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Form 9-331 C
(May 1963)

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 [XX] DEEPEN [ ] PLUG BACK [ ]

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

2. NAME OF OPERATOR: Shell Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 1509, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FWL and 1980' FSL
At proposed prod. zone: Same

5. LEASE DESIGNATION AND SERIAL NO.: NM-073394-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Corder Federal

9. WELL NO.: 5

10. FIELD AND POOL, OR WILDCAT: Cato San Andres

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T-9-S, R-30-E

12. COUNTY OR PARISH: Chaves

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 20 miles northwest of Caprock

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660	799.97	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1867'	3430'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4052.5 GR

22. APPROX. DATE WORK WILL START*: July 8, 1977

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	24#	250'	100 sacks to surface
7 7/8"	5 1/2"	14#	3430'	1500 sacks to surface

Attachments:
- 12-Point Development Plan for Surface Use
- New Mexico Oil Conservation Commission Form C-102
- County Road Map
- Access Road Plat
- Ownership Map
- Facilities Plats
- Rig Layout Plat
- Drilling Prognosis
- Casing and Cement Program
- BOP Assembly Drawing
- Choke Manifold Drawing

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ARTESIA, NEW MEXICO

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 J. D. D'Agostino TITLE Senior Drilling Engineer DATE 5-4-77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE MAY 31 1977

APPROVED BY Lee D. Lara TITLE ACTING DISTRICT ENGINEER DATE MAY 31 1977

CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES AUG 31 1977

*See Instructions On Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

☆ U.S. GOVERNMENT PRINTING OFFICE : 1963—O-711-396

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-128
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

SHELL OIL COMPANY		Lease CONDER FED.		Well No. 5
Unit Letter L	Section 4	Township 9 South	Range 30 East	County Chaves
Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the West line				
Ground Level Elev. 4052.5	Producing Formation San Andres	Pool Cato		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

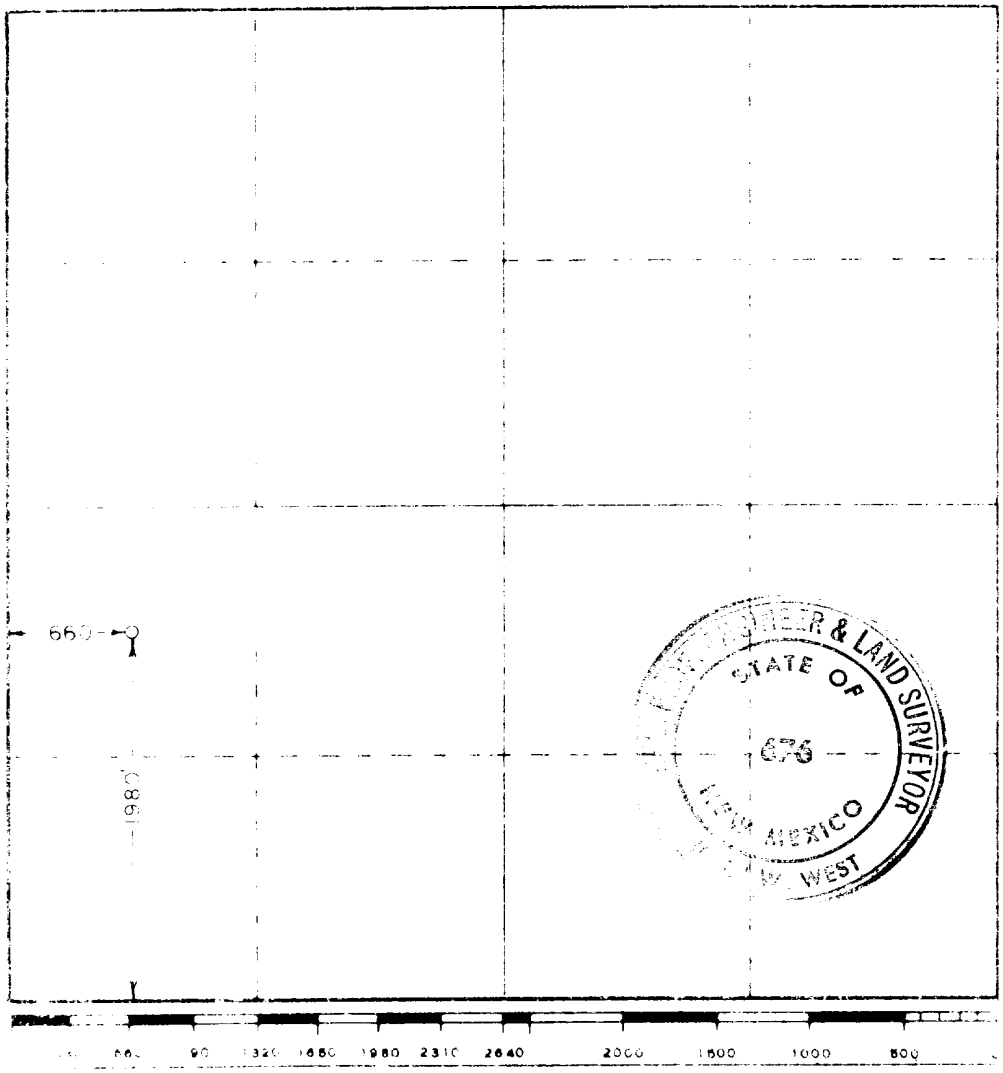
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Commission.



