

N.M.O.C.D. COPY

SUBMIT IN TRIPLICATE*

(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1425.UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-23431

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. LC 028936 (d)
2. NAME OF OPERATOR Anadarko Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Box 67, Loco Hills, New Mexico 88255		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' FNL & 1980' FWL Sec. 31, T17S, R30E, Eddy County, New Mexico		8. FARM OR LEASE NAME Federal L
10. FIELD AND POOL, OR WILDCAT Loco Hills Queen Grayburg San Andres		9. WELL NO. 8
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 31 - 17S - 30E		12. COUNTY OR PARISH Eddy
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx. 2 1/2 miles Southwest of Loco Hills Townsite		14. STATE New Mexico
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 660'	16. NO. OF ACRES IN LEASE 835.32	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. 1043'	19. PROPOSED DEPTH 3300'	20. ROTARY OR CABLE TOOL Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3582 GR		22. APPROX. DATE WORK WILL START* August 1, 1980

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24.0#	550'	400 sx circulated
7-7/8"	4-1/2"	10.5#	3300'	450 sx

1. Rig up rotary tools.
2. Drill to approximately 500'; set & circulate (or redimix) cement to surface on 8-5/8" casing. Install & test Series 900 Double Ram Hydraulic Blowout Preventor.
3. Drill to T D (approximately 3300'); set & cement 4 1/2" casing on bottom.
4. Run cased hole logs & perforate Grayburg & San Andres Zones.
5. Acidize & Fracture treat.
6. Run 2-3/8" tubing, rods & bottom hole pump; install pumping equipment & place well on production.

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.

SIGNED [Signature] TITLE Area Supervisor DATE July 14, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE July 14, 1980

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

RECEIVED

AUG 1 1980

O. C. D.
ARTESIA, OFFICE

July 31, 1980

Anadarko Production Company
P. O. Box 67
Loco Hills, New Mexico 88255

Gentlemen:

ANADARKO PRODUCTION COMPANY Fed "L" No. 8 660 FNL 1980 FWL Sec. 31 T.17S R.30E Eddy County Lease No. LC-028936 (d)

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 3,300 feet to test the Grayburg-San Andres formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and this approval including the GENERAL REQUIREMENTS.
3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
4. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
6. Notify the Survey by telephone 24 hours prior to spudding well.
7. Cement behind the 8-5/8" casing must be circulated.
8. Special Stipulations: Utilize caliche pit in SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 30, T. 17S., R. 30E.

9. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

Orig. Sgd.) GEORGE H. STEWART

George H. Stewart
Acting District Engineer

DATA SHEET

This Data Sheet is provided in reference to the attached "Application for Permit to Drill" Anadarko's Federal L - Well No. 8

1. Location: 660' FNL & 1980' FWL Sec. 31, T17S, R30E, Eddy County, New Mexico.
2. Elevation: 3582' GR
3. Geological Name of Surface Formation: Triassic - Doakum (Santa Rosa).
4. Type of Drilling Tools to be Utilized: Rotary Tools.
5. Proposed Drilling Depth: 3300'.
6. Tops of Important Geological Markers:

Top of Salt - -	555'	Loco Hills -	2720'
Bottom of Salt-	1033'	Metex - - -	2800'
Yates - - - -	1180'	Premier - -	2995'
7-Rivers - - -	1665'	San Andres -	3050'
Queen - - - -	2212'	Lovington -	3200'
Grayburg - - -	2600'		
7. Estimated Depth of Anticipated Water, Oil or Gas:

Oil: 2800' - 3000'
8. Casing Program:

8-5/8" - 24.0#, K-55 - New
4-1/2" - 10.5#, K-55 - New
9. Setting Depth of Casing:

8-5/8" - 550' - Cemented with 400 sx Class H w/2% CaCL - circulated.
4-1/2" - 3300' - Cemented with 450 sx Class C 50/50 Posmix w/6# Salt/sx & 2% gel.
10. Specifications for Pressure Control Equipment:

