

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ E  WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB. REPORT/abd. \_\_\_\_\_

990219 Conf Exp!

DATE FILED AUGUST 27, 1997

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. \_\_\_\_\_ INDIAN # \_\_\_\_\_

DRILLING APPROVED: OCTOBER 14, 1997 14-20-H62-3510

SPOUDED IN: 11.15.97

COMPLETED: 1-19-98 POW PUT TO PRODUCING: 1-30-98

INITIAL PRODUCTION: 6-50 MCF W-31 BBL

GRAVITY A.P.I.

GOR:

PRODUCING ZONES: GAALV

TOTAL DEPTH: 6234'

WELL ELEVATION: 6219' KB

DATE ABANDONED:

FIELD: ANTELOPE CREEK

UNIT:

COUNTY: DUCHESNE

WELL NO. UTE TRIBAL 15-12 API NO. 43-013-31892

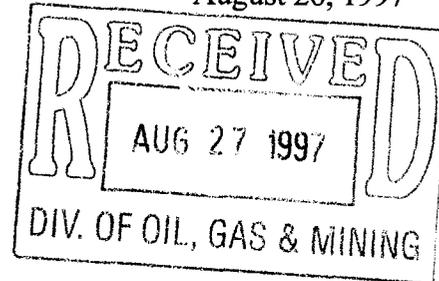
LOCATION 3300 FNL FT. FROM (N) (S) LINE. 520 FEL FT. FROM (E) (W) LINE. LOT 3 1/4 - 1/4 SEC. 15

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
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QUATERNARY	Star Point	Chinle	Molas
Alluvium	Wahweap	Shinarump	Manning Canyon
Lake beds	Masuk	Moenkopi	Mississippian
Pleistocene	Colorado	Sinbad	Humbug
Lake beds	Sego	PERMIAN	Brazer
TERTIARY	Buck Tongue	Kaibab	Pilot Shale
Pliocene	Castlegate	Coconino	Madison
Salt Lake	Mancos	Cutler	Leadville
Oligocene	Upper	Hoskinnini	Redwall
Norwood	Middle	DeChelly	DEVONIAN
Eocene	Lower	White Rim	Upper
Duchesne River	Emery	Organ Rock	Middle
Uinta	Blue Gate	Cedar Mesa	Lower
Bridger	Ferron	Halgaite Tongue	Ouray
Green River	Frontier	Phosphoria	Elbert
<i>B MKR 4117</i>	Dakota	Park City	McCracken
<i>X MKR 4606</i>	Burro Canyon	Rico (Goodridge)	Aneth
<i>Douglas CRK 4056</i>	Cedar Mountain	Supai	Simonson Dolomite
<i>B Limestone 5138</i>	Buckhorn	Wolfcamp	Sevy Dolomite
<i>Castle PK 5680</i>	JURASSIC	CARBON I FEROUS	North Point
<i>Wesatch Basal Carb 6092</i>	Morrison	Pennsylvanian	SILURIAN
Stone Cabin	Salt Wash	Oquirrh	Laketown Dolomite
Colton	San Rafael Gr.	Weber	ORDOVICIAN
Flagstaff	Summerville	Morgan	Eureka Quartzite
North Horn	Bluff Sandstone	Hermosa	Pogonip Limestone
Almy	Curtis		CAMBRIAN
Paleocene	Entrada	Pardox	Lynch
Current Creek	Moab Tongue	Ismay	Bowman
North Horn	Carmel	Desert Creek	Tapeats
CRETACEOUS	Glen Canyon Gr.	Akah	Ophir
Montana	Navajo	Barker Creek	Tintic
Mesaverde	Kayenta		PRE - CAMBRIAN
Price River	Wingate	Cane Creek	
Blackhawk	TRIASSIC		

**Petroglyph Operating Co., Inc.**  
**P.O. Box 1839**  
**Hutchinson, KS 67504-1839**

August 26, 1997



Utah Division of Oil, Gas, & Mining  
1594 West North Temple  
Box 145801  
Salt Lake City, UT 84114-5801

RE: APPLICATION FOR PERMIT TO DRILL  
UTE TRIBAL #15-12  
Lot 3, SEC. 15, T5S, R3W  
DUCHESNE COUNTY, UTAH  
LEASE NO. BIA 14-20-H62-3510  
UTE TRIBAL LANDS

Enclosed please find a copy of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:

Ed Trotter  
P.O. Box 1910  
Vernal, UT 84078  
Phone # (801) 789-4120  
Fax # (801) 789-1420

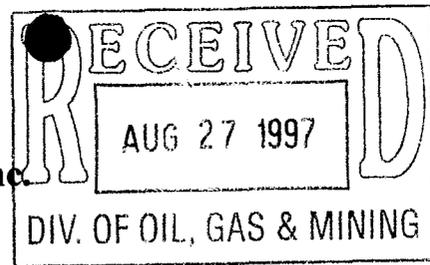
Sincerely,

Ed Trotter  
Agent  
Petroglyph Operating Co., Inc.

Attachments

/EHT/dmt

**Petroglyph Operating Co., Inc.**  
P.O. Box 1839  
Hutchinson, KS 67504-1839



August 26, 1997

Bureau of Land Management  
Vernal District  
170 South 500 East  
Vernal, Utah 84078

RE: APPLICATION FOR PERMIT TO DRILL  
UTE TRIBAL #15-12  
Lot 3, SEC. 15, T5S, R3W  
DUCHESNE COUNTY, UTAH  
LEASE NO. BIA 14-20-H62-3510  
UTE TRIBAL LANDS

Dear Mr. Forsman:

Enclosed are the original and two (2) copies of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:

Ed Trotter  
P.O. Box 1910  
Vernal, UT 84078  
Phone # (801) 789-4120  
Fax # (801) 789-1420

Sincerely,

A handwritten signature in cursive script that reads "Ed Trotter".

Ed Trotter  
Agent  
Petroglyph Operating Co., Inc.

Attachments

pc: State Division of Oil, Gas & Mining  
Bureau of Indian Affairs, Fort Duchesne, UT  
Uintah & Ouray Tribe, Fort Duchesne, UT  
file

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
 DRILL  DEEPEN

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 PETROGLYPH OPERATING COMPANY, INC.

3. ADDRESS AND TELEPHONE NO.  
 P.O. BOX 607, ROOSEVELT, UTAH 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface 100' 3300' FNL & 520' FEL Lot 3  
 At proposed prod. zone 158'

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 20.7 MILES SOUTHWEST OF MYTON, UTAH

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 520'±

16. NO. OF ACRES IN LEASE 112.28

17. NO. OF ACRES ASSIGNED TO THIS WELL 80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 6192.4'

19. PROPOSED DEPTH 6192.4'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6207.1' GRADED GROUND

22. APPROX. DATE WORK WILL START\* SEPTEMBER, 1997

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-H62-3510

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
UTE INDIAN TRIBE

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
UTE TRIBAL

9. AP WELL NO.  
#15-12

10. FIELD AND POOL, OR WILDCAT  
ANTELOPE CREEK

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
SEC. 15, T5S, R3W

12. COUNTY OR PARISH  
DUCHESNE

13. STATE  
UTAH

CONFIDENTIAL

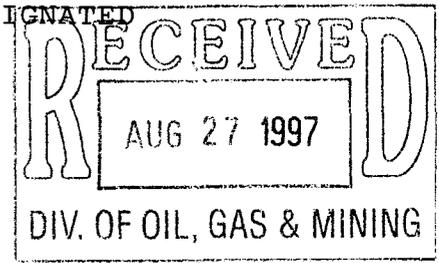
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24.0#	250'	135 sx class "G" + 2% CaCl <sub>2</sub> + 1/4 #/sx celloflake. 50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONES OF INTEREST (+ 10% EXCESS). LIGHT CEMENT (11 PPG+) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (+ 5% EXCESS).
7 7/8	5 1/2	15.5#	6192.4'	

PETROGLYPH OPERATING COMPANY, INC. WILL BE THE DESIGNATED OPERATOR OF THE SUBJECT WELL UNDER BOND #4556.

pc: Utah Division of Oil, Gas, and Mining  
Bureau of Indian Affairs, Fort Duchesne, Utah  
Ute Tribe, Fort Duchesne, Utah

CONFIDENTIAL



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ed Trotter TITLE AGENT FOR PETROGLYPH DATE Aug 26, 1997

(This space for Federal or State office use)

PERMIT NO. 43-013-31892 APPROVAL DATE \_\_\_\_\_

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:

APPROVED BY John R. Bay TITLE Associate Director DATE 10/14/97

\*See Instructions On Reverse Side

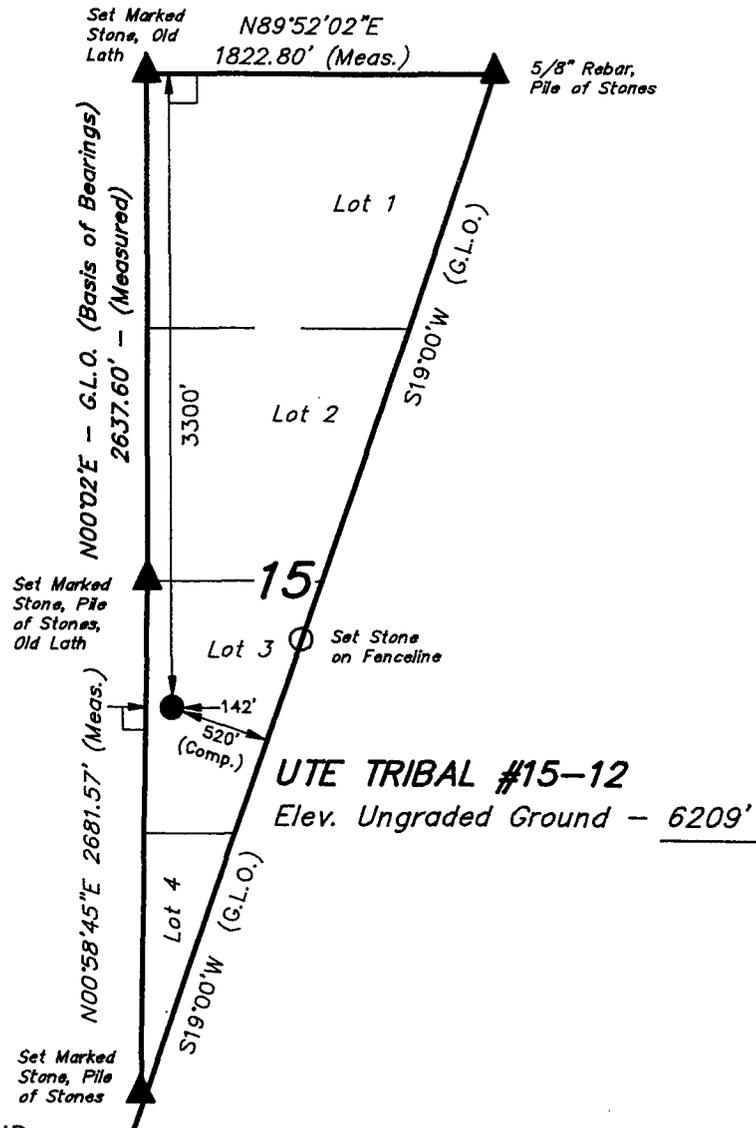
# T5S, R3W, U.S.B.&M.

## PETROGLYPH OPERATING CO., INC.

Well Location, UTE TRIBAL #15-12, located as shown in Lot 3 of Section 15, T5S, R3W, U.S.B.&M. Duchesne County, Utah.

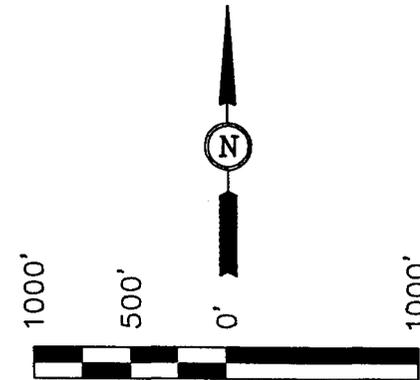
### BASIS OF ELEVATION

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



#### LEGEND:

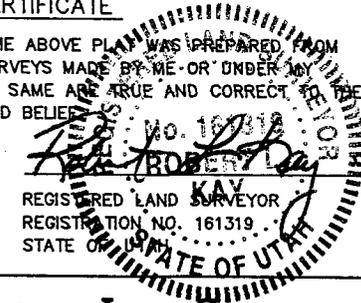
- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- = MILE MARKER.



SCALE

### 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.



Revised: 5-3-97 C.B.T.

Revised: 7-15-97 C.B.T.

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (801) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 2-12-97	DATE DRAWN: 2-18-97
PARTY D.A. S.S. C.B.T.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE PETROGLYPH OPERATING CO., INC.	

