

API # 30-003-20013 *NMOC Santa Fe*

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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
 Samedan Oil Corporation

3. ADDRESS OF OPERATOR
 1616 Glenarm Place, Suite 2550, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 1880 FEL 1660 FSL Sec. 14 T3N-R12W.
 Catron County, New Mexico
 At proposed prod. zone Same as surface

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 16 miles N NE from Pie Town, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 1660'

16. NO. OF ACRES IN LEASE 6245.02

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

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

19. PROPOSED DEPTH 5500'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, ET, GR, etc.) 7330 GR

22. APPROX. DATE WORK WILL START* October 1, 1984

5. LEASE DESIGNATION AND SERIAL NO.
 NM 53320

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Laguna Federal

9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
 NWSE Section 14, T3N-R12W

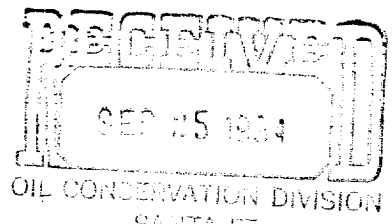
12. COUNTY OR PARISH
 Catron

13. STATE
 New Mexico

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	9 5/8	36 K55	1500	2600 Ft. ³ (cement to surface)
8 3/4	5 1/2	15.5 K55	5500	500 Ft. ³ (or across pay zones)

Set 80' of 20" conductor pipe and cement to surface.
 Drill a 17 1/2" hole with Aerated mud (and rotating head) to 1500'.
 Run 9 5/8" casing with a parasite string, land at 1500'. NU 10" 3000#
 Double Ram BOP's with Annular preventer and rotating head. Drill an
 8 3/4" hole to 5500' with air or aerated mud. DST possible zones as
 drilling progresses and log the well at T.D. If commercial production
 is indicated run 5 1/2" casing.



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 Douglas C. Smith TITLE Division Engineer DATE August 20, 1984
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY S/ Tom Hewitt, Acting TITLE Area Manager DATE 9-21-84
 CONDITIONS OF APPROVAL, IF ANY:

Unit Letter J	Section 14	Township 3North	Range 12West	County Catron
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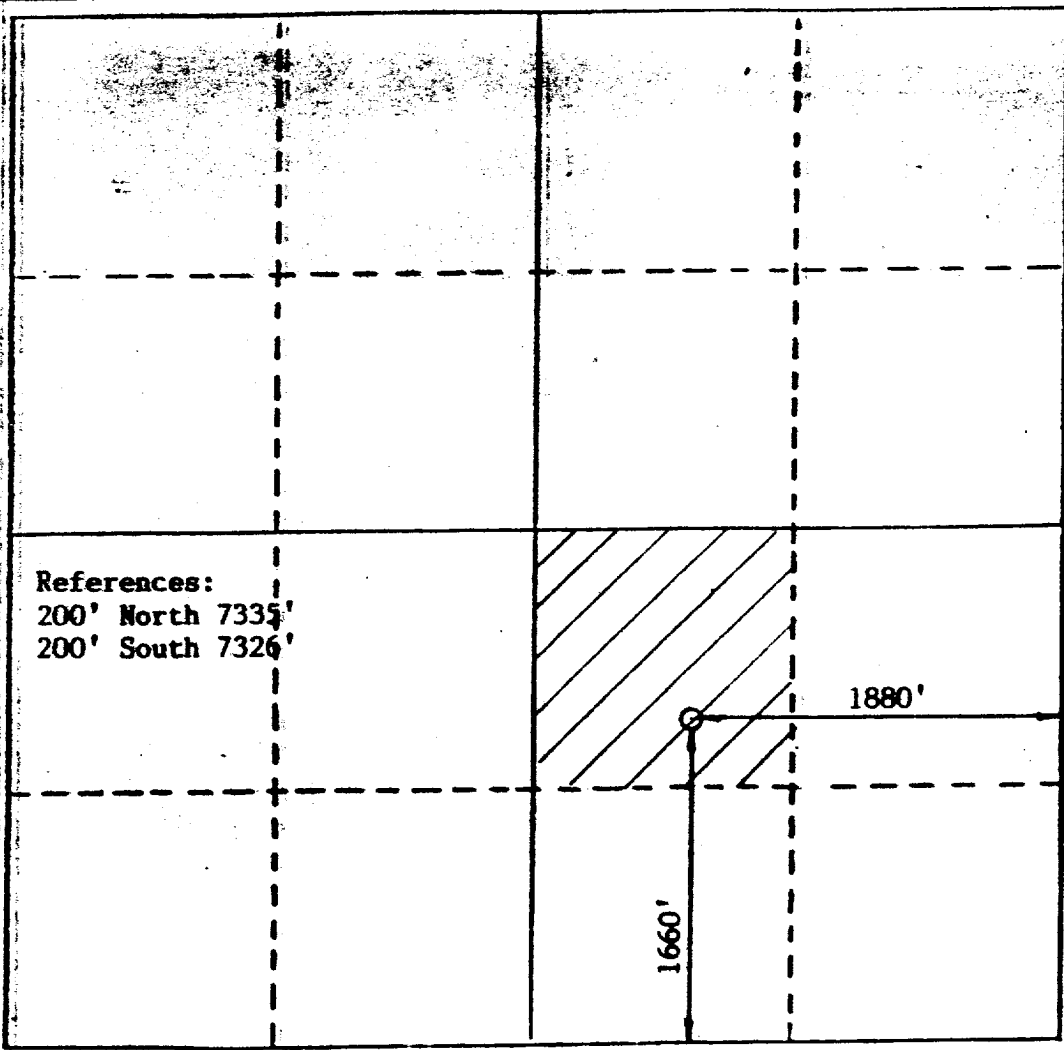
Actual Footage Location of Well:
1660' feet from the **South** line and **1880'** feet from the **East** line

