

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS FILE X WATER SANDS LOCATION INSPE SUB REPORT/abd.

981229 LHD EFF 12-21-98

DATE FILED **DECEMBER 13, 1996**
 LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. INDIAN #
 DRILLING APPROVED: **DECEMBER 16, 1996** **14-20-H62-3516**
 SPUDED IN:
 COMPLETED: PUT TO PRODUCING:
 INITIAL PRODUCTION:
 GRAVITY A.P.I.
 GOR:
 PRODUCING ZONES:
 TOTAL DEPTH:
 WELL ELEVATION:
 DATE ABANDONED: **LHD 12-21-98**
 FIELD: **ANTELOPE CREEK**
 UNIT:
 COUNTY: **DUCHESNE**
 WELL NO. **UTE TRIBAL 21-08** API NO. **43-013-31763**
 LOCATION **1980 FNL** FT. FROM (N) (S) LINE. **4100 FWL** FT. FROM (E) (W) LINE. **SE NE** 1/4 - 1/4 SEC. **21**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
5S	3W	21	PETROGLYPH OPERATING				

GEOLOGIC TOPS:

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

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, UT 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface
1980' FNL & 4100' FNL Lot 2 (SE NE)

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

20.7 MILES SOUTHWEST OF MYTON, UTAH

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1980' (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
533.33

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
6090.5'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6255.5' GRADED GROUND

22. APPROX. DATE WORK WILL START*

NOVEMBER, 1996

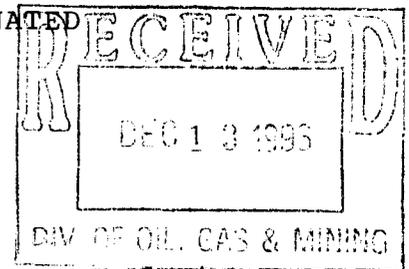
23. PROPOSED CASING AND CEMENTING PROGRAM

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 ₂ + 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#	6090.5'	

CONFIDENTIAL

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, Utah
Ute Tribe, Fort Duchesne, Utah



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

24. SIGNED [Signature] TITLE AGENT FOR PETROGLYPH DATE 11-8-96

(This space for Federal or State office use)

PERMIT NO. 43-013-31763 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:

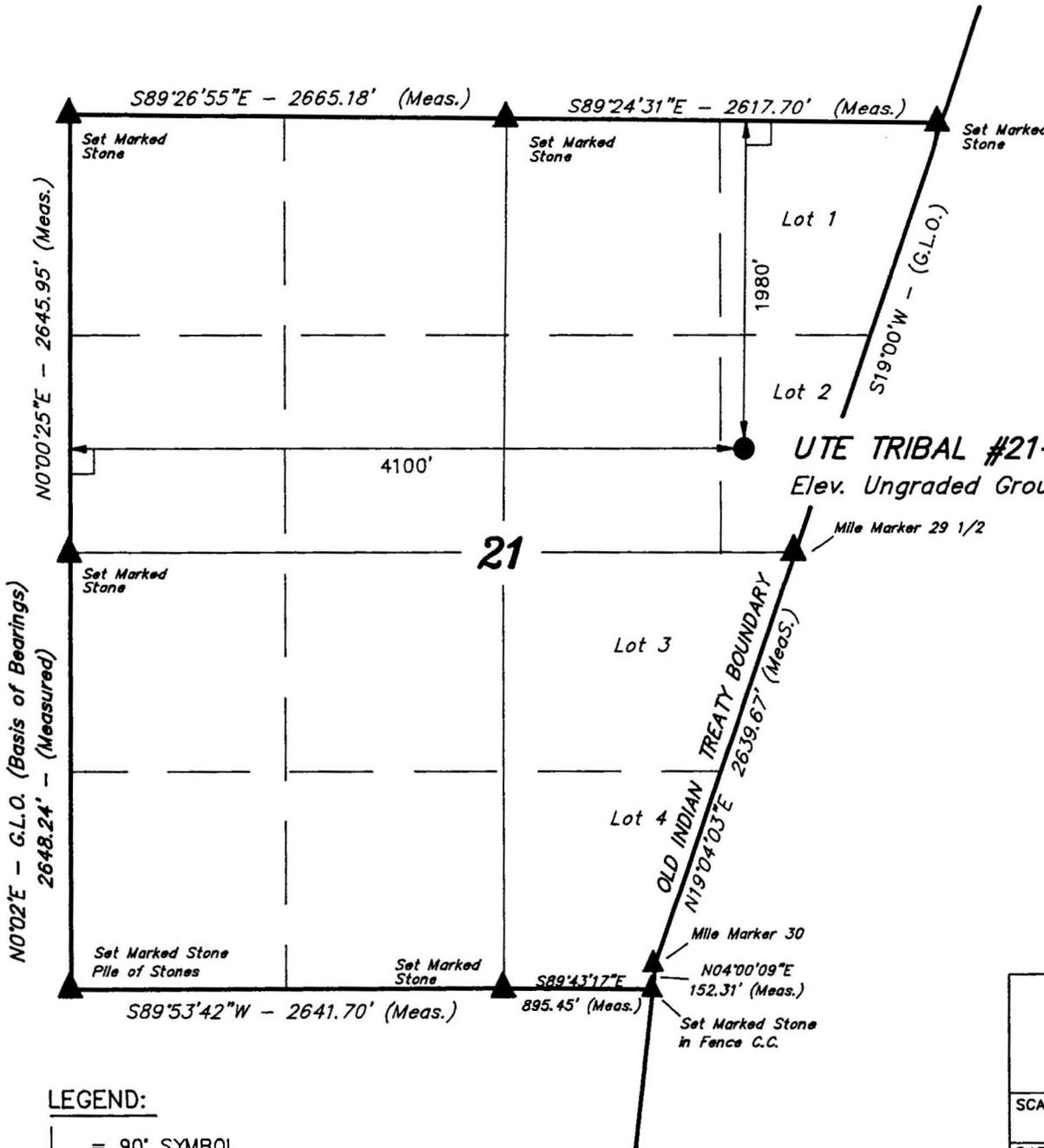
APPROVED BY [Signature] TITLE Petroleum Engineer DATE 12/16/96

*See Instructions On Reverse Side

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

PETROGLYPH OPERATING CO., INC.

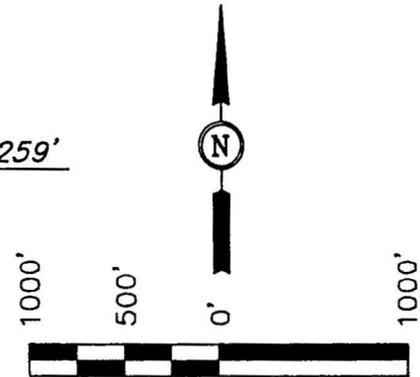
Well location, UTE TRIBAL #21-08, located as shown in Lot 2 of Section 21, T5S, R3W, U.S.B.&M. Duchesne County, Utah.



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.

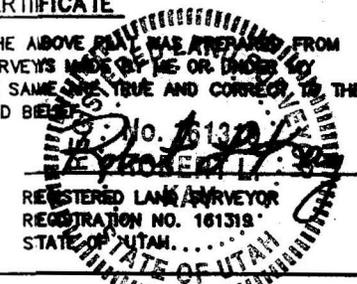
UTE TRIBAL #21-08
Elev. Ungraded Ground - 6259'



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE 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.



LEGEND:

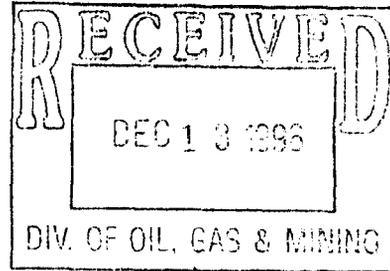
- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & LAND SURVEYING		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 10-15-96	DATE DRAWN: 10-29-96
PARTY B.B. L.D.T. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE PETROGLYPH OPERATING CO., INC.	

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

November 7, 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 #21-08
Lot 2, SEC. 21, T5S, R3W
DUCHESNE COUNTY, UTAH
LEASE NO. BIA 14-20-H62-3516
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 black ink, appearing to read "Ed Trotter". The signature is written in a cursive style with a large initial "E".

Ed Trotter
Agent

Petroglyph Operating Co., Inc.

Attachments

/EHT/dmt

EIGHT POINT PLAN
UTE TRIBAL #21-08
Lot 2, SEC. 21, T5S R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2887.5	3378
'X' marker	4483.5	1782
Douglas Creek	4623.5	1642
"B" Limestone	5000.5	1265
B/Castle Peak Limestone	5555.5	710
Basal Carbonate Limestone	5980.5	285
Total Depth	6090.5	175
Anticipated BHP	2600 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	4623.5	1642
Oil/Gas	B/Castle Peak	5555.5	710
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' - 6090.5'	6090.5'	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 #21-08
Lot 2, SEC. 21, 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 #21-08
Lot 2, SEC. 21, 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.

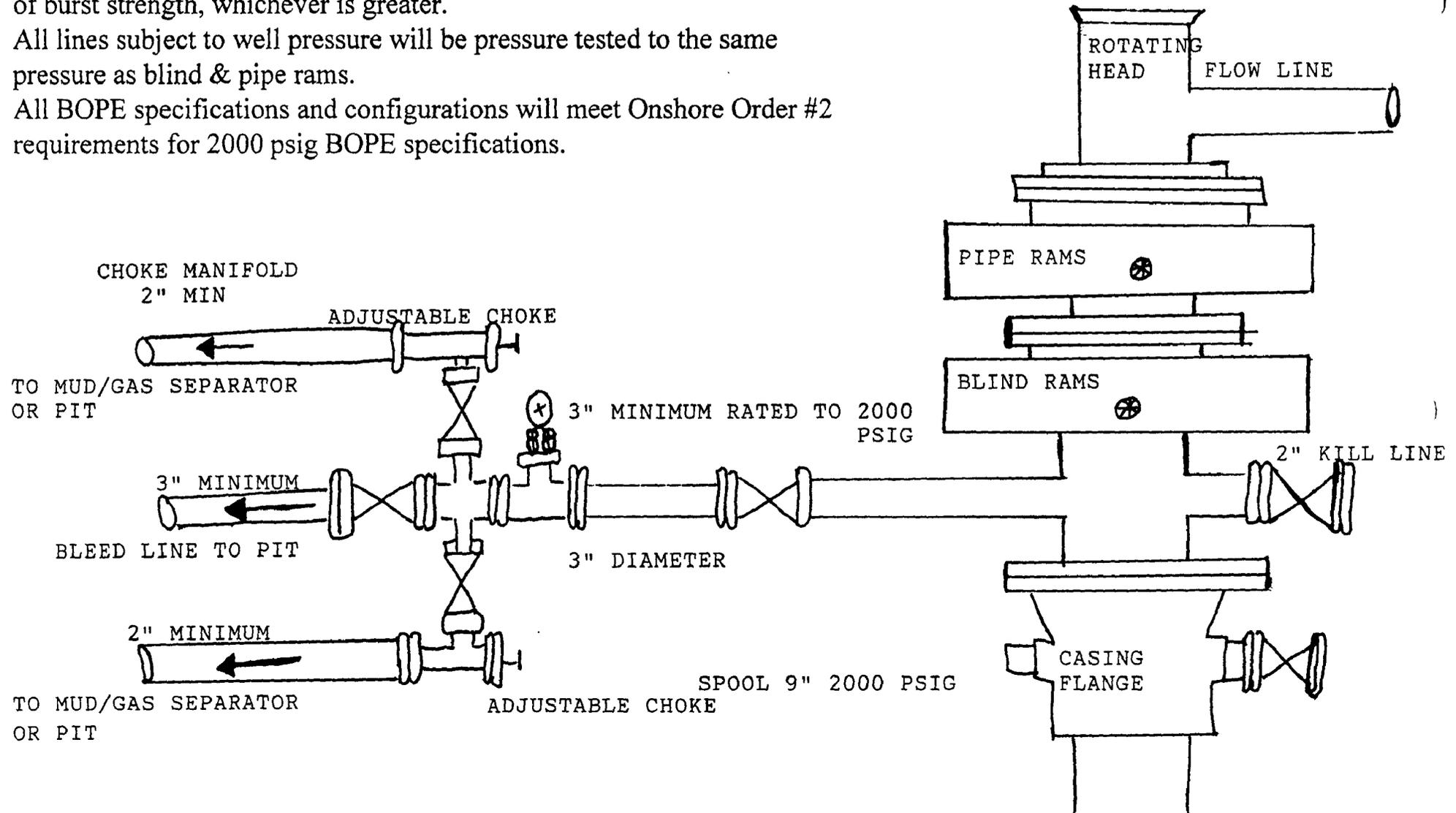
(Attachment: BOP Schematic Diagram)

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 #21-08
Lease Number: BIA 14-20-H62-3516
Location: 1980' FNL & 4100' FWL Lot 2, Sec. 21, T5S R3W
U.S.B.&M., Duchesne County, Utah
Surface Ownership: Ute Indian Tribe

NOTIFICATION REQUIREMENTS

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

Location Completion - prior to moving on the drilling rig.

