

## UNOCAL 76

May 25, 1994

State of New Mexico  
310 Old Santa Fe Trail  
Santa Fe, NM 87503

Gentlemen:

Union Oil Company of California (UNOCAL) requests permission for a nonstandard location for our Rincon Unit No. 183E located 1880' FSL and 2080' FEL, Section 31, T27N-R6W, Rio Arriba County, New Mexico.

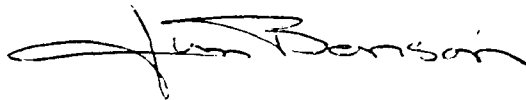
This well is a proposed dual Basin Dakota/South Blanco Totico well that does not conform, as staked, to a "standard" Dakota location. During surveying and staking operations a potential major archaeological site was encountered by the on-site archeologist (Complete Archaeological Service Associates - C.A.S.A.). See attached archaeological report.

To avoid any and all potential archaeological sites, the original location had to be moved several hundred feet to its present staked location, which is outside the "window" of a legal Dakota well. There are no existing pads/locations in the immediate area on which to drill this proposed well.

The offset lease owner, Caulkins Oil Company, has been contacted by certified letter requesting waiver of objection to this proposed unorthodox location.

If you have any questions, please contact me at 307/234-1563, Ext. 116. Thank you for your help in this matter.

Sincerely,

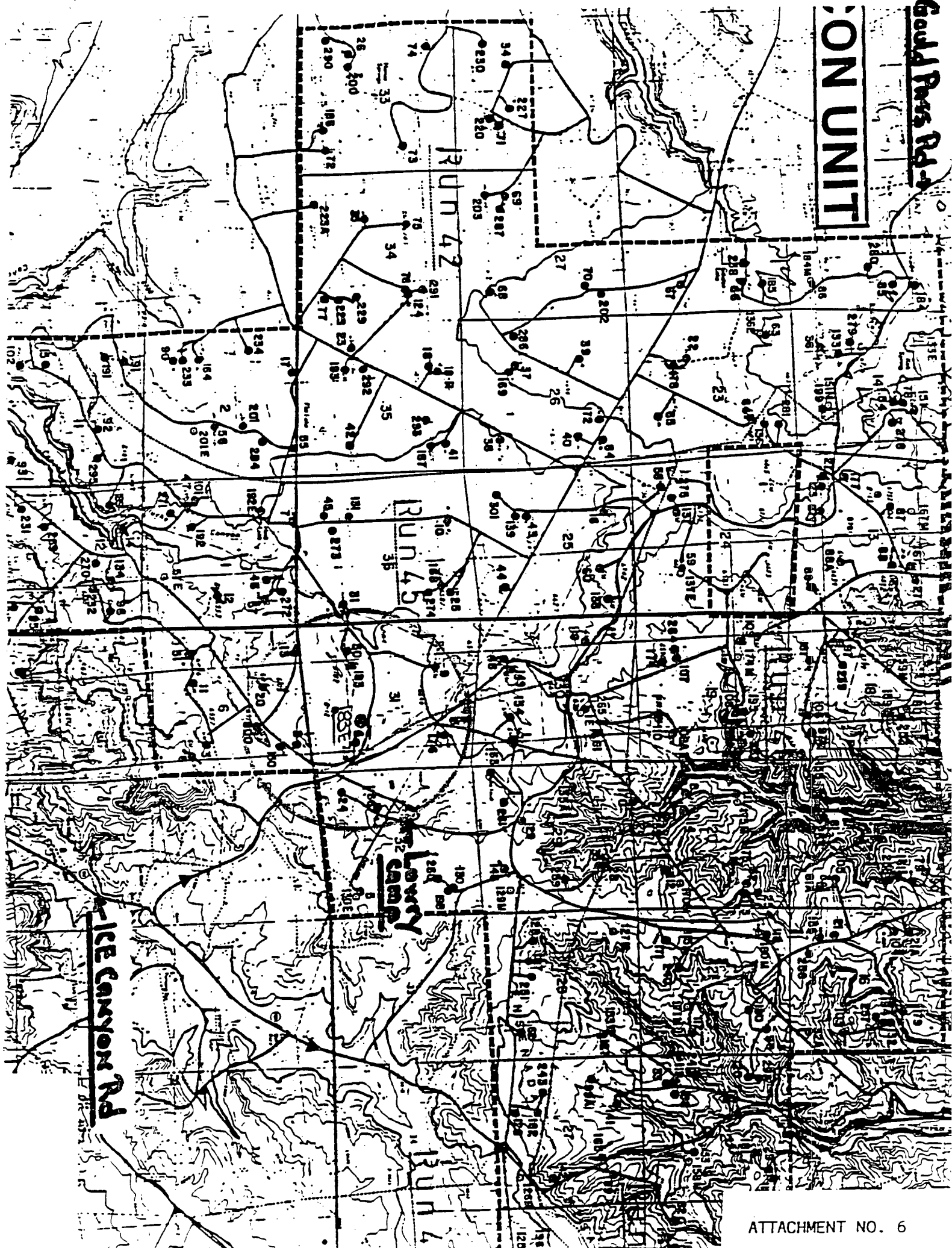


Jim Benson  
Drilling Superintendent

cc: Ernie Busch, Aztec, NM

JB:kb

# ION UNIT





Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>UNOCAL</b>		Lease <b>RINCON</b>		Well No. <b>183-E</b>
Unit Letter <b>J</b>	Section <b>31</b>	Township <b>27N</b>	Range <b>6W</b>	County <b>NMPM Rio Arriba</b>
Actual Footage Location of Well: <b>1880</b> feet from the <b>SOUTH</b> line and <b>2080</b> feet from the <b>EAST</b> line				
Ground level Elev. <b>6614</b>	Producing Formation <b>Dakota/Tocito</b>	Pool <b>Basin/South Blanco</b>	Dedicated Acreage: <b>Dakota - 320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below. **Tocito - 80**

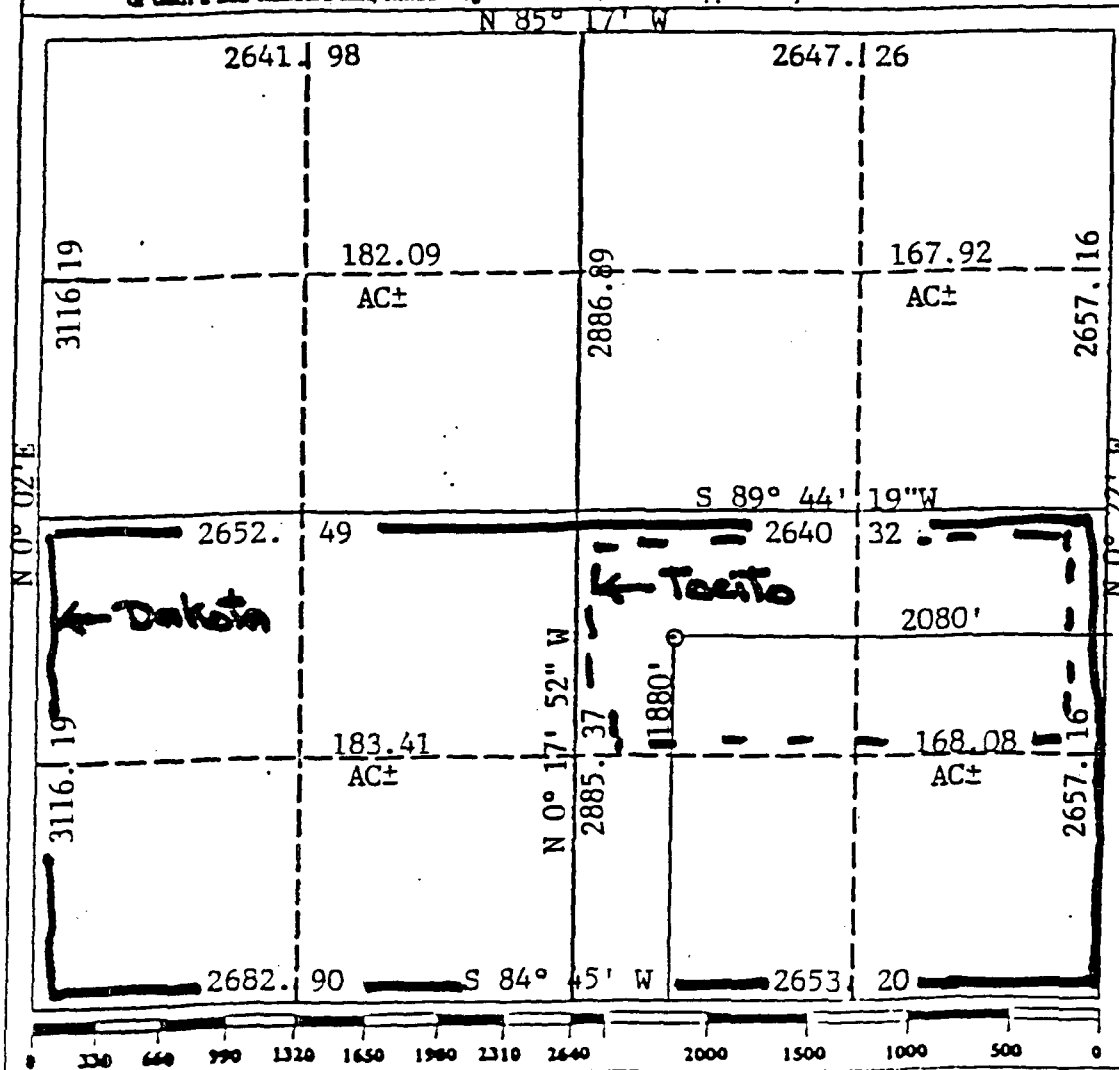
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation **unitization**

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature *Jim Benson*

Printed Name **Jim Benson**

Drilling Superintendent  
Position

**Union Oil Co. of Calif.**  
Company

**1/12/94**

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location on this plat was plotted from field actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **September 20, 1993**

Signature & Seal  
Professional Surveyor

**Cecil B. Tuller**  
Certificate No. **9672**

[illegible]

Figure 13. Plat of RU 183-E (revised location) prepared by High Country Surveys.

