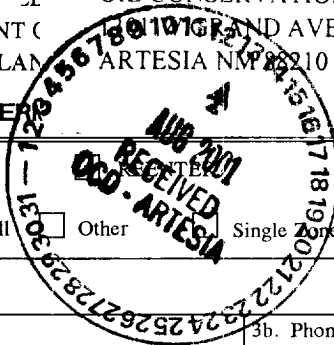


U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
OIL CONSERVATION DIVISION  
ARTESIA NEW MEXICO

FORM APPROVED  
OMB NO. 1004-0136  
Expires: November 30, 2000

APPLICATION FOR PERMIT



1a. Type of Work <input checked="" type="checkbox"/> DRILL		5. Lease Serial No. NM LC-028936-I	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Anadarko Petroleum Corp.		7. Unit or CA Agreement Name and No.	
3a. Address P.O. Box 2497, Midland, TX 79702		8. Lease Name and Well No. PAINT '29' FEDERAL NO. 1	
3b. Phone No. (include area code) 915/682-1666		9. API Well No. 30-015-31955	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1980' FNL & 660' FWL, UNIT LETTER E At proposed prod. zone (SAME)		10. Field and Pool, or Exploratory LOCO HILLS PADDOCK	
14. Distance in miles and direction from nearest town or post office* 1 MILE SE FROM LOCO HILLS		11. Sec., T., R., M., or Blk. and Survey or Area SEC. 29, T-17-S, R-30-E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 660' (660')	16. No. of Acres in lease 40	17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 660'	19. Proposed Depth 5000'	20. BLM/BIA Bond No. on file 153571	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3608' GL	22. Approximate date work will start* AUGUST 17, 2001	23. Estimated duration 30 DAYS	

24. Attachments

**Deswell Controlled Water Basin**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan  | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) GEORGE R.S. BUEHLER	Date 6/15/01
Title SENIOR STAFF DRILLING ENGINEER		

Approved by (Signature) /s/ LESLIE A. THEISS	Name (Printed/Typed) /s/ LESLIE A. THEISS	Date AUG 09 2001
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

**APPROVAL FOR 1 YEAR**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on Reverse)

DECLARED WATER BASIN  
CEMENT BEHIND THE 8 5/8" WITNESS  
CASING MUST BE CIRCULATED

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

# NOTICE OF STAKING

(NOT TO BE USED IN PLACE OF  
Application of Permit to Drill Form 3160-3)

6. Lease Number

NM LC - 028936 - I

1. Oil Well ☒ Gas Well ☐ Other  
(Specify)

7. If Indian, Alottee or  
Tribe Name

2. Name of Operator  
Anadarko Petroleum Corporation

8. Unit Agreement Name

3. Name of Specific Contact Person:  
George Buehler

9. Farm or Lease Name  
Paint "29" Federal

4. Address & Phone No. of Operator or Agent  
P.O. Box 2497  
Midland, Texas 79702 915-682-1666

10. Well No.  
1

5. Surface Location of Well  
1980' FNL & 660' FWL  
Unit Letter E

11. Field or Wildcat Name  
Paddock

12. Sec., T., R., M., Blk  
and Survey or Area  
Sec. 29 T-17-S, R-30E

15. Formation Objective (s)  
Paddock

17. Estimated Well Depth  
5,000'

13. County, Parish  
Eddy

14. State  
New Mexico

17. Additional Information (as appropriate; shall include surface owner's name,  
address and, if known, telephone number)

18. Signed George Buehler Title Sr. Staff Drlg. Eng. Date June 8, 2001

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

- 1) H<sub>2</sub>S Potential
- 2) Cultural Resources (Archeology)
- 3) Federal Right of Way or Special Use Permit

## DRILLING PROGRAM

Attachment to Form 3160-3  
Anadarko Petroleum Corporation  
Paint '29' Federal #1  
1980' FNL & 660' FWL  
Section 29, T17S, R30E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Formations

Top of Salt Section	475'
Base of Salt Section	1150'
Yates	1150'
Queen	2230'
San Andres	3190'
Paddock	4520'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

Water: None Anticipated  
Oil: 2230', 4520'  
Gas: Very Little Anticipated

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Any surface fresh water sands will be protected by setting 8-5/8" casing at 420' and circulating cement back to surface. The Paddock will be isolated with 5-1/2" casing to total depth (5000'±) and cemented with cement back into the 8-5/8" surface casing.

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
12-1/4"	0' - 420'	8-5/8"	24#	K-55	ST&C
7-7/8"	0' - 5000'	5-1/2"	15.5#	K-55	LT&C

### Cementing Program

420' 8-5/8" Surface Casing: Cement to surface: 150 sxs Class C containing 4% Gel, 2% Calcium Chloride followed by 100 sxs Class C containing 2% Calcium Chloride.

5000' 5 1/2" Production Casing

Lead Slurry: Cement Lead to cover from 1500' up to surface using 35:65 Poz C w/6% gel, 5 pps salt, and 0.25 pps celloflake.

Tail Slurry: Cement tail to cover from TD up to 1500' using 50:50 Poz C with 2% Gel, 0.3% FLAC, 0.2% TIC, 0.25 pps Cello-Flake, 1% B28.

### 5. Minimum Specifications for Pressure Control

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000# WP) preventor. This unit will be hydraulically operated. The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 8 5/8" casing shoe, the BOP will be function tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function tests will be documented on the daily driller's log. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having a 3000# WP rating.

### 6. Types and Characteristics of Proposed Mud System

This well will be drilled to total depth with fresh water, cut brine and starch mud systems. Depths are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity</u>	<u>Water Loss</u>
0' - 420'	Fresh water	8.3 - 8.8	28 - 36	No control
420' - 2200'	Brine	10.0 - 10.2	28 - 30	No control
2200' - TD	Salt Gel & Starch	10.0-10.3	30 - 34	< 20 cc

Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

7. Logging, Testing and Coring Program

- A. No drillstem tests are planned.
- B. The open hole electrical logging program will be:
  - 1. DLL/MSFL/GR (TD to 2000')  
Note: GR will be pulled to Ground Level
  - 2. DEN/NEU/CAL (TD to 2000')  
Note: Neutron log will be pulled to Ground Level

C. No coring program is planned.

D. No additional testing will be initiated subsequent to setting the 5-1/2" production casing.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are expected. The anticipated bottom hole temperature at total depth is 100 degrees and maximum bottom pressure is 2100 psia. No major lost circulation intervals have been encountered in adjacent wells. Small quantities of hydrogen sulfide gas are associated with the Queen, Grayburg and San Andres formations in this area. A hydrogen sulfide plan is attached.

