If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

OCD-ARTESIA

RECEIVED
MAY 25 2006
OCD-ARTESIA

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

5. Lease Serial No.
NMNM 111400

6. If Indian, Allottee or Tribe Name

## APPLICATION FOR PERMIT TO DRILL OR REENTER

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

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

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

8. Lease Name and Well No.
NEW 25 FED No. 2H 35687

2. Name of Operator
EOG Resources, Inc. 7377

9. API Well No.
30-015-34895

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

3b. Phone No. *(include area code)*
(432) 686-3642

10. Field and Pool, or Exploratory
Undes Cottonwood Creek; Wolfcamp, West

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface 660' FSL & 1880' FEL (U/L O)

SUBJECT TO LIKE APPROVAL BY STATE

At proposed prod. Zone 660' FNL & 1880' FEL (U/L B)

11. Sec., T., R., M., or Blk. And Survey or Area
Section 25, T16S-R24E, N.M.P.M.

14. Distance in miles and direction from nearest town or post office*
11.5 miles NW from Artesia

12. County or Parish
Eddy

13. State
New Mexico

| 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 320 | 17. Spacing Unit dedicated to this well E/2 |
|---|---|---|
| 18. Distance from proposed location* to nearest well, drilling, completed applied for, on this lease, ft. 1,120' | 19. Proposed Depth 4,669' TVD 8,479' TMD | 20. BLM/BIA Bond No. on file NM2308 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc) Gr 3663' | 22. Approximate date work will start* 6/1/2006 | 23. Estimated duration 30 days |

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.

| 25. Signature | Name *(Printed/Typed)* | Date |
|---|---|---|
| Donny G. Glanton | Donny G. Glanton | 4/17/2006 |

Title
SR LEASE OPERATIONS ROW REPRESENTATIVE

| Approved by *(Signature)* /s/ Tony J. Herrell | Name *(Printed/Typed)* /s/ Tony J. Herrell | Date MAY 23 2006 |
|---|---|---|
| Title FIELD MANAGER | Office CARLSBAD FIELD OFFICE | |

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights 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

CARLSBAD CONTROLLED WATER BASIN

Witness Surface Casing

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 October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | Pool Code | Pool Name |
|---|---|---|
| | | Undes Cottonwood Creek; Wofcamp West |

| Property Code | Property Name | Well Number |
|---|---|---|
| | NEW 25 FEDERAL | 2H |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 7377 | EOG RESOURCES, INC. | 3663' |

## Surface Location

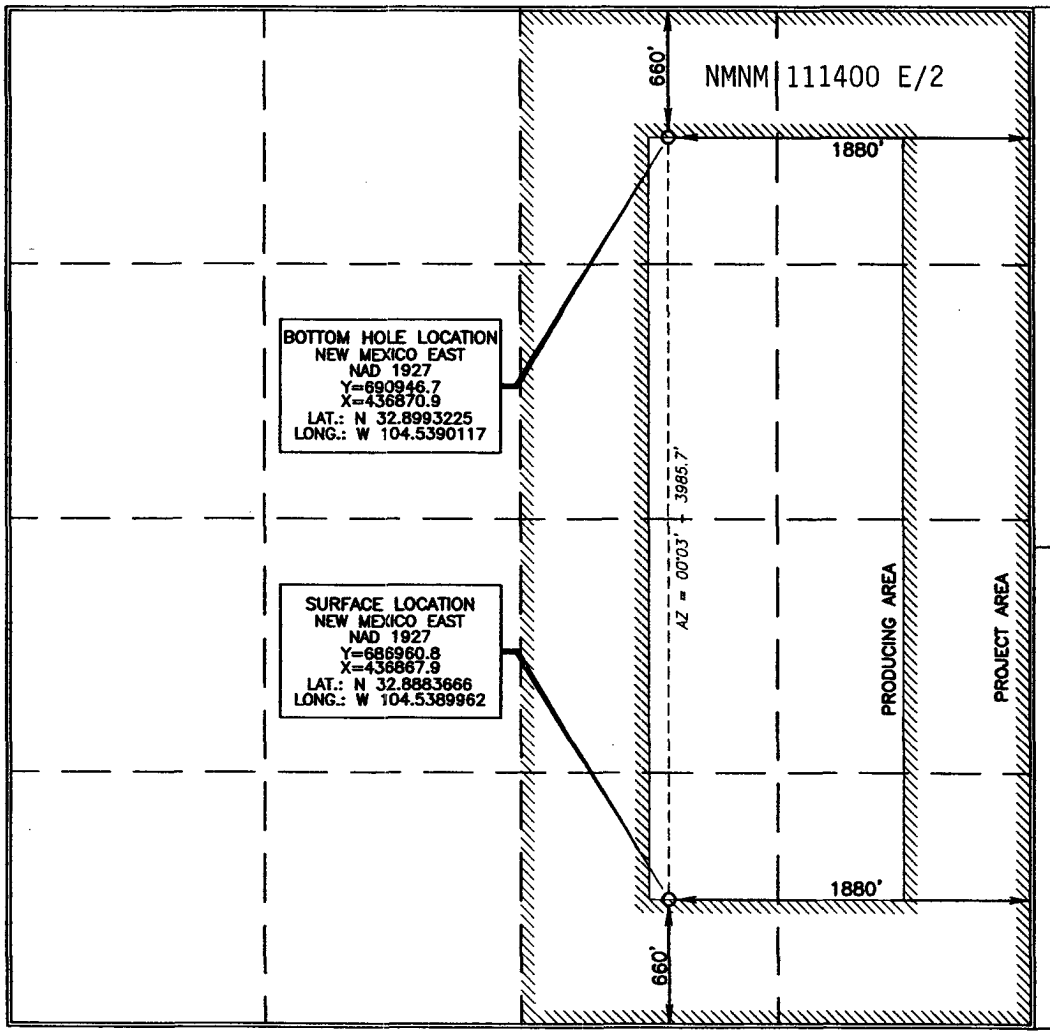
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 25 | 16 SOUTH | 24 EAST, N.M.P.M. | | 660 | SOUTH | 1880 | EAST | EDDY |

