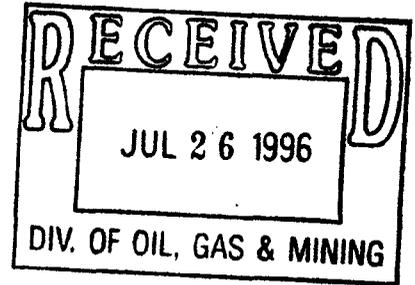


**Petroglyph Operating Co., Inc.**  
P.O. Box 1839  
Hutchinson, KS 67504-1839



July 19, 1996

Utah Division of Oil, Gas, & Mining  
Attn: Mr. Frank Matthews, Petroleum Engineer  
1594 West North Temple  
Box 145801  
Salt Lake City, UT 84114-5801

RE: APPLICATION FOR PERMIT TO DRILL  
UTE TRIBAL # 29-08  
SE/NE SEC. 29, T5S, R3W  
DUCHESNE COUNTY, UTAH  
LEASE NO. BIA 14-20-H62-3518  
UTE TRIBAL LANDS

Dear Mr. Matthews:

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,

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

Ed Trotter  
Agent

**Petroglyph Operating Co., Inc.**

Attachments

/EHT/dmt

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

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

2. NAME OF OPERATOR  
 PETROGLYPH OPERATING COMPANY INC.

3. ADDRESS OF OPERATOR  
 P.O. BOX 607 ROOSEVELT, UT 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 11880' FNL & 480' FEL, SE/4 NE/4  
 At proposed prod. zone <sup>14b</sup>

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 24.5 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)      480'

16. NO. OF ACRES IN LEASE      640

17. NO. OF ACRES ASSIGNED TO THIS WELL      40

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

19. PROPOSED DEPTH      6249'

20. ROTARY OR CABLE TOOLS  
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6474' GRADED GROUND

22. APPROX. DATE WORK WILL START\*  
 AUGUST, 1996

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-H62-3518

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 UTE TRIBE

7. UNIT AGREEMENT NAME  
 N/A

8. FARM OR LEASE NAME  
 UTE TRIBAL

9. WELL NO.  
 UTE TRIBAL #29-08

10. FIELD AND POOL, OR WILDCAT  
 ANTELOPE CREEK

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 SEC. 29, T5S, R3W

12. COUNTY OR PARISH      13. STATE  
 DUCHESNE      UTAH

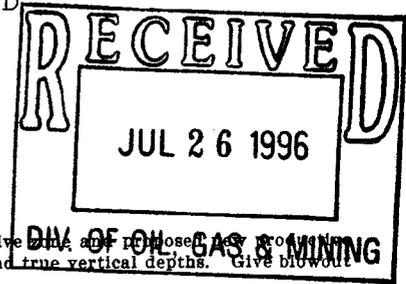
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	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.
7 7/8	5 1/2	15.5#	6249'	

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).

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

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



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 [Signature] TITLE AGENT FOR PETROGLYPH DATE JULY 19, 1996

(This space for Federal or State office use)

PERMIT NO. 43-013-31693 APPROVAL DATE

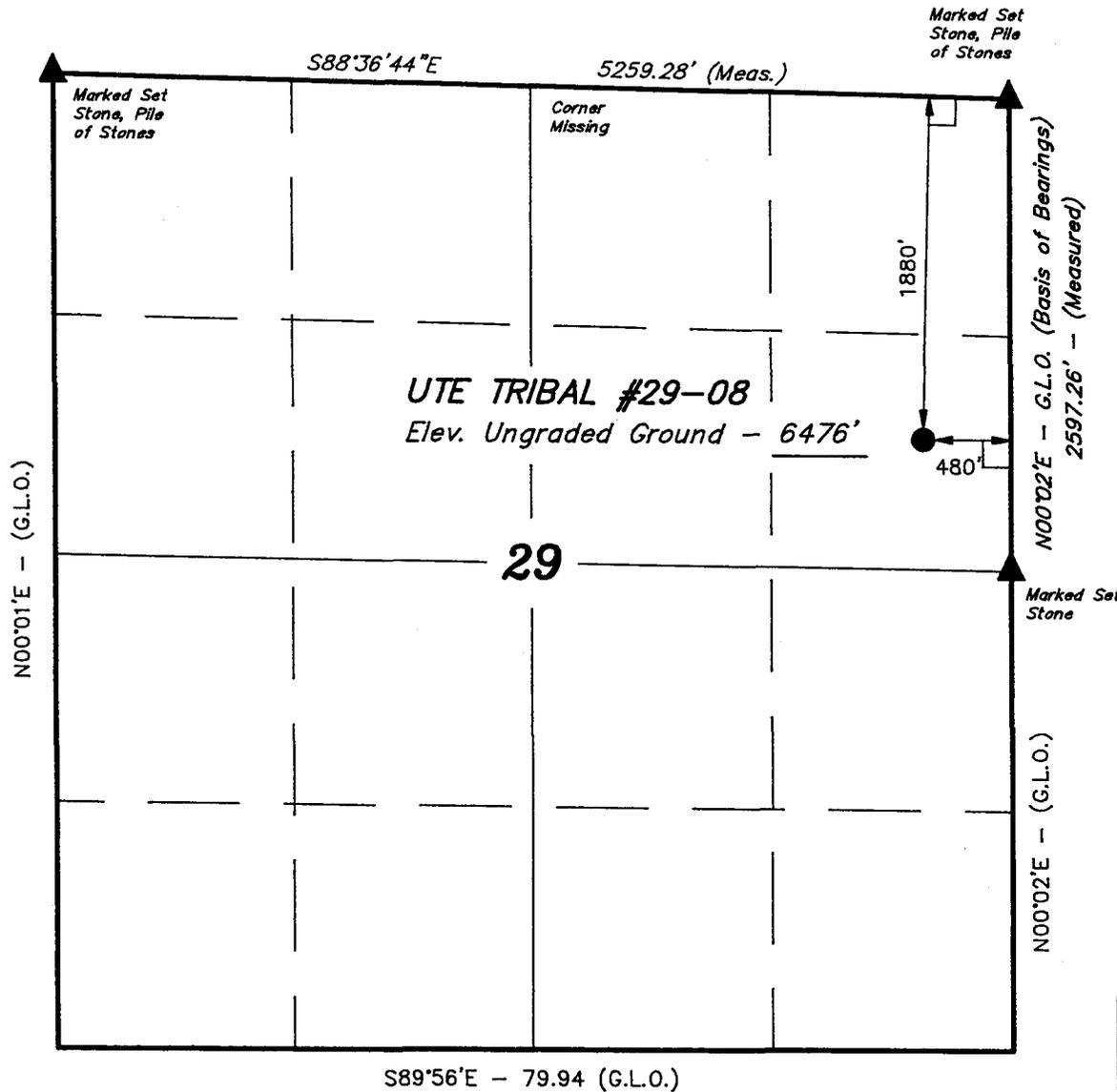
APPROVED BY [Signature] TITLE Petroleum Engineer DATE 8/20/96  
 CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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

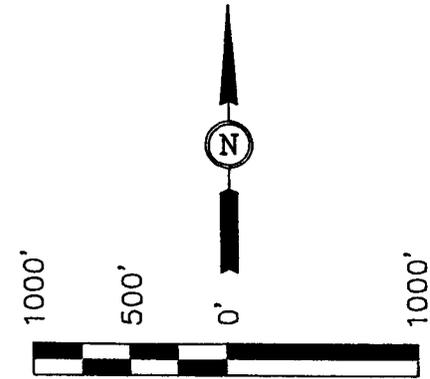
## PETROGLYPH OPERATING CO., INC.

Well Location, UTE TRIBAL #29-08, located as shown in the SE 1/4 NE 1/4 of Section 29, T5S, R3W, U.S.B.&M. Duchesne County, Utah.



### BASIS OF ELEVATION

SPOT ELEVATION LOCATED IN THE NW 1/4 SW 1/4 OF SECTION 28, T5S, R3W, U.S.B.&M. TAKEN FROM THE MYTON SW QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6573 FEET.



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.

*Robert J. King*

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 461319  
STATE OF UTAH

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 6-26-96	DATE DRAWN: 6-27-96
PARTY G.S. B.P. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETROGLYPH OPERATING CO., INC.	

### LEGEND:

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

EIGHT POINT PLAN

UTE TRIBAL # 29-08  
SW/NE SEC. 29, T5S R3W  
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2863.9	3620
'X' marker	4420.9	2063
Douglas Creek	4560.9	1923
"B" Limestone	4932.9	1551
B/Castle Peak Limestone	5490.9	993
Basal Carbonate Limestone	5918.9	565
Total Depth	6248.9	235
Anticipated BHP	2700 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	4560.9	1923
Oil/Gas	B/Castle Peak	5490.9	993
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' - 6248.9'	6248.9'	5 1/2	M-50 #	J-55	4040 PSI	4810 PSI	202,000#

All casing will be new or inspected.

EIGHT POINT PLAN

UTE TRIBAL # 29-08  
SW/NE SEC. 29, T5S R3W  
DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

INTERVAL

0' - 250'  
250' - 4000'  
4000' - TD  
TD

MUD TYPE

Air  
Air/Mist & Aerated Water  
Air/3% KCL water or KCL substitute  
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 # 29-08  
SW/NE SEC. 29, 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.

