

UTAH OIL AND GAS CONSERVATION COMMISSION

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

Application suspended 5.21.85

DATE FILED **11-17-83**

LAND: FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. _____

INDIAN **14-20-H62-~~2658~~³¹⁰¹**

DRILLING APPROVED: **11-30-83 - OIL (Cause No. 131-33)**

SPUDED IN: _____

COMPLETED: _____ PUT TO PRODUCING: _____

INITIAL PRODUCTION: _____

GRAVITY A.P.I. _____

GOR: _____

PRODUCING ZONES: _____

TOTAL DEPTH: _____

WELL ELEVATION: **5455' gr**

DATE ABANDONED: **LA 5.21.85 6-3-85 Sold**

FIELD: **3/4 BLUEBELL**

UNIT: _____

COUNTY: **UINTAH**

WELL NO. **UTE TRIBAL 2-16A1E**

API # **43-047-31418**

LOCATION **187' FSL** FT. FROM (N) (S) LINE.

203' FWL

FT. FROM (E) (W) LINE.

SWSW

1/4 - 1/4 SEC. **16**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
1S	1E	16	BOW VALLEY PETROLEUM				

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

13

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
 Bow Valley Petroleum, Inc.

3. ADDRESS OF OPERATOR
 P. O. Drawer 130, Roosevelt, Utah 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 203' FWL, 187' FSL, NW¹/₄ NW¹/₄
 At proposed prod. zone same *SW SW*

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 5.3 east, 8.0 miles north, east .9, south .1 of Roosevelt, Utah

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

16. NO. OF ACRES IN LEASE 560

17. NO. OF ACRES ASSIGNED TO THIS WELL 560

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

19. PROPOSED DEPTH 13,700'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5455' GR ungraded

22. APPROX. DATE WORK WILL START*
 Nov. 28, 1983

5. LEASE DESIGNATION AND SERIAL NO.
 14-20-H62-2658

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 Ute Tribe

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME
 Ute Tribal

9. WELL NO.
 2-16A1E

10. FIELD AND POOL, OR WILDCAT AND SURVEY OR AREA
 E. BLUEBELL-Wasatch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 16, T1S, R1E, U.S.M.

12. COUNTY OR PARISH 13. STATE
 Uintah Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	9-5/8"	40#	2,200'	400 sxs (Cmt to surface)
8-3/4"	7"	26, 29, 32#	10,400'	750 sxs
6"	5" Liner	18#	13,700'	700 sxs

This is a test of the Tertiary Wasatch Formation. The Wasatch will be selectively perforated and acidized for production.

The proposed location of this well is within a Utah State designated drilling unit containing 560 acres. The Bow Valley Ute 1-17A1E, which is presently producing in the drilling unit, is a Green River well. The proposed Ute 2-16A1E will be a Wasatch producer.

Minimum 3,000 PSI BOPE will be installed and pressure tested to 3,000 PSI prior to drilling the casing shoe at 2,200 feet.

Minimum 5,000 PSI BOPE will be installed and tested to 5,000 PSI prior to drilling the casing shoe at 10,400 feet. After drilling the casing shoe, the casing seat will be tested to an EMW of 13.5 PPG.

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

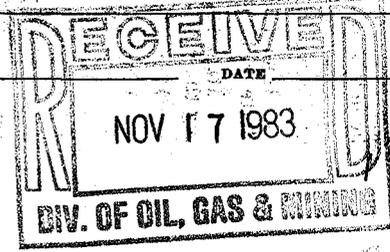
24. SIGNED Nichelle Emerson TITLE Engineering Technician DATE Nov. 16, 1983

(This space for Federal or State office use)

PERMIT NO. 43-047-31418 APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY: _____

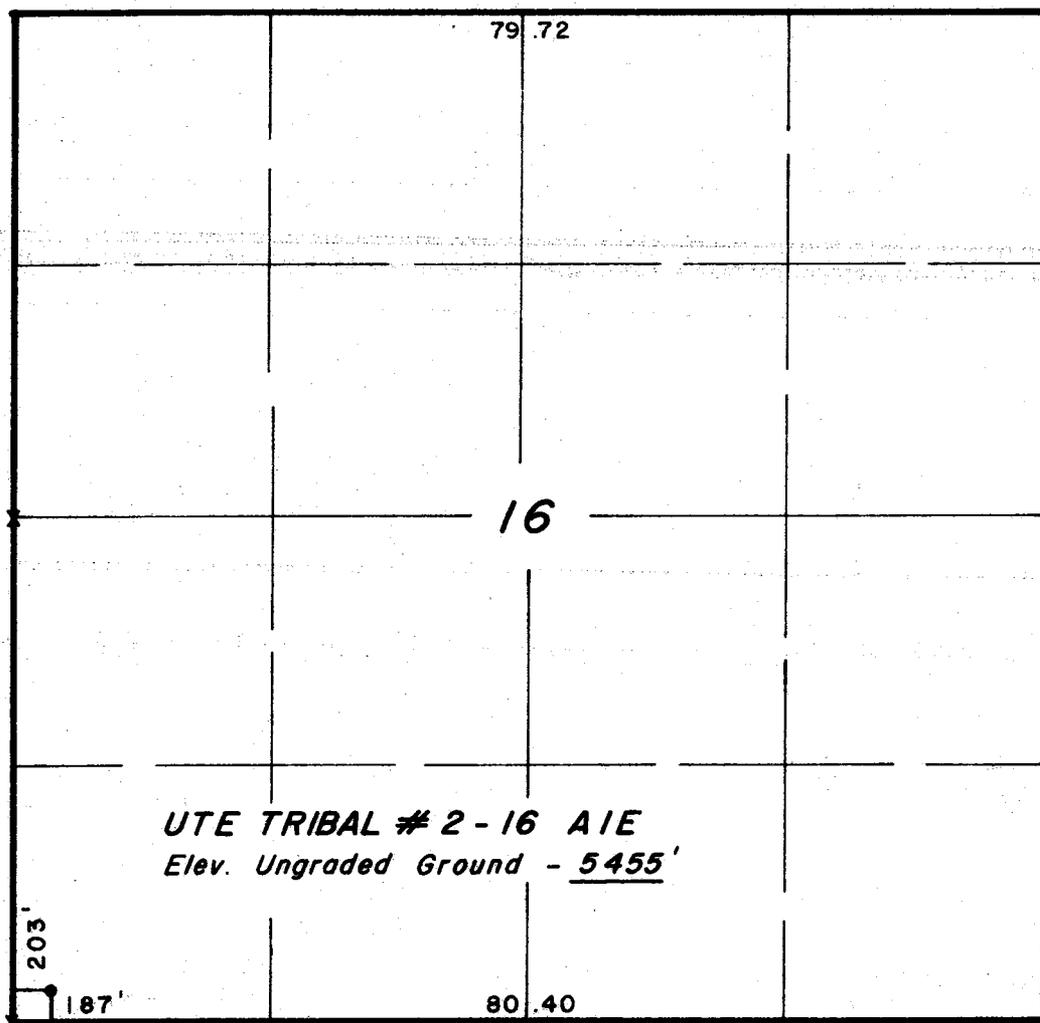


*See Instructions On Reverse Side

TIS, RIE, U.S.M.

PROJECT
BOW VALLEY PETROLEUM INC.

Well location, *UTE TRIBAL #2-16 AIE*,
located as shown in the SW1/4 SW1/4,
Section 16, TIS, RIE, U.S.B. & M.,
Uintah County, Utah.



X = Section Corners Located



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.

Dave Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q - 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	9/16/83
PARTY	LDT, RK, TJ JH	REFERENCES	GLO PLAT
WEATHER	FAIR	FILE	BOW VALLEY

RECEIVED
RMDGA
5/5/82
OCT 13 1983

NOTICE OF STAKING
(Not to be used in place of
Application to Drill Form 9-331-C)

1. Oil Well Gas Well Other
DIVISION OF
OIL, GAS & MINING

2. Name of Operator
BOW VALLEY PETROLEUM, INC.

3. Address of Operator or Agent
P. O. DRAWER 130, ROOSEVELT, UT 84066

4. Surface Location of Well
(Governmental 1/4 or 1/4 1/4)
Sec. 16, T1S, R1E - SW $\frac{1}{4}$ SW $\frac{1}{4}$
Attach: Topographical or other acceptable map
showing location, access road, and lease boundaries.

14. Formation Objective(s)
WASATCH

15. Estimated Well Depth
13,700'

5. Lease Number
14-20-H62-2658

6. If Indian, Allottee or Tribe Name
UTE TRIBE

7. Unit Agreement Name
N/A

8. Farm or Lease Name
UTE TRIBAL

9. Well No.
✓ 2-16-A1E

10. Field or Wildcat Name
EAST BLUEBELL

11. Sec., T., R., M., or
Blk and Survey or Area
Sec. 16, T1S, R1E, U.S.M.

12. County or Parish
UINTAH

13. State
UTAH

16. To Be Completed by Operator Prior to Onsite
a. Location must staked
b. Access Road Flagged
c. Sketch and/or map of location, showing road, pad dimensions, reserve pit, cuts, and fills
(To be provided at onsite)

17. To Be Considered By Operators Prior to Onsite
a. H₂S Potential
b. Private Surface Ownership
c. Cultural Resources (Archaeology)
d. Federal Right of Way

18. Additional Information
This is a 560 acre drilling unit as shown on attached map.
The Ute #1-17A1E producing in the drilling unit is a Green River well.
The proposed Ute #2-16A1E will be a Wasatch producer.

