

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
 DRILL  DEEPEN

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

2. NAME OF OPERATOR  
 PETROGLYPH OPERATING COMPANY, INC.

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 644' FSL & 929' FWL SW/SW  
 At proposed prod. zone  
 196 283

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

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 644'

16. NO. OF ACRES IN LEASE  
 649.34

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 5527.4'

19. PROPOSED DEPTH  
 5527.4'

20. ROTARY OR CABLE TOOLS  
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6322.4' GRADED GROUND

22. APPROX. DATE WORK WILL START\*  
 FEBRUARY 1998

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-H62-3520

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

7. UNIT AGREEMENT NAME

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

9. API WELL NO.  
 #31-13

10. FIELD AND POOL, OR WILDCAT  
 ANTELOPE CREEK

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA  
 SEC. 31, T5S, R3W

12. COUNTY OR PARISH  
 DUCHESNE

13. STATE  
 UTAH

CONFIDENTIAL

CONFIDENTIAL

RECEIVED  
 JAN 26 1998  
 DIV. OF OIL, GAS & MINING

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24.0#	250'	135 sx class "G" + 2% CaCl <sub>2</sub> + 1/4 #/sx celloflake. 50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONES OF INTEREST (+ 10% EXCESS). LIGHT CEMENT (11 PPG+) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (+ 5% EXCESS).
7 7/8	5 1/2	15.5#	5527.4'	

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

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

CONFIDENTIAL

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

24. SIGNED [Signature] TITLE AGENT FOR PETROGLYPH DATE 1-16-1998

(This space for Federal or State office use)

PERMIT NO. 43-013-32039 APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:  
 APPROVED BY [Signature] TITLE DECLARATION SPECIALIST III DATE 3/24/98

\*See Instructions On Reverse Side



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

March 23, 1998

RE: Application for Exception Well Location  
Proposed Ute Tribal #31-13  
Township 5 South, Range 3 West  
Section 31: SW/4 SW/4  
Duchesne County, Utah

Gentlemen;

Petroglyph Operating Company, Inc. (Petroglyph) respectfully requests administrative approval per R-649-3-3 to drill the Ute Tribal #31-13 a 5528' Green River test, at a location 644' FSL & 929' FWL, SW/4 SW/4, Section 31, Township 5 South Range 3 West, Duchesne County, Utah.

The aforementioned footage is not a location at which a well could be drilled in compliance with the spacing order of this lease, which established 40 acre drilling units.

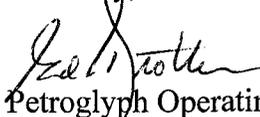
Enclosed is a topographic map which depicts the surface contour in the area of the subject location. Petroglyph believes the proposed exceptionally spaced location to be the preferred location from a construction standpoint. Also this location is preferred by the Bureau of Indian Affairs Resource Department and the Ute Indian Tribe, Energy and Minerals Department who regulate activities on this land.

Petroglyph Operating Company Inc. holds 100% of the operating rights underlying the subject drilling unit as well as drilling units to the north, south, east and west.

Petroglyph respectfully requests the Division of Oil, Gas and Mining Administratively grant this application for the exceptional well location at its earliest opportunity.

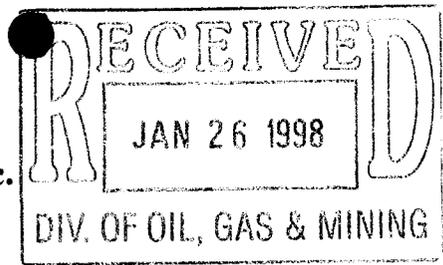
Please direct further correspondence and approval to myself at P.O. Box 1910, Vernal, Utah 84078, or phone me at 801-789-4120.

Sincerely,



Petroglyph Operating Company Inc.  
Ed Trotter, Agent

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



January 20, 1998

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

RE: APPLICATION FOR PERMIT TO DRILL  
UTE TRIBAL #31-13  
SW/SW, SEC. 31, T5S, R3W  
DUCHESNE COUNTY, UTAH  
LEASE NO. BIA 14-20-H62-3520  
UTE TRIBAL LANDS

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

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

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Ed Trotter".

Ed Trotter  
Agent

**Petroglyph Operating Co., Inc.**

Attachments

/EHT/dmt

EIGHT POINT PLAN

UTE TRIBAL #31-13  
SW/SW, SEC. 31, T5S R3W  
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2270.4	4062
"X" Marker	3892.4	2440
Douglas Creek	4032.4	2300
"B" Limestone	4777.4	1555
Basal Carbonate Limestone	5377.4	955
Total Depth	5527.4	805

Anticipated BHP                      2000 psi

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Oil/Gas	Douglas Creek	4032.4	2300
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' - 5527.4'	5527.4'	5 1/2	15.5 #	M-50	3650 PSI	4550 PSI	186,000#

All casing will be new or inspected.

EIGHT POINT PLAN

UTE TRIBAL #31-13  
SW/SW, SEC. 31, T5S R3W  
DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

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

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

6. VARIANCE REQUESTS:

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

7. EVALUATION PROGRAM:

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

Cores: None Programmed

DST: None Programmed

Completion: To be submitted at a later date.

8. ABNORMAL CONDITIONS:

None anticipated.