Ground Level Elev. 7330'	Producing Formation Wildcat	Pool N/A	Deepest Arrangement 40
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1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____
 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 interests, has been approved by the Division.



CERTIFICATION

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

Douglas C. Smith

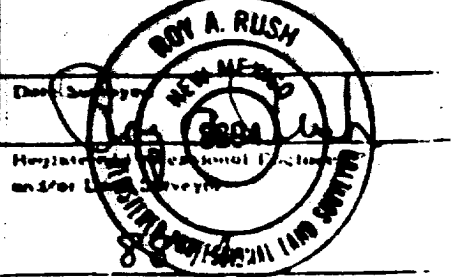
Name: **Douglas C. Smith**
 Position: **Division Engineer**

Company: **SAMEDAN OIL CORPORATION**

Date: **August 20, 1984**

Date: _____

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.



DRILLING PLAN
Samedan Oil Corporation
Laguna Federal 1-14

1. Estimated Tops of Geologic Markers.

<u>FORMATION</u>	<u>DEPTH</u>	<u>SUBSEA</u>
Cervesa Canyon	0	+7323
Gallego	670	+6653
D-Cross	760	+6563
Lower Gallup	810	+6513
Mancos	1200	+6123
Tres Hermanos	1580	+5743
Dakota	1710	+5613
Chinle	1790	+5533
San Andres	3300	+4023
Glorieta	3600	+3723
Yeso Las Vallos	3840	+3483
Yeso Meseta Blanca	4850	+2473
Abo	5080	+2243
Pre Cambrian	5450	+1873

2. Fresh water expected from surface to 1200'. Possible Gas and Oil from 1700' to T.D. Surface csg. will be set at 1500' and cemented to surface to protect possible fresh water sands.

3. Pressure Control Equipment, See Exhibit #1.

4. The surface csg. shall be equipped with a parasite string. This will allow placement of air in the borehole at the base of the surface casing, thereby decreasing the hydrostatic pressure downhole. This is necessary because of possible severe lost circulation.

5. Steel pits will be used to hold drilling fluids. Cuttings will be disposed of in a lined earthen reserve pit.

Drilling Fluid Type Air or Aerated Mud.

<u>Depth Ft.</u>	<u>Weight PPG</u>	<u>Viscosity Secs.⁻¹</u>	<u>API FILTRATE CC/30 min.</u>
0 - 1500	8.6 - 8.8	30 - 45	40 - 10
1500 - TD	8.6 - 8.8	30 - 45	12 - 8

Anticipated Types and Quantities of Mud Additives.

<u>TYPE</u>	<u>AMOUNT SX</u>
Gel	1250
Lime	25
Filter Control	600
Caustic	125
Soda Ash	50
LCM	500

Pit levels will be monitored visually by the drilling crew. A full opening stab-in-valve for the drill pipe will be kept on the rig floor at all times during the drilling operation. An upper kelly cock will be used.

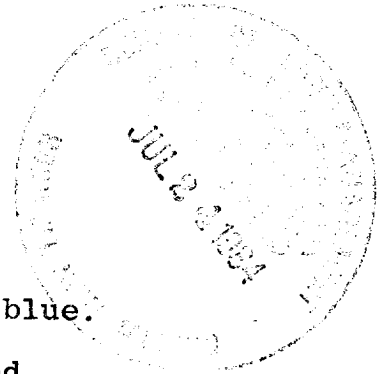
6. Drilling breaks with good shows will be drill-stem tested. After reaching T.D. the well will be logged as follows:

Dual Induction Log T.D. - Surface Csg.
w/ S.P., G.R. & Caliper
Neutron Density T.D. - Surface Csg.
w/ Gamma & Caliper

No coring is planned.

7. Estimated Max Bottom Hole Pressure 2400 psi.
Expected BHP 1800 psi.
No H₂S anticipated.
8. It is proposed to drill this well with mud as a circulating medium, if severe lost circulation is encountered either air or aerated mud will be used.

