

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

RECEIVED BY

MAR 14 1985

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

30-015-25085  
5. LEASE DESIGNATION AND SERIAL NO.

LC 058581

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Ballard Grayburg  
San Andres Unit

8. FARM OR LEASE NAME

Tract No. 10

9. WELL NO.

9

10. FIELD AND POOL, OR WILDCAT

Loco Hills-Queen-G-SA

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

4 - 18S - 29E

12. COUNTY OR PARISH 13. STATE

Eddy

New Mexico

OIL WELL ☐ GAS WELL ☐ OTHER ☒ X-Water Injection SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Anadarko Production Company

3. ADDRESS OF OPERATOR

P. O. Drawer 130, Artesia, New Mexico 88210

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

At surface

2205' FNL &amp; 1310' FWL

At proposed prod. zone Same

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

Approximately 7 miles Southwest of Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

10'

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

750'

16. NO. OF ACRES IN LEASE

2600

19. PROPOSED DEPTH

2880'

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3536.1' GL

22. APPROX. DATE WORK WILL START\*

March 15, 1985

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#	300'	250 sx circulated
7-7/8"	4-1/2"	10.5#	2880'	750 sx circulated

1. Rig up rotary tools.
2. Drill 12-1/4" hole to approx. 300'; set & circulate or readymix cement to surface on 8-5/8" casing. Install & test Series 900 Double Ram Hydraulic Blowout Preventor.
3. Drill 7-7/8" hole to T D (approx 2880'); possibly run Open Hole Logs.
4. Set & circulate cement on 4 1/2" casing from T D to surface.
5. Perforate and acidize Grayburg Zone.
6. Equip braidenhead and casinghead with pipe & valves brought to the surface (valves open) as an "attention getting device" of possible tubing, casing or packer leaks.
7. Run 2-3/8" SALTA (internally plastic lined) tubing with 4 1/2" injection packer.
8. Set packer approx 50' above top perfs; pressure test casing to NMOCD specifications; unset packer, circulate packer fluid & reset packer.
9. Hook up wellhead for water injection.
10. Commence water injection in accordance with NMOCD Order #R-7000, Case #7572 dated 6-11-82.

**Note:** A hearing is scheduled in Santa Fe to obtain approval of this unorthodox location and amend NMOCD Order #R-7000, Case #7572 to include this well - BCSAU Tract No. 10, Well No. 9.

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

March 1, 1985

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

AREA MANAGER  
CARLSBAD RESOURCE AREA

DATE

3-13-85

CONDITIONS OF APPROVAL, IF ANY:

Subject to  
Like Approval  
by State

\*See Instructions On Reverse Side

APPROVAL SUBJECT TO -  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>ANADARKO PRODUCTION COMPANY</b>			Lease <b>Ballard Grayburg SA Unit Tr. 10</b>		Well No. <b>9</b>
Unit Letter <b>E</b>	Section <b>4</b>	Township <b>18 South</b>	Range <b>29 East</b>	County <b>Eddy</b>	
Actual Footage Location of Well:					
<b>2205.0</b> feet from the North line and		<b>1310</b> feet from the West line			
Ground Level Elev. <b>5536.1</b>	Producing Formation <b>Grayburg</b>	Foot <b>Loco Hills-Queen-Grayburg-San Anders</b>		Dedicated Acreage: <b>40</b>	Acres

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 Commission.