EIGHT POINT PLAN

UTE TRIBAL #31-13  
SW/SW, SEC. 31, T5S R3W  
DUCHESNE COUNTY, UTAH

9. STANDARD REQUIRED EQUIPMENT:

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

10. HAZARDOUS CHEMICALS:

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

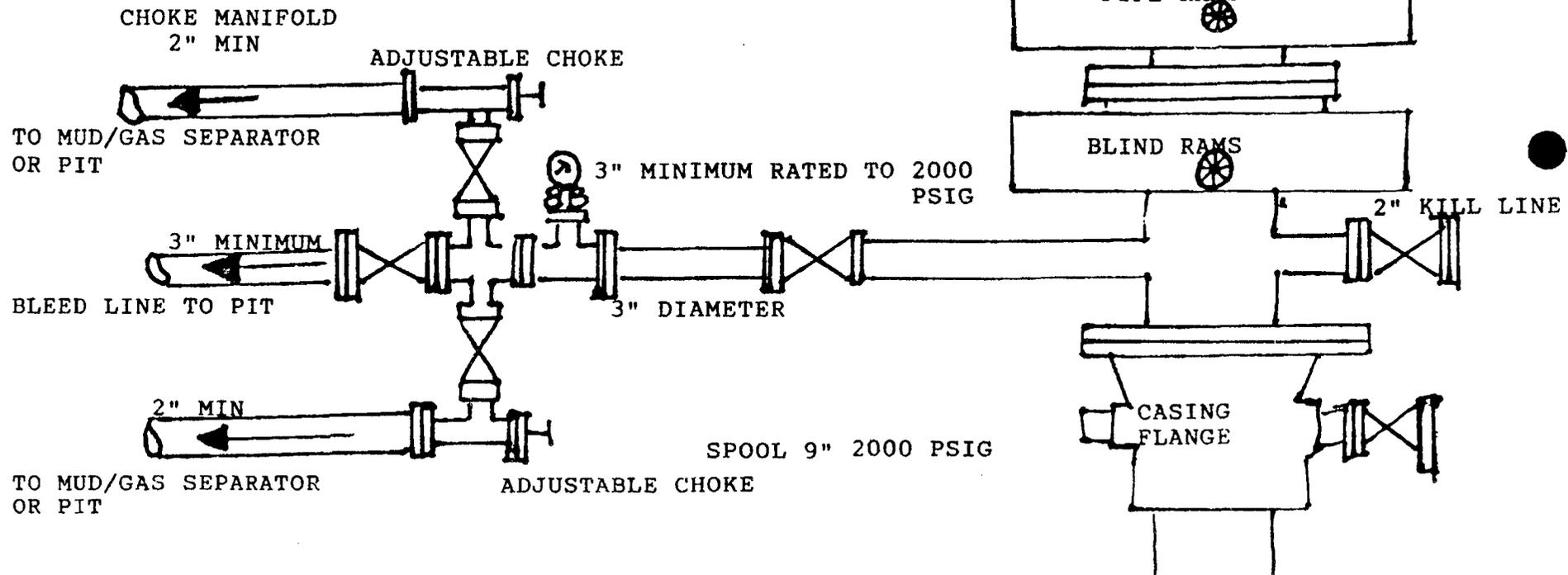
(Attachment: BOP Schematic Diagram)

## 2000 PSIG DIAGRAM

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

### TESTING PROCEDURE:

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



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

Company/Operator: Petroglyph Operating Co., Inc.  
Well Name & Number: Ute Tribal #31-13  
Lease Number: BIA 14-20-H62-3520  
Location: 644' FSL & 929' FWL, SW/SW, Sec. 31, 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 21.7 miles southwest of Myton, Utah - See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

### 2. PLANNED ACCESS ROAD

- A. The access road will be approximately 50 feet 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 - 1\*
- 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 20' from proposed location to a point in the SW/SW of Section 31, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. Proposed pipeline crosses Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline route.
3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

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

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

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

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

5. LOCATION & TYPE OF WATER SUPPLY

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

6. SOURCE OF CONSTRUCTION MATERIAL

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

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

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

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

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

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

On BIA administered land:

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

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

     To protect the environment:

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

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

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

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

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

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

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

Access to the well pad will be from the West.

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 Corner No. 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

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

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

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

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

Certification:

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

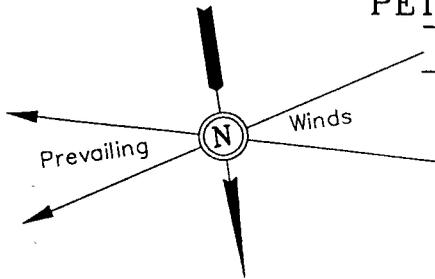
1-16-1998  
Date

Paul L. Rothman

PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #31-13  
SECTION 31, T5S, R3W, U.S.B.&M.  
644' FSL 929' FWL



SCALE: 1" = 50'  
DATE: 10-9-97  
Drawn By: C.B.T.

**NOTE:**

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

FLARE PIT



**NOTE:**

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

Approx. Top of Cut Slope

10' WIDE BENCH/DIKE

RESERVE PITS (8' Deep)

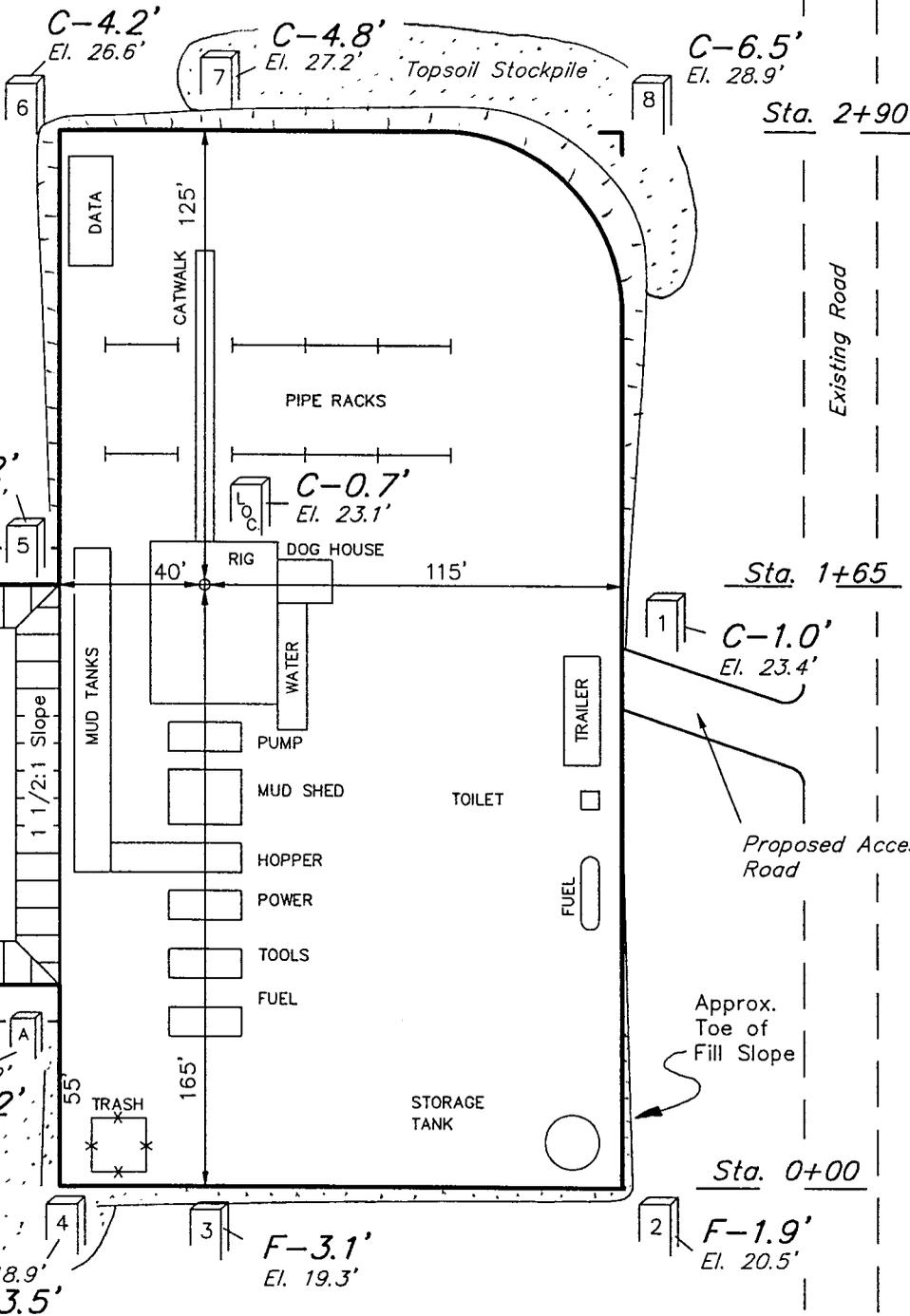
Sta. 0+67

El. 20.5'  
C-6.1' (btm. pit)

