

UTAH OIL AND GAS CONSERVATION COMMISSION

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

990628 LA'D, eff 6-23-99

DATE FILED **MAY 1, 1998**

LAND. FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. INDIAN #

DRILLING APPROVED: **JUNE 24, 1998** **14-20-H62-4798**

SPUDED IN

COMPLETED: PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR.

PRODUCING ZONES:

TOTAL DEPTH

WELL ELEVATION:

DATE ABANDONED: **6-23-99 LA'D**

FIELD: **UNDESIGNATED**

UNIT:

COUNTY: **DUCHESNE**

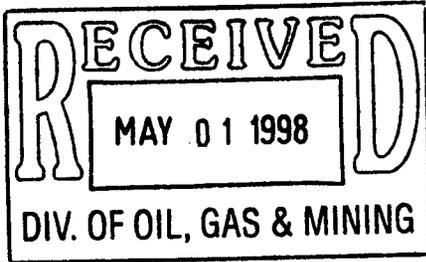
WELL NO. **UTE TRIBAL 27-15-D3** **API NO. 43-013-32085**

LOCATION **501 FSL** FT. FROM (N) (S) LINE. **2074 FEL** FT. FROM (E) (W) LINE. **SW SE** 1/4 - 1/4 SEC. **27**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
4S	3W	27	PETROGLYPH OPERATING				

Petroglyph Operating Co., Inc.

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



April 29, 1998

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

RE: APPLICATION FOR PERMIT TO DRILL
UTE TRIBAL #27-15-D3
SW/SE, SEC. 27, T4S, R3W
DUCHESNE COUNTY, UTAH
LEASE NO. ~~FE~~
SURFACE OWNER: Orvin Moon

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".

Ed Trotter
Agent

Petroglyph Operating Co., Inc.

Attachments

/EHT/dmt

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL 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 CO., INC.

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 501' FSL & 2074' FEL SW/SE
 At proposed prod. zone 193' 637'

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

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 501'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 7185'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5673' GRADED GROUND

22. APPROX. DATE WORK WILL START* MAY 1998

5. LEASE DESIGNATION AND SERIAL NO.
 14-20-H62-4798 (E&D)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

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

9. AM WELL NO.
 #27-15-D3

10. FIELD AND POOL, OR WILDCAT
 ANTELOPE CREEK

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SEC. 27, T4S, R3W

12. COUNTY OR PARISH DUCHESNE

13. STATE UTAH

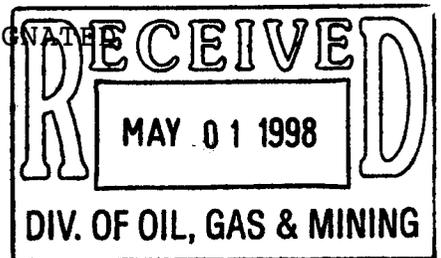
CONFIDENTIAL

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	250'	135 sx class "G" + 2% CaCl 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#	7185'	

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

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



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.

SIGNED [Signature] TITLE AGENT FOR PETROGLYPH DATE 4-28-1998

(This space for Federal or State office use)

PERMIT NO. 43-013-32085 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: **Federal Approval of this Action is Necessary**
 APPROVED BY [Signature] TITLE RECLAMATION SPECIALIST III DATE 6/24/98

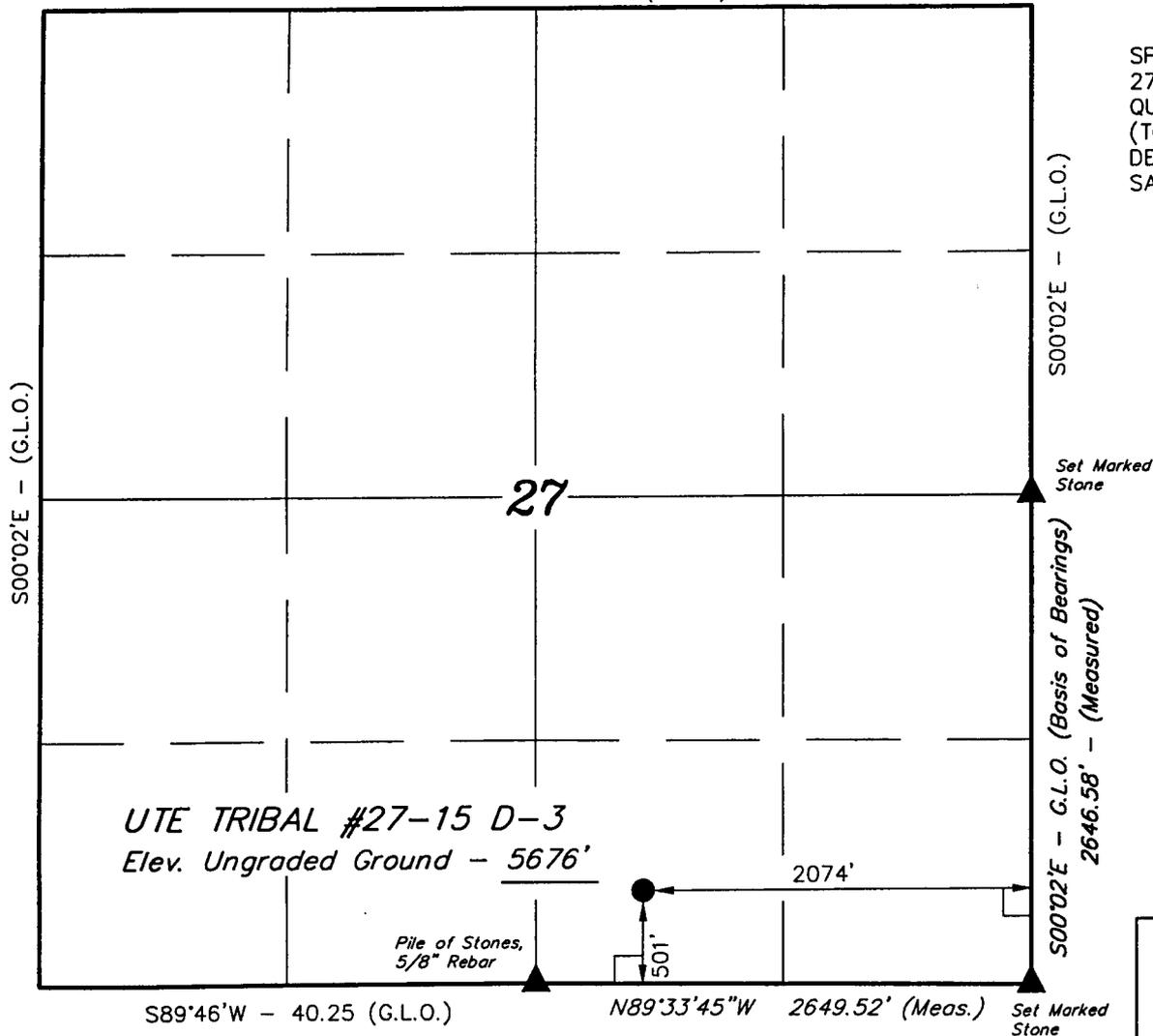
*See Instructions On Reverse Side

T4S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

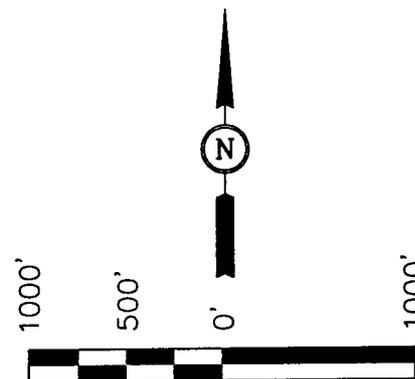
Well Location, UTE TRIBAL #27-15 D-3, located as shown in SW 1/4 SE 1/4 of Section 27, T4S, R3W, U.S.B.&M. Duchesne County, Utah.

