OPER. OGRID NO. 7377
PROPERTY NO. 34381
POOL CODE ✓
EFF. DATE 11/1/04
API NO. 30-025-36929

District I

Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM 94110

6. If Indian, Allottee or Tribe Name:

1a. Type of Work: [X] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.:

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: Pitchblende UFederal Unit Well No.1

2. Name of Operator: EOG Resources, Inc.

9. API Well No.: 30-025-36929

3a. Address: P.O. Box 2267 Midland, TX 79702

3b. Phone No. *(include area code)*: (432) 686-3714

10. Field and Pool, or Exploratory: Wildcat Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 2200'FNL & 660' FWL
At proposed prod. Zone same Unit E

11. Sec., T., R., M., or Blk. And Survey or Area: Sec 27 T-25-S; R-34-E

14. Distance in miles and direction from nearest town or post office*: 22 Mi. west from Jal NM

12. County or Parish: Lea Co.

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. 660
(Also to nearest drlg. Unit line, if any) 660

16. No. of Acres in lease: 960

17. Spacing Unit dedicated to this well: 40 SW/4Nw/4

18. Distance from proposed location* to nearest well, drilling, completed applied for, on this lease, ft.

19. Proposed Depth: 12600

20. BLM/BIA Bond No. on file: NM2308

21. Elevations (Show whether DF, KDB, RT, GL, etc): GL 3318'

22. Approximate date work will start*: 11/1/2004

23. Estimated duration: 25

OCT 2004 RECEIVED Hobbs OCD

24. Attachments

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

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

CAPITAN CONTROLLED WATER BASIN

25. Signature: Mike Francis | Name *(Printed/Typed)*: Mike Francis | Date: 8/23/2004

Title: Agent

Approved by *(Signature)*: /s/ Russ Sorensen | Name *(Printed/Typed)*: Russ Sorensen | Date: 28 OCT 2004

Title: ACTING FIELD MANAGER | Office: CARLSBAD FIELD OFFICE

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

*(Instructions on reverse)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

District I
1625 N. French Dr., Hobbs NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-025-36929	V	Wildcat Bone Spring

[4]Property Code	[5]Property Name	[6]Well Number
34381	Pitchblende Federal Unit	1

[7]OGRID No.	[8]Operator Name	[9]Elevation
7977	EOG Resources, Inc.	3318'

[10]Surface Location

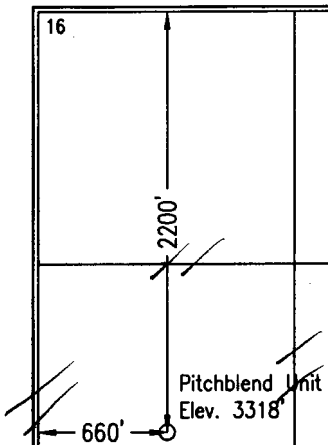
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	27	25 S	34 E		2200	North	660	West	Lea

[11]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

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
40			

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



[17]OPERATOR CERTIFICATION

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

Signature

Mike Francis
Printed Name

Agent
Title and E-mail Address

9/1/2004
Date

[18]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.

8-26-2004
Date of Survey

Signature and Seal of Professional Surveyor

MICHAEL L. STANFORD
NEW MEXICO
10324
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number

16 Miles West of Jal, New Mexico.

File No. A-2601.DWG

DRILLING PROGRAM

EOG RESOURCES, INC.
Pitchblende Federal Unit No 1 well
Lea Co. NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1100'
Delaware Mt. Group	59270'
Bone Springs	9275'
3rd Bone Spring Sand	12025'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	Above 250'	Fresh Water
3rd Bone Spring Sands	12,450'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 11-3/4" casing at 650' and circulating cement back to surface, and 8-5/8" casing will be set at 5200' with cement circulated back to surface

4. CASING PROGRAM

Hole Size	Interval	OD Casing	Weight Grade Jt. Cond. Type
14-3/4"	0-650'	11-3/4"	42# H-40 ST&C
11"	0-4000'	8-5/8"	32# J-55 LT&C
11'	4000'-5200'	8-5/8"	32# HCK LT&C
7-7/8"	0-12,600'	5-1/2"	17#P-110 LT&C

Cementing Program:

11-3/4" Surface Casing:	Cement to surface with 250 sx Prem Plus, 3% Econolite, 25 Calcium Chloride, 0.25#/sx Flocele, 150 sx Prem Plus, 2% Calcium Chloride
8-5/8" Intermediate:	Cement to surface with 1100 sx Interfill C, .25#/sx flocele, 250 sx Premium Plus, 2% Calcium Chloride
5-1/2" Production	Cement w1000sx Interfill C +0.25 pps flocele(Lead) 200 sxs Preminum Plus + 1% CaCl.(Tail). This cement slurry is designed to bring TOC to 4800'.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000-psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All BOP's and accessory equipment will be tested in accordance with Onshore Oil & Gas order No. 2. EOG request authorization to use a 2M system, providing for an annular preventer to be used prior to drilling the surface casing shoe before drilling out of surface casing. Before drilling out of 1st intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/1000 psi and the annular to 3500/5000-psig pressure.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

Depth	Type	Wt (PPG)	Viscosity (sec)	Waterloss (cc)
0-1100	Fresh Water (Spud Mud)	8.5	40-45	N.C.
1100'-5200'	Brine Water	10.0	30	N.C.
5200''- TD	Cut Brine + Polymer/KCL	8.8 – 9.2	28	N.C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

(C) A mud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 5000' to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Electric logging will consist of GR-Dual Laterlog-MSFL and GR-Compensated Density-Neutron from TD to intermediate casing with a GR- Compensated Neutron ran from Intermediate casing to surface..