10. Anticipated Starting Date and Duration of Operations

A cultural resources examination has been submitted by Geo-Marine, Inc. to the BLM office in Carlsbad, New Mexico.

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date for this well is approximately August 1, 2001. The drilling operation should require approximately 10 days. If the well is deemed productive, completion operations will require, at minimum, an additional 20 days for completion and testing.

## SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3  
Anadarko Petroleum Corporation  
Paint '29' Federal No. 1  
1980' FNL & 660' FWL  
Section 29, T17S, R3OE  
Eddy County, New Mexico

### 1. Existing Roads

- A. The well site and elevation plat for the proposed Paint '29' Federal No. 1 are reflected on Exhibit #2. The well was staked by John West Engineering of Hobbs, New Mexico.
- B. Approximately 0.15 miles of new road will be built from the existing road on Exhibit #3.
- C. From intersection of Eddy County 217 and NM 82 in Loco Hills, 1.0 miles west on NM 82. Southeast (left) on existing caliche lease road 0.5 miles. South (right) 0.25 miles on new lease road to Paint 29 Federal #1.

### 2. Proposed Access Road

Only 0.15miles of new road will be built.

### 3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed Paint '29' Federal No. 1.

### 4. Location of Existing and/or Proposed Facilities

- A. If the well is productive, a new tank battery will be built on the drilling pad.
- B. The tank battery will consist of one (1) 4' x 20' HT, two (2) 500 barrel steel tanks and one (1) 300 barrel fiberglass tank (Exhibit 5).
- C. The well will be operated by means of an electric motor.
- D. If the well is productive, rehabilitation plans are as follows:
  - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days of completion, weather permitting).
  - 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of water Supply

The Paint '29' Federal No. 1 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and trucked to location.

6. Source of Construction Materials

All caliche utilized for the drilling pad will be obtained from an existing BLM approved pit.

7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks or lined earthen pits and the reserve pit. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit roughly 150' x 100' x 5', or smaller, in size.
- C. The working pits and reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks, and trucked to disposal. Produced oil will be separated into steel stock tanks until sold.
- E. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- F. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed. The portion of the drilling pad used by the production equipment (pumping unit) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

8. Ancillary Facilities

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil, if any found, will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" compacted caliche.
- B. No permanent living facilities are planned, but a temporary trailer for the tool pusher, may be on location throughout drilling operations.
- C. The reserve pit and earthen pits will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

- A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location to its pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days after the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. The unused area of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

This well site is owned by the U.S.A. An agreement for surface damages will be reached with the BLM Field Inspector during the onsite meeting.

12. Other Information

- A. The area surrounding the well site is gypsiferous and supportive of desert scrub and grassland formation. The vegetation is moderately sparse with desert scrub.



B. No permanent water or water wells are within a 1 mile radius of this location.

C. A cultural resources examination has been submitted by Geo-Marine, Inc. to the BLM office in Carlsbad, New Mexico.

13. Lessee's and Operator's Representative

The Anadarko Petroleum Corporation representative responsible for ensuring compliance of the surface use plan is:

George Buehler  
Senior Staff Drilling Engineer  
(915) 682-1666 (office)

Anadarko Petroleum Corporation  
P. O. Box 2497  
Midland, TX 79702

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road, that I am familiar with the conditions that 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 Anadarko Petroleum Corporation and its contractors under which it is approved.

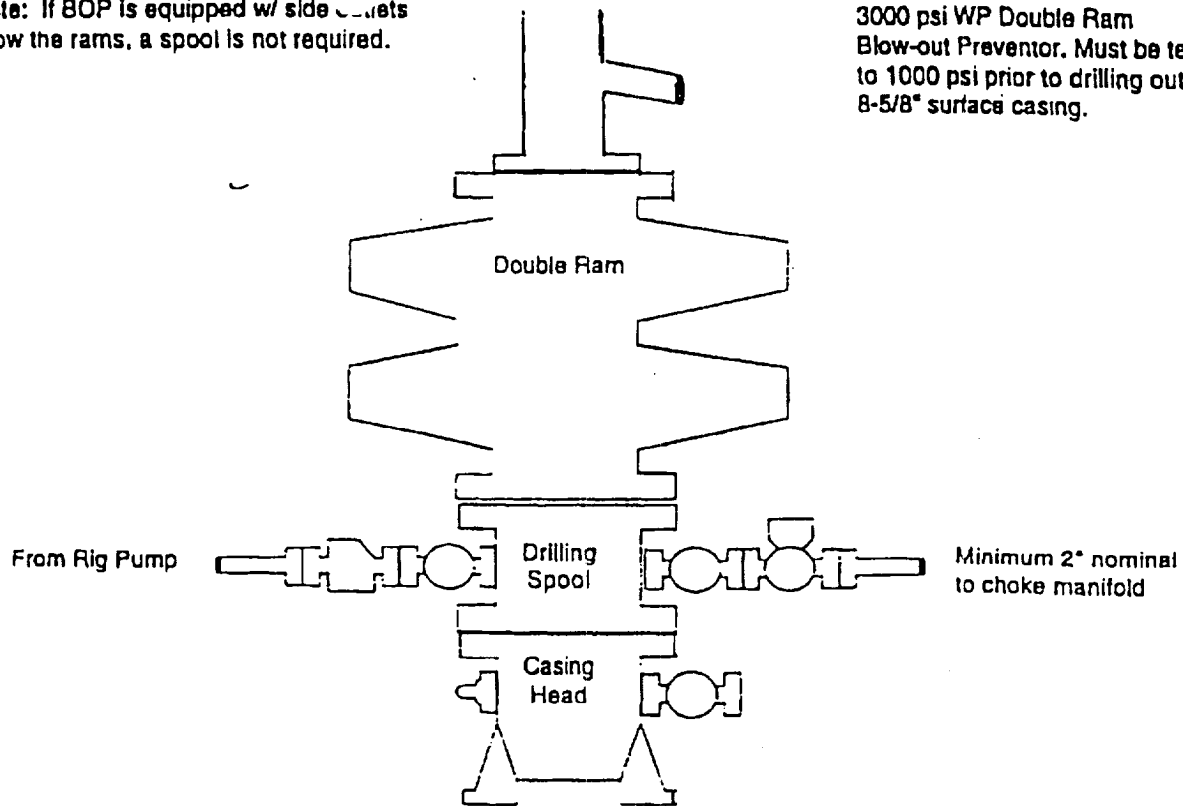
Signed:   
George Buehler – Senior Staff Drilling Engineer

Date: 6/15/01

## BOP Schematic

\*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram  
Blow-out Preventor. Must be tested  
to 1000 psi prior to drilling out  
8-5/8" surface casing.