EIGHT POINT PLAN

UTE TRIBAL #15-12  
Lot 3 SEC. 15, T5S R3W  
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	3002.4	3210
"X" Marker	4602.4	1610
Douglas Creek	4712.4	1500
"B" Limestone	5115.4	1097
B/Castle Peak Limestone	5675.4	537
Basal Carbonate Limestone	6082.4	130
Total Depth	6192.4	20

Anticipated BHP                      2000 psi

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	4712.4	1500
Oil/Gas	B/Castle Peak	5675.4	537
Other mineral zones	N/A		

3. PRESSURE CONTROL EQUIPMENT : BOP Schematic Diagram attached.

4. CASING PROGRAM :

<u>HOLE SIZE</u>	<u>INTERVAL</u>	<u>LENGTH</u>	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>MINIMUM SAFETY FACTOR</u>		
						<u>COLLAPSE</u>	<u>BURST</u>	<u>TENSILE</u>
12 1/4	0' - 250'	250'	8 5/8	24.0 #	J-55	1370 PSI	2950 PSI	263,000#
7 7/8	0' -6192.4'	6192.4'	5 1/2	15.5 #	M-50	3650 PSI	4550 PSI	186,000#

All casing will be new or inspected.

EIGHT POINT PLAN

UTE TRIBAL #15-12  
Lot 3, SEC. 15, T5S R3W  
DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

<u>INTERVAL</u>	<u>MUD TYPE</u>
0' - 250'	Air
250' - 4000'	Air/Mist & Aerated Water
4000' - TD	Air/3% KCL water or KCL substitute
TD	Gel/polyacrylamide polymer w/5-10% LCM

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

6. VARIANCE REQUESTS:

- A. Petroglyph Operating Co., Inc. requests a variance to regulations requiring a straight run blooie line.
- B. Petroglyph Operating Co., Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line.

7. EVALUATION PROGRAM:

Logs: Mud Logging	T.D. to base of surface csg.
Compensated Density-Compensated Neutron Log	T.D. to base of surface csg.
Dual Laterolog - Micro-SFL	T.D. to base of surface csg.
Numar (Magnetic Resonance Imaging Log)	@ Geologists discretion

Cores: None Programmed  
DST: None Programmed

Completion: To be submitted at a later date.

8. ABNORMAL CONDITIONS:

None anticipated.

EIGHT POINT PLAN

UTE TRIBAL #15-12  
Lot 3, SEC. 15, T5S R3W  
DUCHESNE COUNTY, UTAH

9. STANDARD REQUIRED EQUIPMENT:

- A. Choke Manifold
- B. Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

10. 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.

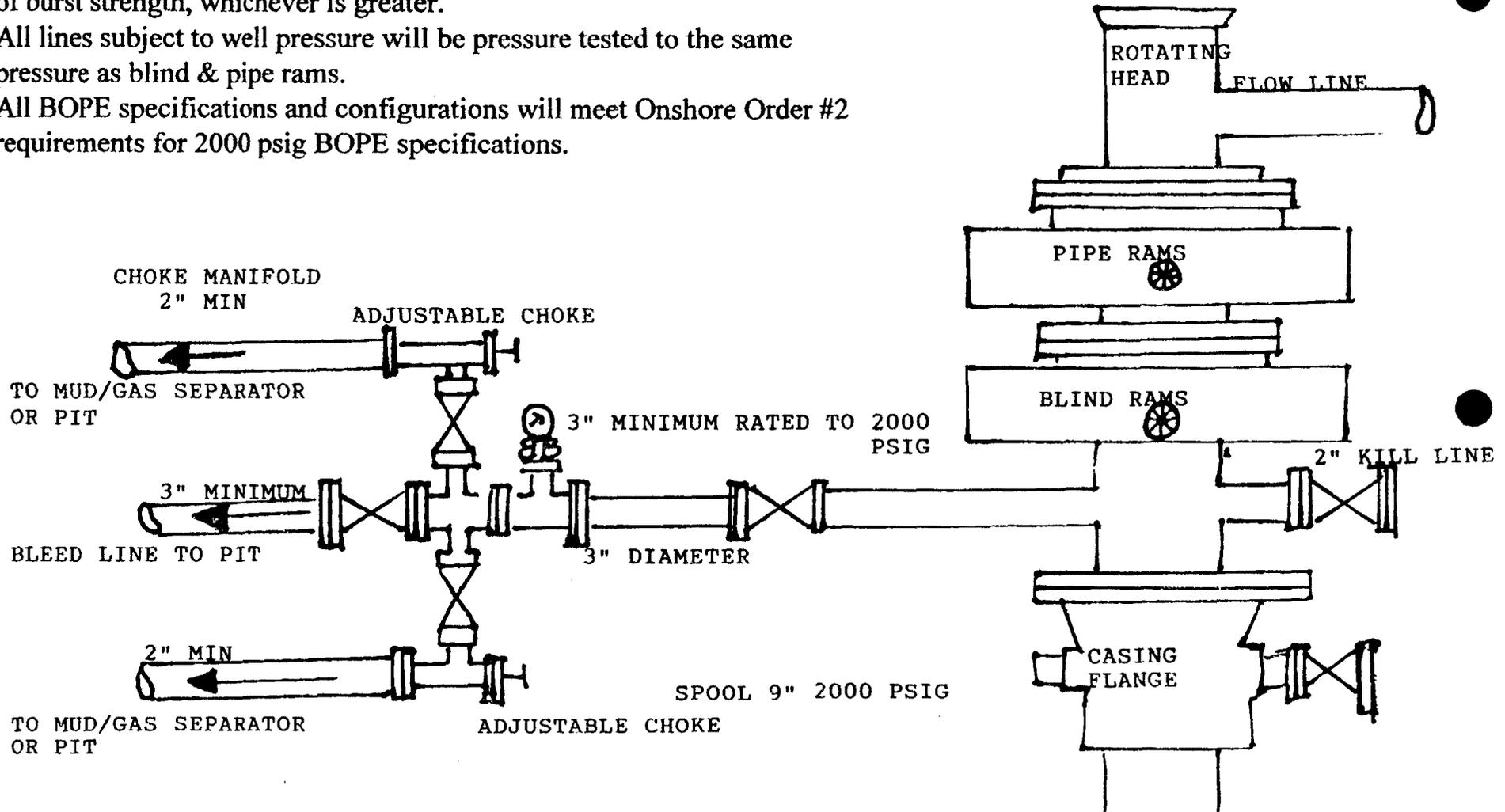
(Attachment: BOP Schematic Diagram)

## 2000 PSIG DIAGRAM

BOTH RAMS ARE 2000 PSIG RATED.  
CASING FLANGE IS 9" 2000 PSIG RATED.  
BOPE 9" 2000 PSIG

### TESTING PROCEDURE:

1. BOPE 's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
2. Blind & Pipe rams will be tested to rated working pressure, 2000 psig
3. Casing will be tested to 0.22 psi/ft. or 1500 psig. Not to exceed 70% of burst strength, whichever is greater.
4. All lines subject to well pressure will be pressure tested to the same pressure as blind & pipe rams.
5. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 2000 psig BOPE specifications.



CONDITIONS OF APPROVAL  
FOR THE SURFACE USE PROGRAM OF THE  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Co., Inc.  
Well Name & Number: Ute Tribal #15-12  
Lease Number: BIA 14-20-H62-3510  
Location: 3300' FNL & 520' FEL, Lot 3, Sec. 15, T5S R3W  
U.S.B.&M., Duchesne County, Utah  
Surface Ownership: Ute Indian Tribe

NOTIFICATION REQUIREMENTS

Location Construction - forty-eight (48) hours prior to construction of location and access roads.

Location Completion - prior to moving on the drilling rig.

Spud Notice - at least twenty-four (24) hours prior to spudding the well.

Casing String and Cementing - twenty-four (24) hours prior to running casing and cementing all casing strings.

BOP and related Equipment Tests - twenty-four (24) hours prior to running casing and tests.

First Production Notice - within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice To Drill and Surface Use Program.

## THIRTEEN POINT SURFACE USE PROGRAM

### 1. EXISTING ROADS

- A. See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing road.
- B. The proposed well site is located approximately 20.7 miles southwest of Myton, Utah - See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

### 2. PLANNED ACCESS ROAD

- A. The access road will be approximately 0.2 miles in length. See attached TOPO Map "B".
- B. The access road has a 30 foot ROW w/18 foot running surface.
- C. Maximum grade on access road will be 8%
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges or major cuts & fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards or fences will be required or encountered.

New or reconstructed roads will be centerlined - flagged at time of location staking.

All travel will be confined to existing access road Right-of-Way. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards For Oil & Gas Exploration and Development, (1989).

The road shall be upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Upgrading shall include ditching, drainage, graveling, crowning, and capping the

roadbed as necessary to provide a well-constructed safe road.

Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot Right-of- Way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossings nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by run off water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

As operator, Petroglyph Operating Co., Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF PROPOSED WELL LOCATION

- A. Water wells - None
- B. Abandoned wells - None
- C. Temporarily abandoned wells - None.
- D. Disposal wells - None.
- E. Drilling wells - None.
- F. Producing wells - 4\*
- G. Shut in wells - None
- H. Injection wells - None

(\*See attached TOPO map "C" for location)

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. ON WELL PAD

- 1. Tank batteries - None
- 2. Production facilities-To be submitted later
- 3. Oil gathering lines - None

4. Gas gathering lines-None
5. Injection lines - None
6. Disposal lines - None
7. Surface pits - None

**B. OFF WELL PAD**

1. Proposed location of attendant off pad flowlines shall be flagged prior to archaeological clearance.
2. A 4 1/2" OD steel above ground production pipeline will be laid approximately 100' from proposed location to a point in Lot 3 of Section 15, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. Proposed pipeline crosses Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline route.
3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain, at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.

The production facilities will be placed on the North side of the location.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities required will be painted within 6 months of installation. Facilities required to comply with O.S.H.A.

(Occupational Safety and Health Act) will be excluded.  
The required paint color is Desert Brown.

5. LOCATION & TYPE OF WATER SUPPLY

- A. Water supply will be from Target Trucking's Roosevelt Brine Storage and/or Target's water source in SE 1/4, Sec. 1, T 4S, R 5W Duchesne County, Utah (State water right #43-10152). All water will come from a non-depletable source.
- B. Water will be hauled by Target Trucking.
- C. No water well will be drilled on lease.

6. SOURCE OF CONSTRUCTION MATERIAL

- A. All construction material for this location and access road will be of native borrow and soil accumulated during the construction of location.
- B. All construction material will come from Ute Tribal Land.
- C. No mineral materials will be required.

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at an approved waste disposal facility.
- 4. Produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.

5. All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on drilling rig to avoid leakage of oil to pit.

B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in reserve pit or be removed and disposed of at an authorized disposal site. Introduction of well bore hydrocarbons to reserve pit will be avoided by flaring them off in flare pit at time of recovery.

Burning of trash will not be allowed. All trash must be contained in a trash cage and hauled away to an approved disposal site at the completion of the drilling activities.

On BIA administered land:

All reserve pits will be lined with either native clay, commercial bentonite or plastic sufficient to prevent seepage. (If a plastic nylon reinforced liner is used, it shall be torn and perforated after the pit dries and before backfilling of the reserve pit).

A 12 mill liner shall be installed in the reserve pit.

To protect the environment:

If the reserve pit is lined the operator will provide the BIA with a chemical analysis of the fluids in that pit no later than 90 days after the well completion to determine the method for final reclamation of the reserve pit. If the elemental concentrations shown by the chemical analysis exceeds the requirements described by part II, Standards of Quality for Waters of the State, Wastewater Disposal Regulations, State of Utah Division of Health, the contents and liner will be removed and disposed of at an authorized disposal site.

To protect the environment (without a chemical analysis) reserve pits will be constructed so as not to leak, break, or allow discharge of liquids.

Storage tanks will be used if drill sites are located on tribal

irrigable land, flood plains, or on lands under crop production. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

8. ANCILLARY FACILITIES

- A. No airstrips or camps are planned for this well.

9. WELL SITE LAYOUT

- A. Refer to attached well site plat for related topography cuts and fills & cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation parking areas, and access road.

The reserve pit will be located on the Southeast side of the location.

The flare pit will be located downwind of the prevailing wind direction on the Southeast side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled topsoil will be stored on the Northeast end.

Access to the well pad will be from the South.

N/A Diversion ditch(es) shall be constructed on the \_\_\_\_\_ side of the location (above/below) the cut slope, draining to the \_\_\_\_\_

N/A Soil compacted earthen berm(s) shall be placed on the \_\_\_\_\_ side(s) of the location between the \_\_\_\_\_

N/A The drainage(s) shall be diverted around the sides of the well pad location.

N/A The reserve pit and/or pad locations shall be constructed long and narrow for topographic reasons \_\_\_\_\_

N/A Corner No. will be rounded off to minimize the fill.

## FENCING REQUIREMENTS

All pits will be fenced according to the following minimum standards:

- A. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16'.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

Each existing fence to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BIA or SMA specifications. A cattleguard with an adjacent 16 foot gate shall be installed in any fence where a road is to be regularly travelled. If the well is a producer, the cattleguards (shall/ shall not) be permanently mounted on concrete bases. Prior to a new road, crossing any fence located on federal land, or any fence between federal land and private land, the operator will contact the BIA, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to

satisfy himself/herself that the fence is adequately braced and tied off.

## 10. PLANS FOR RESTORATION OF SURFACE

### A. PRODUCING LOCATION

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion (weather permitting). Before any dirt work takes place, the reserve pit will be completely dry and all cans, barrels, pipe, fluid, and hydrocarbons, will be removed.

Contact appropriate surface management agency for required seed mixture.

### B. DRY HOLE/ABANDONED LOCATION

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and BIA will attach the appropriate surface rehabilitation conditions of approval.