Surface Use Program
Samedan Oil Corporation
Laguna Federal 1-14



- I. Existing Roads
 - A. See Exhibit 2.
 1. Adequate Existing Roads are shown in blue.
- II. Access Roads to be Constructed and Reconstructed.
 - A. See Exhibit 2.
 1. Existing roads that require some reconstruction are shown in blue and red.
 2. Proposed new access roads to be constructed are shown in red.
 - B. Construction Method
 1. Drilling Operations
 - a. Scratch trail with 20' wide surface.
 - b. Maximum Grade - less than 5%.
 - c. Turnouts - none.
 - d. Drainage Design - water turnouts as required.
 - e. Culverts, Cuts, Fills - two 24" culverts required on proposed access road.
 - f. Surface Material - obtained from private source, if needed.
 - g. Gate and Cattleguards - none required on proposed access roads to be constructed, 2 gates on existing access road will be widened or replaced with cattleguards.
 2. Completion Operation.
 - a. Road will be upgraded to 18' crowned running surface with 6' bar ditches, total width 30'.
- III. Location of Existing Wells - no wells within one mile radius of proposed location.
- IV. Location of Proposed Facilities - on drillsite location.
 - A. See Exhibit 3 for diagram of proposed facilities layout.
 - B. Off Well Pad - NA.
- V. Location and Type of Water Supply
 - A. Water will be purchased from the Lehev Ranch water supply well.
- VI. Construction Material - Only material on the location or access road will be used for construction, however, a road base material of crushed rock will be used if required for access road and wellsite construction and maintenance. The materials will be obtained from existing pit 2 miles east of Pie Town, owned by Mr. Lewey Nalda.

- VII. Methods for Handling Waste Disposal.
- A. Drilling mud & cuttings will be accumulated in a lined earthen reserve pit. The liner shall be impermeable to oil, gas, water and all chemicals used in the drilling operation. Excess fluids will be allowed to evaporate or will be trucked to an authorized disposal well. The reserve pit will be back filled when drilling and completion operations are finalized.
 - B. Garbage and Trash will be collected in an earthen pit covered with screen. This pit will be backfilled at the end of drilling and completion operation.
 - C. Sewage will be collected in chemical latrines and trucked to an authorized disposal site.
- VIII. Auxillary Facilities - none planned.
- IX. Well Site Layout - See Exhibits 4 and 5.
- X. Plans for Reclamation of the Surface.
- A. At abandonment the location will be recountoured to match the original site.
 - B. Topsoil will be stockpiled separately and respread after final countouring.
 - C. Native Grasses or those specified by the BLM will be reseeded on disturbed areas.
 - D. Reclamation operations will commence within 45 days from the date the well is deemed non commercial and should be finished within an additional 45 days. Reseeding will be timed to coincide with expected wet seasons.
- XI. Surface Ownership
- A. Sections 14,23 & 24, T3N-R12W, Catron County, New Mexico are owned by the
John James Lehew Trust
P.O. Box 2E
Pie Town, NM 87827
w/ Jimmy J. Lehew Trustee
- XII. Other Information - Construction activities will be kept to a minimum until the well proves productive.