Possible sidewall cores based on shows.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 5000 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

DRILLING PROGRAM

EOG RESOURCES, INC.
Pitchblende Federal Unit No 1 well
Lea Co. NM

SURFACE USE AND OPERATIONS PLAN

1. EXISTING ROADS:

Access to location will be made as shown on Exhibit #2

Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. PROPOSED ACCESS ROAD:

1825' of new road is required. Exhibit #2a,

No turnouts necessary.

No culverts, cattleguards, gates, low-water crossings are necessary.

Surfacing material consists of native caliche to be obtained from the nearest BLM-approved caliche pit. Any additional materials required will be purchased from the dirt contractor.

3. LOCATION OF EXISTING WELLS:

Exhibit #3 shows all existing wells within a one-mile radius of this well.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, the flowline would also be located on the drill-pad site and no additional disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY:

Fresh water and brine water for drilling will come from commercial sources and transported to the well site over the roads as shown on Exhibit #2.

6. PLANS FOR RESTORATION OF THE SURFACE:

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Location will be cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

Any unguarded pits containing fluid will be fenced until they are dry and back filled.

After abandonment of the well, surface restoration will be in accordance with current federal laws and regulations. Location will be cleaned, and the well pad removed to promote vegetation and disposal of human waste will be complied with. Trash, waste paper, garbage and junk will be hauled to an approved disposal site in an enclosed trash trailer.

All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

ANCILLARY FACILITIES:

No airstrip, campsite, or other facilities will be built.

WELL SITE LAYOUT:

Exhibit #4 shows the relative location and dimensions of the well pad.

DRILLING PROGRAM

EOG RESOURCES, INC.
Pitchblende Federal Unit No 1 well
Lea Co. NM

OTHER INFORMATION:

The area around the well site is grassland and the topsoil is duned and sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

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 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 EOG Resources, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Craig Young
Drilling Engineer
9/01/2004

DRILLING PROGRAM

EOG RESOURCES, INC.
Pitchblende Federal Unit No 1 well
Lea Co. NM

ATTACHMENT TO EXHIBIT #1

1. Wear ring to be properly installed in head.

2. Blow out preventer and all fittings must be in good condition, 5000 psi W.P. minimum. Exhibit #1.

3. All fittings to be flanged

4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum.

5. All choke and fill lines to be securely anchored especially ends of choke lines.

6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

7. Kelly cock on kelly.

8. Extension wrenches and hand wheels to be properly installed.

9. Blow out preventer control to be located as close to driller's position as feasible.

10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

EOG Resources, Inc.