## Choke Manifold Schematic

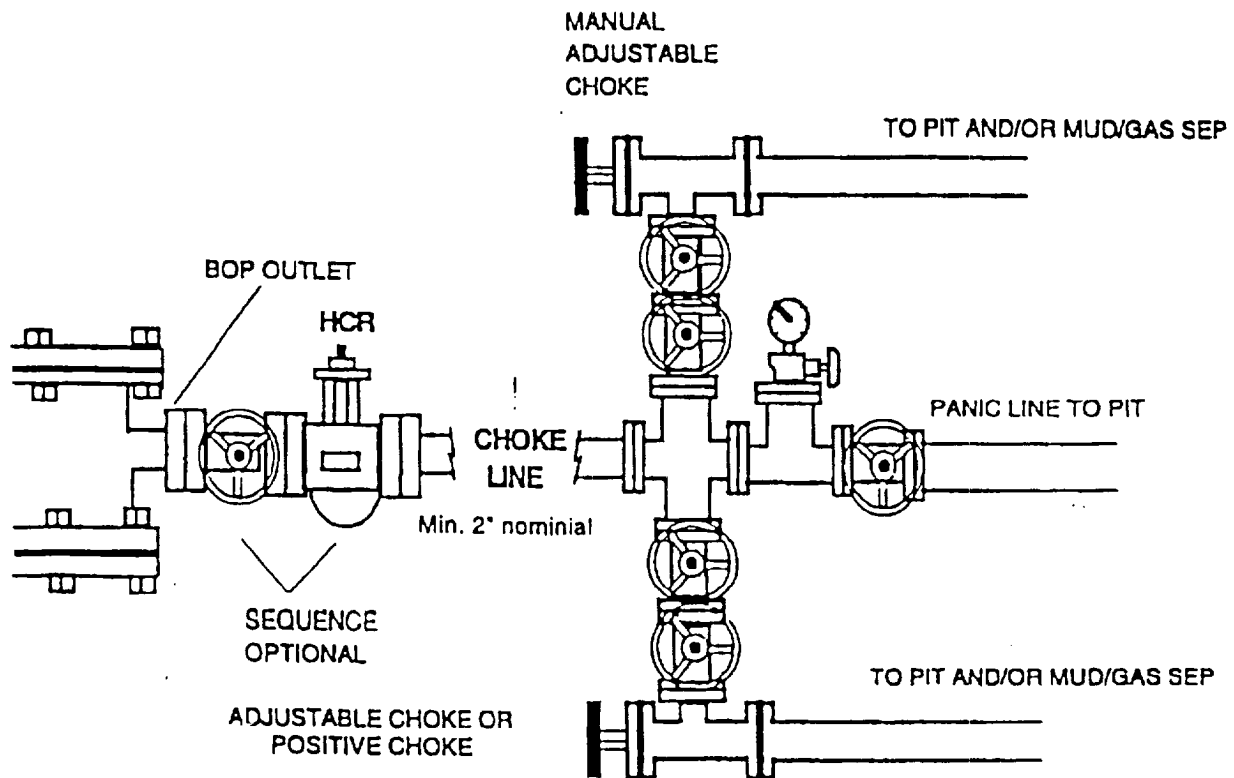


EXHIBIT 1  
Paint '29' Federal No. 1  
Eddy County, New Mexico  
Anadarko Petroleum Corporation

BOP & Choke Manifold

Attachment to Exhibit #1  
Attachment to Form 3160-3  
Anadarko Petroleum Corporation  
Paint '29' Federal No. 1  
1980' FNL & 660' FWL  
Section 29, T17S, R30E  
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
7. Will maintain a kelly cock attached to the kelly.
8. Hand wheels and wrenches will be properly installed and tested for safe operation.
9. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1984  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name PAINT "29" FEDERAL	Well Number 1
OGRD No. 000817	Operator Name ANADARKO PETROLEUM CORP.	Elevation 3608'