#### ON BIA Administered lands:

Abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include: (a) reestablishing irrigation systems where applicable, (b) reestablishing soil conditions in irrigated fields in such a way as to ensure cultivation and harvesting of crops and, (c) ensuring revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment.

11. SURFACE OWNERSHIP

Access road: Ute Indian Tribe

Location: Ute Indian Tribe

12. OTHER INFORMATION

- A. Petroglyph Operating Co., Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:  
-whether the materials appear eligible for the National Register of historic Places;

the mitigation measures the operator will likely have to undertake before the site can be used.

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

- B. As operator, Petroglyph Operating Co., Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BIA,

or the appropriate County Extension Office. On BIA administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

- C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Tribal Lands after the conclusion of drilling operations or at any other time without BIA authorization. However, if BIA authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

On BIA administered land:

Operator's employees, including subcontractors, will not gather firewood along roads constructed by operators. If wood cutting is required, a permit will be obtained from the Forestry Department of the BIA pursuant to 25 CFR 169.13 "Assessed Damages Incident to Right-of-Way authorization". All operators, subcontractors, vendors, and their employees or agents may not disturb saleable timber (including firewood) without a duly granted wood permit from the BIA Forester.

If the surface rights are owned by the Ute Indian Tribe and mineral rights are owned by another entity, an approved right-of-way will be obtained from the BIA before the operator begins any construction activities. If the surface is owned by another entity and the mineral rights are owned by the Ute Indian Tribe, rights-of-way will be obtained from the other entity.

All roads constructed by operators on the Uintah and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members (d) that permits must be obtained from the BIA before cutting firewood or other timber products, and (e) only authorized personnel permitted. All well site locations on the Uintah and Ouray Indian Reservation will have an appropriate sign indicating the name of the operator,

the lease serial number, the well name and number, the survey description of the well (either footage or the quarter-quarter section, the section, township, and range).

Additional Surface Stipulations

N/A No construction or drilling activities shall be conducted between \_\_\_\_\_ and \_\_\_\_\_ because of \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

N/A No surface occupancy will be allowed within 1,000 feet of any sage grouse strutting ground.

N/A No construction or exploration activities are permitted within 1.5 mile radius of sage grouse strutting grounds from April 1 to June 30.

N/A There shall be no surface disturbance within 600 feet of live water (includes stock tanks, springs, and guzzlers).

N/A No cottonwood trees will be removed or damaged.

N/A Pond will be constructed according to BLM specifications approximately \_\_\_\_\_ ft. \_\_\_\_\_ of the location, as flagged on onsite.

LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

PERMITTING

Ed Trotter  
1620 West 750 North  
Vernal UT 84078  
Telephone # (801)789-4120  
Fax # (801) 789-1420

OPERATIONS

Vince Guinn  
P.O. Box 607  
Roosevelt, UT 84066  
(801) 722-2531  
Fax # (801) 722-9145

All lease/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approval plan of operations, and any applicable Notice to Lessees. Petroglyph Operating Co., Inc. is fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

The BIA Office shall be notified upon site completion prior to moving on the drilling rig.

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 which 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 sub-contractors in conformity with this Plan and the terms and conditions under which it is approved.

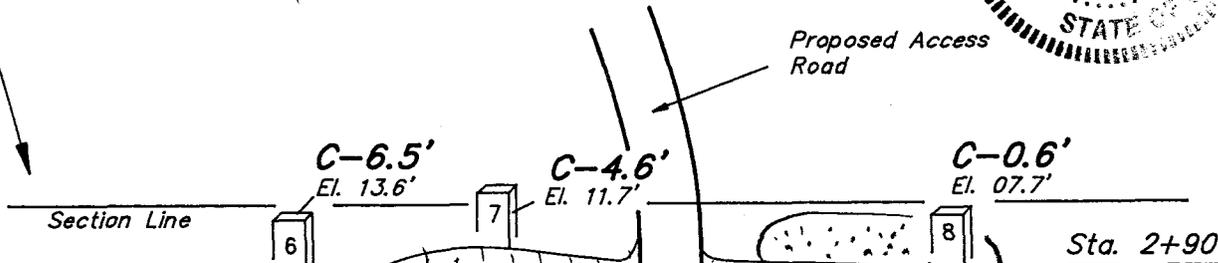
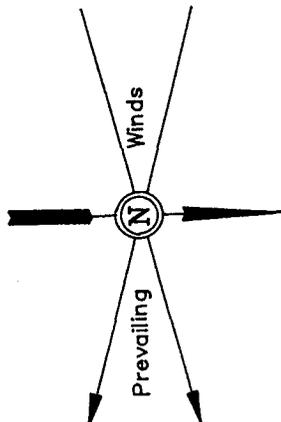
August 26, 1997  
Date

Ed Tiedler

PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #15-12  
SECTION 15, T5S, R3W, U.S.B.&M.  
3300' FNL 142' FWL



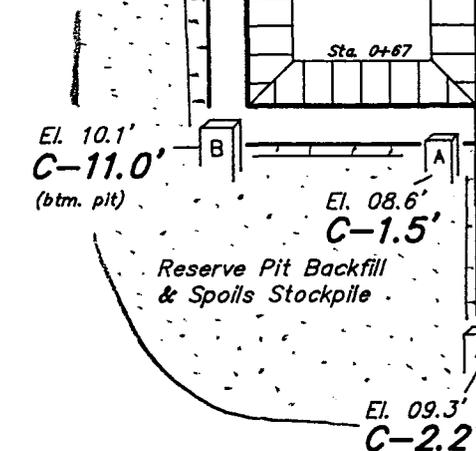
SCALE: 1" = 50'  
DATE: 7-15-97  
Drawn By: C.B.T.

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



**NOTE:**  
Pit Capacity W/2' of Freeboard is ±4,600 Bbls.

Approx. Top of Cut Slope



Elev. Ungraded Ground at Location Stake = 6208.6'

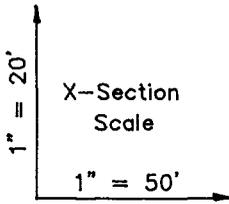
Elev. Graded Ground at Location Stake = 6207.1'

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85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

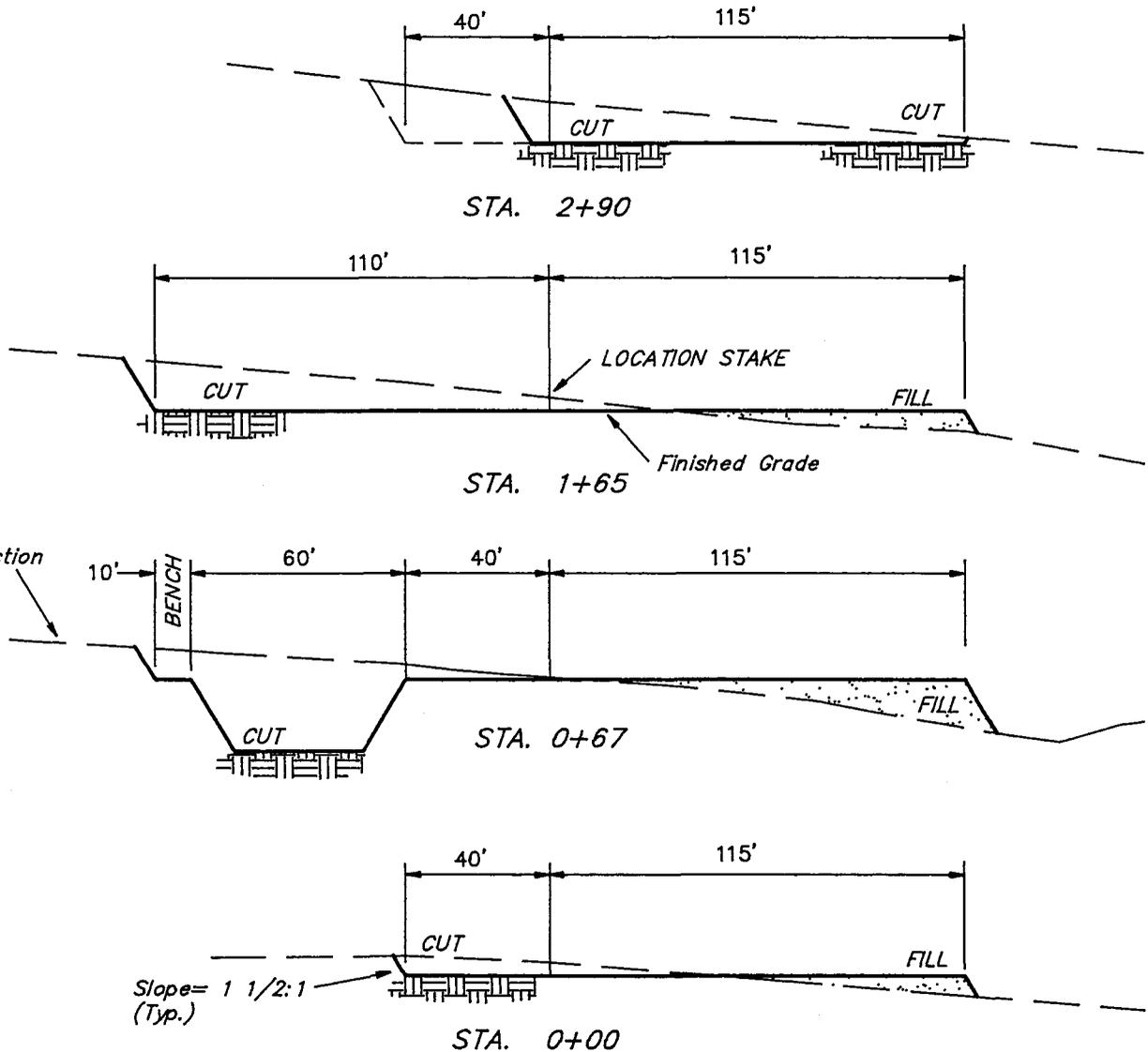
PETROGLYPH OPERATING CO., INC.

TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #15-12  
SECTION 15, T5S, R3W, U.S.B.&M.  
3300' FNL 142' FWL



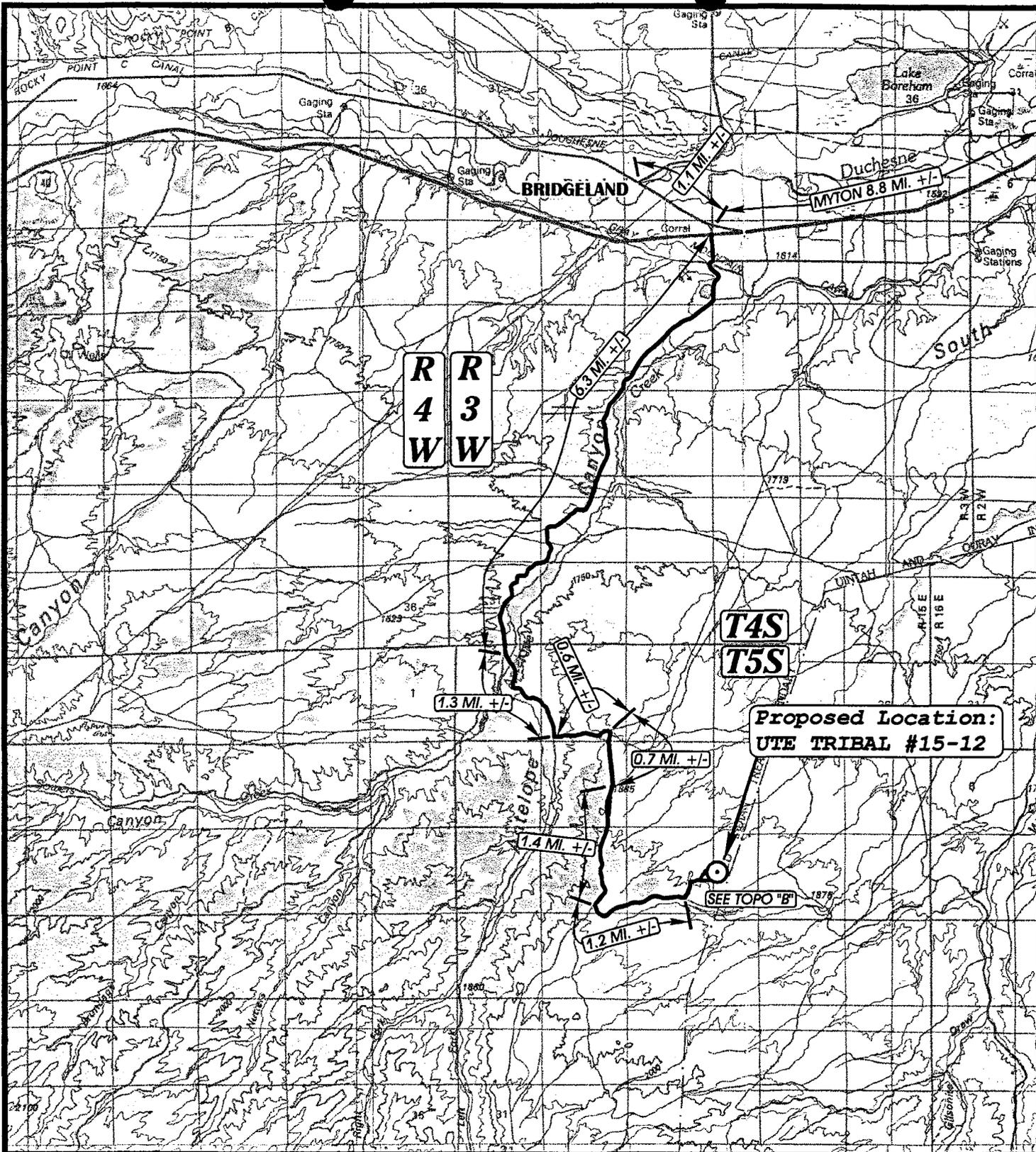
DATE: 7-15-97  
Drawn By: C.B.T.



