

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

Anadarko Production Company

3. ADDRESS OF OPERATOR

P. O. Box 67, Loco Hills, New Mexico 88255

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FNL & 660' FWL Sec. 17, T18S, R29E

At proposed prod. zone Same

Eddy County, New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 7 miles Southwest of Loco Hills Townsite

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

120

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.

660'

19. PROPOSED DEPTH

2800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3517 GR

22. APPROX. DATE WORK WILL START*

August, 1980

23.

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#	350'	150 sx circulated
7-7/8"	4-1/2"	10.5#	2800'	250 sx

1. Rig up rotary tools.
2. Drill to approximately 350'; set & circulate or ready-mix cement to surface on 8-5/8" casing. Install & test Series 900 Double Ram Hydraulic Blowout Preventor.
3. Drill to T D, approximately 2800'; set & cement 4 1/2" casing on T D.
4. Run cased hole logs.
5. Perforate, acidize and 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.

24.

SIGNED

TITLE

Area Supervisor

DATE

July 16, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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

Form 100
Supersedes C-128
Effective 1-1-85

All distances must be from the outer boundaries of the Section

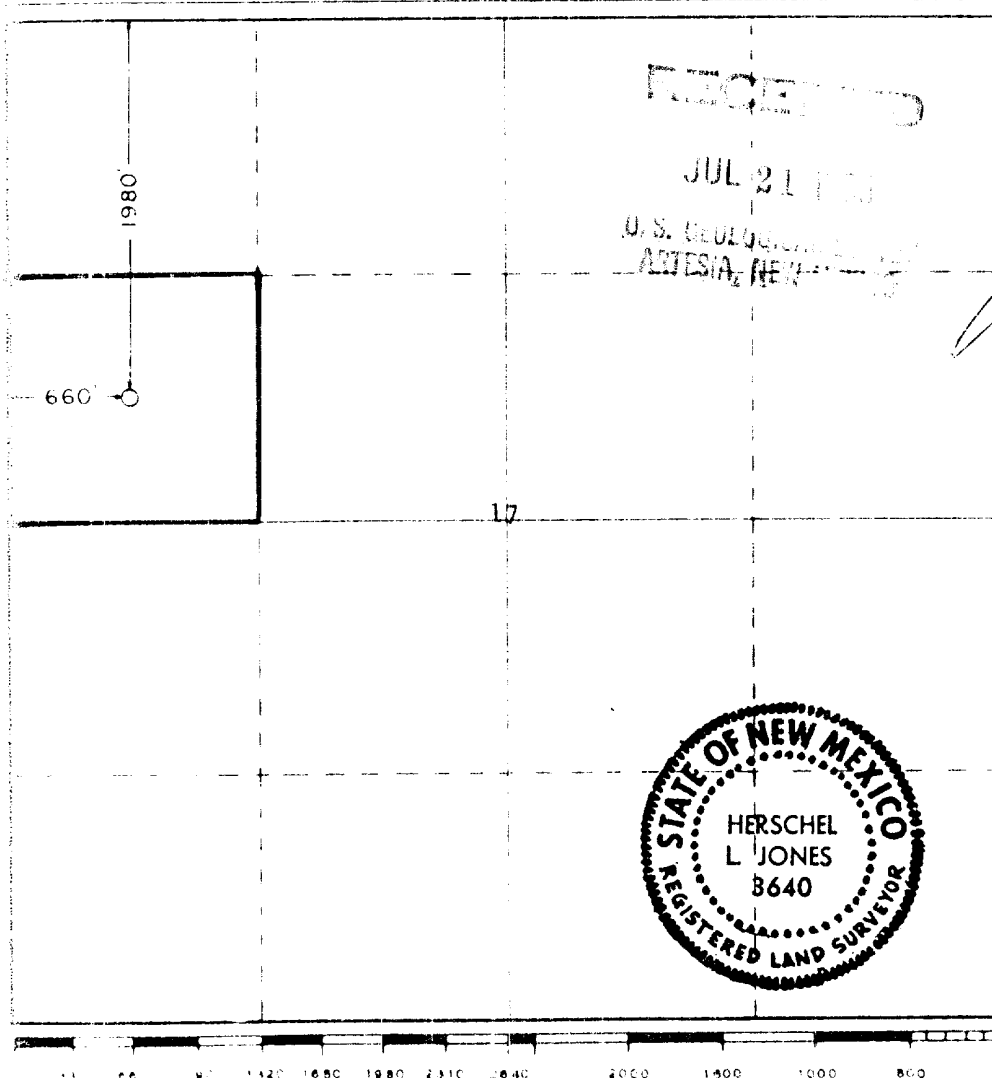
Lessee ANADARKO PRODUCTION COMPANY			Lease Ballard GSA Unit Tract 20			Well No. 12		
Section 17	Township 18 South	Range 29 East	County Eddy					
Date of Completion of Well: 1980 Direction of the North Arrow: North True Dist. 660 Direction of the East Arrow: East								
Producing Formation Grayburg			Pool Loco Hills - Queen			Lease No. 3517		
			Grayburg - San Andres			40		

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 (date 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.

