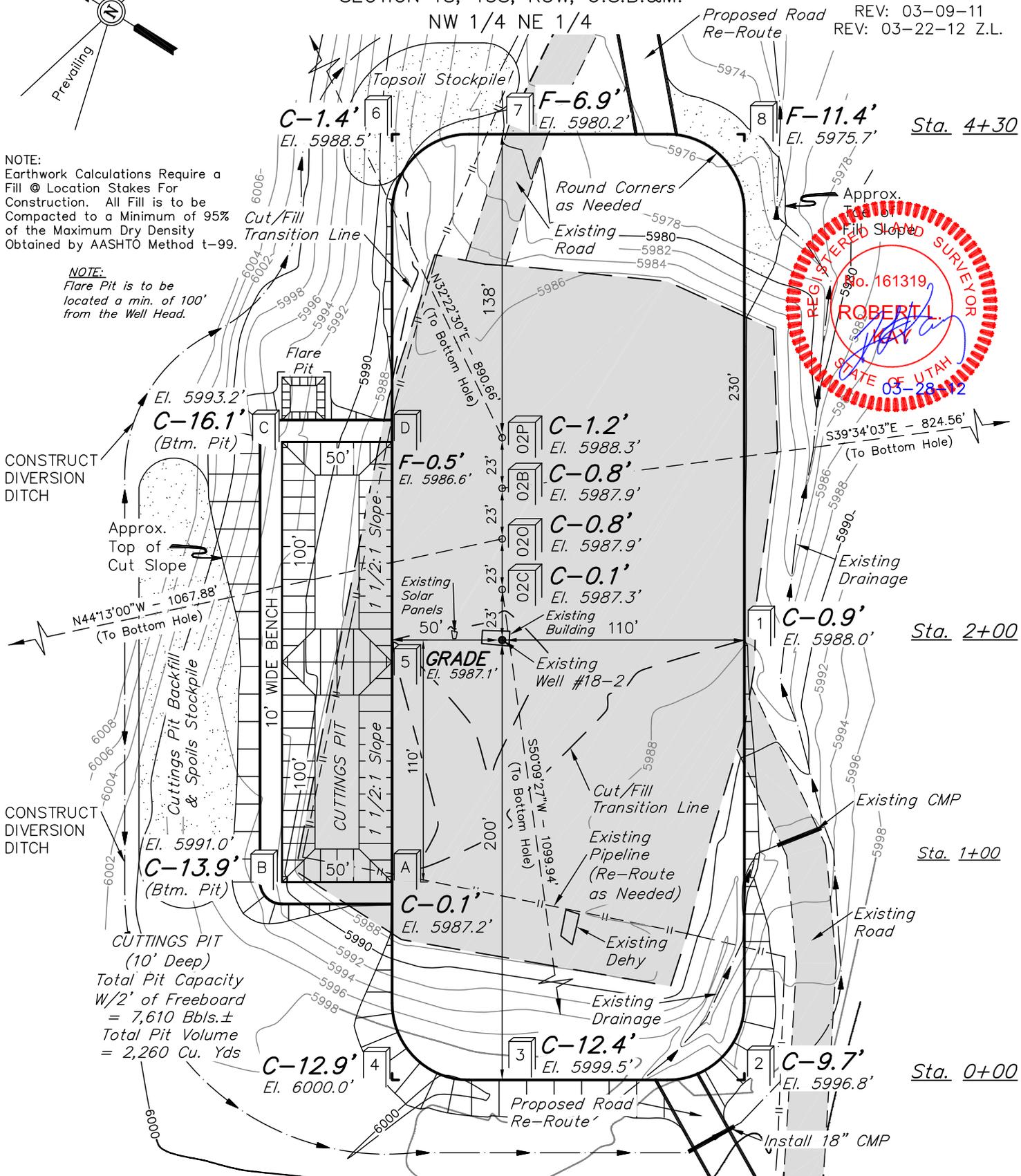
**FIGURE #1**

SCALE: 1" = 60'  
DATE: 03-07-11  
DRAWN BY: S.B.  
REV: 03-09-11  
REV: 03-22-12 Z.L.



NOTE:  
Earthwork Calculations Require a Fill @ Location Stakes For Construction. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

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



CONSTRUCT DIVERSION DITCH

CONSTRUCT DIVERSION DITCH

CUTTINGS PIT (10' Deep)  
Total Pit Capacity W/2' of Freeboard = 7,610 Bbls.±  
Total Pit Volume = 2,260 Cu. Yds

Elev. Ungraded Ground At #18-02C Loc. Stake = **5986.6'**  
FINISHED GRADE ELEV. AT #18-02C LOC. STAKE = **5987.1'**

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

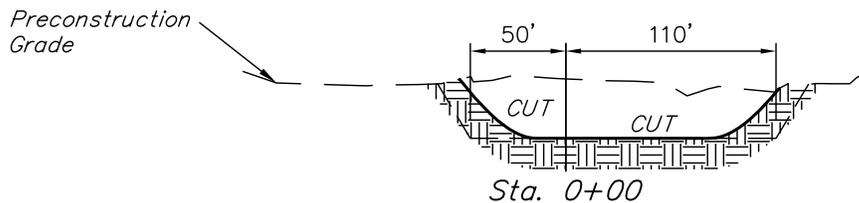
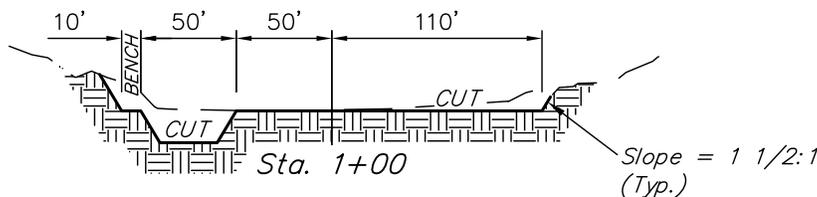
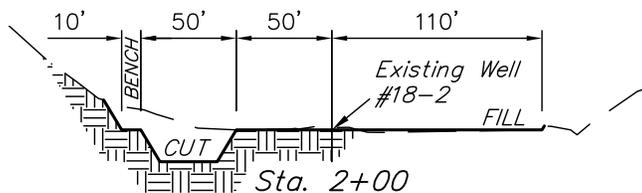
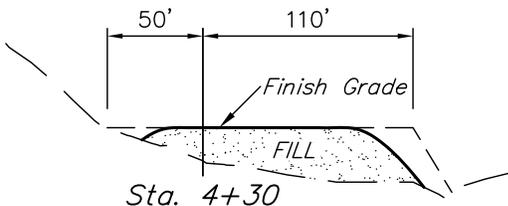
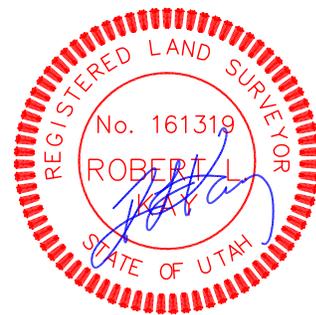
**PETROGLYPH OPERATING CO., INC.**

**FIGURE #2**

**TYPICAL CROSS SECTIONS FOR**

**UTE TRIBAL #18-02C, #18-02O, #18-02P, & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.  
NW 1/4 NE 1/4**

X-Section Scale  
1" = 40'  
1" = 100'  
DATE: 03-07-11  
DRAWN BY: S.B.