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

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

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

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

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

THIRTEEN POINT SURFACE USE PROGRAM

1. EXISTING ROADS

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

2. PLANNED ACCESS ROAD

- A. The access road will be approximately 0.1 mile 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 cattlesguards, 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 - 6*
- 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 - Yes
- 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 pipeline will be laid approximately 1600' from proposed location to a point in the NE/NE of Section 21, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. A second pipeline will be laid approximately 500' from the proposed location to a point in the SW/NE in Section 21, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. Proposed pipelines cross Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline routes.
3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

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

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

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one

of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities required will be painted within 6 months of installation. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is Desert Brown.

5. LOCATION & TYPE OF WATER SUPPLY

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

6. SOURCE OF CONSTRUCTION MATERIAL

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

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

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

application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.

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

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

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

On BIA administered land:

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

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

To protect the environment:

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

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

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

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

The reserve pit will be located on the 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 North side.

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. 2 & 6 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.

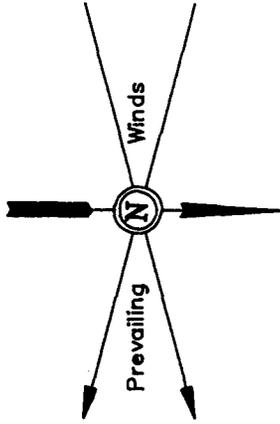
11-8-96
Date



PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL



SCALE: 1" = 50'
DATE: 10-29-96
Drawn By: D.R.B.

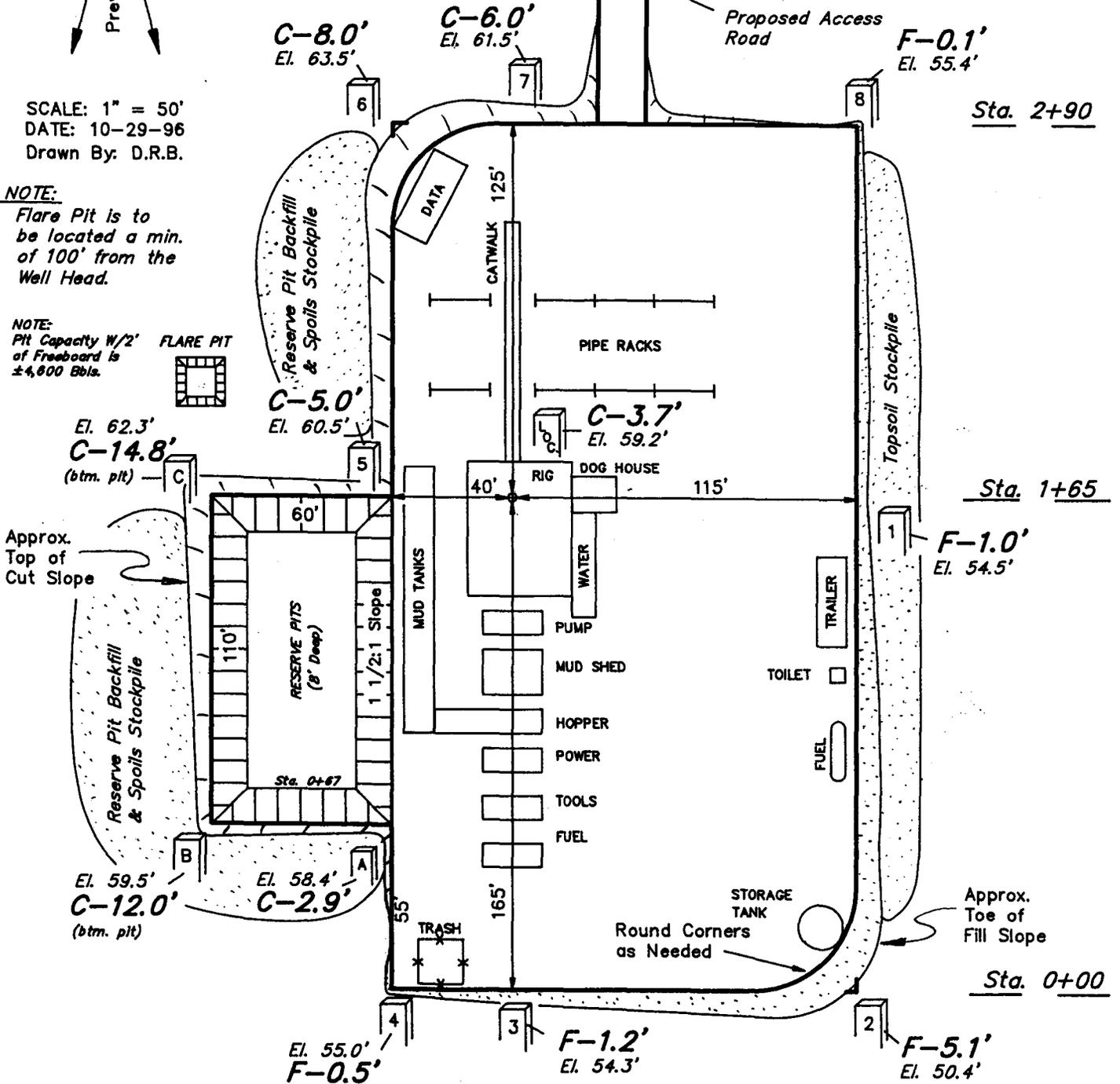
NOTE:

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

NOTE:

Pit Capacity W/2' of Freeboard is ±4,800 Bbls.

FLARE PIT



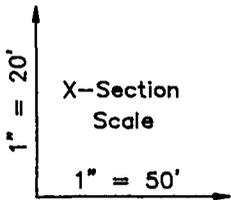
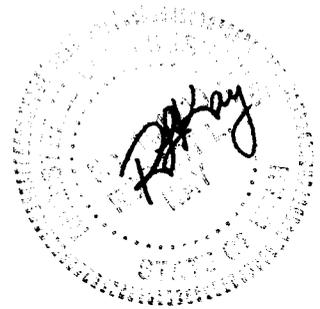
Elev. Ungraded Ground at Location Stake = 6259.2'

Elev. Graded Ground at Location Stake = 6255.5'

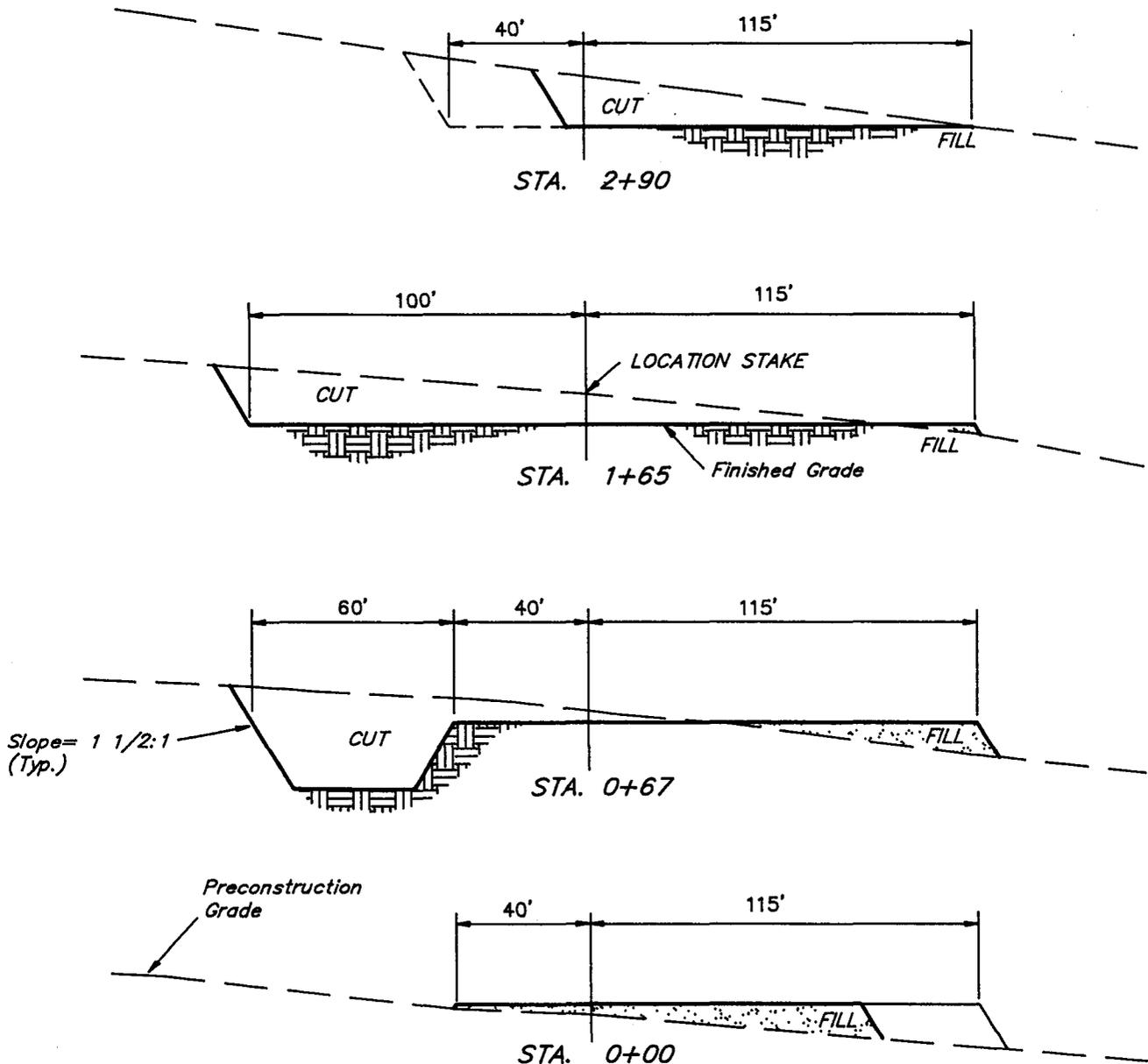
PETROGLYPH OPERATING CO., INC.

TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL



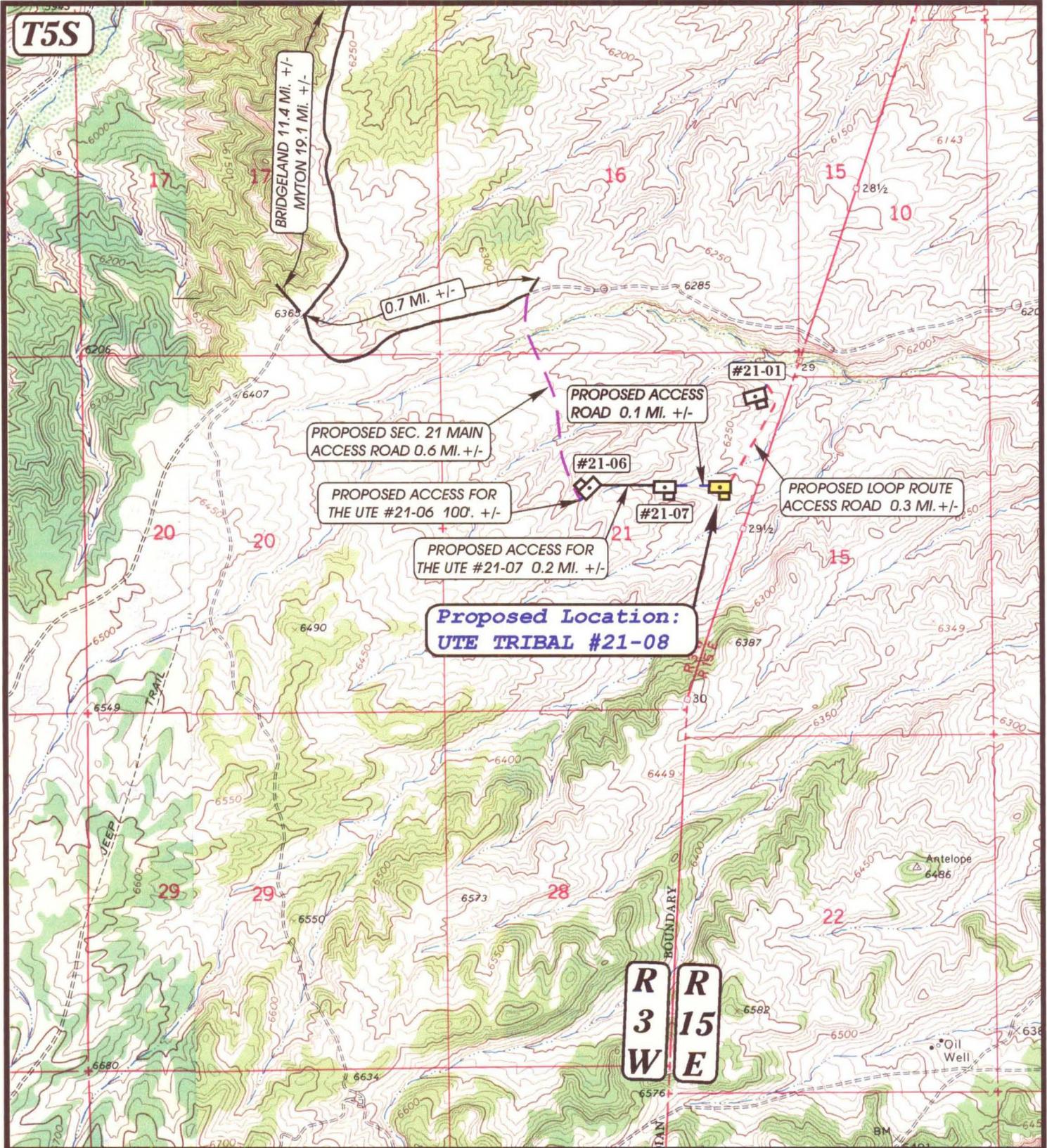
DATE: 10-29-96
Drawn By: D.R.B.