APPROXIMATE YARDAGES

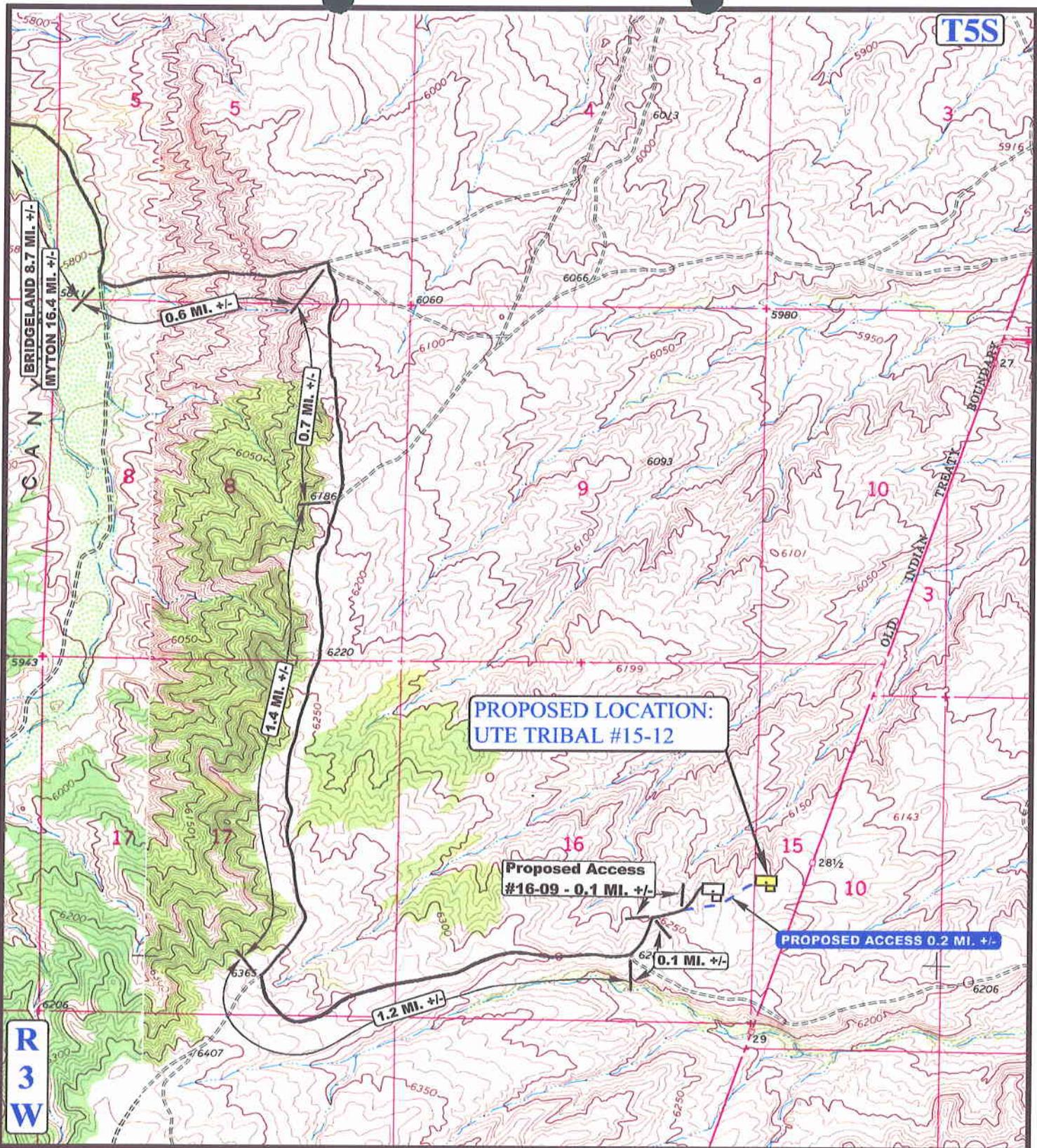
(12") Topsoil Stripping	= 1,910 Cu. Yds.
Remaining Location	= 3,350 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 5,260 CU.YDS.</b>
<b>FILL</b>	<b>= 2,520 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 2,610 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,610 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.



**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #15-12  
 SECTION 15, T5S, R3W, U.S.B.&M.  
 3300' FNL 142' FWL**



**UELS**

**TOPOGRAPHIC  
MAP "B"**

DATE: 2-18-97 J.L.G.  
REVISED: 5-2-97 J.L.G.  
REVISED: 7-7-97 J.L.G.

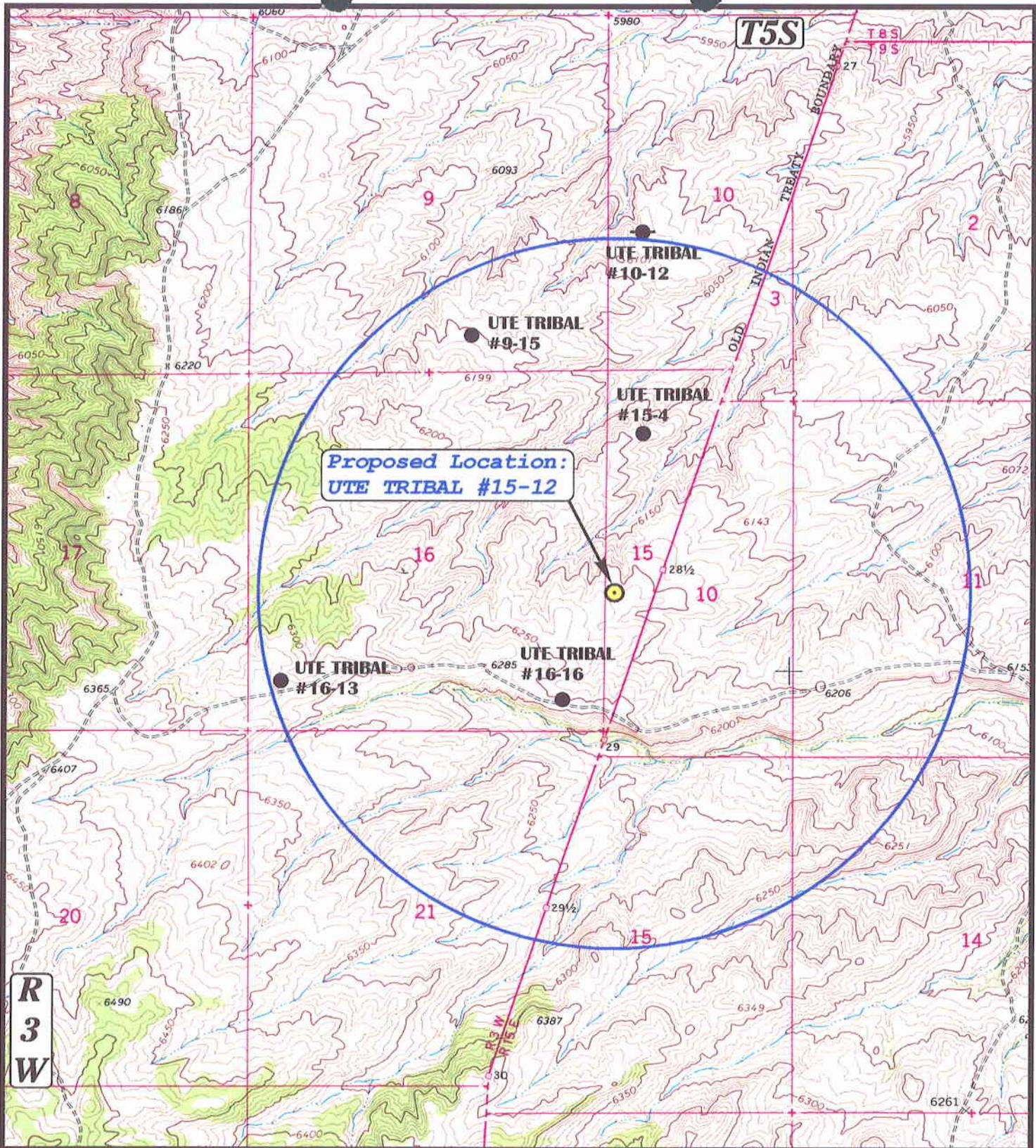
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**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #15-12  
SECTION 15, T5S, R3W, U.S.B.&M.  
3300' FNL 142' FWL**

SCALE: 1" = 2000'



**Proposed Location:  
UTE TRIBAL #15-12**

**R  
3  
W**

**LEGEND:**

- UEI's**
- Water Wells
  - Abandoned Wells
  - Temporarily Abandoned Wells
  - Disposal Wells
  - Drilling Wells
  - Producing Wells
  - Shut-in Wells

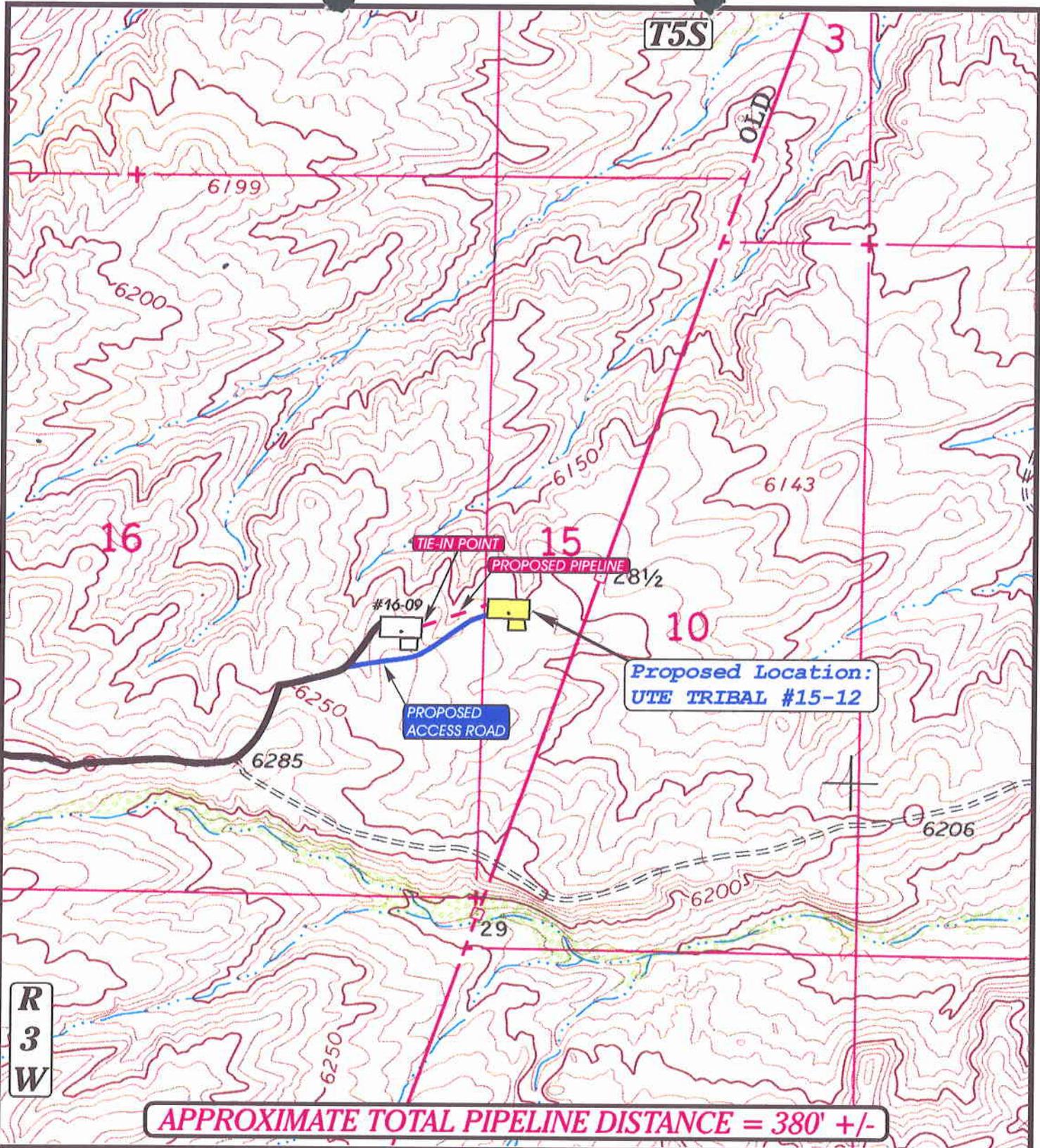
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**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #15-12**  
**SECTION 15, T5S, R3W, U.S.B.&M.**  
**TOPOGRAPHIC MAP "C"**  
 DATE: 2-18-97 J.L.G.  
 REVISED: 5-2-97 J.L.G.  
 REVISED: 7-7-97 J.L.G.