CERTIFICATION

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

Name: J. D. D'Agostino

Position: Senior Drilling Engineer

Company: Shell Oil Company

Date: 5-4-77

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: April 19, 1977

Registered Professional Engineer and/or Land Surveyor

Certificate No. 676

12-POINT DEVELOPMENT PLAN FOR SURFACE USE

SHELL OIL COMPANY
CORDER FEDERAL NO. 5
CATO SAN ANDRES FIELD
CHAVES COUNTY, NEW MEXICO

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MAY 06 1977
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ARTESIA, NEW MEXICO

1. Existing Roads to Well Location

To reach this well location, proceed west from Caprock (located on U.S. 380) ten miles. Turn right (north) on a primitive road for ten miles to the location. (See attached county road map.)

2. Planned Access Roads

Approximately 1320' of 12' wide access road will be required from the well site to the existing lease road east of the location. (See attached plat showing existing and planned access roads.)

3. Location of Existing Wells

Location of existing wells is shown on the attached ownership plat.

4. Location of Tank Batteries, Production Facilities, etc.

A plat showing the existing tank batteries and flowlines and proposed flowlines is attached.

5. Location and Type of Water Supply

We plan to contract with a private supplier to haul the water to be used during this drilling operation.

6. Source of Construction Materials

The materials needed to construct the access roads or well location will be purchased from a private supplier.

7. Methods for Handling Waste Disposal

All waste that can be burned will be burned in a pit located in the northwest corner of the drill site. All other waste and drilling fluids will be buried in a pit and covered with a minimum of two feet of cover.

8. Ancillary Facilities

There will be no permanent structures or airstrips. Trailer locations are shown on the attached location layout sheet.

9. Well Site Layout

See attached location layout sheet.

10. Plans for Restoration of the Surface

Any topsoil removed while digging pits will be stockpiled. The burn pit will be covered and leveled. The reserve pit will be allowed to dry, filled in and leveled. The location will be cleaned, topsoil spread over the disturbed areas and reseeded as directed by the Bureau of Land Management.

11. Other Environmental Information

The immediate area under concern has caliche and sandy soil which is sparsely covered wih unidentified native grasses and scrub mesquite. There are no water wells, flowing streams or bodies of water in the immediate area.

12. Field Representative

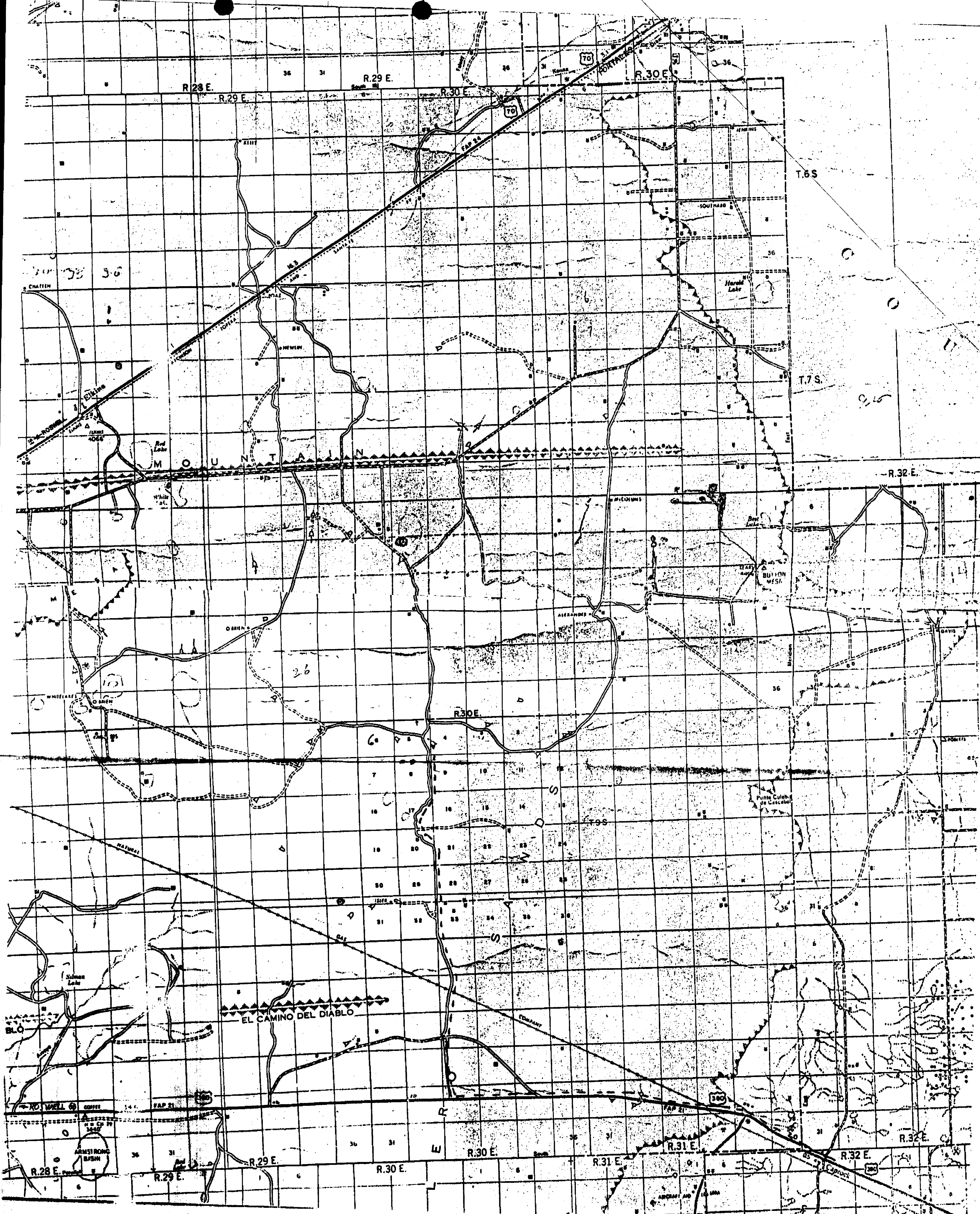
R. E. Henson 4415 Versailles Midland, Texas 79703 915-697-3374	or	J. E. Miller 3331 Providence Midland, Texas 79701 915-697-1069