19. Signed Douglas G. Howard Title District Superintendent Date 10-6-83
Douglas G. Howard

PRODUCTION

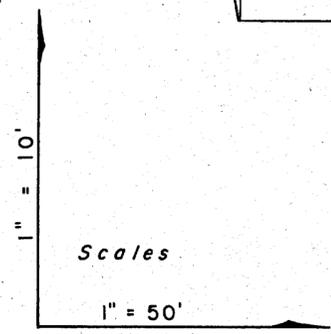
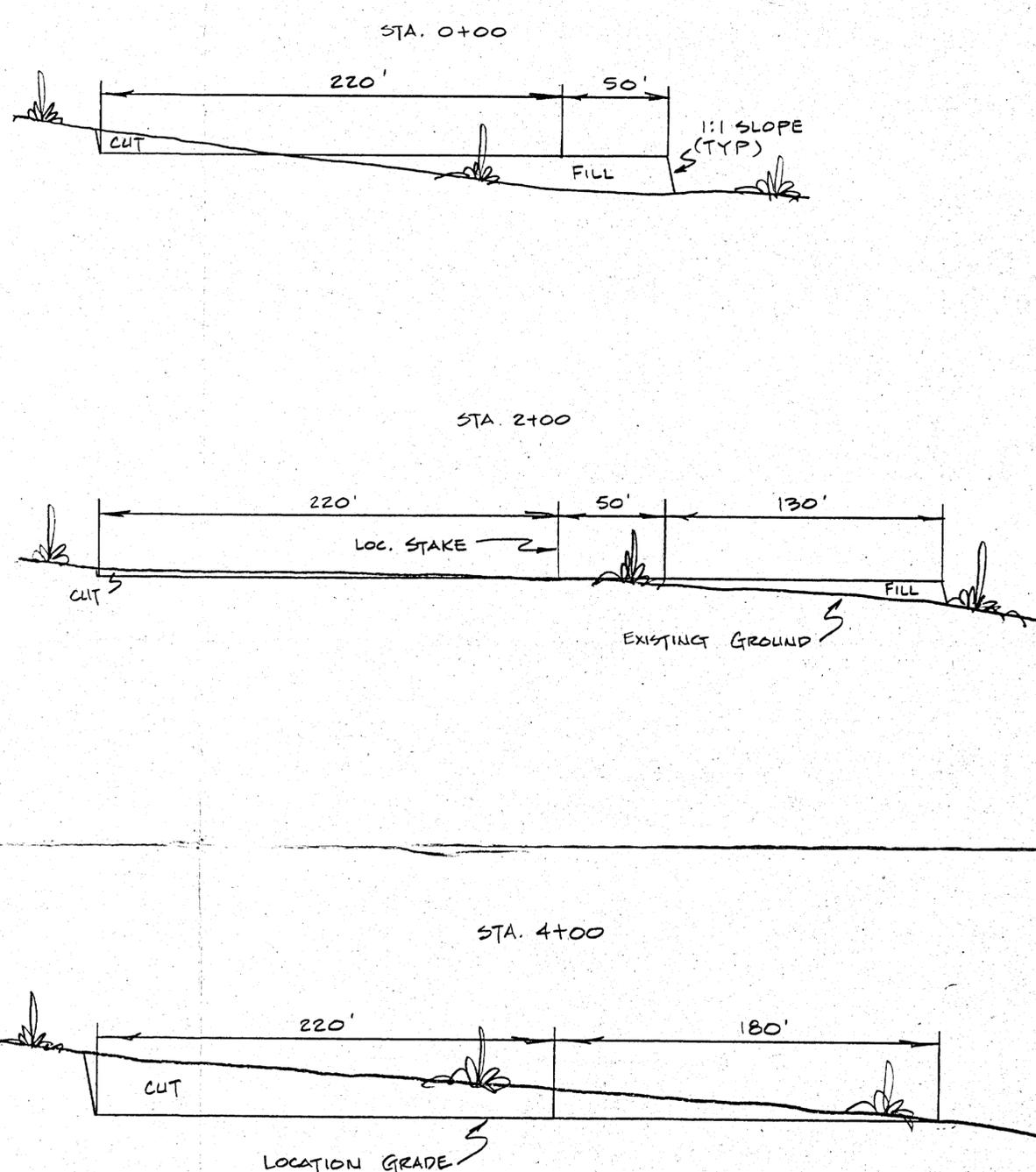
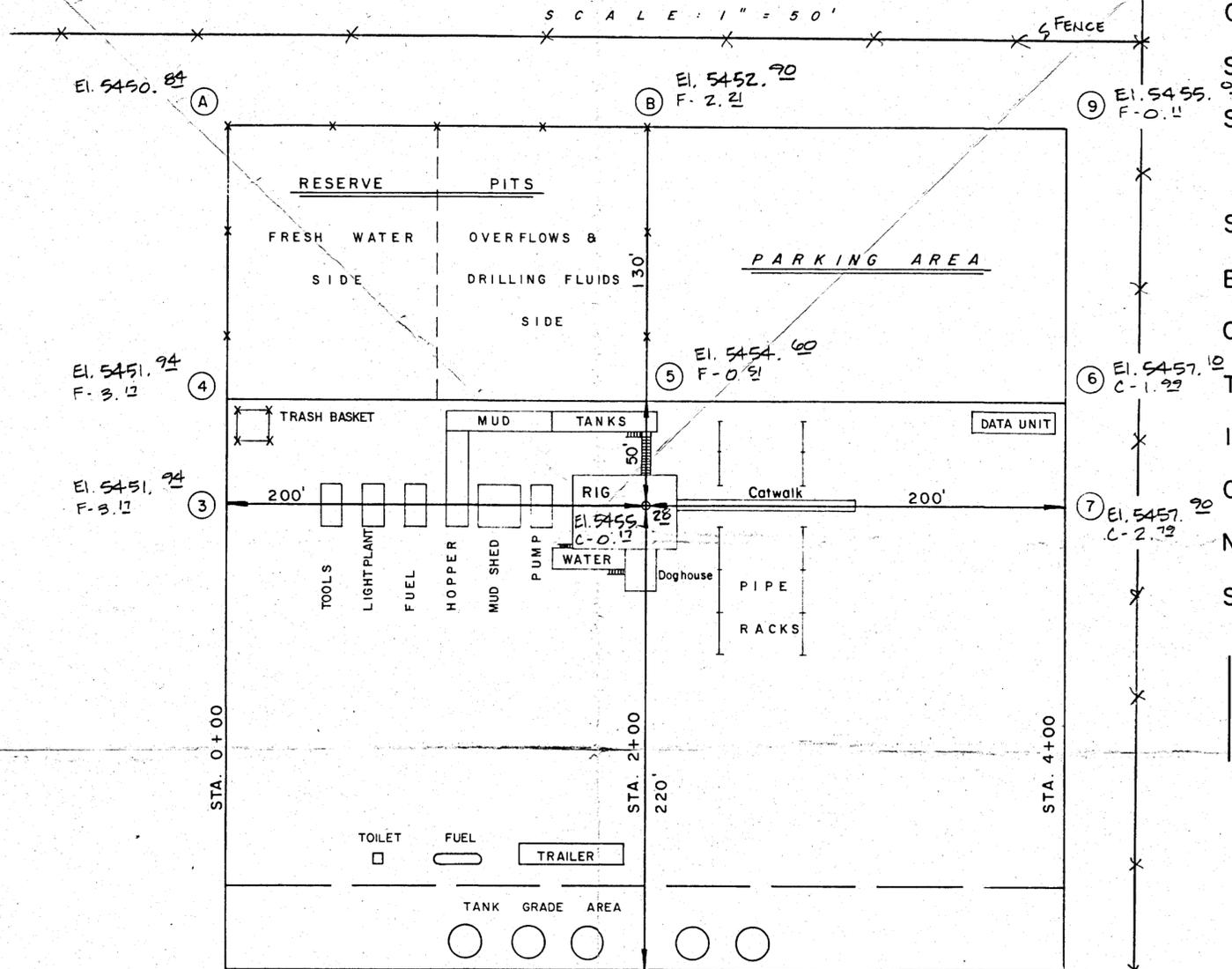
1. The reserve pit and that portion of the location and access road not needed for production of production facilities will be reclaimed within 90 days after completion with the methods described in the rehabilitation section. Stockpiled topsoil will be used in reclaiming the unused areas.
2. All permanent (onsite for six (6) months duration or longer) structures constructed or installed, including the pumpjack, shall be painted a flat, non-reflective, earthtone color to match the standard environmental colors Rocky Mountain 5 State Interagency Committee. All facilities shall be painted within six months of when the production facilities are put in place. Facilities that are required to comply with O.S.H.A. (Occupational Safety and Health Act) are excluded.
3. Tank batteries will be placed on the north end of the location.
4. A bench mark will be established near each wellsite in location where it will not be destroyed. The bench mark will be set in concrete with a brass cap. The brass cap will show the well number and elevation to the nearest one-tenth of a foot. The cuts/fills for the well site will also show elevations in relation to the bench mark.

BOW VALLEY

UTE TRIBAL # 2-16, AIE

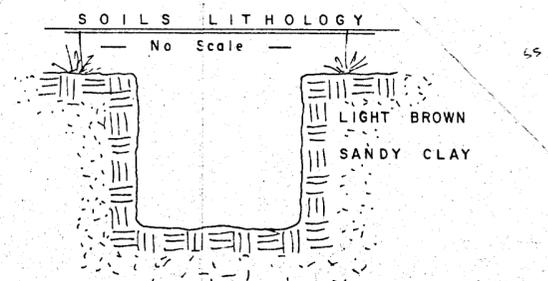
DATE: 9/19/83

SCALE: 1" = 50'



APPROXIMATE YARDAGES

CUBIC YARDS OF CUT = 5835
 CUBIC YARDS OF FILL = 2186
 LOSSES AT 20% = 437 CU. YDS.
 UNBALANCE OF 3212 CU. YDS. CUT



R
I
V
E

Note: Utah State Designated Drilling Unit

0.916 MILE

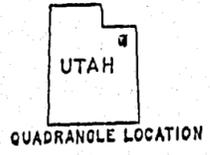
8 MILES TO US. 40
13.3 MILES TO ROOSEVELT