**APPROXIMATE ACREAGES**  
WELL SITE DISTURBANCE = ± 3.772 ACRES  
ACCESS ROAD DISTURBANCE = ± 0.040 ACRES  
**TOTAL = ± 3.812 ACRES**

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

**APPROXIMATE YARDAGES**

(12") Topsoil Stripping = 1,020 Cu. Yds.  
(New Construction Only)  
Remaining Location = 6,980 Cu. Yds.  
**TOTAL CUT = 8,000 CU.YDS.**  
**FILL = 4,200 CU.YDS.**

EXCESS MATERIAL = 3,800 Cu. Yds.  
Topsoil & Pit Backfill = 2,150 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 1,650 Cu. Yds.  
(After Interim Rehabilitation)

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

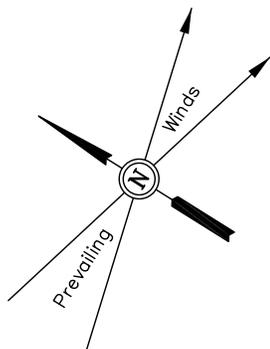
PETROGLYPH OPERATING CO., INC.

TYPICAL RIG LAYOUT FOR

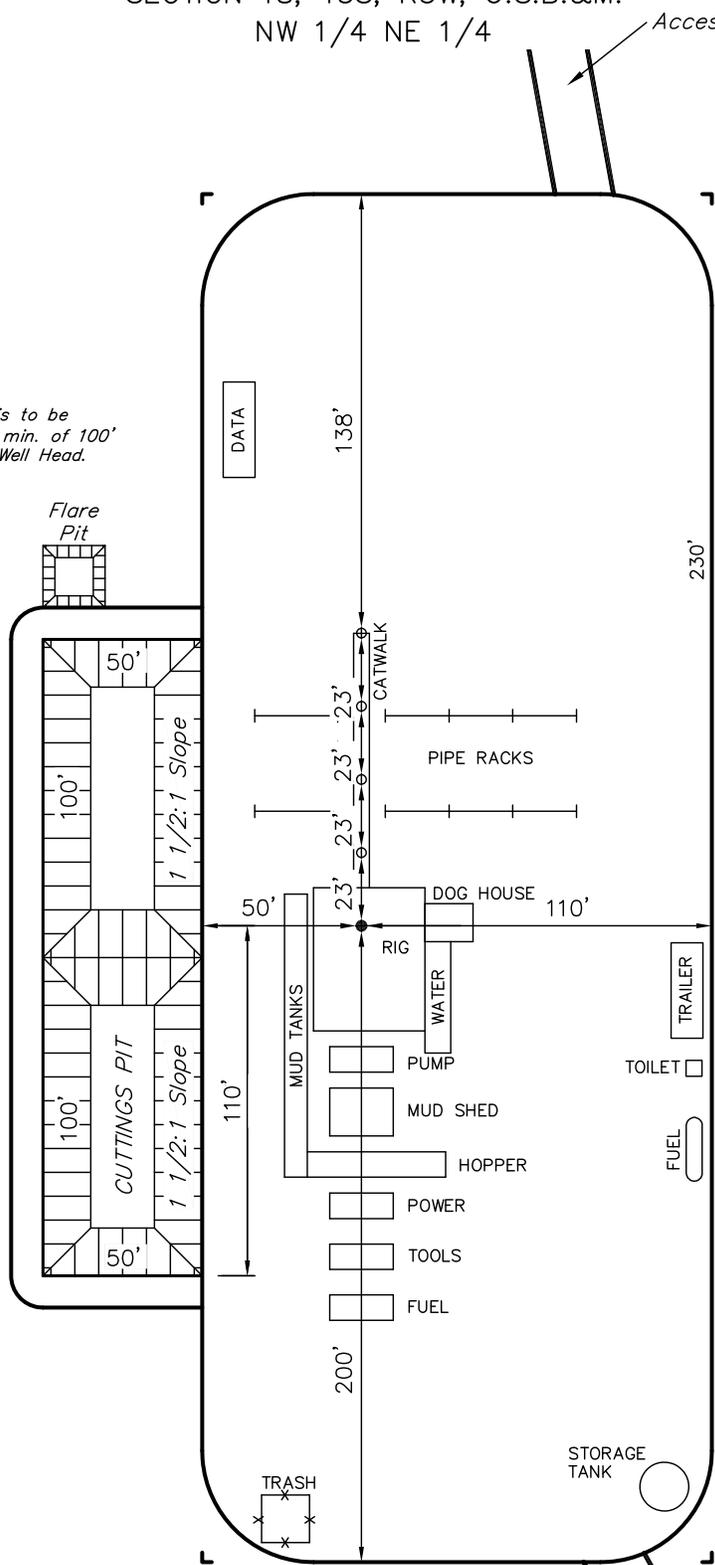
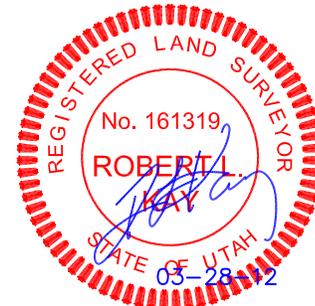
UTE TRIBAL #18-02C, #18-02O, #18-02P, & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.  
NW 1/4 NE 1/4

FIGURE #3

SCALE: 1" = 60'  
DATE: 03-07-11  
DRAWN BY: S.B.  
REV: 03-22-12 Z.L.



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



CUTTINGS PIT  
(10' Deep)  
Total Pit Capacity  
W/2' of Freeboard  
= 7,610 Bbls.±  
Total Pit Volume  
= 2,260 Cu. Yds

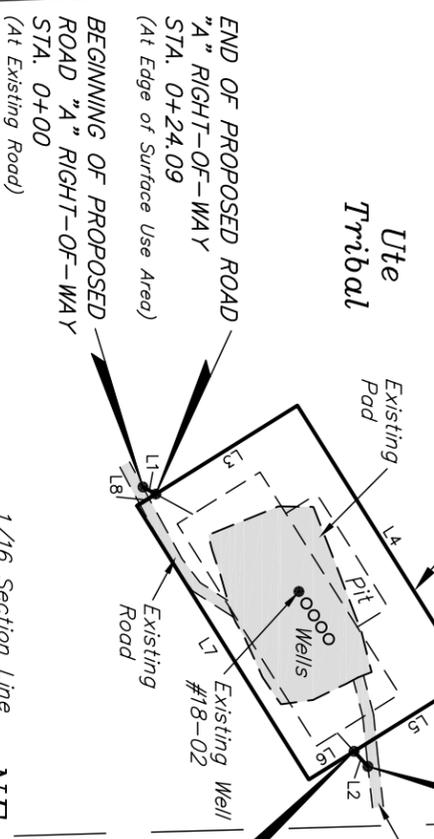
Set Stone

Section Line

589°02'26"W - 2776.25' (Meas.)

Set Marked Stone, Pile of Stones

**SURFACE USE AREA**  
**UTE TRIBAL #18-02C, #18-02D,**  
**#18-02P, & #18-02B**  
**& EXISTING #18-02**  
 Contains 3.772 Acres



LINE	DIRECTION	LENGTH
L1	N28°47'22"E	24.09'
L2	S47°39'50"W	33.61'
L3	N32°04'11"W	273.52'
L4	N57°55'49"E	530.00'
L5	S32°04'11"E	222.72'
L6	S32°04'11"E	87.28'
L7	S57°55'49"W	530.00'
L8	N32°04'11"W	36.48'

**ROAD "A" RIGHT-OF-WAY DESCRIPTION**

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 18, T5S, R3W, U.S.B.&M. WHICH BEARS S39°01'23"E 1350.91' FROM THE NORTH 1/4 CORNER OF SAID SECTION 18, THENCE N28°47'22"E 24.09' TO A POINT IN THE NW 1/4 NE 1/4 OF SAID SECTION 18 WHICH BEARS S39°58'31"E 1342.00' FROM THE NORTH 1/4 CORNER OF SAID SECTION 18. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.017 ACRES MORE OR LESS.