El. 20.2'  
F-2.2'

Reserve Pit Backfill & Spoils Stockpile

El. 18.9'  
F-3.5'



Elev. Ungraded Ground at Location Stake = 6323.1'

Elev. Graded Ground at Location Stake = 6322.4'

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

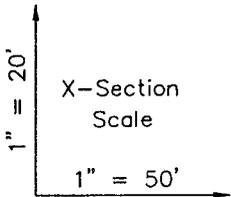
PETROGLYPH OPERATING CO., INC.

TYPICAL CROSS SECTIONS FOR

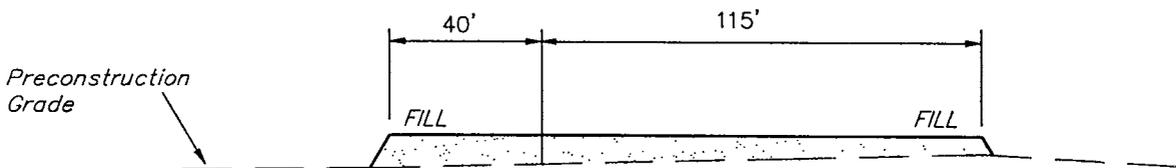
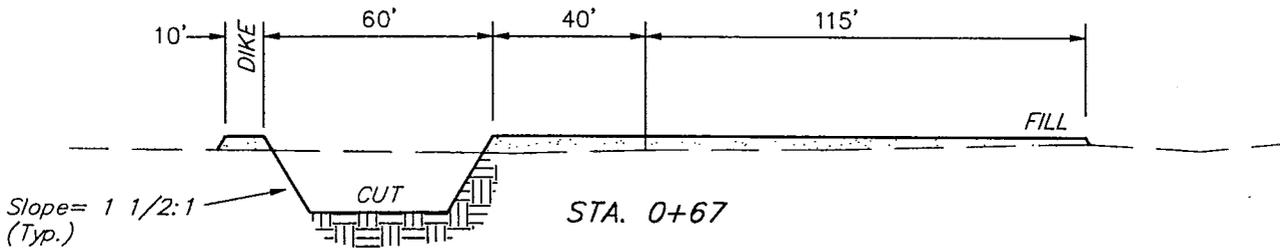
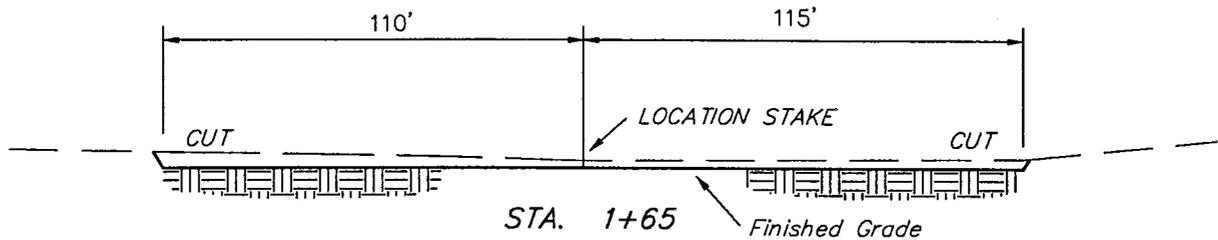
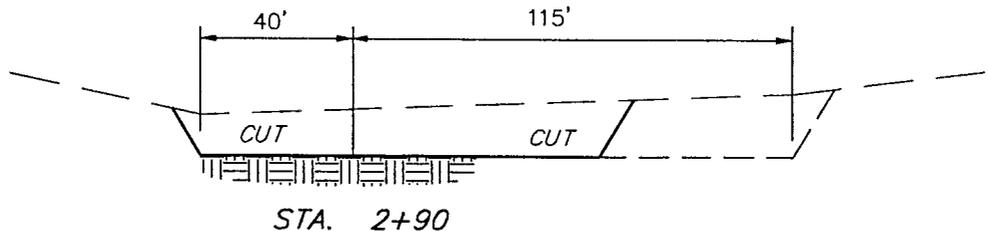
UTE TRIBAL #31-13

SECTION 31, T5S, R3W, U.S.B.&M.

644' FSL 929' FWL



DATE: 10-9-97  
 Drawn By: C.B.T.



NOTE:

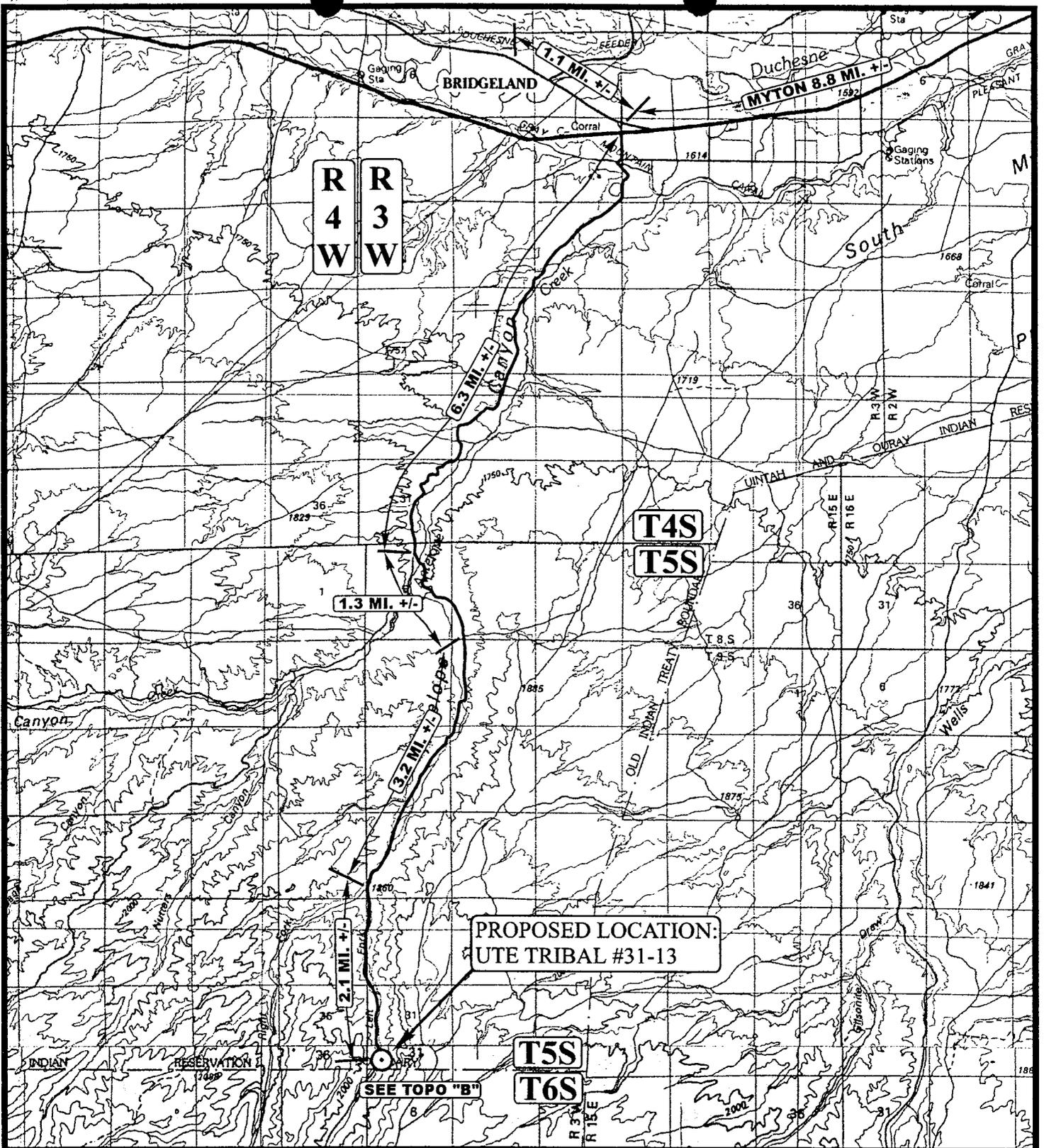
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

STA. 0+00

APPROXIMATE YARDAGES

(12") Topsoil Stripping	=	1,910 Cu. Yds.
Remaining Location	=	2,910 Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>4,820 CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>2,100 CU.YDS.</b>

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



**LEGEND:**

⊙ PROPOSED LOCATION



**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #31-13  
 SECTION 31, T5S, R3W, U.S.B.&M.  
 644' FSL 929' FWL



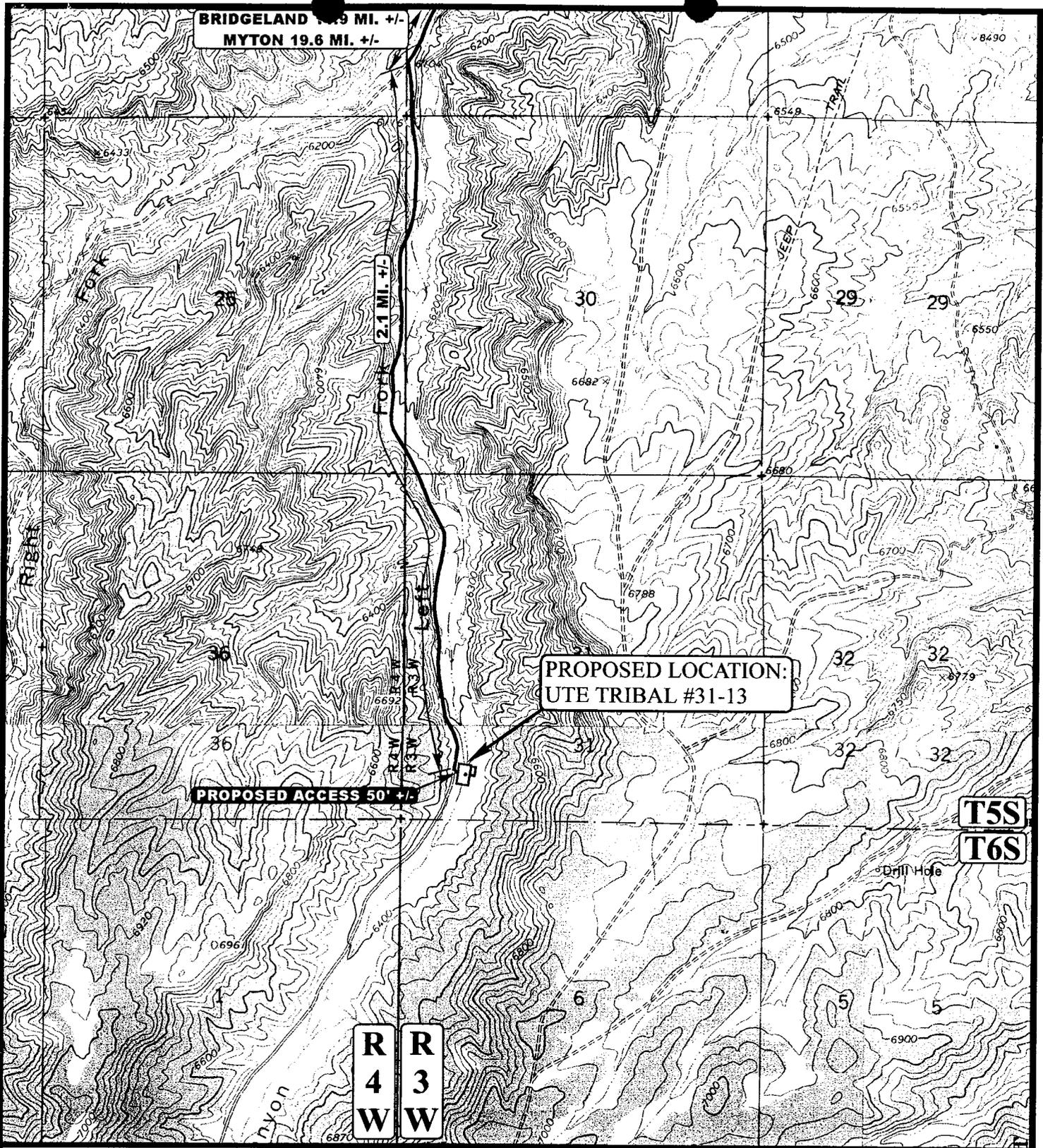
**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (801) 789-1017 \* FAX (801) 789-1813  
 Email: uels@casilink.com

