

RECEIVED
2002 APR 29 AM 10:13
BUREAU OF LAND MANAGEMENT
FEDERAL BUREAU OF SURVEY

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-36040	Pool Code 83280	Pool Name Quail Ridge Morrow
Property Code 29032	Property Name MESCALERO 30 FEDERAL	Well Number 2
OGRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT COMPANY	Elevation 3641'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	30	19 S	34 E		1200	SOUTH	1980	WEST	LEA

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 321.25	Joint or Infill Y	Consolidation Code F	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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Zeno Farris</i></p> <p>Signature</p> <p>Zeno Farris</p> <p>Printed Name</p> <p>Manager, Operations Admin.</p> <p>Title</p> <p>4/16/02</p> <p>Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>FEBRUARY 4, 2002</p> <p>Date Surveyed</p> <p>Signature of Surveyor</p> <p>Professional Surveyor</p> <p>NEW MEXICO</p> <p>7977</p> <p>W.O. No. 2269</p> <p>Certified by Gary L. Jones 7977</p> <p>PROFESSIONAL LAND SURVEYOR</p>
--	---

600 East Las Colinas Blvd. • Suite 1100 • Irving, TX 75039 • (972) 401-3111 • Fax (972) 443-6450
Mailing Address: P.O. Box 140907 • Irving, TX 75014-0907

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Date: 04/23/02

Application to Drill

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1 Location: 1200' FSL & 1980' FWL Sec. 30 19S 34E

2 Elevation above sea level: GR 3641'

3 Geologic name of surface formation: Quaternary Alluvium Deposits

4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 14500'

6 Estimated tops of geological markers:

T/Salt	1658'	Strawn	12164
B/Salt	3232'	Atoka	12416
Delaware	6070'	Morrow	12,747
Bone Spring	8136'		
Wolfcamp	10861		

7 Possible mineral bearing formation:

Bone Spring	Oil
Wolfcamp	Oil
Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17 1/2"	0-425'	13 3/8"	48	8-R	ST&C	H-40
11"	0-5300'	8 5/8"	24	8-R	ST&C	K-55
7 7/8"	0-14500'	5 1/2"	17	8-R	ST&C	N-80 / S-95

Application to Drill

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

9 Cementing & Setting Depth:

13 3/8"	Surface	Set 425' of 13 3/8" H-40 48# ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
8 5/8"	Intermediate	Set 5300' of 8 5/8" K-55 24# ^{32436#} ST&C casing. Cement in two stages, first stage cement with 1650 Sx. Of Class POZ/C Cement + additives, second stage cement with 200 Sx. Of Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 14500' of 5 1/2" NP-80 / S-95 17# ST&C casing. Cement in two stages, first stage cement with 900 Sx. of Class POZ/C Cement + additives. Second stage cement with 500 Sx of Class "C" Estimated top of cement 4800'.

10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nipped up on the 8 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 450'	8.7 - 9.2	32 - 34	May lose circ.	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
450' - 3200'	10 - 10.3	28 - 29	May lose circ	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
3200' - 8300'	11/8/00	28 - 29	NC	Fresh water. Paper for seepage. Lime for pH (9 - 9.5)
8300' - 10000'	9.2 - 9.4	28 - 29	NC	Cut brine. Caustic for pH control.
10000' - 14500'	9.2 - 10.6	32 - 34	NC	XCD Polymer mud system.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Application to Drill

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: One-man unit from 8000' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DST's, or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures or H₂S gas are expected. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 2500 PSI, estimated BHT 1000 .

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35 - 45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Morrow / Atoka pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

Hydrogen Sulfide Drilling Operations Plan

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - A. Characteristics of H2S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H2S detectors, warning system and briefing
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2 H2S Detection and Alarm Systems
 - A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
- 4 Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5 Well control equipment
 - A. See exhibit "E"
- 6 Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed DST will be performed.