**ROAD "B" RIGHT-OF-WAY DESCRIPTION**

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 18, T5S, R3W, U.S.B.&M. WHICH BEARS S62°30'24"E 1475.86' FROM THE NORTH 1/4 CORNER OF SAID SECTION 18, THENCE S47°39'50"W 33.61' TO A POINT IN THE NW 1/4 NE 1/4 OF SAID SECTION 18 WHICH BEARS S61°16'20"E 1464.61' FROM THE NORTH 1/4 CORNER OF SAID SECTION 18. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.023 ACRES MORE OR LESS.

**SURFACE USE AREA DESCRIPTION**

BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 18, T5S, R3W, U.S.B.&M. WHICH BEARS S39°58'31"E 1342.00' FROM THE NORTH 1/4 CORNER OF SAID SECTION 18, THENCE N32°04'11"W 273.52'; THENCE N57°55'49"E 530.00'; THENCE S32°04'11"E 222.72'; THENCE S32°04'11"E 87.28'; THENCE S57°55'49"W 530.00'; THENCE N32°04'11"W 36.48' TO THE POINT OF BEGINNING. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 3.772 ACRES MORE OR LESS.

**END OF PROPOSED ROAD "B" RIGHT-OF-WAY**  
 STA. 0+33.61  
 (At Edge of Surface Use Area)

NE 1/4

1/16 Section Line

N00°48'19"W - 5291.09' (Meas.)

Section Line

Sec. 18

1/4 Section Line

SW 1/4

SE 1/4

SE Cor. Sec. 18  
 Set Stone  
 Pile of Stones

PETROGLYPH OPERATING CO., INC.

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

(For UTE TRIBAL #18-02C, #18-02D, #18-02P, & #18-02B & EXISTING #18-02)

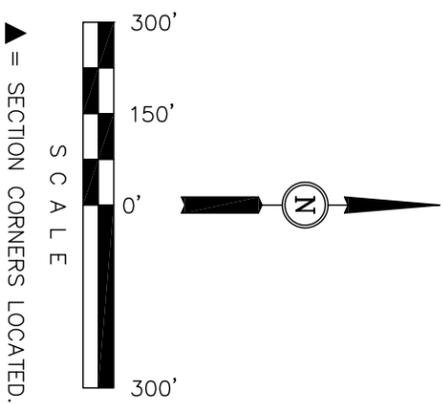
LOCATED IN SECTION 18, T5S, R3W, U.S.B.&M., DUCHESNE COUNTY, UTAH

BASIS OF BEARINGS

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

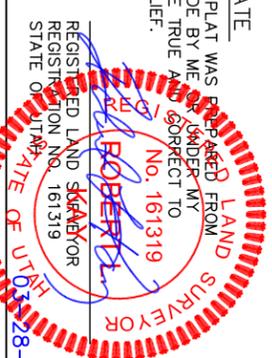
**RIGHT-OF-WAY LENGTHS**

PROPERTY OWNER	FEET	ACRES	RODS
UTE TRIBAL	57.70	0.040	3.50



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

REV. 03-22-12 Z.L.  
 REVISED: 08-05-11



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

SCALE	DATE
1" = 300'	03-07-11
PARTY	REFERENCES
B.H. K.P. S.B.	G.L.O. PLAT
WEATHER	FILE
COLD	5 0 3 8 7

PETROGLYPH OPERATING CO., INC.  
UTE TRIBAL #18-02C,  
#18-02O, #18-02P, & #18-02B  
& EXISTING #18-02  
ROAD RIGHT-OF-WAY & SURFACE USE AREA  
SECTION 18, T5S, R3W, U.S.B.&M.

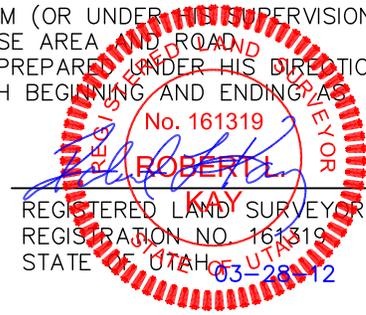
TOTAL ROAD RIGHT-OF-WAY ON UTE TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 57.70' OR 0.011 MILES. WIDTH OF RIGHT-OF-WAY IS 30' (15' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 0.040 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF UTAH )  
COUNTY OF UINTAH ) SS

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 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, 0.011 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.



ACKNOWLEDGEMENT

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

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

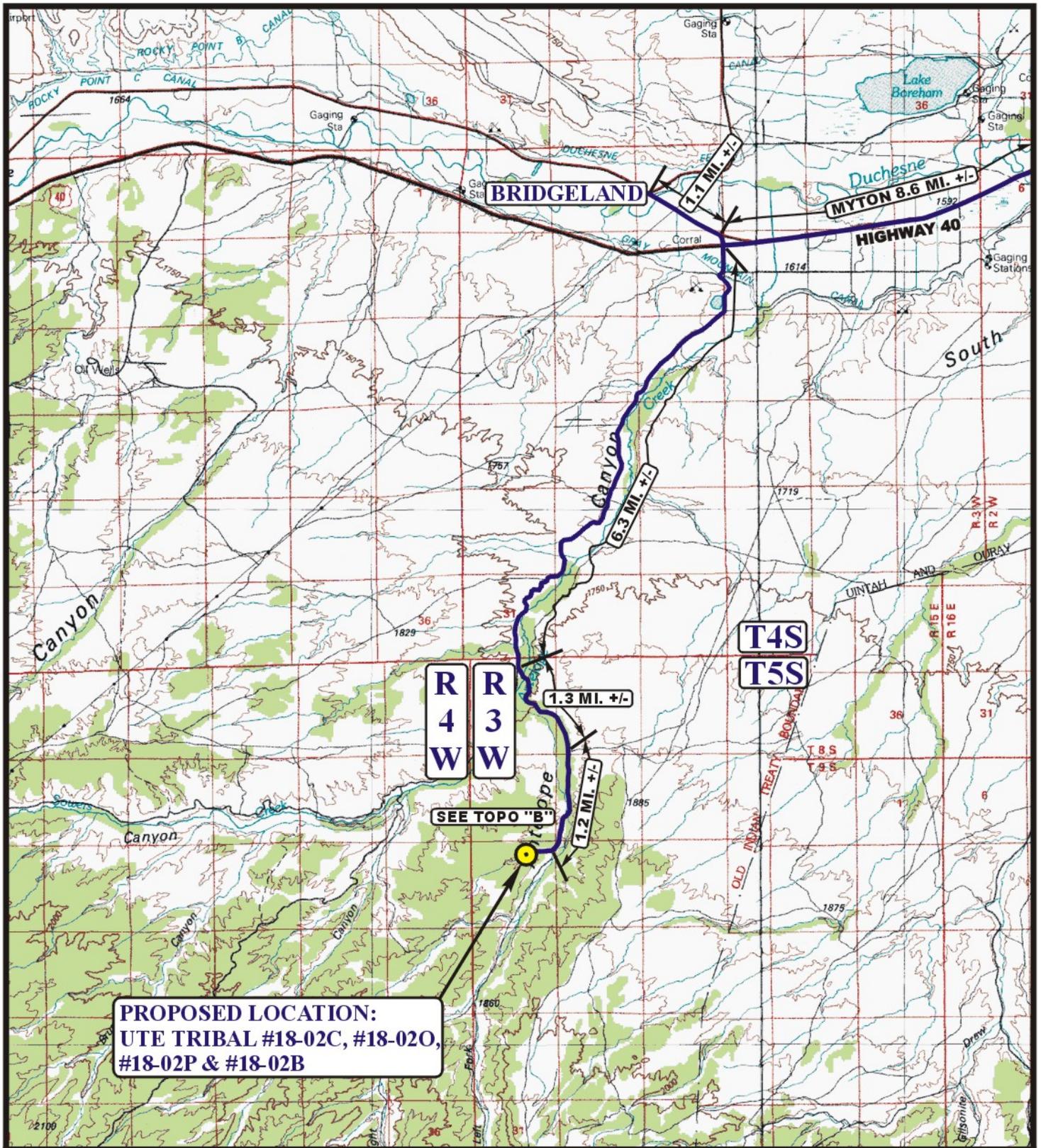
NOTARY PUBLIC  
VERNAL, UTAH

APPLICANT'S CERTIFICATE

I, \_\_\_\_\_, 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 AND ROAD RIGHT-OF-WAY, 0.011 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN, THAT SAID SURFACE USE AREA 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  
RECEIVED: Apr. 03, 2012