Pitchblende Federal Unit Well No.1

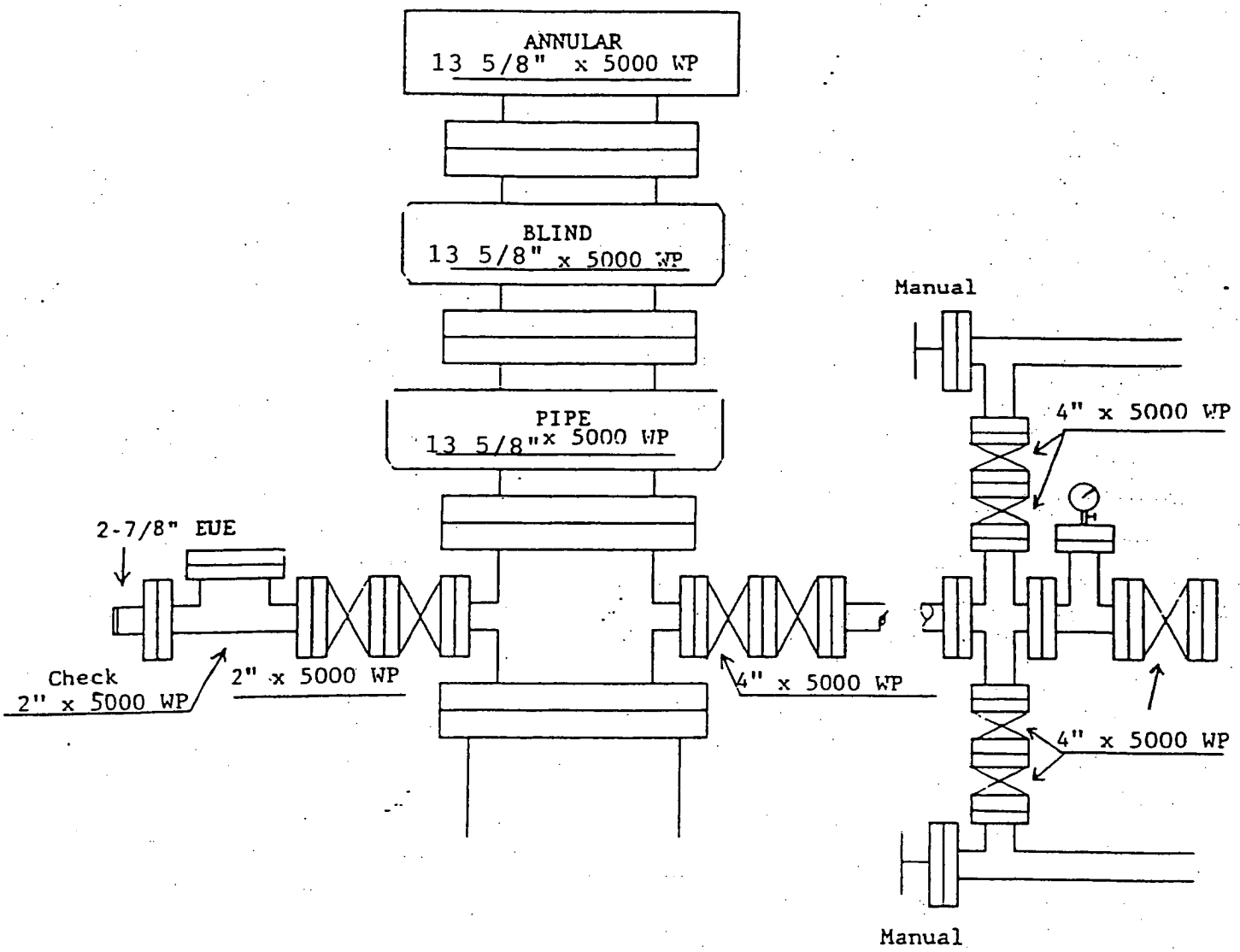
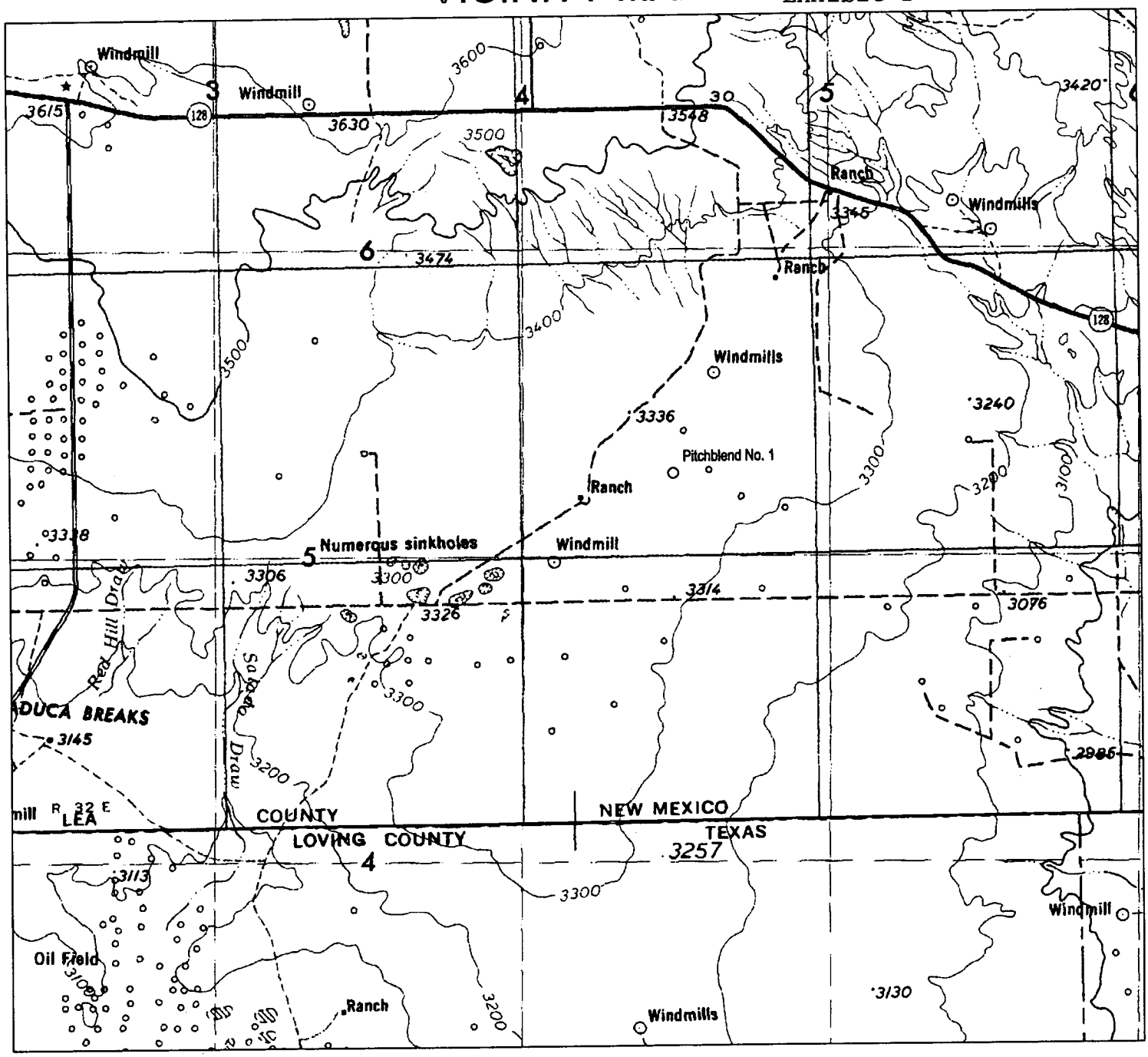


Exhibit 1

VICINITY MAP

Exhibit 2



To access location from the intersection of New Mexico State Highway 128 and Lea County Route 2, 15 miles west of Jal, New Mexico. Take County Route 2 southwest for approximately 6.8 miles to a lease road heading southeast. Take lease road southeast 1.2 miles to point for beginning of proposed new access road then go south 0.4 mi. to the location.