S89°56'W - 80.40 (G.L.O.)



BASIS OF ELEVATION

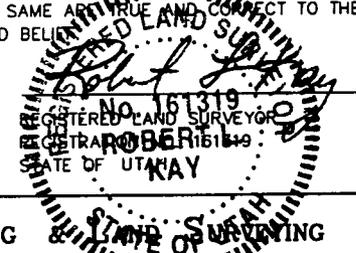
SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 27, T4S, R3W, U.S.B.&M. TAKEN FROM THE MYTON SW, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5692 FEET.



SCALE

CERTIFICATE

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



UTE TRIBAL #27-15 D-3
Elev. Ungraded Ground - 5676'

Pile of Stones,
5/8" Rebar

N89°33'45"W 2649.52' (Meas.) Set Marked Stone

S89°46'W - 40.25 (G.L.O.)

LEGEND:

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

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

SCALE 1" = 1000'	DATE SURVEYED: 04-17-98	DATE DRAWN: 04-19-98
PARTY L.D.T. D.C. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE PETROGLYPH OPERATING CO., INC.	

EIGHT POINT PLAN

UTE TRIBAL #27-15-D3
SW/SE, SEC. 27, T4S R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	3018	2665
"B" Marker	4238	1445
"X" Marker	4718	965
Douglas Creek	4889	600
"B" Limestone	5306	375
B/Castle Peak Limestone	5863	-180
Basal Carbonate Limestone	6235	-552
Total Depth	7185	-1502

Anticipated BHP 2000 psi

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Oil/Gas	Douglas Creek	4889	600
Oil/Gas	B/Castle Peak	5863	-180
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' - 7185'	7185'	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 #27-15-D3
SW/SE, SEC. 27, T4S 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 #27-15-D3
SW/SE, SEC. 27, T4S R3W
DUCHESNE COUNTY, UTAH

9. **STANDARD REQUIRED EQUIPMENT:**

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

10. **HAZARDOUS CHEMICALS:**

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

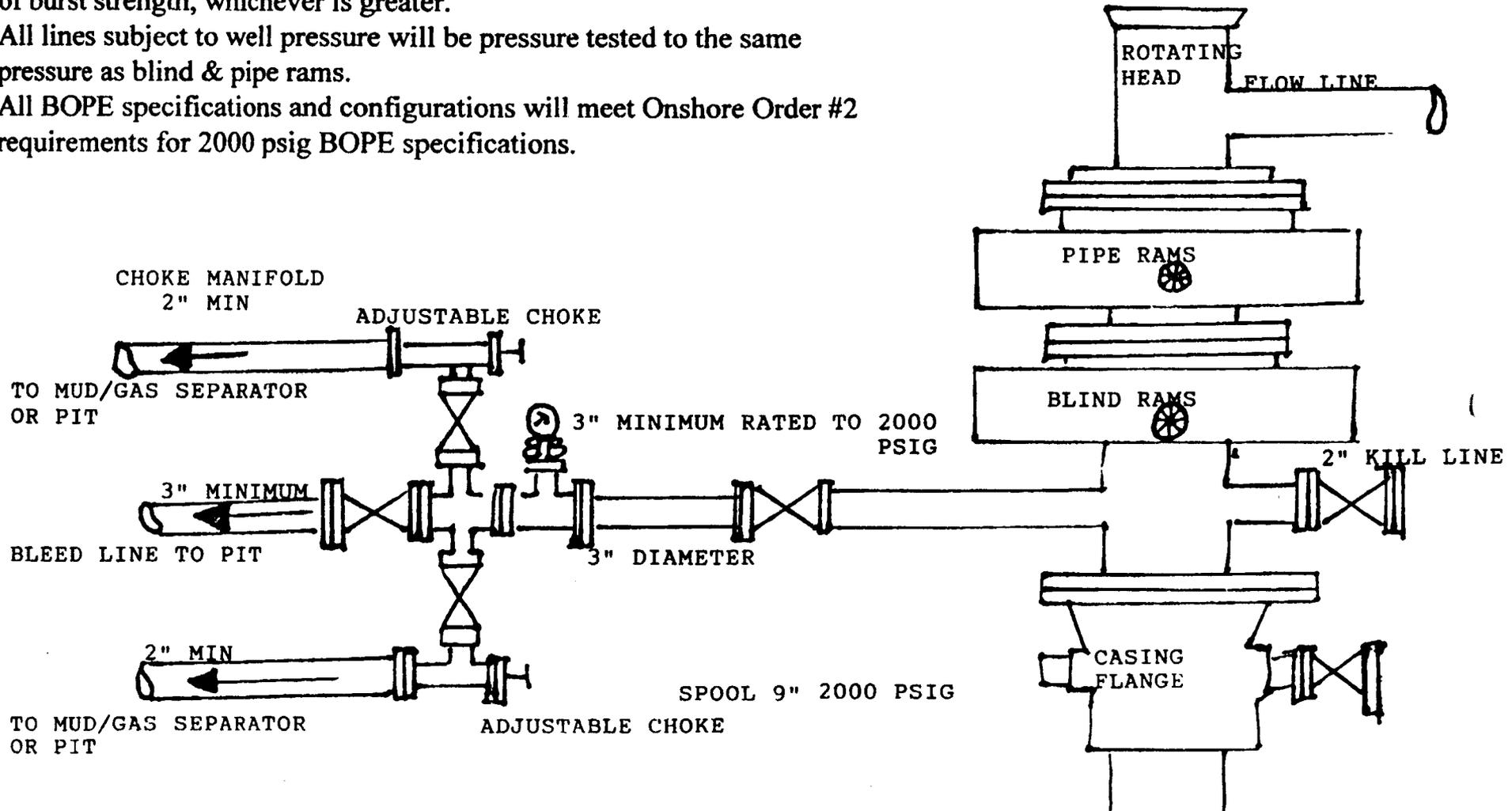
(Attachment: BOP Schematic Diagram)

2000 PSIG DIAGRAM

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

TESTING PROCEDURE:

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



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

Company/Operator: Petroglyph Operating Company
Well Name & Number: UTE TRIBAL #27-15-D3
Lease Number: FEE
Location: 501' FSL & 2074' FEL, SW/SE, Sec. 27, T4S, R3W
U.S.B.&M., Duchesne County, Utah
Surface Ownership: Orvin Moon

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 roads.
- B. The proposed well site is located approximately 14.9 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 150 feet in length. See attached TOPO Map "B"
- B. The access road has a 30 foot ROW w/18 foot running surface.
- C. Maximum grade on access road will be 8%
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges or major cuts & fills will be required.
- G. The access road will be dirt surface.
- H. A cattleguard will be installed in the fence crossing on the access road.

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

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 Company 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 - None
 - 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 - A tank battery will be placed on the location.
- 2. Production facilities - None
- 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. A 4 1/2" OD steel above ground production pipeline will be laid approximately 2065' from proposed location to a point in the NE/NW of Section 34, T4S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline. Proposed pipeline crosses privately owned surface, thus a Right-of-Way grant will be required.
2. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
3. 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.
The production facilities will be placed on the North side of the location.

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 Private 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 Roosevelt 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 Privately owned surface :

The reserve pit will be constructed so as not to leak, break, or allow discharge.

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 Onshore Order No.7, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

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

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

The stockpiled topsoil will be stored on the West end.

Access to the well pad will be from the Northeast.

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

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

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

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

X Corners No. 2 and 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. 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'.
- C. 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 BLM or SMA specifications.

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.

B. DRY HOLE/ABANDONED LOCATION

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment.

11. SURFACE OWNERSHIP

Access road: Private

Location: Private

12. 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

P.O. Box 1910

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 Company 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.