BOW VALLEY PETROLEUM INC.
LTE TRIBAL # 2-16, AIE,
PROPOSED LOCATION

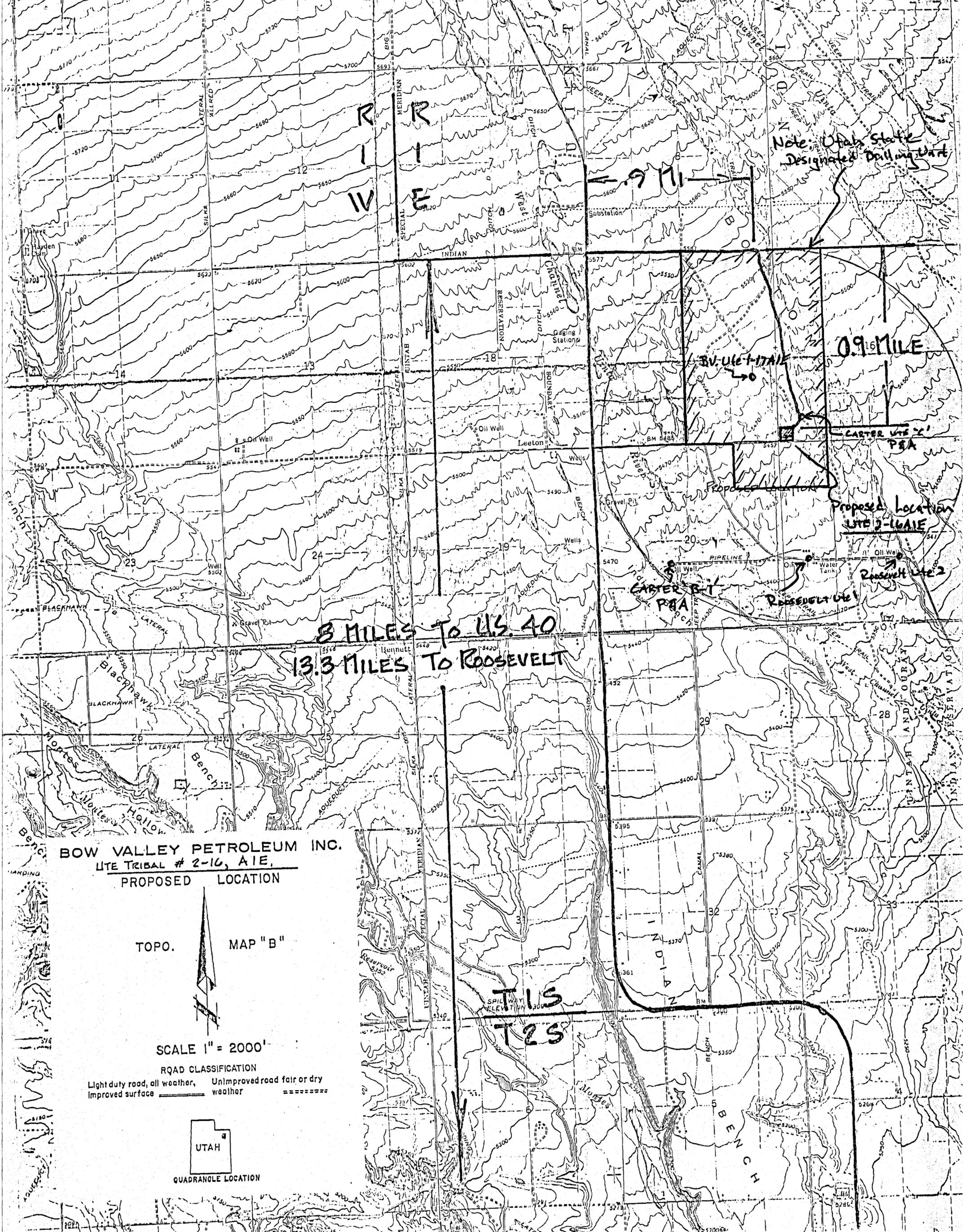
TOPO. MAP "B"

SCALE 1" = 2000'

ROAD CLASSIFICATION
Light duty road, all weather, Improved surface
Unimproved road fair or dry weather



T1S
T2S



PER _____
NOS _____
APD 10-13-83
COMPANY Bow Valley Petroleum, Inc.
WELL Ute 2-16A1E
SECTION 16 T 1S R 1E
LEASE 14-20-H62-2658
ONSITE DATE 10-21-83

ADDITIONS TO THE MULTIPOINT
SURFACE USE PLAN
RECLAMATION PROCEDURES

GENERAL

1. Trespass permits shall be obtained and carried with individual on tribal lands at all times.
2. All operators, subcontractors, vendors, and their employees or agents shall not carry firearms or other weapons.
3. No prospecting will be allowed on tribal lands.
4. No alcoholic beverages or drugs shall be permitted while working on the reservation.
5. A cultural resource clearance is required before any construction begins. The clearance has been done. Clearance has been granted by Grand River Consultants.
6. A wood permit will be obtained from the Forestry Department of the BIA before any firewood is removed.

CONSTRUCTION

1. Construction and maintenance of roads, rehabilitation of disturbed areas and construction of pipeline routes shall be in accordance with the surface use standards as set forth in the booklet, "Surface Operating Standards for Oil and Gas Exploration and Development."
2. The maximum width of access roads will be 30 feet total disturbed area.

3. All operators, subcontractors, vendors, and their employees or agents are confined to establish roads and well sites.
4. All trees four inches or greater in diameter shall be cut and bucked into four foot lengths and neatly stacked adjacent to the access road or drill pad. All trees less than four inches in diameter will be cut and trampled by the heavy equipment.
5. All operators, subcontractors, vendors, and their employees or agents may not gather firewood without a duly granted wood permit.
6. If water or fill materials are needed in constructing roads, well sites, or are used in the drilling process, proper permits are needed. The following information is required: The approximate amount of water or materials needed, the location and ownership of the water rights or materials used.
7. All artifacts found on tribal lands shall be left in place and the BIA promptly notified.
8. Production water will be disposed of at approved disposal pits or injection wells. The injection well or disposal pit used will be identified by legal description.
9. It is the policy of the BIA to make rights-of-ways available, without cost, to operators when both mineral rights and surface rights are owned by the Ute Indian Tribe. If the surface rights are owned by the Tribe and the mineral rights are owned by another entity, the right-of-way will be approved and charges will be assessed for damages prior to the time the operator begins any construction activities. If the surface is owned by the Ute Indian Tribe, rights-of-ways must be cleared with the other entity.
10. Trash, litter, construction materials, etc., will not be littered along roadways or drilling sites. The operator will initiate a procedure to keep the sites free from litter and keep them groomed in a neat and professional condition.
11. The operator will submit a plan for controlling noxious weeds along rights-of-ways for roads, pipelines, well sites, and other applicable facilities. A list of noxious weeds can be obtained from the appropriate county.
12. Adequate and sufficient electric/radioactive logs will be run to locate and identify the prime oil shale horizons and saline minerals in the Mahogany Zone of the Green River formation. Casing and cementing programs will be adjusted to eliminate any potential influence of the well bore or productive hydrocarbon zones on the oil shale and saline minerals resources. Surface casing program may require adjustment for protecting of fresh water aquifers. (See attached tentative casing and cementing program for the Uintah Basin).
13. Burning will not be allowed. All trash must be hauled to the nearest sanitary landfill.

14. The top 6-10 inches of topsoil will be removed and stockpiled on the north end of the location.
15. The reserve pit will be lined with native clay, commercial bentonite, or plastic sufficient to prevent seepage.
16. Reserve pits will be fenced with a wire mesh fence and topped with at least one strand of barbed wire.
17. The operator or his contractor will contact the BIA and the Vernal District BLM, Diamond Mountain Resource Area, 48 hours prior to beginning any work on Tribal land.
18. The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM or BIA stipulations prior to any work.
19. The entire location will be fenced and a cattleguard placed where the access road enters the location.

REHABILITATION

1. Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris resulting from the operation. All trash will be hauled to a local sanitary landfill.
2. The operator or his contractor will contact the BIA and Vernal BLM, Diamond Mountain Resource Area, 48 hours prior to starting rehabilitation work that involves earth moving equipment and upon completion of restoration measures.
3. Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all trash (cans, barrels, pipe, etc.) must be removed.
4. All disturbed areas must be recontoured to the approximate natural contours.
5. The stockpiled topsoil will be evenly distributed over the disturbed area.
6. Prior to reseeding, all disturbed areas, including the access road, will be scarified and left with a rough surface.
7. Seed will be broadcast or drilled at a time specified by the BLM. If broadcast, a harrow or some such implement will be dragged over the seeded area to assure seed coverage, Seeding mixtures will be specified by the BIA.
8. The access will be blocked to prevent any vehicle use.

BOW VALLEY PETROLEUM, INCORPORATED
UTE #2-16A1E
Section 16, T1S, R1E, U.S.B. & M.

9. WELL SITE LAYOUT

See Location Layout Sheet.

The B. I. A. Representative shall be notified before any construction begins on the proposed location site.

As mentioned in Item #7, the pits will be unlined unless it is determined by the representatives of the agencies that the materials are too porous and would cause contamination to the surrounding area; then the pits will be lined with a gel and any other type material necessary to make them safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil on the location site, all topsoil shall be stripped and stockpiled, (See Location Layout Sheet and Item #9). When all drilling and production activities have been completed, the location site will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during the construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the trash pit shall be buried with a minimum of 5' of cover.

Restoration activities shall begin within 12 months after completion of the well. Once restoration activities have begun, they shall be completed within three (3) months.

When restoration activities have been completed, the location site shall be reseeded with a seed mixture recommended by B.I.A. Representative when the moisture content of the soil is adequate for germination. The Lessee further covenants and agrees that all of said clean-up and restoration activities shall be done and performed in a diligent and most workmanlike manner, and in strict conformity with the above mentioned Items #7 and #10.

11. OTHER INFORMATION

The Topography of the General Area (See Topographic Map "A").

The area is a large basin formed by the Uintah Mountains to the North and the Book Cliff Mountains to the South. The sides of these canyons are steep and ledges formed in sandstones, conglomerates, and shale deposits are extremely common to the area.

BOW VALLEY PETROLEUM, INCORPORATED
UTE #2-16A1E
Section 16, T1S, R1E, U.S.B. & M.

11. OTHER INFORMATION - (cont.)

The basin floor is interlaced with numerous canyons and ridges formed by the non-perennial streams of the area. The sides of these canyons are steep and ledges formed in sandstones, conglomerates, and shale deposits are extremely common to the area.

The geologic structures of the area that are visible are of the Uintah Formation (Eocene Epoch) Tertiary Period in the upper elevations and the cobblestone and younger alluvial deposits from the Quaternary Period.

Outcrops of sandstone ledges, conglomerate deposits, and shale are common in this area.

The topsoil in the area range from a light brownish-gray sandy-clay (SM-ML) type soil with poorly graded gravels to a clayey (OL) type soil.

The majority of the numerous washes and streams in the area are of a non-perennial nature flowing during the early spring run-off and extremely heavy rainstorms of long duration which are extremely rare as the normal rainfall in the area is only 8".

The Uinta River to the North of this location is the only perennial stream that is affected by this location site.