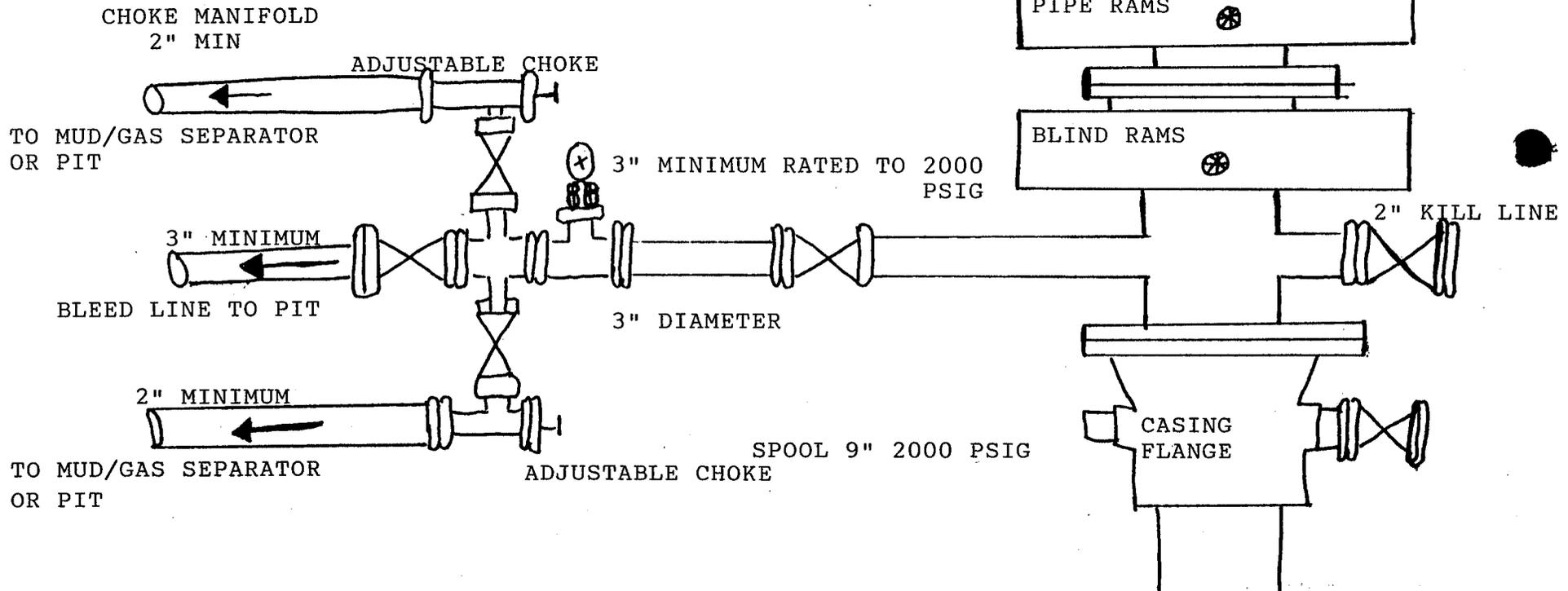
(Attachment: BOP Schematic Diagram)

# 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 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 # 29-08  
Lease Number: BIA 14-20-H62-3518  
Location: 1880' FNL & 480' FEL SE/NE, Sec. 29, 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 24.5 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 0.1 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 - 16\*
- 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 340' from proposed location to a point in the SE/NE of Section 29, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing facility at the Ute Tribal #29-08A tank battery. 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 Ute Tribal # 29-08A 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 South side of the location.

The flare pit will be located downwind of the prevailing wind direction on the South 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 West end of the location.

Access to the well pad will be from the Southeast.

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 \_\_\_\_\_

X Corners No. 2, 6, & 8 will be rounded off to minimize excavation.

## 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

Deanna Bell  
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.

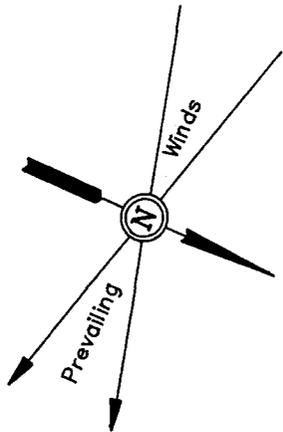
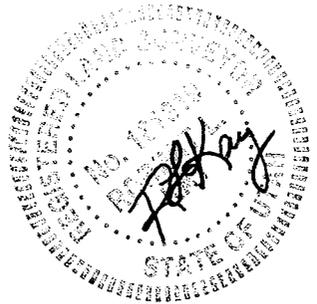
7-19-96

Date

# PETROGLYPH OPERATING CO., INC.

## LOCATION LAYOUT FOR

UTE TRIBAL #29-08  
SECTION 29, T5S, R3W, U.S.B.&M.  
1880' FNL 480' FEL



C-10.5'  
El. 84.4'

F-2.2'  
El. 76.1'

F-7.9'  
El. 66.0'

Sta. 2+75

SCALE: 1" = 50'  
DATE: 6-27-96  
Drawn By: D.R.B

**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.

FLARE PIT

El. 91.2'  
C-25.3'  
(btm. pit)

C-7.3'  
El. 81.2'

C-2.1'  
El. 76.0'

Sta. 1+50

F-1.7'  
El. 72.2'

Approx. Top of Cut Slope

Approx. Toe of Fill Slope

El. 82.6'  
C-16.7'  
(btm. pit)

El. 74.8'  
C-0.9'

Sta. 0+00

El. 71.4'  
F-2.5'

F-6.4'  
El. 67.5'

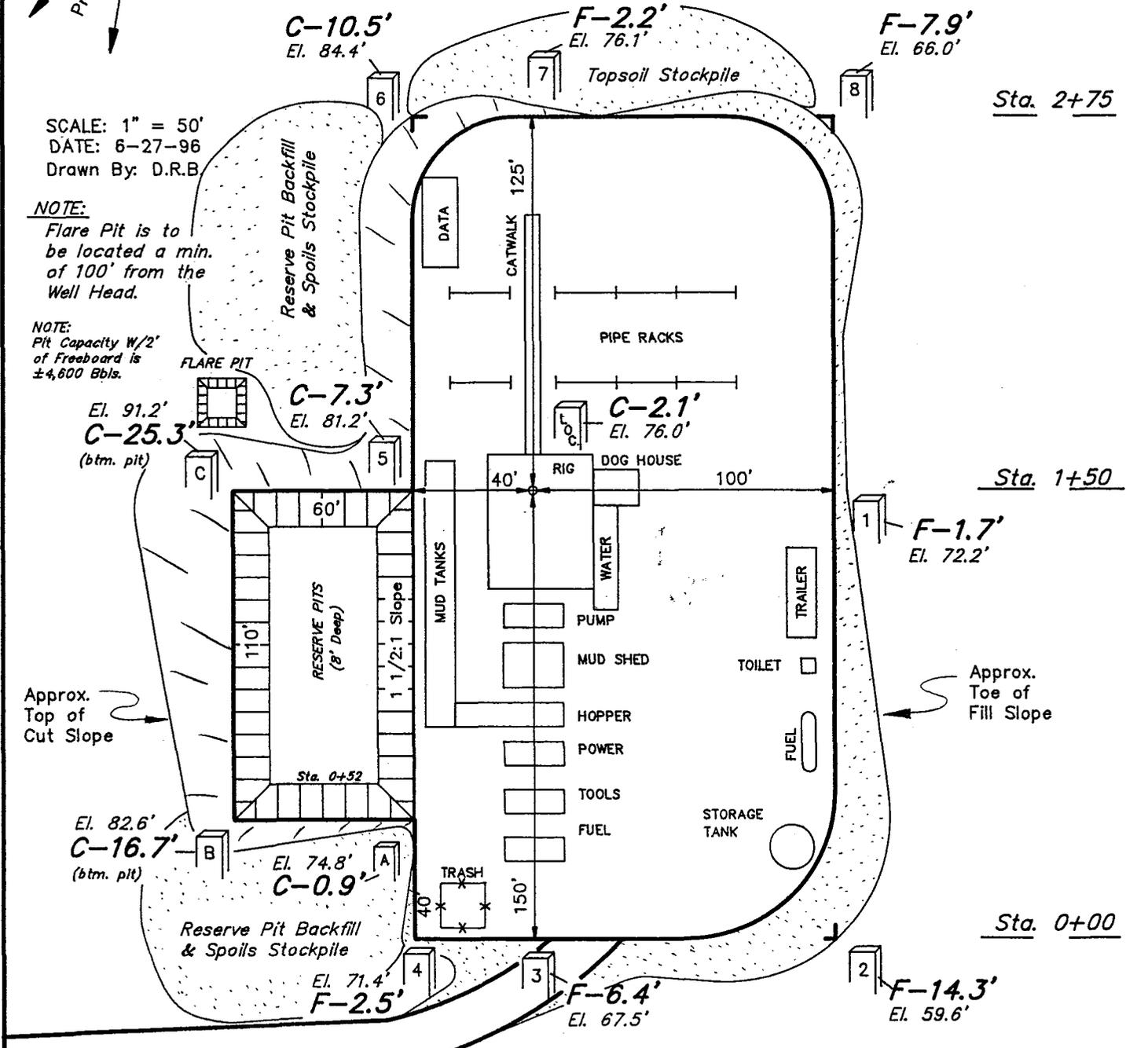
F-14.3'  
El. 59.6'

Proposed Access Road

Elev. Ungraded Ground at Location Stake = 6476.0'

Elev. Graded Ground at Location Stake = 6473.9'

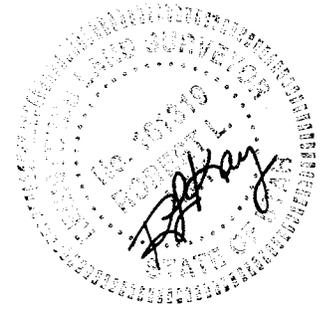
UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



PETROGLYPH OPERATING CO., INC.

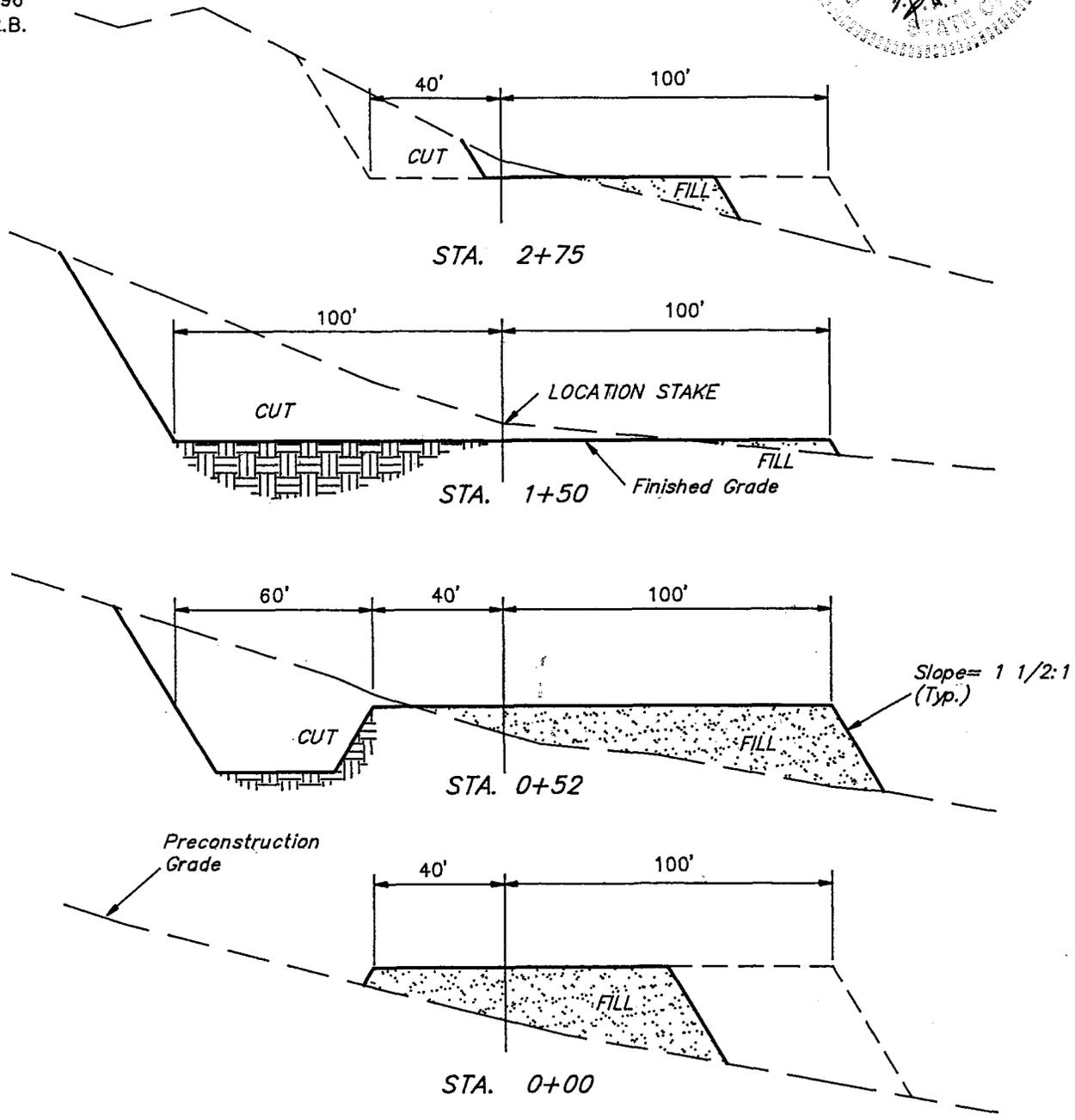
TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #29-08  
SECTION 29, T5S, R3W, U.S.B.&M.  
1880' FNL 480' FEL