## 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 |
|---|---|---|---|---|---|---|---|---|---|
| B | 25 | 16 SOUTH | 24 EAST, N.M.P.M. | | 660 | NORTH | 1880 | EAST | EDDY |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 320 | | | |

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 that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

Donny G. Glanton 4/17/06
*Signature* *Date*

Donny G. Glanton
*Printed Name*

### 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.*

NEW MEXICO
15079
REGISTERED PROFESSIONAL LAND SURVEYOR

FEBRUARY 16, 2006
*Date of Survey*

*Signature and Seal of Professional Surveyor*

Terry J. Asel
*Certificate Number* 15079

WO# 060216WL-b (CDG)

**Permit Information:**

Well Name: New 25 Fed #1H

Location:

SL 660' FSL & 760' FEL, Section 25, T-16-S, R-24-E, Eddy Co., N.M.

BHL 660' FNL & 760' FEL, Section 25, T-16-S, R-24-E, Eddy Co., N.M.

**Casing Program:**

| Casing | Setting Depth | Hole Size | Casing Size | Casing Weight | Casing Grade | Desired TOC |
|---|---|---|---|---|---|---|
| Surface | 900' | 9-7/8" | 7" | 23# | J-55 | Surface |
| Production | 8,516' | 6-1/8" | 4 ½" | 11.6# | P-110 | Surface |

**Cement Program:**

| Depth | No. Sacks | Slurries: |
|---|---|---|
| 900' | 150 | Lead: Premium Plus + 2% $CaCl_2$ + 3% Econolite + ¼ pps Flocele |
| | 175 | Tail: Premium Plus + 2% $CaCl_2$ + ¼ pps Flocele |
| 8,516' | 450 | Lead: Interfill C + ¼ pps Flocele |
| | 350 | Tail: Premium Cement + 100% Acid Soluble Additive + 0.6% Halad®-344 + 0.8% Econolite + 0.2% HR-55 |
| | | |

**Mud Program:**

| Depth | Type | Weight (ppg) | Viscosity | Water Loss |
|---|---|---|---|---|
| 0 – 900' | Fresh - Gel | 8.6-8.8 | 28-34 | N/c |
| 900' – 4,400' | Cut Brine | 8.8-9.2 | 28-34 | N/c |
| 4,400' – 5,200' | Cut Brine | 8.8-9.2 | 28-34 | 10-15 |
| 4,318' – 8,516' | Polymer (Lateral) | 9.0-9.4 | 40-45 | 10-25 |

eog resources

**EOG Resources, Inc.**
P.O. Box 2267
Midland, TX 79702
(915) 686-3600

February 22, 2006

State of New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

To Whom It May Concern:

I am writing to request a waiver for the inclusion of an $H_2S$ Contingency Plan for the New 25 Fed #1H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any $H_2S$ bearing formations during drilling operations.

Sincerely,

Jason LaGrega
Drilling Engineer

# EOG RESOURCES INC.

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well New 25 Fed #1H |
| **Company:** | EOG - Midland (3) | **TVD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Project:** | Thames | **MD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Site:** | New 25 Fed #1H | **North Reference:** | Grid |
| **Well:** | New 25 Fed #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | New 25 Fed #1H | | |
| **Design:** | Plan #1 | | |

| **Project** | Thames | | |
|---|---|---|---|
| **Map System:** | US State Plane 1927 (Exact solution) | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | NAD 1927 (NADCON CONUS) | | |
| **Map Zone:** | New Mexico East 3001 | | |

| **Site** | New 25 Fed #1H | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 686,960.30 ft | **Latitude:** | 32° 53' 18.136 N |
| **From:** | Map | **Easting:** | 437,987.90 ft | **Longitude:** | 104° 32' 7.251 W |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | " | **Grid Convergence:** | -0.11 ° |