Hydrogen Sulfide Drilling Operations Plan

- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if

Surface Use Plan

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Hobbs, N.M. on Hwy 62/180 Go west 23 1/2 miles to mile maker 78 1/2, turn North (Right) on lease road(Fasken sign on Cattleguard). Road angles NW for 1 mile, North .8 Mile, East for .1 Mile, North .2 mile, West .3 Mile, North .3 Mile, .2 mile West into well location.
 - C. Construct power lines and lay pipelines that will be necessary to produce this lease along road R-O-W.
- 2 PLANNED ACCESS ROADS: The proposed access road is 2,193 feet long with an impact area of 50 feet by 2,193 feet. The proposed access road begins on the Southwest corner of the Gruy P & A well location and trends 2,193 feet Southwest, ending on the Southeast corner of the proposed well location.
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"
 - A. Water wells - None known
 - B. Disposal wells - None known
 - C. Drilling wells - None known
 - D. Producing wells - As shown on Exhibit "A"
 - E. Abandoned wells - As shown on Exhibit "A"

Surface Use Plan

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

- 4 If, on completion this well is a producer Gruy Petroleum Management Co. will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied with a Sundry Notice.

5 LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6 SOURCE OF CONSTRUCTION MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7 METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holes with a minimum depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8 ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

Surface Use Plan

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

9 WELL SITE LAYOUT

- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined, unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with PVC or polyethylene line. The pit liner will be 6 mils thick. Pit liner will extend a minimum, 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10 PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recountered to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

Surface Use Plan

Gruy Petroleum Management Co.
Mescalero 30 Federal 2
Unit Letter N Section 30
T19S - R34E Lea County, NM

11 OTHER INFORMATION:

- A. The location is located on the Northwest loape of a sandy ridge in up to 5 m tall coppice dunes, with loose tan sands. Vegetation in the area is yucca, shine oak and various crasses
- B. The wellsite is on surface owned by the Bureau of Land Management, Department of the Interior. The land is used mainly for farming, cattle ranching and oil and gas production.
- C. An Archaeological survey # SNMAS 02-NM-753 has been conducted on the location, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.
- D. Within 1 1/2 miles of this location, there are no dwellings.

12 OPERATORS REPRESENTATIVE:

Gruy Petroleum Management Company
P.O. Box 14097
Irving, TX 75014
Office Phone: (972) 443-6489
Zeno Farris

- 13 **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 currently exit; 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 Gruy Petroleum Management Company contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME: _____