Jerry E. Buckles
Jerry E. Buckles

Area Superintendent

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 Surveyor

Herschel L. Jones
Herschel L. Jones

3640



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

July 30, 1980

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

Gentlemen:

<p>ANADARKO PRODUCTION COMPANY Ballard Grayburg San Andres Unit No. 12 1980 FNL 660 FWL Sec. 17 T.18S R.29E Eddy County Lease No. NM-14843</p>
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<p>Above Data Required on Well Sign</p>

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 2,800 feet to test the Grayburg 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. 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

Anadarko
PRODUCTION COMPANY

A
Panhandle
Eastern
Company

P. O. Box 67 • Loco Hills, New Mexico 88255 • (505) 677-2411

July 16, 1980

United States Geological Survey
P. O. Drawer U
Artesia, New Mexico 88210

RECEIVED

JUL 21 1980

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Gentlemen:

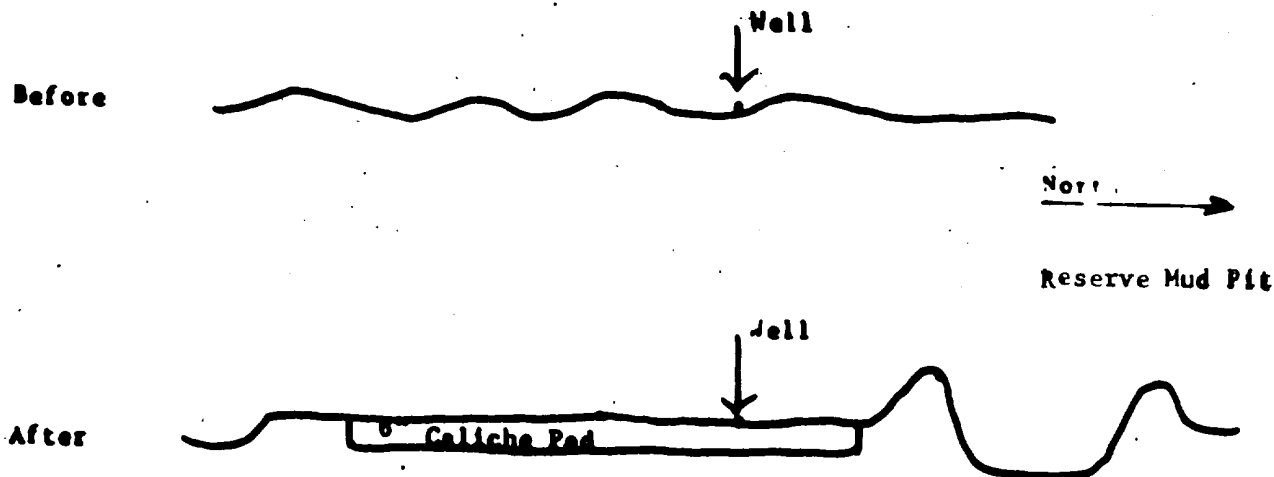
Following is the "Surface Use and Operation Plan" for the drilling of Anadarko Production Company's Ballard Grayburg San Andres Unit Tract No. 20, Well No. 12 located 1980' FNL & 660' FWL Sec. 17, T18S, R29E, Eddy County, New Mexico.