SCALE: 1" = 2000'



**APPROXIMATE TOTAL PIPELINE DISTANCE = 380' +/-**

**UELS**

**TOPOGRAPHIC  
MAP "D"**

- — — Existing Pipeline
- - - Proposed Pipeline



SCALE: 1" = 1000'

**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #15-12  
SECTION 15, T5S, R3W, U.S.B.&M.**

DATE: 2-18-97 J.L.G.  
REVISED: 5-2-97 J.L.G.  
REVISED: 7-7-97 J.L.G.

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WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

*8/27/97*

APD RECEIVED: *06/09/97*

API NO. ASSIGNED: 43-013-31892
--------------------------------

WELL NAME: UTE TRIBAL 15-12  
OPERATOR: PETROGLYPH OPERATING CO (N3800)

PROPOSED LOCATION:  
3LOT 15 - T05S - R03W *E*  
SURFACE: 3300-FNL-0520-FNL  
BOTTOM: 3300-FNL-0520-FNL  
DUCHESNE COUNTY  
ANTELOPE CREEK FIELD (060)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: IND  
LEASE NUMBER: 14-20-H62-3510

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Federal  State  Fee   
(Number 11556)
- Potash (Y/N)
- Oil shale (Y/N)
- Water permit  
(Number 43-10152)
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_)

LOCATION AND SITING:

- R649-2-3. Unit: \_\_\_\_\_
- R649-3-2. General.
- R649-3-3. Exception.
- Drilling Unit.  
Board Cause no: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS:

*U.T. 16-09*  
*Exc. loc. OK (see approval 43-013-31892 <sup>852</sup>)*

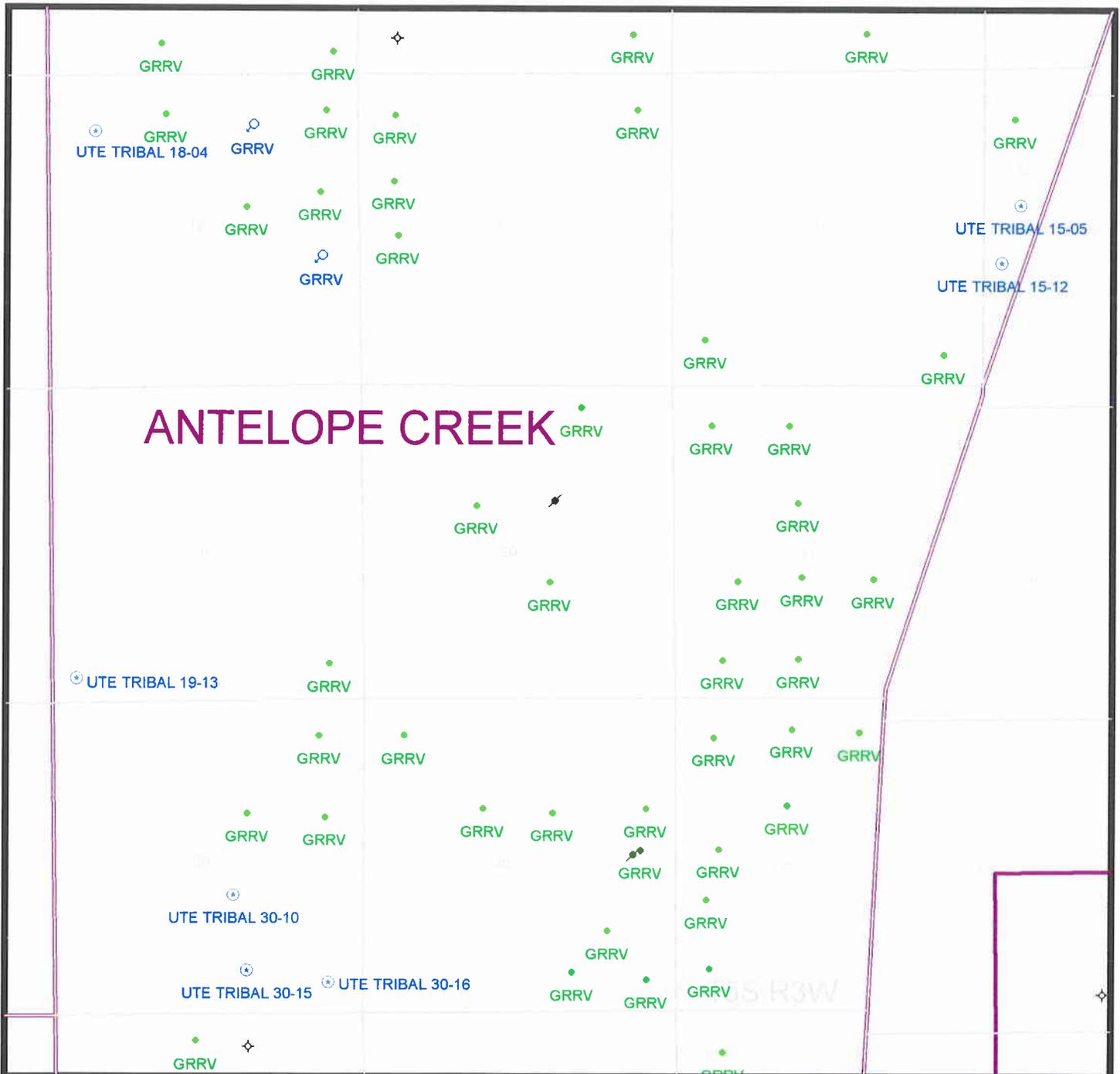
STIPULATIONS:

OPERATOR: PERTOGLYPH (N3800)

FIELD: ANTELOPE CREEK (060)

SEC, TWP, RNG: 15,18,19, & 30, T5S, R3W

COUNTY: DUCHESNE UAC: R649-3-2 & R649-3-3



PREPARED:  
DATE: 10-JUNE-97

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DOGMT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
 DRILL  DEEPEN

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 PETROGLYPH OPERATING COMPANY, INC.

3. ADDRESS AND TELEPHONE NO.  
 P.O. BOX 607, ROOSEVELT, UTAH 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface 3300' FNL & 520' FEL Lot 3  
 At proposed prod. zone AUG 26 1997

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 20.7 MILES SOUTHWEST OF MYTON, UTAH

16. NO. OF ACRES IN LEASE  
 112.28

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 520' ±

19. PROPOSED DEPTH  
 6192.4'

20. ROTARY OR CABLE TOOLS  
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6207.1' GRADED GROUND

22. APPROX. DATE WORK WILL START\*  
 SEPTEMBER, 1997

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-H62-3510

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 UTE INDIAN TRIBE

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME WELL NO.  
 UTE TRIBAL

9. AP WELL NO.  
 #15-12

10. FIELD AND POOL, OR WILDCAT  
 ANTELOPE CREEK

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 SEC. 15, T5S, R3W

12. COUNTY OR PARISH  
 DUCHESNE

13. STATE  
 UTAH

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24.0#	250'	135 sx class "G" + 2% CaCl <sub>2</sub> + 1/4 #/sx celloflake. 50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONE OF INTEREST (+ 10% EXCESS). LIGHT CEMENT (11 PPG+) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (+ 5% EXCESS).
7 7/8	5 1/2	15.5#	6192.4'	

PETROGLYPH OPERATING COMPANY, INC. WILL BE THE DESIGNATED OPERATOR OF THE SUBJECT WELL UNDER BOND #4556.

pc: Utah Division of Oil, Gas, and Mining  
 Bureau of Indian Affairs, Fort Duchesne, Utah  
 Ute Tribe, Fort Duchesne, Utah

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ed Trotter TITLE AGENT FOR PETROGLYPH DATE Aug 26, 1997

(This space for Federal or State office use)

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 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:

APPROVED BY [Signature] TITLE Assistant Field Manager DATE OCT 02 1997  
 Mineral Resources

\*See Instructions On Reverse Side

## memorandum

DATE:

September 15, 1997 *ta*REPLY TO  
ATTN OF:

Superintendent, Uintah &amp; Ouray Agency

SUBJECT:

Concurrence Letter for PETROGLYPH OPERATING CO. INC.  
UTE TRIBAL 15-12, LOT 23, T5S, R3W USBM  
UTE TRIBAL 15-05, LOT 2, T5S, R3W, USBM

RECEIVED

SEP 15 1997

TO:

Bureau of Land Management, Vernal District Office  
Attention: Minerals and Mining Division

We recommend approval of the Application for Permit to Drill on the subject well.

Based on available information received on Sept. 15, 1997, we cleared the proposed location in the following areas of environmental impact.

YES  NO  Listed threatened or endangered species  
 YES  NO  Critical wildlife habitat  
 YES  NO  Archaeological or cultural resources  
 YES  NO  Air quality aspects (to be used only if  
 project is in or adjacent to a Class I area

**REMARKS:** The Ute Tribe Energy & Minerals Department is recommending the following criteria to be adhered during all phases of construction activities.

1. The Ute Tribe Energy and Minerals Department is to be notified 48 hours prior to construction as a Tribal Technician is to monitor construction.
2. 75 foot corridor rights-of-way shall be granted with the following:
  - A. Buried pipelines shall be buried a minimum of 3 feet below soil surface.
  - B. Access roads shall be limited to 22 feet, except as granted for sharp turns.
  - C. Surface pipelines shall be limited to 13 feet wide.
  - D. Buried pipelines shall be limited to 15 feet wide and construction will be monitored by Tribal Technician
3. Pipelines adjacent to access roads shall be buried within 1.5 feet from the outside edge of the barrow ditch. Additional pipelines shall be parallel to each other, as safety requirements will allow.
4. Petroglyph Operating Co. Inc. will assure the Ute Tribe that any/all contractors and any sub-contractors has acquired a Tribal Business License and have an access permits prior to construction.
5. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the area examined, as referenced in report, and to the existing roadways and/or evaluated access routes.
6. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
7. The personnel from the Ute Tribe Energy & Minerals Department should be consulted, should cultural remains from subsurface deposits be exposed during construction work.
8. All mitigative stipulations contained in the Bureau of Indian Affairs site specific Environmental Analysis (EA) will be strictly adhered.
9. Upon completion of Application for Right-of-way, the Ute Tribe Energy and Minerals Department will be notified by Petroglyph Operating Co. Inc., so that a Tribal Technician can verify Affidavit of Completions.

ATTACHMENT: (2) BIA Environmental Analysis, for each location.

SITE SPECIFIC ENVIRONMENTAL ANALYSIS

1.0 PROPOSED ACTION

Petroglyph Operating Co., Inc. is proposing to drill oil well #15-12, and construct pipelines, and an access road

RECEIVED SEP 15 1997

2.0 ALTERNATIVE ACTIONS

- A. ALTERNATIVE CONSIDERED: The proposed action is the preferred alternative.
B. NO ACTION: Under the no action alternative the proposed action would not be implemented.
C. OTHER: NA

3.0 PERMITTEE/LOCATION

- A. Permittee- Petroglyph Operating Co., Inc.
B. Date 7-22-97
C. Well number- 15-12
D. Right-of-way- Access road R\W approx. 1127 feet. Corridor R\W approx. 376.75 feet.
E. Site location- Lot 3, Section 15, T5S, R3W, USB&M.

4.0 SITE SPECIFIC SURVEY

A. SITE DESCRIPTION

- 1. Elevation (feet) 6209
2. Annual precipitation (inches)- 10-12
3. Topography- rolling hills
4. Soil- The soil texture is (0 to 6") gravelly loam

B. VEGETATION

- 1. Habitat type is upland shrub.
2. Percent Ground Cover- estimated to be 70%.
3. Vegetation consists of approximately 60% grasses, 35% shrubs, 5% forbs. The main variety of grasses are squirrel tail, Indian ricegrass, poa, needle & thread, bluebunch wheat, galleta, and blue grama. Forbs are astragalus, mustard, lambs quarter, globemallow, buck wheat, flox, daisy, Indian paint brush, & annuals. Shrubs consist of black sagebrush, fring sage, bud sage, pygmy sage, prickly pear, winterfat, shadscale, snakeweed, mahogany, greasewood, rabbit brush.
4. Observed Threatened & Endangered species: None.

5. Potential For Threatened & Endangered species: Slight

7. Observed Noxious Weeds: None

8. AFFECTED ENVIRONMENTAL

1. There are no surface damages as a result of the initial survey.

4.1 WILDLIFE

A. POTENTIAL SITE UTILIZATION

1. Big Game-The area is used throughout the year by mule deer, elk, and antelope. (elk & mule deer use this area most during winter months.)

2. Small Game-The area is used by cottontail rabbit.

3. Raptor- Various species of raptors use this area for habitat. Raptors which are observed using the area are Golden eagles, Redtail hawk, & Kestrel. Ferruginous hawk hunt in the area and there is an active nest located approximately 2.0 miles south west of this site in Section 20, T5S, R3W, USB&M.

5. Non-Game Wildlife- Animal species which have been observed using this area are black tail jack rabbit, coyote, fox, badger, and various species of reptiles, and song birds.

6. Threatened & Endangered Species: No T&E species are reported using the area of this project.

4.2 PRESENT SITE USE

A. USAGE

	<u>acres</u>
Rangeland	2.86
Irrigable land	0
Woodland	0
Non-Irrigable land	2.86
Commercial timber	0
Floodplain	0
Wetland	0
Riparian	0
Other:	0

4.3 CULTURAL RESOURCES

A. CULTURAL SURVEY

Cultural Resource Surveys were performed by James A. Truesdale, an Independent Archaeologist.