**CERTIFICATION**

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

Name *Jerry E. Buckles*  
**Jerry E. Buckles**

Position  
**Area Supervisor**

Company  
**Anadarko Production**

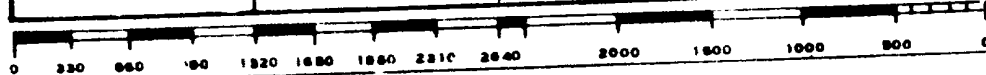
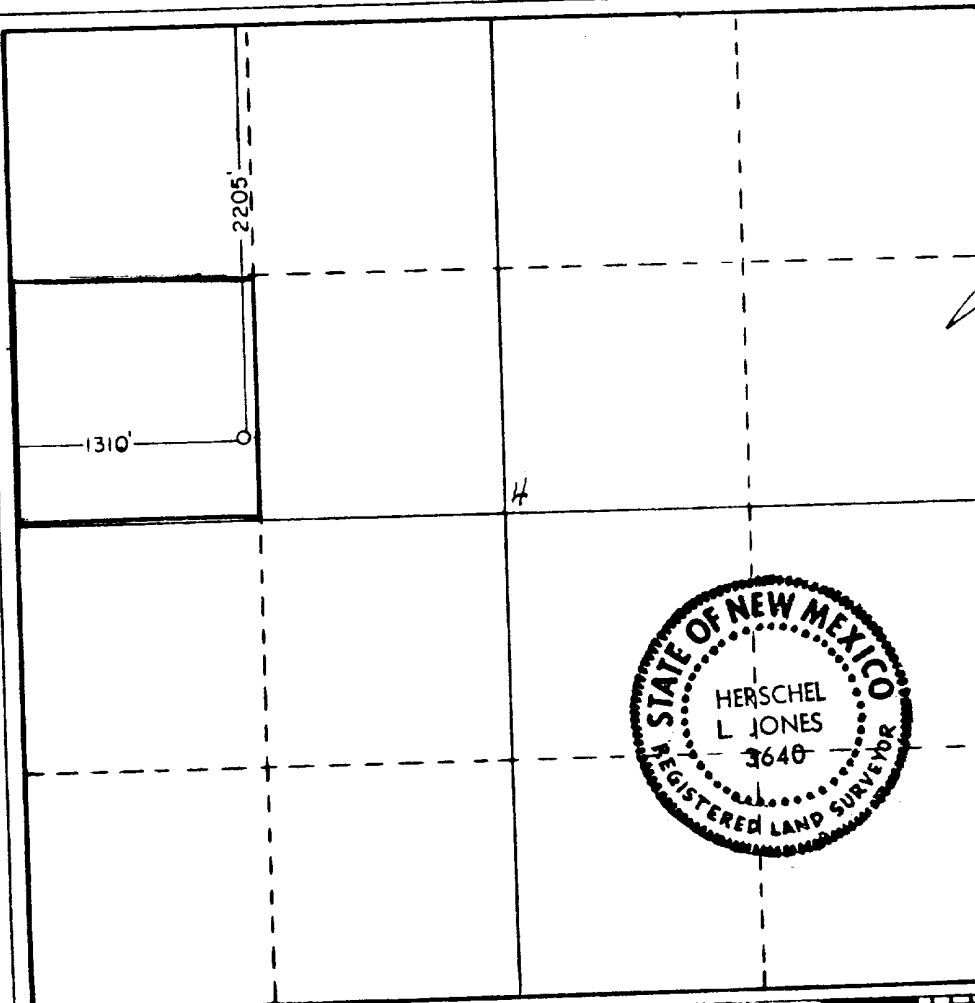
Date

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.

Date Surveyed  
**2/18/85**

Registered Professional Engineer and/or Land Surveyor

Certificate No.  
**3640**



## DATA SHEET

This data sheet is provided in reference to the attached "Application for Permit to Drill: Anadarko's Gallard Grayburg San Andres Unit Tract No. 10, Well No. 9

1. Location: 2205' FNL & 1310' FWL Sec. 4, T18S, R29E, Eddy County, New Mexico

2. Elevation: 3536.1' GL

3. Geological Name of Surface Formation: Triassic Doakum (Santa Rosa)

4. Type of Drilling Tools to be utilized: Rotary

5. Proposed Drilling Depth: 2880'

6. Tops of Important Geological Markers:

T. Salt - -	330'	7-Rivers - -	1300'
B. Salt - -	800'	Queen - - -	1980'
Tansill - -	825'	Grayburg - -	2390'
Yates - - -	900'	San Andres -	2810'