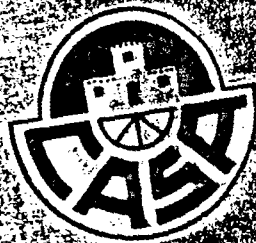
CULTURAL RESOURCE INVENTOR

17 Well Locations  
UNOCAL's Rincon Unit  
1994 Drilling Program  
Rio Arriba County, New Mexico

Prepared by

Laurens C. and Nancy S. Hammack  
Complete Archaeological Service Associates  
12400 Highway 666  
Cortez, Colorado 81321

[CASA 93-52]



Prepared for

UNOCAL  
900 Werner Court  
Casper, Wyoming 82602

Submitted to

Bureau of Land Management  
Farmington District  
1235 La Plata Highway  
Farmington, New Mexico 87401

Permits

NM BLM CRUP 12-2920-93-H

November 18, 1993

Well Name: Rincon Unit 183-E

Location: Original Location: center SE¼ SE¼ Section 31, T27N, R6W  
Revised Location: NW¼ NW¼ SE¼ Section 31, T27N, R6W, Rio Arriba County, New Mexico [oversized and irregularly shaped section measured from southeast corner] (Figure 2).

Operator: UNOCAL

Map Reference: Gould Pass, New Mexico 7.5 minute, 1985 [Provisional]

Staked Footages: Original Location: 660' FSL, 660' FEL  
Revised Location: 1880' FSL, 2080' FEL (Figure 13)

Ownership: Bureau of Land Management, Farmington District

Elevation: 6614 feet

Area Surveyed: Well pad: 600-ft by 600-ft (8.27 acres) surveyed for a well pad with dimensions of 300-ft by 265-ft (1.82 acres).  
Access road: Existing well field road, not surveyed.

Description: Original Location: Well situated on west sloping sage covered terrain just west of crest of low ridge above series of sandstone outcrops bordering small canyon on east.  
Revised Location: Well pad positioned on north-sloping sage covered terrain below pinyon/juniper forested ridge. Fenceline along southern edge of survey parcel with existing well field road through north side of survey area (Figure 14). Sagebrush with bunch grasses growing in a sandy/silty loam

Cultural Resources: Original Location: LA 89073, small Piedra Phase habitation consisting of a single pithouse and probable surface room (see Appendix A for site description)  
Revised Location: None

Recommendations: Cultural resource clearance is recommended for the revised location for Rincon Unit 183-E at the location described above.



Figure 12. Staked location for RU 176-E looking east.

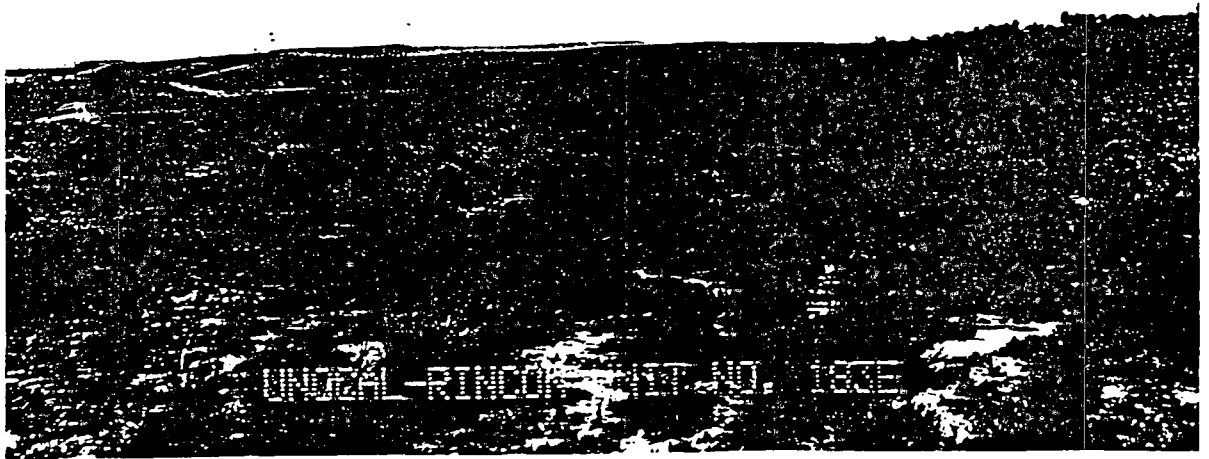


Figure 14. Staked location for RU 183-E (revised) looking east.



Site Number: LA 89073

Location: Center of the SE¼ of the SE¼, Section 31, Township 27 North, Range 6 West, Rio Arriba County, New Mexico (Figure 2).

UTM Location: Zone 13, E 276000/N 4044820

Well Location: Rincon Unit 183E

Map Reference: Gould Pass, N. Mex. 7.5 minute, 1985 [Provisional]

Cultural/Temporal Affiliation: Anasazi, Pueblo I, Piedra Phase

Site Type: Habitation

Description: LA89073, situated on a sage-covered flat at the edge of eroded breaks, consists of a large (6 m diam) pithouse depression associated with a concentration of non-aligned sandstone rocks west of the depression (Figures 45 and 46). The concentration of rock may indicate a single room or small roomblock of masonry or jacal construction. A small concentration of burned reddish sandstone is present near the probable surface structures. Although no definable midden was evident, it may be obscured by thin soil cover. Artifacts are sparse and consist of approximately 50 sherds and a few white chalcedony flakes. Two Piedra Black-on-white sherds were noted, with the remainder being thin grayware.

Significance: The site is considered eligible for nomination to the NRHP due to its undisturbed condition and potential for yielding data significant to the Pueblo I occupation of the area. The site can be expected to yield a full range of artifacts associated with habitation activities as well as biocultural samples with potential for data on diet, subsistence, etc.

Project Effect: Site was within wellpad boundaries of original staked location. Site is completely outside of survey boundaries of revised staked location.

Action Taken: Wellpad moved 1500 ft. to northwest to completely avoid site.

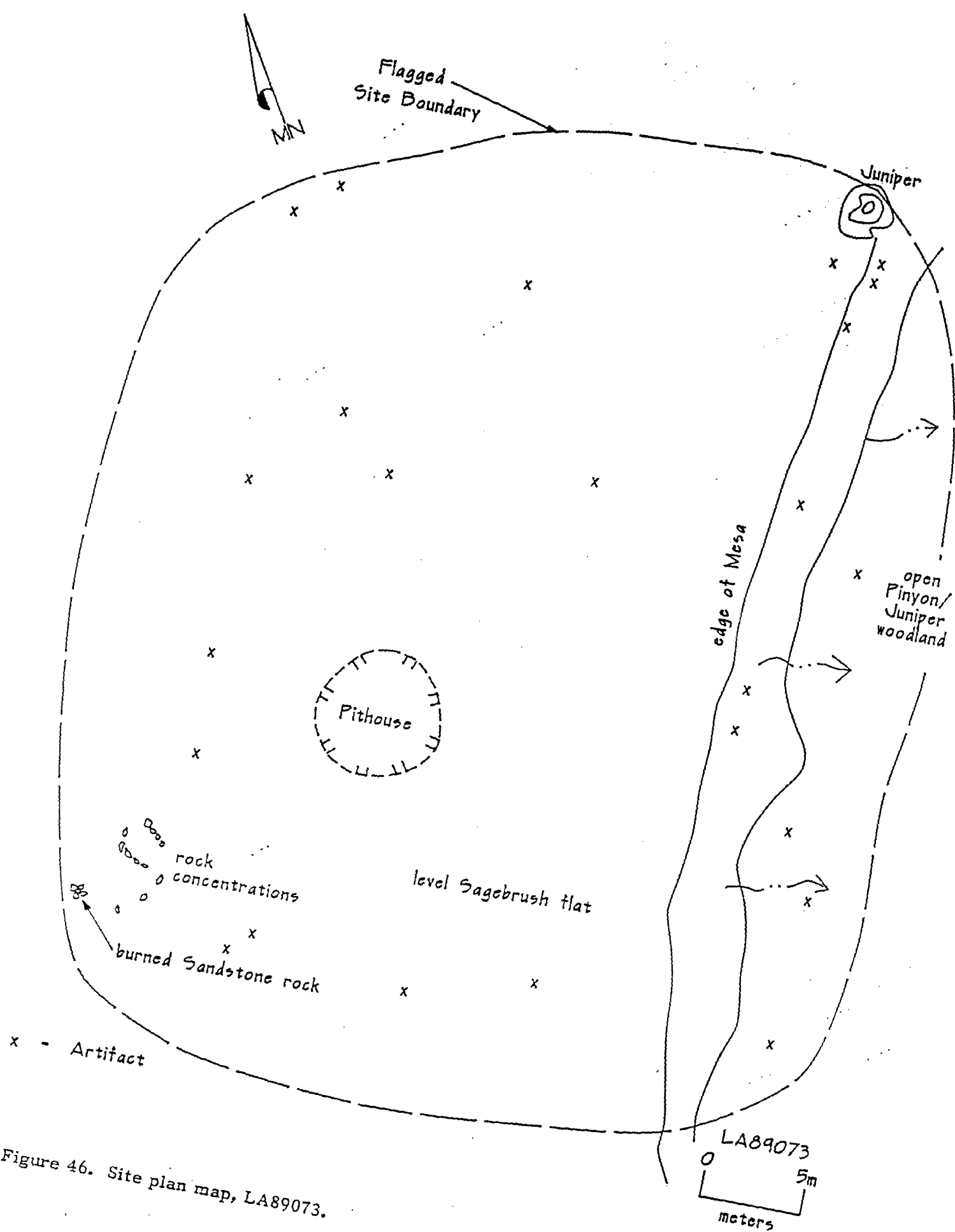


Figure 46. Site plan map, LA89073.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF 07930		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME RINCON		
2. NAME OF OPERATOR UNION OIL COMPANY OF CALIFORNIA			7. UNIT AGREEMENT NAME RINCON		
3. ADDRESS AND TELEPHONE NO. P. O. Box 2620, Casper, WY 82602 (307)234-1563, ext. 116			8. FARM OR LEASE NAME, WELL NO. RINCON 183E		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1880' FSL & 2080' FEL At proposed prod. zone Same			9. API WELL NO.		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 25 miles SE of Blanco, New Mexico			10. FIELD AND POOL, OR WILDCAT Basin Dakota/South Blanco Tocito		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		1880'	16. NO. OF ACRES IN LEASE 2560.34		17. NO. OF ACRES ASSIGNED TO THIS WELL Dakota-160/Tocito-80
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		1000'	19. PROPOSED DEPTH 7670'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6614' GR			22. APPROX. DATE WORK WILL START* 4/15/94		

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"-H-40	32.3#	450	± 250 sx class "B"
8 3/4"	7" - K-55	26# & 23#	± 7670'	2 stage w/DV tool @ ± 5000'

## Proposed Drilling Program:

Drill 12 1/4" hole to 450' w/spud mud. Run & cmt to surf. 9 5/8" csg. Nipple up & test BOPE. Drill 8 3/4" hole to ± 7670' TD w/fresh water/gel mud system. Log & if productive, run & cmt 7" csg in 2 stages w/ "DV" tool at ± 5000'. Selectively perforate the Dakota and Tocito formations. Fracture stimulate both zones separately as required. Test and complete both zones separately w/packer and 2 3/8" tbg.