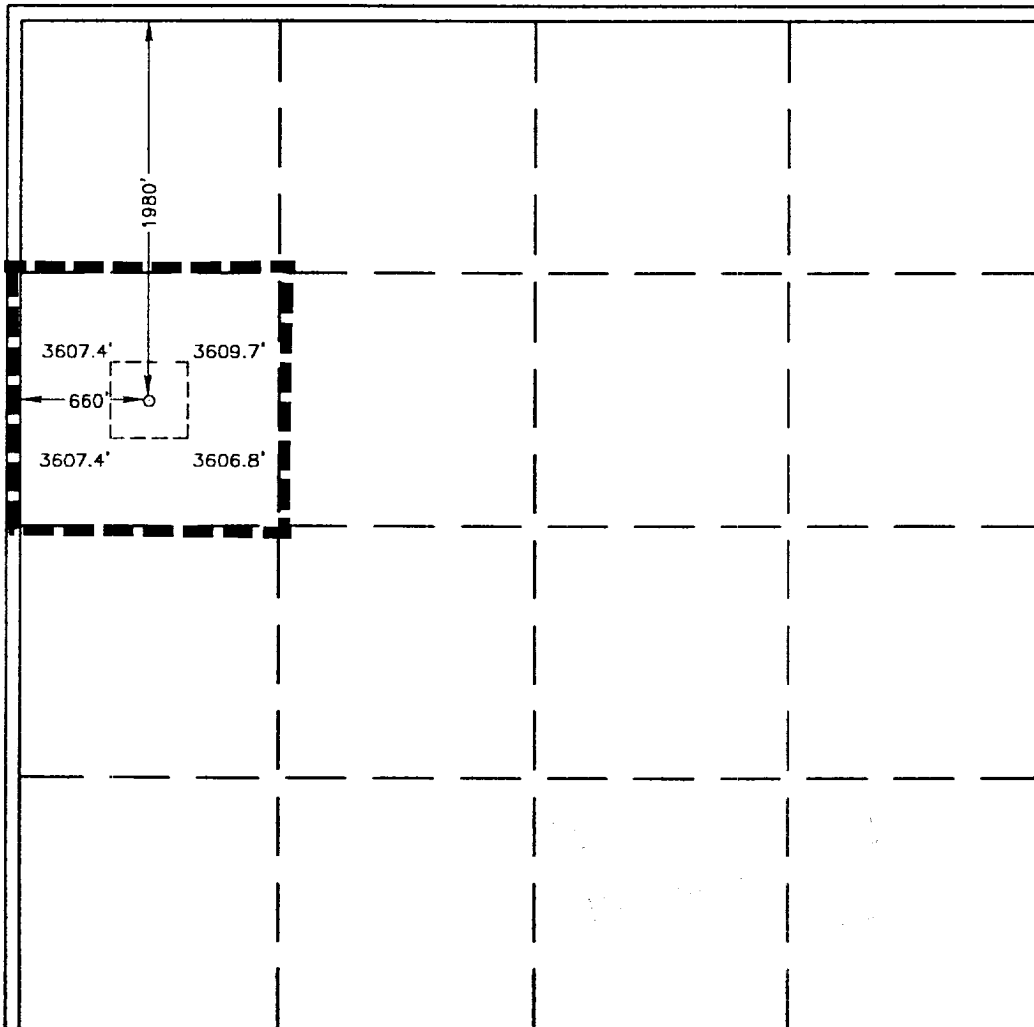
Surface Location

UL or lot No. E	Section 29	Township 17-S	Range 30-E	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 660	East/West line WEST	County EDDY
--------------------	---------------	------------------	---------------	---------	-----------------------	---------------------------	----------------------	------------------------	----------------

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

*George R.S. Buehler*  
Signature

George R.S. Buehler

Printed Name

Sr. Staff Drilling Engineer

Title

June 8, 2001

Date

SURVEYOR CERTIFICATION

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 belief.

MAY 30, 2001

Date Surveyed

AWB

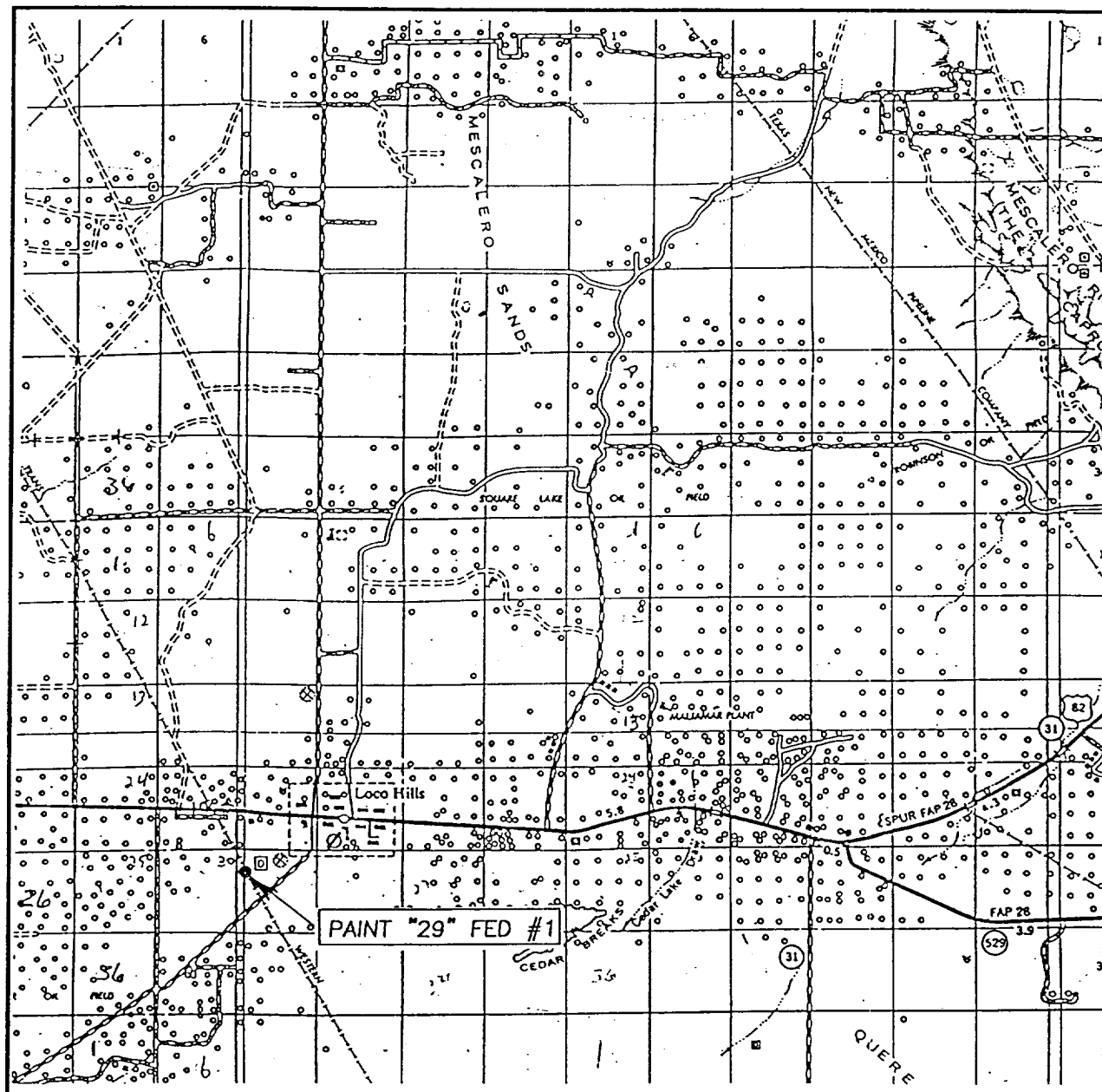
Signature & Seal of  
Professional Surveyor