7. Estimated Depth of Anticipated Water, Oil or Gas:

Oil: - - 2400 - 2800

8. Casing Program:

8-5/8" - 24.0# K-55, or J-55 - New  
4-1/2" - 10.5# K-55 or J-55 - New

9. Setting Depth of Casing:

8-5/8" - 300' - approx. 250 sx cement  
4-1/2" - 2880' - approx. 750 sx cement

10. Specifications for Pressure Control Equipment: (See attached Schematic)

This rig will have a Series 900 BOP with 4 1/2" Blind Rams, kill line and choke manifold; Koomey Hydraulic controls & accumulator with remote controls. When nipping up, test BOP and Choke to 1000 psi. Operate BOP equipment once a day, or as directed by Company Representative.

11. Mud Program:

Spud and drill with fresh water native mud to a depth of approx. 300'. Drill out from under surface casing with 10# brine water to within 50' of T D while maintaining a Ph of 10. At this point paper & gel will be used to clean hole prior to running O. H. Logs.

12. Testing, Logging & Coring Program:

- a. Testing: No drill stem testing is scheduled.
- b. Coring: No coring is planned.
- c. Logging: Open Hole Logs will be run prior to running 4 1/2" casing.

13. Potential Hazards:

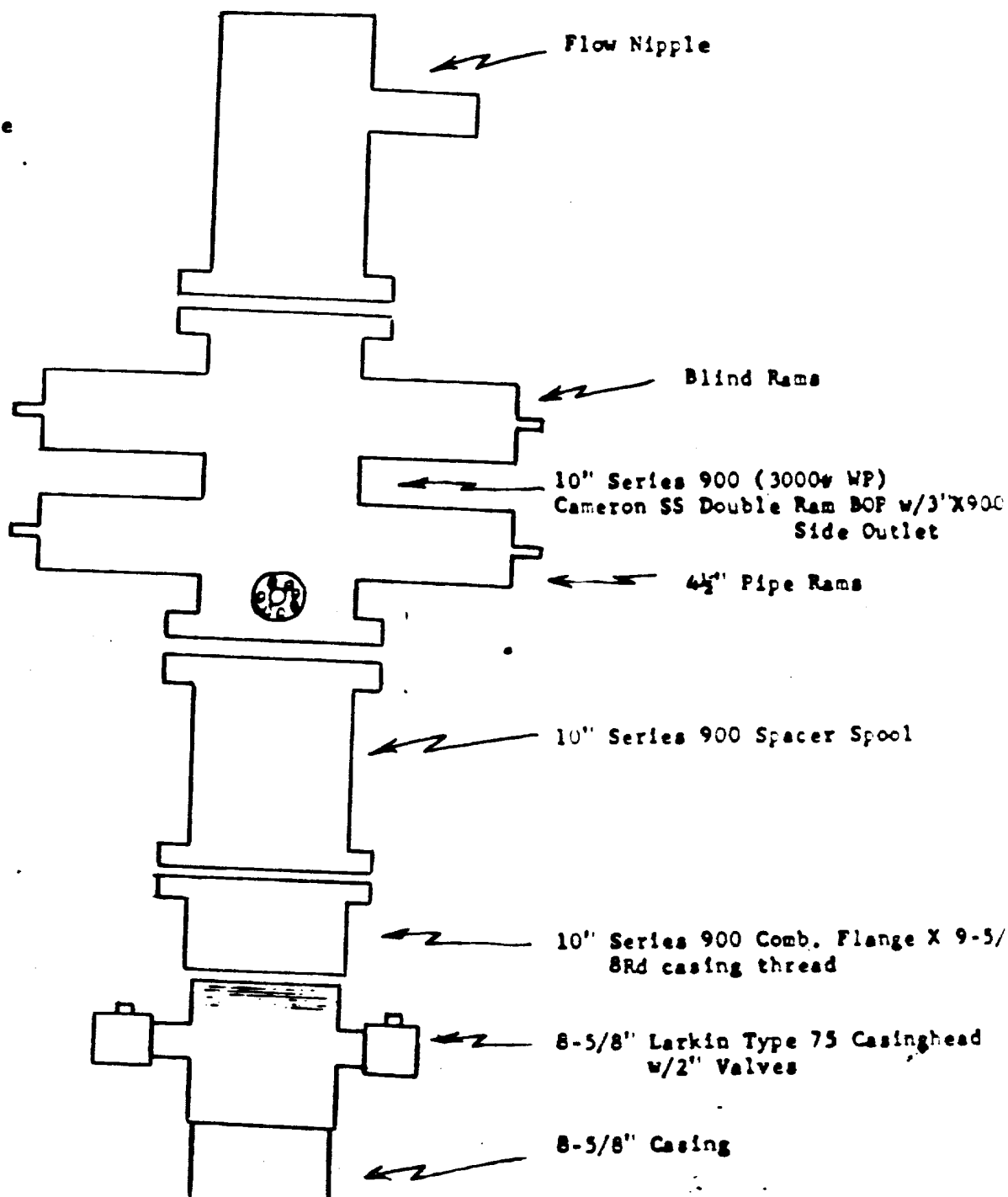
None are expected. Above described BOP should take care of any blowout. Numerous wells have been drilled in this area without problems.