Certification

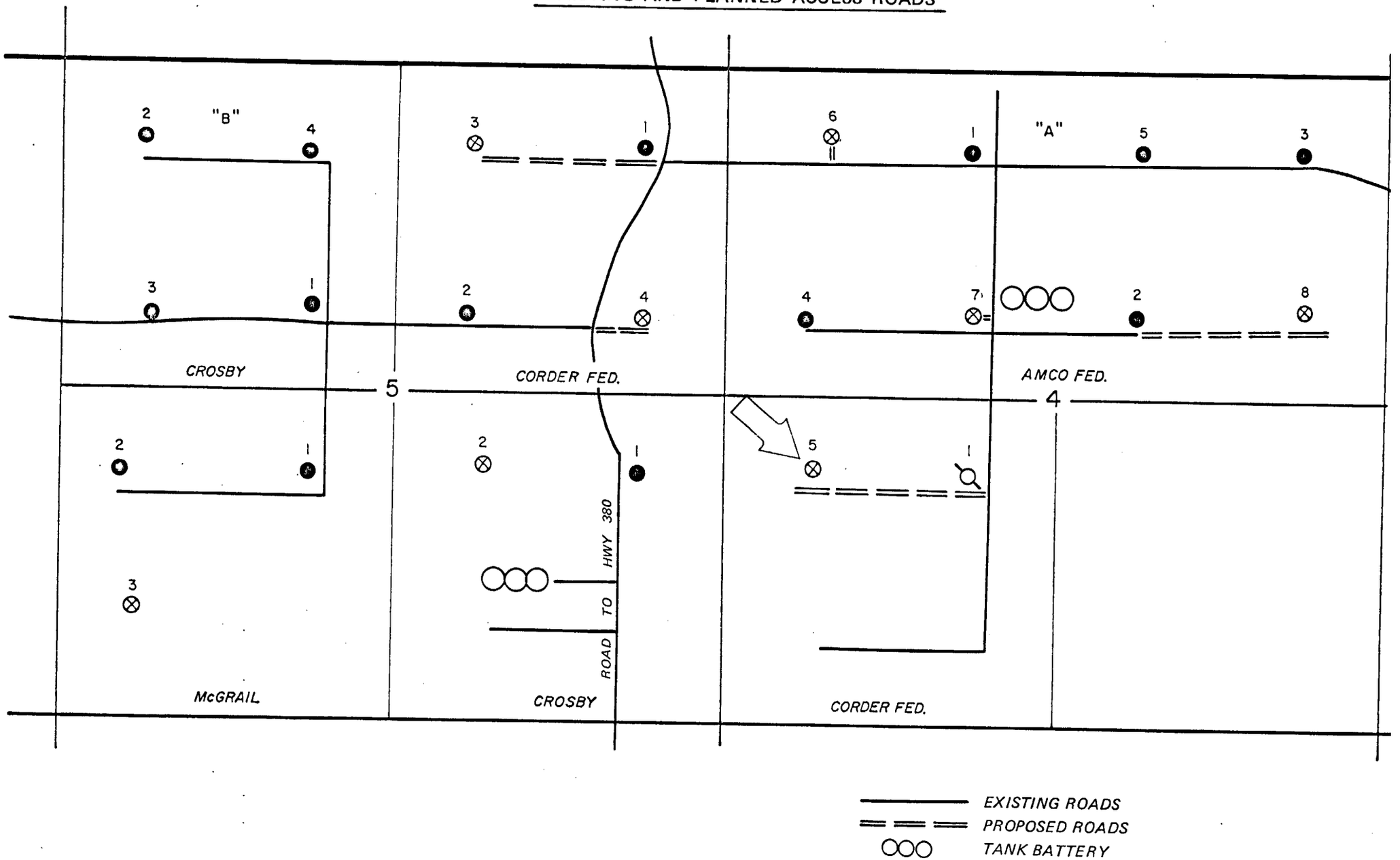
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