| **Well** | New 25 Fed #1H | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 ft | **Northing:** | 686,960.30 ft | **Latitude:** | 32° 53' 18.136 N |
| | **+E/-W** | 0.0 ft | **Easting:** | 437,987.90 ft | **Longitude:** | 104° 32' 7.251 W |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | ft | **Ground Level:** | 3,647.0 ft |

| **Wellbore** | New 25 Fed #1H | | | | |
|---|---|---|---|---|---|
| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
| | IGRF2005 | 2/22/2006 | 8.68 | 60.74 | 49,421 |

| **Design** | Plan #1 | | | | |
|---|---|---|---|---|---|
| **Audit Notes:** | | | | | |
| **Version:** | | **Phase:** | PROTOTYPE | **Tie On Depth:** | 0.0 |
| **Vertical Section:** | **Depth From (TVD) (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Direction (°)** | |
| | 4,653.0 | 0.0 | 0.0 | 0.04 | |

**Plan Sections**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,318.0 | 0.00 | 0.00 | 4,318.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,918.0 | 90.00 | 0.05 | 4,700.0 | 382.0 | 0.3 | 15.00 | 15.00 | 0.00 | 0.05 | |
| 4,943.0 | 90.75 | 0.04 | 4,699.8 | 407.0 | 0.4 | 3.00 | 3.00 | -0.03 | -0.58 | |
| 8,515.8 | 90.75 | 0.04 | 4,653.0 | 3,979.4 | 3.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,515.8 | 90.75 | 0.04 | 4,653.0 | 3,979.5 | 3.0 | 3.00 | -0.78 | -2.90 | -105.15 | BHL (New #1H) |

# EOG RESOURCES INC.

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well New 25 Fed #1H |
| **Company:** | EOG - Midland (3) | **TVD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Project:** | Thames | **MD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Site:** | New 25 Fed #1H | **North Reference:** | Grid |
| **Well:** | New 25 Fed #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | New 25 Fed #1H | | |
| **Design:** | Plan #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.00 | 0.00 | 2,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 0.00 | 0.00 | 2,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 0.00 | 0.00 | 2,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 0.00 | 0.00 | 2,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 0.00 | 0.00 | 2,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 0.00 | 0.00 | 3,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 0.00 | 0.00 | 3,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 0.00 | 0.00 | 3,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 0.00 | 0.00 | 3,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 0.00 | 0.00 | 3,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 0.00 | 0.00 | 3,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 0.00 | 0.00 | 3,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 0.00 | 0.00 | 3,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 0.00 | 0.00 | 3,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 0.00 | 0.00 | 3,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 0.00 | 0.00 | 4,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 0.00 | 0.00 | 4,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 0.00 | 0.00 | 4,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 0.00 | 0.00 | 4,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,318.0 | 0.00 | 0.00 | 4,318.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 12.30 | 0.05 | 4,399.4 | 8.8 | 0.0 | 8.8 | 15.00 | 15.00 | 0.00 |
| 4,500.0 | 27.30 | 0.05 | 4,493.2 | 42.5 | 0.0 | 42.5 | 15.00 | 15.00 | 0.00 |
| 4,600.0 | 42.30 | 0.05 | 4,575.1 | 99.5 | 0.1 | 99.5 | 15.00 | 15.00 | 0.00 |
| 4,700.0 | 57.30 | 0.05 | 4,639.4 | 175.6 | 0.2 | 175.6 | 15.00 | 15.00 | 0.00 |
| 4,800.0 | 72.30 | 0.05 | 4,681.9 | 265.8 | 0.2 | 265.8 | 15.00 | 15.00 | 0.00 |
| 4,900.0 | 87.30 | 0.05 | 4,699.5 | 364.0 | 0.3 | 364.0 | 15.00 | 15.00 | 0.00 |
| 4,918.0 | 90.00 | 0.05 | 4,700.0 | 382.0 | 0.3 | 382.0 | 15.00 | 15.00 | 0.00 |
| 4,943.0 | 90.75 | 0.04 | 4,699.8 | 407.0 | 0.4 | 407.0 | 3.00 | 3.00 | -0.03 |
| 5,000.0 | 90.75 | 0.04 | 4,699.1 | 464.0 | 0.4 | 464.0 | 0.00 | 0.00 | 0.00 |