APPROXIMATE YARDAGES

(12") Topsoil Stripping	=	1,910 Cu. Yds.
Remaining Location	=	4,270 Cu. Yds.
TOTAL CUT	=	6,180 CU.YDS.
FILL	=	1,870 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	4,210 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	4,210 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	0 Cu. Yds.



UELS

**TOPOGRAPHIC
MAP "B"**

DATE: 10-30-96
Drawn by: D.COX

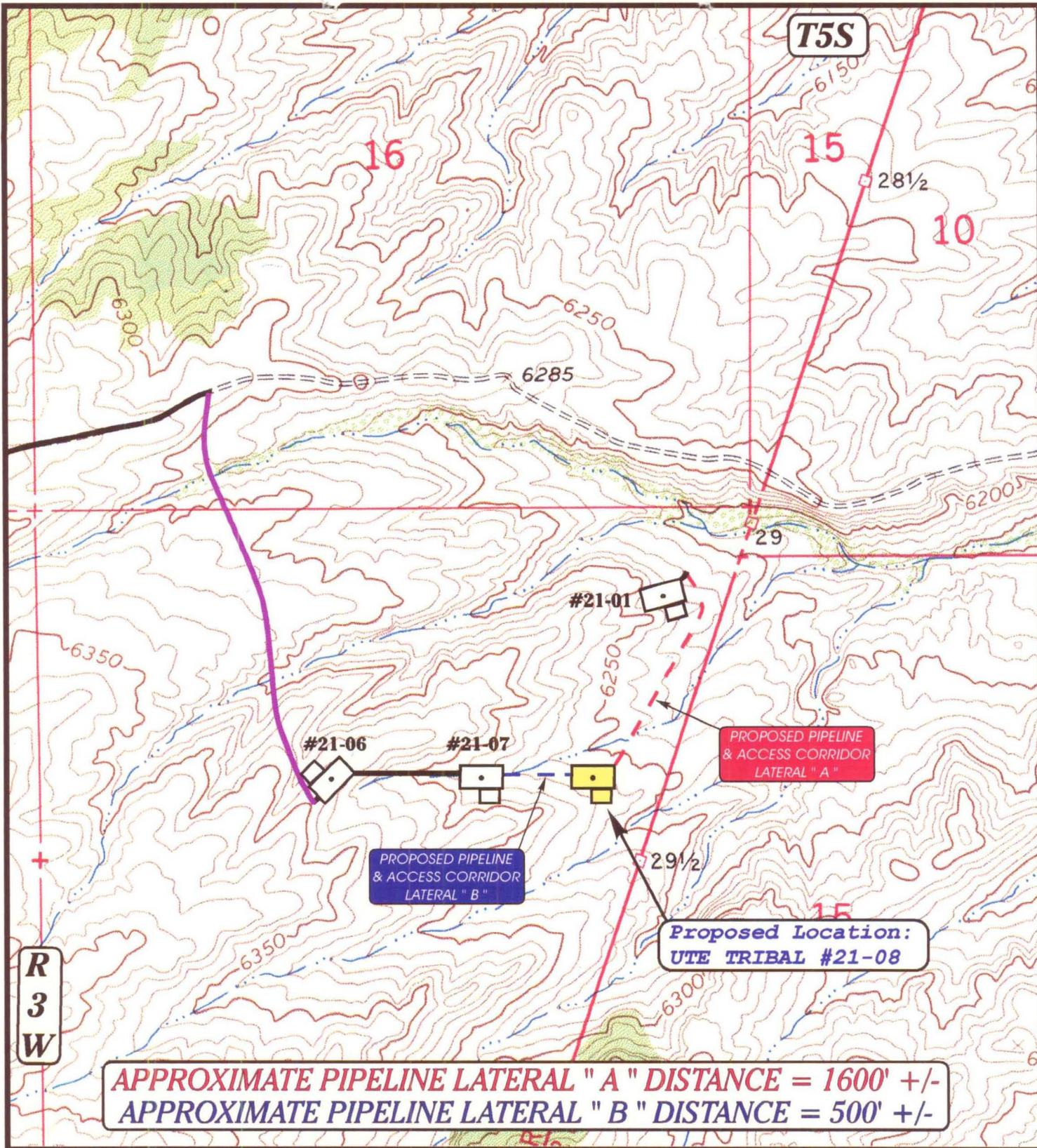
UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



PETROGLYPH OPERATING CO., INC.

**UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL**

SCALE: 1" = 2000'



U E L S

TOPOGRAPHIC MAP "D"

--- Proposed Pipeline & Road Corridor

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



SCALE: 1" = 1000'

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.

DATE: 10-30-96
 Drawn by: D.COX

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/13/96

API NO. ASSIGNED: 43-013-31763

WELL NAME: UTE TRIBAL 21-08
OPERATOR: PETROGLYPH OPERATING (N3800)

PROPOSED LOCATION:
SENE 21 - T05S - R03W
SURFACE: 1980-FNL-4100-FWL
BOTTOM: 1980-FNL-4100-FWL
DUCHESNE COUNTY
ANTELOPE CREEK FIELD (060)

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

LEASE TYPE: IND
LEASE NUMBER: 14-20-H62-3516

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal [State [] Fee []
(Number 80 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.

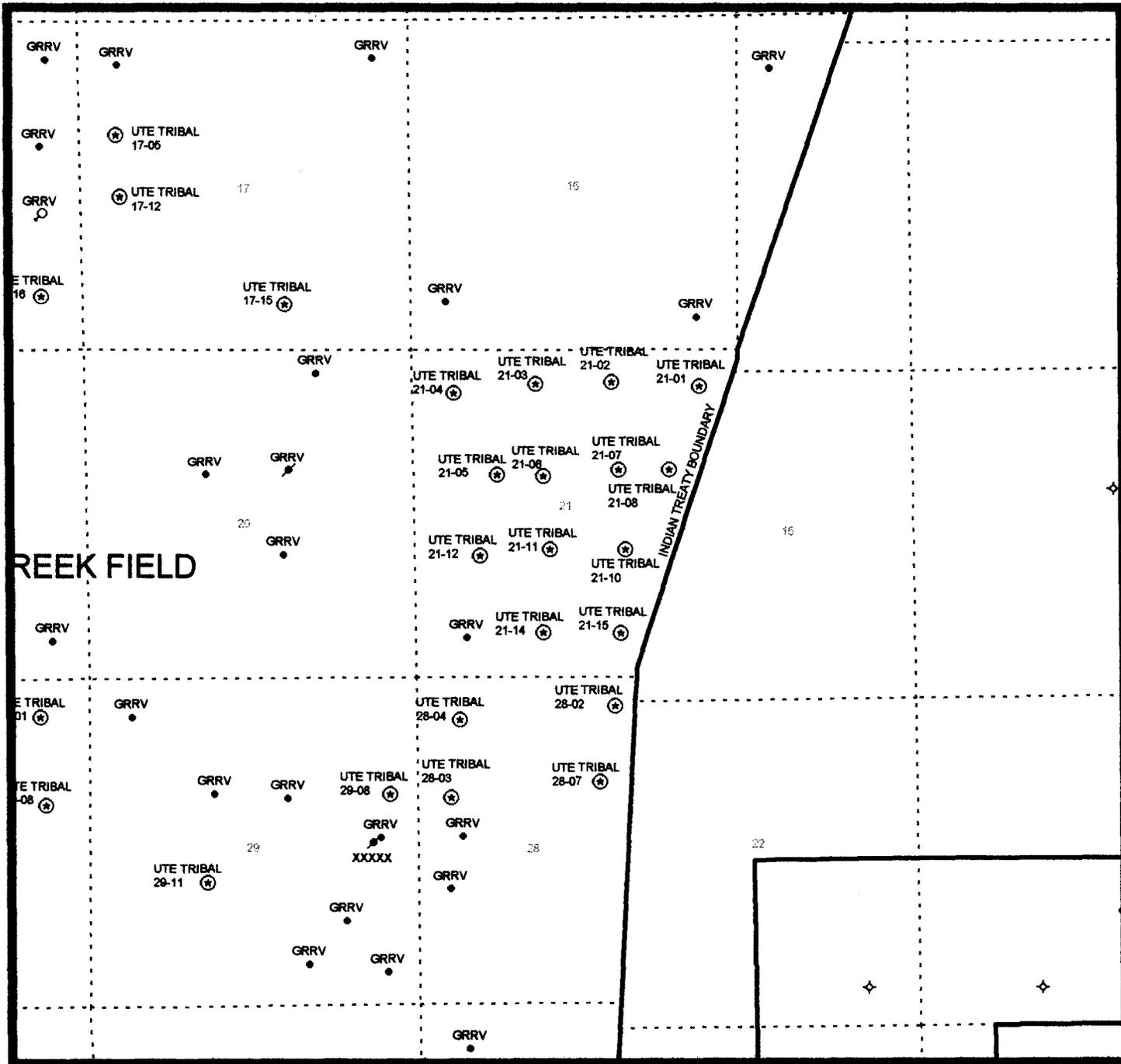
R649-3-3. Exception.

Drilling Unit.
Board Cause no: _____
Date: _____

COMMENTS: _____

STIPULATIONS: _____

**OPERATOR: PETROGLYPH
FIELD: ANTELOPE CREEK (060)
SEC. TWP. RNG: 21, T5S R3W
COUNTY: DUCHESNE
UAC: R649-3-2**



**PREPARED:
DATE: 13-DEC-96**

STATE OF UTAH, DIV OF OIL, GAS & MINERALS

Operator: PETROGLYPH OPERATING	Well Name: UTE TRIBAL 21-08
Project ID: 43-013-31763	Location: SEC. 21 - T5S - R3W

Design Parameters:

Mud weight (9.20 ppg) : 0.478 psi/ft
 Shut in surface pressure : 2514 psi
 Internal gradient (burst) : 0.065 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	6,090	5.500	M-50	ST&C	6,090	4.890	

	Collapse Load (psi)	Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load (kips)	Strgth (kips)	S.F.
1	2911	3650	1.254	2911	4550	1.56	94.40	186	1.97 J

Prepared by : MATTHEWS, Salt Lake City, Utah
 Date : 12-16-1996
 Remarks :

GREEN RIVER

Minimum segment length for the 6,090 foot well is 1,500 feet.

SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 117°F (Surface 74°F , BHT 159°F & temp. gradient 1.400°/100 ft.)

String type: Production

The mud gradient and bottom hole pressures (for burst) are 0.478 psi/ft and 2,911 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)

December 16, 1996

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

Re: Ute Tribal 21-08 Well, 1980' FNL, 4100' FWL, SE NE, Sec. 21,
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 43-013-31763.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Firth".

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 21-08
API Number: 43-013-31763
Lease: 14-20-H62-3516
Location: SE NE Sec. 21 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

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, UT 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface
1980' FNL & 4100' Lot 2 NOV 28 1996
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

20.7 MILES SOUTHWEST OF MYTON, UTAH

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1980'
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
533.33

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
6090.5'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6255.5' GRADED GROUND

22. APPROX. DATE WORK WILL START*

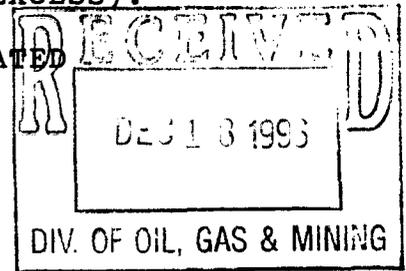
NOVEMBER, 1996

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 ₂ + 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#	6090.5'	

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, Utah
Ute Tribe, Fort Duchesne, Utah



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

24. SIGNED [Signature] TITLE AGENT EOR PETROGLYPH DATE 11-8-96

(This space for Federal or State office use)
PERMIT NO. _____ APPROVAL DATE _____ NOTICE OF APPROVAL

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
TITLE Mineral Resources DATE DEC 16 1996

1170907M030

*See Instructions On Reverse Side

memorandum

DATE: **NOV 27 1996**

REPLY TO
ATTN OF:

Superintendent, Uintah & Ouray Agency

SUBJECT:

Concurrence Letter for **PETROGLYPH OPERATING COMPANY**
TOWNSHIP 5 SOUTH, RANGE 3 WEST, USB&M

TO: Ute Tribal #21-01, SWNE Sec. 21, Ute Tribe #21-10, NWSE, Sec.21
Ute Tribal #21-02, SWSE, Sec. 21, Ute Tribal #21-08, SENE, Sec 21.