NOTE: Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Union Oil Company of California (BLM Bond # CA0048).

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 Jim Benson TITLE Drilling Superintendent DATE 1/12/94

(This space for Federal or State office use)

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

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

\*See Instructions On Reverse Side

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

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

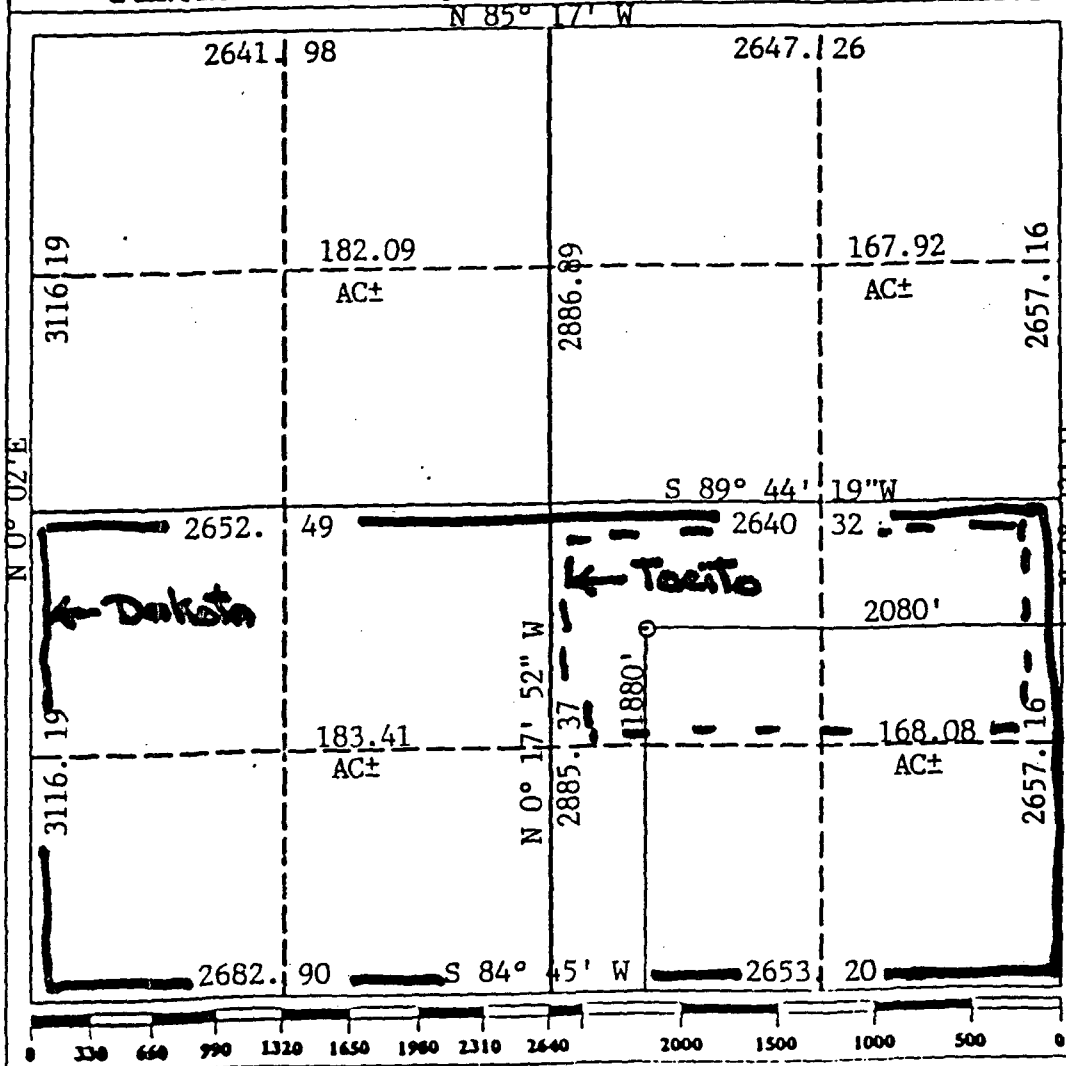
DISTRICT II  
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DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>UNOCAL</b>			Lease <b>RINCON</b>		Well No. <b>183-E</b>
Unit Letter <b>J</b>	Section <b>31</b>	Township <b>27N</b>	Range <b>6W</b>	NMPM	County <b>Rio Arriba</b>
Actual Footage Location of Well: <b>1880</b> feet from the <b>SOUTH</b> line and <b>2080</b> feet from the <b>EAST</b> line					
Ground level Elev. <b>6614</b>	Producing Formation <b>Dakota/Tocito</b>		Pool <b>Basin/South Blanco</b>		Dedicated Acreage: <b>Dakota - 320</b> <b>Tocito - 80</b>
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, unitization, force-pooling, etc.?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation <u>unitization</u></p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature  
Jim Benson  
Printed Name  
**Jim Benson**  
Position  
**Drilling Superintendent**  
Company  
**Union Oil Co. of Calif.**  
Date  
**1/12/94**

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**September 20, 1993**  
Signature & Seal  
Cecil B. Tull  
Professional Surveyor  
REGISTERED PROFESSIONAL SURVEYOR  
Certificate No.  
**9672**

UNION OIL COMPANY OF CALIFORNIA

RINCON UNIT #183E  
1880' FSL & 2080' FEL  
Sec. 31, T27N, R6W  
RIO ARriba COUNTY, NEW MEXICO

A. Drilling Program

1. Surface Formation: San Jose

Estimated tops of Geological Markers

Ungraded Ground Elevation - 6614'

<u>FORMATION</u>	<u>DEPTH BELOW G.L.</u>
San Jose	Surface
Ojo Alamo	2230'
Fruitland	2840'
Pictured Cliffs	3026'
Lower Chacra	4126'
Cliff House	4726'
Point Lookout	5266'
Middle Gallup	6616'
Tocito/Gallup	6811'
Graneros SS	7271'
Dakota	7396'
Burro Canyon	7536'
Morrison S.S.	7596'
Total Depth	7670'

2. Estimated Depth at which oil, gas, water or other mineral-bearing zones are expected to be encountered.

	<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Expected oil zones:	Tocito/Gallup	6811'	7271'
Expected gas zones:	Fruitland	2840'	3026'
	Pictured Cliffs	3026'	4126'
	Mesa Verde	4726'	5166'
	Dakota	7396'	7536'
Expected water zones:	May encounter water flows from the Ojo Alamo ( $\pm 2000'$ ) thru the Mesa Verde formation to the Mancos shale at $\pm 5300'$ .		

Expected Mineral zones: None

3. Pressure Control - BOP (See Attachment Nos. 1, 2, & 3).  
Well head: Casing head 9 5/8" x 11" - 3000 psi w.p.  
(See Attachment No. 3)

BOP Stack and Related Equipment (See Attachment Nos. 1 & 2) One double-gate BOP with 4 1/2" pipe rams and blind rams. The BOP will be hydraulically operated by an accumulator with 1 1/2 times the necessary capacity to close all rams and retain a minimum of 200 psi above precharge. The remote unit (accumulator) will be located in the bottom "dog house" or on the ground between the "dog house" and toolpushers' trailer. A rotating head on top of the BOP stack will be utilized.

A kelly cock will be utilized and a stabbing valve will be on the rig floor.

Two-choke manifold with adjustable and positive chokes.

The choke line will be as straight as possible and turns, if required, will use "T" blocks.

Although 3000 psi BOP equipment will be used, equipment determination (BOP & manifold), line sizing and testing are based on the requirements for 2000 psi BOP equipment due to the known drilling and reservoir conditions.

Testing Procedure:

BOP (pipe and blind rams) and choke manifold will be tested at the rated working pressure of the stack or to 70% of the internal yield of the surface casing as required by the provisions of Onshore Oil and Gas Order No. 2. Tests will be performed at time of installation, following all repairs, prior to drilling out each casing shoe, and at least every 30 days. BOP's will be operationally tested daily and each test will be logged in the IADC Daily Drilling Report. All related requirements of Onshore Oil and Gas Order No. 2 will be met.

Blooie Line:

The blooie line and related equipment will meet all requirements of Onshore Oil and Gas Order No. 2.

4. Casing Program

Surface Casing - 9 5/8" @ ± 450'  
(Mud wt ± 9.0 ppg)

<u>Depth</u>	<u>Size</u>	<u>Wt.</u>	<u>Grade</u>	<u>Thread</u>	<u>New/Used</u>
450'	9 5/8"	32.3#	H-40	8rd-ST&C	New

**NOTE:** Surface casing shall have centralizers on every joint starting at the shoe joint and ending on the last joint @ surface.