*Ronald J. Edson* 6/05/01  
01-11-0695

Certificate No. RONALD J. EDSON 3239  
GARY EDSON 12641

# VICINITY MAP

Vicinity Map



SCALE: 1" = 2 MILES

SEC. 29 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FNL & 660' FWL

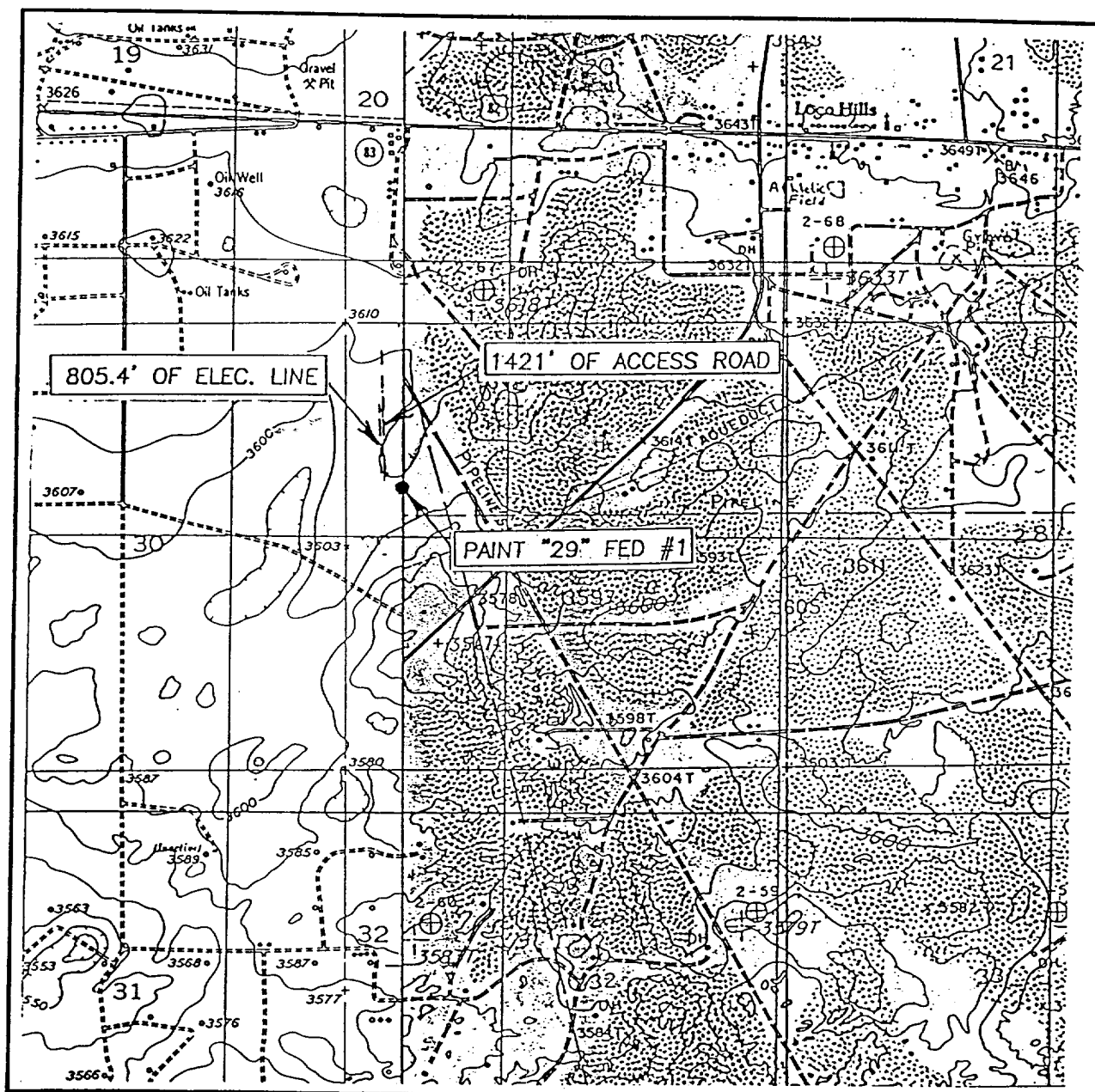
ELEVATION 3608'

OPERATOR ANADARKO PETROLEUM CORP.

LEASE PAINT "29" FEDERAL

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
 LOCO HILLS, N.M.  
 RED LAKE SE, N.M.

SEC. 29 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FNL & 660' FWL

ELEVATION 3608'

OPERATOR ANADARKO PETROLEUM CORP.