RECEIVED

NOV 27 1996

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 November 27, 1996, 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 notified 48 hours prior to construction, as a Tribal Technician is to monitor construction.
2. A 50 foot corridor rights-of-way shall be granted with the following:
 - A. Access roads shall be limited to 22 feet, except as granted for sharp turns.
 - B. Surface pipelines shall be limited to 13 feet.
 - C. Buried pipelines shall be limited 15 feet, and will be monitored by Tribal Technician.
3. Due to the ferruginous hawks, the access road and pipeline will be staked and constructed according to Petroglyphs 96 Drilling Program Map, (attached)
4. Petroglyph Operating Company will assure the Ute Tribe that any/all contractors and any sub-contractors has acquired a Tribal Business License and have access permits prior to construction.
5. 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.
6. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
7. The personnel for the Ute Tribe Energy & Mineral Department should be consulted should cultural remains from subsurface deposits be exposed or identified during construction.
8. All mitigation stipulations contained in the Bureau of Indian Affairs combined site specific Environmental Analysis (EA) will be strictly adhered, during and after construction.
9. 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 Completion's.

Charles H. Cameron

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company

Well Name & Number: Ute Tribal 21-08

API Number: 43-013-31763

Lease Number: 14-20-H62-3516

Location: Lot 2 Sec. 21 T. 5S R. 3W

NOTIFICATION REQUIREMENTS

- Location Construction - at least 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 - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure 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.

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.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative by the operator to insure compliance.

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.

If conductor pipe is set it will be cemented to surface. If drive pipe is used it will be pulled prior to cementing surface casing.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the usable water zone identified at ± 286 ft. or by setting the surface casing at ± 336 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 **TOP OF CEMENT** if the surface casing is set at ± 336 ft. or it will be run to **Surface** if the surface casing is set at ± 250 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.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

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 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (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 (b. 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 on-lease 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. Tests for meter accuracy will be conducted following initial installation and 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 approval or notification is necessary, please contact one of the following individuals:

Wayne Bankert (801) 789-4170
Petroleum Engineer

Ed Forsman (801) 789-7077
Petroleum Engineer

Jerry Kenczka (801) 789-1190
Petroleum Engineer

BLM FAX Machine (801) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

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

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

SURFACE CONDITIONS OF APPROVAL

The Surface Use Conditions of Approval all come from the BIA Concurrence letter and Environmental Analysis Mitigation Stipulations.

Concurrence Letter:

1. The Ute Tribe Energy and Mineral Department is to be notified 48 hours prior to construction. A Tribal Technician is to monitor construction.
2. A 50 foot corridor rights-of-way shall be granted with the following: Access roads shall be limited to 22 feet, except as granted for sharp turns. Surface pipelines shall be limited to 13 feet. Buried pipelines shall be limited to 15 feet, and will be monitored by a Tribal Technician.
3. Due to the ferruginous hawks, the access road and pipeline will be staked and constructed according to Petroglyph's 1996 Drilling Program Map.
4. Petroglyph will assure the Ute Tribe that any/all contractors and subcontractors have acquired a Tribal Business License and have access permits prior to construction.
5. 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.
6. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
7. The Ute Tribe Energy & Mineral Department shall be consulted if cultural remains from subsurface deposits are exposed or identified during construction.
8. All mitigation Stipulations from the BIA combined site specific Environmental Analysis will be strictly adhered to.
9. Upon completion of APD and Right-of-way construction, the Ute Tribe Energy & Mineral Department will be notified by Petroglyph so that a Tribal Technician can verify an Affidavit of Completion.

Environmental Analysis Mitigation Stipulations:

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 areas 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.

SOILS/ RANGE/ WATERSHEDS

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

2. PIPELINES

A surface pipeline is planned for the location. Refer to the APD for further details. Surface pipelines will be limited to 13 feet of the right-of-way.

A. SURFACE PIPELINES

The pipeline will be constructed to lay on the soil surface, and the right-of-way 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 right-of-way. 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 right-of-way will not be used as an access road.

B. BURIED PIPELINES

Refer to the Site Specific Environmental Analysis for a discussion of this option. Since a buried line is not mentioned in the APD the burying and related reseeding instructions are not mentioned as conditions of approval even though they are described in the Environmental Analysis.

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 cuttings and mud, etc. left in them to be buried will be buried a minimum of three 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 there is a 50 foot right-of-way, the bladed areas of the access road will be limited to 22 feet in all areas except where deep cuts and fills are required, or sharp turns are required, and at intersections with other roads.

WILDLIFE/VEGETATION/ THREATENED & ENDANGERED SPECIES

Because the wellsite is located more than one half mile from a Ferruginous Hawk nest, this well site does not have a seasonal restriction on construction and drilling.

CULTURAL RESOURCES

Surveys were performed by James A. Truesdale. The consultant recommends clearance for the project as it is presently staked.

UTE TRIBAL REGULATIONS

See the concurrence letter.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Petroglyph Operating Company, Inc.

3. Address and Telephone No.
P.O. Box 1839, Hutchinson, KS 67504-1839; (316) 665-8500

4. Location of Well (Footage, Sec., T., R., or Survey Description)
**1980' FNL & 4100' FWL
 Lot 2, Sec. 21-T5S-R3W**

5. Lease Designation and Serial No.
14-20-H62-3516

6. If Indian, Allottee or Tribe Name
Ute Indian Tribe

7. If Unit or CA, Agreement Designation
14-20-H62-4650

8. Well Name and No.
Ute Tribal 21-08

9. API Well No.
43-013-31763

10. Field and Pool, or Exploratory Area
Antelope Creek

11. County or Parish, State
Duchesne County, UT

CONFIDENTIAL

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

JAN 21 1998

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

*Extended to 12/16/98.
BTS 3/2/98*

Please extend the approval on the Application for Permit to Drill for the above referenced well.

Petroglyph Operating Company, Inc. plans on drilling this well within the next year.

RECEIVED
MAR 02 1998
DIV. OF OIL, GAS & MINING

COPY

12/16/98
 VERNAL DIST.
 ENG. W10 12/18
 GEOL. _____
 E.S. _____
 PET. _____
 A.M. _____

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

Signed [Signature] Title Operations Coordinator Date 12/31/97

(This space for Federal or State official use)
 Approved [Signature] Title Assistant Field Manager Date FEB 06 1998
 Mineral Resources

Conditions of Approval, if any:

CONDITIONS OF APPROVAL ATTACHED

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

*See Instruction on Reverse Side



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, Utah 84078-2799

<http://www.blm.gov/utah/vernal>

Phone: (435) 781-4400

Fax: (435) 781-4410

IN REPLY REFER TO:

3160

UT08300

CONFIDENTIAL

December 17, 1998

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

Re: Notification of Expiration
Well No. Ute Tribal 21-08 /43-013-31763
Lot 2, Section 21, T5S, R3W
Lease No. 14-20-H62-3516
Duchesne County, Utah

Gentlemen:

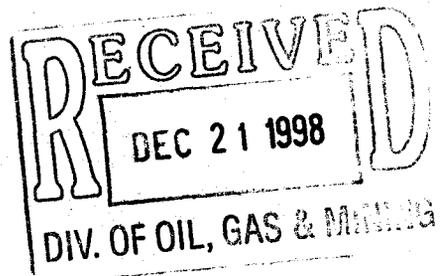
The Application for Permit to Drill the above-referenced well was approved on December 16, 1996. Petroglyph Operating Company, Inc. requested an extension of the original APD approval for an additional year. The request was reviewed and the extension approved until December 16, 1998. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Margie Herrmann
Legal Instruments Examiner

cc: State Div. OG&M
Ed Trotter





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, Utah 84078-2799

<http://www.blm.gov/utah/vernal>

Phone: (435) 781-4400

Fax: (435) 781-4410

IN REPLY REFER TO:

3160

UT08300

CONFIDENTIAL

December 17, 1998

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

Re: Notification of Expiration
Well No. Ute Tribal 21-08 /43-013-31763
Lot 2, Section 21, T5S, R3W
Lease No. 14-20-H62-3516
Duchesne County, Utah

Gentlemen:

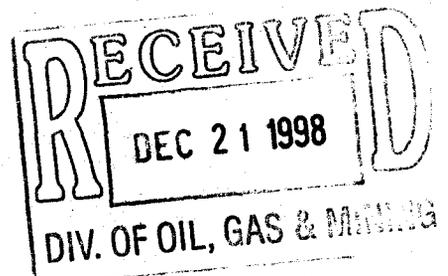
The Application for Permit to Drill the above-referenced well was approved on December 16, 1996. Petroglyph Operating Company, Inc. requested an extension of the original APD approval for an additional year. The request was reviewed and the extension approved until December 16, 1998. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Margie Herrmann
Legal Instruments Examiner

cc: State Div. OG&M
Ed Trotter



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Petroglyph Operating Company, Inc.

3. Address and Telephone No.
P.O. Box 1839, Hutchinson, KS 67504-1839; (316) 665-8500

4. Location of Well (Footage, Sec., T., R., or Survey Description)
**1980' FNL & 4100' FWL
 Lot 2, Sec. 21-T5S-R3W**

5. Lease Designation and Serial No.
14-20-H62-3516

6. If Indian, Allottee or Tribe Name
Ute Indian Tribe

7. If Unit or CA, Agreement Designation
14-20-H62-4650

8. Well Name and No.
Ute Tribal 21-08

9. API Well No.
43-013-31763

10. Field and Pool, or Exploratory Area
Antelope Creek

11. County or Parish, State
Duchesne County, UT

CONFIDENTIAL

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

JAN 21 1998

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

*Extended to 12/16/98.
BTS 3/2/98*

Please extend the approval on the Application for Permit to Drill for the above referenced well.

Petroglyph Operating Company, Inc. plans on drilling this well within the next year.

RECEIVED
MAR 02 1998
DIV. OF OIL, GAS & MINING

COPY

12/16/98
 VERNAL DIST.
 ENG. W10 12/18
 GEOL. _____
 E.S. _____
 PET. _____
 A.M. _____

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

Signed [Signature] Title Operations Coordinator Date 12/31/97

(This space for Federal or State official use)
 Approved [Signature] Title Assistant Field Manager Date FEB 06 1998
 Mineral Resources

Conditions of Approval, if any:

CONDITIONS OF APPROVAL ATTACHED

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

*See Instruction on Reverse Side

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, UT 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface
1980' FNL & 4100' Lot 2 NOV 3 1996
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

20.7 MILES SOUTHWEST OF MYTON, UTAH

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1980' (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
533.33

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
6090.5'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6255.5' GRADED GROUND

22. APPROX. DATE WORK WILL START*

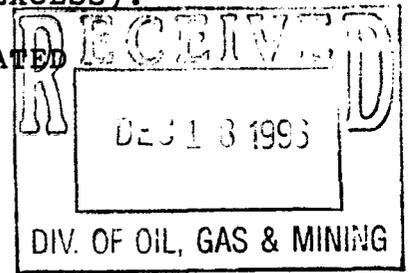
NOVEMBER, 1996

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 ₂ + 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#	6090.5'	

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, Utah
Ute Tribe, Fort Duchesne, Utah



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

24. SIGNED [Signature] TITLE AGENT EOR PETROGLYPH DATE 11-8-96

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE NOTICE OF APPROVAL

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 DEC 16 1996

11TC907M030

*See Instructions On Reverse Side

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

memorandum

DATE: **NOV 27 1996**

REPLY TO
ATTN OF:

Superintendent, Uintah & Ouray Agency

SUBJECT:

Concurrence Letter for **PETROGLYPH OPERATING COMPANY**
TOWNSHIP 5 SOUTH, RANGE 3 WEST, USB&M

TO: Ute Tribal #21-01, SWNE Sec. 21, Ute Tribe #21-10, NWSE, Sec.21
Ute Tribal #21-02, SWSE, Sec. 21, Ute Tribal #21-08, SENE, Sec 21.

RECEIVED

NOV 27 1996

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 November 27, 1996, 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 notified 48 hours prior to construction, as a Tribal Technician is to monitor construction.
2. A 50 foot corridor rights-of-way shall be granted with the following:
 - A. Access roads shall be limited to 22 feet, except as granted for sharp turns.
 - B. Surface pipelines shall be limited to 13 feet.
 - C. Buried pipelines shall be limited 15 feet, and will be monitored by Tribal Technician.
3. Due to the ferruginous hawks, the access road and pipeline will be staked and constructed according to Petroglyphs 96 Drilling Program Map, (attached)
4. Petroglyph Operating Company will assure the Ute Tribe that any/all contractors and any sub-contractors has acquired a Tribal Business License and have access permits prior to construction.
5. 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.
6. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
7. The personnel for the Ute Tribe Energy & Mineral Department should be consulted should cultural remains from subsurface deposits be exposed or identified during construction.
8. All mitigation stipulations contained in the Bureau of Indian Affairs combined site specific Environmental Analysis (EA) will be strictly adhered, during and after construction.
9. 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 Completion's.