**TOPOGRAPHIC  
 MAP**

**10 9 97**  
 MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: J.L.G. REVISED: 00-00-00





**LEGEND:**  
 - - - - - PROPOSED ACCESS ROAD  
 \_\_\_\_\_ EXISTING ROAD

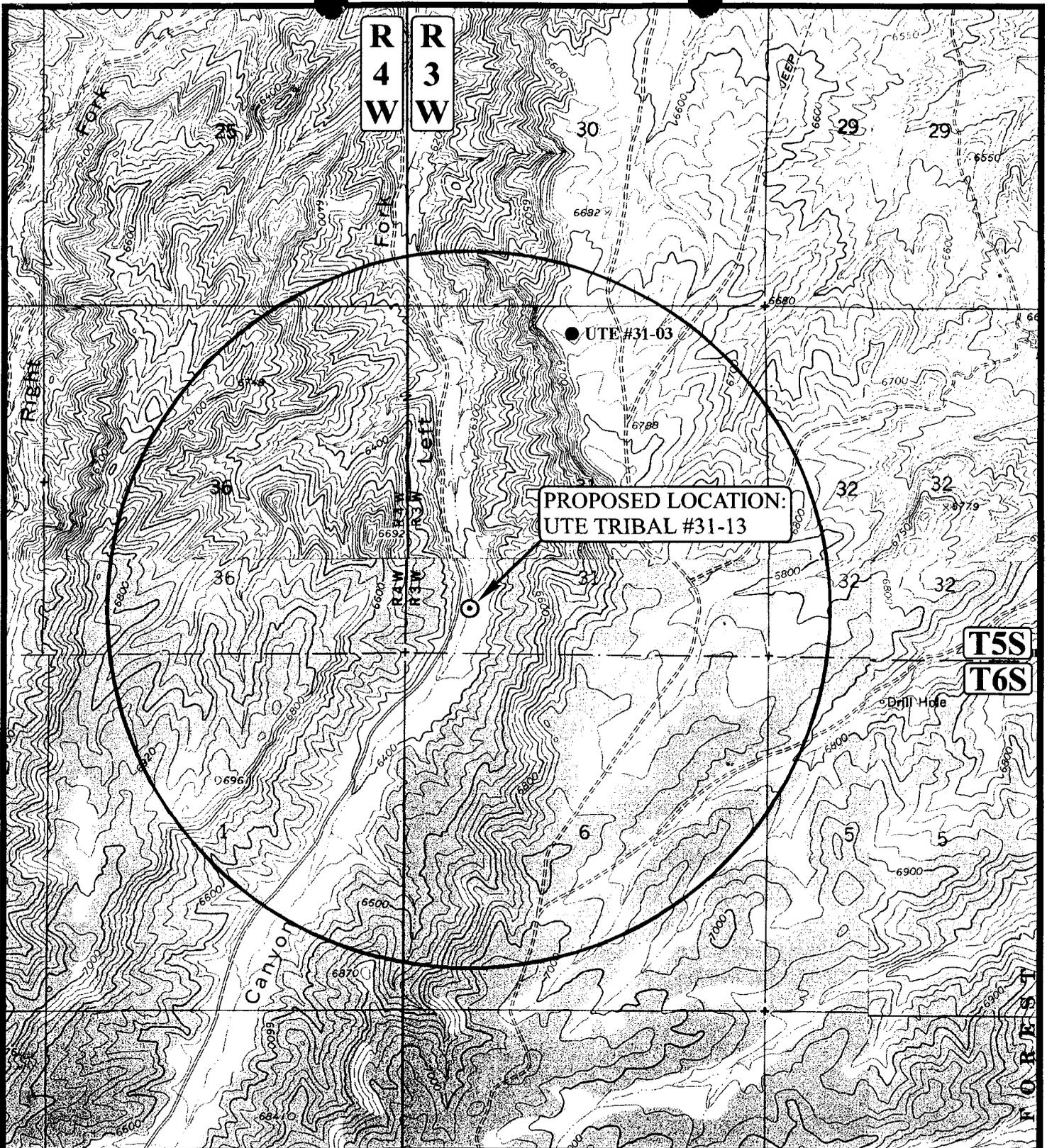
**U E I S**  
 Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (801) 789-1017 \* FAX (801) 789-1813  
 Email: uels@easilink.com



**PETROGLYPH OPERATING CO., INC.**  
 UTE TRIBAL #31-13  
 SECTION 31, T5S, R3W, U.S.B.&M.  
 644' FSL 929' FWL

**TOPOGRAPHIC** **10** **9** **97**  
**MAP** MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00

**B**  
 TOPO



**LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ∅ DISPOSAL WELLS  | ♂ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