## 5.0 ENVIRONMENTAL IMPACTS

### A. SURFACE ALTERATIONS

	<u>acres</u>
1. Access road	0.78
2. Well site	1.43
3. Pipeline right-of-way	0.00
4. Corridor right-of-way	0.65
5. Total area disturbed	2.86

### B. VEGETATION/LANDSCAPE

1. Production loss (AUM's)/year: 0.13
2. Permanent scar on landscape: Yes x No
3. Potential impacts to Threatened & Endangered species:  
Yes No X

### C. SOIL/RANGE/WATERSHED

There will be an increase in soil erosion from wind and water. There will not be any possible point source of water pollution.

The area is presently used as rangeland. In recent years the area has been permitted for livestock grazing, but at the present time no permits have been issued for the area. This project will reduce livestock grazing by approximately 0.13 AUM/year.

The area is not used as irrigated cropland and a water right has not been designated for the area.

### D. WILDLIFE/THREATENED & ENDANGERED SPECIES

There will be an insignificant reduction of wildlife habitat and grazing for livestock. There will also be an increase in wildlife disturbance and poaching resulting from the additional traffic and people using the area.

There are no known impacts to Threatened or Endangered species but is important habitat for the Ferruginous hawk. The area is important winter range for big game.

Ferruginous Hawks use this area for nesting and hunting. There is an nest in Section 20.

## 6.0 MITIGATION STIPULATIONS

### A. VEGETATION/LANDSCAPE

1. Before the site is abandoned the company will be required to restore the well site and right-of-ways to near their original state. The disturbed area

will be reseeded with desirable perennial vegetation.

2. Noxious weeds will be controlled on the well site and rights-of-way. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

#### B. SOILS/RANGE/WATERSHEDS

1. Soil erosion will be mitigated by reseeding all disturbed areas.

#### 2. SURFACE PIPELINES

Surface pipelines will be constructed to lay on the soil surface, and the right-of-way will not be bladed or cleared of vegetation.

Where surface pipelines do not parallel roads but cross country between stations, they shall be welded in place at wellsites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.

#### 3. BURIED PIPELINES

Buried pipelines shall be buried a minimum of 3.0 feet below the soil surface. After construction of the pipeline is completed the disturbed area of the right-of-way shall be contoured to blend into the natural landscape, and it shall be reseeded with desirable vegetation.

Between September 15 and November 1 of the year following pipeline construction all disturbed areas shall be reseeded with perennial vegetation according to BIA, or Ute Tribe specifications.

#### 4. CORRIDOR RIGHT-OF-WAY

A 75 foot wide corridor pipeline right-of-way will be used for, surface pipelines, buried pipelines.

#### 5. ACCESS ROADS

Although the access road rights-of-way is 30 feet, the constructed travel width of the access road shall be limited to 22 feet, except it may be wider where sharp curves, or intersections are required.

#### 6. DRILLING SYSTEM

An open drilling system will be used. Reserve pits will be lined with impervious synthetic liners. Prior to backfilling the reserve pit all fluids will be pumped from the pit into trucks and hauled to approved disposal sites. When the reserve pits are backfilled the surplus oil and mud, etc will be buried a minimum of 3.0 feet below the surface of the soil.

#### 7. PRODUCTION SYSTEM

A closed production system will be used. Production fluids will be contained in leak proof tanks. All production fluids will be disposed of at approved disposal sites. The indiscriminate dumping of production fluids on roads, wellsites or other areas will not be allowed.

#### 8. FIREWOOD

Firewood shall be stockpiled at convenient locations near the wellsite and along the access road.

#### C. WILDLIFE/VEGETATION/THREATENED & ENDANGERED SPECIES

Because the wellsite is located more than 1/2 mile from a Ferruginous hawk nest this wellsite may be constructed and drilled at any time throughout the year.

#### D. CULTURAL RESOURCES

Cultural resource surveys were performed by James A. Truesdale. The consultant recommends clearance of the project as it is presently staked.

#### E. UTE TRIBAL REGULATIONS

(1). Prior to commencing surveys or construction on the U&O Indian Reservation the operator, and any of its sub-contractors, shall acquire access permits and business permits from the Ute Indian Tribe.

(2). Prior to the commencement of construction, the operator shall notify the Ute Tribal Department of Energy and Minerals of the date construction shall begin.

### 7.0 UNAVOIDABLE ADVERSE IMPACTS

#### A. SURFACE ALTERATIONS

None of the adverse impacts listed in 5.0 above can be avoided in a practical manner except those which are mitigated in item 6.0 above and those specified in BLM's 13 point surface use plan.

B. RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT VS LONG TERM PRODUCTIVITY.

1. Short Term: (Estimated 20 years) A total loss of production on the land and the associated environmental impacts will continue to influence the surrounding area for the productive life of the well.
2. Long Term: Standard policies provide for rehabilitation of wellsite and rights-of-ways. After the land is rehabilitated, it is not expected to return to its original productive capability. Normally, there will be a permanent scar left on the landscape.

C. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT

Oil and Gas are non-renewable resources, once they have been removed they can never be replaced.

8.0 CUMULATIVE IMPACTS

A. FULL DEVELOPMENT

Each additional well drilled for development increases the soil erosion potential, reduces wildlife habitat and grazing, increases potential soil and geologic pollution resulting from salt loading, reduces the soil's potential to recover, and increases the potential of water pollution from produced waters and hydro-carbons. Therefore, strict conformance with the mitigation measures and recommendations in this document is emphasized to minimize the adverse environmental impacts.

9.0 NEPA COMPLIANCE

A. RESEARCH/DOCUMENTATION

Based on available information, 7-26-97, the proposed location in the following areas of environmental impacts has been cleared:

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Listed Threatened & Endangered species
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Critical wildlife habitat
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Historical and cultural resources

10.0 REMARKS

A. SURFACE PROTECTION/REHABILITATION

All essential surface protection and rehabilitation requirements are specified above.

11.0 RECOMMENDATIONS

A. APPROVAL/DISAPPROVAL

We recommend approval of the proposed action as outlined in item 1.0 above.

7-26-97

Date

Dale A. Hanberg  
Representative - BIA Land  
Operations, Uintah and Ouray  
Agency

12.0 DECLARATION

A. APPROVAL

It has been determined that the proposed action is not a federal action significantly affecting the quality of the environment as it would require the preparation of an environmental impact statement in accordance with Section 102 (2) (c) of the National Environmental Policy Act of 1969 (42 USC 4331) (2) (C).

7/28/97

Date

Charles Hamer  
Superintendent,  
Uintah and Ouray Agency

14.0 CONSULTATION

A. REPRESENTATIVES/ORGANIZATION

Dale Hanberg- BIA  
Ed Trotter-Petroglyphs  
Lonnie Nephi-UTEM  
Greg Darlington-BLM

B:\EAPet15.12

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company Inc.

Well Name & Number: Ute Tribal 15-12

API Number: 43-013-31892

Lease Number: 14-20-H62-3510

Location: LOT 3 Sec. 15 T.5S R. 3W

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application 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.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

#### 1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **2M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

#### 3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the shallowest potential productive zone. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (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 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO 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 will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (801) 789-7077  
Petroleum Engineer

Wayne P. Bankert (801) 789-4170  
Petroleum Engineer

Jerry Kenzcka (801) 781-1190  
Petroleum Engineer

BLM FAX Machine (801) 781-4410

## EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

## SURFACE CONDITIONS OF APPROVAL

The Surface Use Conditions of Approval all come from the Bureau of Indian Affairs Concurrence Memorandum and Site Specific Environmental Analysis.

The Ute Tribe Energy and Mineral Department is to be notified 48 hours prior to construction. A Tribal Technician is to monitor construction.

Seventy-five (75) foot wide Rights-Of-Way (ROWs) corridor shall be granted for the following:

Access roads shall have constructed travel width limited to 22 feet within a 30 foot allocation of the ROW, except as granted for sharp curves or intersections.

Surface pipelines shall be limited to 13 feet of the ROW. The pipeline will be constructed to lay on the soil surface, and the ROW for the pipeline will not be bladed or cleared of vegetation.

Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the ROW. Where pipelines cross country between stations, they shall be welded in place at wellsites or on roads and then pulled into place with suitable equipment. Traffic will be restricted along these areas so that the pipeline ROW will not be used as an access road.

Buried pipelines shall be buried a minimum of 3 feet below the soil surface within an area of disturbance limited to 15 feet wide, and construction will be monitored by a Tribal Technician.

Buried pipelines adjacent to access roads shall be buried within 1.5 feet from the outside edge of the barrow ditch. Any additional buried pipelines shall be parallel to the outer side of the first buried pipeline and shall be constructed as close to the first pipeline as safety requirements allow.

After construction of the buried pipeline is completed the disturbed area of the right-of-way shall be contoured to blend into the natural landscape and it shall be reseeded with desirable vegetation as recommended by the BIA. Between September 15 and November 1 of the year following pipeline construction all disturbed areas shall be reseeded with perennial vegetation according to BIA, or Ute Tribe specifications.

Petroglyph will assure the Ute Tribe that any/all contractors and subcontractors have acquired a Tribal Business License and have access permits prior to construction.

All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.

All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

The Ute Tribe Energy & Mineral Department shall be consulted if cultural remains from subsurface deposits are exposed or identified during construction.

Before the site is abandoned, the company will be required to restore the well site and ROWs to near their original state. The disturbed areas will be reseeded with desirable perennial vegetation.

Noxious weeds will be controlled on the well site and rights-of-way. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

Reserve pits will be lined with impervious synthetic liners. Prior to backfilling the reserve pit all fluids will be pumped from the pit into trucks and hauled to approved disposal sites. When the reserve pits are backfilled the cuttings and mud, etc. left in them to be buried will be buried a minimum of three feet below the surface of the soil.

A closed production system will be used. Production fluids will be contained in leak proof tanks. All production fluids will be disposed of at approved disposal sites. The indiscriminate dumping of production fluids on roads, wellsites or other areas will not be allowed.

Firewood shall be stockpiled at convenient locations near the wellsite and along the access road.

Upon completion of the project approved under this Application for Permit to Drill and Right-of-way, the Ute Tribe Energy & Minerals Resources Department will be notified by Petroglyph Operating Company so that a Tribal Technician can verify Affidavit of Completion's.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
James W. Carter  
Division Director

1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

October 14, 1997

Petroglyph Operating Company, Inc.  
P.O. Box 607  
Roosevelt, Utah 84066

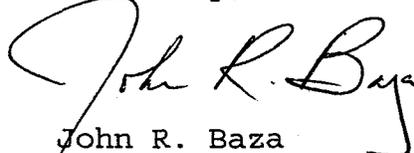
Re: Ute Tribal 15-12 Well, 3300' FNL, 520' FEL, Lot 3,  
Sec. 15, T. 5 S., R. 3 W., Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

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. The API identification number assigned to this well is 43-013-31892.

Sincerely,

  
John R. Baza  
Associate Director

lwp

Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office

Operator: Petroglyph Operating Company, Inc.  
Well Name & Number: Ute Tribal 15-12  
API Number: 43-013-31892  
Lease: 14-20-H62-3510  
Location: Lot 3 Sec. 15 T. 5 S. R. 3 W.

### Conditions of Approval

1. 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.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact John R. Baza (801)538-5334.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

SPUDDING INFORMATION

Name of Company: PETROGLYPH OPERATING

Well Name: UTE TRIBAL 15-12

Api No. 43-013-31892

Section: 15 Township: 5S Range: 3W County: DUCHESNE

Drilling Contractor: \_\_\_\_\_

Rig # \_\_\_\_\_

SPUDDED:

Date: 11/15/97

Time: \_\_\_\_\_

How: DRY HOLE

Drilling will commence: \_\_\_\_\_

Reported by: CHUCK WHITE

Telephone NO.: \_\_\_\_\_

Date: 11/18/97 Signed: JLT

✓

2

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
DRILLING INSPECTION FORM

OPERATOR: PETROGLYPH OPERATING CO COMPANY REP: CHUCK WHITE

WELL NAME UTE TRIBAL #15-12 API NO 43-013-31892

QTR/QTR: SE/NE SECTION: 15 TWP: 5S RANGE: 3W

CONTRACTOR: LEON ROSS DRILLING CO RIG NUMBER: #19

INSPECTOR: DENNIS L INGRAM TIME: 1:00 P.M. DATE: 11/17/97  
SPUD DATE: DRY: \_\_\_\_\_ ROTARY: \_\_\_\_\_ PROJECTED T.D.: \_\_\_\_\_

OPERATIONS AT TIME OF VISIT: RIGGING UP AND WAITNG ON KELLY AND  
BOPE EQUIPMENT.