**PROPOSED LOCATION:  
UTE TRIBAL #18-02C, #18-02O,  
#18-02P & #18-02B**

**LEGEND:**

PROPOSED LOCATION



**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.  
NW 1/4 NE 1/4



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

ACCESS ROAD  
MAP

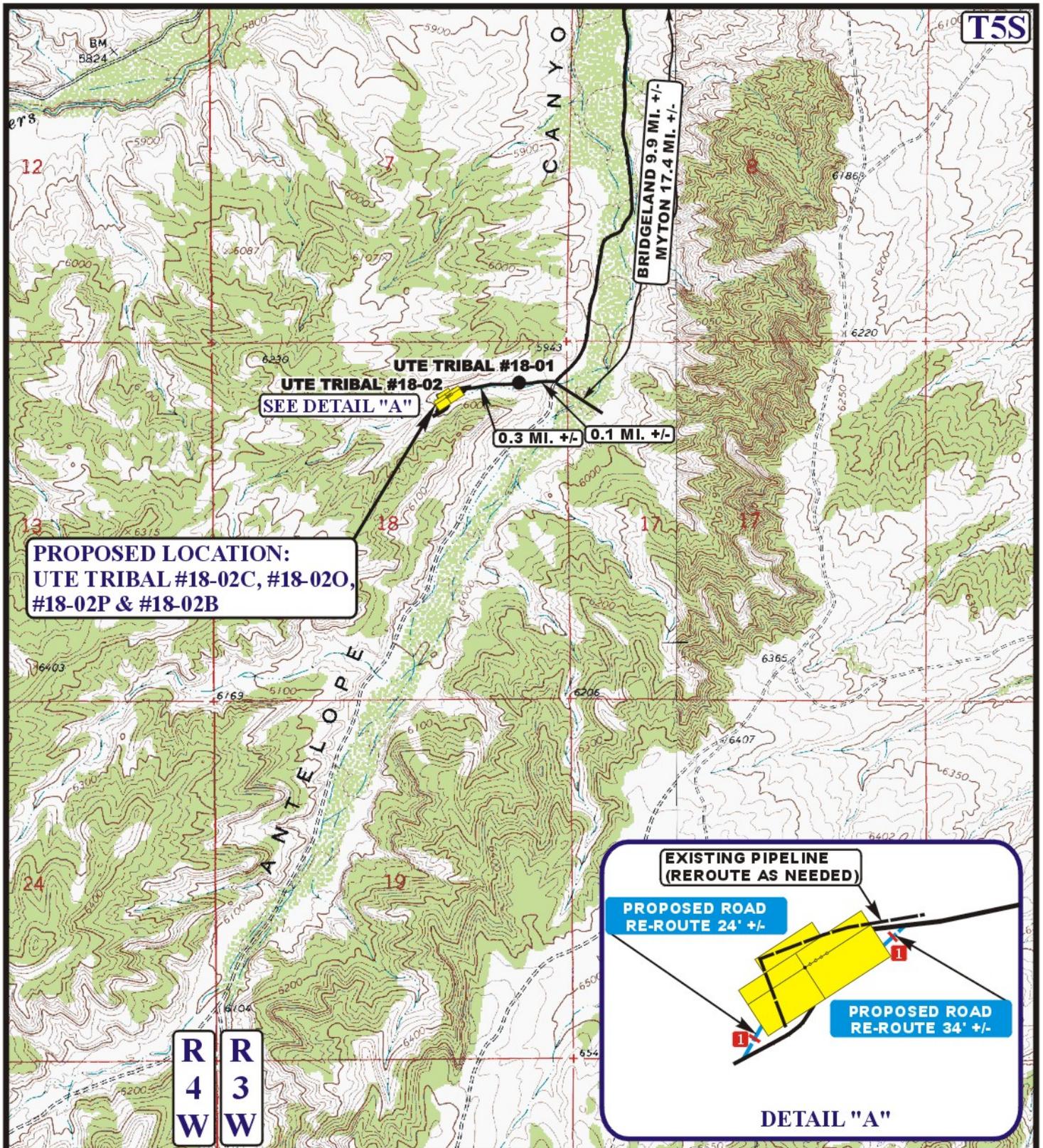
02 22 11  
MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: S.F.

REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- PROPOSED ROAD RE-ROUTE
- EXISTING PIPELINE
- 18" CMP REQUIRED

**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.  
NW 1/4 NE 1/4

**U&L S** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

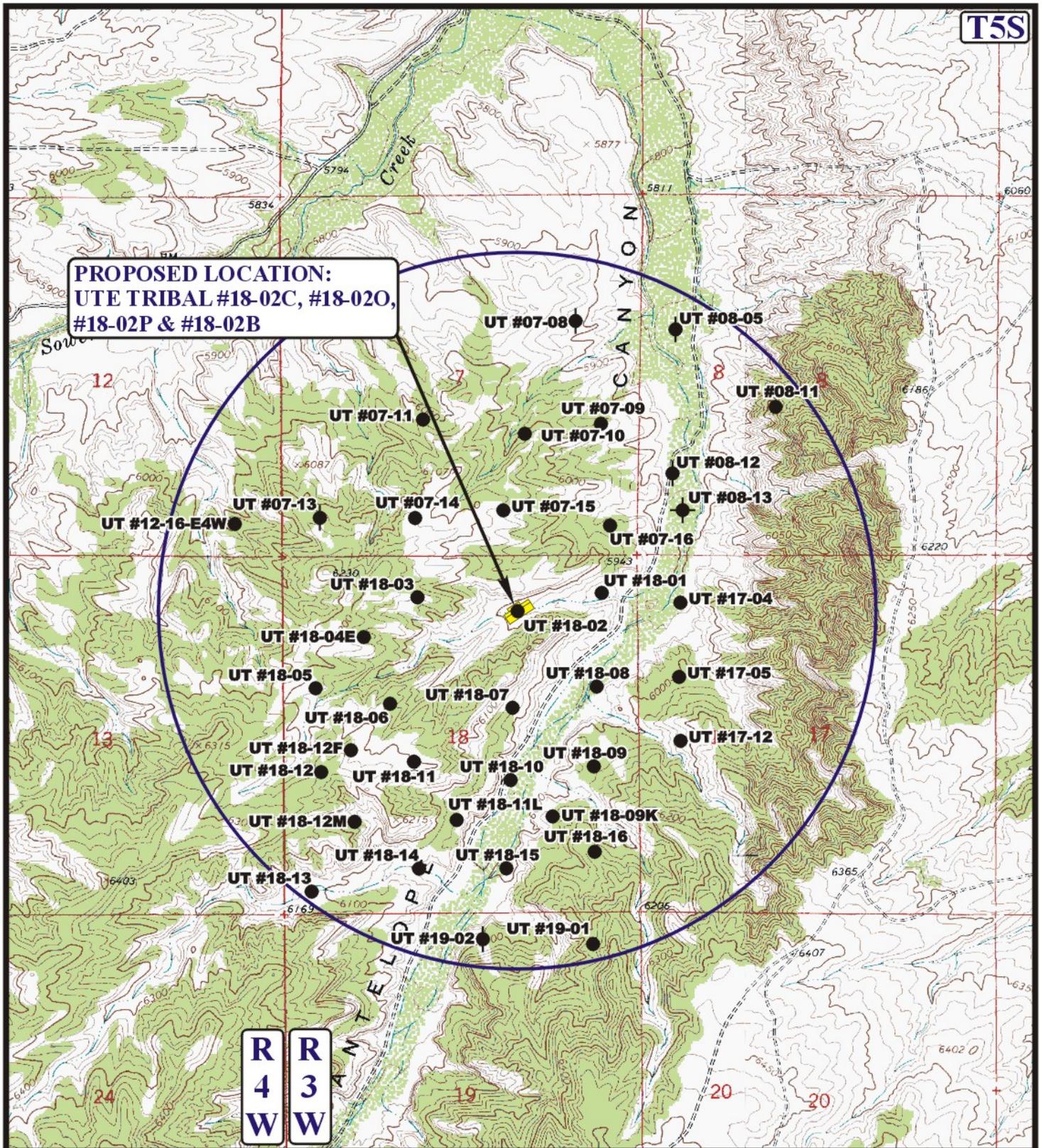
**ACCESS ROAD MAP**

02	22	11
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: S.F. REVISED: 00-00-00

**B TOPO**





**PROPOSED LOCATION:  
UTE TRIBAL #18-02C, #18-02O,  
#18-02P & #18-02B**

**R  
4  
W** **R  
3  
W**

**LEGEND:**

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊗ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B  
SECTION 18, T5S, R3W, U.S.B.&M.  
NW 1/4 NE 1/4**



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

<b>ACCESS ROAD MAP</b>	<b>02</b> MONTH	<b>22</b> DAY	<b>11</b> YEAR	<b>C TOPO</b>
SCALE: 1" = 2000'	DRAWN BY: S.F.		REVISED: 00-00-00	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-3513
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE  <b>7. UNIT or CA AGREEMENT NAME:</b> ANTELOPE CREEK
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> UTE TRIBAL 18-02C
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO	<b>9. API NUMBER:</b> 43013508040000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703	<b>PHONE NUMBER:</b> 208 685-7674 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FNL 1746 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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: 4/23/2012  <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: 50px;" type="text"/>

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

on 4/23/2012 Petroglyph Operating intends to perforate and frac the following in the Green River Formation: B6: 4056'-68', B7.2: 4162'-68', B10: 4279'-81', C5.2: 4619'-22', C6: 4694'-4704' & 4715'-4729', C9: 4845'-49', D7: 5138'-48' & 5162'-76' and E1.2: 5543'-50'. We intend to use Delta 140 gelled fluid and 20/40 mesh sand. Volumes and amounts have yet to be determined and will be reported at a later time.

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

**Date:** April 19, 2012

**By:** *Derek Quist*

<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> 4/18/2012	

<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-H62-3513
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<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 18-02C
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703		<b>9. API NUMBER:</b> 43013508040000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FNL 1746 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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: 4/30/2012	<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 checked="" 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.

The date of first production for this well was 4/30/2012.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
May 11, 2012**

<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> 5/2/2012	

<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-H62-3513
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<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 18-02C
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703		<b>9. API NUMBER:</b> 43013508040000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FNL 1746 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNE Section: 18 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: 5/18/2012	<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 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 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 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. There is not enough room for the necessary information on this form.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
June 01, 2012**

<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> 6/1/2012	

**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-H62-3513</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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: <b>Ute Tribal 18-02C</b>	
2. NAME OF OPERATOR: <b>Petroglyph Operating Company Inc.</b>		9. API NUMBER: <b>4301350804</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>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>800' FNL, 1746' FEL</b>		COUNTY: <b>Duchesne</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNE 18 5S 3W</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"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: <b>5/18/2012</b>	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<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 4/20/2012 Petroglyph Operating Ran GR/CBL from 5990' to 40', still in good cement. ETOC @ surface. Perforated Zone #1: 5543-50'. RU and frac/perforate Green River formations on 4/23/2012. Fraced Zone #1: 5543-50' w/ 416 bbls Delta 140 15# gelled fluid containing 28,600#'s 20/40 mesh sand 1-6# ppg ramped. Set isolation plug @ 5480'. Perforate Zone #2: 5162-76', 5138-48'. Frac Zone #2 w/ 622 bbls Delta 140 15# gelled fluid containing 59,500#'s 20/40 mesh sand 1-6# ppg ramped. Set isolation plug @ 5060'. Perforate Zone #3: 4845-49. Fraced w/ 360 bbls Delta 140 15# gelled fluid containing 20,100#'s 20/40 mesh sand 1-5# ppg ramped. Set isolation plug @ 4790'. Perforate Zone # 4: 4715-29', 4694-4704', 4619-22'. Fraced w/ 661 bbls Delta 140 15# gelled fluid containing 65,400#'s 20\*40 mesh sand 1-5# ppg ramped. Set isolation plug @ 4500'. Perforate Zone #5: 4273-81'. Fraced w/ 310 bbls Delta 140 15# gelled fluid containing 20,200#'s 20/40 mesh sand, 1-5#ppg ramped. Set isolation plug @ 4220'. Perforate Zone #6: 4162-68', 4056-68'. Frac w/ Delta 140 15# gelled fluid containing 50,400#'s 20/40 mesh sand 1-6# ppg ramped. All plugs were drilled out and cleaned out to 6005. Well flod for 2 day. Killed well and prod tbg, rods and rod pump was ran. Well was placed on production 05/18/2012.  
Note: Isolation plugs: Halliburton 8K composite plugs. All perforating guns: 3 1/8" Titan Containing 22.7 gram charges, 0.42" EHD, 23.54 TTP @ 4 spf @ 120\* phased.

NAME (PLEASE PRINT) <u>Rodrigo Jurado</u>	TITLE <u>Regulatory Compliance Specialist</u>
SIGNATURE 	DATE <u>6/1/2012</u>

(This space for State use only)

CONFIDENTIAL

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 [X] GAS WELL [ ] DRY [ ] OTHER [ ]
b. TYPE OF WORK: NEW WELL [X] 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: 800' FNL, 1746' FEL AT TOP PRODUCING INTERVAL REPORTED BELOW: 1327' FNL, 2394' FEL AT TOTAL DEPTH: 1530' FNL, 2676' FEL SWNE BHL by HSM

5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513

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

7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650

8. WELL NAME and NUMBER: Ute Tribal 18-02C [X]

9. API NUMBER: 4301350804

10. FIELD AND POOL, OR WILDCAT: Antelope Creek

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 18 5S 3W

12. COUNTY: Duchesne 13. STATE: UTAH

14. DATE SPURRED: 2/23/2012 15. DATE T.D. REACHED: 3/14/2012 16. DATE COMPLETED: 5/18/2012 ABANDONED [ ] READY TO PRODUCE [X] 17. ELEVATIONS (DF, RKB, RT, GL): 6,001' RKB

18. TOTAL DEPTH: MD 6,092 TVD 5,942 19. PLUG BACK T.D.: MD 6,005 TVD 5,855 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) Borehole Volume, Dual Laterolog Micro Spherically Focused, SDDSN, CBL, X
23. WAS WELL CORED? NO [X] YES [ ] (Submit analysis) WAS DST RUN? NO [X] YES [ ] (Submit report) DIRECTIONAL SURVEY? NO [ ] YES [X] (Submit copy)

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

Table with 10 columns: 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. Rows include 20" K-55, 12.25" J-55, 7.875" J-55.