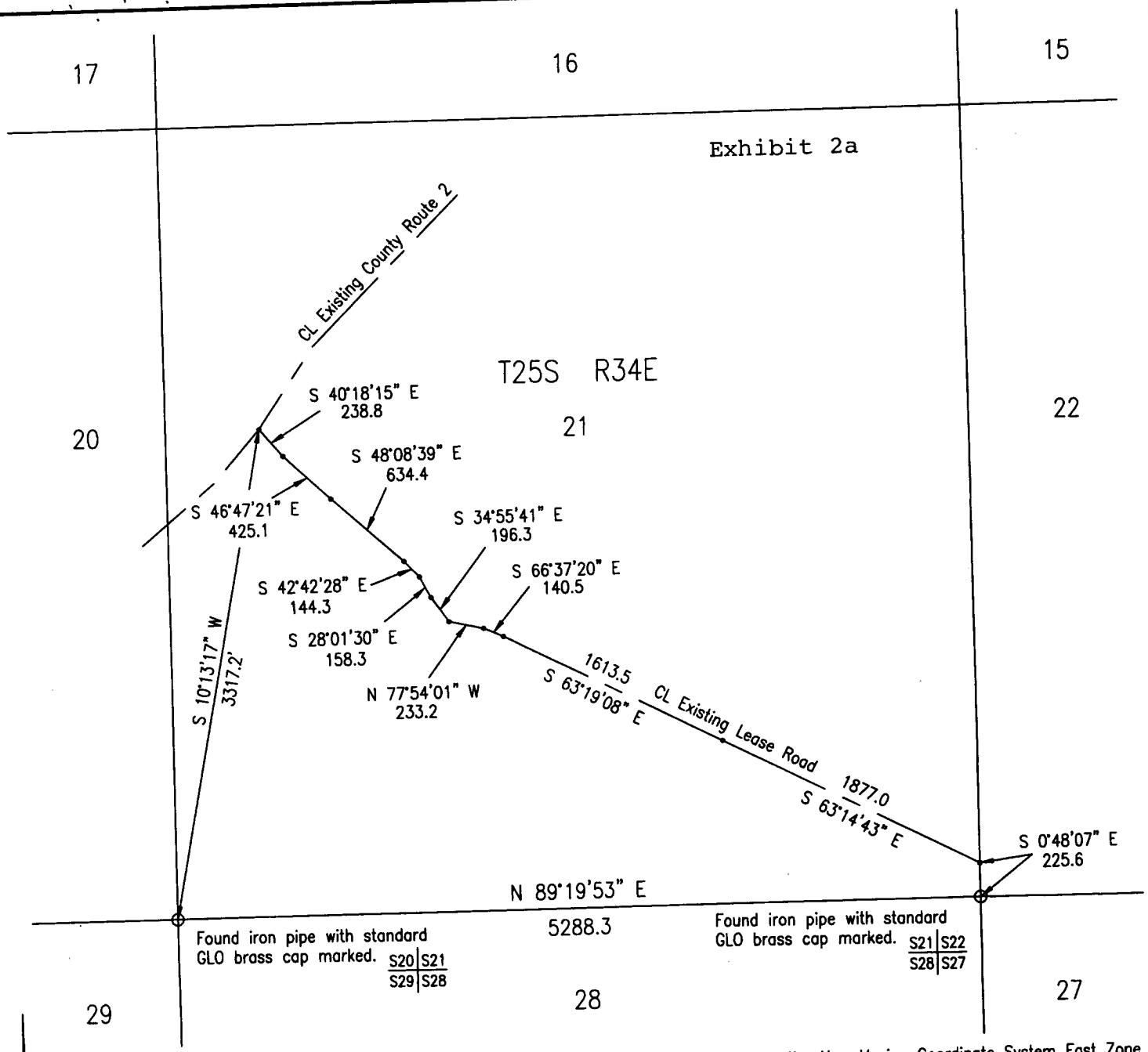
Location Coordinates NAD 27 Lat. 32° 06' 09.3" Long. 103° 27' 49.5"

EOG Resources, Inc.
Pitchblende Fed Unit No.1 Well — 2200 FNL & 660 FWL
Section 27, T25S, R34E, NMPM
Lea County, New Mexico

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Mike Stanford	8-30-2004	1" = 3 mi.	A-2601V

Exhibit 2a



Coordinates and Bearings shown are based upon the New Mexico Coordinate System East Zone NAD 83 as derived from GPS connections to NGS CORS Stations NMRO, TXOD & TXLU . All distances shown are surface values.

I, Michael L. Stanford, New Mexico Professional Surveyor No. 10324, do hereby certify that this Easement Survey Plat and the actual survey on the ground which it is based upon were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the Minimum Standards for Surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act.