14. Anticipated Starting Date & Duration:

Plan to begin drilling operations about Mar. 15, 1985; approx 6 days are required to drill the well & 2 weeks for completion.

15. Other Facets:

Closing Unit  
4 Stage Payne



B O P Schematic



September 28, 1984

Bureau of Land Management  
P. O. Box 1778  
Carlsbad, New Mexico 88220

Gentlemen:

Following is the "Surface Use and Operation Plan" for the drilling of Anadarko Production Company's Ballard Grayburg San Andres Unit Tract No. 10, Well No. 9 located 2205' FNL & 1310' FWL, Sec. 4, T18S, R29E, Eddy County, New Mexico.

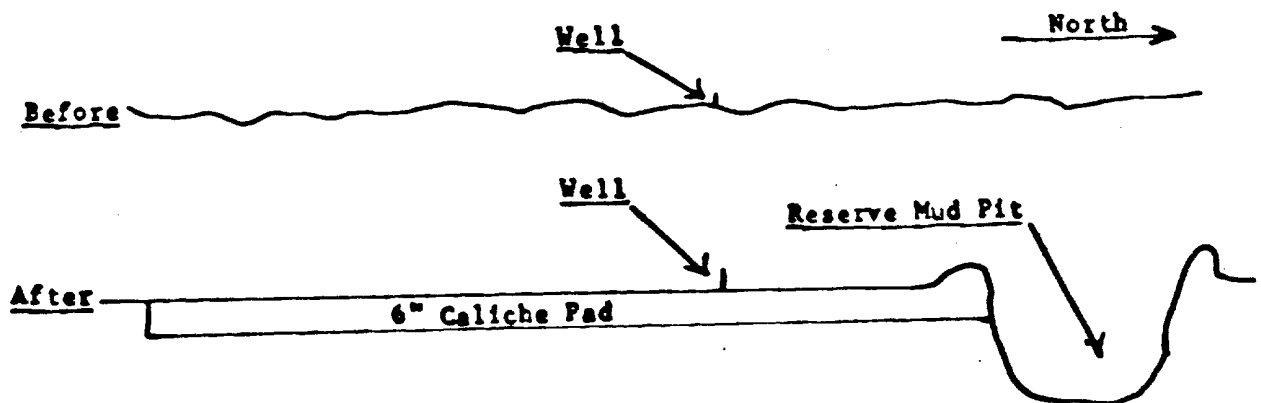
1. Existing Roads - A small scale map is attached (Exhibit #1). It shows the location of this well in relation to Loco Hills, New Mexico Townsite. A larger scale map (Exhibit #2) shows State Highway #360 and County Road #217 in blue. The existing caliche roads are shown in orange. The nearest caliche road is now located approximately 750' West 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 750' West. This new road is shown as a dashed orange 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 2 mile radius.
4. Location of Tank Batteries, Production Facilities and Lines - The Central Tank Battery and Water Injection Plant are located in the SW/4 of NW/4 of Sec. 8, T18S, R29E as shown on Exhibit #2. Existing water injection lines are shown in solid blue and proposed injection lines are shown in dashed blue on Exhibit #2.
5. Location & Type of Water Supply - Fresh water to be used at this drilling site will be supplied by I & W, Inc. or Broom Corporation and will be hauled from our Ballard Water Plant and from City of Carlsbad taps in the Loco Hills area. Brine water will be hauled by I & W, Inc. or Broom Corporation from B & E, Inc. located on County Road #217 approximately 10 miles Southwest of Loco Hills.
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 SW/4 Sec. 8, T18S, R29E Eddy County, New Mexico which belongs to the U. S. Government or an existing caliche pit located in the NW/4 of Section 9 and is owned by Anadarko. Both existing caliche pits are shown in green on Exhibit #2.
7. Methods of Handling Waste Disposal - Enclosed drill site plan (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 #3) 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 100' East, 110' West, 80' North & 100' 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 Wells:  
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 - The road will remain intact as long as there is production on the lease.  
Timetable - This well is expected to produce for several years.