25. TUBING RECORD Table with 9 columns: SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD). Row: 2.875" 5,588

26. PRODUCING INTERVALS Table with 5 columns: FORMATION NAME, TOP (MD), BOTTOM (MD), TOP (TVD), BOTTOM (TVD). 27. PERFORATION RECORD Table with 10 columns: INTERVAL (Top/Bot - MD), SIZE, NO. HOLES, PERFORATION STATUS. Rows (A) Green River, (B), (C), (D).

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. Table with 2 columns: DEPTH INTERVAL, AMOUNT AND TYPE OF MATERIAL. Rows: 4056'-4281', 4619'-4849', 5138'-5550'.

29. ENCLOSED ATTACHMENTS: [X] ELECTRICAL/MECHANICAL LOGS [ ] GEOLOGIC REPORT [ ] DST REPORT [X] DIRECTIONAL SURVEY [ ] SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION [ ] CORE ANALYSIS [X] OTHER: UDOGM Form 7
30. WELL STATUS: POW

**31. INITIAL PRODUCTION**

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

DATE FIRST PRODUCED: <b>4/30/2012</b>		TEST DATE: <b>6/11/2012</b>		HOURS TESTED: <b>24</b>		TEST PRODUCTION RATES: →	OIL – BBL: <b>84</b>	GAS – MCF: <b>51</b>	WATER – BBL: <b>135</b>	PROD. METHOD: <b>Rod Pump</b>
CHOKE SIZE: <b>38/64</b>	TBG. PRESS. <b>80</b>	CSG. PRESS. <b>390</b>	API GRAVITY <b>38.30</b>	BTU – GAS <b>1</b>	GAS/OIL RATIO <b>607</b>	24 HR PRODUCTION RATES: →	OIL – BBL: <b>84</b>	GAS – MCF: <b>51</b>	WATER – BBL: <b>135</b>	INTERVAL STATUS: <b>Open</b>

**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.

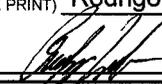
**34. FORMATION (Log) MARKERS:**

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Trona	2,571
				Mahogany	2,742
				Garden Gulch	3,458
				B Marker	3,875
				X Marker	4,373
				Y Marker	4,410
				Douglas Creek	4,519
				B Lime	4,912
				Castle Peak	5,484
				Basal Carbonate	5,895

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

All perf and frac information has been 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 6/21/2012

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

**REPORT OF WATER ENCOUNTERED DURING DRILLING**

Well name and number: Ute Tribal 18-02C

API number: 4301350804

Well Location: QQ NWNE Section 18 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: Craig's Roustabout Service

Address: 5053 South 4625 East

city Vernal state UT zip 84078

Phone: (435) 781-1366

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
24	35	0	Fresh
61	68	0	Fresh

Formation tops: (Top to Bottom)

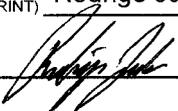
1 _____	2 _____	3 _____
4 _____	5 _____	6 _____
7 _____	8 _____	9 _____
10 _____	11 _____	12 _____

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 6/21/2012

Water Analysis Report

Production Company: **PETROGLYPH**  
 Well Name: **18-02 C**  
 Sample Point: **Surface Rig**  
 Sample Date: **2/29/2012**  
 Sample ID: **WA-207933**

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

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

Sample Specifics		Analysis @ Properties in Sample Specifics			
Test Date:	2/29/2012	Cations		Anions	
		mg/L		mg/L	
System Temperature 1 (°F):	300.00	Sodium (Na):	4436.12	Chloride (Cl):	900.00
System Pressure 1 (psig):	3000.00	Potassium (K):	77.00	Sulfate (SO4):	2680.00
System Temperature 2 (°F):	60.00	Magnesium (Mg):	746.00	Bicarbonate (HCO3):	1220.00
System Pressure 2 (psig):	14.70	Calcium (Ca):	4538.00	Carbonate (CO3):	0.00
Calculated Density (g/ml):	1.01	Strontium (Sr):	0.00	Acetic Acid (CH3COO)	0.00
pH:	6.80	Barium (Ba):	1.60	Propionic Acid (C2H5COO)	0.00
Calculated TDS (mg/L):	14718.49	Iron (Fe):	87.00	Butanoic Acid (C3H7COO)	0.00
CO2 in Gas (%):	0.00	Zinc (Zn):	0.43	Isobutyric Acid ((CH3)2CHCOO)	0.00
Dissolved CO2 (mg/L):	3.96	Lead (Pb):	0.24	Fluoride (F):	0.00
H2S in Gas (%):	0.00	Ammonia NH3:	0.00	Bromine (Br):	0.00
H2S in Water (mg/L):	0.00	Manganese (Mn):	32.10	Silica (SiO2):	0.00