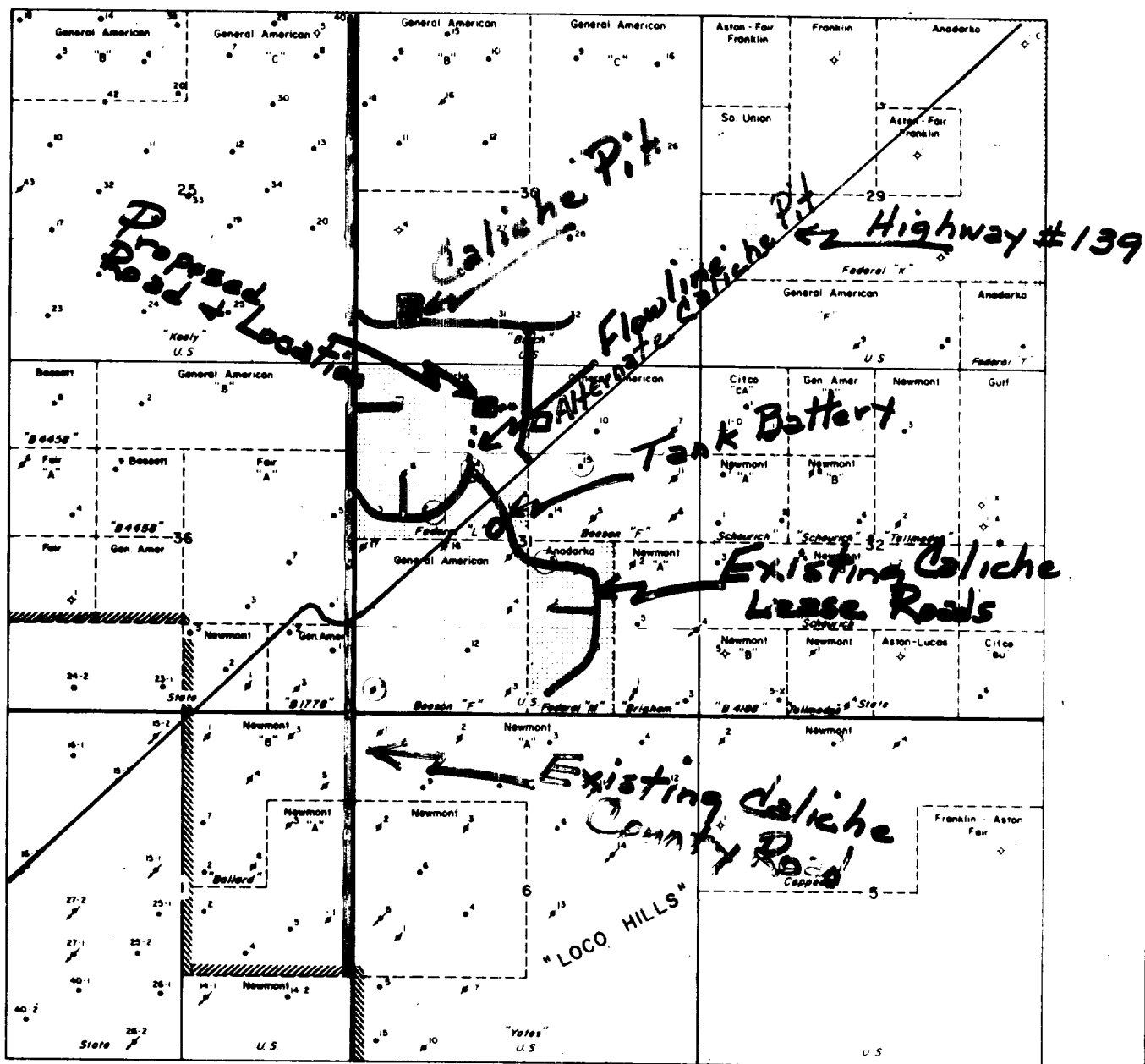
This rig is equipped with a Series 900 BOP with 4" Blind Rams, kill line and choke manifold. When nipping up, test BOP and Choke Manifold to 500 psi. Operate BOP equipment once a day, or as directed by Company Representative.
11. Mud Program:

Drill with Fresh Water Native Mud to within 300' of T D. Gel will be added at this point to increase viscosity and clean hole prior to running casing.
12. Testing, Logging & Coring Program:
 - a. Testing: No drill stem tests will be made.
 - b. Coring: No coring is planned.
 - c. Logging: If Open Hole Logs are not run before the 4½" casing is set & cemented, cased hole logs -(probably Gamma Ray/Comp. Neutron Log) will be run.
13. Potential Hazards:

None are expected. Above described BOP should take care of any blowout problems. Numerous wells have been drilled in this area without problems.
14. Anticipated Starting Date & Duration:

Plan to begin drilling operations August 1st to 15th. Approximately 6 days required to drill the well and 2 weeks for completion.
15. Other Facets:

None.