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

DATE: 6-27-96  
Drawn By: D.R.B.

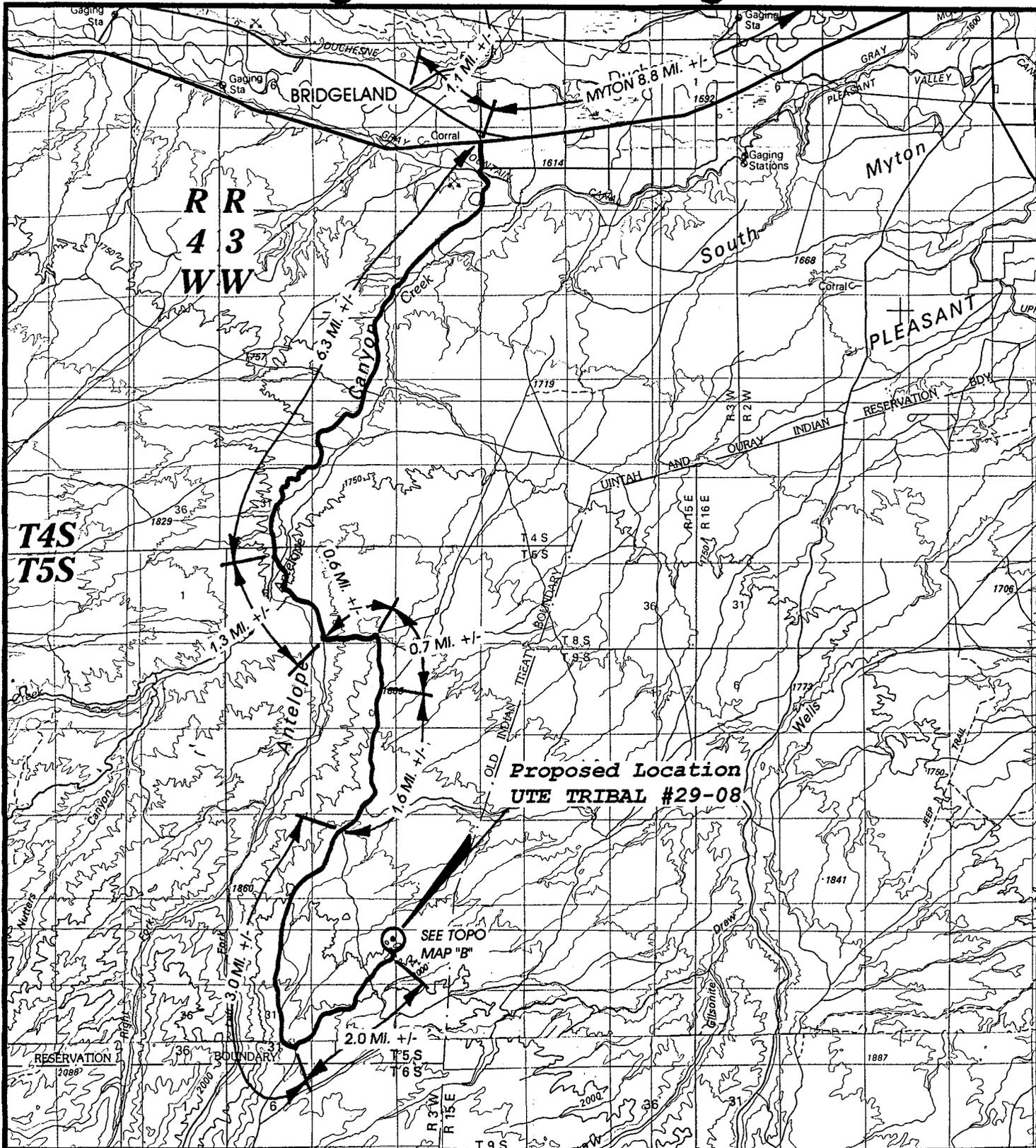


APPROXIMATE YARDAGES

(12") Topsoil Stripping = 1,670 Cu. Yds.  
Remaining Location = 6,160 Cu. Yds.  
TOTAL CUT = 7,830 CU.YDS.  
FILL = 5,190 CU.YDS.

EXCESS MATERIAL AFTER  
5% COMPACTION = 2,370 Cu. Yds.  
Topsoil & Pit Backfill  
(1/2 Pit Vol.) = 2,370 Cu. Yds.  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (801) 789-1017



**U  
E  
I  
S**

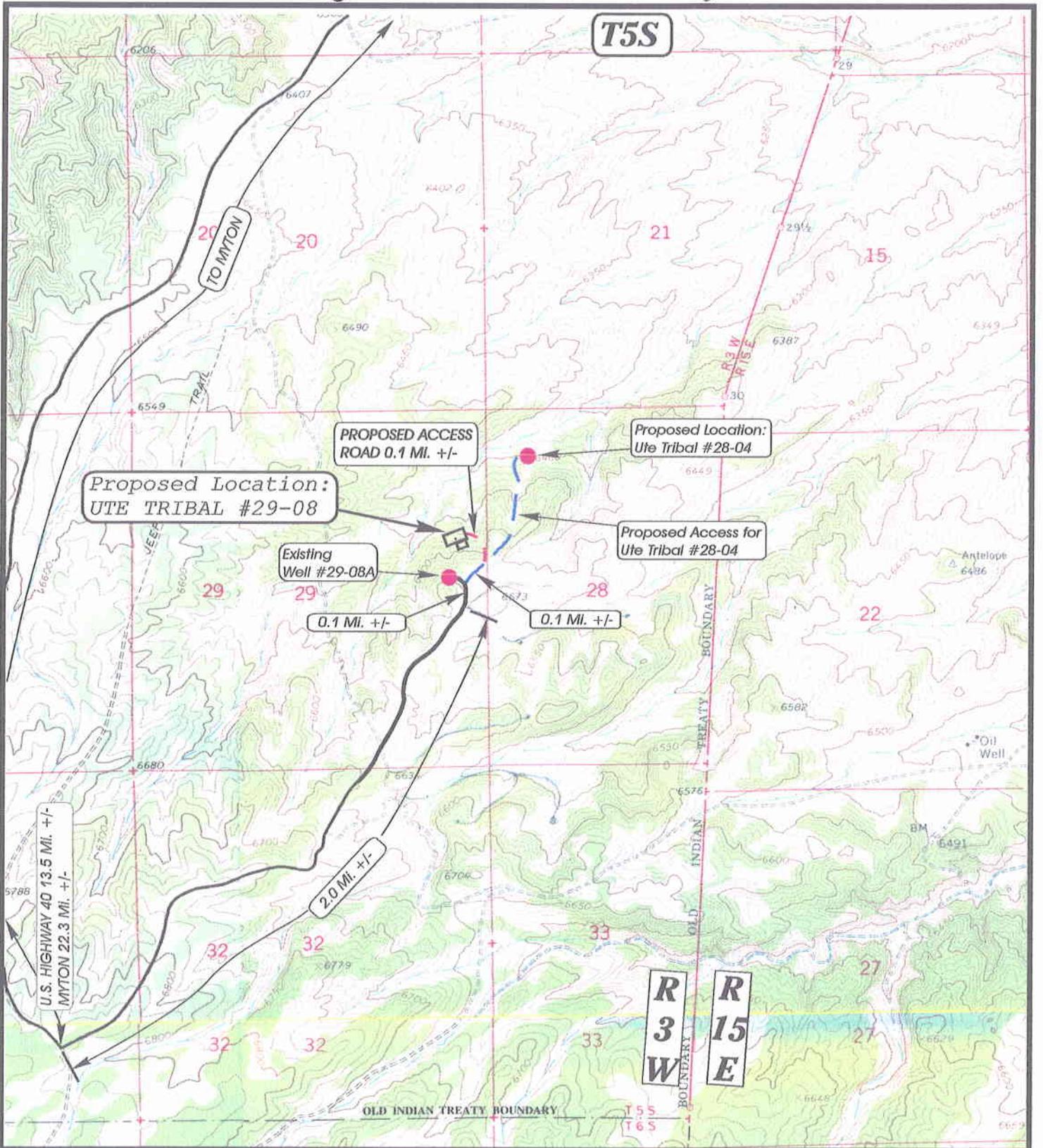
**TOPOGRAPHIC  
MAP "A"**

DATE: 6-27-96  
Drawn by: D.R.B.