**PETROGLYPH OPERATING CO., INC.**

**UTE TRIBAL #31-13**  
**SECTION 31, T5S, R3W, U.S.B.&M.**  
**644' FSL 929' FWL**



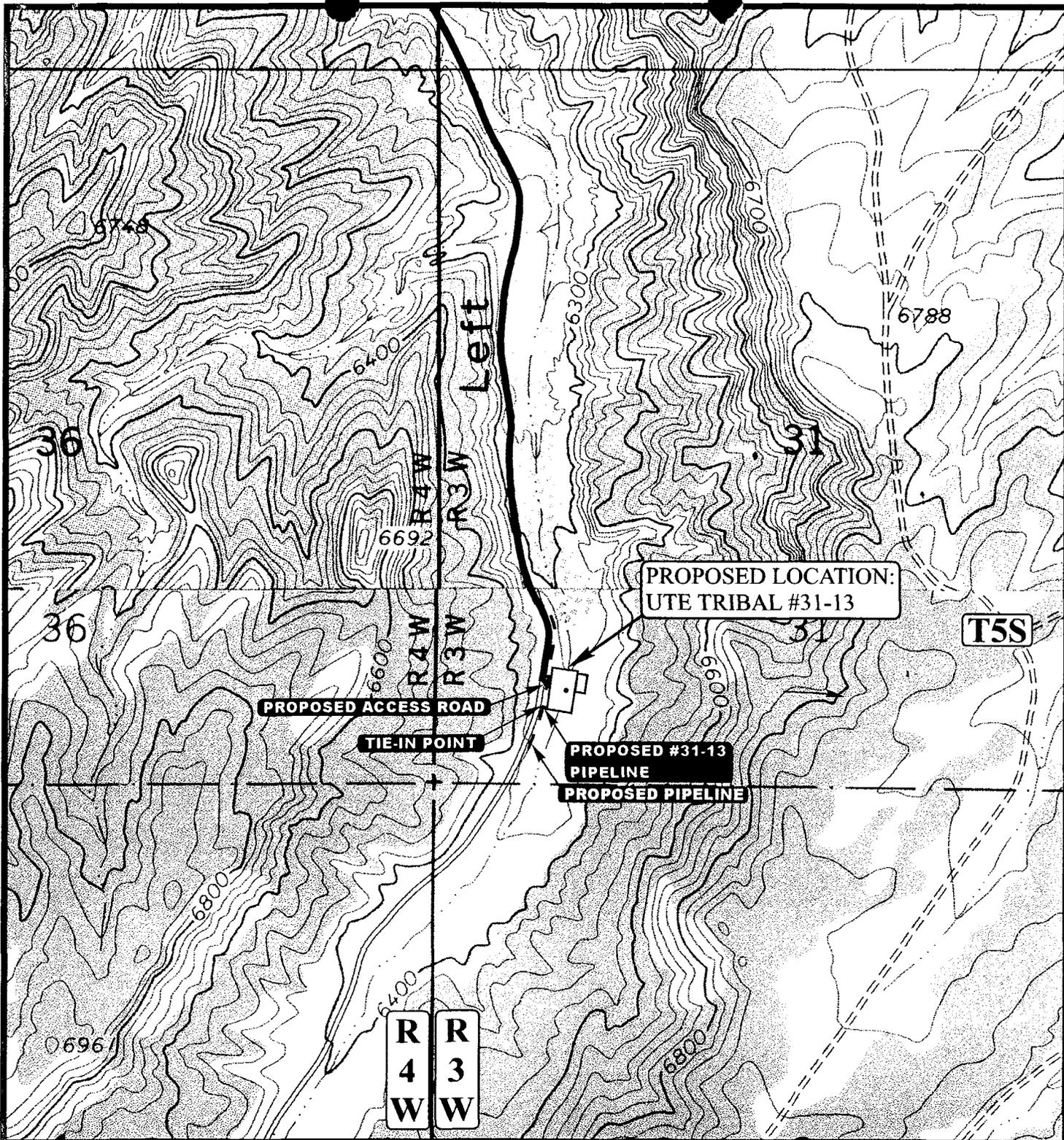
**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (801) 789-1017 \* FAX (801) 789-1813  
 Email: uels@easilink.com

**TOPOGRAPHIC**  
**MAP**

**10 9 97**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 20' +/-

**LEGEND:**

- — — — — EXISTING PIPELINE
- - - - - PROPOSED PIPELINE
- — — — — PROPOSED ACCESS



**PETROGLYPH OPERATING CO., INC.**

UTE TRIBAL #31-13  
 SECTION 31, T5S, R3W, U.S.B.&M.  
 644' FSL 929' FWL



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

TOPOGRAPHIC **10 9 97**  
 MAP MONTH DAY YEAR  
 SCALE: 1" = 1000' DRAWN BY: J.L.G. REVISED: 00-00-00



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/26/98

API NO. ASSIGNED: 43-013-32039

WELL NAME: UTE TRIBAL 31-13  
OPERATOR: PETROGLYPH OPERATING (N3800)

PROPOSED LOCATION:  
SWSW 31 - T05S - R03W  
SURFACE: 0644-FSL-0929-FWL  
BOTTOM: 0644-FSL-0929-FWL  
DUCHESNE COUNTY  
ANTELOPE CREEK FIELD (060)

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

LEASE TYPE: IND  
LEASE NUMBER: 14-20-H62-3520

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Federal  State  Fee   
(Number 1556)
- Potash (Y/N)
- Oil shale (Y/N)
- Water permit  
(Number 113-10152)
- 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: \_\_\_\_\_

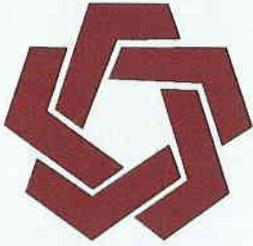
COMMENTS: ANTELOPE CREEK IS A SECONDARY RECOVERY WELL

A SPACING EXCEPTION IS NOT REQUIRED.  
Conf. status req. Cr. loc. OK!

STIPULATIONS: STATE APPROVAL OF THIS WELL DOES NOT

CONSTITUTE THE REQUIRED FEDERAL APPROVAL.  
MUST BE OBTAINED PRIOR TO DRILLING.