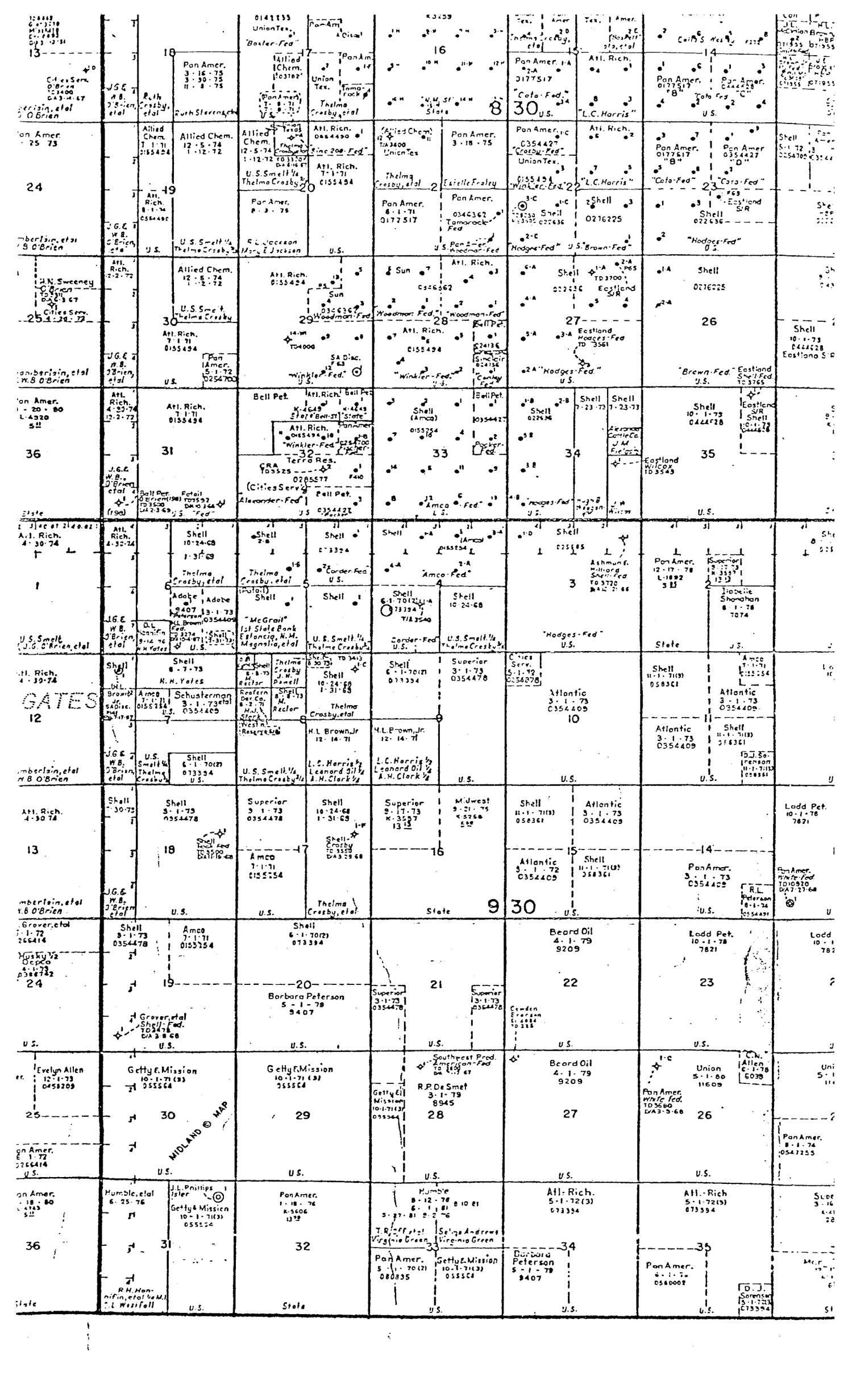
5-4-77
Date

C. A. Simar
Division Drilling Superintendent
(Name and title)

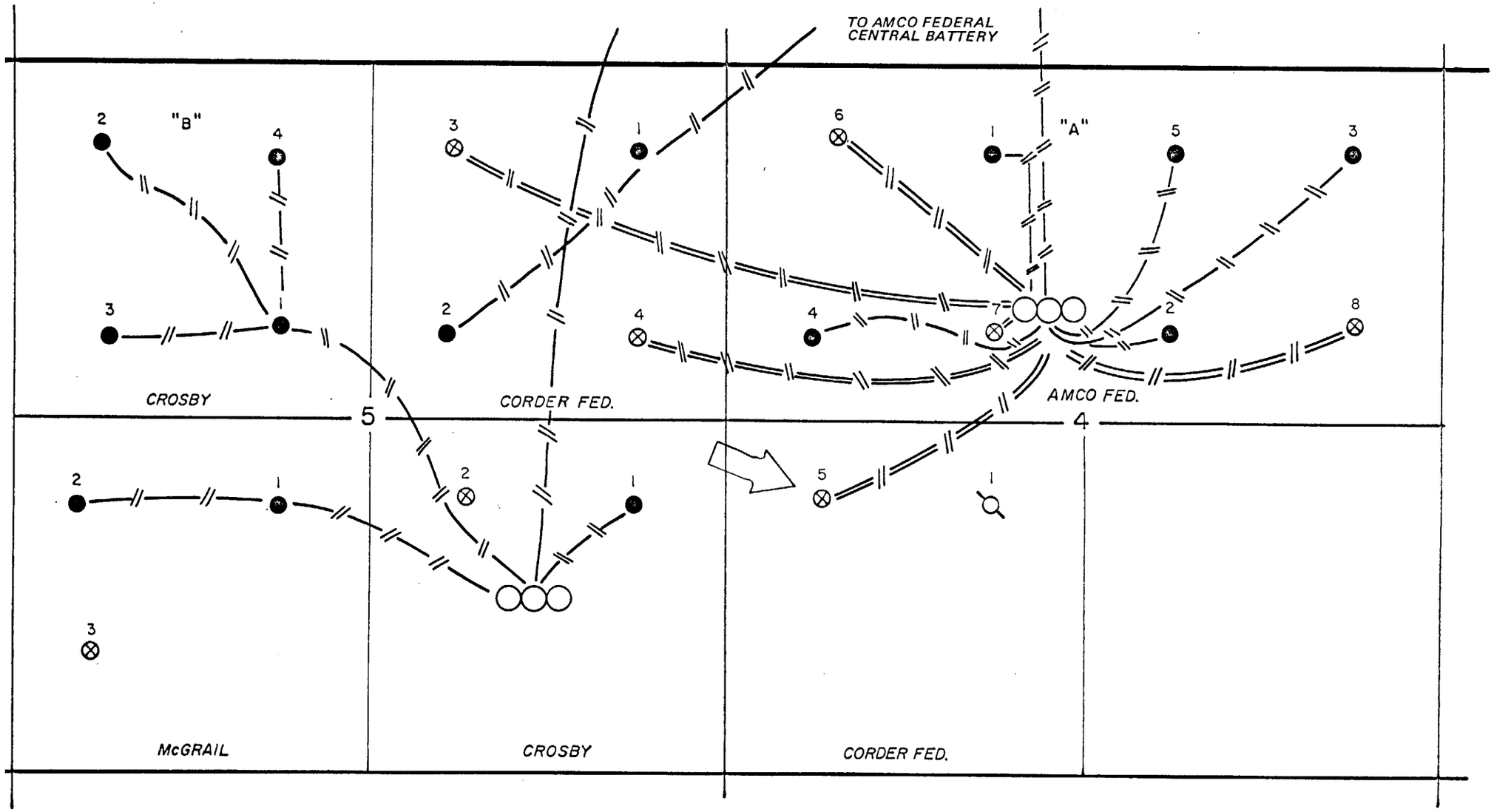

R.28 E.
R.29 E.
R.30 E.
R.31 E.
R.32 E.
T.6 S
T.7 S.
T 9 S
PORTALES
70
FAP 24
ROSWELL
Elkins
M O U N T A I N
Red Lake
Harold Lake
Best Lake
BUTTON MESA
ALEXANDER
JENKINS
SOUTHARD
DAVIS
BOAZ
O BRIEN
WHITE LAKES
East
Meridian
Punta Culebra de Cascabel
NATURAL
GAS
COMPANY
EL CAMINO DEL DIABLO
FAP 21
380
ROSWELL
ARMSTRONG BASIN
Caprock
South