Due to the low precipitation average, climate conditions and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid region we are located in; it consists of areas of sagebrush, rabbitbrush, some grasses and cacti as the primary flora. This is also true of the lower elevations.

The fauna of the area consists predominantly of the mule deer, pronghorn antelope, coyotes, rabbits, and varieties of small ground squirrels and other types of rodents. The area is used by man for the primary purpose of grazing domestic sheep and cattle.

The birds of the areas are raptors, finches, ground sparrows, magpies, crows and jays.

The Topography of the Immediate Area (See Topographic Map "B").

Bow Valley Petroleum, Inc. Ute #2-16A1E, is on a flat area approximately 1 mile Southwest of the East channel of the Uintah river.

The Terrain in the vicinity of the location slopes from the Northwest through the location site to the Southeast at approximately a 1.0% grade.

The vegetation in the immediate area surrounding the location site consists of cultivated farm land.

BOW VALLEY PETROLEUM, INCORPORATED
UTE #2-16A1E
Section 16, T1S, R1E, U.S.B. & M.

11. OTHER INFORMATION - (cont.)

There are no occupied dwellings or other facilities of this nature in the general area. There are, however, some occupied dwellings within a one-mile radius of this location site.

There are no visible archaeological, historical, or cultural sites within any reasonable proximity of the proposed location site. (See Topographic Map "B").

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Douglas G. Howard
District Superintendent
Bow Valley Petroleum, Inc.
P. O. Drawer 130
Roosevelt, UT 84066

Telephone: (801) 722-5166

13. CERTIFICATION

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

11-14-83

Date


✓ Charles Gardner
District Superintendent

BOW VALLEY PETROLEUM INCORPORATED
UTE #2-16 ALE
Section 16, T1S, R1E, U.S.B. & M.

1. EXISTING ROADS

See attached Topographic Map "A".

To reach BOW VALLEY PETROLEUM, INC. well location Ute #2-16ALE located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16, T1S, R1E, U.S.B. & M., Uintah County, Utah:

Proceed Easterly out of Roosevelt, Utah on U.S. Highway 40 approximately 5.3 miles to the junction of this road and an existing road to the North; proceed North along this road 8.0 miles to the junction of this road and State Highway 121; proceed East along State Highway 121 - 0.9 miles to the junction of this road and an existing dirt road to the Southeast; proceed Southeast along this road 0.1 miles to its junction with the proposed access road (to be discussed in Item #2).

The highways mentioned in the foregoing paragraph are bituminous surfaced roads.

There will be no construction on the above described roads. They will meet the necessary standards required to facilitate an orderly flow of traffic during the drilling phase, completion phase, and the production phase of this well at such time that production is established.

The roads that are required for access during the drilling phase, completion phase, and production phase of this well will be maintained at the standards required by the B.I.A. or other controlling agencies.

2. PLANNED ACCESS ROAD

See Topographic Map "B".

The planned access road leaves the existing road described in Item #1 in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 16, T1S, R1E, U.S.B. & M. and proceeds in a Southeasterly direction approximately 1300' + to the proposed location site.

In order to facilitate the anticipated traffic flow necessary to drill and produce this well, the following standards will be met:

The proposed access road will be an 18" crown road (9' either side of the centerline) with drain ditches along either side of the proposed road where it is determined necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area.

Back slopes along the cut areas of the road will be 1 $\frac{1}{2}$ to 1 slopes and terraced.

There will be no turnouts required along this access road.

BOW VALLEY PETROLEUM, INCORPORATED
UTE #2-16A1E
Section 16, T1S, R1E, U.S.B. & M.

2. PLANNED ACCESS ROAD - (cont.)

There are no fences encountered along this access road. There will be no gates or cattleguards required.

3. LOCATION OF EXISTING WELLS

See Topographic Map "B".

Oil producing wells within a one-mile radius include the Bow Valley operated Ute Tribal #1-17A1E and the Ute Tribal #1-16A1E. Other oil wells include the Roosevelt Unit Ute #1 and Ute #2 in sections 20 and 21. All are Green River produced. The carter Ute B-1 and the Carter Ute C are P & A'd. There are no known water wells, disposal wells, injection wells or observation wells within a one-mile radius.

4. LOCATION OF EXISTING AND PROPOSED FACILITES

The only production facilities within a one-mile radius are those associated with the wells described in Item #3 above.

The area will be built if possible, with native materials and if these materials are not available then the necessary arrangements will be made to get them from private sources.

These facilities will be constructed using bulldozers, graders, and workmen crews to construct and place the proposed facilities.

If there is any deviation from the above, all appropriate agencies will be notified.

Rehabilitation of disturbed areas no longer needed for operations after construction is completed will meet the requirements of Item #10.

5. LOCATION AND TYPE OF WATER SUPPLY

See Topographic Map "B".

At the present time, it is anticipated that water for this well will be hauled by truck from the East channel of the Uinta River, approximately 1 mile to the Northeast of the proposed location site, where Highway 121 crosses the river.

In the event that this source is not used, an alternate source will be used and all necessary arrangements will be made with the proper authorities.

There will be no water well drilled at this location site.

BOW VALLEY PETROLEUM, INCORPORATED
UTE #2-16ALE
Section 16, T1S, R1E, U.S.B. & M.

6. SOURCES OF CONSTRUCTION MATERIALS

Construction materials for this location site shall be borrow materials accumulated during construction of the location site. There are no pit lining materials from other sources anticipated at this time, however, if they are required, the appropriate actions will be taken to acquire them from private sources.

7. METHODS FOR HANDLING WASTE DISPOSAL

See Location Layout Sheet.

A reserve pit will be constructed.

The reserve pit will vary in size and depth according to the water table at the time of drilling.

One-half of the reserve pit will be used as a fresh water storage area during the drilling of this well and the other one-half will be used to store non-flammable materials such as cuttings, salts drilling fluids, chemicals, produced fluids, etc.

If deemed necessary by the agencies concerned, to prevent contamination to surrounding areas, the reserve pits will be lined with a gel.

The pits will have wire and overhead flagging installed at such time as deemed necessary to protect the water fowl, wildlife, and domestic animals.

At the onset of drilling, the reserve pit will be fenced on three sides and at the time the drilling activities are completed, it will be fenced on the fourth side and allowed to dry completely prior to the time that backfilling and reclamation activities are attempted.

When the reserve pit dries and the reclamation activities commence, the pits will be covered with a minimum of four feet of soil and all requirements of Item #10 will be followed.

A portable trash basket will be placed on the location site and all trash will be hauled to the nearest Sanitary Landfill.

A portable chemical toilet will be supplied for human waste.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

BOW VALLEY PETROLEUM INCORPORATED

13 Point Surface Use Plan

For

Well Location

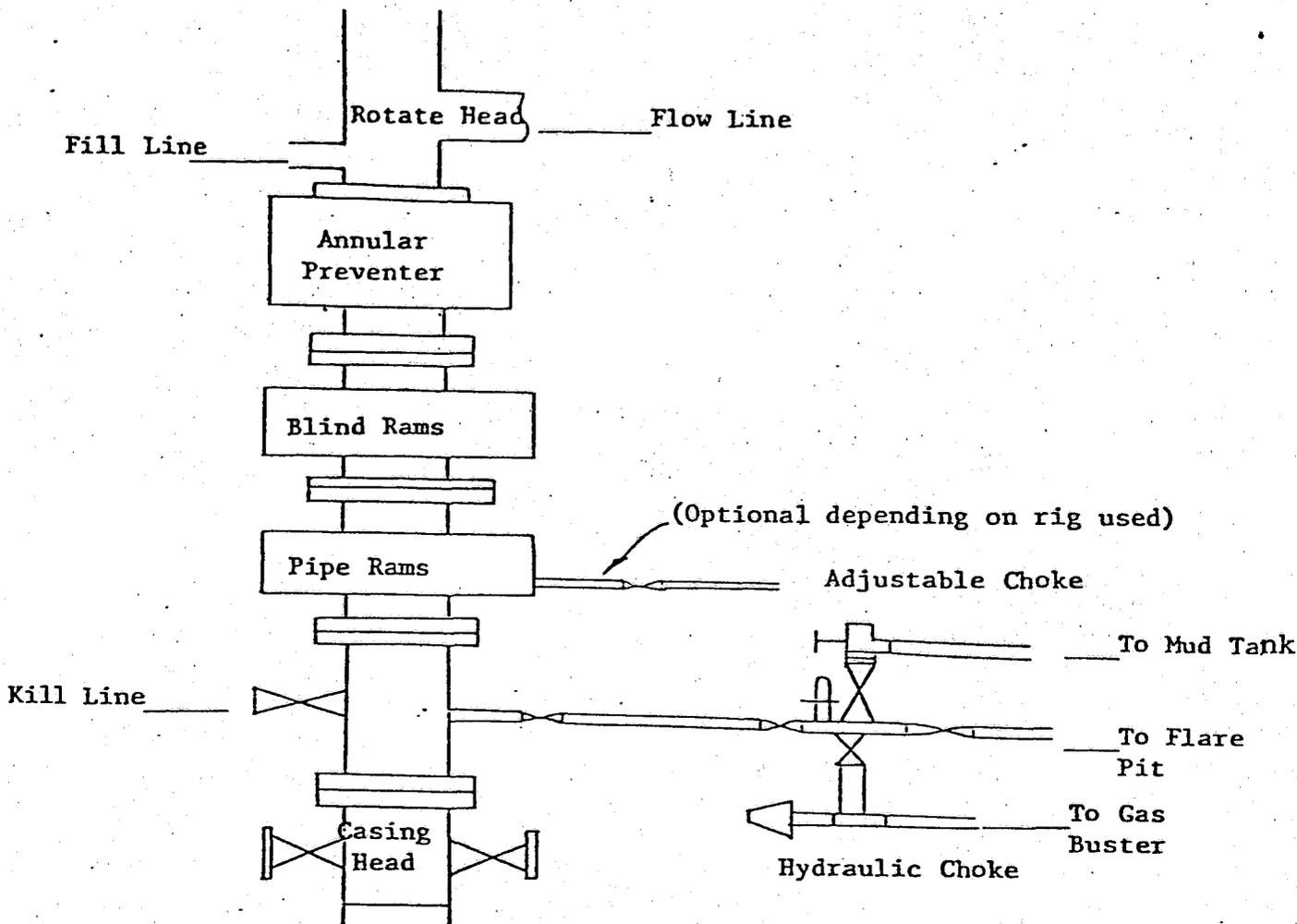
UTE #2-16A1E

Located In

Section 16, T1S, R1E, U.S.B. & M.