Plans for Restoration of Surface - Plugged & Abandoned Wells:  
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, mice, rats, birds & snakes.  
Other Surface Use Activities - leased grazing land.  
Surface Ownership - Bogle Farms, Inc.  
Water Wells - none.  
Lakes, Streams & Ponds - none  
Dwellings - none.  
Archaeological Sites - None; an archaeological survey of this proposed location, road and water injection line was conducted by NMAS. Clearance for this project was suggested by NMAS.  
Historical Sites - none.  
Cultural Sites - none.

12. Operator's Representative -

Truman D. Jones - - - - Office Phone - 748-3368  
Home Phone - - 677-3215

Charles E. Copeland - - - Office Phone - 748-3368  
Home Phone - - 746-6074

Michael L. Braswell - - - Office Phone - - 748-3368  
Home Phone - - - 365-2200

Jerry E. Buckles - - - - Office Phone - - 748-3368  
Home Phone - - - 746-9473

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.

September 28, 1984  
Date

Michael L. Braswell  
Michael L. Braswell

Field Foreman  
Title



March 1, 1985

Mr. Charles S. Dahlen or Mr. Bob Pitschke  
Bureau of Land Management  
P. O. Box 1778  
Carlsbad, New Mexico 88220

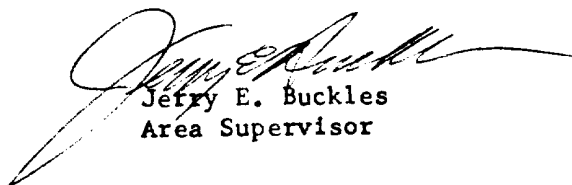
Re: Anadarko's  
BGSAU Tract No. 10, Well No. 9  
Loc. 2205' FNL & 1310' FWL  
Sec. 4, T18S, R29E, Eddy County, New Mexico

Dear Sir:

Bogle Farms, Inc. is the surface owner of the above captioned location. Arrangements were made with Mr. Millard Derrick (Ranch Foreman for Bogle Farms, Inc.) for the drilling of this location. Upon final abandonment, this location will be cleaned, leveled and all pits backfilled.

No other restoration stipulations were required by Mr. Derrick.