WELL SIGN: N MUD WEIGHT 8.3+ LBS/GAL BOPE: N

BLOOIE LINE: Y FLARE PIT: N H2S POTENTIAL: N

ENVIRONMENTAL:

RESERVE PIT: Y FENCED: Y LINED: Y PLASTIC: Y

RUBBER: \_\_\_\_\_ BENTONITE: \_\_\_\_\_ SANITATION: (2)

BOPE TEST RECORDED IN THE RIG DAILY TOUR BOOK: N/A

REMARKS:

(LAST HOLE WAS WITH HUGOTON ENERGY COMPANY IN COLORADO) DERRICK  
IS IN THE AIR WITH PITS AND SHEDS IN PLACE. DRILLER SAYS  
THIS RIG CAME IN FROM COLORADO. IT IS OWNED BY LEON ROSS  
AND WAS SENT TO COLORADO TO DRILL A COUPLE OF SHALLOW WELLS  
TO WORK OUT BUGS. ROSS JUST FINISHED PUTTING THIS RIG  
TOGETHER AND IT IS UNPROVEN BEYOND 1900 FEET.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
DRILLING INSPECTION FORM

OPERATOR: PETROGLYPH OPERATING CO COMPANY REP: CHUCK WHITE

WELL NAME UTE TRIBAL #15-12 API NO 43-013-31892

QTR/QTR: SE/NE SECTION: 15 TWP: 5S RANGE: 3W

CONTRACTOR: LEON ROSS DRILLING CO RIG NUMBER: #19

INSPECTOR: DENNIS L INGRAM TIME: 11:30 A.M. DATE: 11/25/97

SPUD DATE: DRY: \_\_\_\_\_ ROTARY: 11/20/97 PROJECTED T.D.: 6199'

OPERATIONS AT TIME OF VISIT: LAYING DOWN DRILL PIPE.

WELL SIGN: Y MUD WEIGHT 8.3+ LBS/GAL BOPE: Y

BLOOIE LINE: Y FLARE PIT: N H2S POTENTIAL: N

ENVIRONMENTAL:

RESERVE PIT: Y FENCED: Y LINED: Y PLASTIC: Y

RUBBER: \_\_\_\_\_ BENTONITE: \_\_\_\_\_ SANITATION: (2)

BOPE TEST RECORDED IN THE RIG DAILY TOUR BOOK: YES,

REMARKS:

OPERATOR REACHED T.D. THIS MONRING AROUND 5:00 AM, AND HAVE

SHORT TRIPPED DRILL PIPE TO PREPARE FOR RUNNING LOGGING TOOLS.

LEON ROSS WAS ON LOCATION AND CLAIMS THEY HAVE ANOTHER HOLE

TO FRILL FOR PETROGLYPH. THEY SHOULD BE MOVING ON FRIDAY.

SURVEYS SHOW 1 DEGREE @ 5742'; 1 DEGREES @ 4665'; 1 1/4 DEGREES

3596'; AND 1 3/4 DEGREES @ 2499'.

(2)

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
DRILLING INSPECTION FORM

OPERATOR: PETROGLYPH OPERATING CO COMPANY REP: CHUCK WHITE

WELL NAME UTE TRIBAL #15-12 API NO 43-013-31892

QTR/QTR: SE/NE SECTION: 15 TWP: 5S RANGE: 3W

CONTRACTOR: LEON ROSS DRILLING CO RIG NUMBER: #19

INSPECTOR: DENNIS L INGRAM TIME: 11:30 A.M. DATE: 11/25/97

SPUD DATE: DRY: \_\_\_\_\_ ROTARY: 11/20/97 PROJECTED T.D.: \_\_\_\_\_

OPERATIONS AT TIME OF VISIT: DRILLING AHEAD @ 3556

WELL SIGN: N MUD WEIGHT 8.3+ LBS/GAL BOPE: Y

BLOOIE LINE: Y FLARE PIT: N H2S POTENTIAL: N

ENVIRONMENTAL:

RESERVE PIT: Y FENCED: Y LINED: Y PLASTIC: Y

RUBBER: \_\_\_\_\_ BENTONITE: \_\_\_\_\_ SANITATION: (2)

BOPE TEST RECORDED IN THE RIG DAILY TOUR BOOK: YES, SPENT THREE DAYS TESTING BOPE, ACCORDING TO RIG HANDS.

REMARKS:

NEITHER THE APD OR THE BOPE TEST CHART ARE DISPLAYED IN DOG

HOUSE. BIT #2 IN HOLE, A 7 7/8" STC F-5 WITHOUT JET NOZZLES.

TRIPLEX PUMP ON ACCUMULATOR WAS CYCLING OFTEN AND LEAKING

HYDRALLIC FLUID ONTO SHED FLOOR WHILE RUNNING. SURVEYS

SHOW 1 DEGREES @ 3004'; 1 1/2 DEGREES @ 2499'; 3/4 DEGREES @

2033'; AND 1/4 DEGREES @ 1198'.OND 1900 FEET.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE  
(See other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
(Expires August 31, 1985)

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-H62-3510

6. IF INDIAN, ALOTTTEE OR TRIBE NAME  
Ute Indian Tribe

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1.a. TYPE OF WELL: Oil Well  Gas Well  Dry  Other   
b. TYPE OF COMPLETION: New Well  Workover  Deepen  Plug Back  Diff. Reserv.  Other

7. UNIT AGREEMENT NAME  
14-20-H62-4650

8. FARM OR LEASE NAME

2. NAME OF OPERATOR  
PETROGLYPH OPERATING COMPANY, INC. **CONFIDENTIAL**

3. ADDRESS OF OPERATOR  
P.O. BOX 607, ROOSEVELT, UT 84066 (435) 722-2531

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 3300' FNL 520' FEL

9. WELL NO.  
Ute Tribal 15-12

10. FIBLD AND POOL, OR WILDCAT  
Antelope Creek

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Lot 3 Sec. 15-T5S-R3W

At top prod. interval reported below **CONFIDENTIAL**  
At total depth 6234' RTD

14. PERMIT NO. 43-013-31892  
DATE ISSUED 10/14/97  
12. County or Parish Duchesne  
13. State Utah

15. DATE SPUDDED 11/13/97  
16. DATE T.D. REACHED 12/4/97  
17. DATE COMPLETED (Ready to prod.) 1/19/98  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 6219' KB  
19. ELEV. CASINGHEAD 6207' GGL

20. TOTAL DEPTH, MD & TVD 6234' TD  
21. PLUG BACK T.D., MD & TVD 6173' PBTD  
22. IF MULTIPLE COMPL., HOW MANY\* 5  
23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S) OF THIS COMPLETION -- TOP, BOTTOM, NAME (MD AND TVD)\*  
Green River B6.1, C4, C6, C8.2, D5

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
Gamma Ray to surface, Density-Compensated Neutron Porosity, AIT (normal suite)

27. WAS WELL CORED  
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	266'	12-1/4"	165 sxs Class G	
5-1/2"	15.5#	6218'	7-7/8"	270 sxs Highfill, followed by 375 sxs Thixotropic	

29. LINER RECORD

SIZE	TOP	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5444'	

30. TUBING RECORD

PERFORATION RECORD (Interval, size and number)	ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.												
<b>CONFIDENTIAL</b> D5 5351-56' (20 holes) B6.1 4328-33' (20 holes) C8.2 5040-44' (16 holes) C8.2 4964-67' (12 holes) C6 4964-67' (12 holes) C4 4789-94' (20 holes)	<table border="1"> <thead> <tr> <th>DEPTH INTERVAL (MD)</th> <th>AMOUNT AND KIND OF MATERIAL USED</th> </tr> </thead> <tbody> <tr> <td>5351-56'</td> <td>6000 gal Boragel 30, 28500# 20/40 prop</td> </tr> <tr> <td>5040-44' &amp; 4964-67'</td> <td>8369 gal Boragel 30, 42000# 20/40 prop</td> </tr> <tr> <td>4964-67'</td> <td>4466 gal Boragel 30, 24000# 20/40 prop</td> </tr> <tr> <td>4789-94'</td> <td>7583 gal Boragel 30, 42000# 20/40 prop</td> </tr> <tr> <td>4328-33'</td> <td>7190 gal Boragel 30, 42500# 20/40 prop</td> </tr> </tbody> </table>	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED	5351-56'	6000 gal Boragel 30, 28500# 20/40 prop	5040-44' & 4964-67'	8369 gal Boragel 30, 42000# 20/40 prop	4964-67'	4466 gal Boragel 30, 24000# 20/40 prop	4789-94'	7583 gal Boragel 30, 42000# 20/40 prop	4328-33'	7190 gal Boragel 30, 42500# 20/40 prop
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED												
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4964-67'	4466 gal Boragel 30, 24000# 20/40 prop												
4789-94'	7583 gal Boragel 30, 42000# 20/40 prop												
4328-33'	7190 gal Boragel 30, 42500# 20/40 prop												

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)	WELL STATUS (Producing or shut-in)
1/30/98	2 1/2" x 1-3/4" x 16' 40 ring PA pump	producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL - BBL. #	GAS - MCF. 50	WATER - BBL. 31	GAS-OIL RATIO
2/6/98	24						

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24 HR. RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)
	1200					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
Sold, used for fuel

TEST WITNESSED BY  
Dave Schreiner

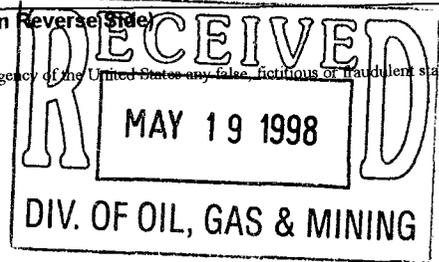
35. LIST OF ATTACHMENTS

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

Signed Maia Bell Title Operations Coordinator Date 3/31/98

\* (See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly or 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.



37. SUMMARY OF POROUS ZONES: (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):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Ute Tribal 15-12						
B Marker	4117					
X Marker	4606					
Douglas Creek	4756					
B Limestone	5138		CONFIDENTIAL			
Castle Peak	5686					
Basal Carbonate	6092					

STATE OF UTAH  
 DIVISION OF OIL, GAS AND MINING  
 ENTITY ACTION FORM - FORM 6

OPERATOR Petroglyph Operating Company, Inc. OPERATOR ACCT. NO. N 3800  
 ADDRESS P.O. Box 607  
Roosevelt, UT 84066

04/17/98 08:58 FAX 435 722 9145

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				COUNTY	SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG			
A	99999	12083	43-013-31892	Ute Tribal 15-12	Lot 3	15	5S	3W	Duchesne	11-13-97	
WELL 1 COMMENTS: <i>Entity added 4-17-98 (Common Tank) See Ute Tribal 15-12 will tie into tank battery at Ute Tribal 16-06</i>											
WELL 2 COMMENTS: <b>CONFIDENTIAL</b>											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

PETROGLYPH

LISHA C

- ACTION CODES** (See instructions on back of form)
- 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)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

*Deanna Bell*  
 Signature Deanna Bell  
 Operations Coordinator 12-15-97  
 Title Date  
 Phone No. 801 722-2531

002

FORM 7

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

1. Well name and number: Ute Tribal 14-20-H62-3510  
 API number: 15-12-31
2. Well Location: QQ Lot 3 Section 15 Township 5S Range 3W County Duchesne Duchesne
3. Well operator: Petroglyph Operating Company, Inc.  
 Address: P.O. Box 607  
Roosevelt, UT 84066 Phone: (435) 722-2531
4. Drilling contractor: Leon Ross Drllg  
 Address: P.O. Box 757  
Roosevelt, UT 84066 Phone: (435) 722-4469
5. Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
1390	1385	7 BBLS Hr	Fresh
2990	3000	20 BBLS Hr	Iron

6. Formation tops: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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.

Date: 12/6/97

Name & Signature: Lisha Bell

Title: Operations Coordinator



ENTITY ACTION FORM - FORM 8  
\*\*\*\*\*CORRECTION\*\*\*\*\*

OPERATOR Petroglyph Operating Company, Inc.  
ADDRESS P. O. Box 607  
Roosevelt, UT 84066

OPERATOR ACCT. NO. N3800

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	12083	12166	43-013-31892	Ute Tribal 15-12	Lot 3	15	5S	3W	Duchesne	11/13/97	
WELL 1 COMMENTS: <i>Entity chg. 7-10-98. See</i> <b>CONFIDENTIAL</b> Well coded to wrong entity # in error											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group of 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)

NOTE: Use COMMENT section to explain why each Action Code was selected.

*Deanna Bell*  
Signature Deanna Bell

Operations Coordinator 7/10/98  
Title Date

Phone No. (435) 722-2531



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 REGION 8  
 999 18<sup>TH</sup> STREET - SUITE 300  
 DENVER, CO 80202-2466

NOV 21 2001

Ref: 8P-W-GW

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

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

Mr. Micheal Safford  
 Operations Coordinator  
 Petroglyph Operating Company, Inc.  
 P. O. Box 607  
 Roosevelt, UT 84066

RE: Add Additional Well to Area Permit  
 Antelope Creek Waterflood  
 EPA Area Permit UT2736-00000  
 Duchesne County, Utah

Dear Mr. Safford:

Your letter of June 6, 2001, requesting that the following production well be converted to a Class II enhanced oil recovery well and added to the Antelope Creek Waterflood, as authorized under EPA Area Permit #UT2736-00000 is hereby granted.