XIII. Operator's Representative and Certification

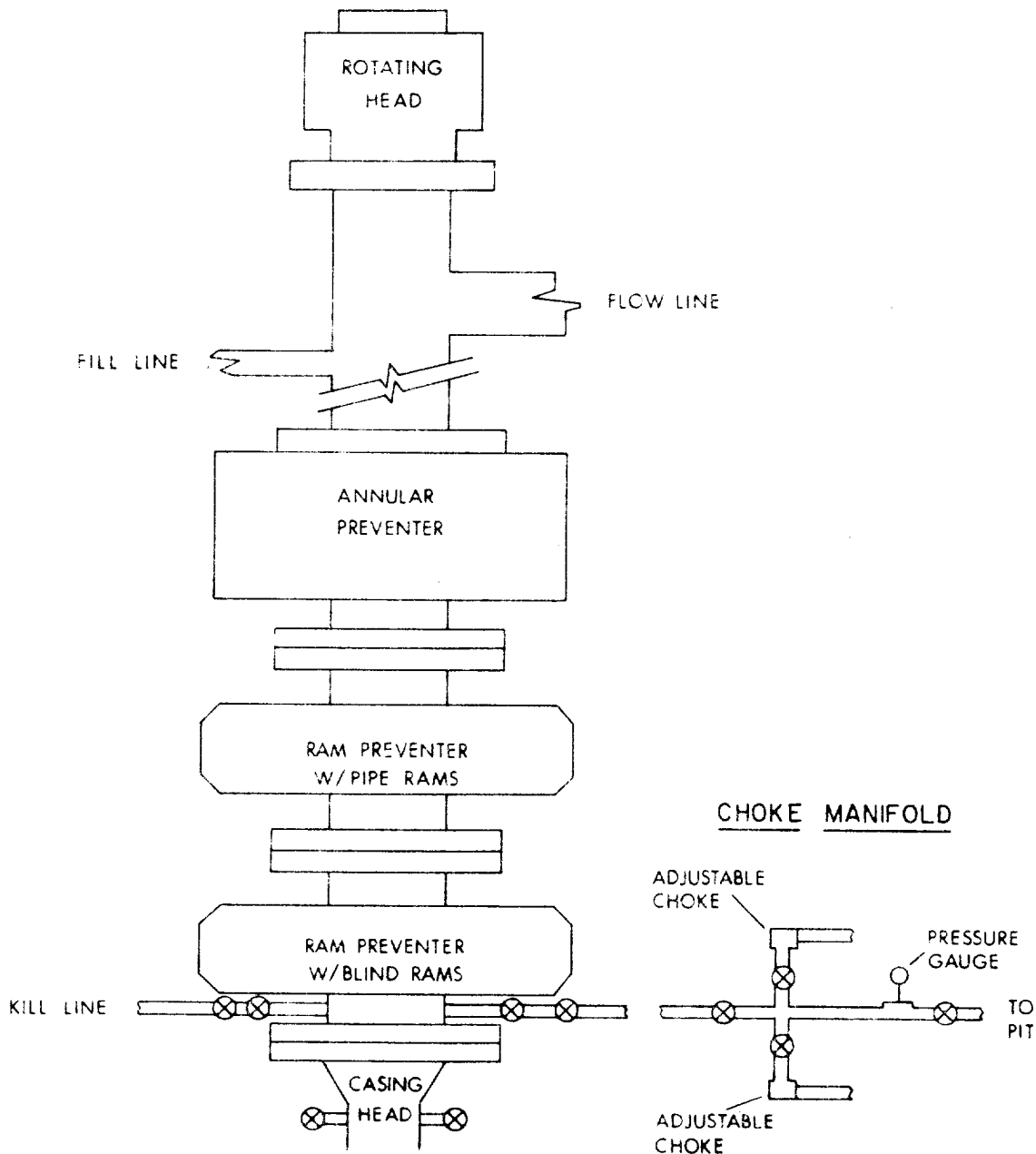
Douglas C. Smith
Division Engineer
Samedan Oil Corporation
1616 Glenarm Pl., Suite 2550
Denver, CO 80202
Ph: (303) 534-0677

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 this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Samedan Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date 7/18/84

Douglas C. Smith
Douglas C. Smith
Division Engineer

**EXHIBIT #1
PRESSURE CONTROL EQUIPMENT**



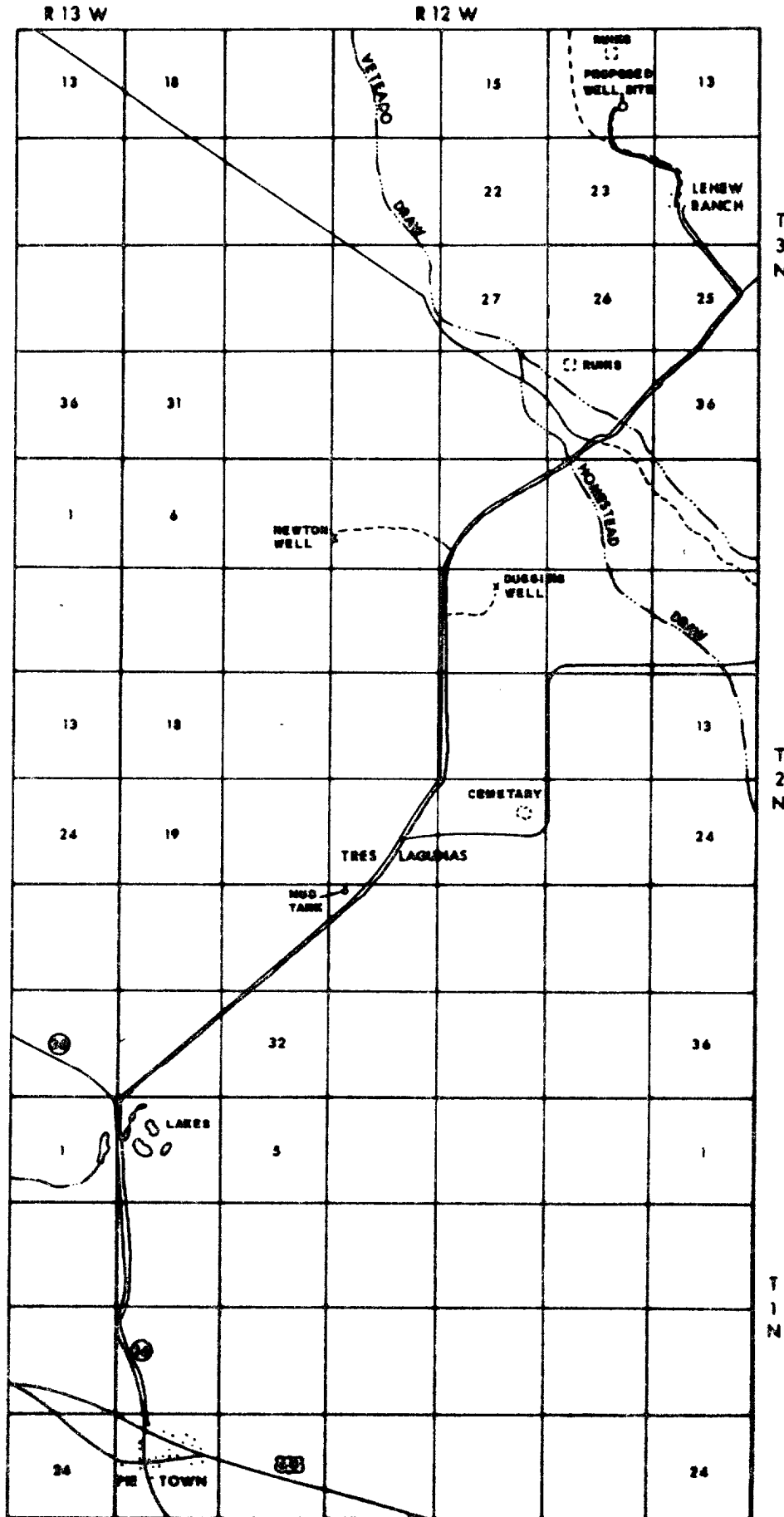
10" 3000 psi W. P.