Yours very truly,

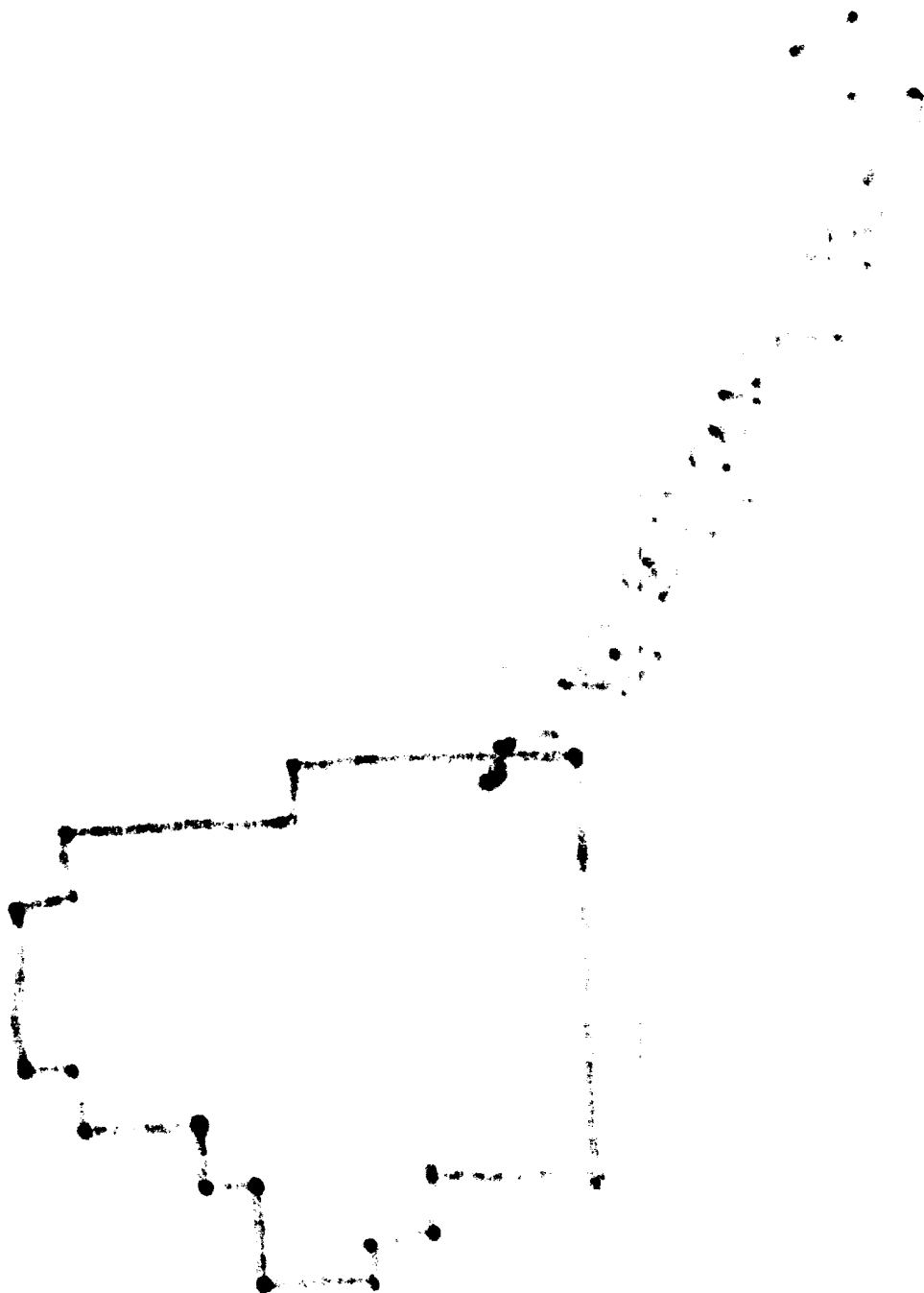


Jerry E. Buckles  
Area Supervisor

JEB/rk