MICHAEL L. STANFORD NEW MEXICO 10324 REGISTERED PROFESSIONAL LAND SURVEYOR

Surveyor's Name Michael L. Stanford P.S. No. 10324 Date August 30, 2004

1000 0 1000 2000 3000 Feet

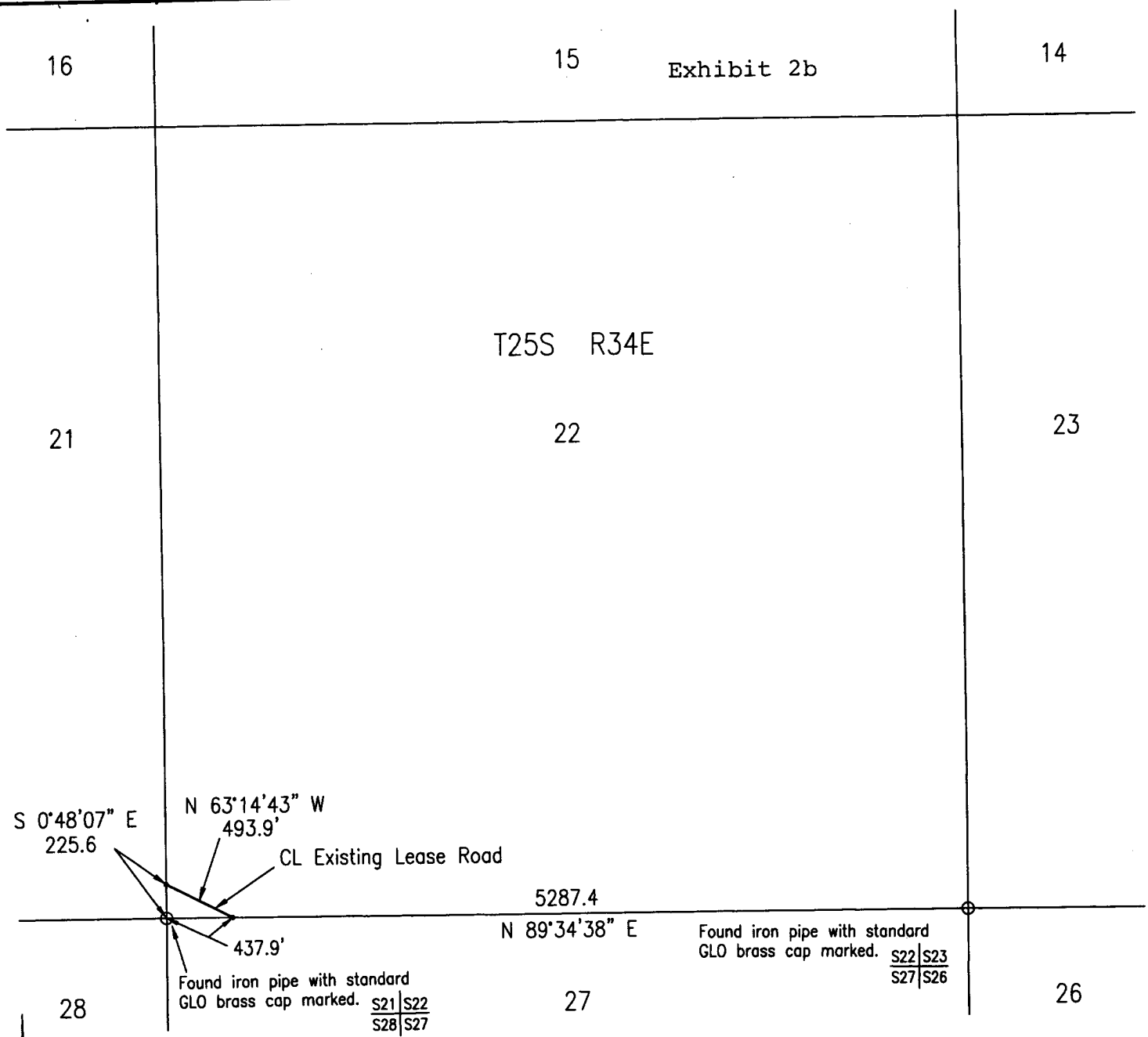
Date Surveyed August 27, 2004

EOG Resources, Inc.
Easement Plat for Existing Lease Road
Section 21, T-25-S, R-34-E, N.M.P.M.,
Lea County, New Mexico.

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Al Fuller	8-30-04	1" = 1000'	A-2602

Exhibit 2b



MICHAEL L. STANFORD
NEW MEXICO
10324
REGISTERED PROFESSIONAL LAND SURVEYOR

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Surveyor's Name Michael L. Stanford P.S. No. 10324 Date August 30, 2004