**DOUBLE RAM BOP W/2-2" 3000 psi VALVES
W/ ANNULAR PREVENTER & ROTATING HEAD**

1. PIPE RAMS WILL BE TESTED EVERY 24 HRS.
2. BLIND RAMS WILL BE TESTED ON EVERY TRIP.

7-17-84

PROPOSED ROUTE



ROAD LEGEND

- TO BE CONSTRUCTED
- TO BE IMPROVED

SCALE: 1" = 8000'

DATE: 7-18-84

EXHIBIT # 3
PRODUCTION FACILITIES

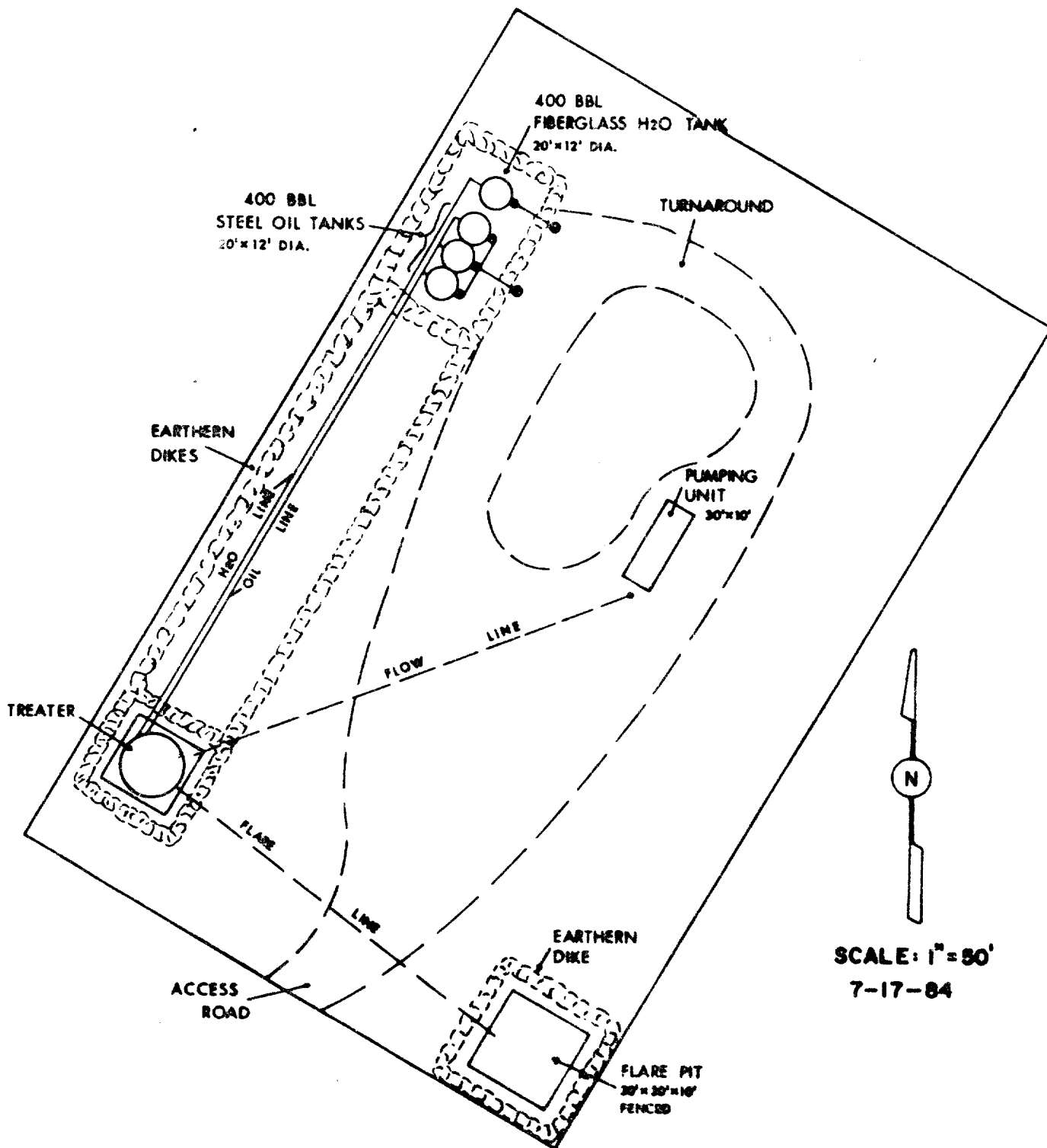


EXHIBIT #4
DRILLING PAD

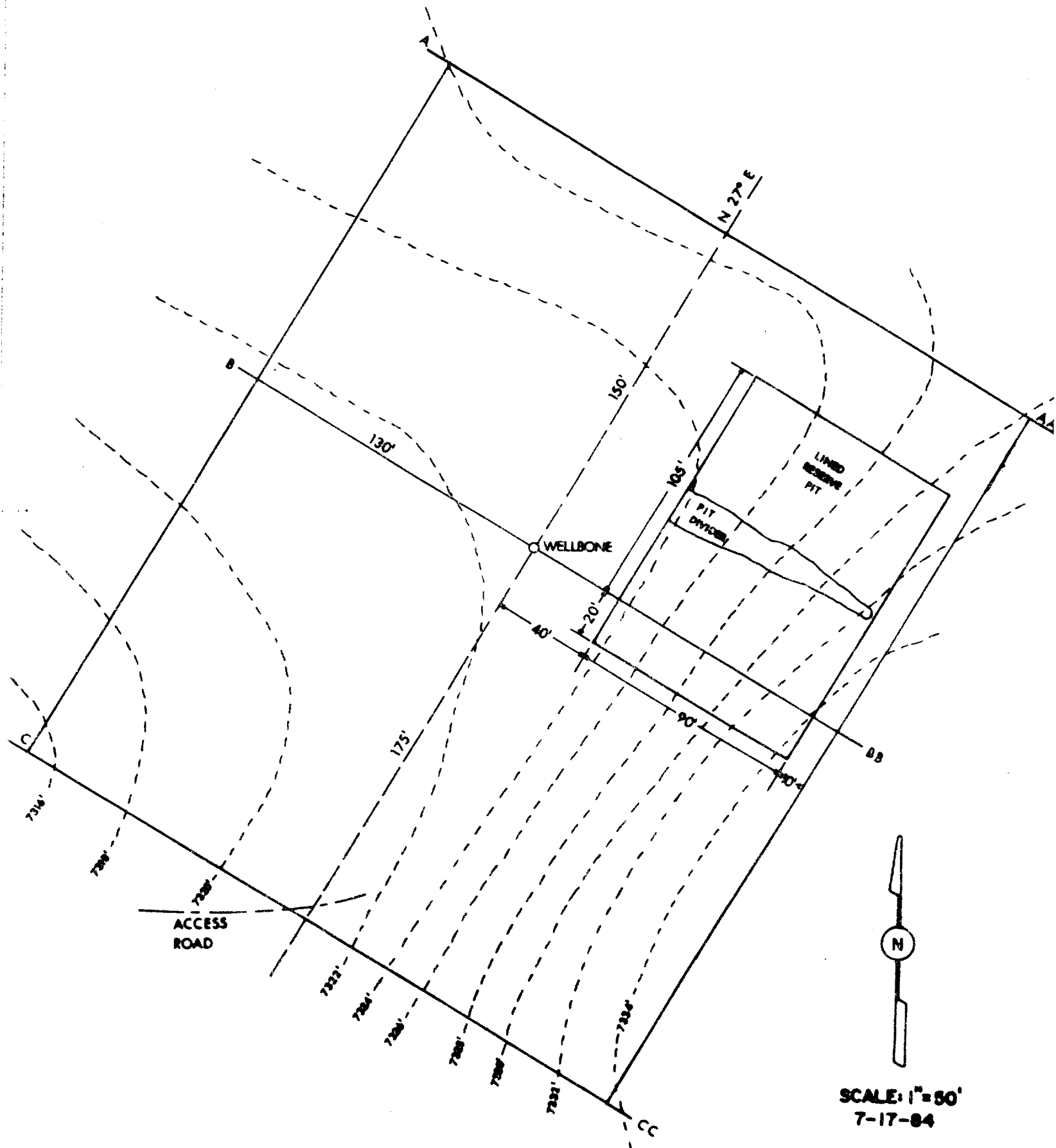