Production Casing 7" @ TD  
(Mud Wt. ± 9.0 ppg)

<u>Depth</u>	<u>Size</u>	<u>Wt.</u>	<u>Grade</u>	<u>Thread</u>	<u>New/Used</u>
TD - ±5000'	7"	26#	K-55	8rd-LT&C	New
±5000'-Surf	7"	23#	K-55	8rd-LT&C	New

Minimum Safety Factors

Collapse:	1.125
Tension:	1.8
Burst:	1.0

Casing Testing:

All casing strings will be pressure tested to 0.22 psi/ft. or 1500 psi (whichever is greater) but not to exceed 70% of the minimum internal yield.

Cementing Program:

A.) Surface casing - The surface casing will be cemented to surface to isolate any fresh water or gas zones w/ 250 sxs Class "B" w/ 2% CaCl<sub>2</sub> and 1/4#/sx Cello flakes. (Volume plus 100% excess) slurry weight 15.7 ppg, yield 1.17 cu ft/sx. Cementing hardware to include guide shoe, insert float collar and centralizers.

B.) Production casing - (Actual cement volumes to be recalculated based on caliper logs plus 35% excess). The production casing will be cemented in 2 stages as follows: DV tool @ ± 5000'

1st Stage: Lead - 450 sxs 50/50/2 POZ containing gel, fluid loss control, free water control agent, dispersant, and lost circ. material (slurry wt. 13 ppg, yield 1.27 cu ft/sx). Tail with 125 sxs Class "B" w/ fluid loss control (slurry wt. 15.7 ppg, yield 1.17 cu ft/sx).

2nd Stage: Lead - 750 sxs 65/35/8 containing gel fluid loss control, free water control agent and loss circ. material (slurry wt. 11.4 ppg, yield 2.48 cu ft/sx). Tail with 125 sxs Class "B" w/ fluid loss control (slurry wt. 15.7 ppg, yield 1.17 cu ft/sx).

Casing hardware for production string to include guide shoe, insert float collar, centralized shoe joint and next five joints. Centralizers and turbalizers above and below stage tool, oil and gas zones as needed and across Ojo Alamo formation.

Auxiliary Equipment:

1. Kelly cock
2. Stabbing valve when kelly is out of string
3. Rotating head

5. Drilling Fluid:

<u>Depth</u>	<u>Type</u>	<u>Wt.</u>	<u>Vis</u>	<u>W.L.</u>
Surf. - 450'	fresh water/gel		Spud Mud	
450 - ± 4600'	fresh water/gel	8.4-8.6	30-35	NC
± 4600' - TD	fresh water/gel	8.6-9.0	35-45	<10

Actual mud volume and/or mud reserve material will be equal to or greater than the active system capacity. System volume (steel tanks only) will be approx. 400 bbls. Sufficient LCM material will be on location and utilized to control loss circulations problems.

**Note:** Because of the highly developed area surrounding the proposed well and the well-known drilling conditions, flow sensors and PVT's will not be utilized.



6. Testing, logging and coring program:

DST's: None Planned

Logging: 1. Surface casing to TD - DIL/SP/Gr  
2. Surface casing to TD - LDT/CNL/CAL with  
P.E.F.

Coring: None Planned

Completion: After drilling and running and cementing the production casing, the drilling rig will be removed and a service unit will be moved in. BOPs of similar pressure rating as those used to drill with will be used. The Dakota and Tocito/Gallup will be selectively perforated and hydraulically fracture stimulated. A packer will isolate the reservoirs and the well will be dual completed utilizing 2 strings of 2 3/8" tbq.

7. Abnormal Pressures, temperatures, and potential Hazards:

- A) Due to numerous wells drilled in the unit, no above normal pressure zones are anticipated.
- B) No above normal temperatures are anticipated.
- C) No hydrogen sulfide gas is anticipated.

8. Additional Information:

Starting Date:

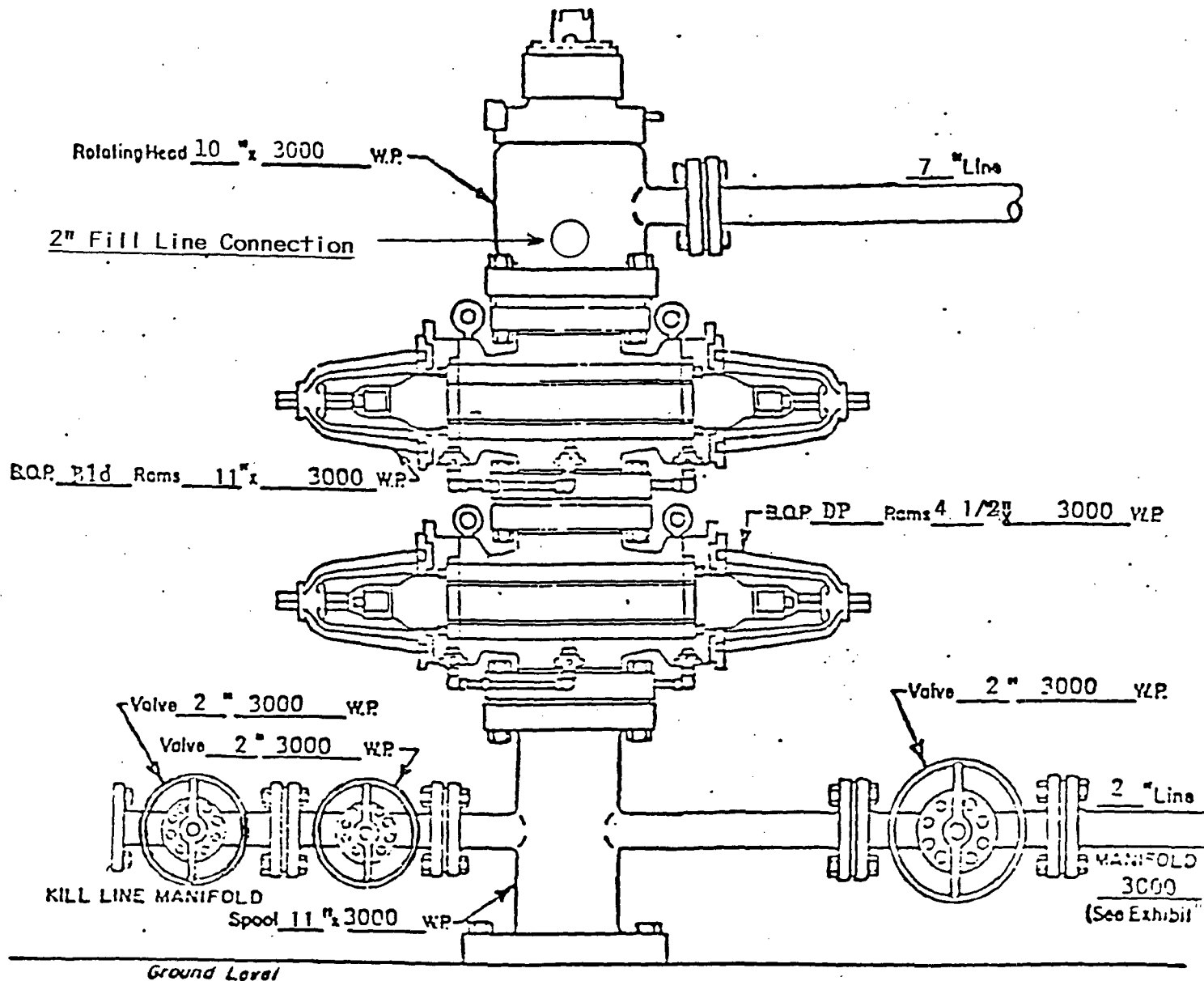
Road and location work will begin (with BLM approval) between March 15 - April 1, 1994 - weather permitting. Drilling would commence shortly after completion of the road and location.

Duration of Operation:

Drilling - 20 days

Completion - 15 days

UNION OIL COMPANY OF CALIFORNIA  
RINCON UNIT WELLS  
RINCON FIELD  
RIO ARRIBA COUNTY, NEW MEXICO



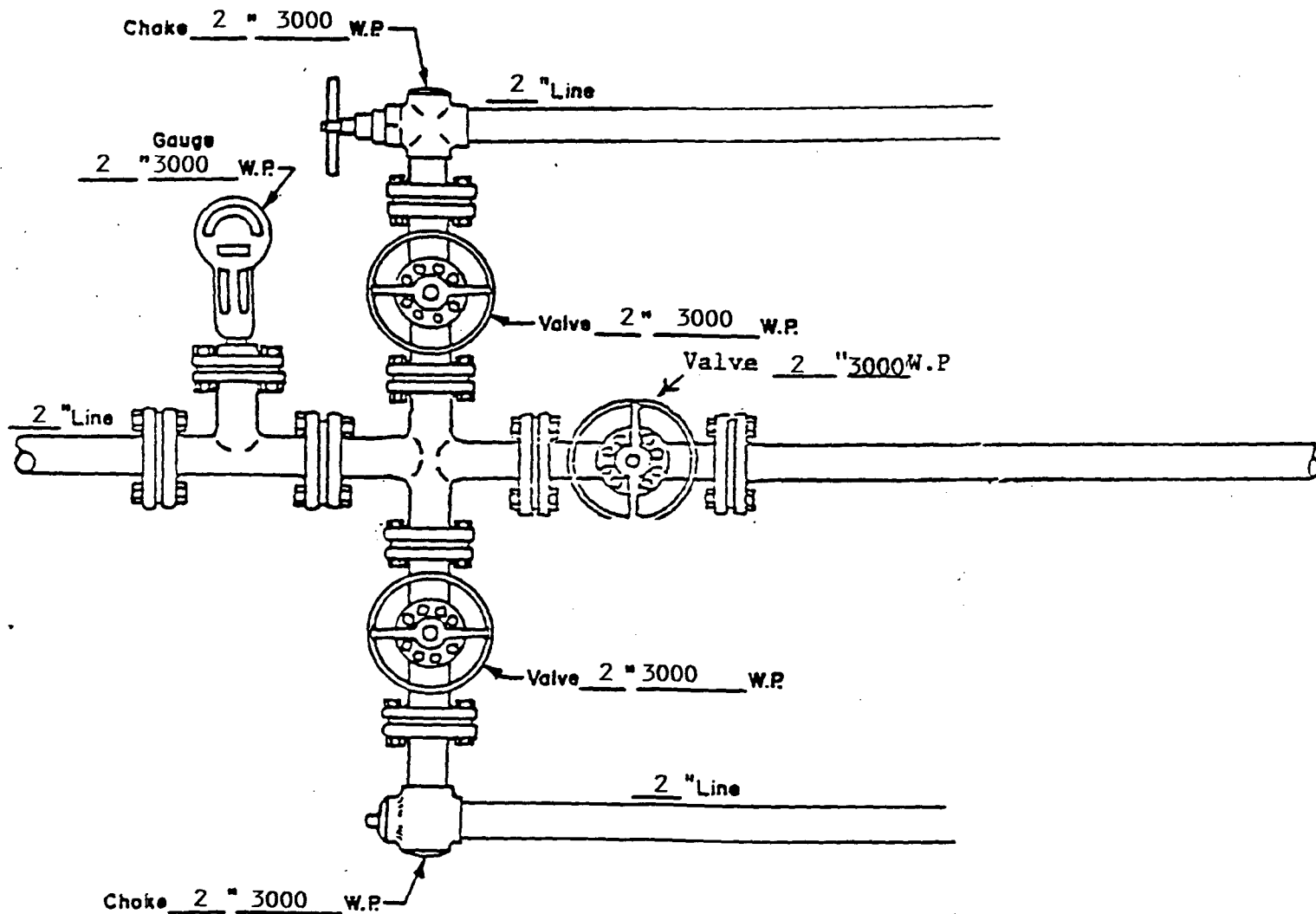
WELL HEAD B.O.P.  
3000 #W.P.