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

4-28-1998

Date

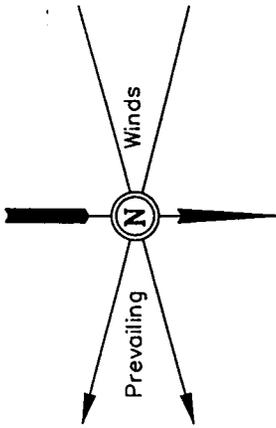


Ed Trotter-Agent-
Petroglyph Operating Company

PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #27-15 D-3
SECTION 27, T4S, R3W, U.S.B.&M.
501' FSL 2074' FEL



SCALE: 1" = 50'
DATE: 04-19-98
Drawn By: D.R.B.

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

Approx. Top of Cut Slope

FLARE PIT

El. 78.8'
C-13.4'
(btm. pit)

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

El. 74.6'
C-9.2'
(btm. pit)

Reserve Pit Backfill & Spoils Stockpile

El. 72.7'
F-0.7'

El. 71.6'
F-1.8'

C-2.7'
El. 76.1'

F-2.3'
El. 71.1'

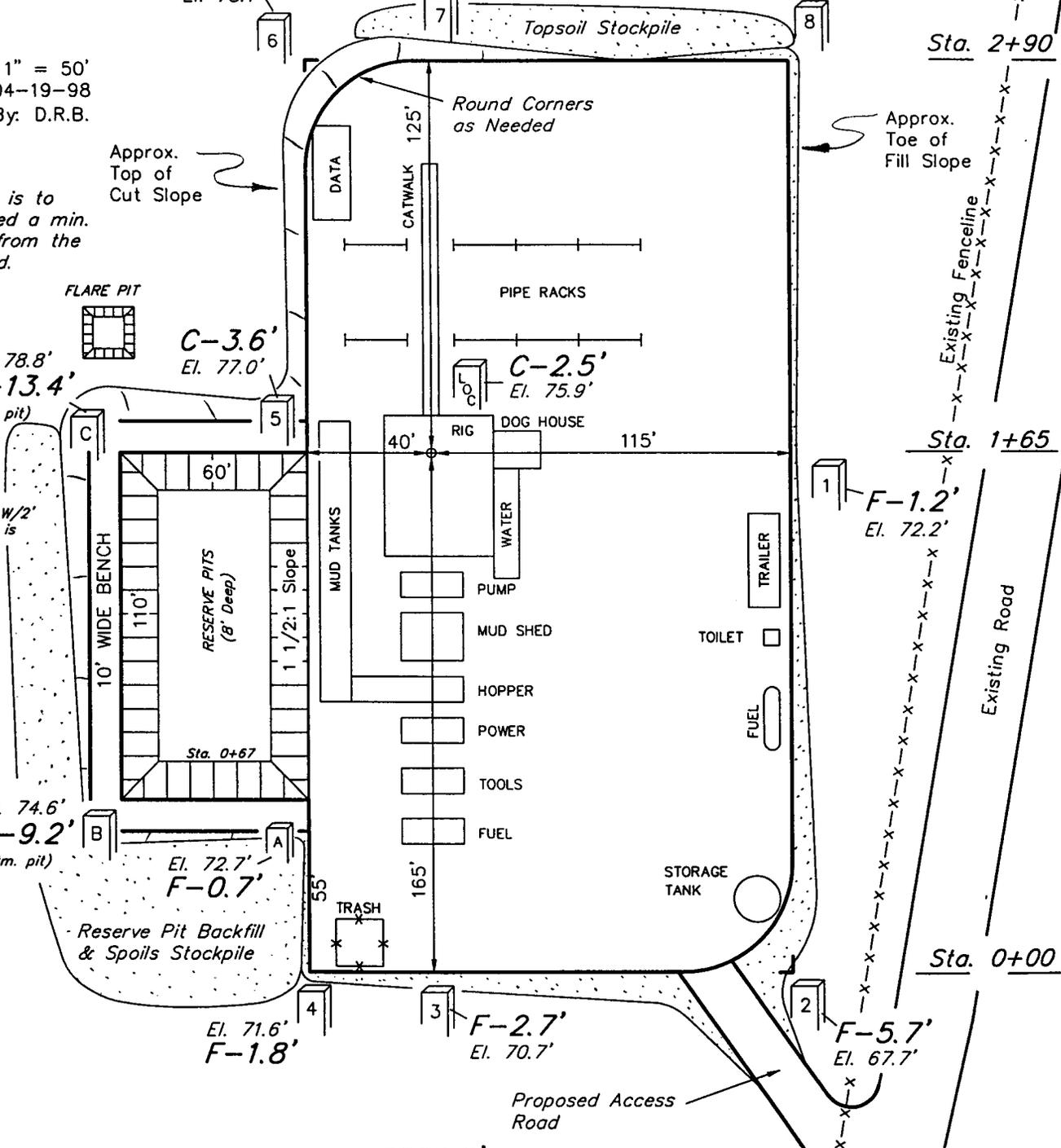
C-4.7'
El. 78.1'

C-2.5'
El. 75.9'

F-1.2'
El. 72.2'

F-2.7'
El. 70.7'

F-5.7'
El. 67.7'



Elev. Ungraded Ground at Location Stake = 5675.9'
Elev. Graded Ground at Location Stake = 5673.4'

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

PETROGLYPH OPERATING CO., INC.

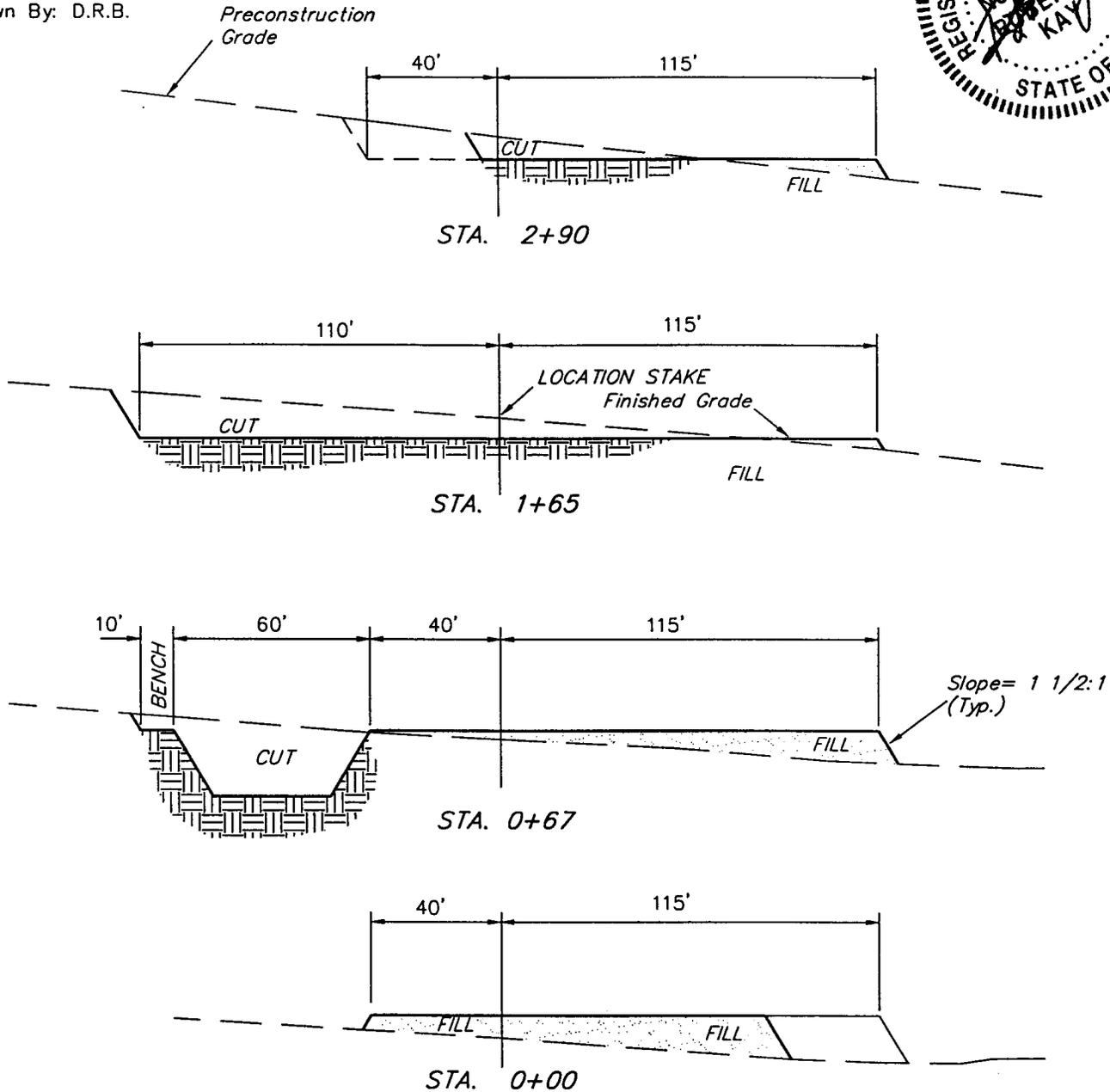
TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #27-15 D-3
SECTION 27, T4S, R3W, U.S.B.&M.
501' FSL 2074' FEL