# EOG RESOURCES INC.

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well New 25 Fed #1H |
| **Company:** | EOG - Midland (3) | **TVD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Project:** | Thames | **MD Reference:** | WELL @ 3664.0ft (Original Well Elev) |
| **Site:** | New 25 Fed #1H | **North Reference:** | Grid |
| **Well:** | New 25 Fed #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | New 25 Fed #1H | | |
| **Design:** | Plan #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,100.0 | 90.75 | 0.04 | 4,697.8 | 564.0 | 0.5 | 564.0 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 90.75 | 0.04 | 4,696.4 | 663.9 | 0.5 | 663.9 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 90.75 | 0.04 | 4,695.1 | 763.9 | 0.6 | 763.9 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 90.75 | 0.04 | 4,693.8 | 863.9 | 0.7 | 863.9 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 90.75 | 0.04 | 4,692.5 | 963.9 | 0.8 | 963.9 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 90.75 | 0.04 | 4,691.2 | 1,063.9 | 0.8 | 1,063.9 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 90.75 | 0.04 | 4,689.9 | 1,163.9 | 0.9 | 1,163.9 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 90.75 | 0.04 | 4,688.6 | 1,263.9 | 1.0 | 1,263.9 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 90.75 | 0.04 | 4,687.3 | 1,363.9 | 1.1 | 1,363.9 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 90.75 | 0.04 | 4,686.0 | 1,463.9 | 1.1 | 1,463.9 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 90.75 | 0.04 | 4,684.7 | 1,563.9 | 1.2 | 1,563.9 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 90.75 | 0.04 | 4,683.3 | 1,663.9 | 1.3 | 1,663.9 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 90.75 | 0.04 | 4,682.0 | 1,763.9 | 1.4 | 1,763.9 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 90.75 | 0.04 | 4,680.7 | 1,863.8 | 1.4 | 1,863.8 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 90.75 | 0.04 | 4,679.4 | 1,963.8 | 1.5 | 1,963.8 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 90.75 | 0.04 | 4,678.1 | 2,063.8 | 1.6 | 2,063.8 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 90.75 | 0.04 | 4,676.8 | 2,163.8 | 1.7 | 2,163.8 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 90.75 | 0.04 | 4,675.5 | 2,263.8 | 1.7 | 2,263.8 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 90.75 | 0.04 | 4,674.2 | 2,363.8 | 1.8 | 2,363.8 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 90.75 | 0.04 | 4,672.9 | 2,463.8 | 1.9 | 2,463.8 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 90.75 | 0.04 | 4,671.5 | 2,563.8 | 2.0 | 2,563.8 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 90.75 | 0.04 | 4,670.2 | 2,663.8 | 2.0 | 2,663.8 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 90.75 | 0.04 | 4,668.9 | 2,763.8 | 2.1 | 2,763.8 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 90.75 | 0.04 | 4,667.6 | 2,863.8 | 2.2 | 2,863.8 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 90.75 | 0.04 | 4,666.3 | 2,963.8 | 2.2 | 2,963.8 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 90.75 | 0.04 | 4,665.0 | 3,063.7 | 2.3 | 3,063.7 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.75 | 0.04 | 4,663.7 | 3,163.7 | 2.4 | 3,163.7 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.75 | 0.04 | 4,662.4 | 3,263.7 | 2.5 | 3,263.7 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.75 | 0.04 | 4,661.1 | 3,363.7 | 2.5 | 3,363.7 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 90.75 | 0.04 | 4,659.8 | 3,463.7 | 2.6 | 3,463.7 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.75 | 0.04 | 4,658.4 | 3,563.7 | 2.7 | 3,563.7 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.75 | 0.04 | 4,657.1 | 3,663.7 | 2.8 | 3,663.7 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 90.75 | 0.04 | 4,655.8 | 3,763.7 | 2.8 | 3,763.7 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.75 | 0.04 | 4,654.5 | 3,863.7 | 2.9 | 3,863.7 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.75 | 0.04 | 4,653.2 | 3,963.7 | 3.0 | 3,963.7 | 0.00 | 0.00 | 0.00 |
| 8,515.8 | 90.75 | 0.04 | 4,653.0 | 3,979.5 | 3.0 | 3,979.5 | 0.02 | 0.00 | -0.02 |

**Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| BHL (New #1H) - plan hits target - Point | 0.00 | 0.00 | 4,653.0 | 3,979.5 | 3.0 | 690,939.80 | 437,990.90 | 32° 53' 57.514 N | 104° 32' 7.305 W |