☐ Manual

☒ Hydraulic

NOTE: Although 3000 psi BOP equipment will be used, equipment determination and line sizing are based on the requirements for 2000 psi BOP equipment due to the known drilling and reservoir conditions.

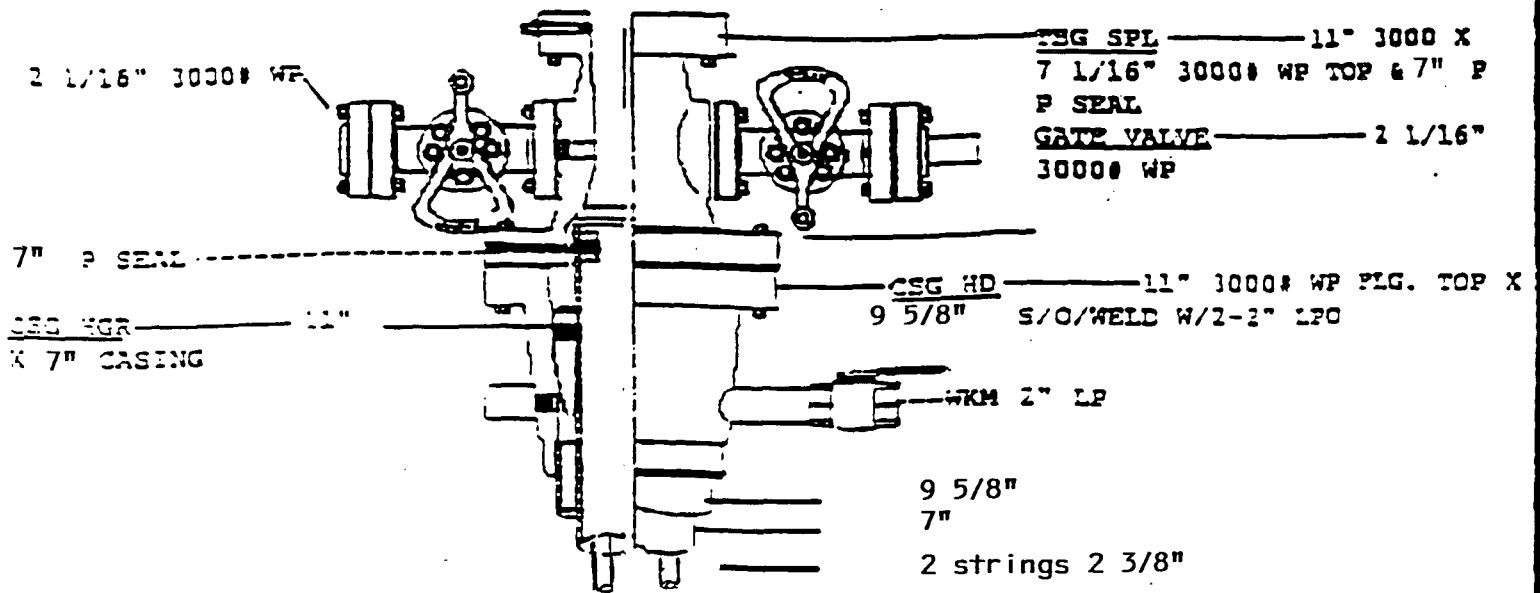
UNION OIL COMPANY OF CALIFORNIA  
 RINCON UNIT WELLS  
 RINCON FIELD  
 RIO ARriba COUNTY, NEW MEXICO



MANIFOLD  
 3000 #W.P.

- ☒ Manuel  
☐ Hydraulic

UNION OIL COMPANY OF CALIFORNIA  
 RINCON UNIT WELLS  
 (DAKOTA/TOCITO)  
 RINCON UNIT  
 RIO ARriba COUNTY, NEW MEXICO  
 (9 5/8", 7", 2 strings 2 3/8")



UNION OIL COMPANY OF CALIFORNIA  
RINCON UNIT #183E  
1880' FSL & 2080' FEL  
SEC. 31, T27N, R6W  
RIO ARriba COUNTY, NEW MEXICO

B. Thirteen Point Surface Use Plan

1. Existing Roads:

- a. Proposed Well Site Location: The proposed well site was staked under direction of a registered land surveyor and is shown on the enclosed surveyor's plat.
- b. Proposed Access Route and Existing Roads: Attachment Nos. 4, 5 and 6 indicate the proposed access route and existing roads in the area.
- c. Proposed Route to Location: From Blanco, New Mexico proceed East on highway US 64 for approximately 1 mile to the intersection of County Road 4450 (Largo Canyon Road) and US 64. Turn right (south) and proceed approximately 25 miles going past El Paso's Largo camp to the intersection of highway 4450 and 403 (Counselor Road) at the abandoned Largo School. At this intersection proceed straight, going across the large cement bridge and up ICE Canyon Road for approximately 2 1/2 miles to a Y in the road. Turn left at the Y in the road (towards Union's Lowry Camp) and proceed approximately 1 1/4 mile to T in the road (turn off to Union's Lowry Camp). From this T in the road proceed approximately 1/4 mile to another Y in road. Turn left (across the cattle guard) and proceed straight approximately 1/2 mile. Turn left onto location.
- d. Existing roads and any newly constructed roads will be maintained at a standard equal to or better than the conditions of the roads prior to the start of operations. At the conclusion of drilling and completion operations, the roads will be repaired and restored to a standard equal to or better than the conditions at the start of operations. Existing roads on federal surface will be maintained at BLM standards.

2. Planned Access Roads:

- a. No new access road is required. All vehicles will be confined to the access roads, pads and the location area.
- b. Width, Grade and Turnout: N/A
- c. Culverts, Major Cuts and Fills: No culverts will be needed. A ditch will be cut along the South side of the location to divert water/run-off from the pad to the West, per BLM request during on-site.
- d. Surfacing Material: None planned
- e. Gates, Cattle Guards, Fence Cuts: There will be no cattle guards, fence cuts or gates.

3. Location of Existing Wells: Attachment Nos 6 and 7 indicate wells within a one mile radius.

4. Location of Existing or Proposed Facilities:

- a. There are no existing facilities located within the well pad.
- b. Attachment No. 8 shows the proposed new facilities and flow lines to be constructed if the well is productive. Approximately 1000' of new welded and wrapped steel line of three to four inch diameter will be buried and run to the ESE to connect into the nearest El Paso line. The pipeline will be buried along existing disturbed areas, and/or along existing roads or right-of-ways where feasible.
- c. There are no additional construction materials anticipated.
- d. If necessary, any auxiliary pits (mud pits, blow pits, test pits) will be constructed so as not to leak, break or allow discharge of liquids. These pits will be fenced and flagged to protect livestock and wildlife.
- e. Rehabilitation of Disturbed Areas Unnecessary for Production: Three sides of the reserve pit will be fenced during drilling operations. After the rig moves off, the fourth side will be fenced. After the well is completed and tested and

following completion of construction of production facilities, the location will be cleaned up and bladed, and those areas required for continued production will be graded to provide drainage and minimize erosion. The reserve pit will be allowed to dry for a period not to exceed 1 year and then will be backfilled. The reserve pit and the area unnecessary for use during production will be graded to blend with the surrounding topography per stipulation set forth by the BLM or surface owner agreement.

Revegetation and reseedling will take place during the next designated season per BLM or surface owner's stipulations.

5. Location and Type of Water Supply:

- a. Water will be obtained from UNOCAL's water supply well located at UNOCAL's Lowry Camp, (SW/4, Sec. 32-T27N-R6W). The water will be trucked to location utilizing vacuum trucks over existing roads.

6. Source of Construction Materials:

- a. The proposed location will utilize soil material which is on location. No other material is anticipated.
- b. The site and road lie on lands owned by the Federal Government and managed by the BLM.

7. Methods for Handling Waste Material:

- a. Cuttings, salts, chemicals, drilling fluids, and test fluids will be contained in the reserve pit which will be fenced on three sides during drilling. (The fourth side will be fenced when the rig moves off.) The water will be allowed to evaporate and the remaining solids will be buried. Used motor oil will not be disposed of in the pit or on the location.
- b. All sewage will be contained in a self-contained, chemically treated, portable latrine and disposed of at an authorized disposal site upon completion of operations. The latrine will remain on location through termination of completion operations.

- c. Garbage and other waste material will be contained in and enclosed in a portable trash cage and disposed of at an authorized disposal site upon completion of operations. No garbage and trash will be disposed of in the reserve pit.
- d. Produced fluids will be handled through the proposed production facilities. Produced water will be disposed of in accordance with NTL-2B.