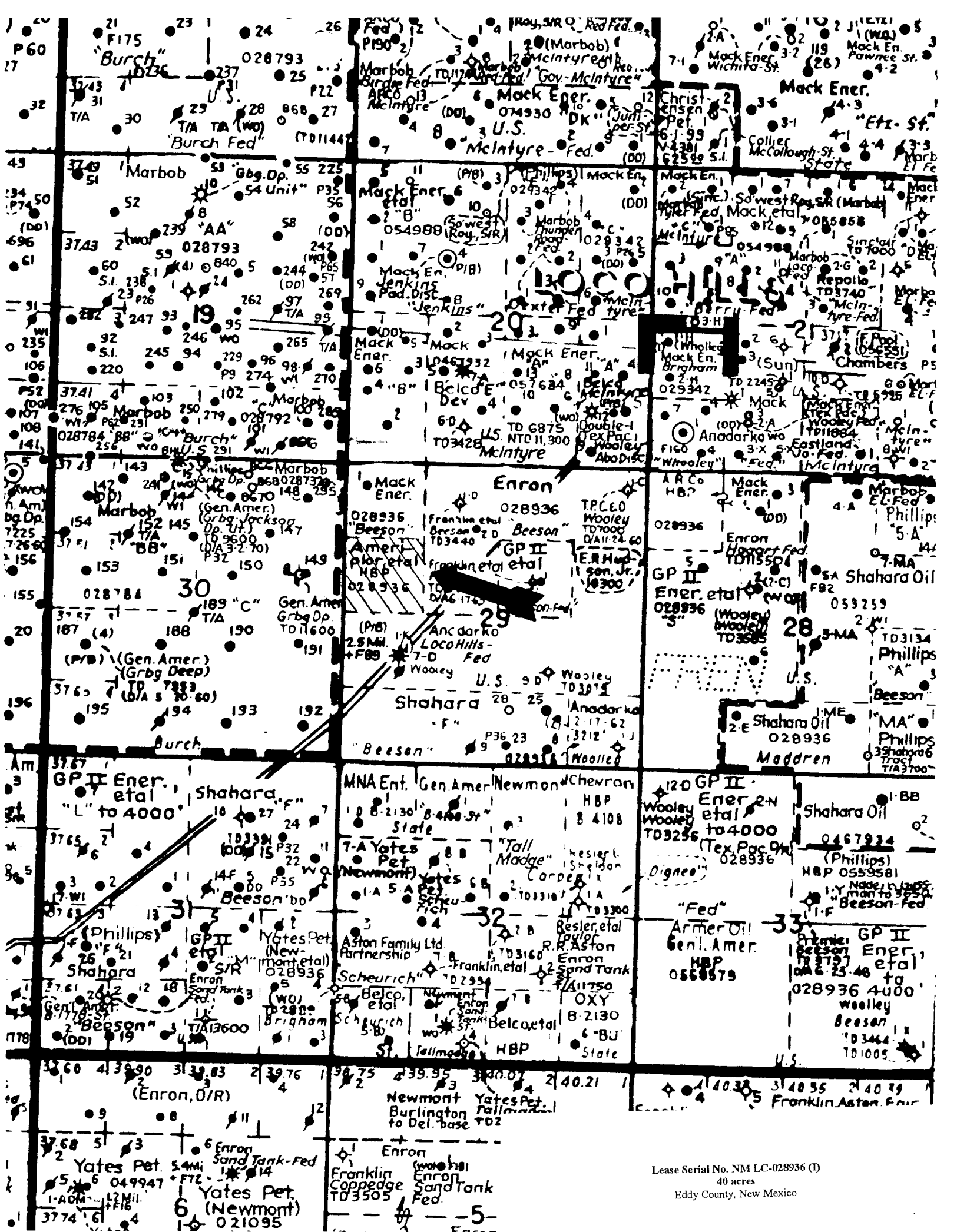
LEASE PAINT "29" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
LOCO HILLS, N.M. RED LAKE SE, N.M.

JOHN WEST SURVEYING  
 HOBBS, NEW MEXICO  
 (505) 393-3117

EXHIBIT 2  
 Attachment 2  
 Paint '29' Federal No. 1  
 Eddy County, New Mexico  
 Anadarko Petroleum Corporation