**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #29-08  
SECTION 29, T5S, R3W, U.S.B.&M.  
1880' FNL 480' FEL**



**UELS**

**TOPOGRAPHIC  
MAP "B"**

DATE: 6-27-96  
Drawn by: D.COX

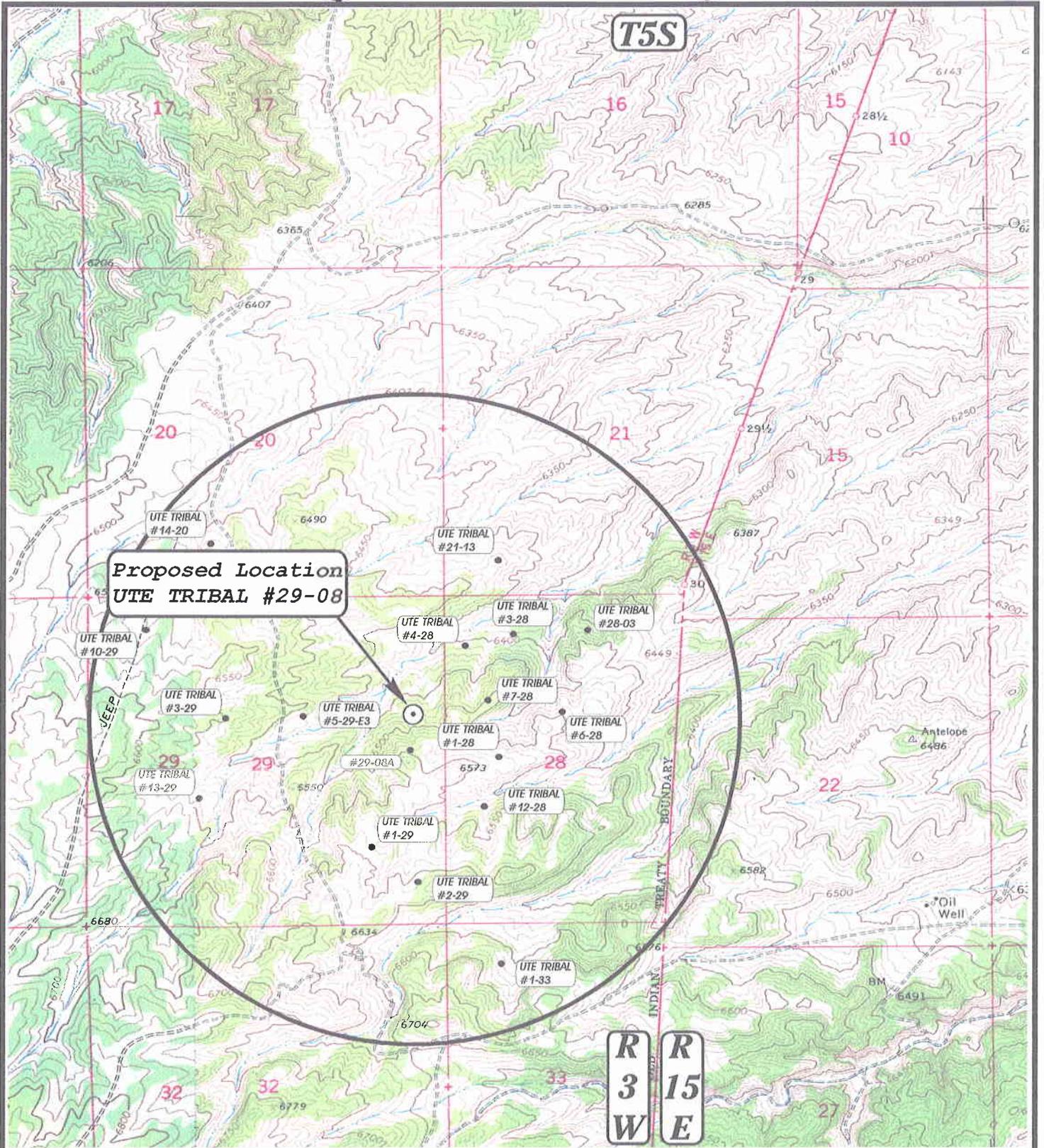
UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



SCALE: 1" = 2000'

**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #29-08  
SECTION 29, T5S, R3W, U.S.B.&M.  
1880' FNL 480' FEL



**LEGEND:**

- WELLS**
- Water Wells
  - Abandoned Wells
  - Temporarily Abandoned Wells
  - Disposal Wells
  - Drilling Wells
  - Producing Wells
  - Shut-in Wells

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



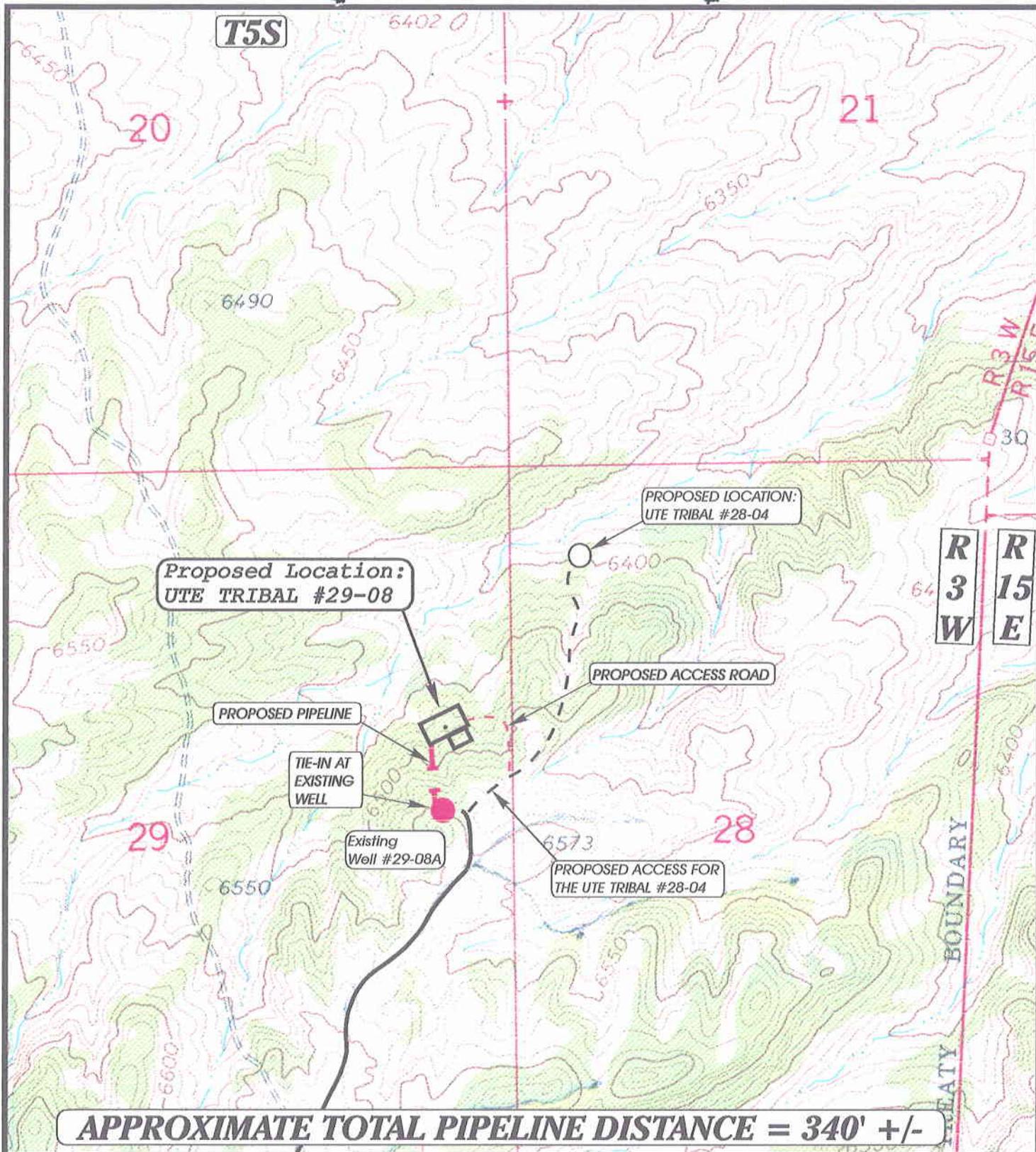
SCALE: 1" = 2000'

**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #29-08  
SECTION 29, T5S, R3W, U.S.B.&M.

**TOPOGRAPHIC  
MAP "C"**

DATE: 6-27-96 Drawn by: D.COX



TOPOGRAPHIC  
MAP "D"



----- Existing Pipeline  
 HHHHHHHH Proposed Pipeline



**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #29-08  
 SECTION 29, T5S, R3W, U.S.B.&M.

DATE: 6-27-96  
 Drawn by: D.COX

SCALE: 1" = 1000'

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/26/96

API NO. ASSIGNED: 43-013-31693

WELL NAME: UTE TRIBAL 29-08  
OPERATOR: PETROGLYPH OPERATING (N3800)

PROPOSED LOCATION:  
SENE 29 - T05S - R03W  
SURFACE: 1880-FNL-0480-FEL  
BOTTOM: 1880-FNL-0480-FEL  
DUCHESNE COUNTY  
ANTELOPE CREEK FIELD (060)

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

LEASE TYPE: IND  
LEASE NUMBER: 14-20-H62-3518

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal  State  Fee   
(Number BO 4556)

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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