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LEGEND

- Oil Well
- ◆ Plugged & Abandoned
- ◆ Temporarily Abandoned
- ◆ Dry & Abandoned
- ◆ Water Injection Well
- ▨ Anadarko Acreage
- ▨ Newmont Operated
- ▨ West Loco Hills Grayburg Unit
- Premier Completions



**ANADARKO
PRODUCTION COMPANY**

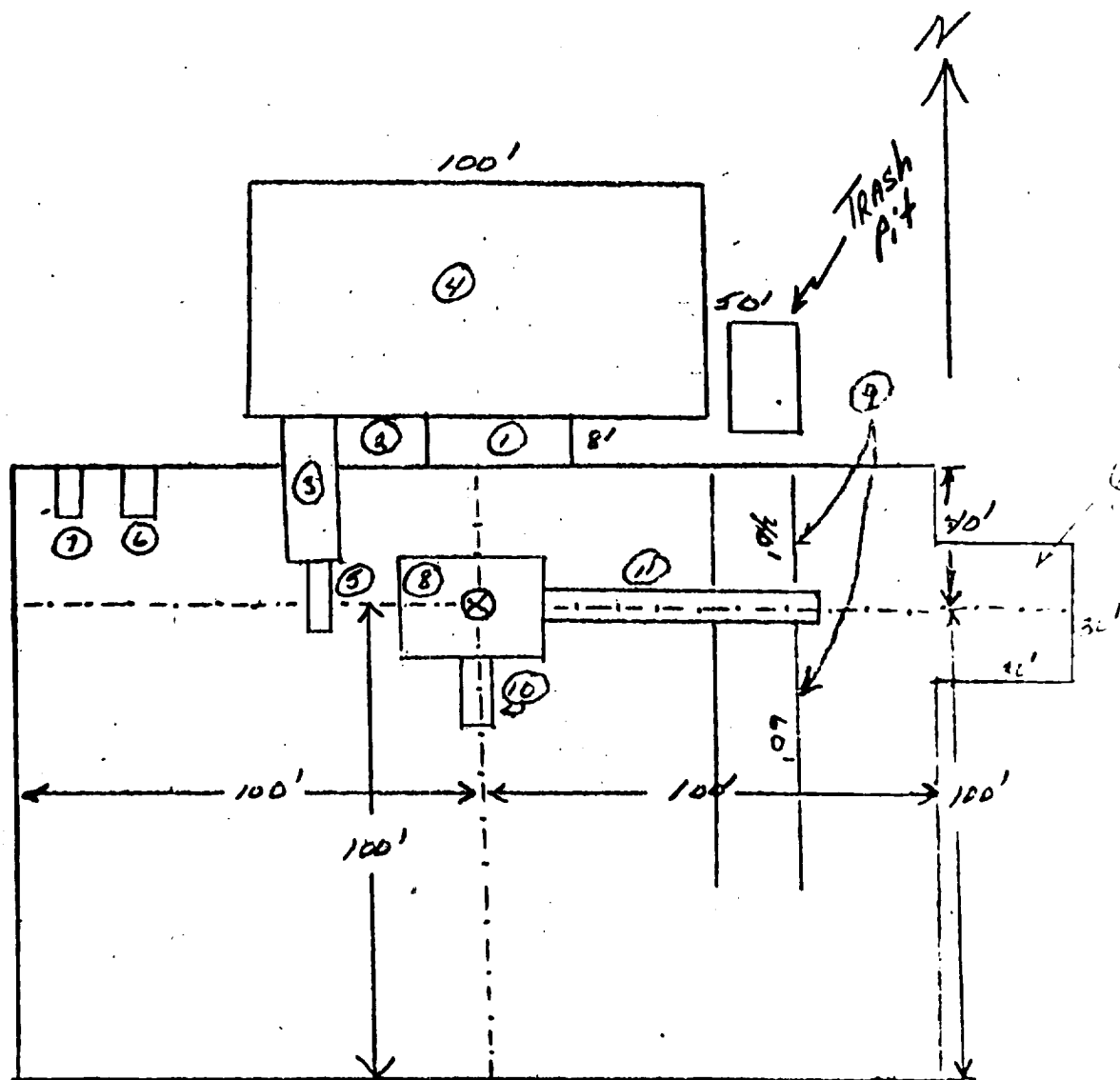
LOCO HILLS

EDDY COUNTY, NEW MEXICO

PROPOSED
Federal L No. 8



Exhibit #2



- ① Shale Pit 30' x 8'
- ② Mud Pit 20' x 8'
- ③ Suction Pit 30' x 8'
- ④ Reserve Pit 100' x 50'
- ⑤ Pump

- ⑥ Water Tank
- ⑦ Fuel Tank
- ⑧ Rig
- ⑨ Pipe Racks
- ⑩ Dog House
- ⑪ Cat Walk 60'
- ⑫ Stinger

Schaeffer Type E 10" Series 900 Hydraulic BOP. The waste and debris from this well will be disposed of in a reserve pit and covered up.