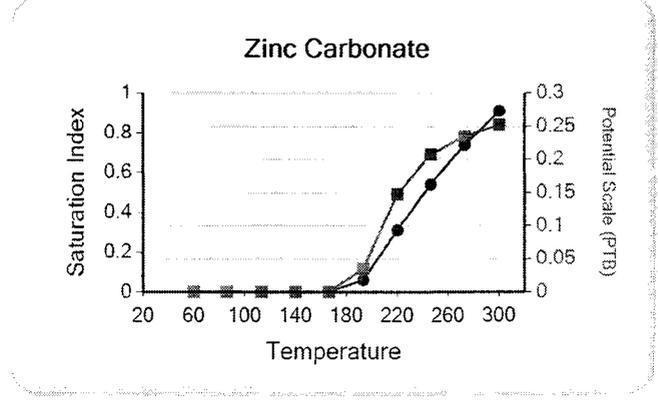
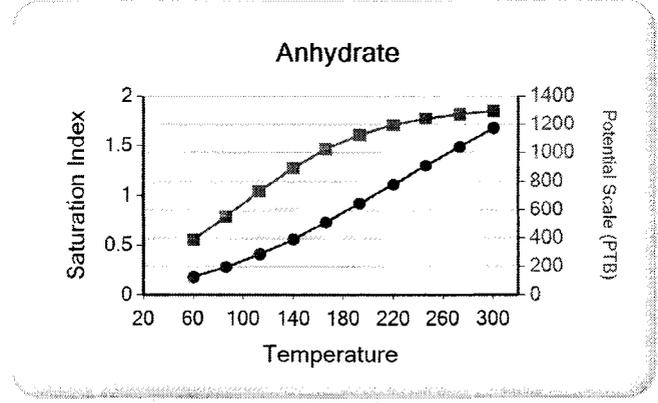
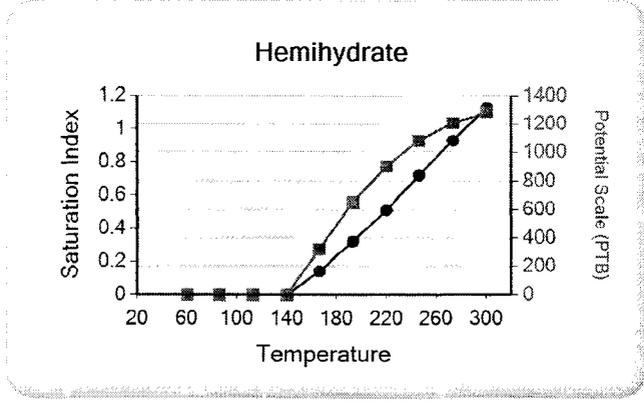
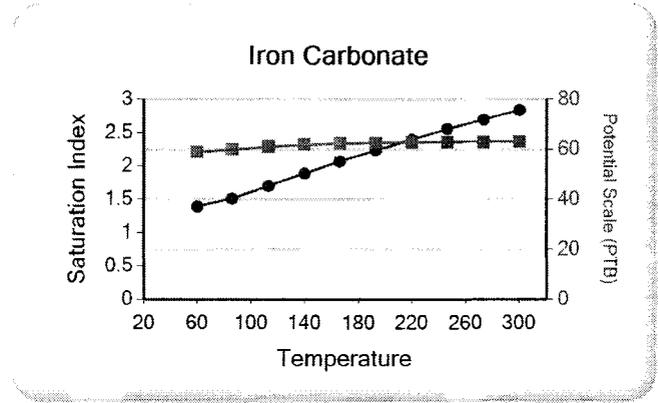
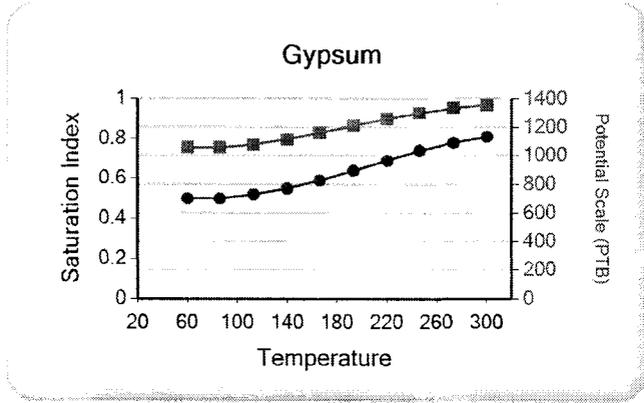
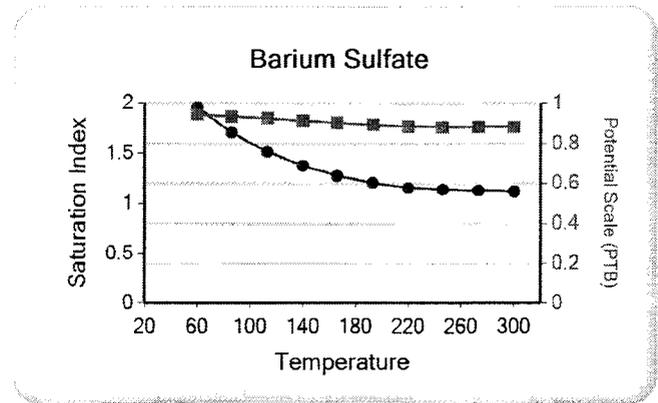
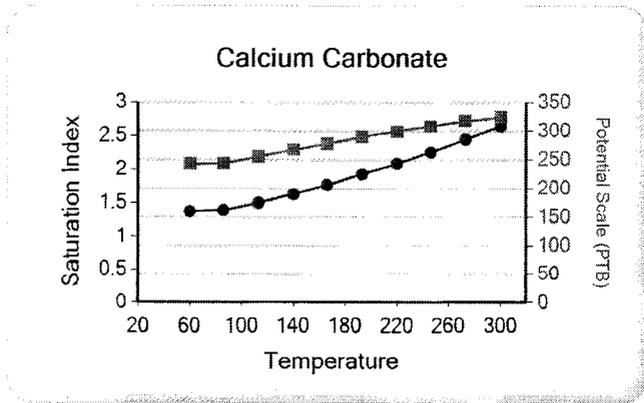
Notes:

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4 2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60	14	1.37	242.93	1.96	0.94	0.00	0.00	1.39	58.91	0.50	1056.36	0.00	0.00	0.00	0.00	0.00	0.00
86	346	1.39	243.82	1.71	0.94	0.00	0.00	1.51	59.93	0.50	1056.01	0.00	0.00	0.00	0.00	0.00	0.00
113	678	1.50	255.35	1.52	0.93	0.00	0.00	1.70	61.10	0.52	1077.79	0.00	0.00	0.00	0.00	0.00	0.00
140	1009	1.63	267.34	1.38	0.91	0.00	0.00	1.89	61.85	0.55	1115.67	0.00	0.00	0.00	0.00	0.00	0.00
166	1341	1.77	279.09	1.28	0.90	0.00	0.00	2.07	62.33	0.59	1162.67	0.00	0.00	0.00	0.00	0.00	0.00
193	1673	1.93	290.15	1.21	0.89	0.00	0.00	2.24	62.63	0.64	1212.37	0.00	0.00	0.00	0.00	0.00	0.00
220	2004	2.09	300.23	1.16	0.89	0.00	0.00	2.40	62.83	0.69	1259.71	0.00	0.00	0.00	0.00	0.00	0.00
246	2336	2.26	309.21	1.14	0.88	0.00	0.00	2.56	62.96	0.74	1301.19	0.00	0.00	0.00	0.00	0.00	0.00
273	2668	2.45	317.04	1.13	0.88	0.00	0.00	2.70	63.05	0.78	1334.63	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	2.64	323.74	1.12	0.88	0.00	0.00	2.84	63.11	0.81	1358.73	0.00	0.00	0.00	0.00	0.00	0.00

Temp (°F)	PSI	Hemihydrate CaSO4 ~ 0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60	14	0.00	0.00	0.18	386.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	346	0.00	0.00	0.28	552.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	678	0.00	0.00	0.41	730.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	1009	0.00	0.00	0.56	893.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	1341	0.14	319.30	0.73	1027.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	1673	0.32	648.86	0.92	1127.59	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2004	0.51	903.98	1.11	1197.98	0.00	0.00	0.31	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
246	2336	0.72	1085.92	1.30	1244.95	0.00	0.00	0.54	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
273	2668	0.93	1207.63	1.49	1275.26	0.00	0.00	0.74	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	1.13	1285.42	1.68	1294.42	0.00	0.00	0.91	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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





Job Number: UT121000  
 Company: Petroglyph  
 Lease/Well: Ute Tribal 18-02C  
 Location: Duchesne County  
 Rig Name: Aztec 673  
 RKB: 14.5  
 G.L. or M.S.L.: MSL

State/Country: Utah / USA  
 Declination: 11.28  
 Grid: True  
 File name: C:\DOCUME~1\HBUSER\DESKTOP\UT121000.SVY  
 Date/Time: 15-Mar-12 / 06:21  
 Curve Name: Ute Tribal 18-02C

**Payzone Directional**

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 231.00  
 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	Direction Deg	Dogleg Severity Deg/100
391.00	.19	229.96	390.99	-1.96	-1.58	2.46	2.52	218.87	.00
533.00	.09	306.07	532.99	-2.05	-1.85	2.73	2.76	222.13	.13
563.00	.17	19.65	562.99	-1.99	-1.85	2.69	2.72	222.98	.56
654.00	.80	221.20	653.99	-2.34	-2.23	3.20	3.23	223.58	1.06
747.00	2.10	228.50	746.96	-3.96	-3.93	5.55	5.58	224.80	1.41
837.00	3.20	241.40	836.86	-6.25	-7.37	9.66	9.67	229.69	1.38
929.00	4.30	246.50	928.66	-8.86	-12.79	15.51	15.56	235.29	1.25
1021.00	5.50	247.30	1020.32	-11.94	-20.02	23.07	23.31	239.20	1.31
1115.00	6.50	246.10	1113.81	-15.83	-29.04	32.53	33.07	241.41	1.07
1207.00	8.00	243.18	1205.07	-20.83	-39.52	43.82	44.67	242.21	1.68
1301.00	9.00	239.20	1298.04	-27.54	-51.67	57.49	58.55	241.94	1.23
1394.00	10.10	234.80	1389.75	-35.97	-64.58	72.83	73.92	240.88	1.42