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

DATE: 04-19-98
Drawn By: D.R.B.

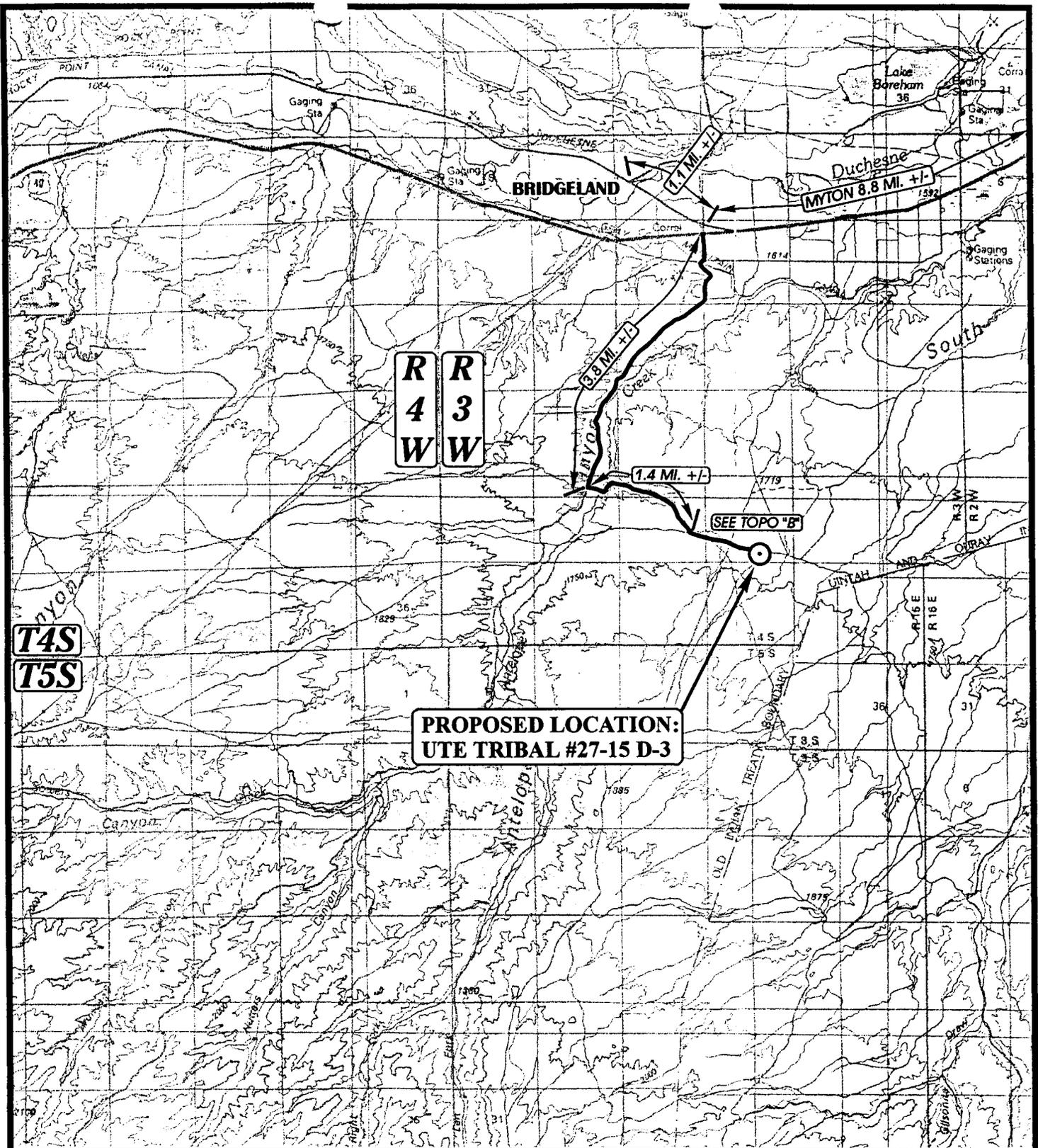


APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	960	Cu. Yds.
Remaining Location	=	3,280	Cu. Yds.
TOTAL CUT	=	4,240	CU.YDS.
FILL	=	2,460	CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	1,650	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	1,650	Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	0	Cu. Yds.