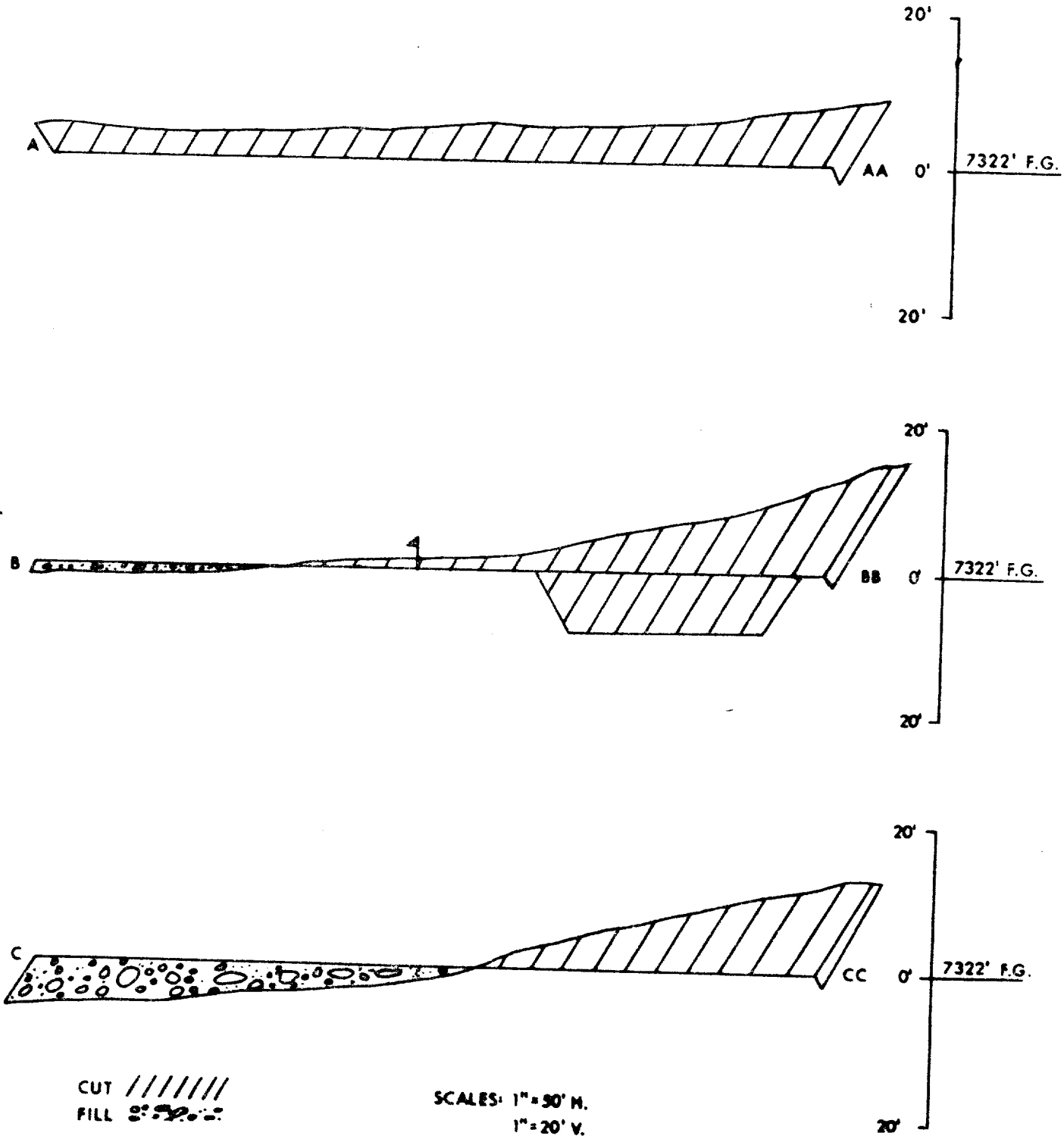
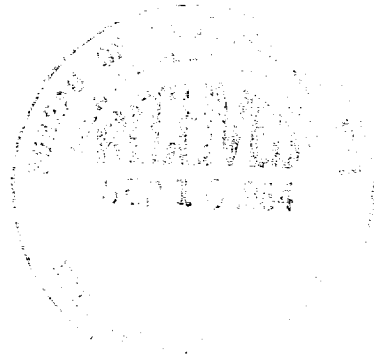


EXHIBIT #5
DRILLING PAD CROSS SECTION



SAMEDAN OIL CORPORATION
SUITE 2550
1616 GLENARM PLACE
DENVER, COLORADO 80202
303-534-0677
OMNIFAX 303-893-2675

September 7, 1984



Bureau of Land Management
Socorro Resource Area
P.O. Box 1219
Socorro, New Mexico 87801

ATTENTION: Mr. Rocky Currett
Mr. Roy Deen

Re: Amendment to APD
Laguna Federal #1

Gentlemen:

The following changes are needed in the Surface Use Program for the Laguna Federal #1:

SECTION II - ACCESS ROAD

The proposed new access road, which follows an existing trail from the Lehev Ranch to the well, will be changed to bypass an archeological site. The site is located in the existing trail 1550' FNL and 100' FEL in Section 23, T3N-R12W. The access road will be moved 120' southwest of the existing road to avoid the archeological site.