## SITE DETAILS: New 25 Fed #1H

Site Centre Northing: 686960.30
Easting: 437987.90

Positional Uncertainity: 0.0
Convergence: -0.11
Local North: Grid

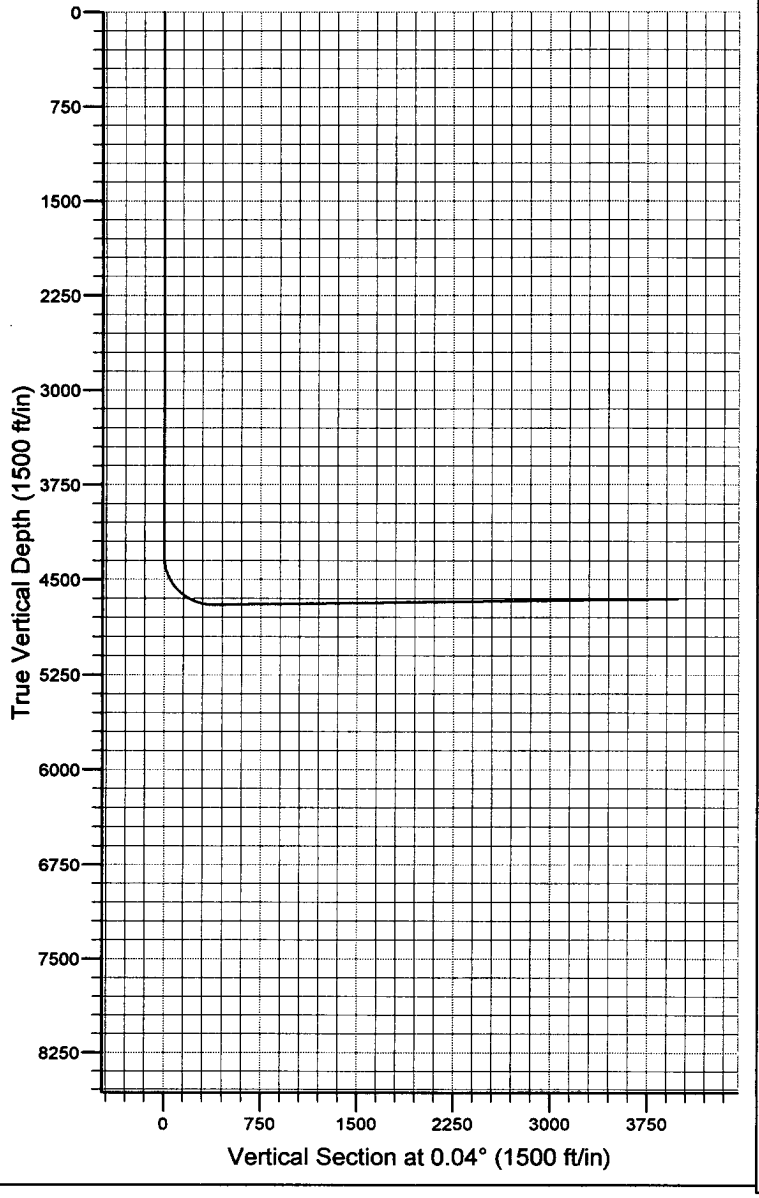
## PROJECT DETAILS: Thames

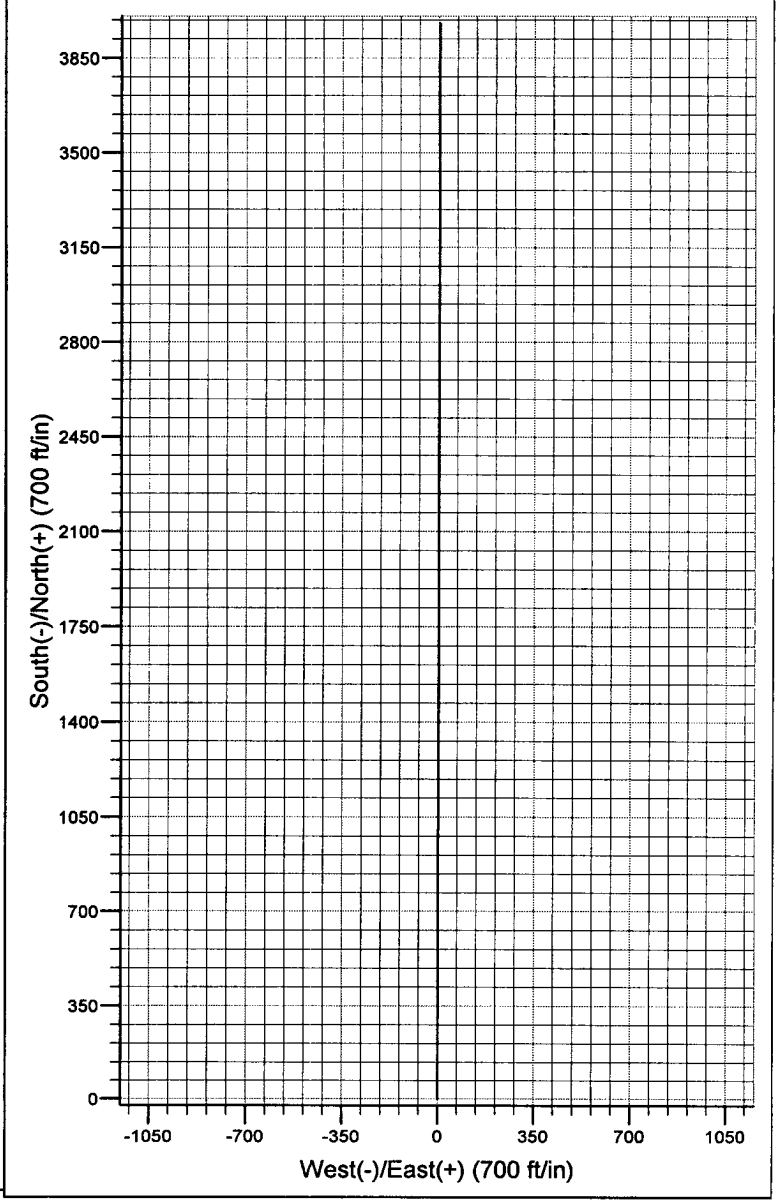
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level