1000 0 1000 2000 3000 Feet

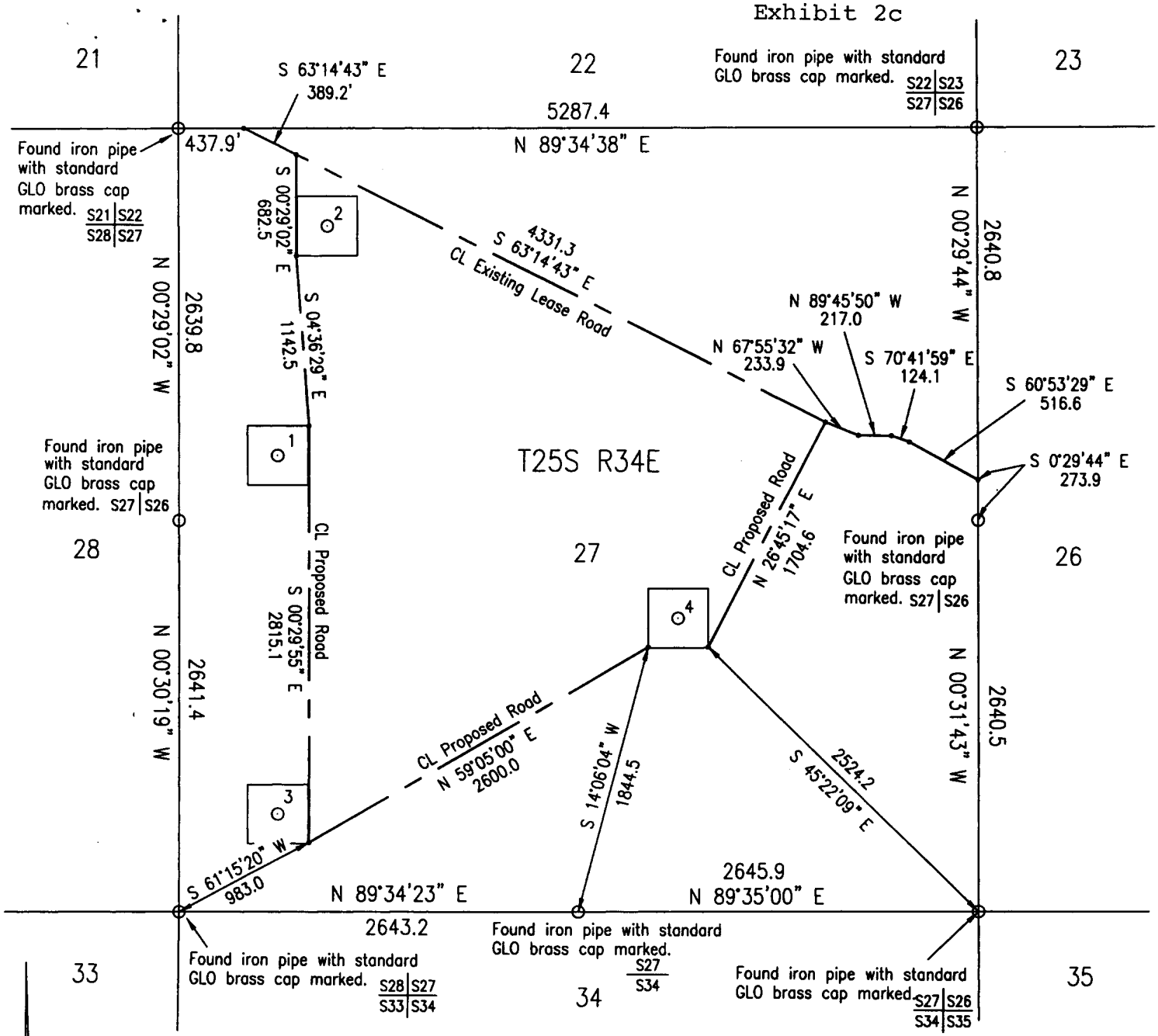
Date Surveyed August 27, 2004

EOG Resources, Inc.
Easement Plat for Existing Lease Road
Section 22, T-25-S, R-34-E, N.M.P.M.,
Lea County, New Mexico.

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Al Fuller	8-30-04	1" = 1000'	A-2603

Exhibit 2c



MICHAEL L. STANFORD
NEW MEXICO
10324
REGISTERED PROFESSIONAL LAND SURVEYOR

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Surveyor's Name Michael L. Stanford P.S. No. 10324 Date August 30, 2004

Date Surveyed August 27, 2004

1000 0 1000 2000 3000 Feet

EOG Resources, Inc.
Easement Plat for Existing and Proposed Lease Roads
Section 27, T-25-S, R-34-E, N.M.P.M.,
Lea County, New Mexico.

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Al Fuller	8-30-04	1" = 1000'	A-2604