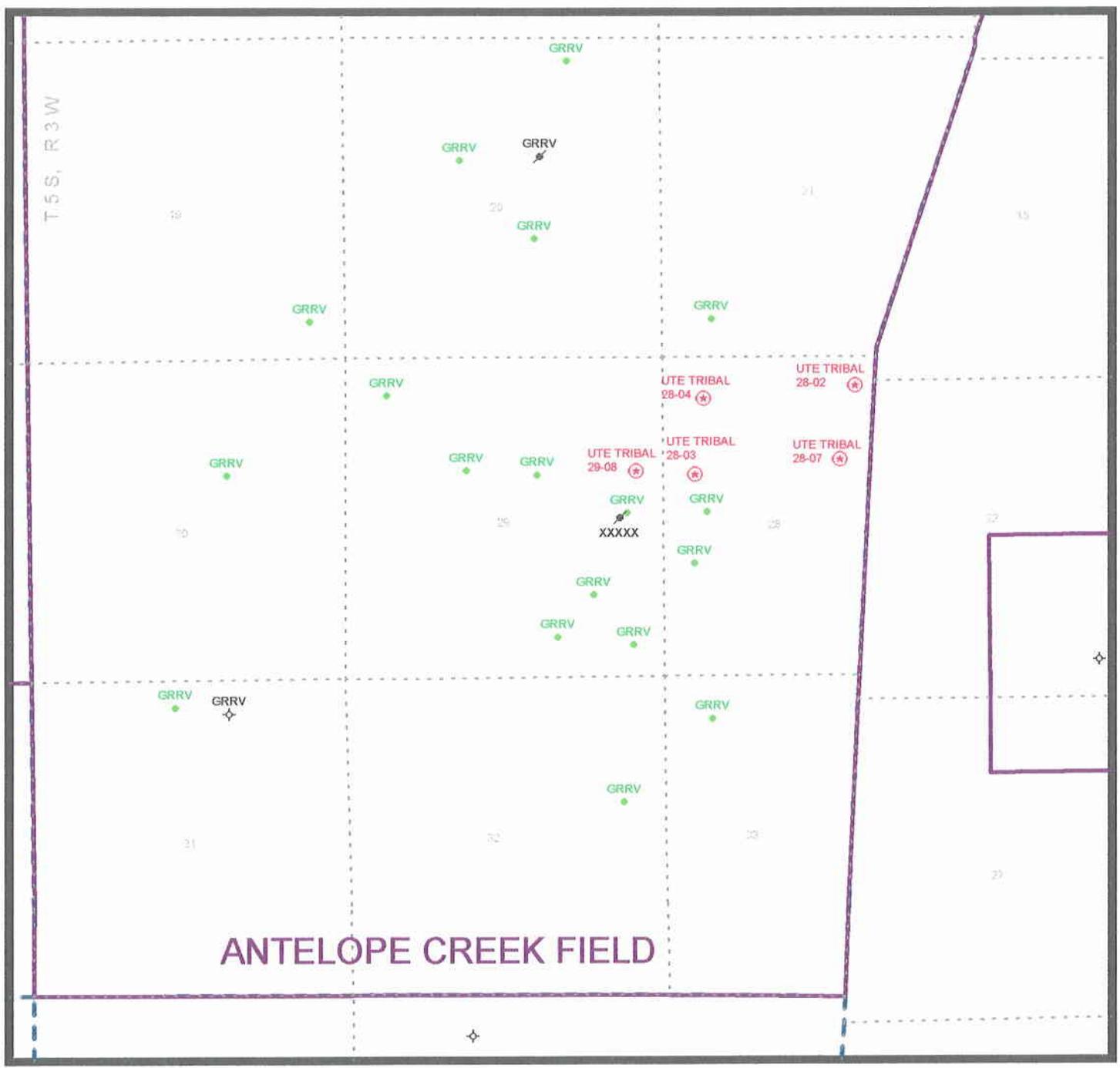
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**OPERATOR: PETROGLYPH OPERATING**  
**FIELD: ANTELOPE CREEK (060)**  
**SEC. TWP. RNG: SEC. 28 & 29, T5S, R3W**  
**COUNTY: DUCHESNE**  
**SPACING: UAC R649-3-2 & R649-3-3**



**PREPARED:**  
**DATE: 26-JULY-96**

STATE OF UTAH, DIV OF OIL, GAS & MINERALS

Operator: PETROGLYPH OPERATING	Well Name: UTE TRIBAL 29-08
Project ID: 43-013-31693	Location: SEC. 29 - T5S - R3W

Design Parameters:

Mud weight ( 8.80 ppg) : 0.457 psi/ft  
 Shut in surface pressure : 2428 psi  
 Internal gradient (burst) : 0.069 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	6,249	5.500	15.50	M-50	ST&C	6,249	4.890
	Collapse Load Strgth S.F. (psi) (psi)		Burst Load Strgth S.F. (psi) (psi)	Min Int Yield Strgth S.F. (psi)	Tension Load Strgth S.F. (kips) (kips)		
1	2857	3650	1.278	2857	4550	1.59	96.86 186 1.92 J

Prepared by : MATTHEWS, Salt Lake City, Utah  
 Date : 08-20-1996  
 Remarks :

GREEN RIVER

Minimum segment length for the 6,249 foot well is 1,500 feet.

SICP is based on the ideal gas law, a gas gravity of 0.75, and a mean gas temperature of 118°F (Surface 74°F , BHT 161°F & temp. gradient 1.400°/100 ft.)

String type: Production

The mud gradient and bottom hole pressures (for burst) are 0.457 psi/ft and 2,857 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1987 pricing model. (Version 1.07)



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

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

August 20, 1996

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

Re: Ute Tribal 29-08 Well, 1880' FNL, 480' FEL, SE NE, Sec. 29,  
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 43-013-31693.

Sincerely,

R. J. Firth  
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 29-08  
API Number: 43-013-31693  
Lease: 14-20-H62-3518  
Location: SE NE Sec. 29 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 Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews at (801)538-5334 or Mike Hebertson at (801)538-5333.

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.

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

**SUBMIT IN TRIPLICATE\***  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

**1a. TYPE OF WORK**  
 DRILL       DEEPEN       PLUG BACK

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

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

**3. ADDRESS OF OPERATOR**  
 P.O. BOX 607 ROOSEVELT, UT 84066

**4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)**  
 At surface  
 1880' FNL & 480' FEL, SE/4 NE/4  
 At proposed prod. zone

**14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\***  
 24.5 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)**      **16. NO. OF ACRES IN LEASE**      **17. NO. OF ACRES ASSIGNED TO THIS WELL**  
 480'      640      40

**18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.**      **19. PROPOSED DEPTH**      **20. ROTARY OR CABLE TOOLS**  
 6249'      ROTARY

**21. ELEVATIONS (Show whether DF, RT, GR, etc.)**      **22. APPROX. DATE WORK WILL START\***  
 6474' GRADED GROUND      AUGUST, 1996

**5. LEASE DESIGNATION AND SERIAL NO.**  
 14-20-H62-3518

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

**7. UNIT AGREEMENT NAME**  
 N/A

**8. FARM OR LEASE NAME**  
 UTE TRIBAL

**9. WELL NO.**  
 UTE TRIBAL #29-08

**10. FIELD AND POOL, OR WILDCAT**  
 ANTELOPE CREEK

**11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA**  
 SEC. 29, T5S, R3W

**12. COUNTY OR PARISH**      **13. STATE**  
 DUCHESNE      UTAH

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	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.
7 7/8	5 1/2	15.5#	150'	

**RECEIVED**  
 AUG 27 1996  
 DIV. OF OIL, GAS & MINING

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).

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

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

**RECEIVED**  
 JUL 25 1996

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 [Signature]      TITLE AGENT FOR PETROGLYPH      DATE JULY 19, 1996

(This space for Federal or State office use)  
**NOTICE OF APPROVAL**

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY [Signature]      ACTING Assistant Field Manager      DATE AUG 20 1996  
 TITLE Mineral Resources

**CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY**

44080-607-182

\*See Instructions On Reverse Side

UNITED STATES GOVERNMENT  
memorandum

AUG 12 1996

DATE:

REPLY TO  
ATTN OF:

Superintendent, Uintah & Ouray Agency

RECEIVED

SUBJECT:

Concurrence Letter for Petroglyph Operating Co. Inc.  
Ute Tribal 28-04, SW /4 Sec. 21, NW/4 Sec. 28, NE/4 Sec. 29 T5S, R 3W, USB&M  
Ute Tribal 29-08, NE/4, Sec. 29, T5S, R3W, USB&M

AUG 13 1996

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 08-07-96, 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  
of attainment  
YES  NO  Other (if necessary)

COMMENTS: The Ute Tribe Energy & Minerals 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.
2. Petroglyph Operating Company will assure the Ute Tribe that any/all contractors/sub-contractors have acquired a Tribal Business License and have an Access Permit prior to construction.
3. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.
4. All recommendations of the Bureau of Indian Affairs combined site specific Environmental Analysis report shall be strictly adhered, during and after construction.
5. All personnel should refrain from collecting artifacts and from disturbing any significant cultural remains from subsurface deposits be exposed or identified during construction.
6. The personnel from the Ute Tribe Energy & Minerals Department should be consulted should cultural remains from subsurface deposits be exposed or identified during construction.
7. Upon completion of Application for Permit to Drill and Right-of-way, the Ute Tribe Energy & Minerals Resource Department will be notified by Petroglyph Operating Company so that a Tribal Technician can verify Affidavit of Completions.

*Charles H. Cameron*

EA dated 8/7/96 attached.

**SITE SPECIFIC  
ENVIRONMENTAL ANALYSIS**

RECEIVED *J. O.*

AUG 13 1996 *29-09*

**1.0 PROPOSED ACTION**

Petroglyph Operating Co., Inc. is proposing to drill oil well #~~28~~<sup>29</sup> and construct 340 feet of steel surface production pipeline, and 0.1 mile of access road..

**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 7-1-96
- C. Well number-29-08
- D. Right-of-way-Pipeline R\W approx. 340 feet, access road 0.1 miles.
- E. Site location- SENE, Section 29, T5S, R3W, USB&M.

**4.0 SITE SPECIFIC SURVEY**

A. SITE DESCRIPTION

- 1. Elevation (feet) 6476
- 2. Annual precipitation (inches)- 12-14
- 3. Topography- rolling hills
- 4. Soil- The soil texture is (0 to 6") gravely shale loam with moderate permeability.

B. VEGETATION

- 1. Habitat type is upland pinion juniper.
- 2. Percent Ground Cover- estimated to be 40%.
- 3. Vegetation consists of approximately 13% grasses, 20% shrubs, 5% forbs, trees 62%. The main variety of grasses are squirrel tail, Indian ricegrass, poa, needle & thread, bluebunch wheat, and blue grama. Forbs are astragalus, mustard, lambs quarter, globemallow, buck wheat, & annuals. Shrubs consist of black sagebrush, prickly pear, shadscale. Trees are pinion pine, and Utah juniper.

#### 4.3 CULTURAL RESOURCES

##### A. CULTURAL SURVEY

Cultural Resource Surveys were performed by James A. Truesdale, an Independent Archaeologist on June 3, 1996.

#### 5.0 ENVIRONMENTAL IMPACTS

##### A. SURFACE ALTERATIONS

	<u>acres</u>
1. Access road	0.36
2. Well site	1.26
3. Pipeline right-of-way	0.23
4. Total area disturbed	1.85

##### B. VEGETATION/LANDSCAPE

1. Production loss (AUM's)/year: 0.12
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 0.12 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 a nest approximately 2,000 feet north of the wellsite in Section 20 which has an active nesting history.

## 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. The pipeline will be constructed to lay on the soil surface, and the right-of-way 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 right-of-way.

Where 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. 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.
4. 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.
5. Although the access roads have a 30 foot right-of-way the bladed area of the road will be limited to

21 feet in all areas except where deep cuts and fills are required, sharp turns are required, or at the intersections with other roads.

C. WILDLIFE/VEGETATION/THREATENED & ENDANGERED SPECIES

1. Because the wellsite is located approximately 2,000 feet from the active Ferruginous hawk nest this wellsite and access road shall be constructed and the well drilled between the dates of August 15, and February 15.

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, 7-1-96, 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.

7-1-96  
Date

[Signature]  
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).