## SECTION DETAILS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 4318.0 | 0.00 | 0.00 | 4318.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 4918.0 | 90.00 | 0.05 | 4700.0 | 382.0 | 0.3 | 15.00 | 0.05 | 382.0 | |
| 4943.0 | 90.75 | 0.04 | 4699.8 | 407.0 | 0.4 | 3.00 | -0.58 | 407.0 | |
| 8515.8 | 90.75 | 0.04 | 4653.0 | 3979.4 | 3.0 | 0.00 | 0.00 | 3979.4 | |
| 8515.8 | 90.75 | 0.04 | 4653.0 | 3979.5 | 3.0 | 3.00 | -105.22 | 3979.5 | BHL (New #1H) |



**DRILLING PROGRAM**

**EOG RESOURCES, INC.**
**New 25 Fed No. 2H**
**Eddy Co. NM**

## 1. GEOLOGIC NAME OF SURFACE FORMATION:

Quaternary Alluvium 0-200

## 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

| | |
|---|---|
| San Andres | 665' |
| Glorieta | 2,035' |
| Tubb | 3,326' |
| Abo Shale | 4,015' |
| Wolfcamp Pay | 5,065' |

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

| | | |
|---|---|---|
| Quanterary Alluvium | 0- 200' | Fresh Water |
| San Andres | 665' | Oil |
| Glorieta | 2,035' | Oil/Gas |
| Tubb | 3,326' | Oil/Gas |
| Abo/Wolfcamp Pay | 5,065' | Gas |

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 8.625" casing at 900' and circulating cement back to surface.

## 4. CASING PROGRAM

| Hole Size | Interval | OD Casing | Weight | Grade | Jt. Conn. Type |
|---|---|---|---|---|---|
| 12.250" | 0-900' | 8.625" | 32# | J-55 | LT&C |
| 7.875" | 0-8,479' | 5.5" | 17# | N-80 | LT&C |

Cementing Program:

8.625" Surface Casing: Cement to surface with 150 sx Prem Plus, 3% Econolite 0.25 pps Flocele, 2% Calcium Chloride, 175 sx Prem Plus, 2% Calcium Chloride, 0.25 pps Flocele

5.5" Production: Cement to surface with 400sx Interfill C,+ 0.25 pps Flocele; 300 sx Premium Cement, +100% Acid Soluble Additive, + 0.6% Halad-344 + 0.8% Econolite+ 0.2% HR-55.

## 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. as follows:

Under Surface – 3M System

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 mud system. The applicable depths and properties of this system are as follows:

| Depth | Type | Wt (PPG) | Viscosit (sec) | Waterloss (cc) |
|---|---|---|---|---|
| 0-900' | Fresh – Gel | 8.6-8.8 | 28-34 | N/c |
| 900'-4400' | Cut Brine | 8.8-9.2 | 28-34 | N/c |
| 4,400'-5,200' | Cut Brine | 8.8-9.2 | 28-34 | 10-15 |
| 4,218'-8,479' | Polymer (Lateral) | 9.0-9.4 | 40-45 | 10-25 |

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.

## 8. LOGGING, TESTING AND CORING PROGRAM:

Electric logging will consist of GR-Dual Laterlog and GR-Compensated Density-Neutron from +/-900' to TVD.

Possible sidewall cores based on shows.

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

The estimated bottom hole temperature (BHT) at TD is 105 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 3000 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 30 days. 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.
New 25 Fed No. 2H
Eddy Co. NM

## SURFACE USE AND OPERATIONS PLAN
**Surface is owned by the BLM**

**Directions to Well Site: From the Intersection of U.S. Hwy 82 & U.S. Hwy 285, Go west on Hwy 82 for 11.3 miles; Thence north on County Road No. 95 (Joy Road) for 4.2 miles; Thence east on County Road No. 75 for 1.8 miles; Thence south 0.9 miles; Thence east for 0.7 miles; Thence north 0.1 miles to the proposed location.**

### 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:

350' of new road is required (See Exhibit 2a) and will tee into the access road to EOG's New 25 Fed No. 1H.

No turnouts necessary.

No culverts are necessary. No 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, a flowline will be built to the nearest pipeline.

## 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 & 2a and by temporary water supply lines.

## 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.

## OTHER INFORMATION:

The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass.