Uintah County, Utah

BOW VALLEY PETROLEUM BLOW OUT PREVENTION EQUIPMENT



Minimum 3,000 PSI BOPE is to be installed after setting surface pipe. All preventers are to be tested to 1500 PSI prior to drilling out casing shoe.

Minimum 5,000 PSI BOPE is to be installed after setting the long string. The pipe rams are to be tested to 5,000 PSI, the blind rams are to be tested to 2500# and the annular preventer to 1,500 PSI prior to drilling out shoe.

All auxillary BOPE will be tested to appropriate pressures when BOP's are tested. (Manifold, Upper and Lower Kelly Cocks, Valves and Inside BOP).

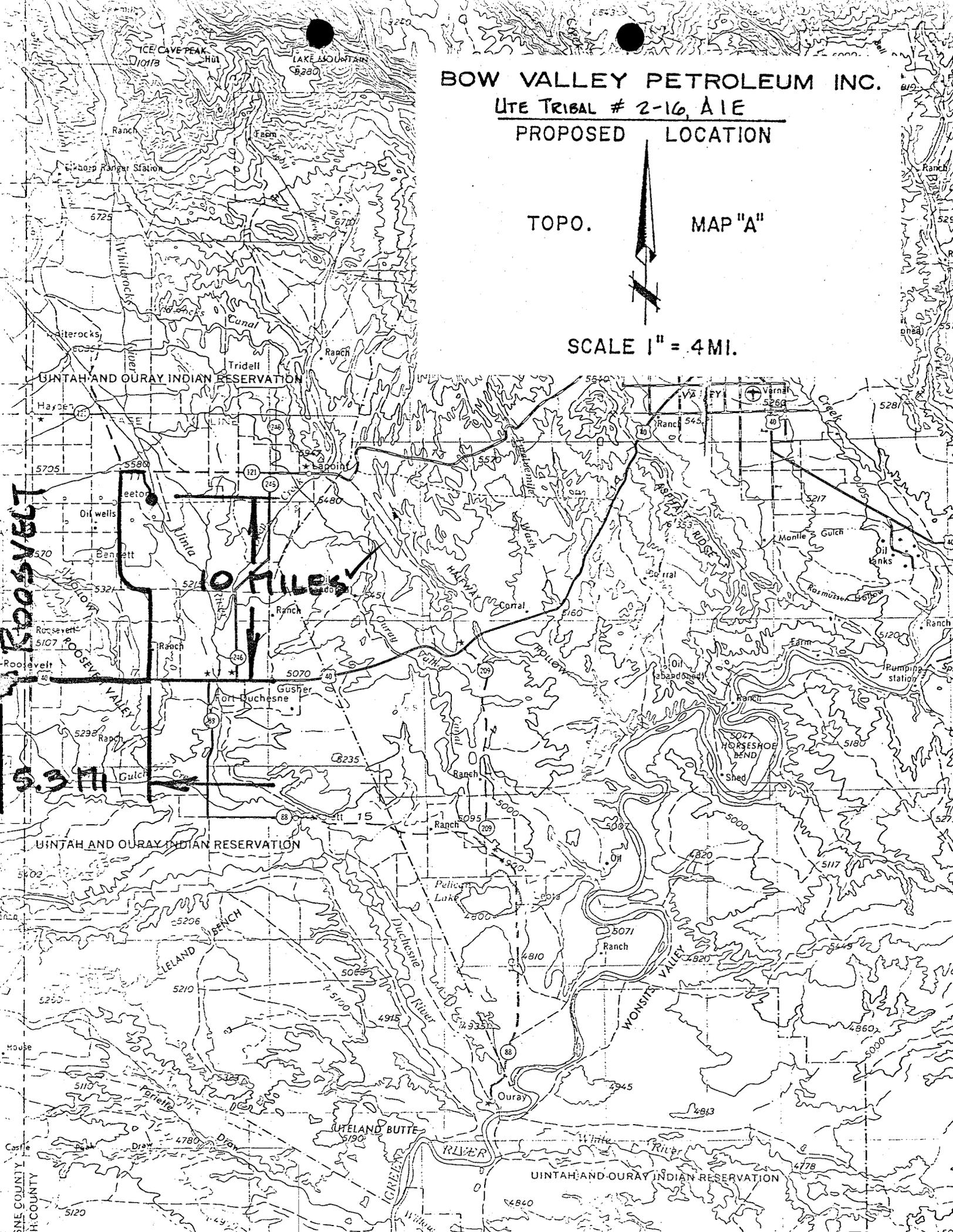
After drilling the shoe, the casing seat will be pressure tested to an equivalent mud weight of 13.5 PPG.

BOW VALLEY PETROLEUM INC.
UTE TRIBAL # 2-16, A1E
PROPOSED LOCATION

TOPO.

MAP "A"

SCALE 1" = 4 MI.



ROOSEVELT
5.3 MI

KAINE COUNTY
H.COUNTY

EXHIBIT "A"

TEN POINT COMPLIANCE PROGRAM

NTL 6

Attached to Form 9-331C

WELL NAME: Ute Tribal #2-16 ALE

LOCATION: Section 16, T1S, R1E, U.S.B. & M.
Uintah County, State of Utah

1. GEOLOGIC SURFACE FORMATION

Tertiary Duchesne River Formation

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Duchesne River Fm Surface
✓ Green River 6130'
Wasatch 11,000'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL GAS OR MINERALS

No water flows anticipated
Oil & Gas 8300' to 11,000' GR - 11,000' to T.D. Wasatch Oil Gas

4. PROPOSED CASING PROGRAM

(a) Conductor Casing: 20" to 40', 52.73#, K-55, 175 sacks cement to surface. 9-5/8" surface casing to 2200', 40.00#, K-55, 400 sacks cement to surface. 7" intermediate casing, 26, S-95 or 29#, N-80, 0 to 4500'. 7" 29#, S-95 or 7" 32#, N-80 from 4500' to 8900'. 7" 32#, S-95 from 8900' to 10,400', 750 sacks cement to approximately 7500', 5" liner, 18#, P-110, 700 sacks "G" 10,200' to 13,700'.

(b) Production Tubing: 2-7/8" tubing, 6.5#, N-80

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

EXHIBIT "B" is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to the full working pressure after nipling up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period, as will blind rams each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP include a kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATING MUDS

0 - 3,000' - Fresh Water
3,000' - T.D. - Fresh Gel Mud

7. AUXILIARY EQUIPMENT TO BE USED

5,000# WP Safety Valve, inside BOP, Upper Kelly Cock, Mud Monitoring Equipment (See Exhibit "A").

8. TESTING, LOGGING AND CORING PROGRAMS

(a) Logging Program:

DIL, SP, GR 2000' - T.D.
DIL, CNL, GR 5000' - T.D.
Mud Logging 5000' - T.D.

(b) Coring: No Cores

(c) Production:

If production is obtained, producing formation will be selectively perforated and treated.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE

No abnormal pressure or temperature anticipated.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The anticipated starting date is to be approximately or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 90 days from spudding and rig release.

OPERATOR BOW VALLEY PETRO INC

DATE 11-21-83

WELL NAME UTE TRIBAL 2-16A1E

SEC ^{SW SW} 16 T 15 R 1E COUNTY UINTAH

43-047-31418
API NUMBER

INDIAN
TYPE OF LEASE

POSTING CHECK OFF:

INDEX

MAP

HL

NLD

PI

PROCESSING COMMENTS:

Ron, I think this APP raises issues which should come before the Board for reference in dealing with similar requests this approval will generate.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: 11-31-83

BY: [Signature]

CHIEF PETROLEUM ENGINEER REVIEW:

11/29/83 irregular drilling & spacing unit #1-17A1E Grand River fm, only, 8960' - 10928', TR 10993'

APPROVAL LETTER:

SPACING:

A-3

UNIT

c-3-a

131-33 5-28-80
CAUSE NO. & DATE

c-3-b

c-3-c

SPECIAL LANGUAGE:

- WATER
- Production of only the Wasatch formation which is below the correlative stratigraphic equivalent depth of the lower most perforations in the #1-17A1E well is permitted for the Ute Tribal 2-16A1E well.

RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

AUTHENTICATE LEASE AND OPERATOR INFORMATION

VERIFY ADEQUATE AND PROPER BONDING

AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

APPLY SPACING CONSIDERATION

ORDER 131-33

UNIT _____

c-3-b

c-3-c

CHECK DISTANCE TO NEAREST WELL.

CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

VERIFY LEGAL AND SUFFICIENT DRILLING WATER

OPERATOR BOW VALLEY

DATE 11-21-83

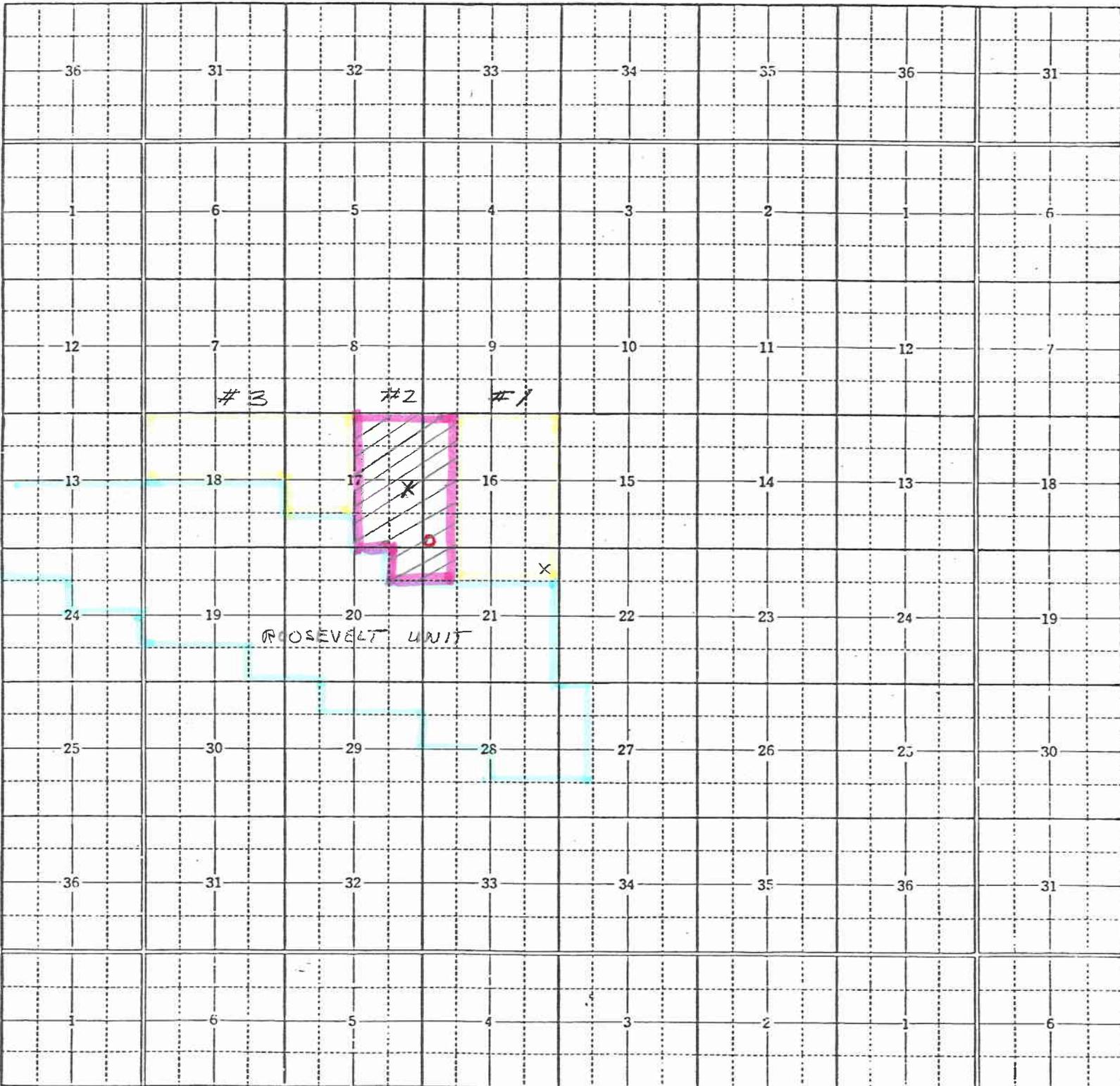
TOWNSHIP 15

RANGE 1E

COUNTY UINTAH

CAUSE # 131-33

UTE TRIBAL 2-16A1E



[Handwritten signature]

November 30, 1983

Bow Valley Petroleum, Inc.
P. O. Drawer 130
Roosevelt, Utah 84066

RE: Well No. Ute Tribal 2-16A1E
SWSW Sec. 16, T. 1S, R. 1E
187' FSL, 203' FWL
Uintah County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with the Order issued in Cause No. 131-33 dated May 28, 1980. Prior to spudding, a copy of the Utah Division of Water Rights (Phone No. 801-533-6071) approval for us or purchase of drilling water must be submitted to this office, otherwise this approval is void. Production of only the Wasatch formation which is below the correlative stratigraphic equivalent depth of the lower perforations in the #1-17A1E well is permitted for the Ute Tribal 2-16A1E well.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

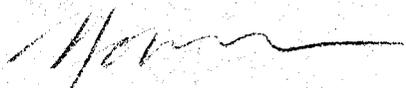
RONALD J. PIRTH - Chief Petroleum Engineer
Office: 533-5771
Home: 571-6068

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-047-31418.

Sincerely,



Norman C. Stout
Administrative Assistant

NCS/as
cc: Branch of Fluid Minerals
Bureau of Indian Affairs



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Water Rights

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dee C. Hansen, State Engineer

23 East Main Street • P.O. Box 879 • Vernal, UT 84073 • 801-789-3714

*For further
nom. stand*

December 7, 1983

file

Ute Tribe
C/O Bow Valley Petroleum, Inc.
P. O. Drawer 130
Roosevelt, Utah 84066

RE: Temporary Change Appl. 83-43-29

Gentlemen:

The above numbered Temporary Change Application has been approved, subject to prior rights.

A copy is herewith returned to you for your records and future reference.

Very truly yours,

Ted Baldwin

Ted Baldwin
for Dee C. Hansen
State Engineer

DCH:TB/1n

Enclosure

RECEIVED
DEC 9 1983

**DIVISION OF
OIL, GAS & MINING**

RULES AND REGULATIONS

(Read Carefully)

This application blank is to be used only for temporary change of point of diversion, place or nature of use for a definitely fixed period not to exceed one year. If a permanent change is desired, request proper application blanks from the State Engineer.

Application for temporary change must be filed in duplicate, accompanied by a filing fee of \$7.50 Where the water affected is under supervision of a Water Commissioner, appointed by the State Engineer, time will be saved if the Application is filed with the Commissioner, who will promptly investigate the proposed change and forward both copies with filing fee and his report to the State Engineer. Applications filed directly with the State Engineer will be mailed to the Water Commissioner for investigation and report. If there be no Water Commissioner on the source, the Application must be filed with the State Engineer.

When the State Engineer finds that the change will not impair the rights of others he will authorize the change to be made. If he shall find, either by his own investigation or otherwise, that the change sought might impair existing rights he shall give notice to persons whose rights might be affected and shall give them opportunity to be heard before acting upon the Application. Such notice shall be given five days before the hearing either by regular mail or by one publication in a newspaper. Before making an investigation or giving notice the State Engineer will require the applicant to deposit a sum of money sufficient to pay the expenses thereof.

Address all communications to:

State Engineer
State Capitol Building
Salt Lake City, Utah

STATE ENGINEER'S ENDORSEMENTS

(Not to be filled in by applicant)

Change Application No. (River System)

- 1. Application received by Water Commissioner (Name of Commissioner)
Recommendation of Commissioner
2. 12-7-43 Application received over counter by mail in State Engineer's Office by JHB
3. Fee for filing application, \$7.50 received by ; Rec. No.
4. Application returned, with letter, to , for correction.
5. Corrected application resubmitted over counter by mail to State Engineer's Office.
6. Fee for investigation requested \$
7. Fee for investigation \$, received by ; Rec. No.
8. Investigation made by ; Recommendations:
9. Fee for giving notice requested \$
10. Fee for giving notice \$, received by ; Rec. No.
11. Application approved for advertising by publication mail by
12. Notice published in
13. Notice of pending change application mailed to interested parties by as follows:
14. Change application protested by (Date Received and Name)
15. Hearing set for at
16. December 7, 1953 Application recommended for rejection approval by JHB
17. Change Application rejected approved and returned to

THIS APPLICATION IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

- 1.
2.
3.

x Theodore Baldwin For
Dee C. Hansen, P. E. State Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Uintah and Ouray Agency
Fort Duchesne, Utah 84026

PERMIT FOR USE OF WATER

1. Permission is granted to BOW VALLEY PETROLEUM, INC., hereinafter referred to as Permittee, by the Ute Indian Tribe, hereinafter referred to as Permitter, to use water for the purpose of an oil and/or gas well drilling operation located in SW $\frac{1}{4}$ SW $\frac{1}{4}$, SECTION 16, T1S, R1E, U.S.M., water to be drawn from UINTAH RIVER IN UINTAH COUNTY, UTAH.
2. In consideration of the water claimed by the Ute Indian Tribe, the Permittee will pay the sum of \$ 3,300.00 by check, payable to the Bureau of Indian Affairs.
3. The Permittee agrees:
 - a. The Permitter can make no guarantee as to amount of or time of year that such water will be available. It is understood that availability is totally dependent on the natural supply of water.
 - b. All facilities including, but not limited to pipe and pumps, installed by the Permittee must be of such nature and design so as not to in any way interfere with the delivery of irrigation water.
 - c. Upon completion or apparent abandonment of the oil and/or gas well for which this drilling permit is granted, the Permittee will repair any damages and remove or be responsible for the cost of removal of any facilities installed by the Permittee.
 - d. **LIABILITY:** Permittee is liable for all damages that result from his operations, or for injury to the Permitter or his property, including livestock; to lessees, licensees and surface owners. The Permittee agrees to save and hold harmless the Permitter and the United States and its officers, representatives and employees, and the surface owners or their tenants from all suits for injury or claims for damage to persons and property from the Permittee's operations under

this permit.

e. BOND: To guarantee performance under this permit, a bond is to be furnished as follows: BOND #709E192-4

TRAVELER \$15,000.00

f. TERM: Permittee is granted use of water subject to conditions hereinabove stated for a period beginning with the date of approval of this permit, and ending

UPON WELL COMPLETION

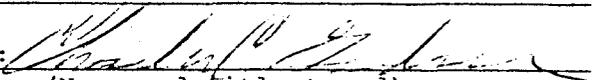
g. All conditions of this permit are thoroughly understood and only those specifically stated herein are intended to be granted.

h. Issue copy of permit to each water hauler.

i. Remind company personnel that carrying firearms while on the Uintah and Ouray Reservation is prohibited.

PERMITTEE:

BOW VALLEY PETROLEUM, INC.

By: 
(Name and title typed)

Charles G. Gardner
District Superintendent

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO. 14-20-H62-2658-3101
6. IF INDIAN, ALLOTTEE OR TRIBE NAME Ute Tribe
7. UNIT AGREEMENT NAME N/A
8. FARM OR LEASE NAME Ute Tribal
9. WELL NO. 2-16A1E
10. FIELD AND POOL, OR WILDCAT E. BLUEBELL-Wasatch
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 16, T1S, R1E, U.S.M.
12. COUNTY OR PARISH Uintah
13. STATE Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [] PLUG BACK []

b. TYPE OF WELL OIL WELL [X] GAS WELL [] OTHER [] SINGLE ZONE [] MULTIPLE ZONE []

2. NAME OF OPERATOR Bow Valley Petroleum, Inc.

3. ADDRESS OF OPERATOR P. O. Drawer 130, Roosevelt, Utah 84066

4. LOCATION OF WELL (Report location clearly and in accordance with all State requirements.*) At surface 203' FWL, 187' FSL, NW 1/4 NW 1/4 SW SW At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 5.3 east, 8.0 miles north, east .9, south .1 of Roosevelt, Utah

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

16. NO. OF ACRES IN LEASE 560

17. NO. OF ACRES ASSIGNED TO THIS WELL 560

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

19. PROPOSED DEPTH 13,700'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5455' GR ungraded

22. APPROX. DATE WORK WILL START* Nov. 28, 1983

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 12 1/4", 8-3/4", and 6" hole sizes with corresponding casing and cement data.