7/1/90  
Date

  
\_\_\_\_\_  
Superintendent,  
Uintah and Ouray Agency

**14.0 CONSULTATION**

**A. REPRESENTATIVES/ORGANIZATION**

Dale Hanberg- BIA  
Ed Trotter-Petroglyphs  
Lonnie Nephi-UTEM

B:\EAPetro.290

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company Inc.

Well Name & Number: Ute Tribal 29-08

API Number: 43-013-31693

Lease Number: 14-20-H62-3518

Location: SENE Sec. 29 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 base of the usable water zone, identified at 989 ft. 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  $\pm$  789 ft. 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 Kencka (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 USE PLAN OF OPERATION**  
Conditions of Approval (COA's)

1. The Ute Tribe Energy and Minerals Department is to be notified 48 hours prior to construction.
2. Petroglyph Operating Company will assure the Ute Tribe that any/all contractors/subcontractors have acquired a Tribal Business License and have an Access Permit prior to construction.
3. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.
4. All recommendations of the Bureau of Indian Affairs, combined site specific Environmental Analysis (EA) report shall be strictly adhered, during and after construction.
5. All personnel should refrain from collecting artifacts and from disturbing any significant cultural remains from subsurface deposits that are exposed or identified during construction.
6. The personnel from the Ute Tribe Energy & Minerals Department should be consulted, should cultural remains from subsurface deposits be exposed during construction work.
7. Upon completion of Application for Permit to Drill and Right-of-way, the Ute Tribe Energy & Minerals Resource Department will be notified by Petroglyph Operating Company so that a Tribal Technician can verify Affidavit of Completions.

**Mitigation stipulations** from the combined site specific Environmental Analysis.

1. Before the site is abandoned the company will be required to restore the well pad and access road to near their original state. The disturbed area will be reseeded with desirable perennial vegetation.
2. Noxious weeds will be controlled on all well sites and rights-of-way. If noxious weeds spread from the well sites or rights-of-way onto adjoining land, the company will also be responsible for their control.
3. The pipeline will be constructed to lay on the soil surface, and the right-of-way 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 right-of-way.

Where 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

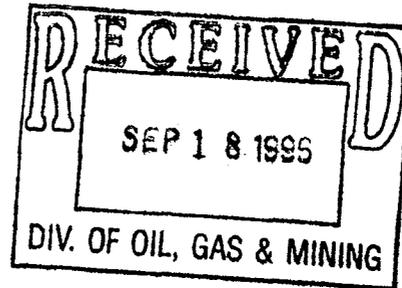
pipeline right-of-way will not be used as an access road.

4. An open drilling system shall 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.
5. 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, well sites or other areas will not be allowed.
6. Although the access roads have a 30 foot right-of-way the bladed area of the road will be limited to 21 feet in all areas except where deep cuts and fills are required, sharp turns are required, or at the intersections with other roads.
7. Because the wellsite is located approximately 2,000 feet from the active ferruginous hawk nest this wellsite and access road shall be constructed and the well drilled between August 15 and February 15.

VIA UPS

September 13, 1996

Vicky Dyson  
State of Utah  
Division of Oil, Gas & Mining  
1594 W. North Temple, Ste. 1210  
Salt Lake City, UT 84114



Ms. Dyson:

Enclosed please find the logs listed below for the wells located in Duchesne County, Utah.

<u>Well Name</u>	<u>Log</u>
Ute Tribal 04-01A	CNL, AIT
Ute Tribal 04-02A	AIT
Ute Tribal 04-06B	AIT
Ute Tribal 04-09	AIT
Ute Tribal 08-11	CNL, AIT
Ute Tribal 17-05	CNL, AIT
Ute Tribal 28-02	CNL, AIT
Ute Tribal 28-03	CNL, AIT
Ute Tribal 28-04	CNL, AIT
Ute Tribal 29-08	CNL, AIT

*TOSS, R03W, 29 43 013 31693*

**CONFIDENTIAL**

Pursuant to your letter requesting a copy of an FMI log ran on the Ute Tribal 04-02, I am unable to submit a copy for your files since only one copy is ran due to the costly expense. If you have any questions, please do not hesitate to contact me at (316) 665-8500.

Sincerely,

Angela R. Ely  
Administrative Operations Manager

ARE/ms

Enclosures



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**RECEIVED**  
OCT 2 8 1996  
DIV. OF OIL, GAS & MINING

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Petroglyph Operating Company, Inc.

3. ADDRESS OF OPERATOR  
P.O. Box 1839 Hutchinson, KS 67504-1839

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface 1880' FNL & 480' FEL, SE NE  
 At top prod. interval reported below  
 At total depth

14. PERMIT NO. 43-013-31693 DATE ISSUED \_\_\_\_\_

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-H62-3518  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Ute Indian Tribe  
 7. UNIT AGREEMENT NAME  
14-20-H62-4650  
 8. FARM OR LEASE NAME  
Ute Tribal  
 9. WELL NO.  
29-08  
 10. FIELD AND POOL, OR WILDCAT  
Antelope Creek  
 11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec 29-T5S-R3W

12. COUNTY OR PARISH Duchesne 13. STATE Utah

15. DATE SPUDDED 8-21-96 16. DATE T.D. REACHED 9-1-96 17. DATE COMPL. (Ready to prod.) 9-17-96 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 6474 GL 19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD 6249' RTD 21. PLUG BACK T.D., MD & TVD 6087' 22. IF MULTIPLE COMPL. HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Green River 25. WAS DIRECTIONAL SURVEY MADE \_\_\_\_\_

26. TYPE ELECTRIC AND OTHER LOGS RUN  
CNL, AIT 9-18-96 27. WAS WELL COBED \_\_\_\_\_

**CONFIDENTIAL**

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/7"	24#	264	12 1/4"	150 sx Class G	
5 1/2"	15.5#	6140	7 7/8"	60 sx hilift, 400 sx 10-0	RFC

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5551'	

31. PERFORATION RECORD (Interval, size and number)

5525-36	(45 shots)
5234-38	(17 shots)
5246-50	(17 shots)
5100-04	(17 shots)
4955-61	(25 shots)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5525-36	7300 gal fluid, 30800# prop
5234-50	4200 gal fluid, 16430# prop
5100-04	4400 gal fluid, 13400# prop
4955-61	4300 gal fluid, 13600# prop

33.\* PRODUCTION

DATE FIRST PRODUCTION 10-4-96 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) 2 1/2" x 1 1/2" x 16 40 ring pump WELL STATUS (Producing or shut-in) producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-6-96	24			53	22	10	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
	1300					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Dave Schreiner

35. LIST OF ATTACHMENTS

**CONFIDENTIAL**

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

SIGNED Angela K. Ely TITLE Administrative Operations Manager DATE 10-25-96

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

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
X Marker	4434					
Douglas Creek	4576					
B Limestone	4940					
Castle Peak	5506					
Basal Carbonate	5936					

Ute Tribal 29-08  
3160-4 Completion Report continued  
Page 2

- |     |         |                             |
|-----|---------|-----------------------------|
| 31. | 4768-72 | (17 shots)                  |
|     | 4630-34 | (17 shots)                  |
| 32. | 4768-72 | 4100 gal fluid, 13500# prop |
|     | 4630-34 | 4200 gal fluid, 18500# prop |

CONFIDENTIAL

**EQUIPMENT INVENTORY**  
**UTAH DIVISION OF OIL, GAS AND MINING**  
**STATE OF UTAH**

Operator: PETROGLYPH OPERATING CO State: \_\_\_\_\_ Federal: \_\_\_\_\_ Indian: \_\_\_\_\_ Fee: \_\_\_\_\_

Well Name: UTE TRIBAL #29-08 API Number: 43-013-31693

Section: 29 Township: 5S Range: 3W County: Duchesne Field: ANTELOPE CREEK

Well Status: POW Well Type: Oil: YES Gas: \_\_\_\_\_

**PRODUCTION LEASE EQUIPMENT: (NUMBER)**

Boiler(s): N Compressor(s): N Separator(s): N Dehydrator(s): N  
Shed(s): N Line Heater(s): N Heated Separator(s): N VRU: N  
Heater Treater(s): N

**PUMPS:**

Triplex: \_\_\_\_\_ Chemical: \_\_\_\_\_ Centrifugal: (1)

**LIFT METHOD:**

Pumpjack: YES Hydraulic: \_\_\_\_\_ Submersible: \_\_\_\_\_ Flowing: \_\_\_\_\_

**GAS EQUIPMENT: (NUMBER)**

Purchase Meter: NO Sales Meter: NO

**TANKS:**

	NUMBER	SIZE
Oil Storage Tank(s):	<u>N/A</u>	<u>0000</u>
Water Tank(s):	<u>N/A</u>	<u>0000</u>
Power Water Tanks:	<u>N/A</u>	<u>0000</u>
Condensate Tank(s):	<u>0</u>	<u>0000</u>
Propane Tank:	<u>0</u>	<u>0000</u>

**Central Battery Location: (IF APPLICABLE)**

Qtr/Qtr: NE/SE Section: 29 Township: 5S Range: 3W

REMARKS: CENTRIFUGAL PUMP IN AS HEAT TRACE PUMP FOR FLOWLINE. LINE HEATER IS LOCATED OFF LEASE. RUNNING ON CASING GAS FROM COMINGLED LOCATION.

Inspector: DENNIS L INGRAM Date: 12/9/96

PEYROGLYPH OPERATING CO.  
UTE TRIBAL #29-08  
SE/NE SEC 29; T5; R3W  
POW

INDIAN  
43013-31693

↑ SOUTH

SOIL STOCKPILE

COMINGLED TO  
UT #29-09

FLOW LINE

Pump  
Jack

PIT  
RECLAMATION  
HERE

○ WELLHEAD

ENTRANCE

12/9/96

D. L. J. [Signature]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

MAR 12 2007

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Steve Wall, District Manager  
Petroglyph Energy, Inc.  
4116 West 3000 So. Ioka Lane  
Roosevelt, UT 84066

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

43-013-31693

55 3W 29

RE: Additional Well to Antelope Creek Area Permit  
**UIC Permit No. UT20736-00000**  
**Well ID: UT20736-07123**  
Ute Tribal No. 29-08  
Duchesne County, Utah

Dear Mr. Wall:

The Petroglyph Operating Company, Inc. (Petroglyph) request to convert the former Green River Formation oil well Ute Tribal No. 29-08 to an enhanced recovery injection well in the Antelope Creek Waterflood project is hereby authorized by the Environmental Protection Agency (EPA) under the terms and conditions of the Authorization For Additional Well.

The addition of the proposed injection well, within the exterior boundary of the Uintah & Ouray Indian Reservation, is being made under the authority of 40 CFR §144.33 (c) and terms of the Antelope Creek Waterflood UIC Area Permit No. UT20736-00000. Unless specifically mentioned in the enclosed Authorization For Additional Well, the Ute Tribal No. 29-08 is subject to all terms and conditions of the UIC Area Permit UT20736-00000 as modified.