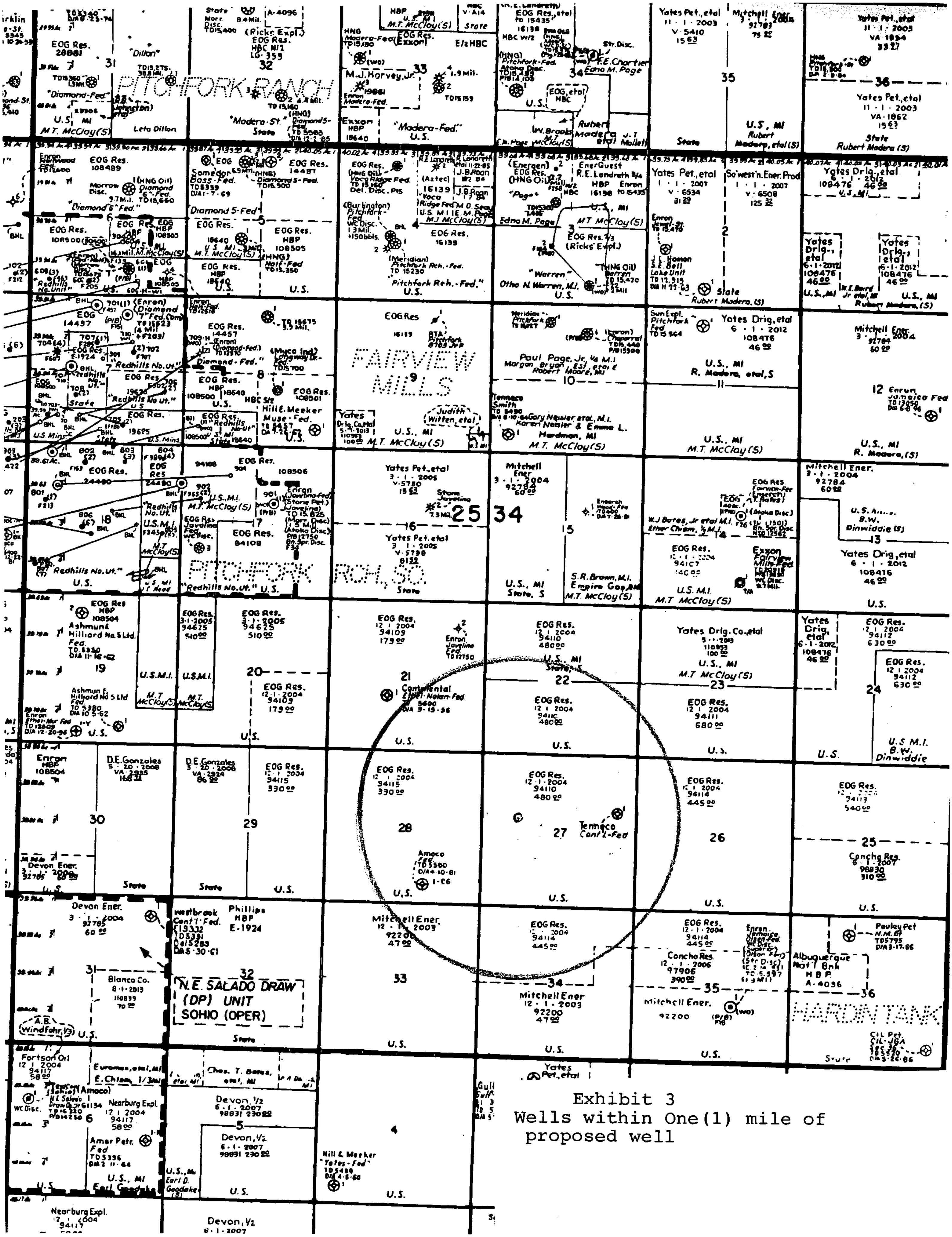
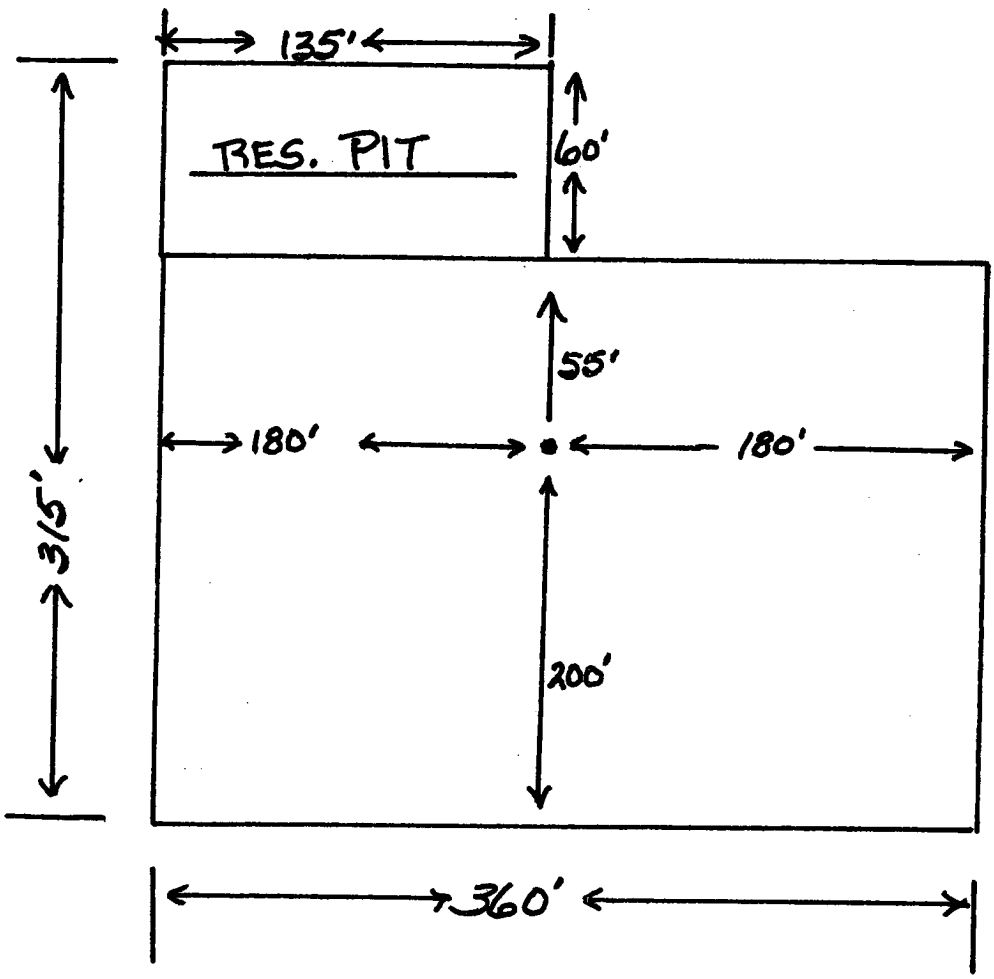
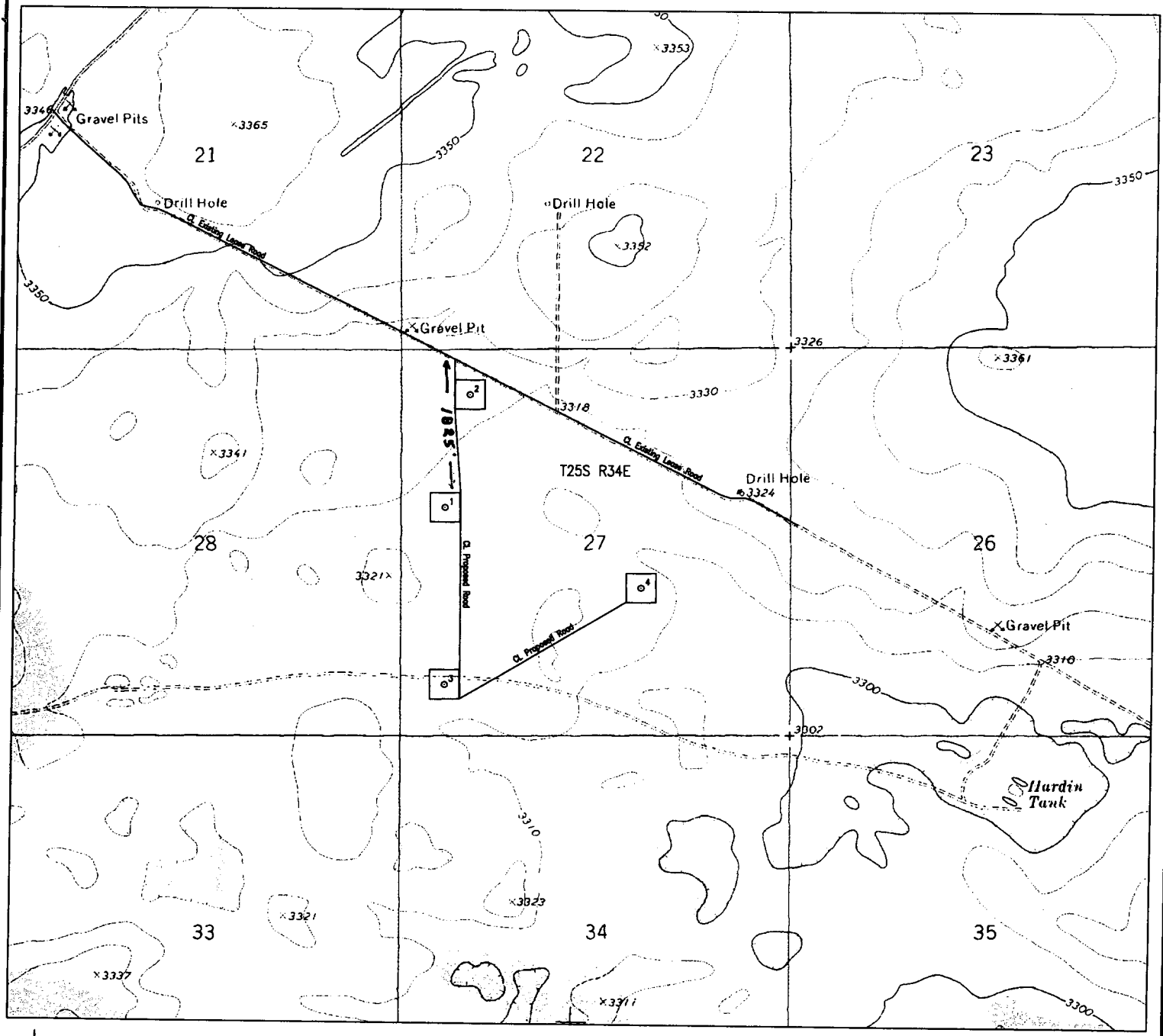