SECTION II - CULVERTS

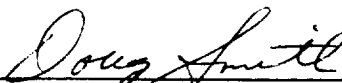
Two proposed 24" culverts for the proposed new access road will not be used. The access road will make a dry crossing through the two drainage areas.

SECTION IX - DRILLING PAD LAYOUT

Exhibit 4 showing the drilling pad layout has been changed. The new layout is slightly smaller. The orientation has been changed to place the entire pit in a slight fill area. This will reduce the amount of dirt work required. The topsoil and subsoil stockpiles have been moved to the east side of the location. This reduces the amount of activity near the archeological site LAC-8447a-1.

Yours very truly

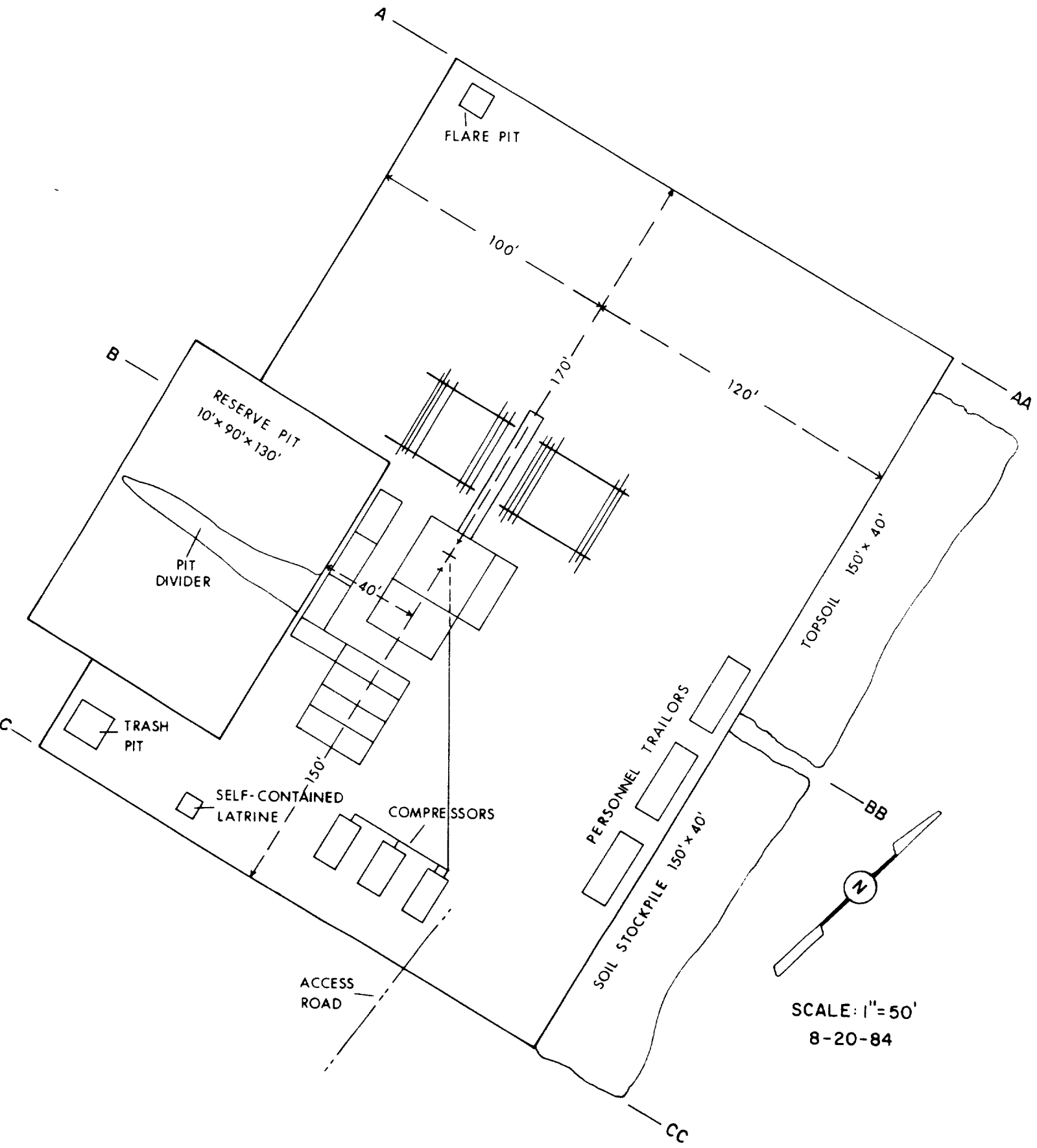
SAMEDAN OIL CORPORATION



Doug Smith
Division Engineer

DS/kk

EXHIBIT # 4 DRILLING PAD



SCALE: 1" = 50'
8-20-84

EXHIBIT #5

DRILLING PAD CROSS SECTION