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



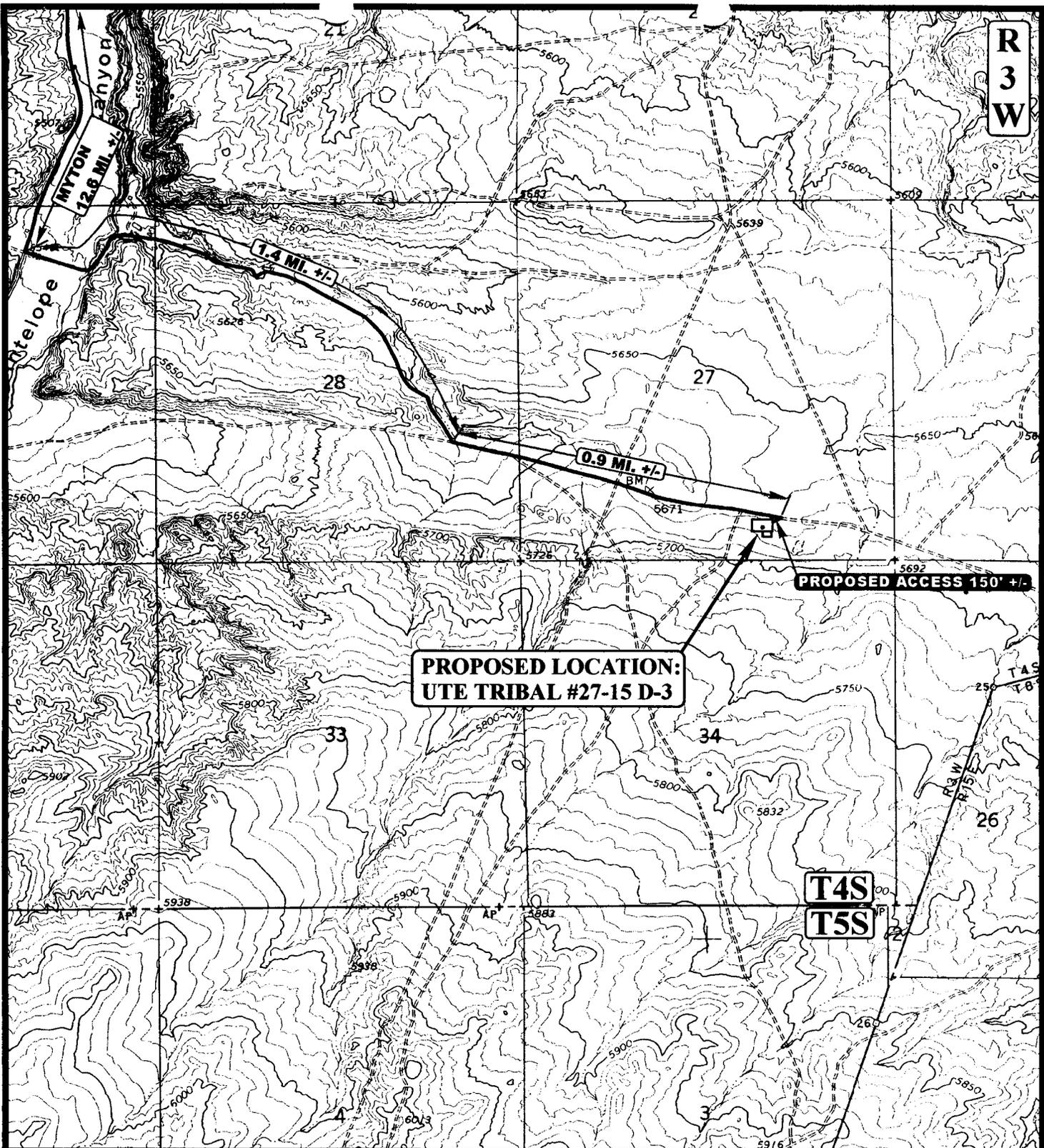
LEGEND:
 ○ PROPOSED LOCATION

PETROGLYPH OPERATING CO., INC.
 UTE TRIBAL #27-15 D-3
 SECTION 27, T4S, R3W, U.S.B.&M.
 501' FSL 2074' FEL

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

TOPOGRAPHIC 4 18 98
 MAP MONTH DAY YEAR
 SCALE: 1:100,000 DRAWN BY: D.COX REVISED: 00-00-00





LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING ROAD



PETROGLYPH OPERATING CO., INC.

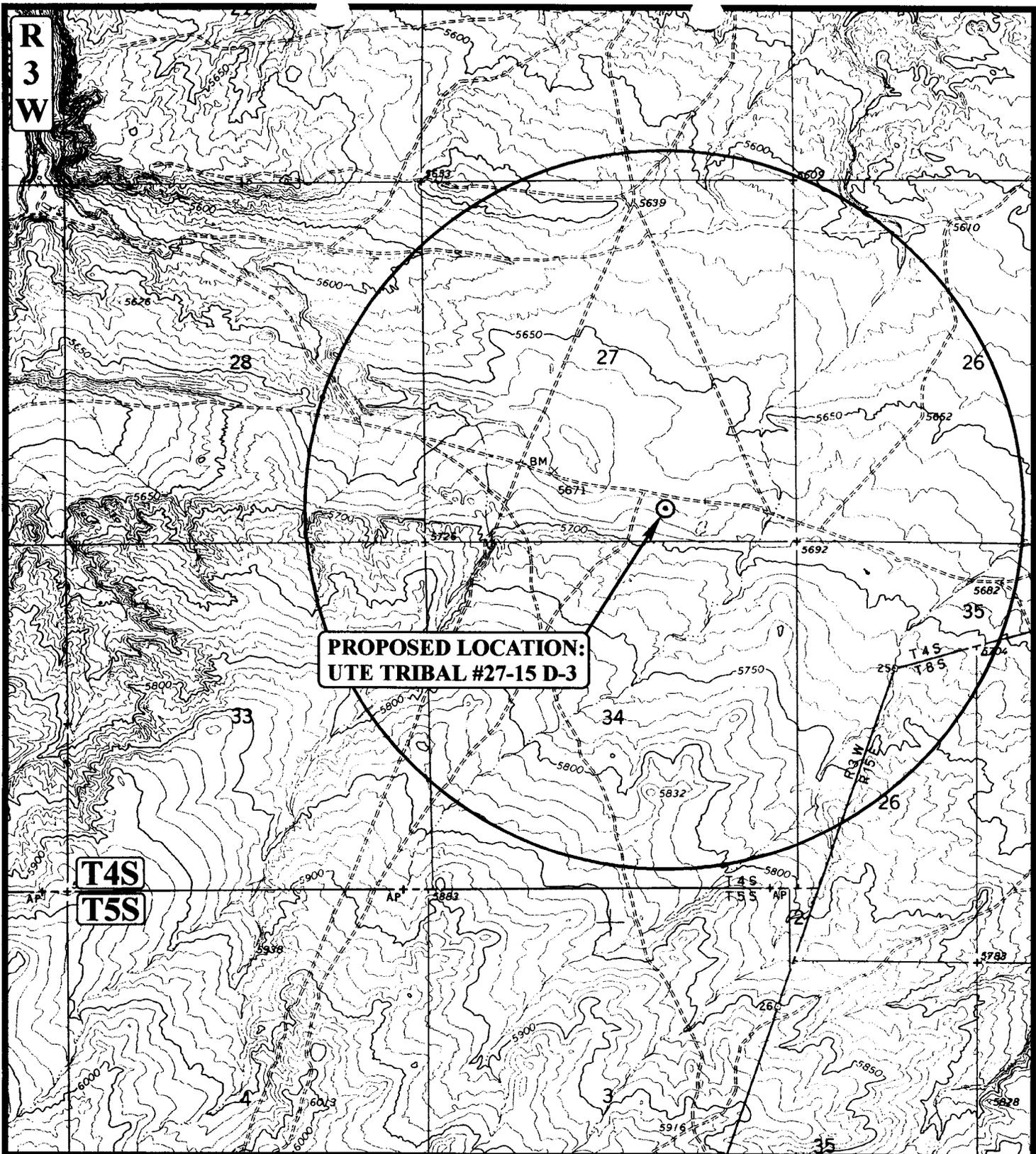
UTE TRIBAL #27-15 D-3
SECTION 27, T4S, R3W, U.S.B.&M.
501' FSL 2074' FEL



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

TOPOGRAPHIC **4** **18** **98**
MAP MONTH DAY YEAR
 SCALE: 1"=2000' DRAWN BY: D.COX REVISD: 00-00-00





LEGEND:

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



PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #27-15 D-3
SECTION 27, T4S, R3W, U.S.B.&M.
501' FSL 2074' FEL