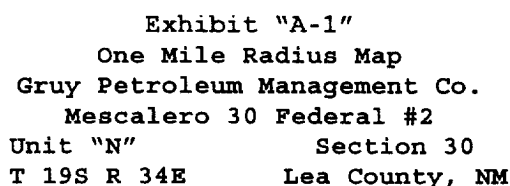
Zeno Farris

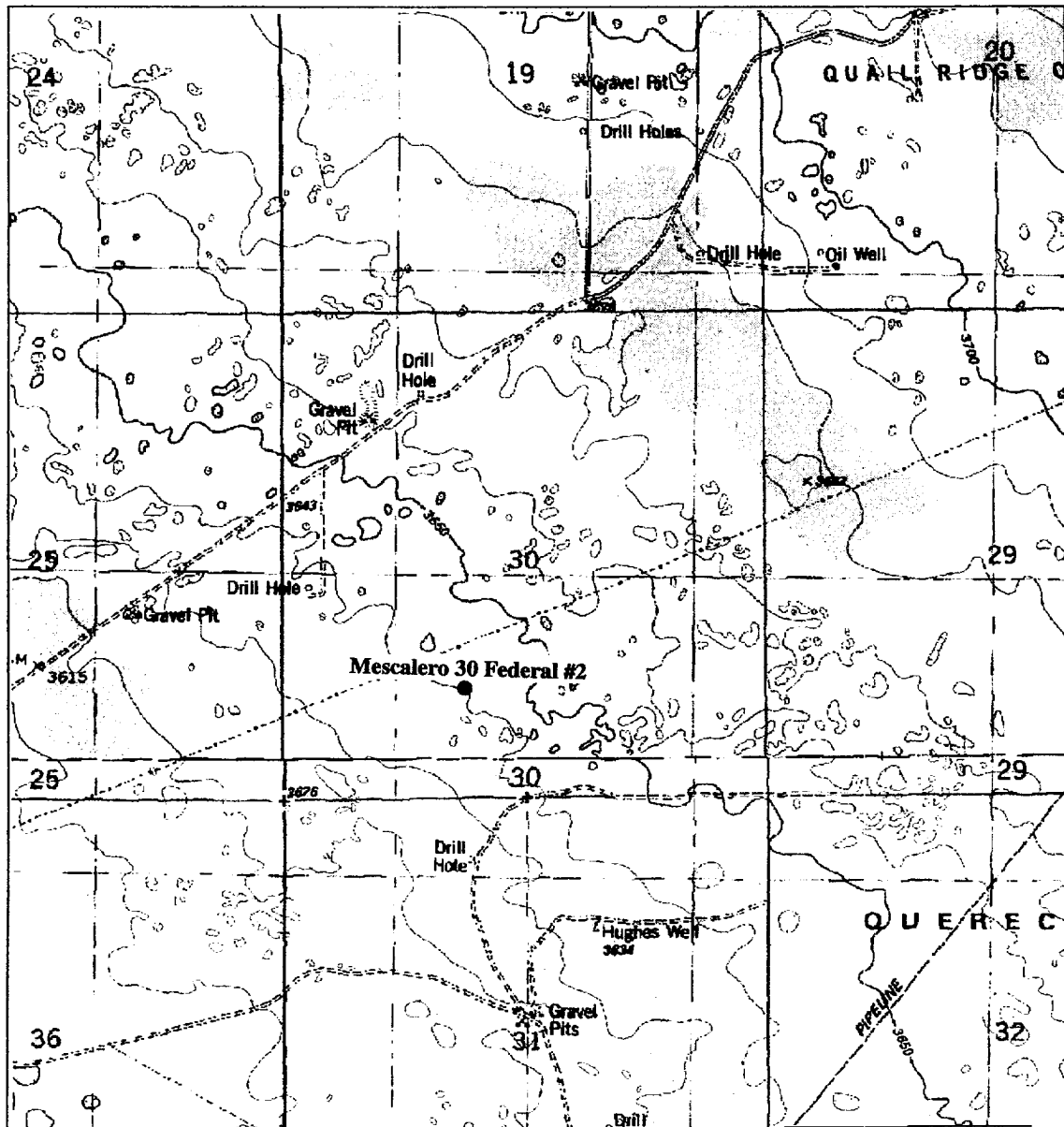
DATE: _____

4/23/02

TITLE: _____

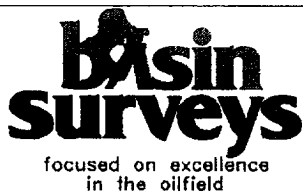
Manager, Operations Administration





MESCALERO 30 FEDERAL #2

Located at 1200' FSL and 1980' FWL
 Section 30, Township 19 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