Exhibit # 3

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form 7-1-77
Supersedes C-128
Effective 1-1-78

All distances must be from the outer boundaries of the Section

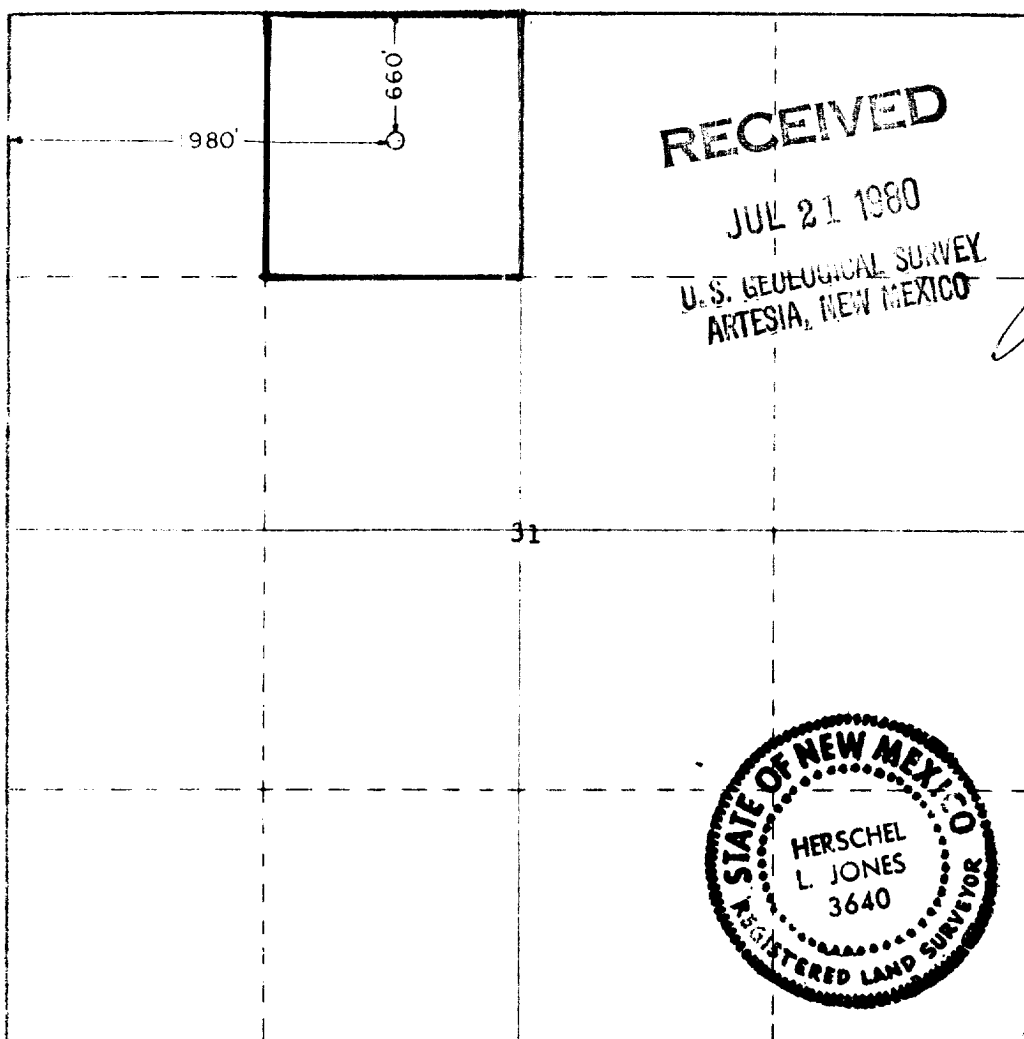
Operator ANADARKO PRODUCTION COMPANY			Lease Federal L		Well No. 8
Section C	Section 31	Township 17 South	Range 30 East	County Eddy	
True Location of Well: 660 feet from the North line and 1980 feet from the West line Surface Elev. 3582 Producing Formation Grayburg - San Andres Loc. Loco Hills - Queen Section Grayburg - San Andres 40 Acres					

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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

Jerry E. Buckles

Area Superintendent

Jerry E. Buckles

Anadarko Production Company

July 17, 1980

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

July 16, 1980

Registered Professional Engineer
and Land Surveyor

Certificate No.

3640

13 660 90 1320 1680 1980 2340 2640 2000 1800 1000 800 0