<u>NAME</u>	<u>LOCATION</u>	<u>EPA WELL PERMIT NO.</u>
Ute Tribal #15-12	Lot 3 - Section 15 T 5 S - R 3 W Duchesne County, UT	#UT2736-04640

This additional well is within the boundary of the existing Area Permit for the Antelope Creek Waterflood (UT2736-00000), and this addition is being made under the provisions of 40 CFR §144.33 and the terms and conditions of the original Permit. The proposed well location, well schematic, conversion procedures with/schematic, plugging and abandonment plan with/schematic, Cement Bond Log (CBL), and Financial Responsibility Demonstration, submitted by your office, have been reviewed and approved as follows:

- (1) The **conversion** plan for this production well has been reviewed, and found satisfactory. EPA analysis of the CBL for this well **has not identified** a minimum interval of adequate cement within the **confining zone** (3,999' to 4,117'), pursuant to Region 8 Ground



Water Section Guidance No. 34. Therefore, it has not been determined that cement in this well provides an effective barrier to upward movement of fluids through vertical channels adjacent to the wellbore. (Part II Mechanical Integrity [MI]) pursuant to 40 CFR § 146.8 (2). The permittee is then required to demonstrate Part II MI, pursuant to standards of Region 8 GROUND WATER SECTION GUIDANCE NO. 37 Demonstrating Part II (external) Mechanical Integrity for a Class II injection well Permit.

- (2) **Maximum injection pressure (MIP)** - please reference the Final Area Permit UT2736-00000, Part II. Section C.5.(b). The maximum surface injection pressure (MIP) shall not exceed 1900 psig. Until such time that a step-rate injectivity test (SRT) has been performed and approved by the EPA, the initial maximum surface injection pressure for the Ute Tribal #15-12 shall not exceed 1900 psig.

Final Area Permit (UT2736-00000), has provisions whereby the operator may request an increase or decrease in the maximum surface injection pressure.

- (3) **The plugging and abandonment plan and schematic**, submitted by your office, has been reviewed, and approved.

**Underground Sources of Drinking Water (USDWs).** The base of the USDWs in the Ute Tribal #15-12 is approximately 1,699 feet below ground level and is located within the Uinta Formation. The source for this USDW information is formation water analyses submitted by the operator for twenty-two (22) wells within the initial AOR, and from Publication No. 92 (1987), prepared jointly by the USGS and the Utah of Oil, Gas, and Mining.

**Injection Interval:** Fluid injection shall be limited to the gross zones within the Green River Formation between the approximate depths of 4,117' (Top of "B" Marker) and 6,092' (Basal Carbonate). The injection (perforated) zones within this portion of the Green River Formation (4,328' to 5,351') are comprised of porous and permeable lenticular calcareous sandstones interbedded with low permeability carbonates and calcareous shales. The lenticular sandstones vary in thickness from 1 to 30 feet and are individually separated by shale which act as isolation barriers (confining zones) for the waterflood.

**Confining Zone:** The overall confining zone above the top injection interval, is identified in this well from 3,999' to 4,117', and is overlain by impermeable Upper Green River Formation calcareous sandy lacustrine shales and continuous beds of microcrystalline dolomite.

Prior to commencing injection into this well, permittee shall fulfill Permit condition PART II, C. 2. and have submitted to the EPA, for review and approval, the following:

- (1) The conversion is complete and the permittee has submitted a completed **Well Rework Record (EPA Form 7520-12)**; and
- (2) the **pore pressure has been determined of the proposed injection zones**; and
- (3) the Permittee has submitted for review and approval **Part I (internal) and Part II (external) of the mechanical integrity test (MIT)**; EPA form enclosed with current MIT Guidance No. 37.

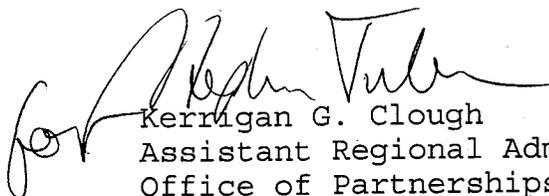
Please be aware that Petroglyph does not have authorization to begin injection into the Ute Tribal #15-12 until the items listed above have been approved by the EPA and Petroglyph has received written authorization to begin injection from the EPA.

All other provisions and conditions of the Permit remain as originally issued July 12, 1994, and revised April 30, 1998.

- (4) **Financial Responsibility Demonstration:** the applicant has chosen to demonstrate financial responsibility through a Surety Performance Bond in the amount of \$15,000 per well, as submitted by Bond Rider NO. 1.

If you have any questions, please contact Mr. Dan Jackson at 303-312-6155. Also, please direct the above requirements to Mr. Jackson at the above letterhead address, citing **MAIL CODE 8P-W-GW**. Thank you for your continued cooperation.

Sincerely,



Kerrigan G. Clough  
Assistant Regional Administrator  
Office of Partnerships and  
Regulatory Assistance

Enclosure: EPA MIT Form  
Current MIT Guidance No. 37

cc: Mr. D. Floyd Wopsock, Chairman  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Ms. Elaine Willie, Environmental Coordinator  
Ute Indian Tribe

Norman Cambridge  
BIA - Uintah & Ouray Agency

Mr. Jerry Kenczka  
BLM - Vernal District Office

Mr. Gilbert Hunt  
State of Utah Natural Resources  
Division of Oil, Gas & Mining

Mr. Nathan Wiser, 8ENF-T



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII  
999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

AUG - 9 1995

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 37  
Demonstrating Part II (external) Mechanical Integrity  
for a Class II injection well permit.

FROM: Tom Pike, Chief *Tom Pike*  
UIC Direct Implementation Section

TO: All Section Staff  
Montana Operations Office

During the review for a Class II injection well permit, consideration must be given to the mechanical integrity (MI) of the well. MI demonstrates that the well is in sound condition and that the well is constructed in a manner that prevents injected fluids from entering any formation other than the authorized injection formation.

A demonstration of MI is a two part process:

PART I - INTERNAL MECHANICAL INTEGRITY is an assurance that there are no significant leaks in the casing/tubing/packer system.

PART II - EXTERNAL MECHANICAL INTEGRITY demonstrates that after fluid is injected into the formation, the injected fluids will not migrate out of the authorized injection interval through vertical channels adjacent to the wellbore.

A Class II injection well may demonstrate Part II MI by showing that injected fluids remain within the authorized injection interval. This may be accomplished as follows:

- 1) Cement bond log showing 80% bond through the an appropriate interval (Section Guidance 34),
- 2) Radioactive tracer survey conducted according to a EPA-approved procedure, or
- 3) Temperature survey conducted according to a EPA-approved procedure (Section Guidance 38).

For each test option above, the operator of the injection well should submit a plan for conducting the test. The plan will then be approved (or modified and approved) by EPA. EPA's pre-approval of the testing method will assure the operator that the test is conducted consistent with current EPA guidance, and that the test will provide meaningful results.

Part II MI may be demonstrated either before or after issuing the Final Permit. However, if Part II is to be demonstrated after the Final Permit is issued, a provision in the permit will require the demonstration of Part II MI. The well will also be required to pass Part II MI prior to granting authorization to inject.

Radioactive tracer surveys and temperature surveys require that the well be allowed to inject fluids as part of the procedure. In these cases, a well that has shown no other demonstration of Part II MI will be allowed to inject only that volume of fluid that is necessary to conduct the appropriate test.

After the results of the test proves that the well has passed Part II MI, the well will be given authorization to begin full injection operations.

If any of the tests show a lack of Part II MI, the well will be repaired and retested, or plugged (See Headquarters Guidance #76).

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
 Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
 999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Test conducted by: \_\_\_\_\_  
 Others present: \_\_\_\_\_

Well Name: _____	Type: ER SWD	Status: AC TA UC
Field: _____		
Location: _____	Sec: _____ T _____ N/S R _____ E/W	County: _____ State: _____
Operator: _____		
Last MIT: ____/____/____	Maximum Allowable Pressure: _____	PSIG

Is this a regularly scheduled test?     Yes     No  
 Initial test for permit?     Yes     No  
 Test after well rework?     Yes     No  
 Well injecting during test?     Yes     No    If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: \_\_\_\_\_ psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	psig	psig	psig
End of test pressure	psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	psig	psig	psig
5 minutes	psig	psig	psig
10 minutes	psig	psig	psig
15 minutes	psig	psig	psig
20 minutes	psig	psig	psig
25 minutes	psig	psig	psig
30 minutes	psig	psig	psig
minutes	psig	psig	psig
minutes	psig	psig	psig
<b>RESULT</b>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?     Yes     No



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		5. Lease Serial No. 1420H623510
2. Name of Operator PETROGLYPH OPERATING COMPANY, Contact: MICHEAL SAFFORD E-Mail: mikes@petroglyph.net		6. If Indian, Allottee or Tribe Name UTE INDIAN TRIBE
3a. Address P.O. BOX 607 ROOSEVELT, UT 84066	3b. Phone No. (include area code) Ph: 435.722.2531 Fx: 435.722.9145	7. If Unit or CA/Agreement, Name and/or No. 1420H624650
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 15 T5S R3W SE SW 3300FNL 520FEL <b>LOT 3</b>		8. Well Name and No. UTE TRIBAL 15-12
		9. API Well No. 43-013-31892
		10. Field and Pool, or Exploratory ANTELOPE CREEK
		11. County or Parish, and State DUCHESNE COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The above referenced well was converted to an injection well on December 3, 2001 under the area permit of UT2736-04640.

The well was reperforated at the following intervals 4 spf 4788-95, 4805-07, 5351-58.

Treated with with.

5351 to 5358 treated with 600 gallons 15% HCL with additives

5040 to 5044 treated with 500 gallons 15% HCL with additives

4964 to 4967 treated with 300 gallons 15% HCL with additives

4805 to 4807 treated with 300 gallons 15% HCL with additives

4788 to 4795 treated with 550 gallons 15% HCL with additives

Current status is waiting on EPA approval to commence injection.

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

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #9918 verified by the BLM Well Information System  
For PETROGLYPH OPERATING COMPANY,, sent to the Vernal

Name (Printed/Typed) MICHEAL SAFFORD	Title COORDINATOR
Signature (Electronic Submission)	Date 01/04/2002

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice 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.		Office _____

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.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

JAN 9 2002

Ref: 8P-W-GW

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Micheal Safford  
Operations Coordinator  
Petroglyph Operating Company, Inc.  
P.O. Box 607  
Roosevelt, UT 84066

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

RE: **Limited Authorization to Inject**  
Ute Tribal #15-12  
EPA Area Permit No. UT2736-00000  
EPA Well Permit No. UT04640  
Duchesne County, Utah

Dear Mr. Safford:

On January 4, 2002, Petroglyph Operating Company, Inc. (Petroglyph) submitted information required to fulfill the Environmental Protection Agency's (EPA) **Prior to Commencing Injection (Additional Wells)** requirements in the above-referenced Final Area Permit and Authorization to Add an Additional Well to the Area Permit. The successfully completed Part I (Internal) Mechanical Integrity pressure test of December 17, 2001, a Well Rework Record (EPA Form No. 7520-12) with an updated wellbore diagram, and an injection zone pore pressure determination have been reviewed and approved by the EPA.

EPA is hereby authorizing injection into the Ute Tribal #15-12 for a **limited period of up to one hundred eighty (180) calendar days**, effective upon receipt of this letter, herein referred to as the '**limited authorized period**'.

Because the cement bond log submitted for this well did not show an adequate interval of **80% or greater** bond index through the confining zone above the perforated intervals (4,328' to 5,351'), the operator also is required to demonstrate Part II (External) Mechanical Integrity (Part II MI) within the limited authorized period. The demonstration shall be by temperature survey or other approved test. Approved tests for demonstrating



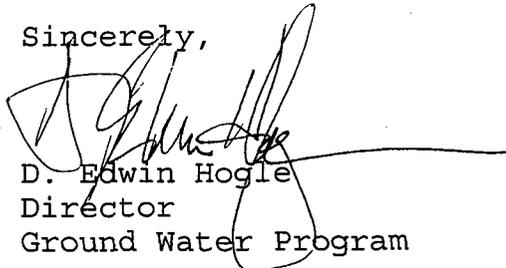
Part II MI include a temperature survey, noise log or oxygen activation log, and Region 8 may also accept results of a radioactive tracer survey (RATS) under certain circumstances. The limited authorized period allows injection for the purpose of stabilizing the injection formation pressure prior to demonstrating Part II MI, which is necessary because the proposed injection zone may be under pressured due to previous oil production from the zone, and the tests rely on stable formation pressure. Results of tests shall be submitted to, and written approval with authority to re-commence injection received from, EPA prior to resuming injection following the limited authorized period. A copy of Region 8 current guideline for conducting a temperature survey is enclosed with this letter.

An initial maximum surface injection pressure (MIP) **not to exceed 1900 psig** was determined for wells within Area Permit UT2736-00000. Please note that the maximum pressure used during the temperature survey or other approved test becomes the final permitted maximum injection pressure, or MIP, because Part II MI was demonstrated at that pressure. Therefore, it may be advantageous to run a step rate test prior to conducting the temperature survey or other approved test.

Should the operator apply for an increase to the MIP at any future date, another demonstration of Part II MI must be conducted in addition to the step rate test. The operator must receive prior authorization from the Director in order to inject at pressures greater than the permitted MIP during the test(s).

If you have any questions in regard to the above action, please contact Chuck Tinsley at 303.312.6266 or Dan Jackson at 303.312.6155. Results from temperature log or other Part II MI test should be mailed directly to the Ground Water Program Director, Mail Code 8P-W-GW.

Sincerely,



D. Edwin Hogle  
Director  
Ground Water Program

enclosure:

Region 8 current Guideline for conducting a Temperature Survey for Mechanical Integrity