790-3345



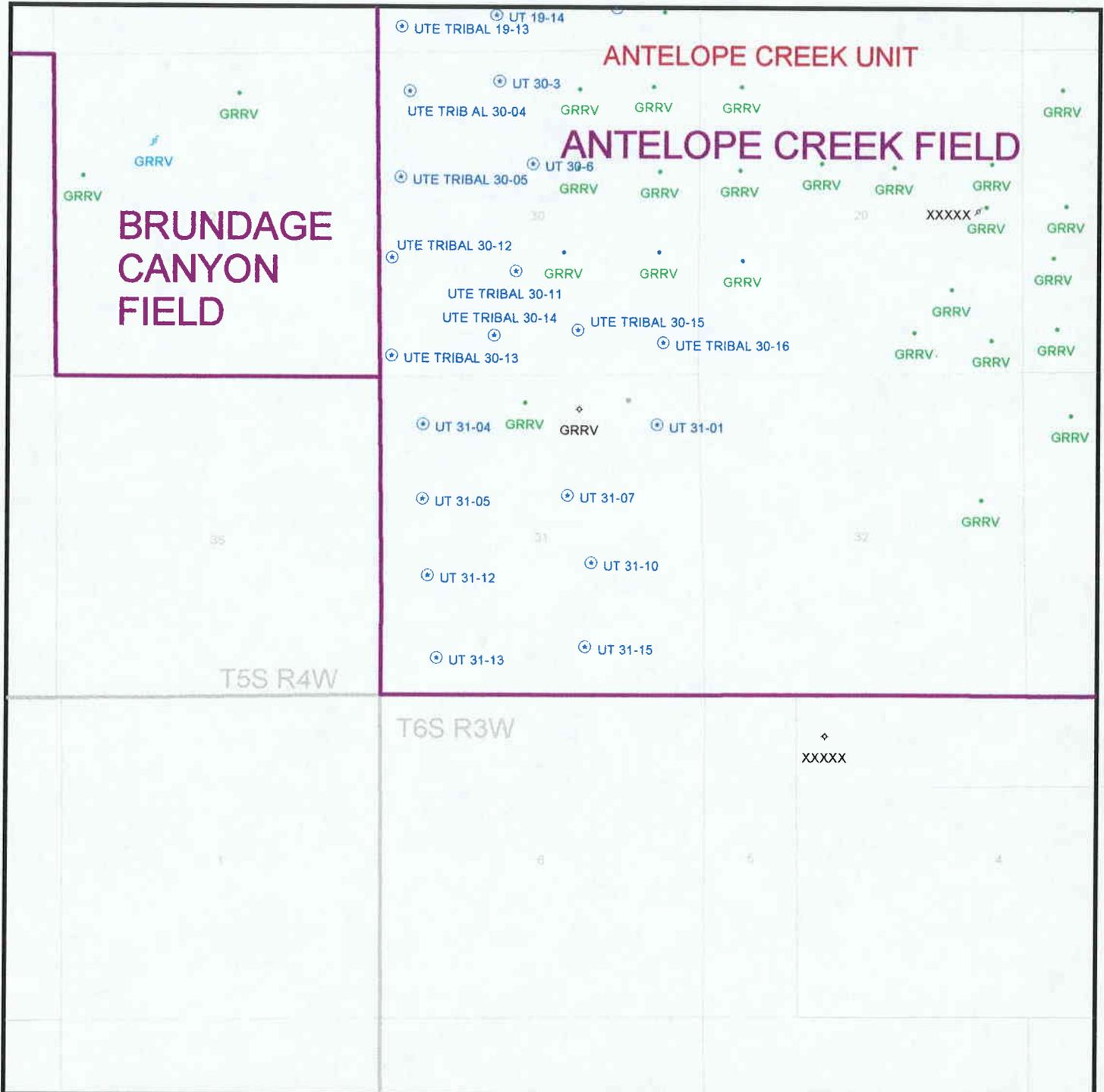
DIVISION OF OIL, GAS & MINING

OPERATOR: PETROGLYPH OPER. (N3800)

FIELD: ANATELOPE CREEK (060)

SEC. TWP. RNG.: SEC. 31 T5S, R3W

COUNTY: DUCHESNE UAC:R649-2-3 ANTELOPE CREEK SECONDARY



DATE PREPARED:  
27-JAN-1998

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
 DRILL  DEEPEN

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

2. NAME OF OPERATOR  
 PETROGLYPH OPERATING COMPANY, INC.

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 644' FSL & 929' FWL SW/SW  
 At proposed prod. zone

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

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 644'

16. NO. OF ACRES IN LEASE  
 649.34

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 5527.4'

19. PROPOSED DEPTH  
 5527.4'

20. ROTARY OR CABLE TOOLS  
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6322.4' GRADED GROUND

22. APPROX. DATE WORK WILL START\*  
 FEBRUARY 1998

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-H62-3520

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

7. UNIT AGREEMENT NAME

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

9. API WELL NO.  
 #31-13

10. FIELD AND POOL, OR WILDCAT  
 ANTELOPE CREEK

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA  
 SEC. 31, T5S, R3W

12. COUNTY OR PARISH  
 DUCHESNE

13. STATE  
 UTAH

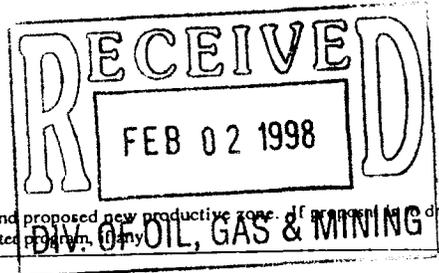
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24.0#	250'	135 sx class "G" + 2% CaCl <sub>2</sub>
7 7/8	5 1/2	15.5#	5527.4'	+ 1/4 #/sx celloflake.
				50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONE OF INTEREST (+ 10% EXCESS) LIGHT CEMENT (11 PPG+) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (- 5% EXCESS).

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

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

JAN 21 1998



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

24. SIGNED [Signature] TITLE AGENT FOR PETROGLYPH DATE 1-16-1998

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

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

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:  
 APPROVED BY [Signature] Assistant Field Manager  
 Mineral Resources DATE JAN 28 1998

\*See Instructions On Reverse Side

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company Inc.

Well Name & Number: Ute Tribal 31-13

API Number: 43-013-32039

Lease Number: 14-20-H62-3520

Location: SWSW Sec. 31 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 874 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 the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. One copy 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 3162.7-5(d) shall be submitted to the appropriate Field Office within 60 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 3162.7-5 (1).

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 (435) 789-7077  
Petroleum Engineer

Wayne P. Bankert (435) 789-4170  
Petroleum Engineer

Jerry Kenczka (435) 781-1190  
Petroleum Engineer

BLM FAX Machine (435) 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 PROGRAM  
Conditions of Approval (COAs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Petroglyph, their employees, sub-contractors, and representatives shall not carry firearms on their person or in their vehicles while working on Indian lands

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



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

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

March 24, 1998

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

Re: Ute Tribal 31-13 Well, 644' FSL, 929' FWL, SW SW, Sec. 31,  
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 43-013-32039.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza".

John R. Baza  
Associate Director

lwp

Enclosures

cc: Duchesne County Assessor

Bureau of Land Management, Vernal District Office

Operator: Petroglyph Operating Company, Inc.  
Well Name & Number: Ute Tribal 31-13  
API Number: 43-013-32039  
Lease: 14-20-H62-3520  
Location: SW SW Sec. 31 T. 5 S. R. 3 W.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

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

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or John R. Baza at (801)538-5334.

3. Reporting Requirements

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

4. State approval of this well does not supercede the required federal approval which must be obtained prior to drilling.

SPUDDING INFORMATION

Name of Company: PETROGLYPH OPERATING

Well Name: UTE TRIBAL 31-13

Api No. 43-013-32039

Section 31 Township 5S Range 3W County DUCHESNE

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

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

SPUDDED:

Date 4/1/98

Time \_\_\_\_\_

How DRY HOLE

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

Reported by GENE

Telephone # \_\_\_\_\_

Date: 3/31/98 Signed: JLT

J

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

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

OPERATOR ACCT. NO. N3800

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	99999	12352	43-013-32039	Ute Tribal 31-13	SWSW	31	5S	3W	Duchesne	4/1/98	
WELL 1 COMMENTS: <b>CONFIDENTIAL</b> Entity added 4-17-98. (Common Tank) Sec Ute Tribal 31-13 will tie into existing battery at Ute Tribal 31-04											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

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

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

Deanna Bell  
Signature Deanna Bell

Operations Coordinator 4/15/98  
Title Date

Phone No. (435) 722-2531

Form 7

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**REPORT OF WATER ENCOUNTERED DURING DRILLING**

1. Well name and number: Ute Tribal 31-13

API number: 43-013-32039

2. Well Location: QQ SWSW Section 31 Township 5S Range 3W County Duchesne

3. Well Operator: Petroglyph Operating Company, Inc.

Address: P.O. Box 607

Roosevelt, UT 84066

Phone: (435) 722-2531

4. Drilling Contractor: Union Drilling

Address: P.O. Drawer 40

Buckhannon, WV 26201

Phone: (304) 472-4610

5. Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
<del>0</del>			
375	545	Dry	
	545	Damp @ 545 No flow w/o. Foam.	