EX 6161 1



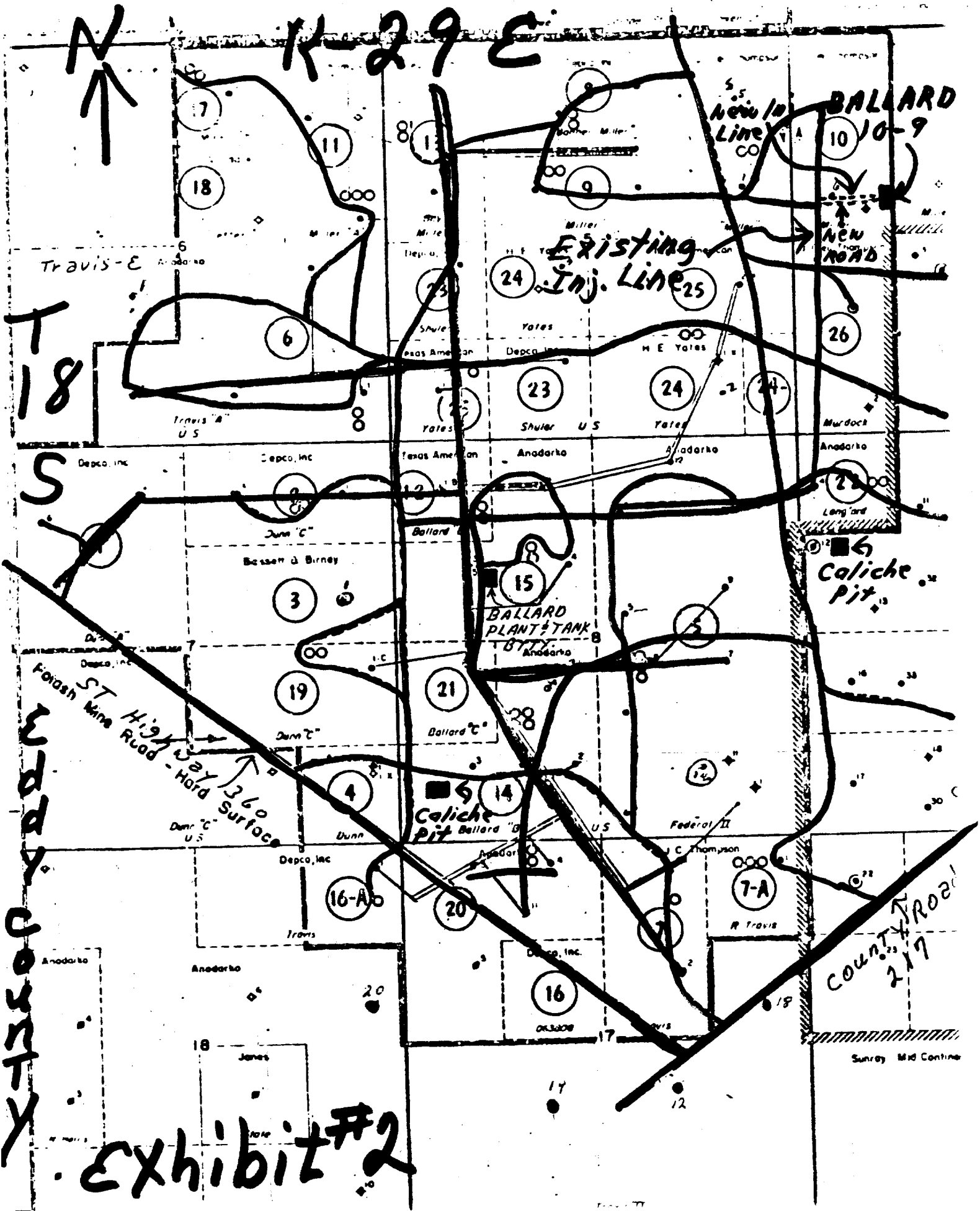
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K-29E