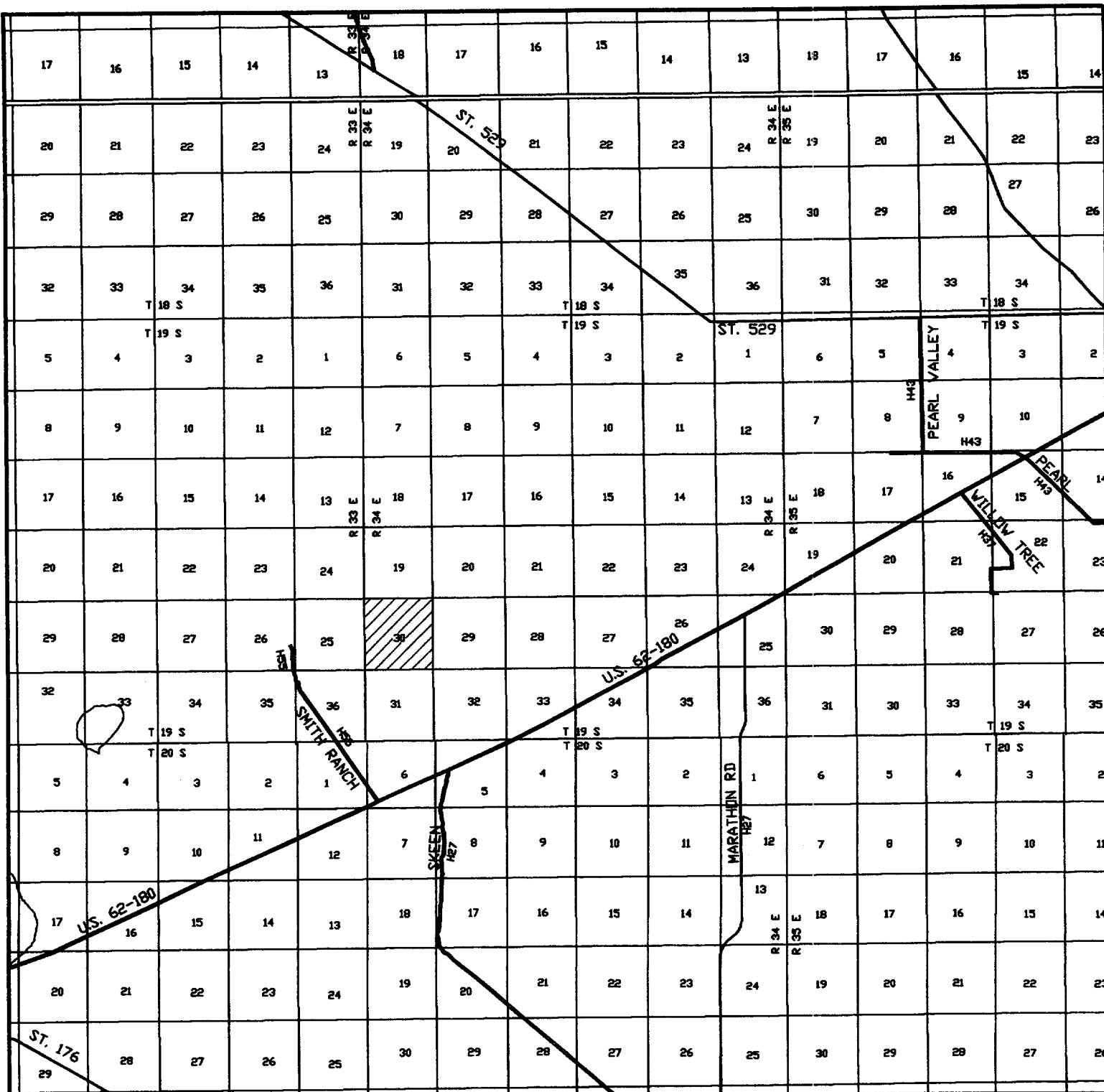
W.O. Number: 2269AA - KJG CD#4

Survey Date: 02-04-2002

Scale: 1" = 2000'

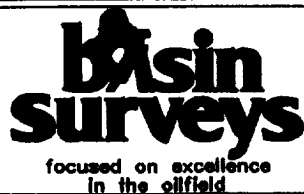
Date: 02-06-2002

**GRUY PETROLEUM
 MANAGEMENT CO.**



MESCALERO 30 FEDERAL #2

Located at 1200' FSL and 1980' FWL
 Section 30, Township 19 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