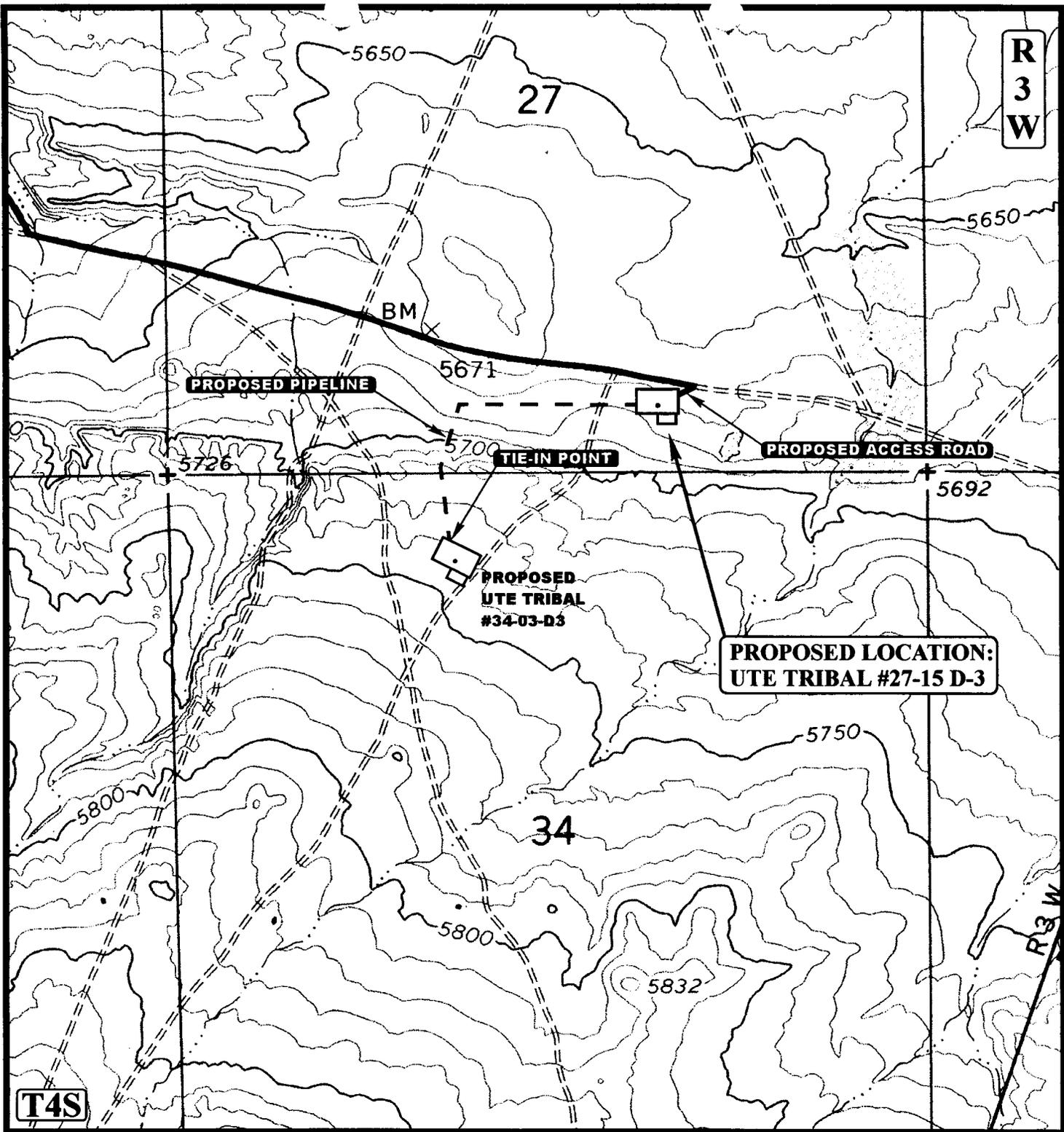
Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

4	18	98
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: D.COX REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 2065' +/-

LEGEND:

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



PETROGLYPH OPERATING CO., INC.

**UTE TRIBAL #27-15 D-3
SECTION 27, T4S, R3W, U.S.B.&M.
501' FSL 2074' FEL**



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

TOPOGRAPHIC 4 18 98
MAP MONTH DAY YEAR
SCALE: 1" = 1000' DRAWN BY: D.COX | REVISED: 00-00-00



WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 05/01/98

API NO. ASSIGNED: 43-013-32085

WELL NAME: UTE TRIBAL 27-15-D3
 OPERATOR: PETROGLYPH OPERATING CO (N3800)
 CONTACT: Ed Trehan (435) 789-4120

PROPOSED LOCATION:
 SWSE 27 - T04S - R03W
 SURFACE: 0501-FSL-2074-FEL
 BOTTOM: 0501-FSL-2074-FEL
 DUCHESNE COUNTY
 UNDESIGNATED FIELD (002)

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

LEASE TYPE: IND
 LEASE NUMBER: 14-20-H62-4798
 SURFACE OWNER: Fee / Orvin Moon

PROPOSED FORMATION: DGCRK

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal State Fee
 (No. 4556)

Potash (Y/N)

Oil Shale (Y/N) *190-5(B)

Water Permit
 (No. 43-10152)

RDCC Review (Y/N)
 (Date: _____)

St/Fee Surf Agreement (Y) (N)

LOCATION AND SITING:

R649-2-3. Unit _____

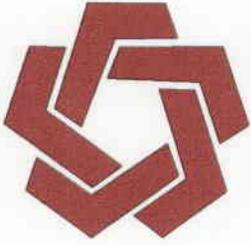
R649-3-2. General

R649-3-3. Exception

Drilling Unit
 Board Cause No: _____
 Date: _____

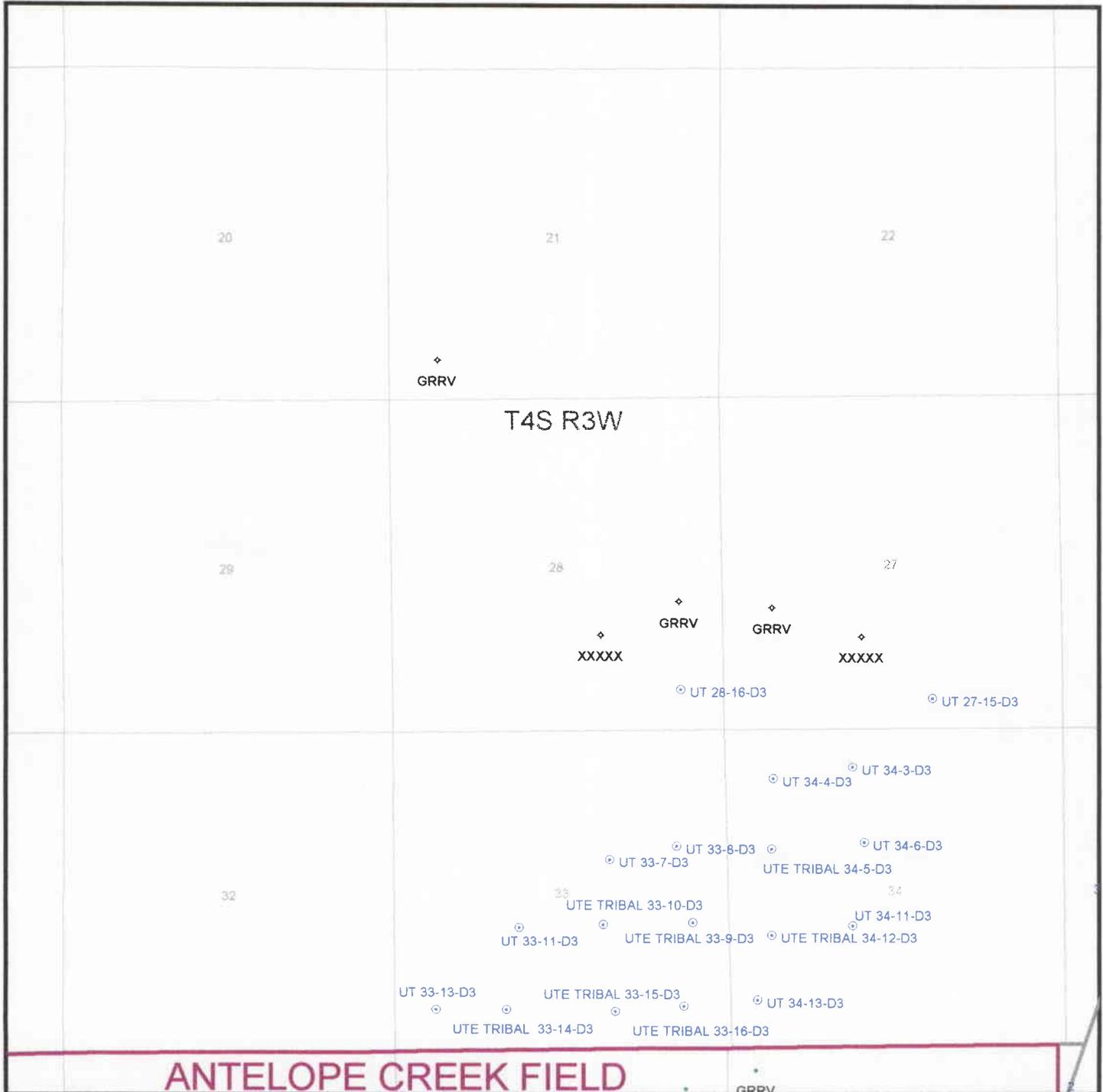
COMMENTS: *Rec'd surf. agreement 6-23-98.