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

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

I hereby certify that this report is true and complete to the best of my knowledge. Date: 4/9/98

Name & Signature: [Signature] Title: Operator Sup.

**REPORT OF WATER ENCOUNTERED DURING DRILLING**

1. Well name and number: Ute Tribal 31-13

API number: 43-013-32039

2. Well Location: QQ SWSW Section 31 Township 5S Range 3W County Duchesne

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<del>0</del>			
375	545	Dry	
	545	Damp @ 545 No flow w/o. Foam.	

APR 20 1998

APR 20 1998

DOSM  
By *do*

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

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

I hereby certify that this report is true and complete to the best of my knowledge. Date: 4/9/98

Name & Signature: *[Signature]* Title: Operator Sup.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-H62-3520

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1.a. TYPE OF WELL: Oil Well  Gas Well  Dry  Other

b. TYPE OF COMPLETION: New Well  Workover  Deepen  Plug Back  Diff. Reserv.  Other

2. NAME OF OPERATOR  
PETROGLYPH OPERATING COMPANY, INC.

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 644' FSL 929' FWL

At top prod. interval reported below

At total depth 5737' RTD

CONFIDENTIAL  
PERIOD  
EXPIRED  
ON 6-5-99

CONFIDENTIAL

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

8. FARM OR LEASE NAME

9. WELL NO.  
Ute Tribal 31-13

10. FIELD AND POOL, OR WILDCAT  
Antelope Creek

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
SWSW SEC.31-T5S-R3W

14. PERMIT NO. 43-013-32039  
DATE ISSUED 3/24/98

12. County or Parish Duchesne  
13. State Utah

15. DATE SPUDDED 4/1/98  
16. DATE T.D. REACHED 4/8/98  
17. DATE COMPLETED (Ready to prod.) 5/5/98  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 6332' KB  
19. ELEV. CASINGHEAD 6322' GGL

20. TOTAL DEPTH, MD & TVD 5737' TD  
21. PLUG BACK T.D., MD & TVD 5652' PBDT  
22. IF MULTIPLE COMPL., HOW MANY\* 6  
23. INTERVALS DRILLED BY  
ROTARY TOOLS  
CABLE TOOLS

24. PRODUCING INTERVAL(S) OF THIS COMPLETION -- TOP, BOTTOM, NAME (MD AND TVD)\*  
GREEN RIVER B8, C6.1, C9.2, D7.11, E1, E7  
25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
Gamma Ray to surface, Density-Compensated Neutron Porosity, AIT (normal suite)  
27. WAS WELL CORED  
No

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48.0#	38'	17-1/2"	130 sxs Class H, 2% CaCl <sub>2</sub> , .25#/sk cellophane flake	
8-5/8"	24.0#	409'	12-1/4"	360 sxs Class H, 3% CaCl <sub>2</sub> , .3#/sk cellophane flake	
5-1/2"	15.5#	5697'	7-7/8"	125 sxs Highfill, 380 sxs Thixotropic	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5293'	

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
CONFIDENTIAL		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
E7 5210-16' (24 holes)	C6.1 4148-51' (12 holes)	5210-16'	3000 gal Boragel 30, 12500# 20/40 prop; 2934 gal Boragel 30, 19000# 16/30 prop
E1 4902-10' (32 holes)	B8 3683-86' (12 holes)	4902-10'	3000 gal Boragel 30, 13000# 20/40 prop; 2892 gal Boragel 30, 19500# 16/30 prop
D7.11 4662-67' (20 holes)		4662-67'	3000 gal Boragel 30, 13000# 20/40 prop; 2660 gal Boragel 30, 19500# 16/30 prop
C9.2 4273-77' (16 holes)		4273-77'	3000 gal Boragel 30, 13000# 20/40 prop; 2822 Boragel 30, 19500# 16/30 prop
C6.1 4158-62' (16 holes)		4148-51' & 4158-62'	3000 gal Boragel 30, 12500# 20/40 prop; 2644 gal Boragel 30, 18700# 16/30 prop

CONFIDENTIAL

33. PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)			WELL STATUS (Producing or shut-in)		
5/9/98		2 1/2" x 1-3/4" x 16' 40 ring PA pump			producing		
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS-OIL RATIO
5/12/98	24			#	15	59	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)	
	450	24 HR. RATE					

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

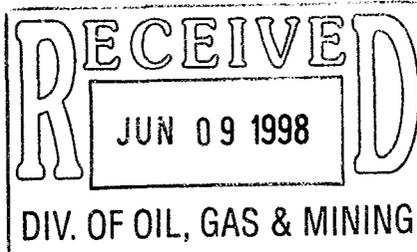
35. LIST OF ATTACHMENTS  
32. Fracturing continued (see reverse)

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

Signed Deanna Bell Title Operations Coordinator Date 6/1/98

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

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



37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof, cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Ute Tribal 31-13						
B Marker	3362					
X Marker	3840					
Douglas Creek	3974					
B Limestone	4338					
Castle Peak	4880					
Basal Carbonate	5324					
		CONFIDENTIAL				
32. continued						
		3683-86'	3246 gal Boragel 30, 26500# 20/40 prop			

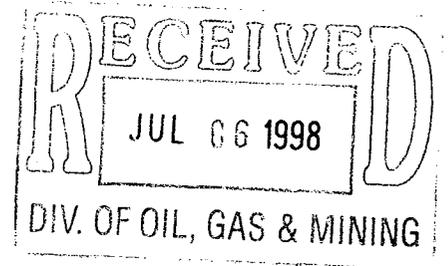
38. GEOLOGIC MARKERS



Petroglyph Energy, Inc.  
6209 North Highway 61  
Hutchinson, KS 67502

P.O. Box 1839  
Hutchinson, KS 67504-1839

316 665-8500  
316 665-8577 fax



July 1, 1998

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

**CONFIDENTIAL**

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 34-05D3 ✓	High Resolution Induction & Spectral Density Dual Spaced Neutron
Ute Tribal 31-13	CNLD & AIT 43 013 32039 55 30 31
Ute Tribal 19-15	CNLD & AIT
Ute Tribal 19-12	CNLD & AIT

Please hold these in confidence as permitted in division guidelines. If you need further information, please do not hesitate to call me at 316-665-8500.

Sincerely,

Brooke Kirmer  
Geology Technician