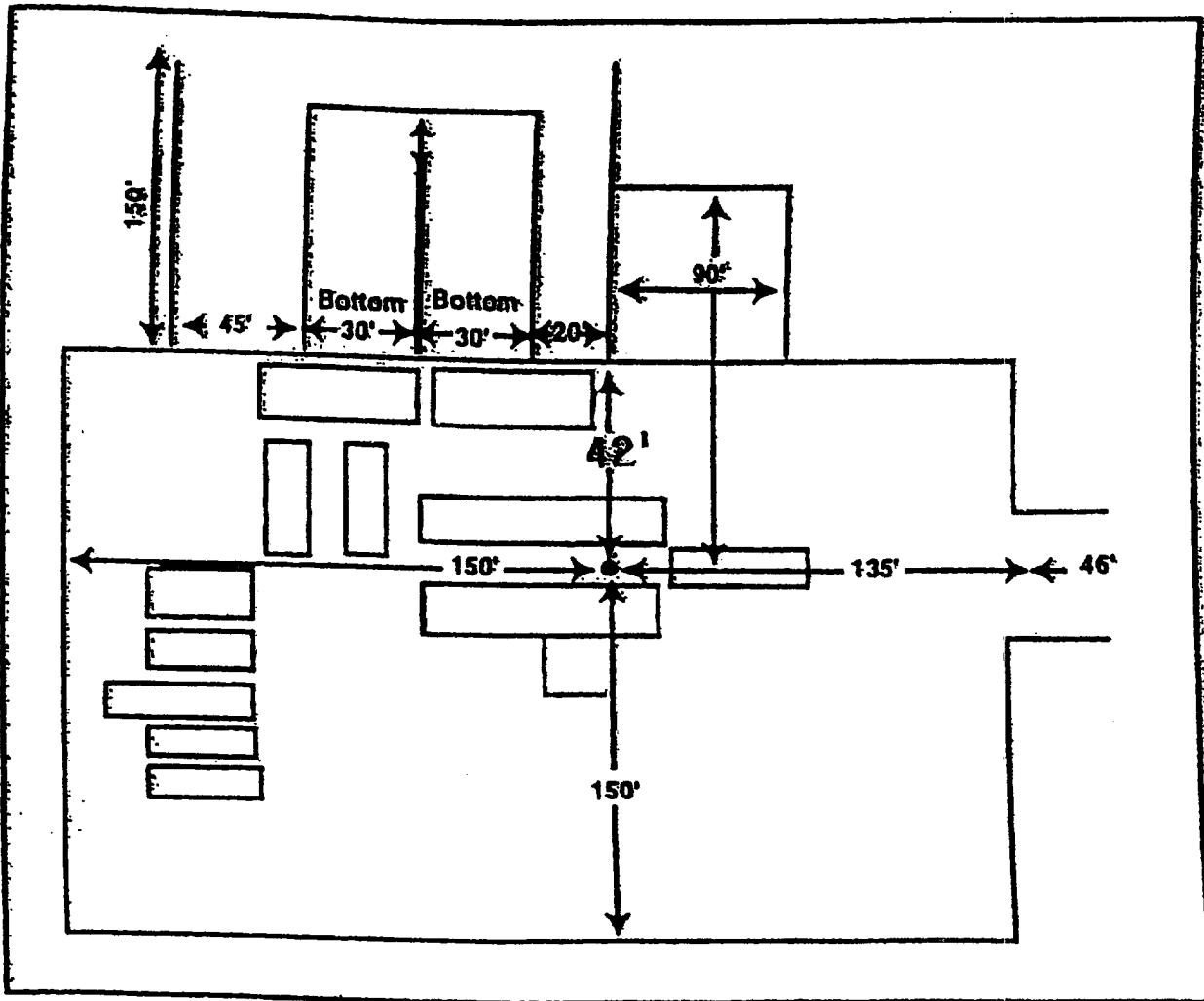
W.O. Number: 2269AA - KJG CD#4

Survey Date: 02-04-2002