1. Existing Roads - A small scale map is attached (Exhibit #1). It shows the location of this well in relation to Loco Hills, N. M. Townsite.
A larger scale map (Exhibit #2) shows State Highway #360 and County Road #139 in blue. The existing caliche lease roads are shown in orange. The nearest caliche road is now located approximately 900' NE of this drill site.
2. Planned Access Roads - A 12' wide caliche road is to be built between this drill site and an existing caliche road which is approximately 900' Northeast. This new road is shown as a dashed green line on Exhibit #2.
There will be no fence to cut or cattleguard to set.
3. Location of Existing Wells - All existing wells on lease are indicated on enclosed map. There are no exploratory wells being drilled within a two mile radius.
4. Location of Tank Batteries, Production Facilities and Lines - There is a central tank battery located on the Ballard Unit in the SW/4 of NW/4 of Section 8, T18S, R29E. All production on the Ballard Unit is piped to this central tank battery. Existing lease lines to central tank battery are shown in black; proposed line to location is dashed blue on Exhibit #2.
5. Location & Type of Water Supply - Fresh water to be used at drilling site will be supplied by I & W Trucking or Jim's Water Service and will be hauled from our Ballard Unit Water Plant and from Double Eagle Water Company taps in the Loco Hills area.
6. Source of Construction Material - Primary source of caliche will be the reserve pit area of the new drilling location. Alternate source will be an existing caliche pit located in the SW/4 of SW/4 of Section 8, T18S, R29E.
7. Methods for Handling Waste Disposal - Enclosed drill site plat (Exhibit #3) indicates location of drilling pits, reserve pit and rubbish pit. After sufficient time has elapsed to allow drilling fluids to dry, all pits will be closed and leveled. The rubbish pit adjacent to drilling site will be deep enough to contain all rubbish when covered and leveled.

8. Ancillary Facilities - There are no camps or airstrips planned.

9. Well Site Layout - Well site (Exhibit #4) has been staked and is indicated by red area on enclosed maps (Exhibits #1 & #2). Drilling site is a sandy area covered by sparse native vegetation. Drilling pad will be 6" of caliche measuring 130' East, 120' West, 30' North and 110' South. Drilling pad will blend with terrain since the topography is relatively flat.

Cross Section - Before & After - is shown below:



10. Plans for Restoration of Surface - Commercial Well

Reshaped Topography - Rubbish will be buried upon completion of drilling operations. All future rubbish will be removed by the individual generating same.

Caliche Pad - Caliche drilling pad will remain intact until well is abandoned.

Road - Road will remain intact as long as there are producing wells in this area.

Timetable - The well should produce for several years.

Plans for Restoration of Surface - Plugged and Abandoned Well

Surface will be restored in accordance with all regulations in effect at the time of abandonment.

11. Other Information - Topography is generally flat, surrounded by small sand dunes.

Soil Characteristics - Unconsolidated sand.

Flora - Sparse grass and weeds.

Fauna - Rabbits, rats, mice, birds and snakes.

Other Surface Use Activities - Leased grazing land.

Surface Ownership - Federal land.

Water Wells - None.

Lakes, Streams and Ponds - There is a rancher's water tank located approximately 1 1/2 miles Southeast of this location.

Dwellings - None.

Other Facilities - None.

Archaeological Sites - None.

Historical Sites - None.

Cultural Sites - None.

12. Operator's Representative - Charles E. Copeland, Field Foreman for Anadarko

- Office Phone - 677-2411

Home Phone - 396-4541

13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling 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 Sweatt Construction Company or Jabo Rowland Construction Company and their contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

July 17, 1980

Date


Jerry E. Buckles

Area Supervisor
Title

DATA SHEET

This data sheet is provided in reference to the attached "Application for Permit to Drill" Anadarko's Ballard Grayburg SAU Tract No. 20, Well No. 12

1. Location: 1980' FNL & 660' FWL Sec. 17, T18S, R29E, Eddy County, New Mexico
2. Elevation: 3517' 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: 2800'
6. Tops of Important Geological Markers:

T. Salt - 350'	7-Rivers - 1275'
B. Salt - 780'	Queen - - - 1890'
Tansill - 835'	Grayburg - - 2250'
Yates - - 920'	San Andres - 2685'
7. Estimated Depth of Anticipated Water, Oil or Gas:

Oil - 2400' - 2685'
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" - 350'-150 sx Class H w/2% CaCL
4-1/2" - 2800'-250 sx Class C 50/50 Posmix w/6# Salt/sx & 2% gel
10. Specifications for Pressure Control Equipment:

This Warton Rig is equipped with a Series 900 BOP with 4" Blind Rams, kill line and choke manifold. Koomey Hydraulic Controls and Accumulator with remote controls. When nipping up, test BOP and Choke 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 conducted.
 - b. Coring: No coring is planned.
 - c. Logging: Run Gamma Ray/Compensated Neutron Log after 4 1/2" casing is set.
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 during August, 1980. Approximately 6 days required to drill the well and 2 weeks for completion.
15. Other Facets:

None

Existing Flow Lines

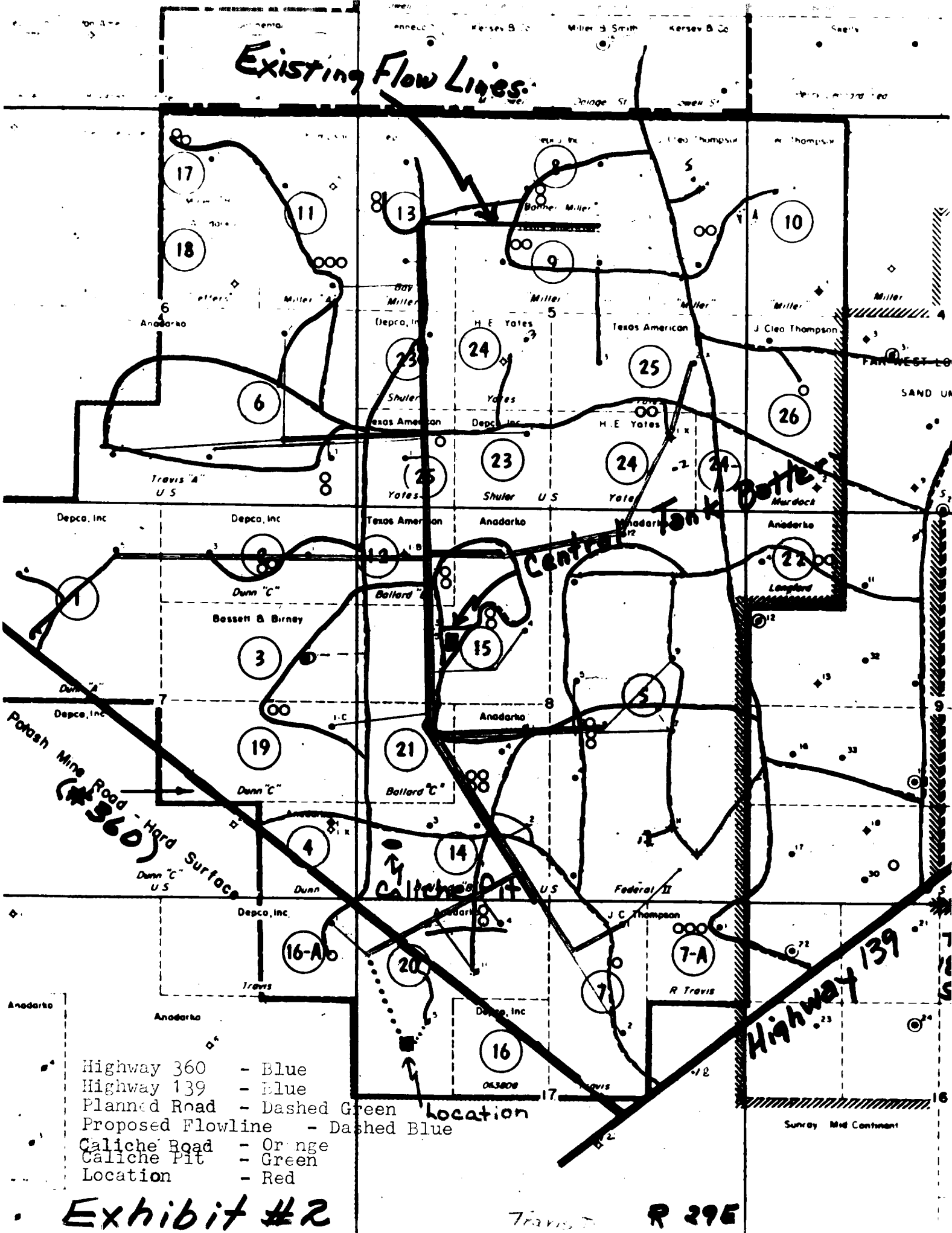


Exhibit #2

R 29E

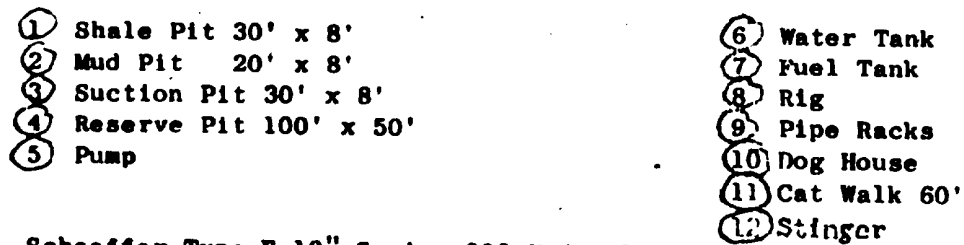


Exhibit # 3