Charles H. Cameron

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company

Well Name & Number: Ute Tribal 21-08

API Number: 43-013-31763

Lease Number: 14-20-H62-3516

Location: Lot 2 Sec. 21 T. 5S R. 3W

NOTIFICATION REQUIREMENTS

- Location Construction - at least 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 - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure 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.

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.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative by the operator to insure compliance.

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.

If conductor pipe is set it will be cemented to surface. If drive pipe is used it will be pulled prior to cementing surface casing.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the usable water zone identified at ± 286 ft. or by setting the surface casing at ± 336 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 **TOP OF CEMENT** if the surface casing is set at ± 336 ft. or it will be run to **Surface** if the surface casing is set at ± 250 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.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours **prior** to spudding the well.

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 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (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 (b. 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 on-lease 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. Tests for meter accuracy will be conducted following initial installation and 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 approval or notification is necessary, please contact one of the following individuals:

Wayne Bankert Petroleum Engineer	(801) 789-4170
Ed Forsman Petroleum Engineer	(801) 789-7077
Jerry Kenczka Petroleum Engineer	(801) 789-1190
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, spend solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

SURFACE CONDITIONS OF APPROVAL

The Surface Use Conditions of Approval all come from the BIA Concurrence letter and Environmental Analysis Mitigation Stipulations.

Concurrence Letter:

1. The Ute Tribe Energy and Mineral Department is to be notified 48 hours prior to construction. A Tribal Technician is to monitor construction.
2. A 50 foot corridor rights-of-way shall be granted with the following: Access roads shall be limited to 22 feet, except as granted for sharp turns. Surface pipelines shall be limited to 13 feet. Buried pipelines shall be limited to 15 feet, and will be monitored by a Tribal Technician.
3. Due to the ferruginous hawks, the access road and pipeline will be staked and constructed according to Petroglyph's 1996 Drilling Program Map.
4. Petroglyph will assure the Ute Tribe that any/all contractors and subcontractors have acquired a Tribal Business License and have access permits prior to construction.
5. 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.
6. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
7. The Ute Tribe Energy & Mineral Department shall be consulted if cultural remains from subsurface deposits are exposed or identified during construction.
8. All mitigation Stipulations from the BIA combined site specific Environmental Analysis will be strictly adhered to.
9. Upon completion of APD and Right-of-way construction, the Ute Tribe Energy & Mineral Department will be notified by Petroglyph so that a Tribal Technician can verify an Affidavit of Completion.

Environmental Analysis Mitigation Stipulations:

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 areas 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.

SOILS/ RANGE/ WATERSHEDS

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

2. PIPELINES

A surface pipeline is planned for the location. Refer to the APD for further details. Surface pipelines will be limited to 13 feet of the right-of-way.

A. SURFACE PIPELINES

The pipeline will be constructed to lay on the soil surface, and the right-of-way 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 right-of-way. 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 right-of-way will not be used as an access road.

B. BURIED PIPELINES

Refer to the Site Specific Environmental Analysis for a discussion of this option. Since a buried line is not mentioned in the APD the burying and related reseeding instructions are not mentioned as conditions of approval even though they are described in the Environmental Analysis.

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 cuttings and mud, etc. left in them to be buried will be buried a minimum of three 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 there is a 50 foot right-of-way, the bladed areas of the access road will be limited to 22 feet in all areas except where deep cuts and fills are required, or sharp turns are required, and at intersections with other roads.

WILDLIFE/VEGETATION/ THREATENED & ENDANGERED SPECIES

Because the wellsite is located more than one half mile from a Ferruginous Hawk nest, this well site does not have a seasonal restriction on construction and drilling.

CULTURAL RESOURCES

Surveys were performed by James A. Truesdale. The consultant recommends clearance for the project as it is presently staked.

UTE TRIBAL REGULATIONS

See the concurrence letter.



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)

December 16, 1996

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

Re: Ute Tribal 21-08 Well, 1980' FNL, 4100' FWL, SE NE, Sec. 21,
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 43-013-31763.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Firth".

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 21-08
API Number: 43-013-31763
Lease: 14-20-H62-3516
Location: SE NE Sec. 21 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

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, UT 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface: 1980' FNL & 4100' FNL Lot 2 (SE NE)
 At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
 14-20-H62-3516

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

7. UNIT AGREEMENT NAME

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

9. AP WELL NO.
 #21-08

10. FIELD AND POOL, OR WILDCAT
 ANTELOPE CREEK

11. SEC., T., R. M., OR BLK. AND SURVEY OR AREA
 Sec. 21, T5S, R3W

12. COUNTY OR PARISH 13. STATE
 DUCHESNE UTAH

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1980'
 (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
 533.33

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.
 6090.5'

19. PROPOSED DEPTH
 6090.5'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6255.5' GRADED GROUND

22. APPROX. DATE WORK WILL START*
 NOVEMBER, 1996

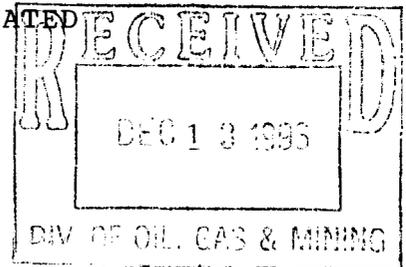
23. PROPOSED CASING AND CEMENTING PROGRAM

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 ₂ + 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#	6090.5'	

CONFIDENTIAL

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, Utah
Ute Tribe, Fort Duchesne, Utah



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

24. SIGNED [Signature] TITLE AGENT FOR PETROGLYPH DATE 11-8-96

(This space for Federal or State office use)
PERMIT NO. 43-013-31763 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:

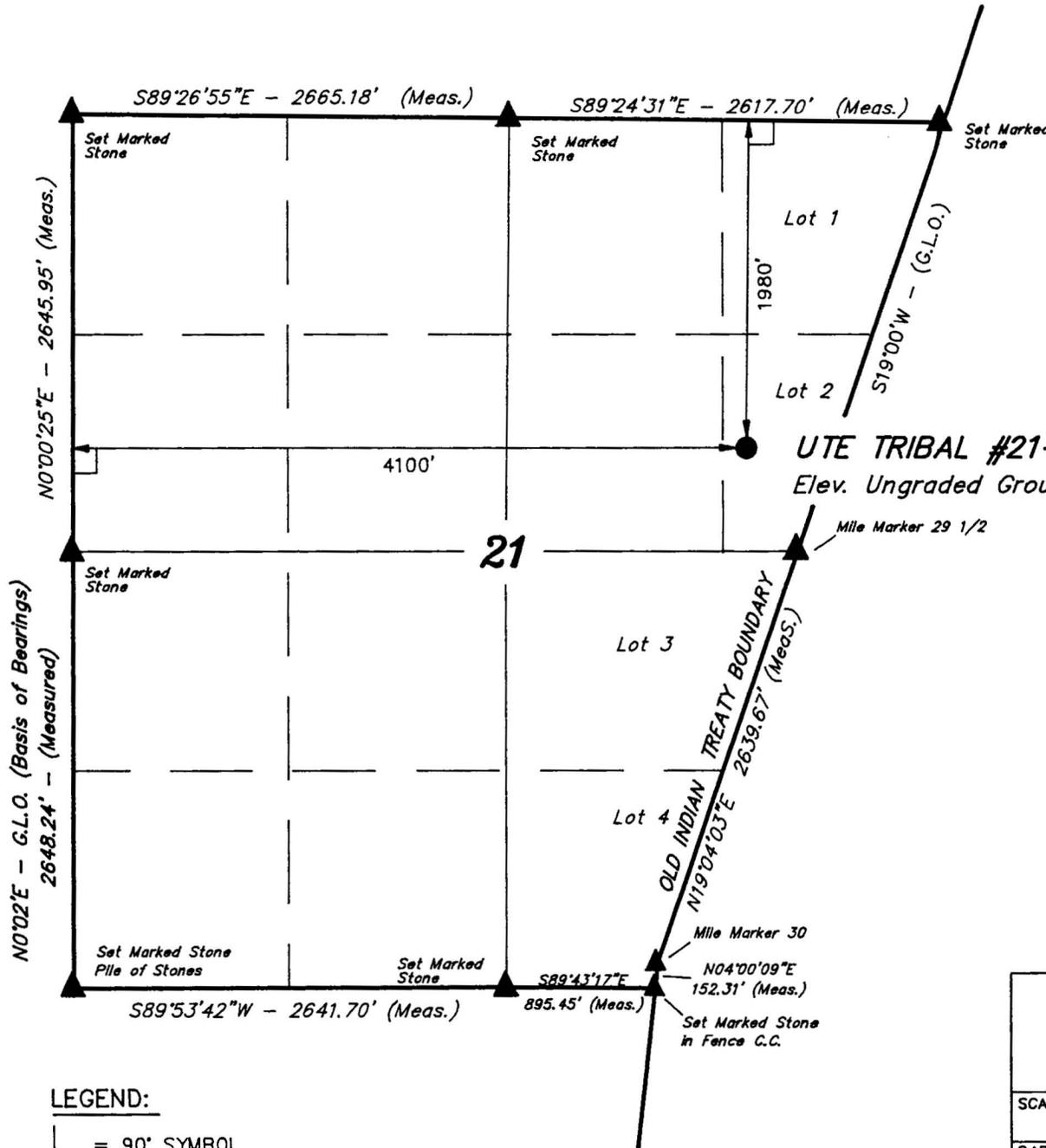
APPROVED BY [Signature] TITLE Petroleum Engineer DATE 12/16/96

*See Instructions On Reverse Side

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

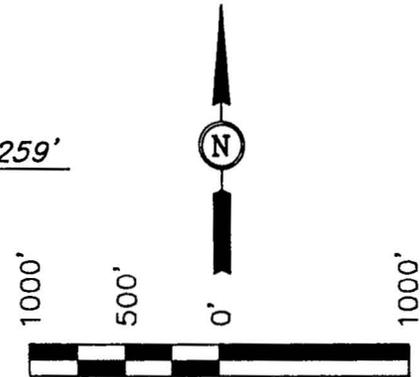
PETROGLYPH OPERATING CO., INC.

Well location, UTE TRIBAL #21-08, located as shown in Lot 2 of Section 21, T5S, R3W, U.S.B.&M. Duchesne County, Utah.



BASIS OF ELEVATION

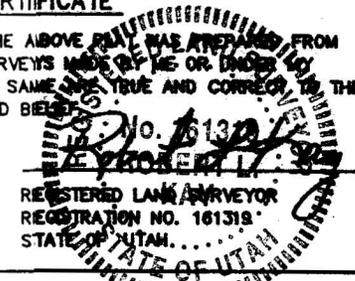
SPOT ELEVATION LOCATED IN THE NW 1/4 SW 1/4 OF SECTION 28, T5S, R3W, U.S.B.&M. TAKEN FROM THE MYTON SW QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6573 FEET.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE 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.



LEGEND:

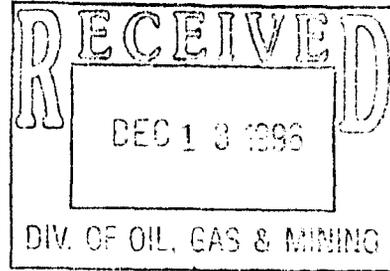
- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & LAND SURVEYING		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 10-15-96	DATE DRAWN: 10-29-96
PARTY B.B. L.D.T. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE PETROGLYPH OPERATING CO., INC.	

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

November 7, 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 #21-08
Lot 2, SEC. 21, T5S, R3W
DUCHESNE COUNTY, UTAH
LEASE NO. BIA 14-20-H62-3516
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

EIGHT POINT PLAN
UTE TRIBAL #21-08
Lot 2, SEC. 21, T5S R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2887.5	3378
'X' marker	4483.5	1782
Douglas Creek	4623.5	1642
"B" Limestone	5000.5	1265
B/Castle Peak Limestone	5555.5	710
Basal Carbonate Limestone	5980.5	285
Total Depth	6090.5	175
Anticipated BHP	2600 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	4623.5	1642
Oil/Gas	B/Castle Peak	5555.5	710
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' - 6090.5'	6090.5'	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 #21-08
Lot 2, SEC. 21, 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 #21-08
Lot 2, SEC. 21, 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.