Please be aware that Petroglyph does not have authorization to begin injection operations into the well until all Prior to Commencing Injection requirements have been submitted and evaluated by the EPA, and Petroglyph has received written authorization from the Director to begin injection.

Prior to receiving an initial authorization to inject for a limited timeframe, the EPA requires that Petroglyph submit for review and approval the following: (1) the results of a **Part I (Internal) mechanical integrity test (MIT)**, (2) a **pore pressure** calculation of the injection interval, (3) a completed **EPA Form No. 7520-12 Well Rework Record**. A **Part II (External) mechanical integrity test** will be reviewed before a final authorization to inject approval is issued.

The initial Maximum Allowable Injection Pressure (MAIP) for the Ute Tribal No. 29-08 was determined to be 1690 psig. UIC Area Permit UT20736-00000 also provides the opportunity for the permittee to request a change in the MAIP based upon results of a step rate test that demonstrates that the formation breakdown pressure will not be exceeded.

If you have any questions, please call Ms. Linda Bowling at (303) 312-6254 or 1.800.227.8917 (Ext. 6254). Please submit the required data to **ATTENTION: Linda Bowling**, at the letterhead address, citing **MAIL CODE: 8P-W-GW** very prominently.

Sincerely,



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

encl: Authorization For Conversion of An Additional Well  
EPA Form No. 7520-12 (Well Rework Record)

**cc w/enclosures:**

Chester Mills, Superintendent  
BIA - Uintah & Ouray Indian Agency  
P.O. Box 130  
Fort Duchesne, UT 84026

Fluid Minerals Engineering Office  
U.S. Bureau of Land Management-  
Vernal Field Office  
170 South 500 East  
Vernal, Utah 84078

Frances Poowegup, Councilwoman  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Ft. Duchesne, UT 84026

Gilbert Hunt  
Associate Director  
Utah Division of Oil, Gas, and Mining  
1594 West North Temple - Suite 1220  
Salt Lake City, UT 84114-5801

Irene Cuch, Councilwoman  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Ft. Duchesne, UT 84026

Kenneth Smith  
Executive Vice President and Chief  
Operating Officer  
Petroglyph Energy, Inc.  
555 S. Cole Blvd  
Boise, ID 83709

Maxine Natchees, Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Fort Duchesne, UT 84026

Lynn Becker, Director  
Energy and Minerals Department  
Ute Indian Tribe  
P.O. Box 70  
Ft. Duchesne, UT 84026

Ronald Groves, Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Ft. Duchesne, UT 84026

Richard Jenks, Jr., Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Ft. Duchesne, UT 84026

T. Smiley Arrowchis, Vice Chairman  
Uintah & Ouray Business Committee  
Ute Indian Tribe  
P.O. Box 190  
Ft. Duchesne, UT 84026

Shaun Chapoose, Director  
Land Use Department  
Ute Indian Tribe  
P.O. Box 460  
Fort Duchesne, UT 84026



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

**AUTHORIZATION FOR ADDITIONAL WELL**

**UIC Area Permit No: UT20736-00000**

The Antelope Creek Waterflood Final UIC Area Permit No. UT20736-00000, effective July 12, 1994, authorizes injection for the purpose of enhanced oil recovery into multiple lenticular sand units which are distributed throughout the lower portion of the Green River Formation. On January 23, 2006, the permittee provided notice to the Director concerning the following additional enhanced recovery injection well:

Well Name: Ute Tribal 29-08  
EPA Well ID Number: UT20736-07123  
Location: 480 ft FEL & 1880 ft FNL  
*SENE* ~~SWNE~~ Sec. 29 - T5S - R3W  
Duchesne County, Utah

Pursuant to 40 CFR §144.33, Area UIC Permit No. UT20736-00000 authorizes the permittee to construct and operate, convert, or plug and abandon additional enhanced recovery injection wells within the area permit. This well was determined to satisfy additional well criteria required by the permit.

This well is subject to all provisions of UIC Area Permit No. UT20736-00000, as modified and as specified in the Well Specific Requirements detailed below. This Authorization shall expire one year after the Effective Date unless the permittee has converted the well to injection or submits a written request to extend this Authorization prior to the expiration date.

This Authorization is effective upon signature.

Date: MAR 12 2007

**Stephen S. Tuber**  
\*Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

*\* The person holding this title is referred to as the Director throughout the Permit and Authorization*

## WELL-SPECIFIC REQUIREMENTS

Well Name: Ute Tribal 29-08  
EPA Well ID Number: UT20736-07123

**Prior to commencing injection operations, the permittee shall submit the following information and receive written Authority to Inject from the Director:**

1. a successful Part I (Internal) Mechanical Integrity Test (MIT);
2. pore pressure calculation of the proposed injection zone; and
3. completed Well Rework Record EPA Form No. 7520-12 and schematic diagram.

**Approved Injection Zone:** Injection is approved between the base of the Green River A Lime Marker, at approximately 3932 ft (KB)<sub>CBL</sub>, to the top of the Basal Carbonate, at approximately 5936 ft (KB)<sub>CBL</sub>.

**Maximum Allowable Injection Pressure (MAIP):** The initial MAIP is 1690 psig, based on the following calculation:

$$\begin{aligned} \text{MAIP} &= [\text{FG} - (0.433)(\text{SG})] * \text{D}, \text{ where} \\ \text{FG} &= 0.80 \text{ psi/ft} \quad \text{SG} = 1.009 \quad \text{D} = \underline{4666 \text{ ft}} \text{ (top perforation depth KB)} \\ \text{MAIP} &= \underline{1690 \text{ psig}} \end{aligned}$$

UIC Area Permit No. UT20736-00000 also provides the opportunity for the permittee to request a change of the MAIP based upon results of a step rate test that demonstrates the formation breakdown pressure will not be exceeded.

**Well Construction and Corrective Action:** *The following Corrective Action is required.*

The cement bond log did not provide evidence that an effective barrier exist to prevent significant upward fluid movement through vertical channels adjacent to the injection well bore. Therefore the operator shall demonstrate Part II Mechanical Integrity within one hundred eighty (180) days after commencing injection and at least once every five (5) years thereafter using a temperature survey, noise log, oxygen activation log, or a radioactive tracer survey under certain circumstances.

The permit limits the injection zone to “the gross interval **within the Green River Formation**”, which is between the approximate depths of 3932 ft and 5936 ft (KB)<sub>CBL</sub>. Documentation for both procedures shall be submitted to the Director for review before authorization to inject will be permitted.

**Tubing:** *No Corrective Action is required.*

2-3/8" or similar size injection tubing is approved; the packer shall be set at a depth no more than 100 ft above the top perforation.

**Corrective Action for Wells in Area of Review: *No Corrective Action is required.***

The following wells that penetrate the confining zone are within or proximate to a 1/4 mile radius around the Ute Tribal No. 29-08. This well was evaluated to determine if any corrective action is necessary to prevent fluid movement into USDWs:

Well: Ute Tribal No. 28-05A	Location: Sec. 28 - T5S - R3W
Well: Ute Tribal No. 29-01	Location: Sec. 29 - T5S - R3W
Well: Ute Tribal No. 29-08A	Location: Sec. 29 - T5S - R3W
Well: Ute Tribal No. 29-08B	Location: Sec. 29 - T5S - R3W

**Demonstration of Mechanical Integrity: *The following Corrective Action is required.***

A successful demonstration of Part I (Internal) Mechanical Integrity using a standard Casing-Tubing pressure test is required prior to injection and at least once every five (5) years thereafter. EPA reviewed the cement bond log and was unable to determine if the cement would provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR 146.8 (a)(2). Therefore, further demonstration of Part II (External) Mechanical Integrity is required within one-hundred and eighty (180) days after injection begins and every five (5) years thereafter.

**Demonstration of Financial Responsibility: *No Corrective Action is required.***

The applicant has demonstrated financial responsibility in the amount of \$15,000 via a Surety Bond that has been reviewed and approved by the EPA.

**Plugging and Abandonment: *The following Action is required.***

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging after each plug is set. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation (located at 4666 ft (KB)) with a minimum 20 ft cement plug on top of the CIBP.
- PLUG NO. 2: Set a minimum 200 ft cement plug inside and backside (unless pre-existing backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the Trona Zone and the Mahogany Shale, between approximately 2707 ft (KB) to 2907 ft (KB).

PLUG NO. 3: Set a minimum 200 ft cement plug on the inside and backside (unless pre-existing backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the Green River, between approximately 1522 ft (KB) to 1722 ft (KB).

PLUG NO. 4: Set a minimum 200 ft cement plug on the inside and backside (unless pre-existing backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the USDW, between approximately 1131 ft (KB) and 1331 ft (KB).

PLUG NO. 5: Set a minimum 50 ft cement plug on the backside of the 5-1/2" casing, across the surface casing shoe at 283 ft (KB) (unless pre-existing backside cement precludes cement-squeezing this interval.)

PLUG NO. 6: Set a cement plug inside of the 5-1/2" casing, from at least 258 ft (KB) to 308 ft (KB).

PLUG NO. 7: Set a cement plug on the backside of the 5-1/2" casing, from surface to a depth of at least 50 ft.

PLUG NO. 8: Set a cement plug inside of the 5-1/2" casing from surface to a depth of at least 50 ft.

Cut off surface and 5-1/2" casing at least 4 ft below ground level and set P&A marker; submit Sundry Notices and all necessary data as required by the EPA and other regulatory agencies.

**Reporting of Noncompliance:**

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than thirty (30) days following each schedule date.
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

**Twenty-Four Hour Noncompliance Reporting:**

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director, or by contacting the Region 8 Emergency Operations Center at 303.293.1788 if calling from outside EPA Region 8. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

**Oil Spill and Chemical Release Reporting:**

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the **National Response Center (NRC) 1.800.424.8802 or 202.267.2675**, or through the NRC website at **<http://www.nrc.uscg.mil/index.htm>**.

**Other Noncompliance:**

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted.

**Other Information:**

Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

## WELL-SPECIFIC CONSIDERATIONS

Well Name: Ute Tribal 29-08  
EPA Well ID Number: UT20736-07123

**Underground Sources of Drinking Water (USDWs):** USDWs in the Antelope Creek Waterflood area generally may occur within the Uinta Formation, which extends from the surface to the top of the Green River Formation at approximately 1622 ft below ground surface. According to "*Base of Moderately Saline Ground Water in the Uinta Basin, Utah, State of Utah Technical Publication No. 92,*" the base of moderately saline ground water may be found at approximately 173 ft (GL) below ground surface at this well location. Based on correlation to the Ute Tribal 04-03 Type Log, the base of the USDW was found to be 1231 ft (KB) in the Ute Tribal 29-08 well.