8. Auxiliary Facilities:

- a. No camps or airstrips will be needed.

9. Well Site Layout: (See Attachment Nos. 9, 10 and 11)

- a. The well site layout is shown on the Attachments 9, 10 and 11 along with cross-sections, topographic features, and cut and fills.
- b. The reserve pit will not be lined (per on-site with BLM Representative on 11/17/93) unless porous material is encountered during the construction of the reserve pit. If such material is encountered the BLM will be contacted for a determination to line the pit.
- c. All persons working in the area and associated with the project will be informed that they are subject to prosecution for knowingly disturbing historic and/or archaeological sites or for collecting artifacts. If historical or archaeological materials are uncovered, work will be stopped and an authorized officer will be informed.

10. Plans for Restoration of the Surface:

a. Construction Practices:

- (1) If snow is on the location, it will be removed from the location prior to construction and stockpiled separately from the top soil, downhill from the existing road.
- (2) The top 12" of topsoil (if available) will be removed from this disturbed area and stockpiled as shown in Attachment 9.



- (3) The backslope and foreslope will be constructed no steeper than 3:1. Vegetative debris will not be put in or under fill embankments.
- (4) A waterbar will be constructed at the top of the foreslope.
- (5) Rat and mouse holes will be filled immediately upon release of the drilling rig from the location.
- (6) Drill cuttings and muds should remain in the reserve pit until dry. The reserve pit will not be "squeezed," "crowded," or "cut." When the pit is backfilled, cuttings and drilling muds must be covered with at least 3 feet of earth.
- (7) If the reserve pit does not dry, alternative methods of drying, removal of fluids, or other treatment shall be developed. If fluids will be disposed of by a method other than evaporation, prior approval by BLM is required.
- (8) Weed control of disturbed areas will be handled by Union Oil Company in accordance with guidelines established by the appropriate authorities.
- (9) No snow will be removed except for on traveled roads or the drill site.
- (10) Construction will not take place using frozen material or during periods when the soil material is saturated, or when watershed damage is likely to occur.
- (11) The reserve pit will be fenced on three sides during drilling, and the fourth side will be fenced at the time the rig is removed. Wire will be held in place by line posts and wooden corner "H" braces. The pit will be flagged overhead if there is oil in the pit.
- (12) Construct the reserve pit in complete cut with the total depth below the original ground surface at the lowest point within the pit. Design the reserve pit to prevent the collection of surface runoff.

- (13) All disturbed areas of the wellsite not needed for the production pad will be ripped prior to reshaping at 18-24 inch intervals on the contour.
- (14) During reclamation the fill material will be pushed into the cuts and up over the backslope. No depressions capable of trapping water or forming ponds will remain in the area.
- (15) The top soil will be distributed evenly over the area. The seed bed will be prepared by disking to a depth of 4 to 6 inches following the contour. This work will not be done when the ground or topsoil is frozen or wet.
- (16) Seeding depth will be 1/2" to 3/4" using a drill equipped with a depth regulator. Where drilling is not possible (too steep or rocky), seed will be broadcast at double the specified rate and the area will be raked or chained.
- (17) All disturbed surfaces will be seeded with the following mixture: Special Antelope or Ensenada mix as per BLM recommendations.

b. Pipelines/Flow Lines/Overhead Lines:

- (1) If the well is productive, a flow line will be installed as shown on Attachment 8. This flow line will tie into an existing flow line located approximately 1000' East-southeast of the wellhead.
- (2) Pipelines will be constructed adjacent to roads or paralleling existing rights-of-way, where feasible. Changes in pipeline routes that require R.O.W., surveying, archaeological clearance, etc. will be filed under a separate permit to the BLM for approval.

11. Land Status:

- A. The surface is owned by the Federal Government and administered by the BLM.

12. Other Information:

- A. The closest water is the Carrizo Canyon Arroyo approximately 4 miles to the NE.
- B. There are no occupied dwellings within 2 miles of location.
- C. Archaeological Survey has been performed and has been sent under separate cover.
- D. Pipeline ROW and permitting (if necessary) will be determined and permitted at a later date.
- E. Construction operations (building pads and locations) are planned on or about March 15 - April 1, 1994, weather permitting and with BLM approval. Drilling operations should start immediately after, again weather permitting.

13. Operator's Field Representative and Certification:

A. Field Representative:

Mr. Jim B. Benson  
Drilling Superintendent  
Union Oil Company of California  
P. O. Box 2620  
Casper, Wyoming 82602

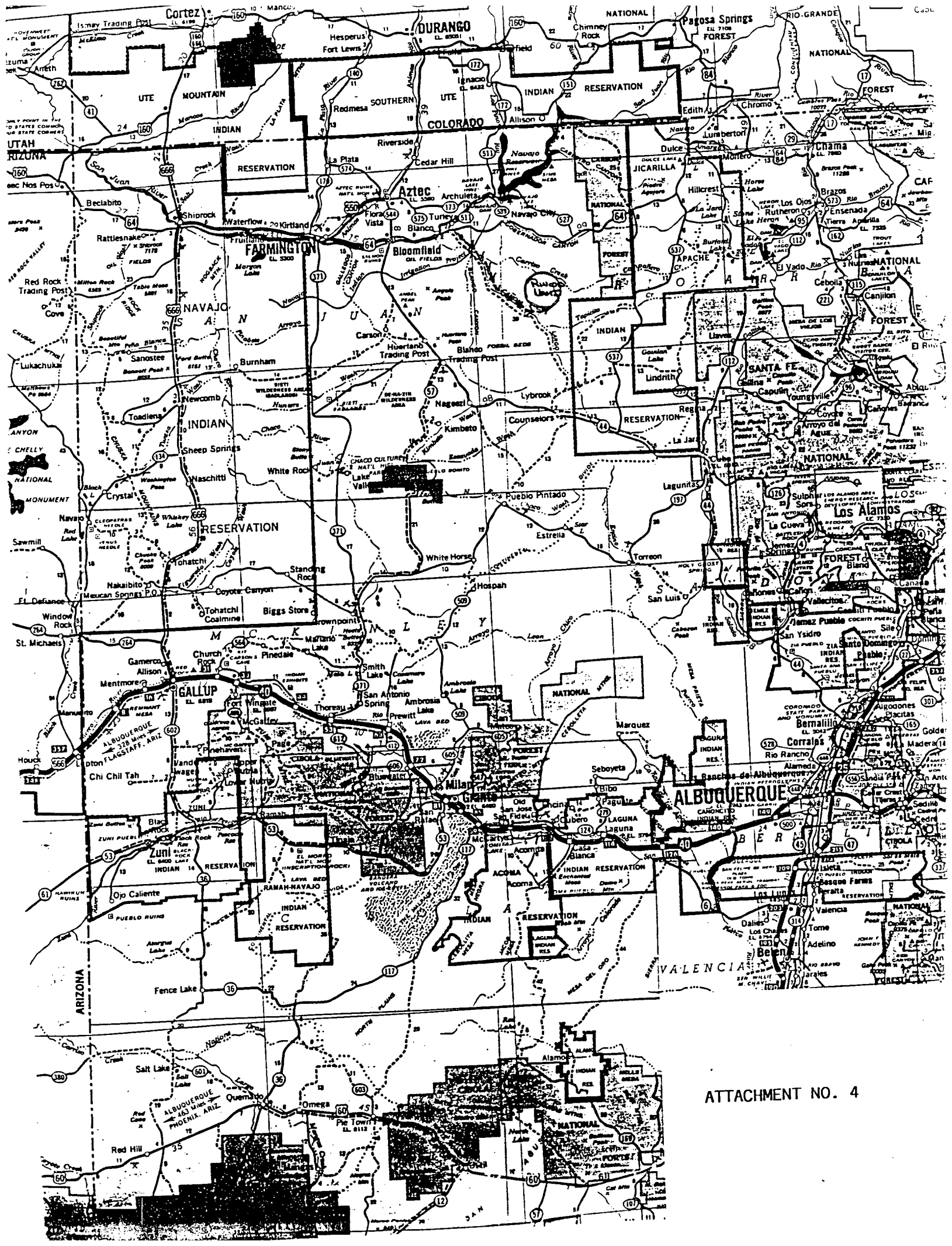
Phone - (307) 234-1563, ext. 116  
Fax - (307) 234-9441

B. 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 currently 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 Union Oil Company of California and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