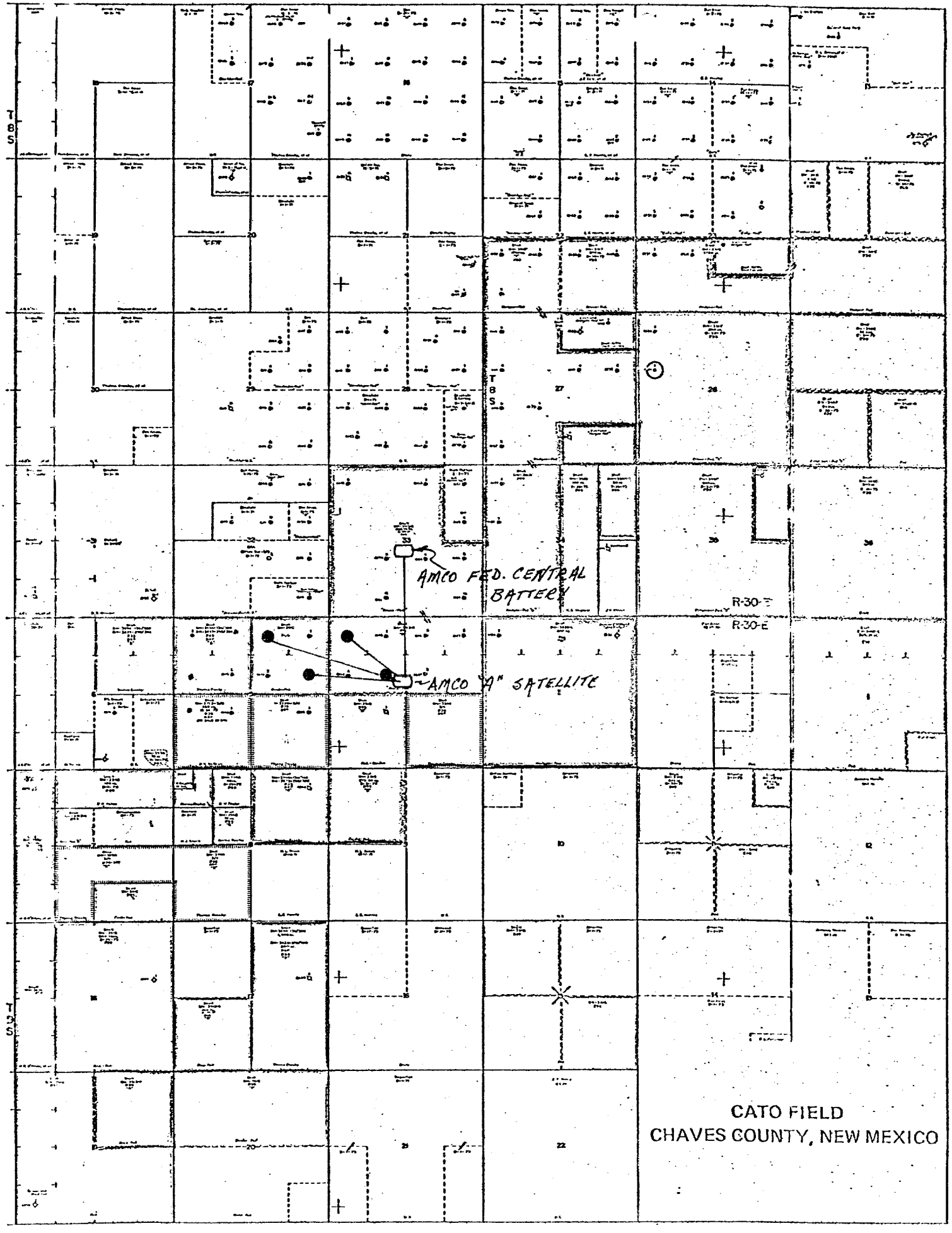
EXISTING AND PLANNED ACCESS ROADS




GATES
MIDLAND © MAP

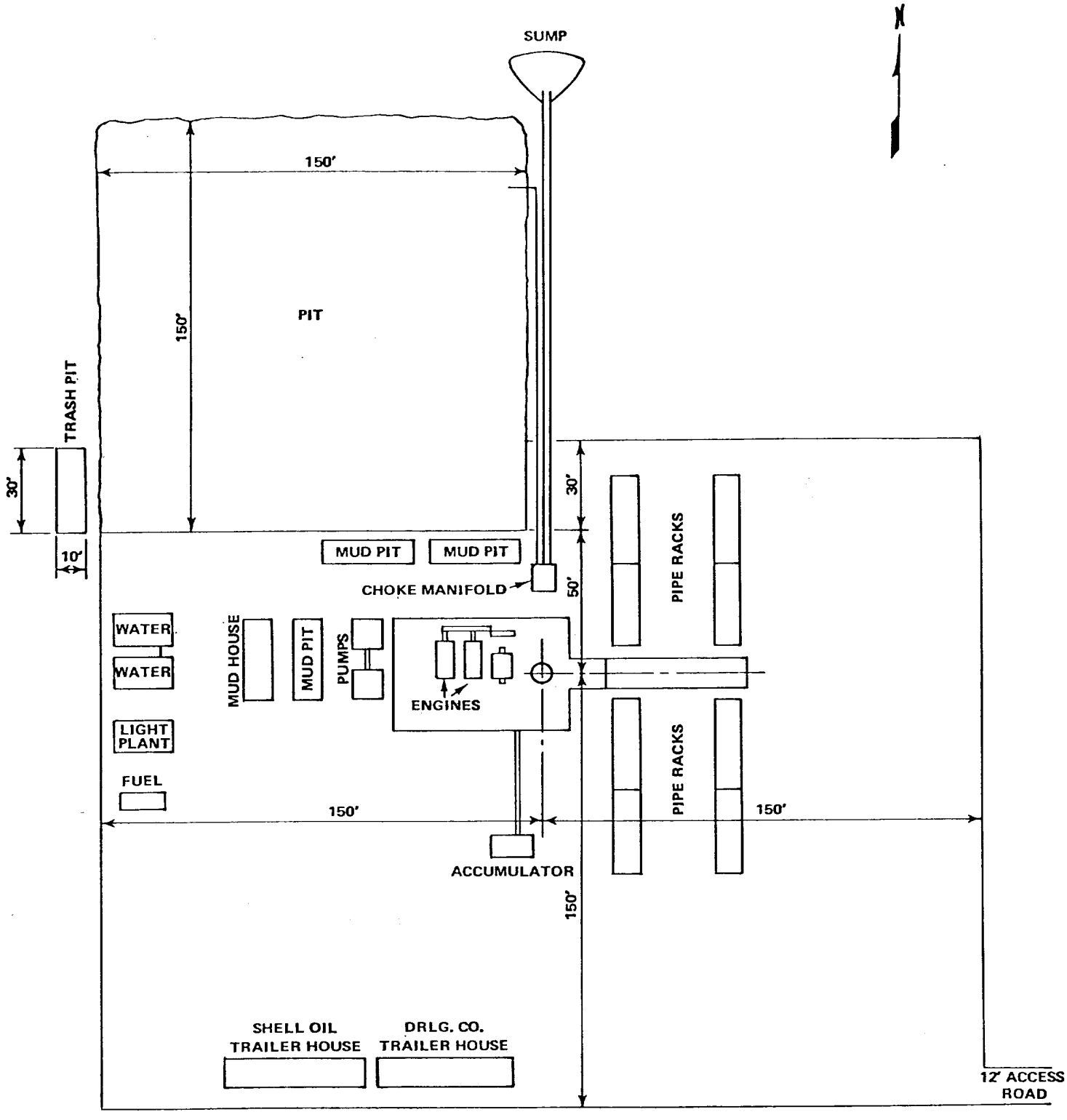
TANK BATTERIES AND FLOW LINES





CATO FIELD
CHAVES COUNTY, NEW MEXICO

LOCATION PLAT FOR CATO FIELD



SCALE: 1" = 50'