## COMPANY REPRESENTATIVES:

**Permitting & Land**

Mr. Donny G. Glanton
Senior ROW Lease Operations Representative
EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3642 Office

**Drilling**

Mr. Ron McIntyre or
Mr. Jason LaGrega
Division Drilling Engineers
EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3640 Office
(432) 686-3633 Office

**Operations**

Mr. Howard Kemp
Production Manager
EOG Resources, Inc
P.O. Box 2267
Midland, TX 79702
(432) 686-3704 Office

## 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.

Jason LaGrega
Division Drilling Engineer
DATE: 4/17/06

**DRILLING PROGRAM**

**EOG RESOURCES, INC.**
**New 25 Fed No. 2H**
**Eddy 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, 3000 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 3000 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.

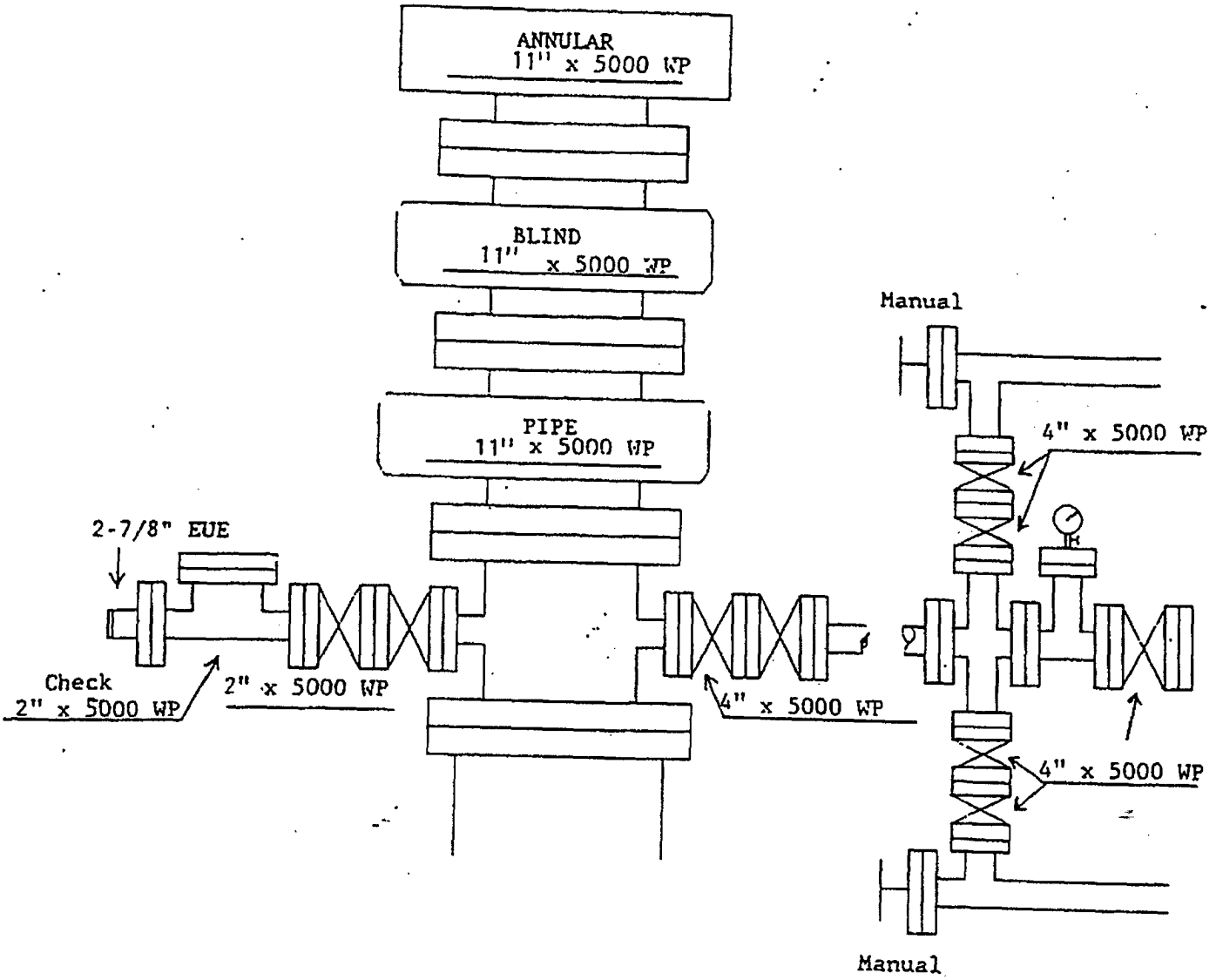
9. Blow out preventer control to be located as close to driller's position as feasible.

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.