This is a test of the Tertiary Wasatch Formation. The Wasatch will be selectively perforated and acidized for production. The proposed location of this well is within a Utah State designated drilling unit containing 560 acres. The Bow Valley Ute 1-17A1E, which is presently producing in the drilling unit, is a Green River well. The proposed Ute 2-16A1E will be a Wasatch producer. Minimum 3,000 PSI BOPE will be installed and pressure tested to 3,000 PSI prior to drilling the casing shoe at 2,200 feet. Minimum 5,000 PSI BOPE will be installed and tested to 5,000 PSI prior to drilling the casing shoe at 10,400 feet. After drilling the casing shoe, the casing seat will be tested to an EMW of 13.5 PPG.

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

24. SIGNED Michelle Emerson TITLE Engineering Technician DATE Nov. 16, 1983

PERMIT NO. APPROVAL DATE APPROVED BY [Signature] TITLE DISTRICT MANAGER DATE 12-20-83

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

*See Instructions On Reverse Side

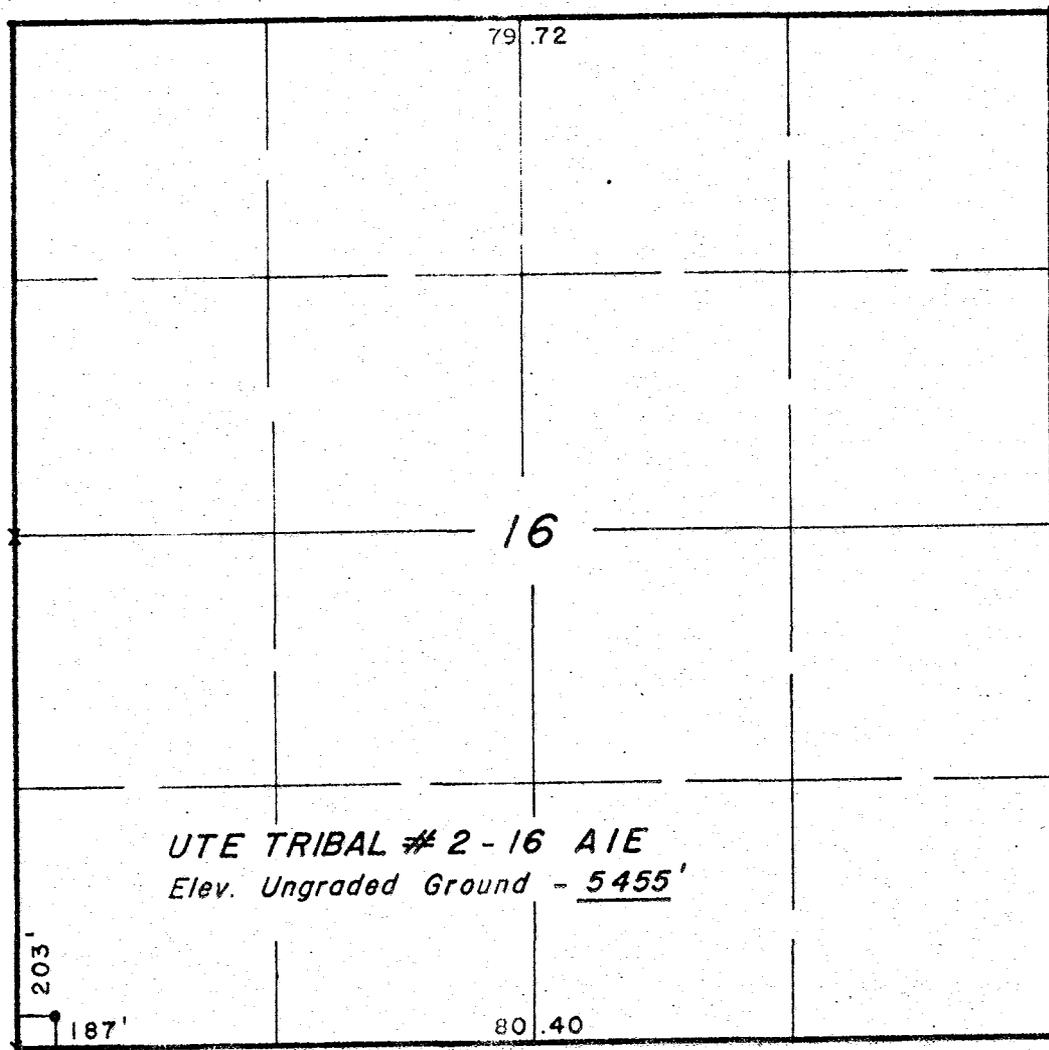
FLARING OR VENTING OF GAS IS SUBJECT TO MTL 4-A DATED 1/1/80

State Oil & Gas

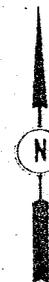
T1S, R1E, U.S.M.

PROJECT
BOW VALLEY PETROLEUM INC.

Well location, UTE TRIBAL #2-16 A1E,
located as shown in the SW1/4 SW1/4,
Section 16, T1S, R1E, U.S.B. & M.,
Uintah County, Utah.



X = Section Corners Located



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.

Gene Stewart
REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q - 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	9/16/83
PARTY	LDT, RK, TJ JH	REFERENCES	GLO PLAT
WEATHER	FAIR	FILE	BOW VALLEY

PER _____
NOS _____
APD 10/13/83
COMPANY Bow Valley Pet.
WELL Ute 2-16-A1E
SECTION 16 T 1S R 1E
LEASE 14-20-H62-2658 3|0|
ONSITE DATE 10/21/83

ADDITIONS TO THE MULTIPPOINT
SURFACE USE PLAN
RECLAMATION PROCEDURES

GENERAL

1. Trespass permits shall be obtained and carried with individual on tribal lands at all times.
2. All operators, subcontractors, vendors, and their employees or agents shall not carry firearms or other weapons.
3. No prospecting will be allowed on tribal lands.
4. No alcoholic beverages or drugs shall be permitted while working on the reservation.
5. A cultural resource clearance is required before any construction begins. The clearance has been done. Clearance has been granted by Grand River Consultants.
6. A wood permit will be obtained from the Forestry Department of the BIA before any firewood is removed.

CONSTRUCTION

1. Construction and maintenance of roads, rehabilitation of disturbed areas and construction of pipeline routes shall be in accordance with the surface use standards as set forth in the booklet, "Surface Operating Standards for Oil and Gas Exploration and Development."
2. The maximum width of access roads will be 30 feet total disturbed area.

3. All operators, subcontractors, vendors, and their employees or agents are confined to establish roads and well sites.
4. All trees four inches or greater in diameter shall be cut and bucked into four foot lengths and neatly stacked adjacent to the access road or drill pad. All trees less than four inches in diameter will be cut and trampled by the heavy equipment.
5. All operators, subcontractors, vendors, and their employees or agents may not gather firewood without a duly granted wood permit.
6. If water or fill materials are needed in constructing roads, well sites, or are used in the drilling process, proper permits are needed. The following information is required: The approximate amount of water or materials needed, the location and ownership of the water rights or materials to be used.
7. All artifacts found on tribal lands shall be left in place and the BIA promptly notified.
8. Production water will be disposed of a approved disposal pits or injection wells. The injection well or disposal pit used will be identified by legal description.
9. It is the policy of the BIA to make rights-of-ways available, without cost, to operators when both mineral rights and surface rights are owned by the Ute Indian Tribe. If the surface rights are owned by the Tribe and the mineral rights are owned by another entity, the right-of-way will be approved and charges will be assessed for damages prior to the time the operator begins any construction activities. If the surface is owned by the Ute Indian Tribe, rights-of-ways must be cleared with the other entity.
10. Trash, litter, construction materials, etc., will not be littered along roadways or drilling sites. The operator will initiate a procedure to keep the sites free from litter and keep them groomed in a neat and professional condition.
11. The operator will submit a plan for controlling noxious weeds along rights-of-ways for roads, pipelines, well sites, and other applicable facilities. A list of noxious weeds can be obtained from the appropriate county.
12. Adequate and sufficient electric/radioactive logs will be run to locate and identify the prime oil shale horizons and saline minerals in the Mahogany Zone of the Green River formation. Casing and cementing programs will be adjusted to eliminate any potential influence of the well bore or productive hydrocarbon zones on the oil shale and saline minerals resources. Surface casing program may require adjustment for protection of fresh water aquifers. (See attached tentative casing and cementing program for the Uintah Basin).
13. Burning will not be allowed. All trash must be hauled to the nearest sanitary landfill.

14. The top 6-10 inches of topsoil will be removed and stockpiled on the north end of the location.
15. The reserve pit will be lined with native clay, commercial bentonite, or plastic sufficient to prevent seepage.
16. Reserve pits will be fenced with a wire mesh fence and topped with at least one strand of barbed wire.
17. The operator or his contractor will contact the BIA and the Vernal District BLM, Diamond Mountain Resource Area, 48 hours prior to beginning any work on Tribal land.
18. The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM or BIA stipulations prior to any work.
19. The entire location will be fenced and a cattleguard placed where the access road enters the location.

REHABILITATION

1. Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris resulting from the operation. All trash will be hauled to a local sanitary landfill.
2. The operator or his contractor will contact the BIA and Vernal BLM, Diamond Mountain Resource Area, 48 hours prior to starting rehabilitation work that involves earth moving equipment and upon completion of restoration measures.
3. Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all trash (cans, barrels, pipe, etc.) must be removed.
4. All disturbed areas must be recontoured to the approximate natural contours.
5. The stockpiled topsoil will be evenly distributed over the disturbed area.
6. Prior to reseeding, all disturbed areas, including the access road, will be scarified and left with a rough surface.
7. Seed will be broadcast or drilled at a time specified by the BLM. If broadcast, a harrow or some such implement will be dragged over the seeded area to assure seed coverage. Seeding mixtures will be specified by the BIA.
8. The access will be blocked to prevent any vehicle use.