Location Verification Map



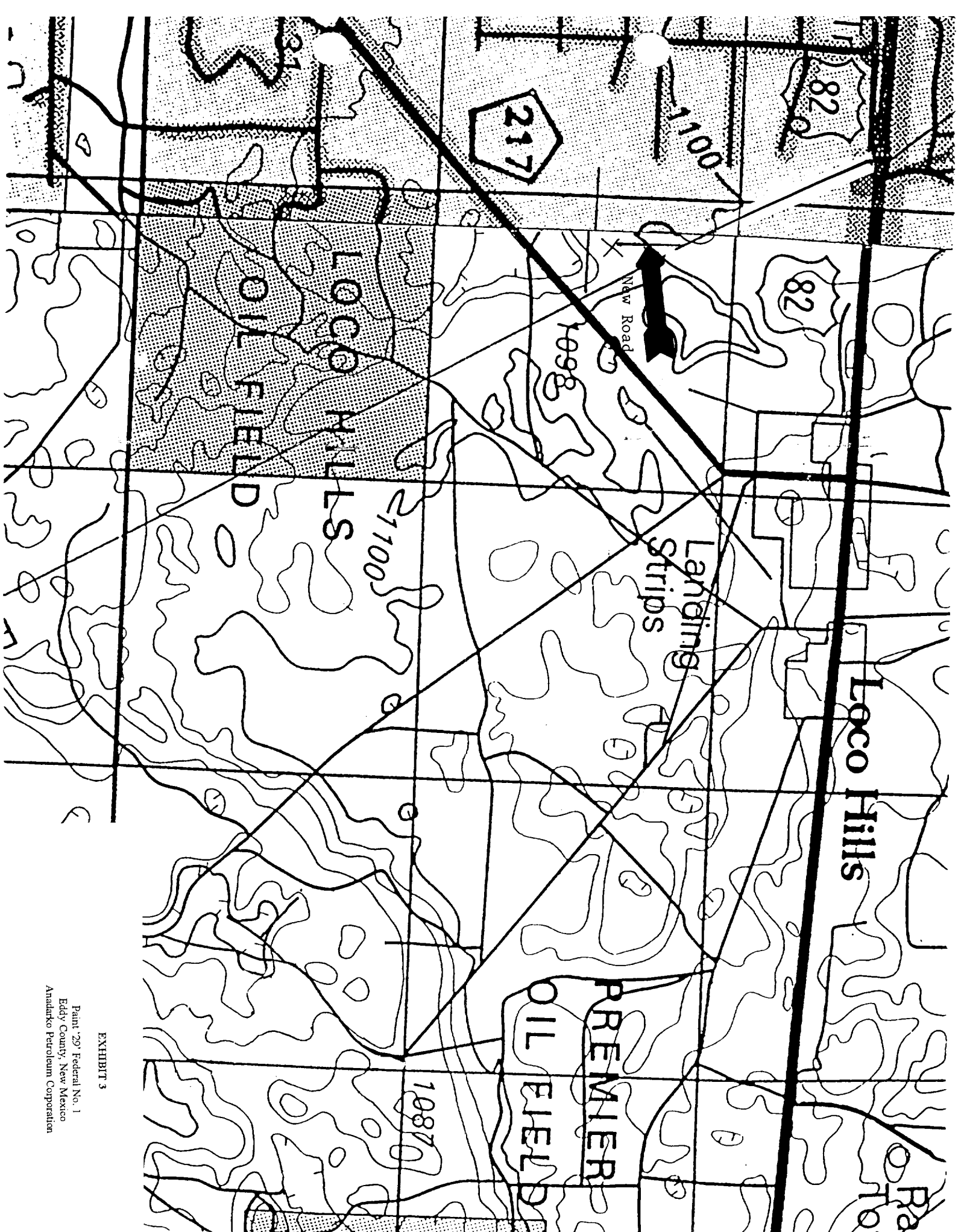
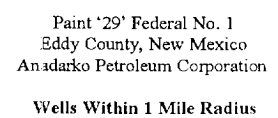
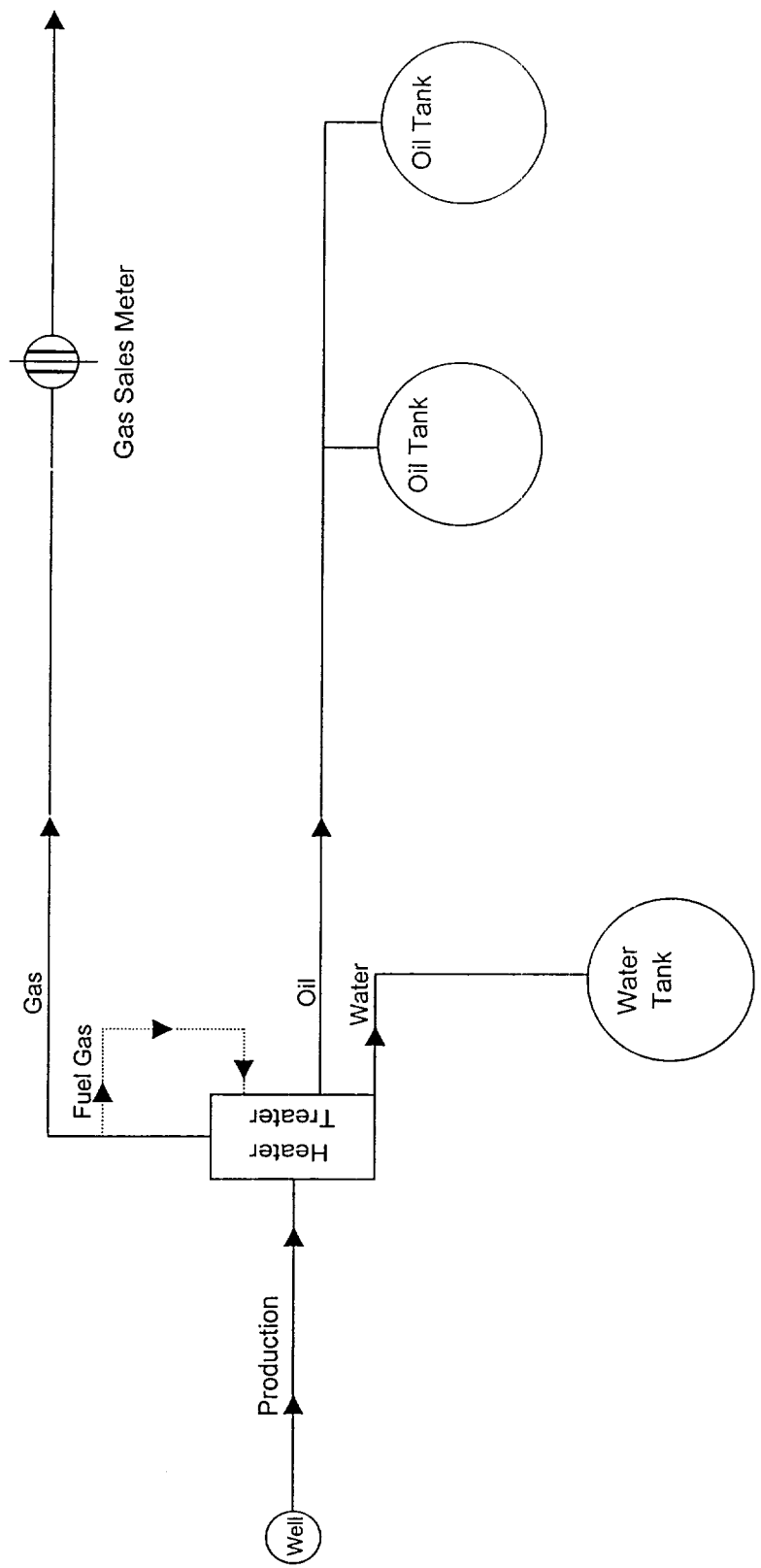