Scale: 1" = 2 miles

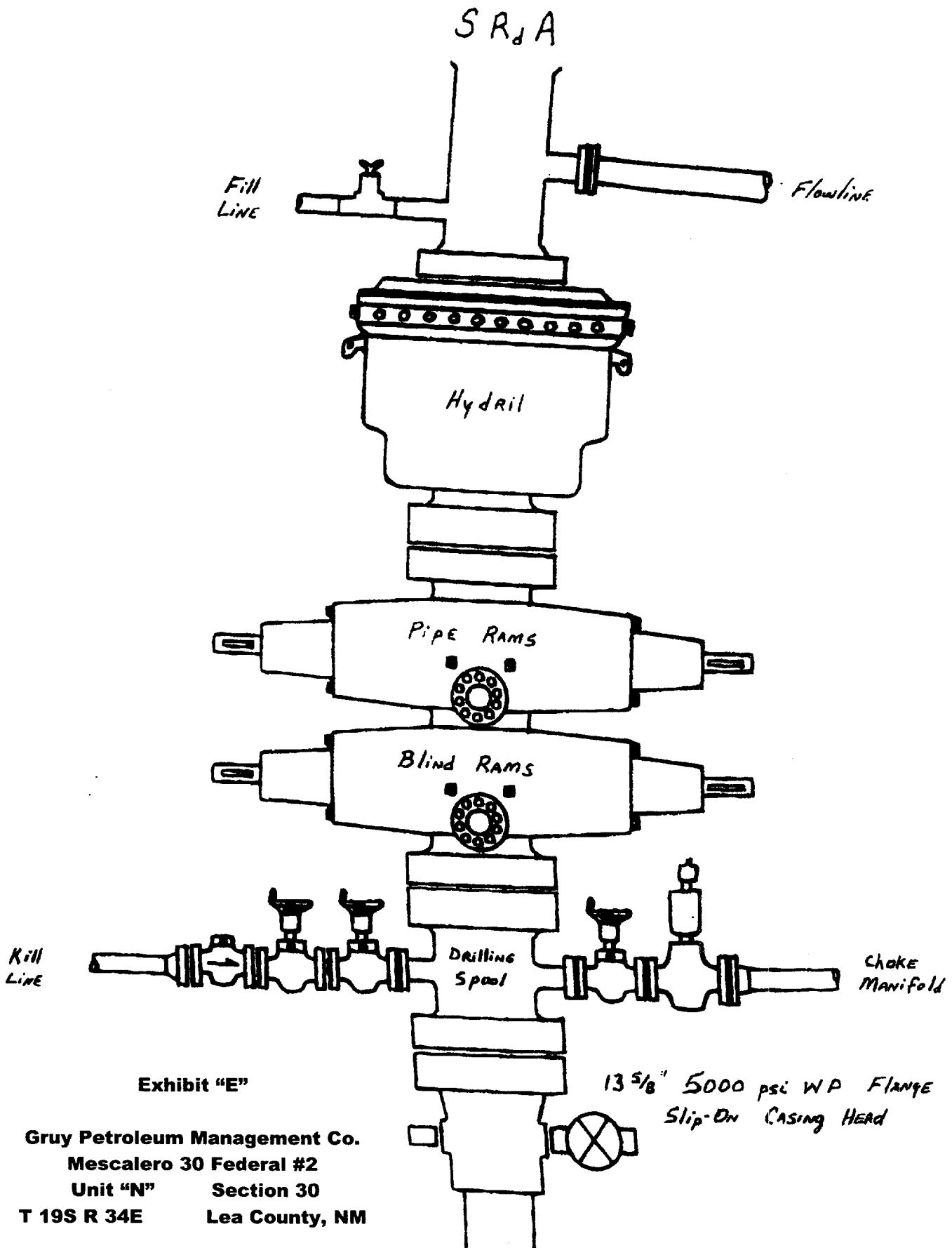
Date: 02-06-2002

GRUY PETROLEUM
 MANAGEMENT CO.