PRODUCTION

1. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed within 90 days after completion with the methods described in the rehabilitation section. Stockpiled topsoil will be used in reclaiming the unused areas.
2. All permanent (on site for six (6) months duration or longer) structures constructed or installed, including the pumpjack, shall be painted a flat, non-reflective, earthtone color to match the standard environmental colors Rocky Mountain 5 State Interagency Committee. All facilities shall be painted within six months of when the production facilities are put in place. Facilities that are required to comply with O.S.H.A. (Occupational Safety and Health Act) are excluded.
3. Tank batteries will be placed on the north end of the location.
4. A bench mark will be established near each well site in location where it will not be destroyed. The bench mark will be set in concrete with a brass cap. The brass cap will show the well number and elevation to the nearest one-tenth of a foot. The cuts/fills for the well site will also show elevations in relation to the bench mark.



United States Department of the Interior

2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

February 2, 1981

General Outline for the Protection and Isolation of Ground Water and Oil Shale in the Uinta Basin.

The oil shale occurs with varying thicknesses in most parts of the Uinta Basin and at varying depths. Ground water also occurs at varied depths above and below the Oil Shale. These ground waters have varying degrees of salinity. Nonetheless, drilling for hydrocarbon in the Uinta Basin should provide for the protection of the oil shale and the ground water if either is present.

The protection of the oil shale and the ground water can effectively be carried on through the design of an adequate casing and cementing program for each well drilled in the area.

In the Uinta Basin, water occurs mainly in the Uinta and the Green River formations. As drilling for hydrocarbon gets deeper into the crust of the earth, more ground water might be encountered and will be protected as it is encountered.

This notice's purpose is to attempt to lay the groundwork for a casing program and cementing program that will protect the oil shale and the ground water if present.

These programs are to be considered as guidelines. The specificity of casing depth, amount of cement and the depth of staging collars will be considered on an individual basis after a careful study of the logs of each individual well. Cementing from the bottom up is an economical solution if carefully conducted.

The casing and cementing program presented here as an example, will assume that fresh water was encountered in the upper parts of the Green River, that the oil shale occurs in the middle of the Green River (1000 foot section) and that some ground water is encountered in the lower parts of the Green River.

In this case, three areas will have to be cemented to assure the integrity of the ground water and oil shale. These areas are above the upper fresh water, across the oil shale and below the lower water aquifer. Deep aquifers that do not contain useful water are cemented to prevent water zone influence on production.

The following casing and cementing program will be appropriate for this example:

- A. Surface casing is set at approximately 300 feet and cemented to the surface.

- B. The next casing string will be set at approximately 300 feet below the lowest aquifer. Cementing will be done in three stages, using two stage collars and cement baskets or equivalent as described below and on attached sketches:
1. Cement first stage through the casing shoe to fill annulus back to base of lower aquifer.
 2. Place 1st stage collar (with cement basket immediately below) at a selected point at the base of the oil shale. Cement will have to reach top of oil shale.
 3. Place 2nd stage collar (with cement basket immediately below) 50 feet above the top of the Bird's Nest aquifer and cement to at least 300 feet above the stage collar.
- C. The above is an example. Reasonable equivalents that accomplish these same protective measures, (such as cementing the water zones instead of isolating them), depending on the individual cases will be considered for approval.
- D. When the above mentioned well is to be abandoned, inner-casing plugs will have to be placed at the same depth as the above mentioned annulus cement jobs.

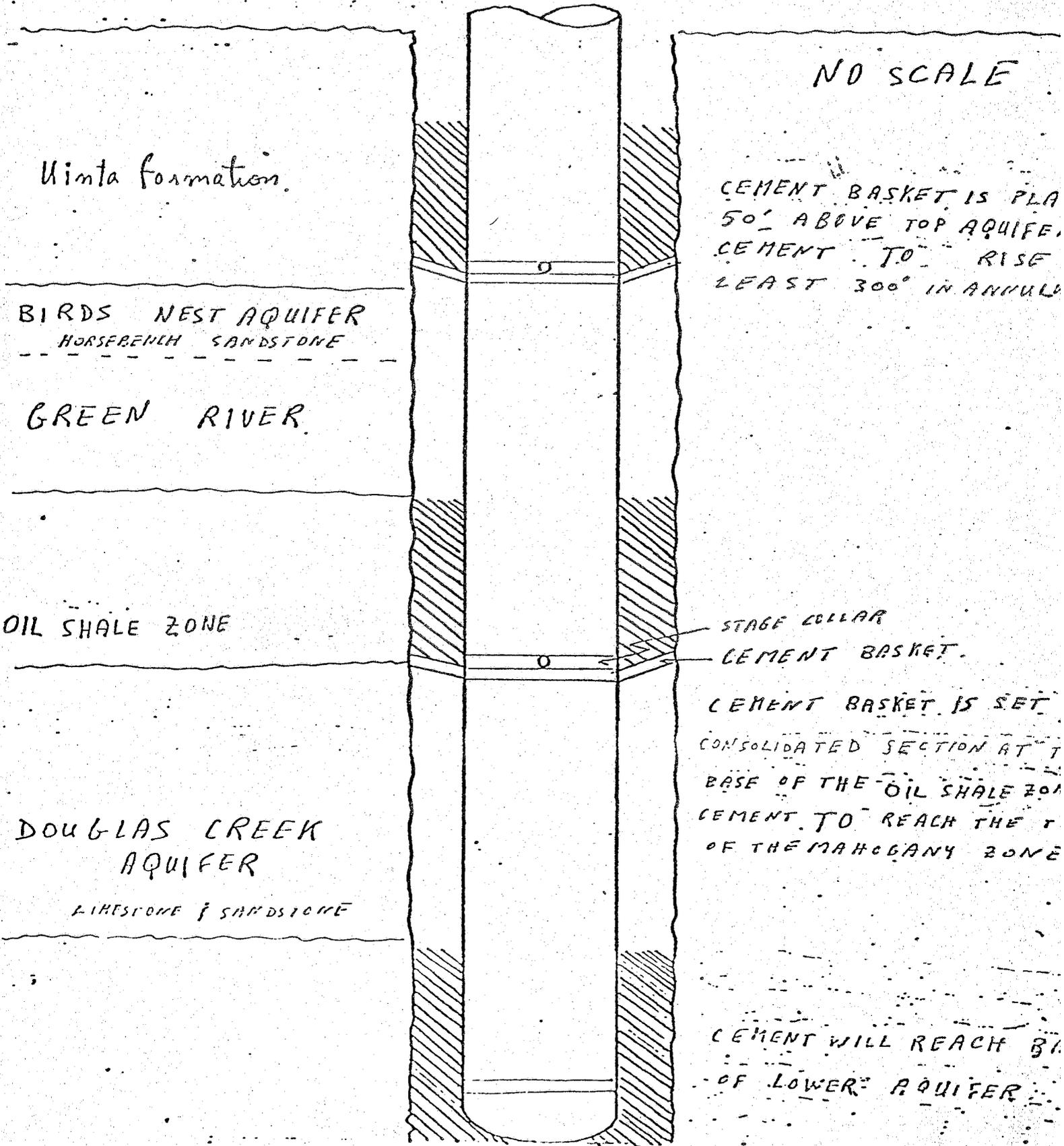
The use of cement bond logs will verify the authenticity of the cement job performed.

- E. The Operator of such well should notify U.S.G.S. 48 hours prior to commencement of casing and cementing activity, so a technician could be dispatched to witness the operations to verify compliance with casing and cementing program.

Attached Sketches:

1. Schematic of the required casing and cementing program.
2. Cross section of the Uinta Basin.
3. Schematic of the general ground water protection program.

PARTIAL CASING & CEMENTING PROGRAM FOR WELLS
 NATURAL BUTTES FIELD. HINTAH COUNTY, UTAH



Uinta formation.

BIRDS NEST AQUIFER
 HORSEBENCH SANDSTONE

GREEN RIVER

OIL SHALE ZONE

DOUGLAS CREEK
 AQUIFER

LIMESTONE & SANDSTONE

NO SCALE

CEMENT BASKET IS PLACED
 50' ABOVE TOP AQUIFER.
 CEMENT TO RISE AT
 LEAST 300' IN ANNUAL

STAGE COLLAR
 CEMENT BASKET.

CEMENT BASKET IS SET IN
 CONSOLIDATED SECTION AT THE
 BASE OF THE OIL SHALE ZONE.
 CEMENT TO REACH THE TOP
 OF THE MAHOGANY ZONE

CEMENT WILL REACH BOTTOM
 OF LOWER AQUIFER

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

RECEIVED

MAY 28 1985

**DIVISION OF OIL
GAS & MINING**

3162.35
U-820
14-20-H62-3101

May 21, 1985

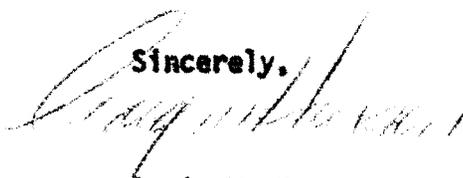
Bow Valley Petroleum, Inc.
P. O. Drawer 130
Roosevelt, Utah 84066

RE: Rescind Application for Permit to Drill
Well No. 2-16A1E
Section 16, T1S, R1E
Uintah County, Utah
Lease No. 14-20-H62-3101

The Application for Permit to Drill the referenced well was approved on December 20, 1983. Since that date, no known activity has transpired at the approved location. Under current District policy, Applications for Permit to Drill are effective for a period of one year. In view of the foregoing, this office is rescinding the approval of the referenced application without prejudice. 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,



Craig M. Hansen
ADM for Minerals

bcc: State Div. O G & M
well file
BIA



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 3, 1985

Bow Valley Petroleum, Inc.
P O Drawer 130
Roosevelt, Utah 84066

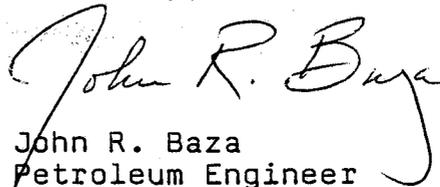
Gentlemen:

Re: Well No. Ute Tribal 2-16A1E - Sec. 16, T. 1S., R. 1E.,
Uintah County, Utah - API #43-047-31418

In concert with action taken by the Bureau of Land Management, May 21, 1985, approval to drill the above referenced well is hereby rescinded.

A new "Application for Permit to Drill" must be filed with this office, for approval, prior to future drilling of the subject location.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza". The signature is written in dark ink and is positioned above the typed name and title.

John R. Baza
Petroleum Engineer

pk
cc: Dianne R. Nielson
Ronald J. Firth
File

0170S/98