Exhibit 3
Wells within One(1) mile of proposed well

exhibit 4



Location & Elevation Verification Plat



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U.S.G.S. TOPOGRAPHIC MAP — ANDREWS PLACE, NEW MEXICO – TEXAS

CONTOUR INTERVAL — 10 FEET

LOCATION COORDINATES — NAD 27: LAT. 32.10258 LONG. 103.46376

LOCATION ELEVATION — 3318 FEET

2000 0 2000 4000 6000 Feet

EOG Resources, Inc.
Pitchblend Unit No. 1 – 2200 FNL & 660 FWL
Section 27, T25S, R34E, NMPM
Lea County, New Mexico

STANFORD SURVEYING COMPANY
P.O. BOX 8490
MIDLAND, TEXAS 79708-8490
432-699-5708

DRAWN BY	DATE	SCALE	FILE NAME
Mike Stanford	8-31-2004	1" = 2000'	A-2601T

Statement Accepting Responsibility For Operations

Operator Name: EOG Resources, Inc.
Street or Box: P.O. Box 2267
City, State: Midland, TX
Zip Code: 79702

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM 94110

Legal Description of Land: Section 27, T-25-S;R-34-E NMPM
LeaCo., NM

Formation(s) (if applicable):

Bond Coverage: (***State if individually bonded or another's bond***) Individually

BLM Bond File No.: NM2308 with endorsement to State of NM

Authorized Signature: Mike Francis

Title: Agent

Date: 9/8/04

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: EOG Resources, Inc. Telephone: 432 686-3-14 e-mail address: mike_francis@eogresources.com
Address: PO Box 2267 Midland Tx.
Facility or well name: Pitchblende Federal Unit No 1 API #: 30-025-36922 U/L or Qtr/Qtr E Sec 27 T 25 R 34
County: Lea Latitude 32.09593 Longitude 103.46375 NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 7,000 bbl	**Below-grade tank** Volume: ____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (50 feet or more, but less than 100 feet) 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (No)	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet (1000 feet or more)	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	

RECEIVED SEP 2004 OCD Hobbs

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

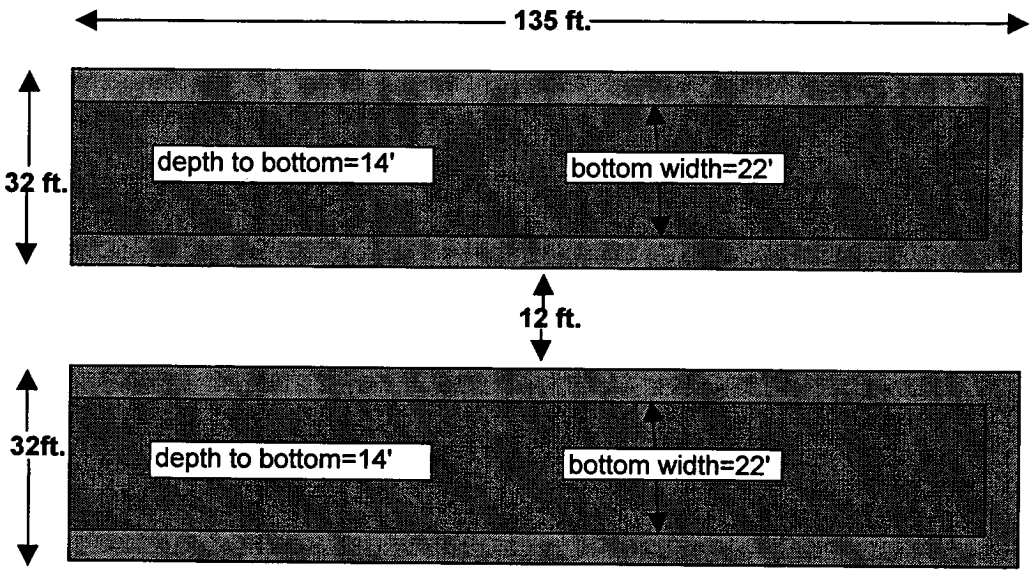
I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: 9/28/04
Printed Name/Title Mike Francis Agent Signature Mike Francis

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: 11/1/04
Printed Name/Title _____ Signature _____

PETROLEUM ENGINEER

New Mexico Trench Pits



Pits will be 32 ft. wide at top and 22 ft. wide at bottom with 5 ft. shelves on walls.
Bottom depth will be 22 ft.
There will be 12 feet separating pits unless soil conditions require more.