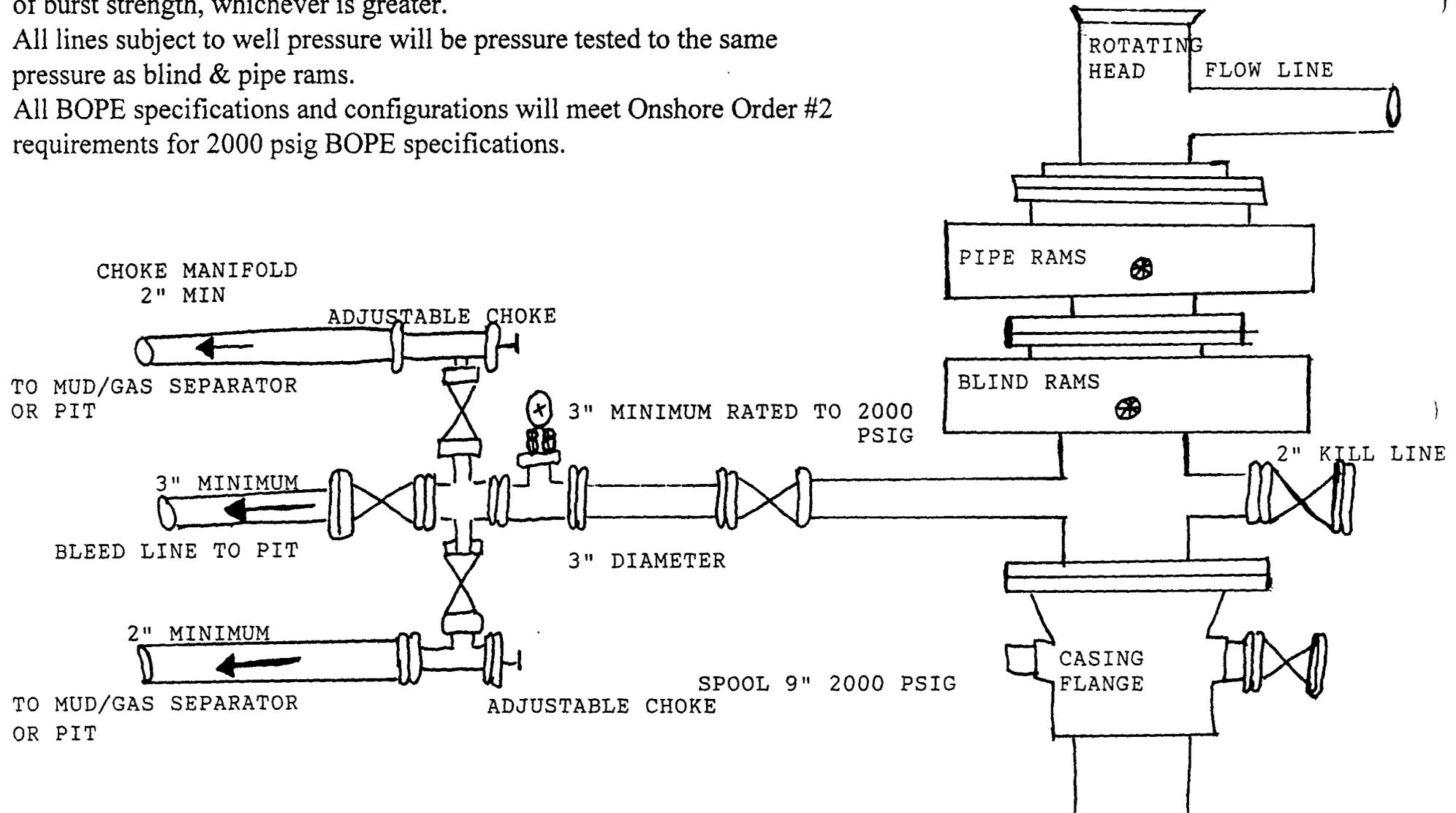
(Attachment: BOP Schematic Diagram)

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 #21-08
Lease Number: BIA 14-20-H62-3516
Location: 1980' FNL & 4100' FWL Lot 2, Sec. 21, T5S R3W
U.S.B.&M., Duchesne County, Utah
Surface Ownership: Ute Indian Tribe

NOTIFICATION REQUIREMENTS

- Location Construction - forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and related Equipment Tests - twenty-four (24) hours prior to running casing and tests.
- First Production Notice - within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

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

THIRTEEN POINT SURFACE USE PROGRAM

1. EXISTING ROADS

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

2. PLANNED ACCESS ROAD

- A. The access road will be approximately 0.1 mile 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 - 6*
- 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 - Yes
- 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 pipeline will be laid approximately 1600' from proposed location to a point in the NE/NE of Section 21, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. A second pipeline will be laid approximately 500' from the proposed location to a point in the SW/NE in Section 21, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. Proposed pipelines cross Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline routes.
3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

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

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

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one

of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities required will be painted within 6 months of installation. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is Desert Brown.

5. LOCATION & TYPE OF WATER SUPPLY

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

6. SOURCE OF CONSTRUCTION MATERIAL

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

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

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

application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.

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

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

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

On BIA administered land:

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

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

To protect the environment:

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

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

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

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

The reserve pit will be located on the 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 North side.

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. 2 & 6 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.

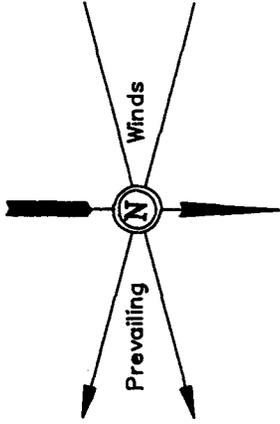
11-8-96
Date



PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL



SCALE: 1" = 50'
DATE: 10-29-96
Drawn By: D.R.B.

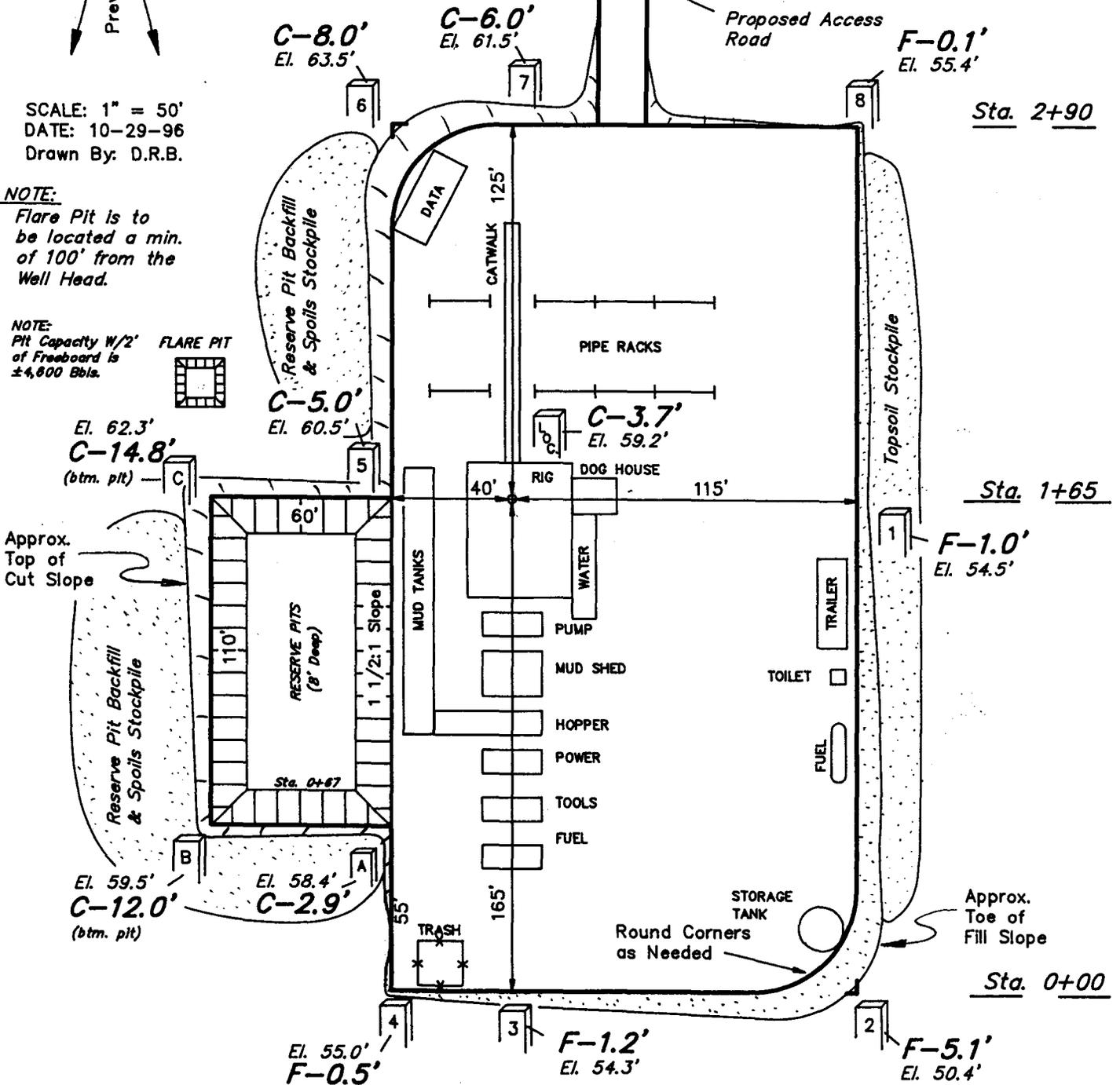
NOTE:

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

NOTE:

Pit Capacity W/2' of Freeboard is ±4,800 Bbls.

FLARE PIT



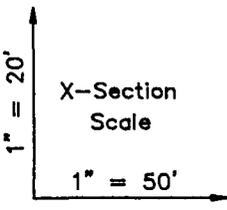
Elev. Ungraded Ground at Location Stake = 6259.2'

Elev. Graded Ground at Location Stake = 6255.5'

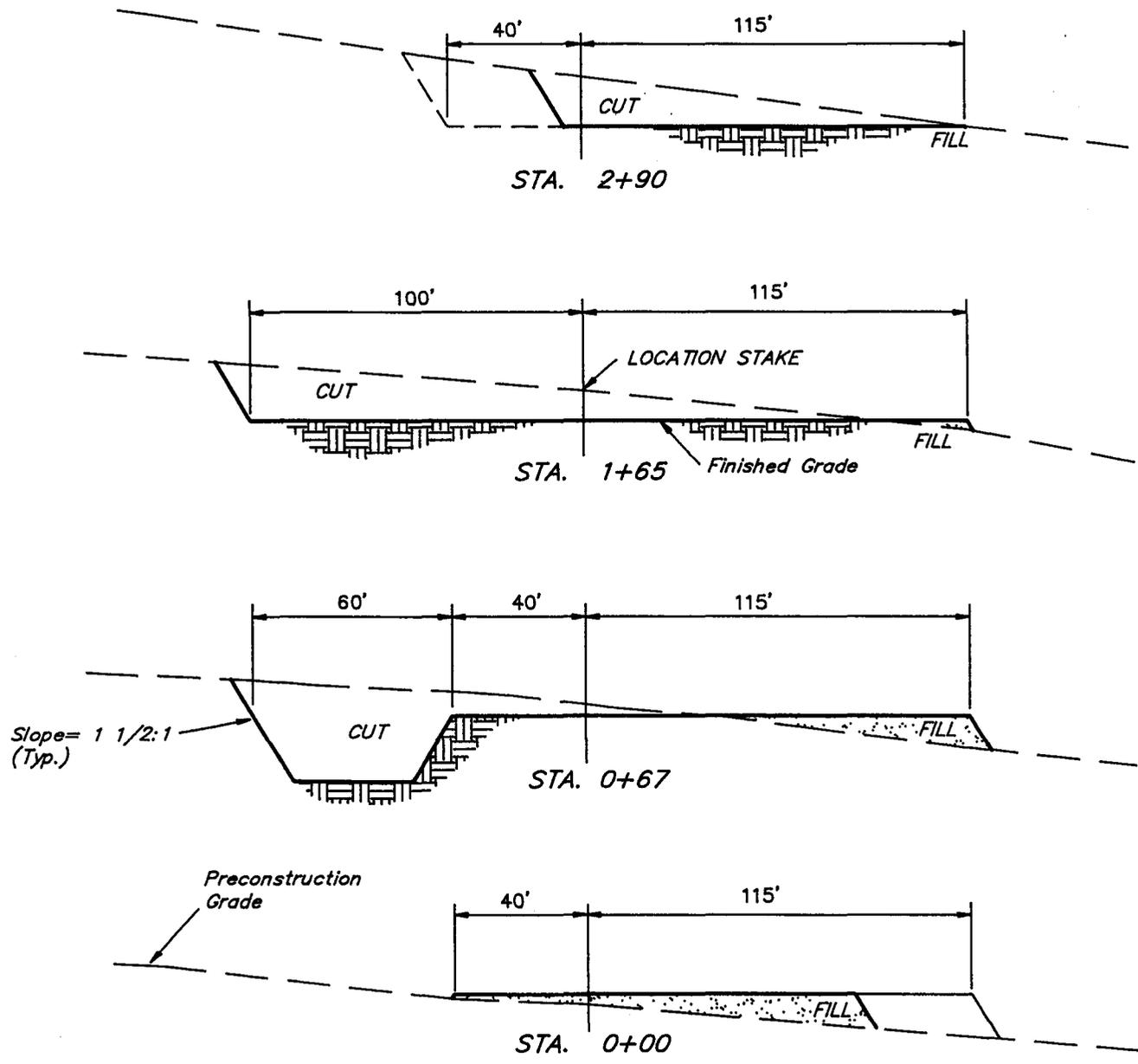
PETROGLYPH OPERATING CO., INC.

TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL



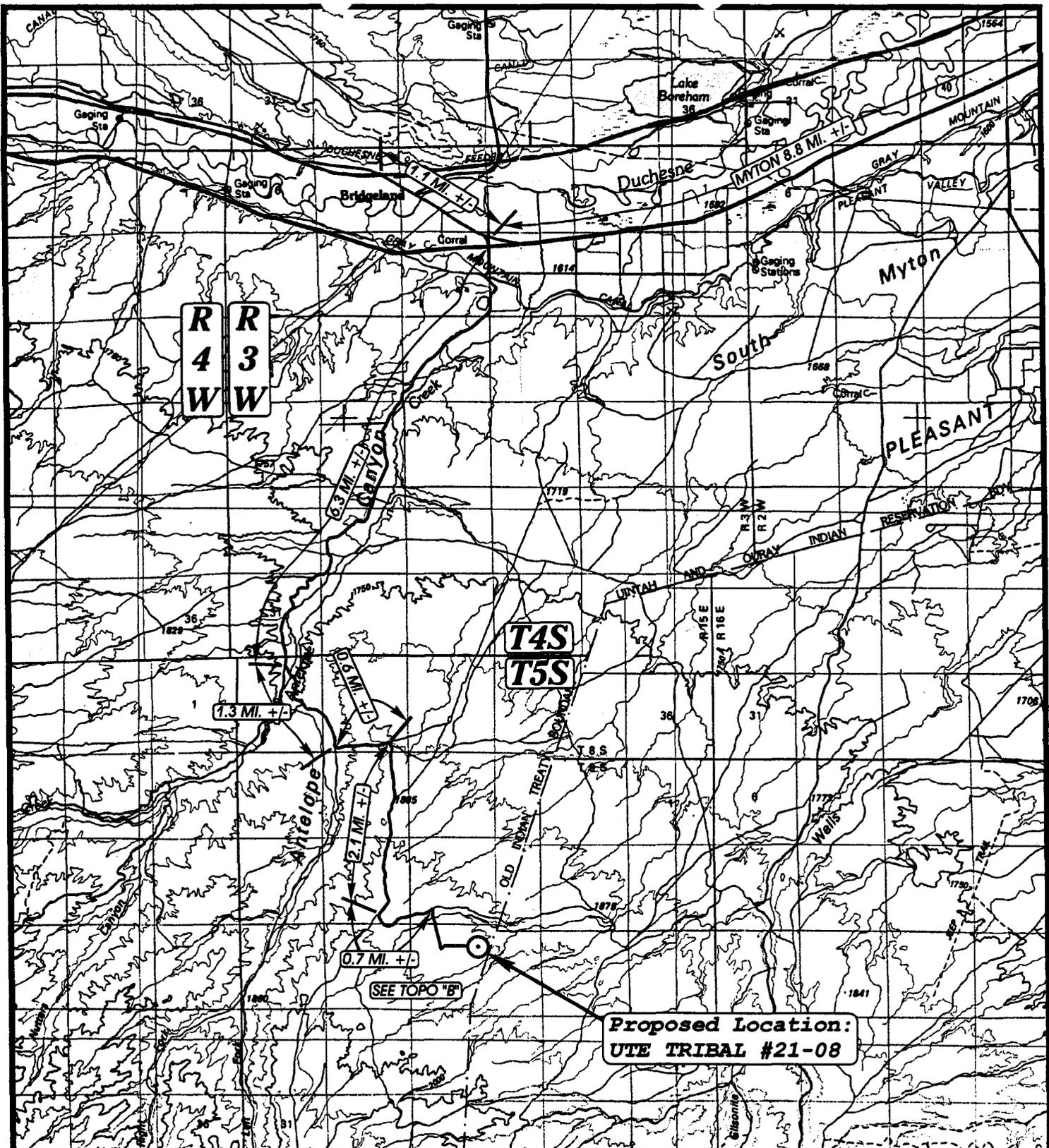
DATE: 10-29-96
Drawn By: D.R.B.



APPROXIMATE YARDAGES

(12") Topsoil Stripping	=	1,910 Cu. Yds.
Remaining Location	=	4,270 Cu. Yds.
TOTAL CUT	=	6,180 CU.YDS.
FILL	=	1,870 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	4,210 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	4,210 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	0 Cu. Yds.



U
E
L
S

**TOPOGRAPHIC
MAP "A"**

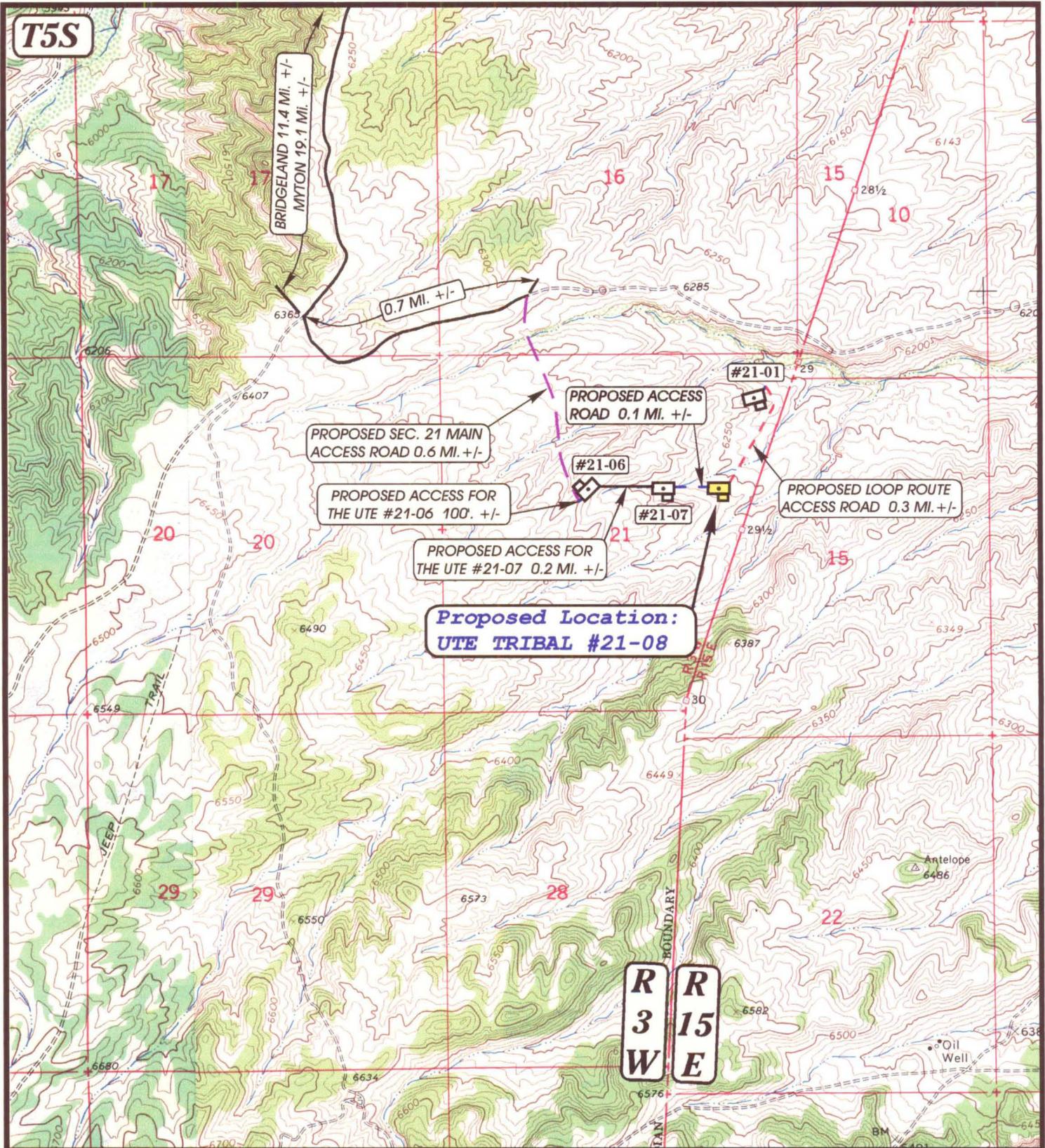
DATE: 10-29-96
Drawn by: JLG

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



PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL



**TOPOGRAPHIC
MAP "B"**

DATE: 10-30-96
Drawn by: D.COX

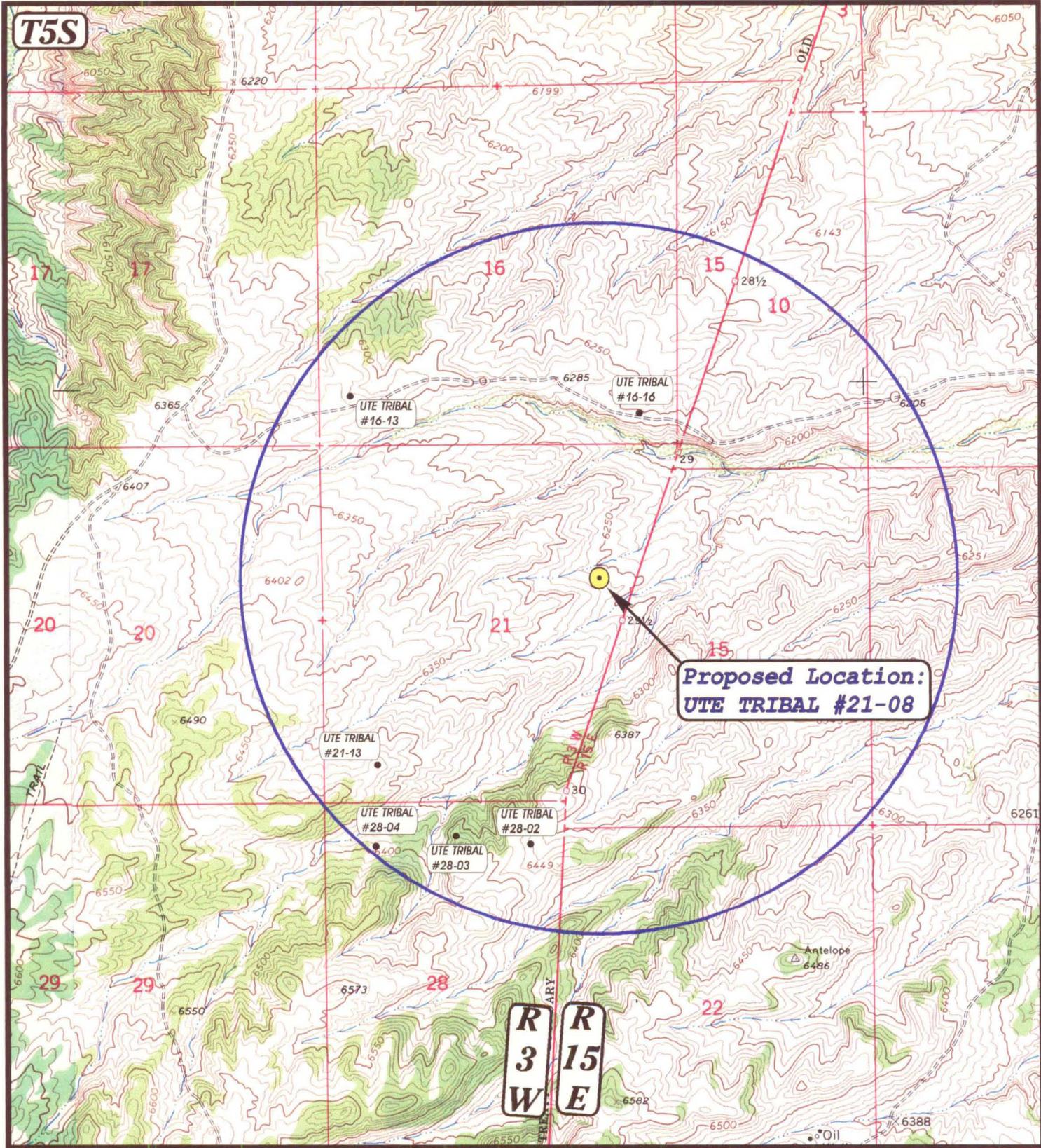
UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



PETROGLYPH OPERATING CO., INC.

**UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.
1980' FNL 4100' FWL**

SCALE: 1" = 2000'



**Proposed Location:
UTE TRIBAL #21-08**

LEGEND:

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

U E I S
 UINTEH ENGINEERING & LAND SURVEYING
 85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

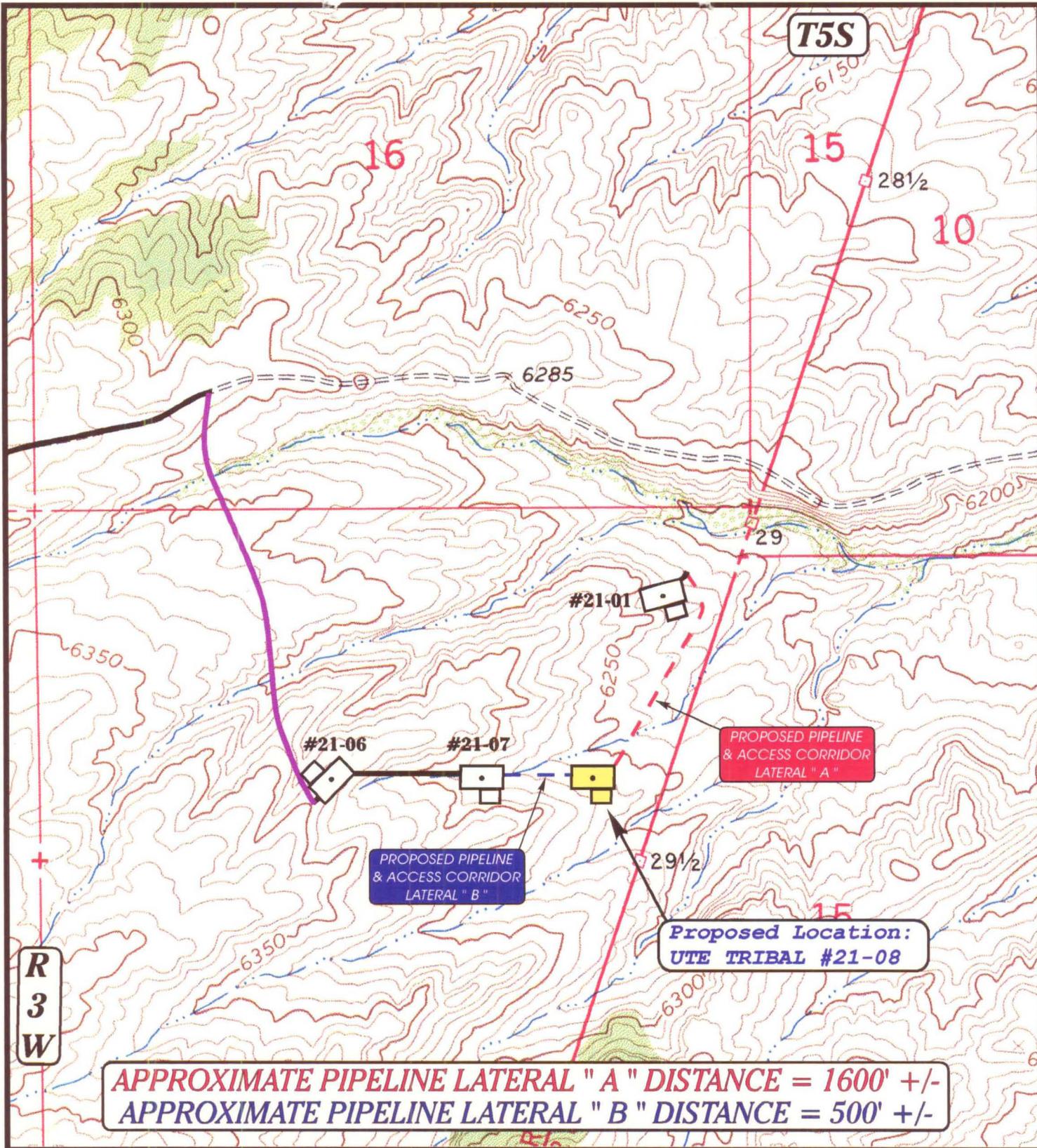


SCALE: 1" = 2000'

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #21-08
 SECTION 21, T5S, R3W, U.S.B.&M.
**TOPOGRAPHIC
 MAP "C"**

DATE: 10-30-96 Drawn by: D.COX



APPROXIMATE PIPELINE LATERAL "A" DISTANCE = 1600' +/-
APPROXIMATE PIPELINE LATERAL "B" DISTANCE = 500' +/-

**TOPOGRAPHIC
MAP "D"**

UELS

--- Proposed Pipeline & Road Corridor



PETROGLYPH OPERATING CO., INC.

**UTE TRIBAL #21-08
SECTION 21, T5S, R3W, U.S.B.&M.**

DATE: 10-30-96
Drawn by: D.COX

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

SCALE: 1" = 1000'

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS FILE WATER SANDS LOCATION INSPE. SUB. REPORT/abd.

981229 LA'D EFF 12-21-98

DATE FILED **DECEMBER 13, 1996**

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO.

INDIAN #

DRILLING APPROVED: **DECEMBER 16, 1996**

14-20-H62-3516

SPUDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

LA'D 12-21-98

FIELD:

ANTELOPE CREEK

UNIT:

COUNTY:

DUCHESNE

WELL NO.

UTE TRIBAL 21-08

API NO. 43-013-31763

LOCATION

1980 FNL

FT. FROM (N) (S) LINE.

4100 FWL

FT. FROM (E) (W) LINE.

SE NE

1/4 - 1/4 SEC.

21

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
5S	3W	21	PETROGLYPH OPERATING				

GEOLOGIC TOPS:

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

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/13/96

API NO. ASSIGNED: 43-013-31763

WELL NAME: UTE TRIBAL 21-08
 OPERATOR: PETROGLYPH OPERATING (N3800)

PROPOSED LOCATION:
 SENE 21 - T05S - R03W
 SURFACE: 1980-FNL-4100-FWL
 BOTTOM: 1980-FNL-4100-FWL
 DUCHESNE COUNTY
 ANTELOPE CREEK FIELD (060)

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

LEASE TYPE: IND
 LEASE NUMBER: 14-20-H62-3516

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal [State [] Fee []
 (Number 80 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.

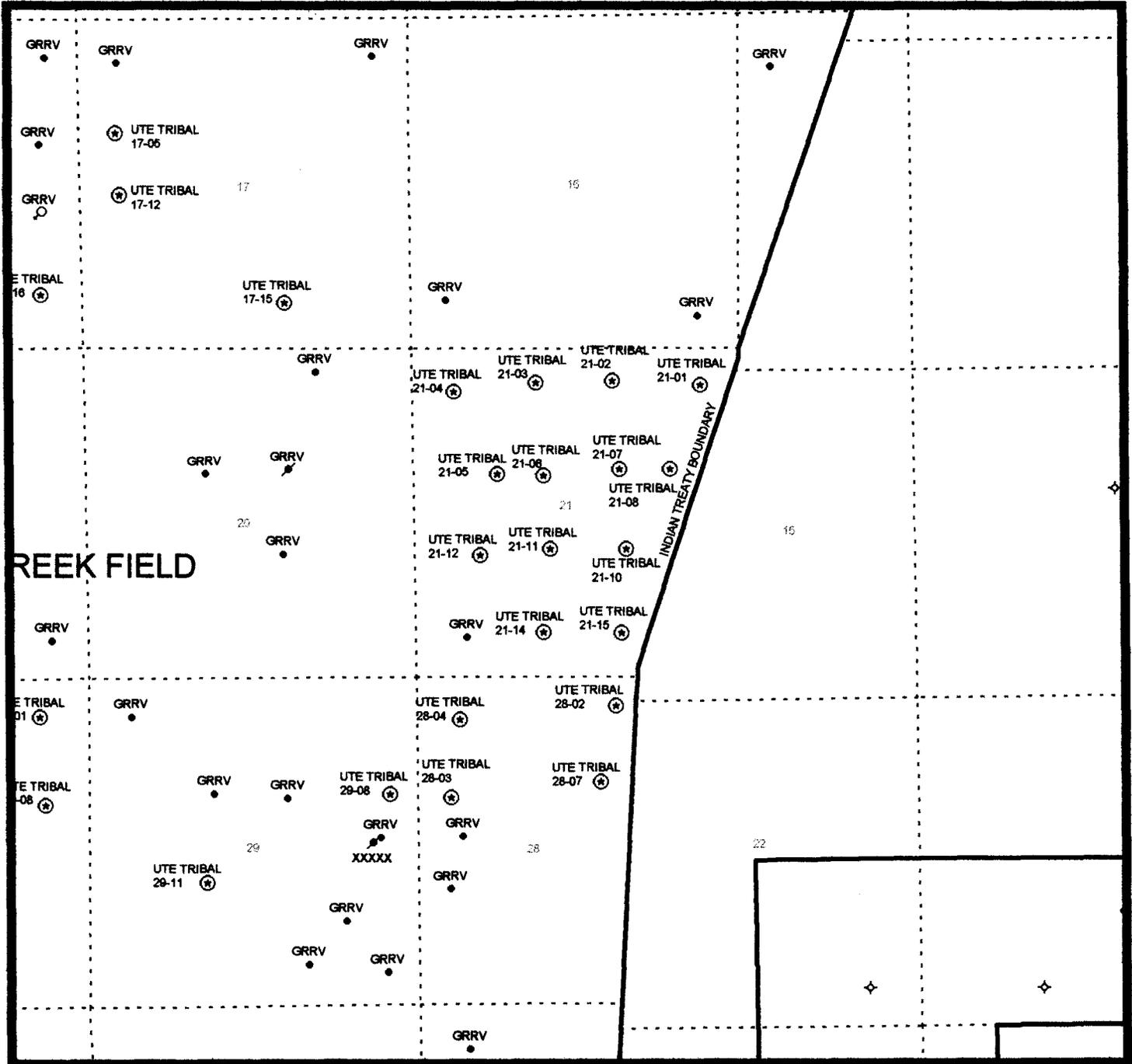
R649-3-3. Exception.

Drilling Unit.
 Board Cause no: _____
 Date: _____

COMMENTS: _____

STIPULATIONS: _____

**OPERATOR: PETROGLYPH
FIELD: ANTELOPE CREEK (060)
SEC. TWP. RNG: 21, T5S R3W
COUNTY: DUCHESNE
UAC: R649-3-2**



**PREPARED:
DATE: 13-DEC-96**

STATE OF UTAH, DIV OF OIL, GAS & MINERALS

Operator: PETROGLYPH OPERATING	Well Name: UTE TRIBAL 21-08
Project ID: 43-013-31763	Location: SEC. 21 - T5S - R3W

Design Parameters:

Mud weight (9.20 ppg) : 0.478 psi/ft
 Shut in surface pressure : 2514 psi
 Internal gradient (burst) : 0.065 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	6,090	5.500	15.50	M-50	ST&C	6,090	4.890

	Collapse Load (psi)	Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load (kips)	Strgth (kips)	S.F.
1	2911	3650	1.254	2911	4550	1.56	94.40	186	1.97 J

Prepared by : MATTHEWS, Salt Lake City, Utah
 Date : 12-16-1996
 Remarks :

GREEN RIVER

Minimum segment length for the 6,090 foot well is 1,500 feet.

SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 117°F (Surface 74°F , BHT 159°F & temp. gradient 1.400°/100 ft.)

String type: Production

The mud gradient and bottom hole pressures (for burst) are 0.478 psi/ft and 2,911 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)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, Utah 84078-2799

<http://www.blm.gov/utah/vernal>

Phone: (435) 781-4400

Fax: (435) 781-4410

IN REPLY REFER TO:

3160

UT08300

CONFIDENTIAL

December 17, 1998

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

Re: Notification of Expiration
Well No. Ute Tribal 21-08 /43-013-31763
Lot 2, Section 21, T5S, R3W
Lease No. 14-20-H62-3516
Duchesne County, Utah

Gentlemen:

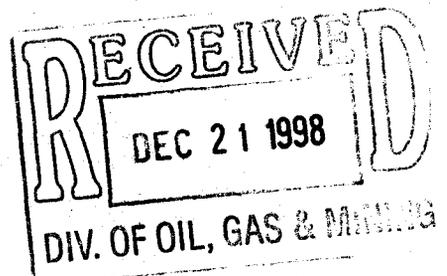
The Application for Permit to Drill the above-referenced well was approved on December 16, 1996. Petroglyph Operating Company, Inc. requested an extension of the original APD approval for an additional year. The request was reviewed and the extension approved until December 16, 1998. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Margie Herrmann
Legal Instruments Examiner

cc: State Div. OG&M
Ed Trotter



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Petroglyph Operating Company, Inc.

3. Address and Telephone No.
P.O. Box 1839, Hutchinson, KS 67504-1839; (316) 665-8500

4. Location of Well (Footage, Sec., T., R., or Survey Description)
**1980' FNL & 4100' FWL
 Lot 2, Sec. 21-T5S-R3W**

5. Lease Designation and Serial No.
14-20-H62-3516

6. If Indian, Allottee or Tribe Name
Ute Indian Tribe

7. If Unit or CA, Agreement Designation
14-20-H62-4650

8. Well Name and No.
Ute Tribal 21-08

9. API Well No.
43-013-31763

10. Field and Pool, or Exploratory Area
Antelope Creek

11. County or Parish, State
Duchesne County, UT

CONFIDENTIAL

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

JAN 21 1998

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

*Extended to 12/16/98.
BTS 3/2/98*

Please extend the approval on the Application for Permit to Drill for the above referenced well.

Petroglyph Operating Company, Inc. plans on drilling this well within the next year.

RECEIVED
MAR 02 1998
DIV. OF OIL, GAS & MINING

COPY

12/16/98
 VERNAL DIST.
 ENG. W10 12/18
 GEOL. _____
 E.S. _____
 PET. _____
 A.M. _____

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

Signed *[Signature]* Title Operations Coordinator Date 12/31/97

(This space is for Federal or State official use)
 Approved *[Signature]* Title Assistant Field Manager Date FEB 06 1998
 Mineral Resources

Conditions of Approval, if any:

CONDITIONS OF APPROVAL ATTACHED

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

*See Instruction on Reverse Side