**Confining Zone:** The Confining Zone at this location is approximately 201 ft of interbedded limestone and shale between the depths of 3731 ft to 3932 ft (KB) which directly overlies the Injection Zone, based on correlation to the Antelope Creek Ute Tribal 04-03 well Type Log. Additional impermeable lacustrine shale beds above the Confining Zone provide for further protection for any overlying USDW.

**Injection Zone:** The Injection Zone at this well location is an approximately 2004 ft section of multiple lenticular sand units interbedded with shale, marlstone and limestone from the base of the Confining Zone at 3932 ft (KB) to the top of the Basal Carbonate Formation at 5936 ft (KB), based on correlation to the Ute Tribal 04-03 well Type Log.

**Well Construction:** The cased hole cement log, shows the top of continuous casing cement at approximately 2808 ft and shows variable quality of the downhole cement. Therefore, EPA will require demonstration of Part II (External) Mechanical Integrity through the operation life of the well, and has amended the plugging and abandonment plan to include a cement squeeze plug outside of the casing across the base of USDW's at 1231 ft (KB).

**Surface Casing:** 8-5/8" casing is set at 264 ft (KB) in a 12-1/4" hole, using 150 sacks cement circulated to the surface.

**Longstring Casing:** 5-1/2" casing is set at 6140 ft (KB) in a 7-7/8" 6249 ft Total Depth hole with a plugged back total depth (PBTD) of 6087 ft, cemented with 60 sacks cement.

**Top of Cement:** 2808 ft (KB) *cbl*

**Perforations:** top perforation: **4666 ft** (KB)      Bottom perforation: **5496 ft** (KB)

**Wells in Area of Review (AOR):** Construction and cementing records, including cement bond logs (CBL) as available, for one well in the 1/4 mile AOR that penetrated the confining zone was reviewed and found adequate to prevent fluid movement out of the injection zone and into USDWs.

Well: Ute Tribal No. 28-05A	Casing Cement top: 3230 ft (KB) <sub>CBL</sub>
Well: Ute Tribal No. 29-01	Casing Cement top: 1696 ft (KB) <sub>CBL</sub>
Well: Ute Tribal No. 29-08A	Casing Cement top: 630 ft (KB) <sub>CBL</sub>
Well: Ute Tribal No. 29-08B	Casing Cement top: surface – temporarily abandoned well (completion report)



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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>142H623518</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>Ute Indian Tribe</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Injection conversion</u>		7. UNIT or CA AGREEMENT NAME: <b>1420H624650</b>
2. NAME OF OPERATOR: <b>Petroglyph Operating Company, Inc.</b>		8. WELL NAME and NUMBER: <b>Ute Tribal 29-08</b>
3. ADDRESS OF OPERATOR: P. O. Box 607	Roosevelt	9. API NUMBER: <b>4301331693</b>
	UT 84066	10. FIELD AND POOL, OR WILDCAT: <b>Antelope Creek</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>480' FEL and 1880' FNL</b>		COUNTY: <b>Duchesne</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWNE 29 T5S R3W</b>		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>3/13/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

This sundry is serving notice that Petroglyph Operating Company, Inc. (POCI) plans to convert the Ute Tribal 29-08 to an injection well from a producing well. This work is being performed under our area UIC permit number UT 20736-00000. POCI has obtained approval to perform the conversion on the Ute Tribal 29-08 from the EPA. After the conversion on the Ute Tribal 29-08 is complete, POCI will submit the necessary information to the EPA to obtain approval to regain injection operations.

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

NAME (PLEASE PRINT) <u>Steve Wall</u>	TITLE <u>Manager</u>
SIGNATURE <u><i>Steve Wall</i></u>	DATE <u>3/13/2007</u>

(This space for State use only)

**RECEIVED**  
**MAR 15 2007**

DIV. OF OIL, GAS & MINING

(5/2000)

(See Instructions on Reverse Side)

(5/2000)

(See Instructions on Reverse Side)

DIV. OF OIL, GAS & MINING

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>1420H623518</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>Ute Indian Tribe</b>
		7. UNIT or CA AGREEMENT NAME: <b>1420H624650</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Injection well</u>	8. WELL NAME and NUMBER: <b>Ute Tribal 29-08</b>	
2. NAME OF OPERATOR: <b>Petroglyph Operating Company, Inc.</b>		9. API NUMBER: <b>4301331693</b>
3. ADDRESS OF OPERATOR: P. O. Box 607	CITY <b>Roosevelt</b> STATE <b>UT</b> ZIP <b>84066</b>	PHONE NUMBER:
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>480' FEL, 1880'FNL</b>		10. FIELD AND POOL, OR WILDCAT: <b>Antelope Creek</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWNE 29 5S 3W</b>		COUNTY: <b>Duchesne</b>
		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: <b>3/16/2007</b>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

On March 16 2007 this well was converted to a water injection well to support the ongoing secondary waterflood currently active in Antelope Creek. The rods and tubing have been pulled from this well. The injection string consists of 2 3/8". 4.7# J55 EUE tubing. The packer is set at 4603' +/- KB. Packer fluid has been circulated in the casing and a successful MIT conducted. Well was converted as is with no changes.

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

NAME (PLEASE PRINT) <u>Steve Wall</u>	TITLE <u>Manager</u>
SIGNATURE <u><i>Steve Wall</i></u>	DATE <u>3/23/2007</u>

(This space for State use only)

**RECEIVED  
MAR 26 2007**

Wonnata

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Injection well</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623518
2. NAME OF OPERATOR: Petroglyph Operating Company, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe
3. ADDRESS OF OPERATOR: P. O. Box 607 CITY Roosevelt STATE UT ZIP 84066		7. UNIT or CA AGREEMENT NAME: 1420H624650
4. LOCATION OF WELL FOOTAGES AT SURFACE: 480' FEL, 1880'FNL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNE 29 5S 3W		8. WELL NAME and NUMBER: Ute Tribal 29-08
PHONE NUMBER:		9. API NUMBER: 4301331693
COUNTY: Duchesne		10. FIELD AND POOL, OR WILDCAT: Antelope Creek
STATE: UTAH		

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 3/16/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

On March 16 2007 this well was converted to a water injection well to support the ongoing secondary waterflood currently active in Antelope Creek. The rods and tubing have been pulled from this well. The injection string consists of 2 3/8" 4.7# J55 EUE tubing. The packer is set at 4603' +/- KB. Packer fluid has been circulated in the casing and a successful MIT conducted. Well was converted as is with no changes.

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

NAME (PLEASE PRINT) <u>Steve Wall</u>	TITLE <u>Manager</u>
SIGNATURE <u>Steve Wall</u>	DATE <u>3/23/2007</u>

(This space for State use only)

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>1420H623518</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>Ute Indian Tribe</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>		7. UNIT or CA AGREEMENT NAME: <b>1420H62450</b>
2. NAME OF OPERATOR: <b>Petroglyph Operating Company, Inc.</b>		8. WELL NAME and NUMBER: <b>Ute Tribal 29-08</b>
3. ADDRESS OF OPERATOR: P. O. Box 607 CITY <u>Roosevelt</u> STATE <u>Ut</u> ZIP <u>84066</u>		9. API NUMBER: <b>4301331693</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>480' FEL 1880' FNL</b>		10. FIELD AND POOL, OR WLD CAT: <b>Antelope Creek</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWNE 29 T5S R3W</b>		COUNTY: <b>Duchesne</b>
		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>7/27/2007</u>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**First date of Injection July 27, 2007**

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

NAME (PLEASE PRINT) <u>Steve Wall</u>	TITLE <u>Manager</u>
SIGNATURE <u><i>Steve Wall</i></u>	DATE <u>7/27/2007</u>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

JUL 23 2007

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Steve Wall, District Manager  
Petroglyph Energy, Inc.  
4116 West 3000 So. Ioka Lane  
Roosevelt, UT 84066

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

43-013-31693  
RE: Limited Authorization to Inject  
UIC Permit No. UT20736-00000  
Well ID No. UT20736-07123  
Ute Tribal 29-08, Duchesne County, Utah

Dear Mr. Wall:

On March 26, 2007, we received information required to fulfill the Environmental Protection Agency's (EPA) **Prior to Commencing Injection** requirements presented in the Authorization For Additional Wells letter for the Ute Tribal 29-08 add well. The Part I (Internal Mechanical Integrity pressure test performed on March 19, 2007, updated wellbore diagram, Well Rework Record (EPA Form No. 7520-12), and injection zone pore pressure determination have been reviewed and approved by the EPA.

EPA is hereby authorizing injection into the Ute Tribal 29-08 injection well 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, you are required to demonstrate Part II Mechanical Integrity (External MI) within the limited authorized period. Approved tests for demonstrating External MI include a temperature survey, noise log or oxygen activation log, and Region 8 may also accept results of a radioactive tracer survey under certain circumstances.

A limited authorized period is granted to allow injection for the purpose of stabilizing the injection formation pressure prior to demonstrating External 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.

**RECEIVED**

**AUG 16 2007**

DIV. OF OIL, GAS & MINING

A maximum allowable injection pressure (MAIP) **not to exceed 1680 psig** was determined for the Ute Tribal 29-08 injection well. This pressure has been recalculated with the use of the top perforation, 4630 ft, provided in the Well Rework Record dated March 23, 2007. It is also noted that the bottom perforation has been changed to 5536 ft. The top and bottom perforations are both located within the approved injection zone and are accepted. Please note that the maximum pressure used during the temperature survey or other approved test becomes the final permitted MAIP because External MI will be demonstrated at that pressure. In the future, should you choose to request an increase to the MAIP, new supporting information, such as a step rate test, are required as part of the request. In order to inject at pressures greater than the revised MAIP during any future test or tests, you first must receive prior authorization.

If you have any questions in regard to the above action, please contact Linda Bowling at (303) 312-6254. Results from temperature logs or other External MI test should be mailed directly to Linda Bowling at Mail Code 8P-W-GW.

Sincerely,



*for* Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance



cc:

Curtis Cesspooch, Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Ronald Groves, Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Irene Cuch, Vice-Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Steven Cesspooch, Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Shawn Champoose, Director  
Land Use Department  
Ute Indian Tribe

Gil Hunt  
Technical Services Manager  
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office  
BLM - Vernal Office

Lynn Becker, Director  
Energy and Minerals Department  
Ute Indian Tribe

Phillip Chimbraus, Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Francis Poowegup, Councilman  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Chester Mills, Superintendent  
BIA - Uintah & Ouray Indian Agency

Mr. Kenneth Smith  
Executive Vice President and Chief  
Operating Officer  
Petroglyph Energy, Inc.