STIPULATIONS: ① FEDERAL APPROVAL



DIVISION OF OIL, GAS & MINING

OPERATOR: PERTOGLYPH (N3800)
FIELD: UNDESIGNATED (002)
SEC. 27 & 28, TWP 4S, RNG 3W
COUNTY: DUCHESNE UAC: R649- 3-2 STATEWIDE



DATE PREPARED:
5-MAY-1998

DIVISION OF OIL, GAS AND MINING

**APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS**

Operator: PETROGLYPH OPERATING COMPANY, INC.
Well Name & Number: UTE TRIBAL #27-15D-3
API Number: 43-013-32085
Location: 1/4,1/4 SW/SE Sec. 27 T. 4 SOUTH R. 3 WEST

Surface:

(INDIAN MINERALS/FEE SURFACE) A surface agreement was signed by landowner Orven J. Moon, according to Petroglyph. Attendance: Ed Trotter and Steve Duncan (Petroglyph Operating); Greg Darlington (BLM); Dennis L. Ingram (DOGM); Lonnie (Ute Indian Minerals Department). Lease is located on domestic sheep range in sagebrush/shadscale, greasewood pasture that dips to the north. Reserve pit is located uphill to the south in cut. A small stock pond for sheep is located 1/4 mile east of location, no other surface water. A production line staking is marked leaving location, which is intended for use when injection or flood system is applied. Petroglyph says they'll install a cattle guard and gate where access road crosses fence. Operator will install production equipment and tanks on location, with line heater, pump jack, etc. Photographs were taken of surface during onsite visit for well files. Petroglyph notified--and invited--DOGM 48 hours notice of onsite visit to permit said well, and claims landowner was out and looked at leases; however, it wasn't clear whether the landowners were invited to participate in permitting visit.

Reviewer: Dennis L. Ingram

Date: 4/23/98

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 CO., INC.

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 501' FSL & 2074' FEL SW/SE
 At proposed prod. zone

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
 501'

16. NO. OF ACRES IN LEASE
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40

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

19. PROPOSED DEPTH
 7185'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5673' GRADED GROUND

22. APPROX. DATE WORK WILL START*
 MAY 1998

CONFIDENTIAL

RECEIVED
MAY 01 1998

5. LEASE DESIGNATION AND SERIAL NO.
 14-20-H62-4798 (E&D)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARMOR LEASE NAME WELL NO.
 UTE TRIBAL

9. AN WELL NO.
 #27-15-D3

10. FIELD AND POOL, OR WILDCAT
 ANTELOPE CREEK

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SEC. 27, T4S, R3W

12. COUNTY OR PARISH
 DUCHESNE

13. STATE
 UTAH

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	250'	135 sx class "G" + 2% CaCl ₂ + 1/4 #/sx celloflake.
7 7/8"	5 1/2"	15.5#	7185'	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).

CONFIDENTIAL

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

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

RECEIVED
JUN 12 1998
DIV. OF OIL, GAS & MINING

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 4-28-1998

(This space for Federal or State office use)

PERMIT NO. **NOTICE OF APPROVAL** APPROVAL DATE 43-013-32085

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] ACTING Assistant Field Manager TITLE Mineral Resources DATE JUN 08 1998

*See Instructions On Reverse Side

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company

Well Name & Number: Ute Tribal 27-15-D3

API Number: 43-013-32085

Lease Number: 14-20-H62-4798

Location: SWSE Sec. 27 T. 4S 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 via the cementing program. 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.

The Gamma Ray and Induction Logs need to be pulled from TD to the Surface Shoe.

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

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

6. Notifications of Operations

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

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, 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 Ute Tribe Energy and Mineral Department is to be notified 48 hours prior to construction.

Petroglyph will assure the Ute Tribe that any/all contractors and subcontractors have acquired a 1998 Tribal Business License and have access permits prior to commencing surveys or construction.

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

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

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

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.

The project area is owned by a private individual. Petroglyph will comply with the private landowner's requests on all mitigative measures.
(Orvin J. and Delphia N. Moon)--- Wellpad, access road and cattleguard for existing fence.



SEP 9 1997

UTE INDIAN TRIBE

Tax Department
P.O. Box 70
Fort Duchesne, Utah 84026

June 1, 1998

Mr. Howard Cleavinger
Bureau of Land Management
Vernal District Office
Vernal, Utah 84078

Subject: Application for Permit to Drill and Pipeline Rights-Of-Way

Dear Mr. Cleavinger,

On September 16, 1997, Petroglyph Operating Company was granted Permission to Survey by the Bureau of Indian Affairs, Minerals & Mining Office. The following wellsite, access road and pipeline are on fee surface, but has tribal minerals;

1. Ute Tribal #01-16E4W, SESE, Section 1, T5S, R4W, USBM
2. Ute Tribal #06-01, NENE, Section 6, T5S, R3W, USBM
3. Ute Tribal #06-09, NESW, Section 6, T5S, R3W, USBM
4. Ute Tribal #06-07, SWNE, Section 6, T5S, R3W, USBM
5. Ute Tribal #27-15D3, SWSE, Section 27, T4S, R3W, USBM
6. Ute Tribal #28-16D3, SESE, Section 28, T4S, R3W, USBM

On April 23, 1998, onsite were conducted with the following; Ed Trotter and Steve Wall, Petroglyph Operating Company; Dennis Ingram, Agent for State of Utah; Greg Darlington, Bureau of Land Management-Vernal District Office; and Lonnie Nephi, Tribal Technician.

Based upon the reports submitted and the consensus of the on-site personnel, the Ute Tribe Energy and Minerals Department is recommending the following;

1. The Ute Tribe Energy and Minerals Department is to be notified prior to construction.
2. Petroglyph will assure the Ute Tribe that any/all contractors and any sub-contractors have acquired a 1998 Tribal Business License and have "Access Permits" prior to construction.
3. All vehicular traffic, personnel movement, construction/restoration operations should be confined to the areas examine and approved, and to the existing roadways and/or evaluated access routes.
4. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
5. The personnel from the Ute Tribe Energy and Minerals Department should be consulted should cultural remains from subsurface deposits be exposed or identified during construction. If you should require additional information please feel free to contact this office.

Sincerely,

ENERGY & MINERALS RESOURCE DEPT.

Ferron Secakuku, EMRD Exec. Director

MEMORANDUM OF SURFACE USE AND
RIGHT-OF-WAY AGREEMENT

THIS MEMORANDUM WITNESSES:

THAT on the 16th day of June, 1997, between ORVEN J MOON AND DELPHIA N MOON, TRUSTEES, whose address is East Highway, Neola, Utah 84053 84021 (GRANTOR), in consideration of the covenants and agreements contained in that certain Surface Use and Right-Of-Way Agreement dated JUNE 25th 1997 (the "Agreement"), has granted and conveyed, and by these presents does hereby grant and convey to PETROGLYPH OPERATING COMPANY, INC., whose address is 6209 North Highway 61, P.O. Box 1839, Hutchinson, Kansas 67502 (GRANTEE), certain rights of surface use, rights-of-way, and easements for the exploration, development, production, and transportation of oil and gas in, on, over, through and across certain real property owned by GRANTOR and situated in the County of Duchesne, State of Utah, and more particularly described as follows:

Township 4 South - Range 3 West USM

Section 16: SW/4 SW/4

Section 27: All

Section 28: SE/4 SE/4

Section 33: E/2 NE/4, SE/4 SE/4

Section 34: All

Containing 1,450.00 acres, more or less.