WELL: Corder Federal 5

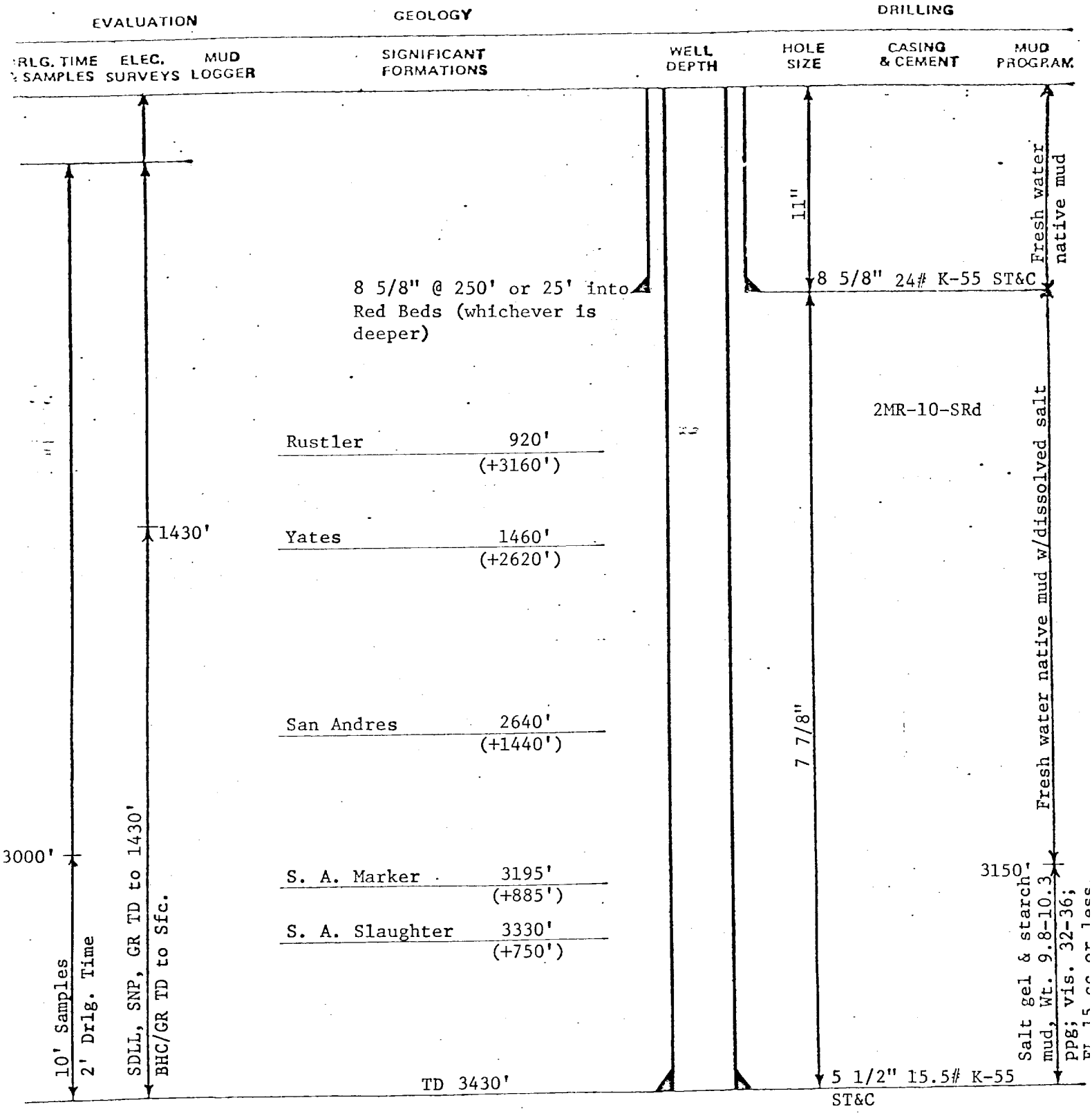
W.O. NO. _____

LOCATION: 660' FWL & 1980' FSL Section 4, T-9-S, R-30-E, Chaves County, New Mexico

FIELD: Cato San Andres

EST. ELEVATION: 4080'

OBJECTIVE: San Andres



PROGNOSIS DETAIL
CORDER FEDERAL 5
CHAVES COUNTY, NEW MEXICO

CASING AND CEMENT:

8 5/8" surface casing set at 250'± or 25' into Red Beds (whichever is deeper). Cement to surface. WOC minimum 8 hours and test with 1000 psi minimum of 30+ minutes.

5 1/2" production casing set at 3430'±. Casing to be set 100' into S. A. Slaughter zone (on depth). Cement to surface.

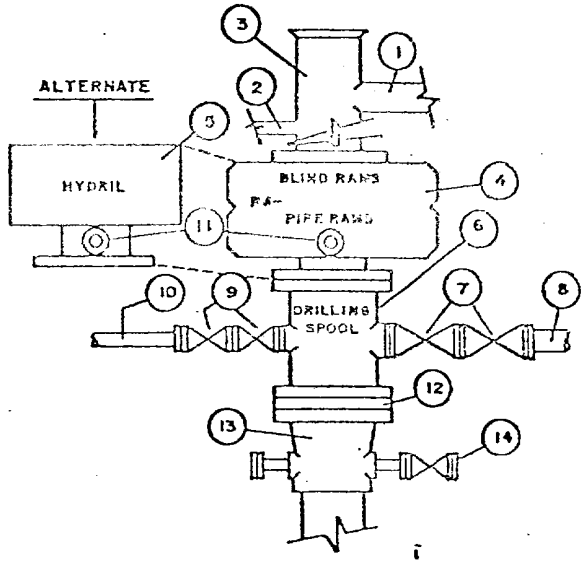
DRAW[illegible] AND CHECK LIST NO. EP-1004-2
(ATTACHMEN[illegible] TO BID SHEET AND DRILLING ORDE)
MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
FOR SHALLOW AND INTERMEDIATE NORMAL PRESSURE WELLS

2000 psi WP-API Class 2M

SPECIFICATIONS FOR WELL NO. Cato Field CASING SIZE 8 5/8

Contractor and Operator to furnish items checked (x)