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1487.00	11.50	229.20	1481.10	-46.73	-78.26	90.23	91.15	239.16	1.88
1580.00	12.30	228.70	1572.10	-59.32	-92.72	109.39	110.08	237.39	.87
1673.00	13.50	227.10	1662.75	-73.25	-108.12	130.12	130.60	235.88	1.35
1766.00	14.40	229.20	1753.01	-88.20	-124.82	152.51	152.84	234.76	1.11
1859.00	14.10	228.60	1843.15	-103.25	-142.08	175.39	175.63	233.99	.36
1952.00	14.85	227.62	1933.19	-118.77	-159.38	198.60	198.76	233.31	.85
2044.00	16.48	228.68	2021.77	-135.33	-177.89	223.41	223.52	232.74	1.80
2137.00	17.23	228.37	2110.78	-153.19	-198.09	250.35	250.42	232.28	.81
2230.00	17.80	229.03	2199.47	-171.66	-219.12	278.32	278.35	231.92	.65
2324.00	16.66	225.60	2289.25	-190.51	-239.59	306.09	306.11	231.51	1.62
2416.00	17.31	227.58	2377.24	-208.97	-259.12	332.89	332.89	231.11	.95
2509.00	17.61	232.58	2465.96	-226.86	-280.51	360.76	360.76	231.04	1.64
2603.00	18.20	233.95	2555.40	-244.14	-303.67	389.64	389.64	231.20	.77
2696.00	18.00	231.80	2643.80	-261.57	-326.71	418.51	418.51	231.32	.75
2789.00	18.30	229.70	2732.18	-279.90	-349.13	447.47	447.48	231.28	.77
2882.00	17.50	230.70	2820.67	-298.20	-371.09	476.05	476.06	231.22	.92
2975.00	18.50	231.10	2909.12	-316.32	-393.39	504.79	504.79	231.20	1.08
3069.00	19.10	232.70	2998.11	-335.01	-417.23	535.08	535.08	231.24	.84
3161.00	19.40	231.00	3084.96	-353.74	-441.08	565.40	565.41	231.27	.69
3255.00	18.90	230.10	3173.76	-373.33	-464.89	596.24	596.24	231.23	.62
3348.00	18.50	229.29	3261.85	-392.62	-487.63	626.05	626.05	231.16	.51
3441.00	17.14	227.40	3350.39	-411.52	-508.91	654.47	654.47	231.04	1.59
3534.00	16.57	226.26	3439.39	-429.96	-528.58	681.37	681.37	230.87	.71
3627.00	16.74	226.92	3528.49	-448.28	-547.94	707.94	707.95	230.71	.27
3720.00	16.10	229.50	3617.70	-465.80	-567.53	734.19	734.21	230.62	1.04
3813.00	16.60	234.20	3706.94	-481.95	-588.11	760.35	760.36	230.67	1.52
3906.00	16.00	234.04	3796.20	-497.25	-609.26	786.41	786.42	230.78	.65
4000.00	15.03	231.90	3886.78	-512.38	-629.34	811.53	811.54	230.85	1.20
4093.00	14.15	233.82	3976.78	-526.53	-648.00	834.95	834.95	230.90	1.08
4186.00	13.05	233.60	4067.17	-539.47	-665.63	856.79	856.79	230.98	1.18
4279.00	13.67	235.01	4157.65	-552.00	-683.08	878.24	878.24	231.06	.75
4372.00	13.18	232.85	4248.11	-564.71	-700.54	899.80	899.80	231.13	.75

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4465.00	12.30	231.18	4338.82	-577.32	-716.71	920.30	920.31	231.15	1.03
4558.00	12.48	234.48	4429.66	-589.37	-732.60	940.24	940.24	231.18	.79
4651.00	12.92	234.26	4520.38	-601.28	-749.22	960.65	960.66	231.25	.48
4744.00	13.14	236.10	4610.99	-613.25	-766.43	981.56	981.58	231.34	.50
4837.00	12.83	233.70	4701.61	-625.26	-783.53	1002.40	1002.43	231.41	.67
4930.00	12.66	234.04	4792.32	-637.35	-800.10	1022.89	1022.93	231.46	.20
5023.00	11.60	234.65	4883.24	-648.75	-815.98	1042.40	1042.44	231.51	1.15
5116.00	11.78	237.55	4974.31	-659.25	-831.61	1061.17	1061.22	231.59	.66
5209.00	10.85	237.95	5065.50	-668.99	-847.04	1079.29	1079.37	231.70	1.00
5302.00	9.80	236.99	5157.00	-677.95	-861.10	1095.85	1095.95	231.79	1.14
5395.00	8.48	232.83	5248.82	-686.40	-873.20	1110.57	1110.69	231.83	1.59
5488.00	7.38	233.73	5340.92	-694.08	-883.48	1123.39	1123.52	231.85	1.19
5581.00	6.86	234.92	5433.21	-700.81	-892.84	1134.90	1135.03	231.87	.58
5674.00	6.15	234.83	5525.61	-706.87	-901.46	1145.41	1145.55	231.90	.76
5767.00	5.40	233.07	5618.14	-712.37	-909.03	1154.76	1154.90	231.92	.83
5860.00	5.27	232.41	5710.73	-717.60	-915.91	1163.40	1163.55	231.92	.15
5953.00	4.44	228.37	5803.40	-722.60	-921.99	1171.26	1171.41	231.91	.96
6015.00	4.31	226.48	5865.22	-725.80	-925.47	1175.98	1176.13	231.89	.31
<b>Projected to TD</b>									
6092.00	4.31	226.48	5942.00	-729.78	-929.67	1181.75	1181.89	231.87	.00



Job Number: SVGJ-120278  
 Company: Petroglyph  
 Lease/Well: Ute Tribal 18-02C  
 Location: Duchesne County, Utah  
 Rig Name: Casedhole Solutions  
 RKB: 0'  
 G.L. or M.S.L.: GL

State/Country: Utah/USA  
 Declination: 11.30°  
 Grid: East To True  
 File name: F:\2012SU~1\PETROG~1\LORENZUTE18-02C.SVY  
 Date/Time: 05-Mar-12 / 13:29  
 Curve Name: Surface - 391' M.D. (Rate Gyro)

We hereby certify that our survey data from  
Surface MD to 391' MD is, to the best of  
 our knowledge a true and accurate account of the  
 well bore.  
Garry Fowler 3/5/12  
 MS Energy Services Date

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane .00  
 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		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.46	216.05	100.00	-.32	-.24	-.32	.40	216.05	.46
200.00	.57	223.78	199.99	-1.01	-.82	-1.01	1.30	219.01	.13
300.00	.35	211.23	299.99	-1.63	-1.32	-1.63	2.10	219.01	.24
<b>Last Survey Depth Recorded</b>									
391.00	.19	229.96	390.99	-1.96	-1.58	-1.96	2.52	218.80	.20



Job Number: SVGJ-120278  
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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.46	216.05	100.00	-.32	-.24	-.32	.40	216.05	.46
200.00	.57	223.78	199.99	-1.01	-.82	-1.01	1.30	219.01	.13
300.00	.35	211.23	299.99	-1.63	-1.32	-1.63	2.10	219.01	.24
<b>Last Survey Depth Recorded</b>									
391.00	.19	229.96	390.99	-1.96	-1.58	-1.96	2.52	218.80	.20