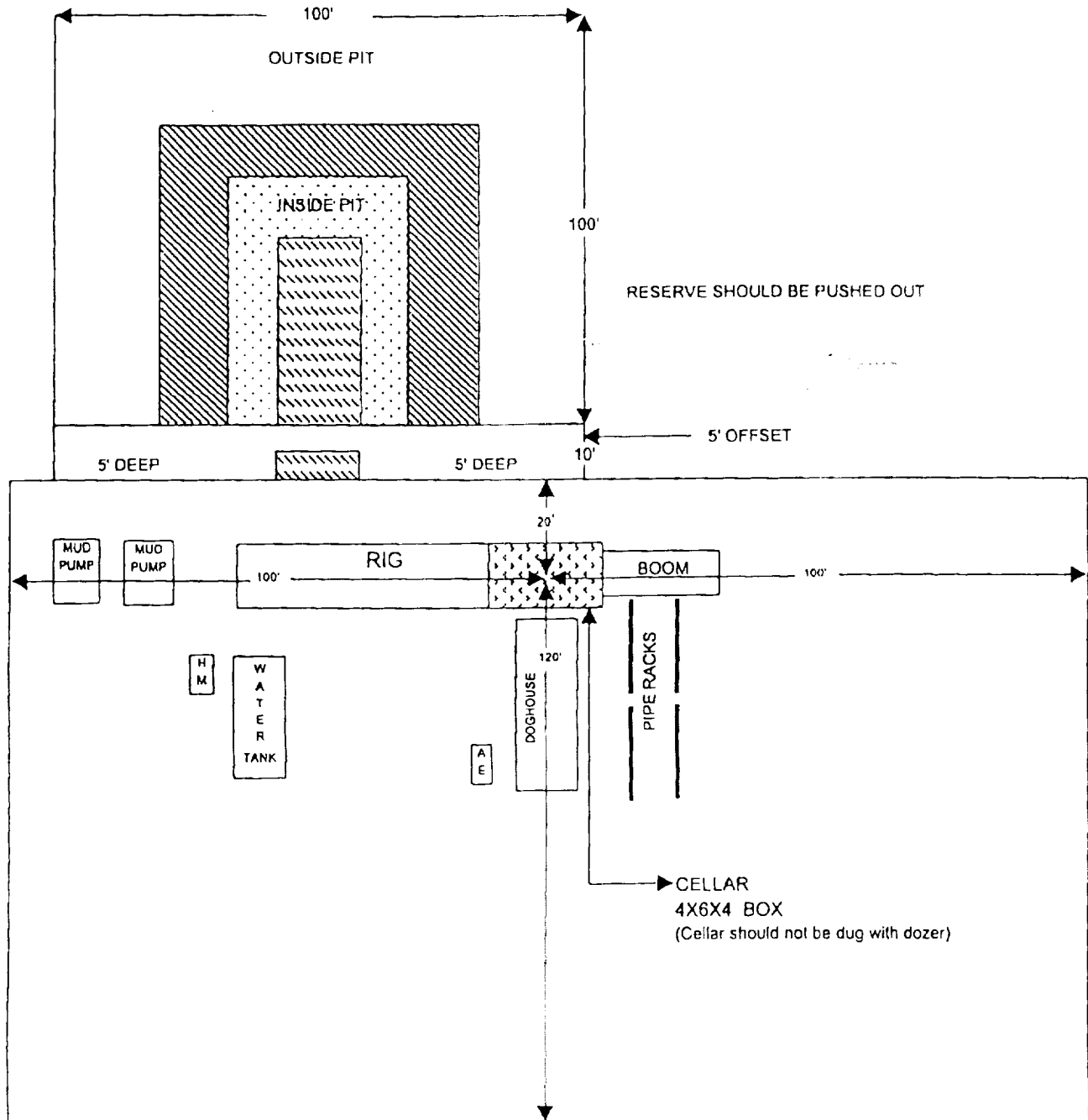
EXHIBIT 3







CapStar Drilling, Inc.  
 LOCATION SPECIFICATIONS AND RIG LAYOUT  
 FOR EARTH PITS



Cellar can be 4X4X4 if using a screw-on wellhead  
 Working Pits dug 5' below ground level

ANADARKO PETROLEUM CORPORATION

HYDROGEN SULFIDE DRILLING  
OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of the H<sub>2</sub>S safety equipment and of personal protective equipment to be utilized at the location such as H<sub>2</sub>S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H<sub>2</sub>S bearing formation, H<sub>2</sub>S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H<sub>2</sub>S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H<sub>2</sub>S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

B. H<sub>2</sub>S Safety Equipment And Systems

All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H<sub>2</sub>S bearing formation. The safety systems to be utilized during drilling operations are as follows:

### 1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

### 2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

### 3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) - five minute escape packs located at strategic points around the rig.
- (b) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

### 4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

#### 5. Mud Program

- (a) The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight and safe drilling practices .. (for example, keeping the hole filled during trips) will minimize hazards when drilling in H<sub>2</sub>S bearing formations.

#### 6. Metallurgy

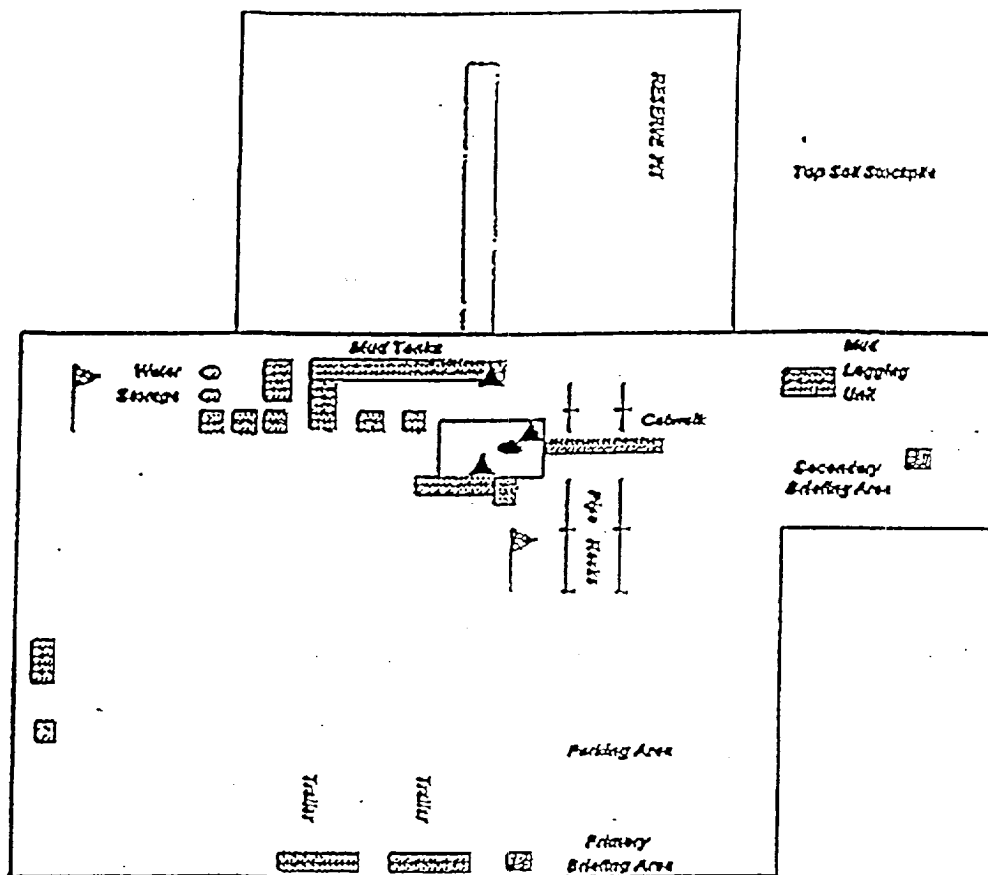
- (a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.

#### 7. Communication

- (a) Two way radio and cellular telephone communication will be available in company vehicles.

#### C. Diagram of Drilling Location

- 1. Attached is a diagram representing a typical location layout as well as the location of H<sub>2</sub>S monitors, briefing areas, and wind direction indicators.



- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ▴ WIND DIRECTION INDICATORS
- ☒ SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT

H2S PLAN