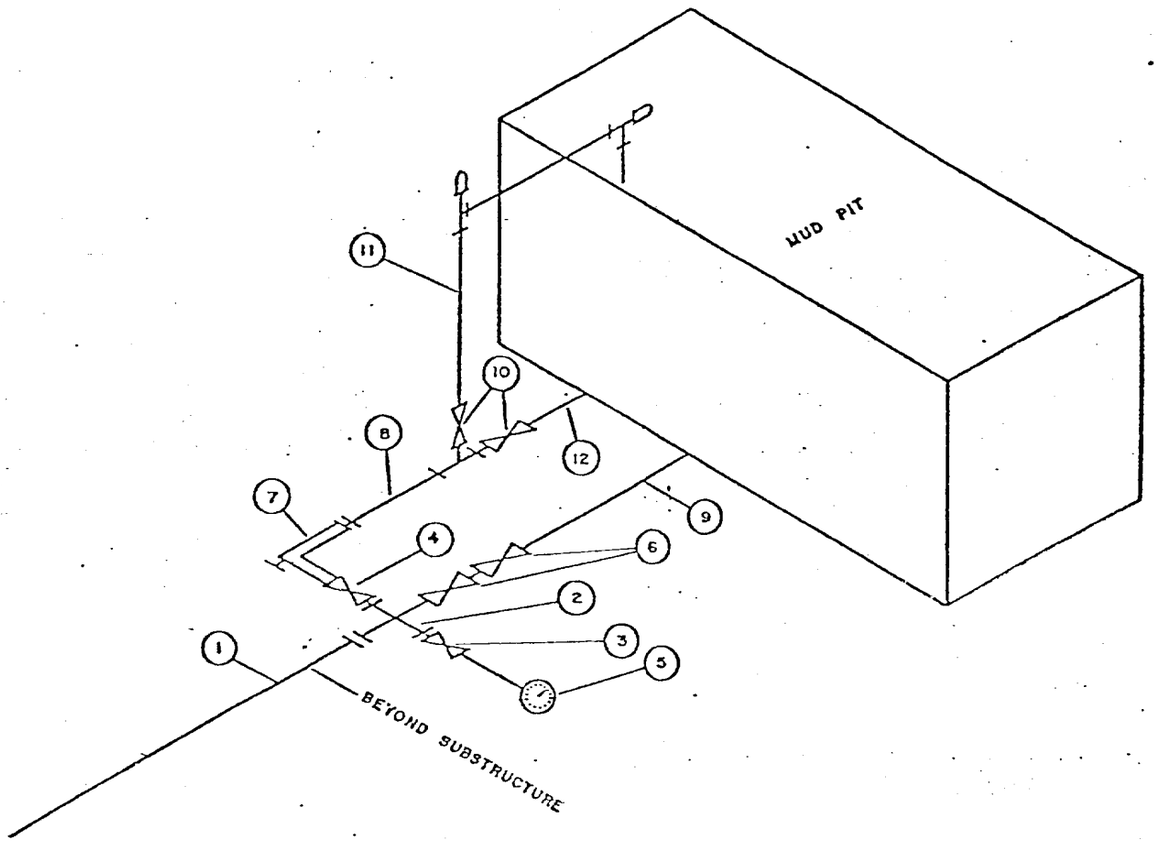
No.		Min. Size	Type	Press. Rating	Furnished by Contr.	Oper.
1	Flowline	8 5/8			X	
2	Fill up line	2"			X	
3	Drilling Nipple	11"			X	
4	Two single or one dual hydraulically operated CIW or Shaffer rams	10"	Shaffer	2000	X	
5	Hydril* (Alternate to 4)					
6	Drilling spool with " and " outlets			2000	X	
7	Gate valves	2"	CIW "F" or equal	2000	X	
8	Line to choke manifold	2"		2000	X	
9	Gate valves	2"	CIW "F" or equal	2000	X	
10	Line to rig mud pump manifold	2"		2000	X	
11	" and " outlets in ram or Hydril. Run kill line & choke line from these outlets (Alternate to #6 above)	NA				
12	Wear flange or bushing	- -	- - -	- - -	- -	- -
13	Casing Spool	10"		2000		X
14	Gate Valve	2"		2000		X



*or equivalent

DRAWING AND CHECK LIST NO. EP-1005-3
(ATTACHMENT 3 TO BID SHEET AND DRILLING ORDER)
MINIMUM BLOWOUT PREVENTER CHOKE MANIFOLD FOR LARGE SURFACE AND CONDUCTOR STRINGS
2000 psi API Class 2M
SPECIFICATIONS FOR WELL NO. Cato Field CASING SIZE 8 5/8

GENERAL LAYOUT
CHOKE MANIFOLD, CHOKE DISCHARGE LINES



Contractor and Operator to furnish items checked (x)

No.		Min. Size	Type	Press. Rating	Furnished by Contr.	Oper.
1	Line from drilling spool	2"		2000	X	
2	Cross 2 x 2 / 2 x 2			2000	X	
3	Gate Valve	2	*CIW F	2000	X	
4	Gate Valve	2	*CIW F		X	
5	Pressure Gauge			3000	X	
6	Gate Valves	2	*CIW F	2000	X	

No.		Min. Size	Type	Press. Rating	Furnished by Contr.	Oper.
7	Adjustable Choke	2	*H-2	2000	X	
8	Line to Reserve Pit	2		2000	X	
9	Line to Reserve Pit	2		1000	X	
10	Gate Valves	2	*CIW F	2000	X	
11	Line to Mud Pit	2		1000	X	
12	Line to Reserve Pit	2		1000	X	

*or equivalent

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be flanged or Cameron clamp of comparable rating. Low pressure lines downstream from a choke can contain screwed connections.
2. All flanges to be API 6B and ring gaskets shall be API RX.
3. All lines shall be securely anchored.
4. Choke to be equipped with tungsten carbide seat and needle and replacement parts shall be available.
5. Line from drilling spool to choke manifold to be as straight as possible. Line downstream from chokes shall make turns by large radius bend or 90° bends using bull plugged tees.
6. Discharge lines from chokes and choke bypass shall vent at a minimum of 100 ' from the well.