1/12/94  
Date

Jim Benson  
Jim B. Benson  
Drilling Superintendent





Gold Pines Rd

ION UNIT

MINCAN UNIT

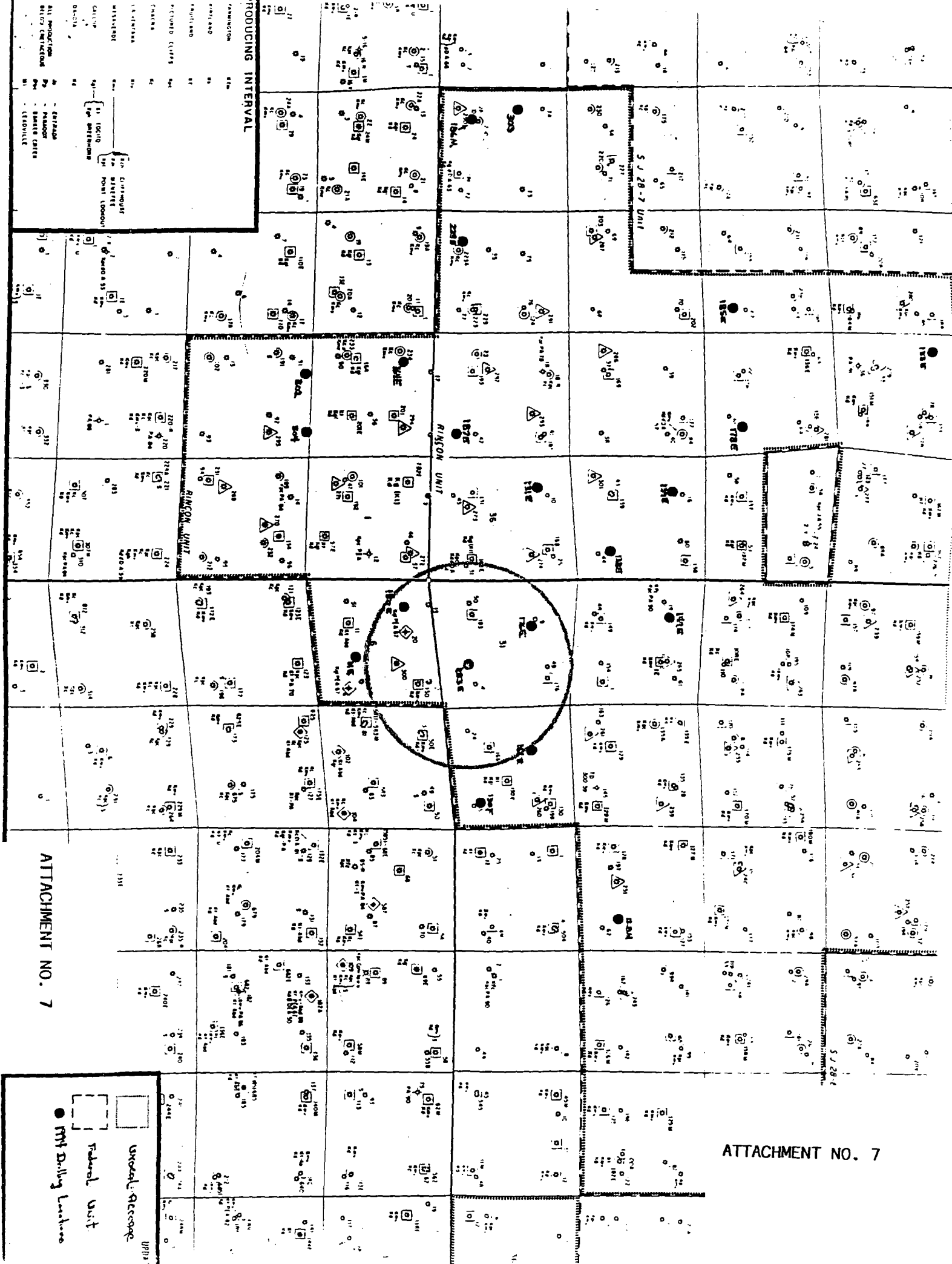
ICE Canyon Rd

Lowry

Run 42

Run 45

Run 4



ATTACHMENT NO. 7

ATTACHMENT NO. 7

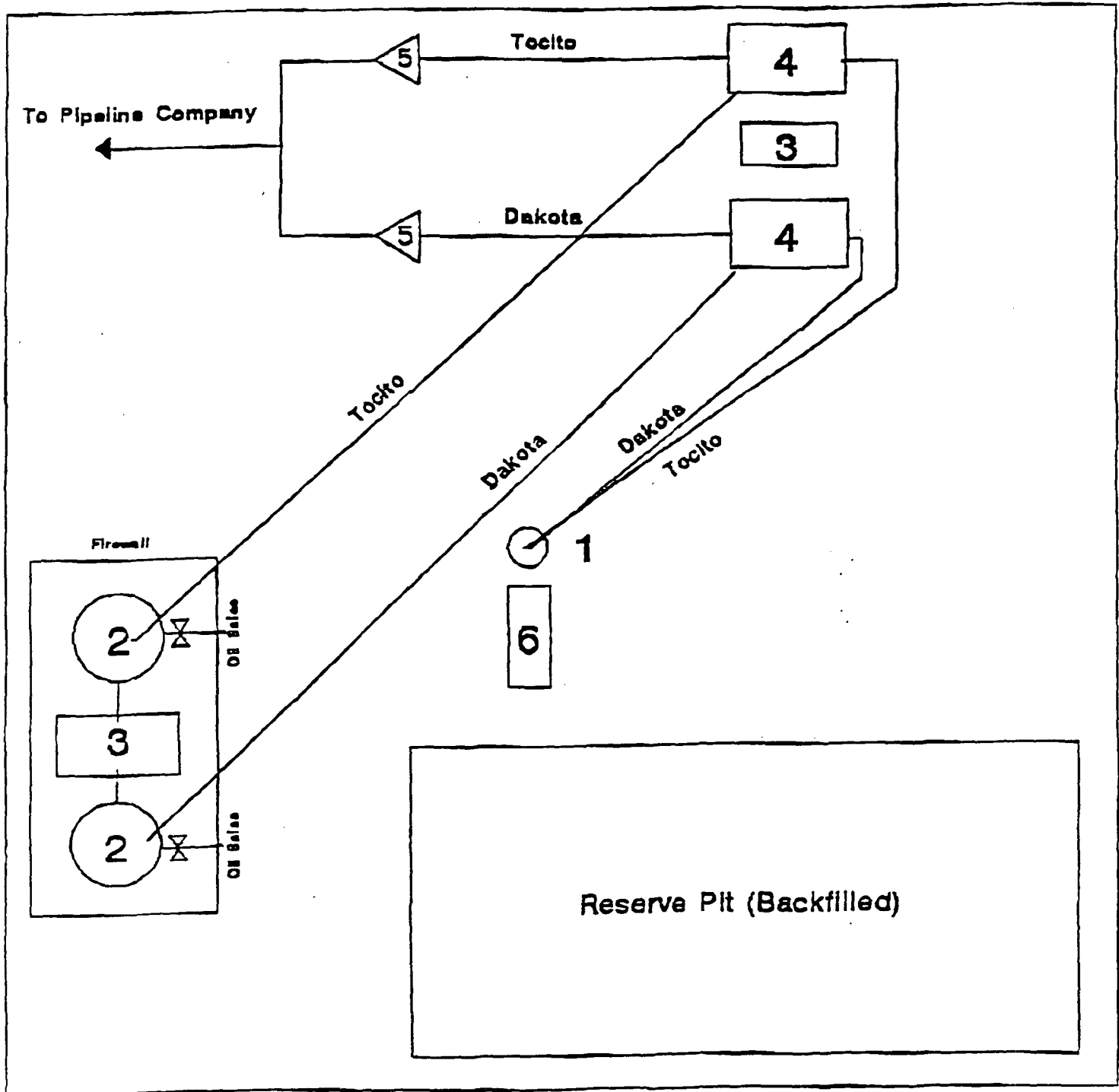
Unsub. Aircraft

Federal Unit

M4 Drilling Location

UNION OIL COMPANY OF CALIFORNIA  
RINCON UNIT WELLS  
RINCON FIELD  
RIO ARriba COUNTY, NEW MEXICO

PRODUCTION FACILITIES SCHEMATIC  
TYPICAL DUAL TOCITO/DAKOTA PRODUCER



1. Wellhead
2. 400 GEL Welded Steel Tank API 12F
3. Double lined Production pits w/ Leak Detection
4. Separation/Dehydrator Skid
5. Meter Run w/ Meter House (Gas Sales)
6. Pumping Unit C-228 (Tocito Skid)

⌵ Sealed Lead Line (Oil Sales)

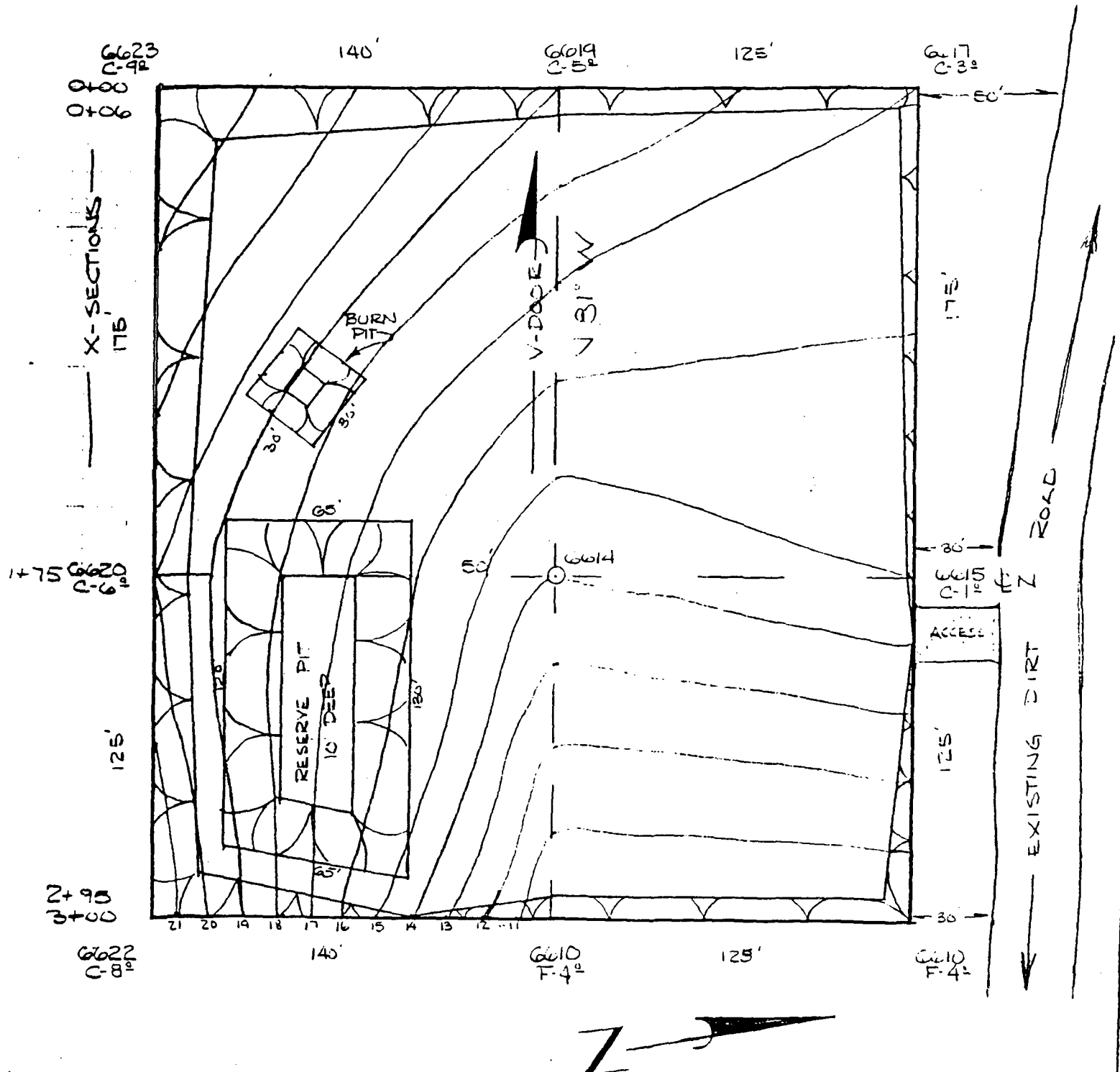
Not to Scale



Scale 1" = 50'