T  
18

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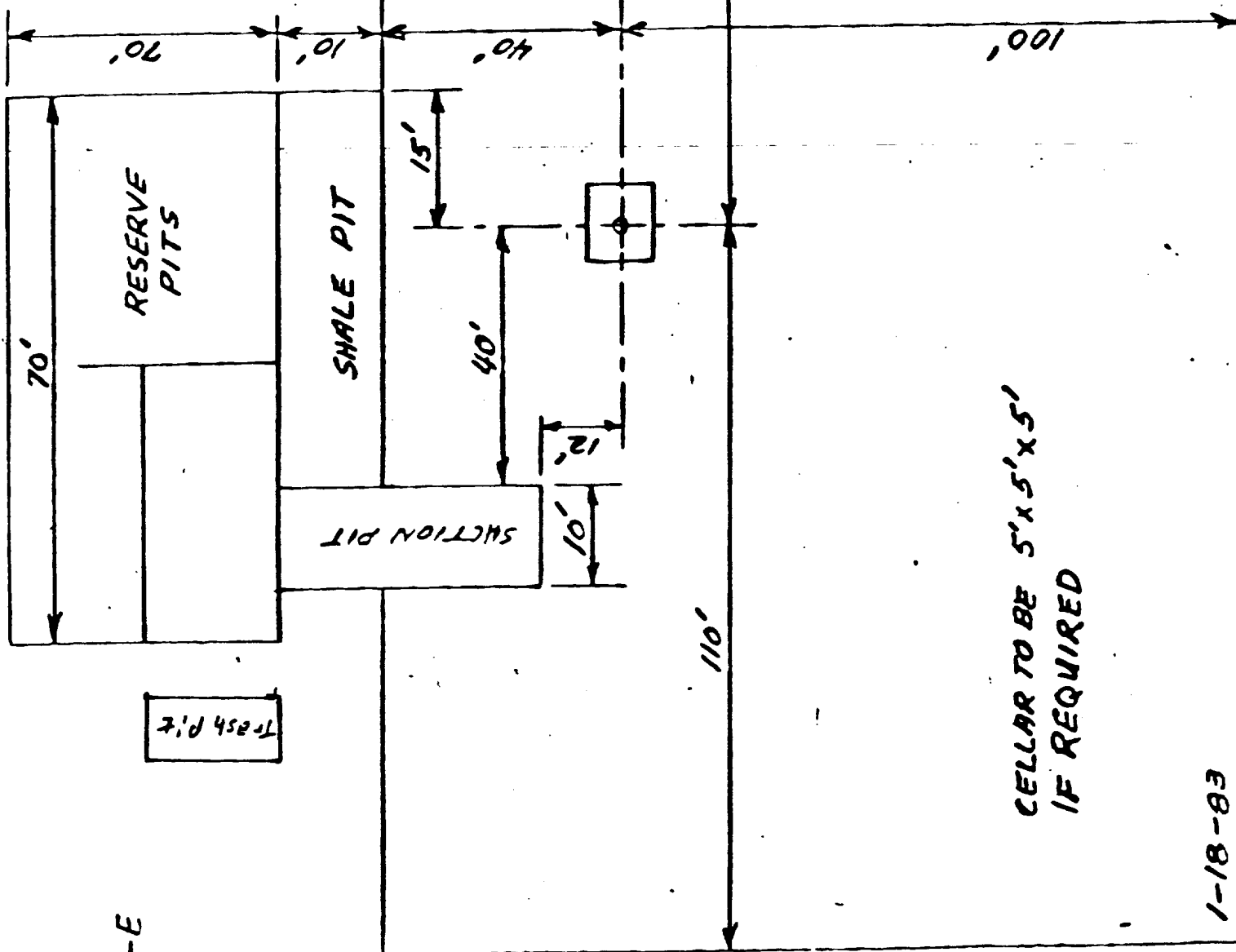
Eddy County

Exhibit #2





A diagram of a rectangular frame. The horizontal member is labeled "STINGER" with an arrow pointing to it. The vertical member has a dimension of 20' indicated by a vertical double-headed arrow. The horizontal member has a dimension of 20' indicated by a horizontal double-headed arrow.



CELLAR TO BE 5'X5'X5'  
IF REQUIRED

1-18-83

Exhibit #3