Rig 80

Exhibit "D"
 Rig Layout Plan
 Gruy Petroleum Management Co.
 Mescalero 30 Federal #2
 Unit "N" Section 30
 T 19S R 34 E Lea County, NM



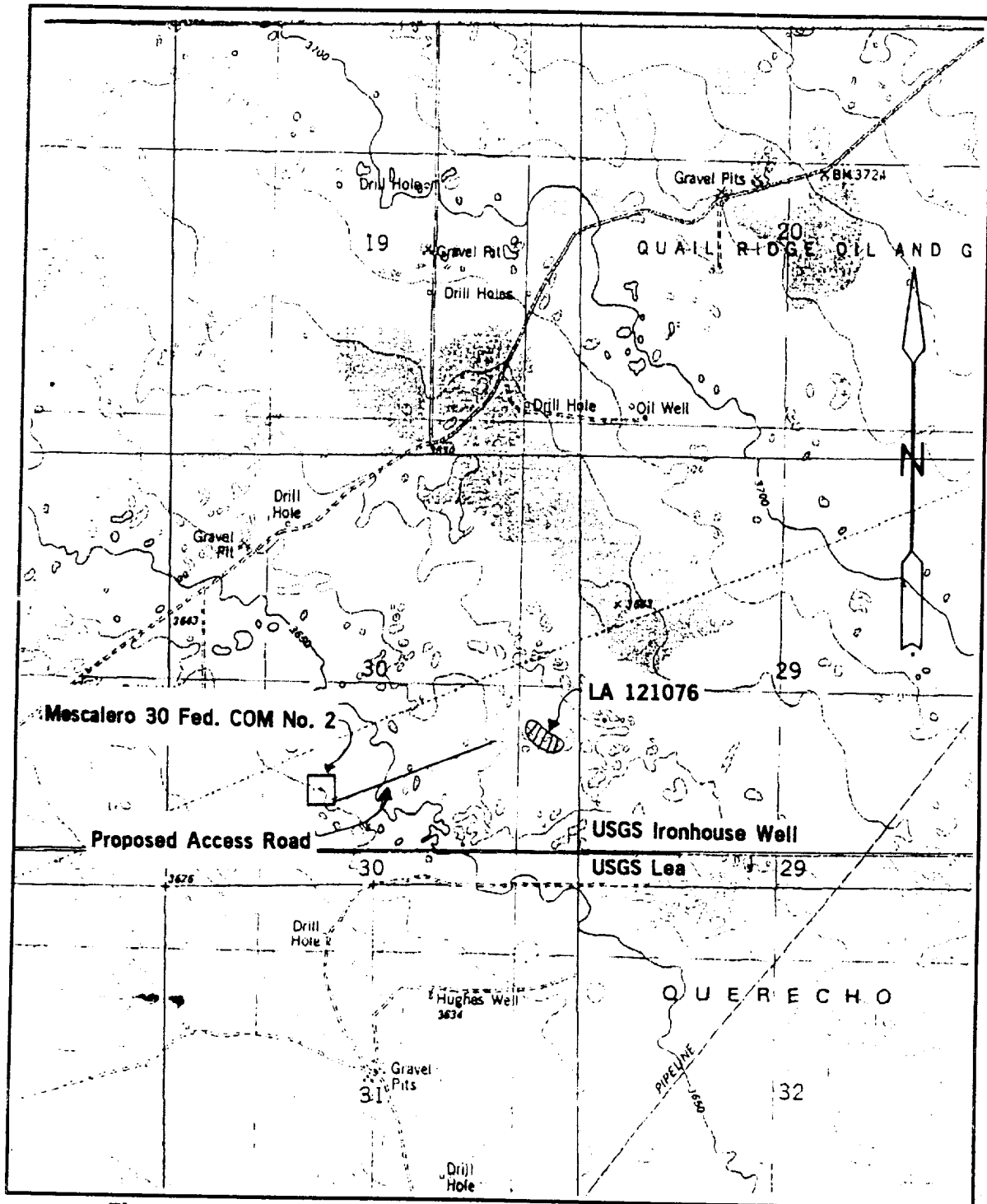


Figure 1. Survey Area Gruy Petroleum Management Company
The Mescalero "30" Federal COM Number 2 Well Location and Access Road
Section 30, T.19S., R.34E
USGS Ironhouse Well, NM 1984 7.5' topo map
Lea County, New Mexico
Scale 1:24,000

Southern New Mexico Archaeological Services, Inc.