Contour Int. = 1'

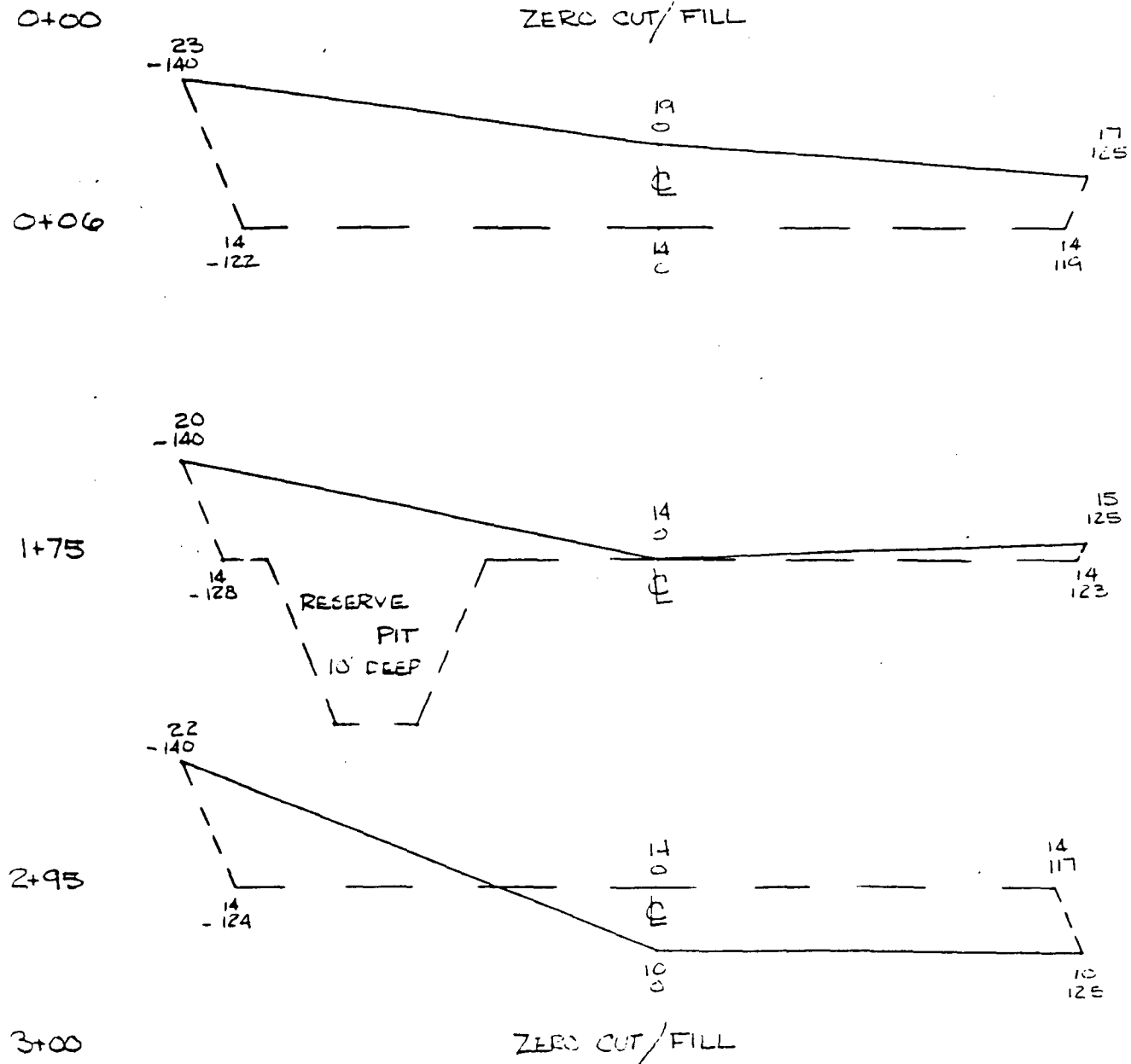
RINCON 183-E  
 1880 F/S1 & 2080 F/EL  
 Sec. 31 T27N R6W N.M.P.M.  
 Rio Arriba County, NM



PAD LAYOUT AND TOPOGRAPHY

Scale Horiz. 1" = 50'  
 Vert. 1" = 10'

RINCON 183-E

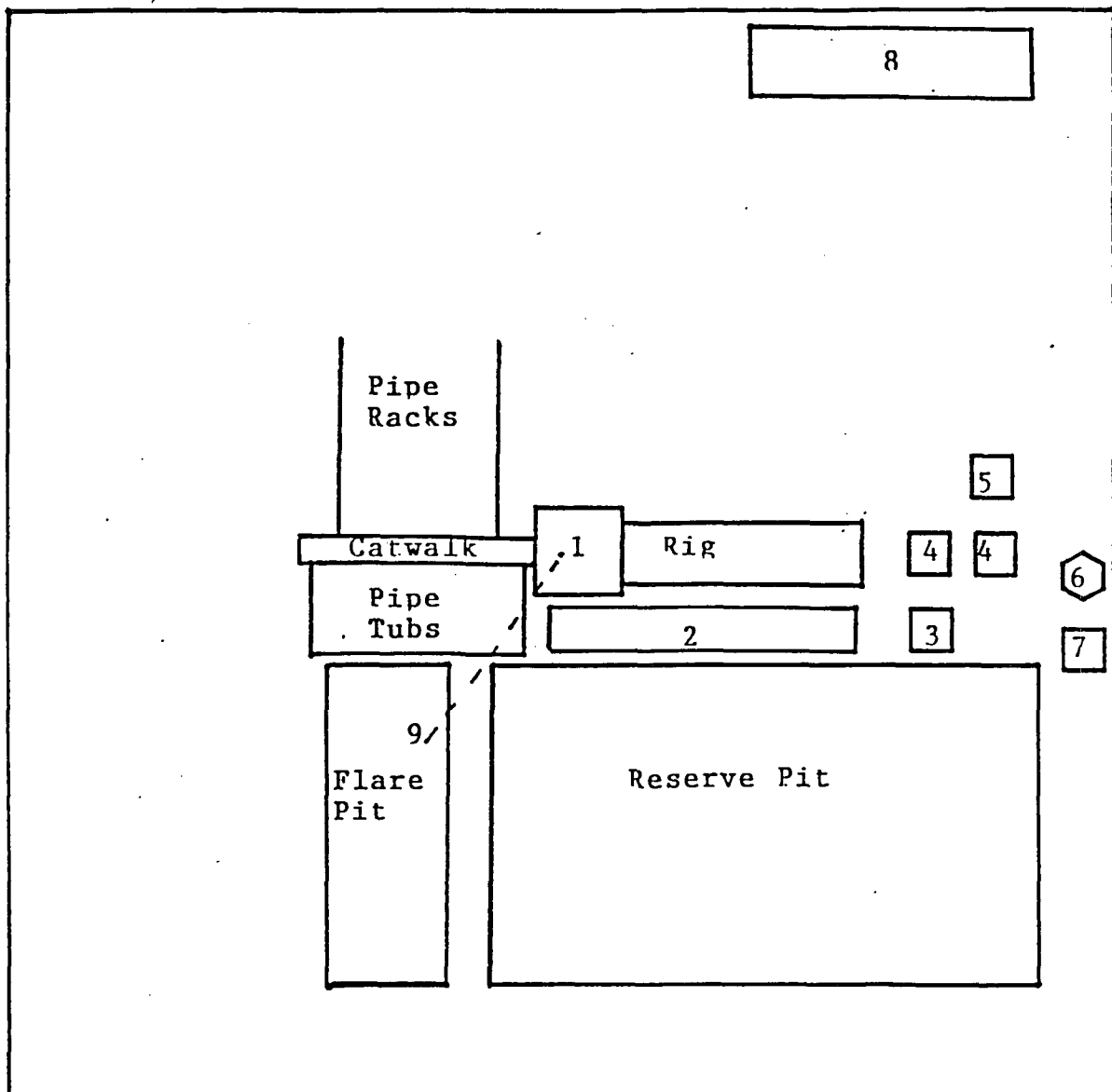
X-SECTIONS AND VOLUMES

CUT.....7605 CU YDS.  
 FILL.....1336 CU YDS.  
 PIT EXCAVATION.....1824 CU YDS.

UNION OIL COMPANY OF CALIFORNIA  
RINCON UNIT WELLS  
RINCON FIELD  
RIO ARriba COUNTY, NEW MEXICO

Drill Pad Schematic

Not to scale



- 1) Substructure & Doghouse
- 2) Steel Mud Tank
- 3) Mud trailer/supply
- 4) Mud Pump
- 5) Generator
- 6) Latrine
- 7) Trash Cage
- 8) Trailer (variable numbers)
- 9) Blooie Line

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

07/22/94 10:09:13  
OGOMES -EMFR  
PAGE NO: 1

Sec : 31 Twp : 27N Rng : 06W Section Type : NORMAL

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9 46.61  Federal owned	10 44.61  Federal owned A	11 42.84  Federal owned	12 41.09  Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

1980  
-150  
1830

1980

42.83  
41.07  
83.90

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

07/22/94 10:09:31  
OGOMES -EMFR  
PAGE NO: 2

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4 40.78  Federal owned	N 40.00  Federal owned	O 40.00  Federal owned	P 40.00  Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12