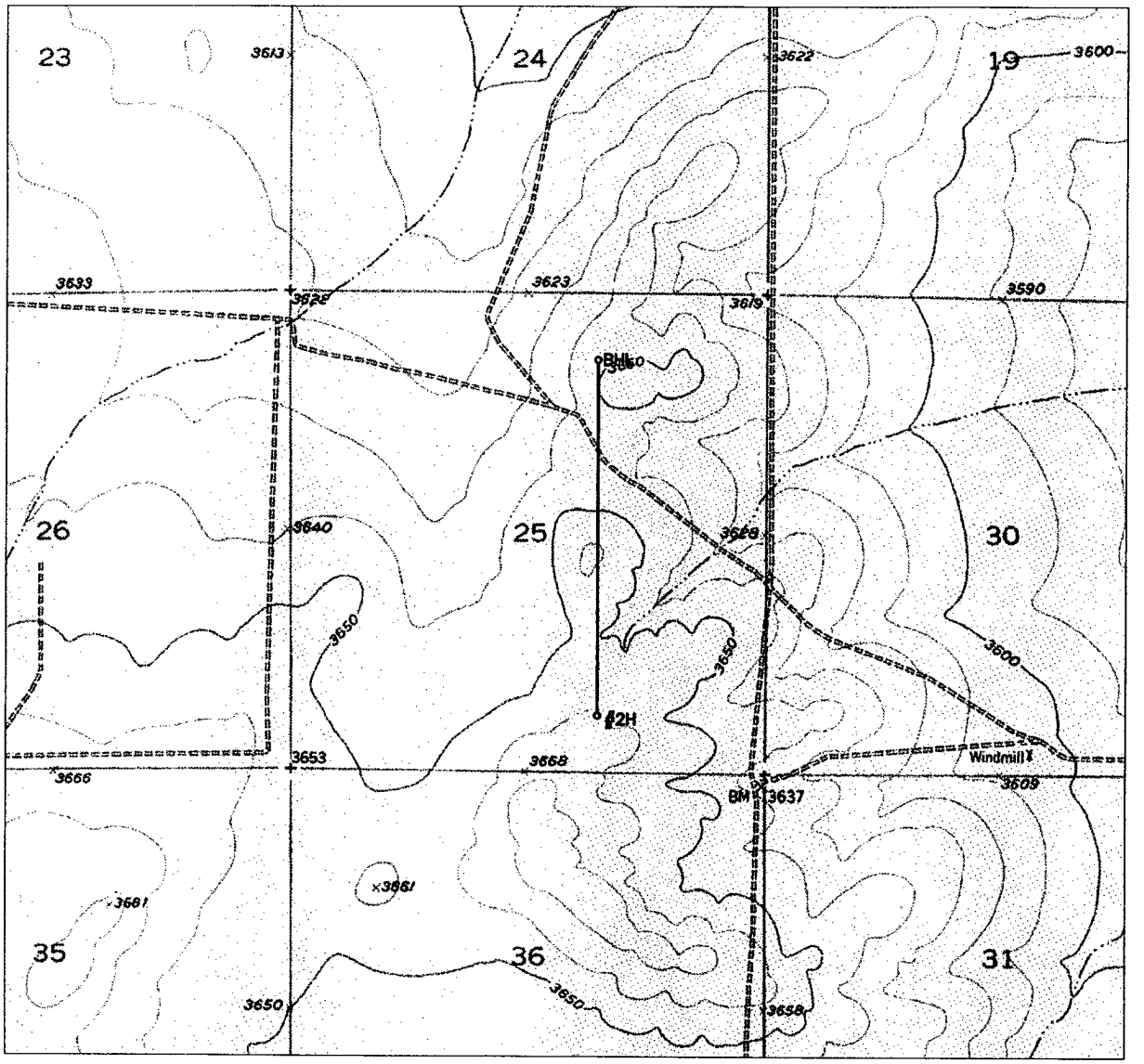
EXHIBIT "1"

EOG Resources, Inc.

NEW 25 Fed No. 2H



# LOCATION VERIFICATION MAP




SEC. 25 TWP. 16-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 1880' FEL

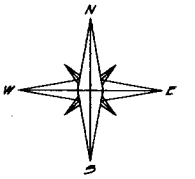
ELEVATION 3663'

OPERATOR EOG RESOURCES, INC

LEASE NEW 25 FED #2H

U.S.G.S. TOPOGRAPHIC MAP
HOPE NE, NM

CONTOUR INTERVAL = 10 FEET
SCALE 1" = 2000'




Asel Surveying
& Consulting

P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 505-393-9146

## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** EOG Resources, Inc.
**Well Name & No.** New 25 Federal #2H
**Surface Location:** 660' FSL, 1880' FEL, Section 25, T. 16 S., R.24 E., Eddy County, New Mexico
**Bottom Location:** 660' FNL, 1880' FEL, Section 25, T. 16 S., R.24 E., Eddy County, New Mexico
**Lease:** NM-111400

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822, for wells in Eddy County in sufficient time for a representative to witness:

   A. Well Spud

   B. Cementing casing: **8-5/8** inch **5-1/2** inch

   C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The **8-5/8** inch surface casing shall be set at **approximately 900 feet** and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the **5-1/2** inch production casing is **to be sufficient to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval**.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **8-5/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **8-5/8** inch first intermediate casing shall be **2000** psi.

4. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

5/2/2006
acs