E 320862 B AD280 F 259
DATE 1-JUL-1997 16:26PM FEE 17.00
CAROLYNE B. MADSEN, RECORDER
FILED BY CRY
FOR ED TROTTER
DUCHEсне COUNTY CORPORATION

Said rights and uses are granted upon and subject to all of the terms and conditions set forth in the Agreement, executed by GRANTOR and GRANTEE, which Agreement is held by and can be inspected by parties having a vested interest in the Agreement and/or subject property during reasonable business hours at the offices of GRANTOR or GRANTEE. Such uses, rights-of-way and easements are granted for the full period of development of and the production life of any of the wells, appurtenances and facilities associated therewith.

IN WITNESS WHEREOF, this Memorandum has been duly executed this 25th day of June, 1997.

GRANTOR ORVEN J MOON AND DELPHIA N MOON, TRUSTEES

By: *Orven J Moon*
By: *Delphia N Moon*

GRANTEE PETROGLYPH OPERATING COMPANY, INC.

By: *Ed Trotter*
Its: Agent

ACKNOWLEDGMENTS

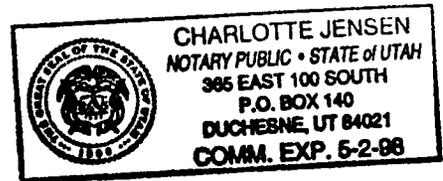
STATE OF UTAH)
 : ss.
COUNTY OF DUCHESNE)

The foregoing instrument was acknowledged before me this 25th day of June, 1997 by ORVEN J MOON AND DELPHIA N MOON, TRUSTEES.

Charlotte Jensen
Notary Public
Residing in: Duchesne, Ut

Commission Expires:

5-2-98



ACKNOWLEDGMENT

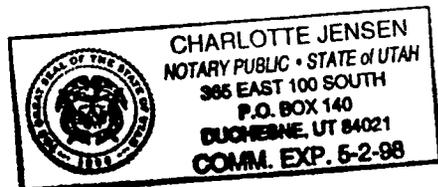
STATE OF ~~KANSAS~~ Utah)
 : ss.
COUNTY OF Duchesne)

The foregoing instrument was acknowledged before me this 25th day of June, 1997 by Ed Trotter, the Agent of PETROGLYPH OPERATING COMPANY, INC.

Charlotte Jensen
Notary Public
Residing in: Duchesne, Ut

My Commission Expires:

5-2-98



FAX COVER SHEET

FROM: ED TROTTER

FAX NO. 435-789-1420

TELEPHONE NO. 435-789-4120

TO: UDOG & M FAX NO. 801-359-3940 ATTENTION: LISHA CORDOVA DATE: 6-23-1998 TOTAL NUMBER OF PAGES INCLUDING COVER PAGE: 3

All information contained in this facsimile is confidential and is solely directed to the above named recipient. If you receive this fax in error, or there is a problem with the transmission, please call: 1-435-789-4120. Thank you.

Lisha,

**Please disregard the Agreement I faxed you earlier today, it was the wrong one.
This Agreement covers the two wells in question.**

Thank you.

FILE COPY

MEMORANDUM OF SURFACE USE AND RIGHT-OF-WAY AGREEMENT

THIS MEMORANDUM WITNESSES:

THAT on the 16th day of June, 1997, between ORVEN J MOON AND DELPHIA N MOON, TRUSTEES, whose address is East Highway, Neola, Utah 84053 84021 (GRANTOR), in consideration of the covenants and agreements contained in that certain Surface Use and Right-Of-Way Agreement dated JUNE 25th 1997 (the "Agreement"), has granted and conveyed, and by these presents does hereby grant and convey to PETROGLYPH OPERATING COMPANY, INC., whose address is 8209 North Highway 81, P.O. Box 1839, Hutchinson, Kansas 67502 (GRANTEE), certain rights of surface use, rights-of-way, and easements for the exploration, development, production, and transportation of oil and gas in, on, over, through and across certain real property owned by GRANTOR and situated in the County of Duchesne, State of Utah, and more particularly described as follows:

Township 4 South - Range 3 West USM

Section 16: SW/4 SW/4

Section 27: All

Section 28: SE/4 SE/4

Section 33: E/2 NE/4, SE/4 SE/4

Section 34: All

Containing 1,450.00 acres, more or less.

E 320862 8 A0280 P 259
DATE 1-JUL-1997 16:26PM FEE 17.00
CAROLYNE B. MADSEN, RECORDER
FILED BY CRY
FOR ED TROTTER
DUCHEсне COUNTY CORPORATION

Said rights and uses are granted upon and subject to all of the terms and conditions set forth in the Agreement, executed by GRANTOR and GRANTEE, which Agreement is held by and can be inspected by parties having a vested interest in the Agreement and/or subject property during reasonable business hours at the offices of GRANTOR or GRANTEE. Such uses, rights-of-way and easements are granted for the full period of development of and the production life of any of the wells, appurtenances and facilities associated therewith.

IN WITNESS WHEREOF, this Memorandum has been duly executed this 25th day of June, 1997.

GRANTOR ORVEN J MOON AND DELPHIA N MOON, TRUSTEES

By: [Signature]

By: [Signature]

GRANTEE PETROGLYPH OPERATING COMPANY, INC.

By: [Signature]
Its: Agent

ACKNOWLEDGMENTS

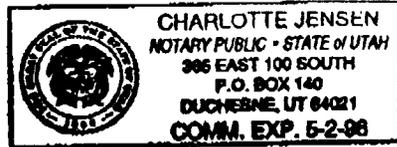
STATE OF UTAH)
 : ss.
COUNTY OF DUCHESNE)

The foregoing instrument was acknowledged before me this 25th day of June, 1997 by ORVEN J MOON AND DELPHIA N MOON, TRUSTEES.

Charlotte Jensen
Notary Public
Residing in: Duchesne, UT

Commission Expires:

5-2-98



ACKNOWLEDGMENT

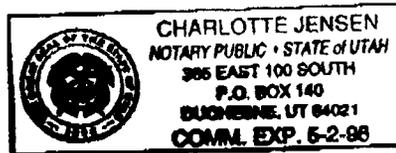
STATE OF ~~Utah~~)
 : ss.
COUNTY OF Duchesne)

The foregoing instrument was acknowledged before me this 25th day of June, 1997 by Ed Trutter, the Agent of PETROGLYPH OPERATING COMPANY, INC.

Charlotte Jensen
Notary Public
Residing in: Duchesne, UT

My Commission Expires:

5-2-98





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

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

Michael O. Leavitt
Governor

Lowell P. Braxton
Division Director

June 24, 1998

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

Re: Ute Tribal 27-15-D3 Well, 501' FSL, 2074' FEL, SW SE,
Sec. 27, T. 4 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 43-013-32085.

Sincerely,

A handwritten signature in cursive script, appearing to read "Steven L. Baza".

for John R. Baza
Associate Director

lwp

Enclosures

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

Operator: Petroglyph Operating Company
Well Name & Number: Ute Tribal 27-15-D3
API Number: 43-013-32085
Lease: 14-20-H62-4798
Location: SW SE Sec. 27 T. 4 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 prior to spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

3. Reporting Requirements

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

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



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

June 11, 1999

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

43-013-32085
Re: Notification of Expiration
Well No. Ute Tribal 27-15-D3
SWSE, Section 27, T4S, R3W
Lease No. 14-20-H62-4798
Duchesne County, Utah

Gentlemen:

The Application for Permit to Drill the above-referenced well was approved on June 8, 1998. Since that date no known activity has transpired at the approved location. Applications for Permit to Drill are effective for a period of one year. 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

DOGm
'LA'
Date

