

11/11 14 2008
OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
NMNM 108958
6 If Indian, Allottee or Tribe Name

S

1a. Type of work: ☒ DRILL ☐ REENTER
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

Split Estate

2. Name of Operator
EOG Resources, Inc.

7 If Unit or CA Agreement, Name and No.
8. Lease Name and Well No.
NILE STATE 22 COM 2H

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

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

9. API Well No.
30-015-34422

10. Field and Pool, or Exploratory
Collins Ranch; Wolfcamp (Gas)

4. Location of Well (Report location clearly and in accordance with any State requirements.)
At surface 960' FSL & 760' FWL (U/L M)
At proposed prod. zone 660' FNL & 760' FWL (U/L D)

11. Sec., T. R. M. or Blk. and Survey or Area
Section 22, T17S-R24E, N.M.P.M.

14. Distance in miles and direction from nearest town or post office*
12 miles west of Artesia, NM

Roswell Controlled Water Basin

12. County or Parish
Eddy
13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)
760'

16. No. of acres in lease
320

17 Spacing Unit dedicated to this well
W/2 of Sec 22, T17S-R24E, N.M.P.M.

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft
1120'

19. Proposed Depth
5,100' TVD; 8,455' TMD

20 BLM/BIA Bond No. on file
NM2308

21 Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 3,753'

22 Approximate date work will start*

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 System Lands, the SUPO must 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 BLM.

25. Signature *Donny G. Glanton*

Name (Printed/Typed)
Donny G. Glanton

Date
07/16/2007

Title
Sr. Lease Operations ROW Representative

Approved by (Signature) */s/ James Stovall*

Name (Printed/Typed)

Date
JUL 10 2008

Title
FIELD MANAGER

Office */s/ James Stovall*

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 TWO YEARS

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 page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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:

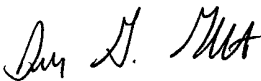
Lease No.: NMNM 108958

Legal Description of Land: NW/4 of Section 22, T17S; R24E, N.M.P.M., Eddy Co. NM

Formation: Collins Ranch; Wolfcamp Gas

Bond Coverage: Nationwide

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

Authorized Signature: 
Donny G. Glanton

Title: Sr. Lease Operations ROW Representative

Date: 7/16/2007



599

(432) 686-3642 Office
(432) 770-0602 Cell
Donny_Glanton@eogresources.com

EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3600

September 26, 2007

BLM – Carlsbad Office
Att: Mr. Duncan Whitlock
620 E. Greene
Carlsbad, NM 88220

Re: NILE STATE 22 COM 2H

Dear Mr. Whitlock:

The surface is owned by the State of New Mexico.

A handwritten signature in cursive script, appearing to read "Donny G. Glanton".

Donny G. Glanton
Sr. ROW Lease Operations Representative



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, and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

Form C-102

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 copies

Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-34422	² Pool Code 7501	³ Pool Name Collins Ranch; Wolfcamp (G)
⁴ Property Code 34244	⁵ Property Name NILE STATE "22" COM	
⁷ GRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁶ Well Number 2H
		⁹ Elevation 3765'

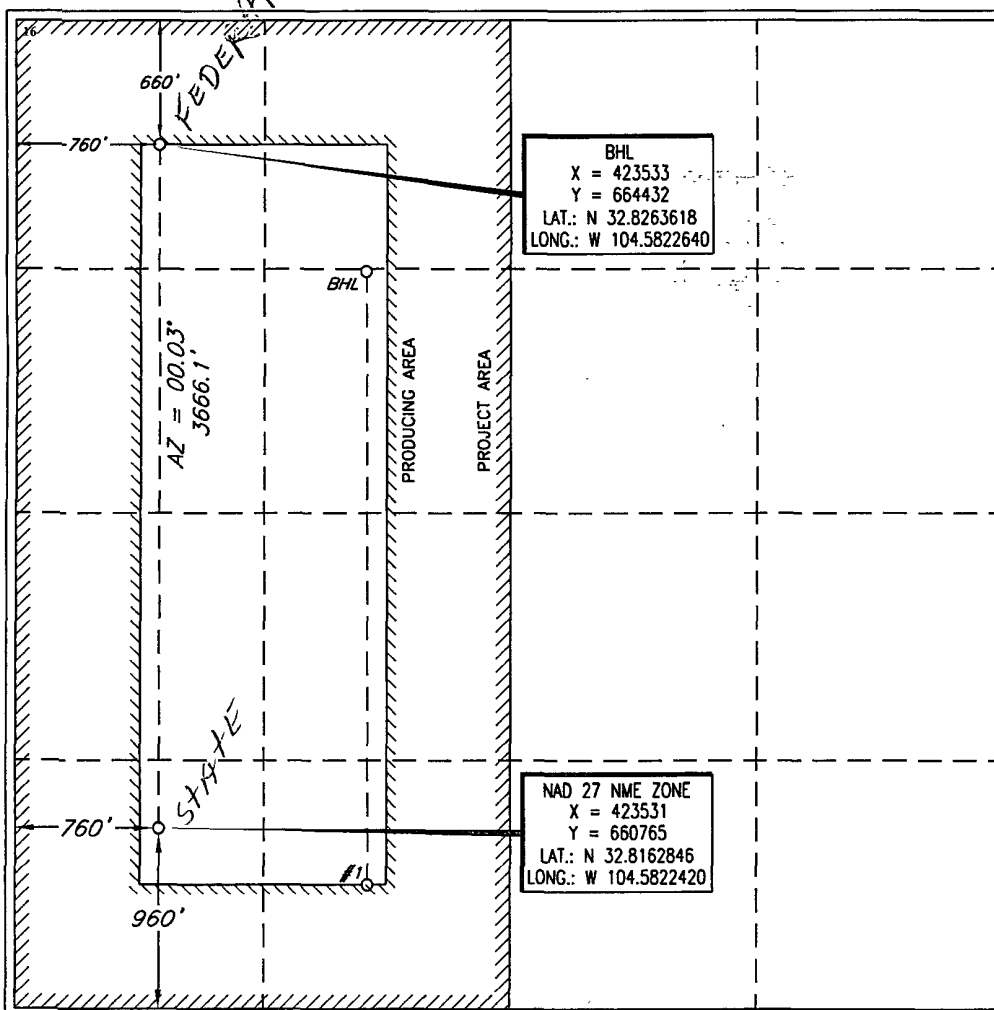
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	17 SOUTH	24 EAST, N.M.P.M.		960'	SOUTH	760'	WEST	EDDY

¹¹Bottom 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
D	22	17 SOUTH	24 EAST, N.M.P.M.		660'	NORTH	760'	WEST	EDDY
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL 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: *Donny G. Glanton*

Printed Name: Donny G. Glanton

Title: Sr. Lease Operations Rep

Date: 10/1/2007

Date:

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my belief.

SEPT 30 2005

Date of Survey:

Signature and Seal of Professional Surveyor

Certificate Number: V. A. BEZNER R.P.S. #7920

JOB #106714 / 101 SE / E.U.O.

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico

Form C-102

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

Energy, Minerals, and Natural Resources Department

Revised August 15, 2000

Submit to Appropriate District Office

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Fee Lease - 3 copies

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1000 Rio Brazos Rd., Aztec, NM 87410

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-34422	² Pool Code 75010	³ Pool Name Collins Ranch ; Wolfcamp Gas
⁴ Property Code 34244	⁵ Property Name NILE STATE "22" COM	⁶ Well Number 2H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3765'

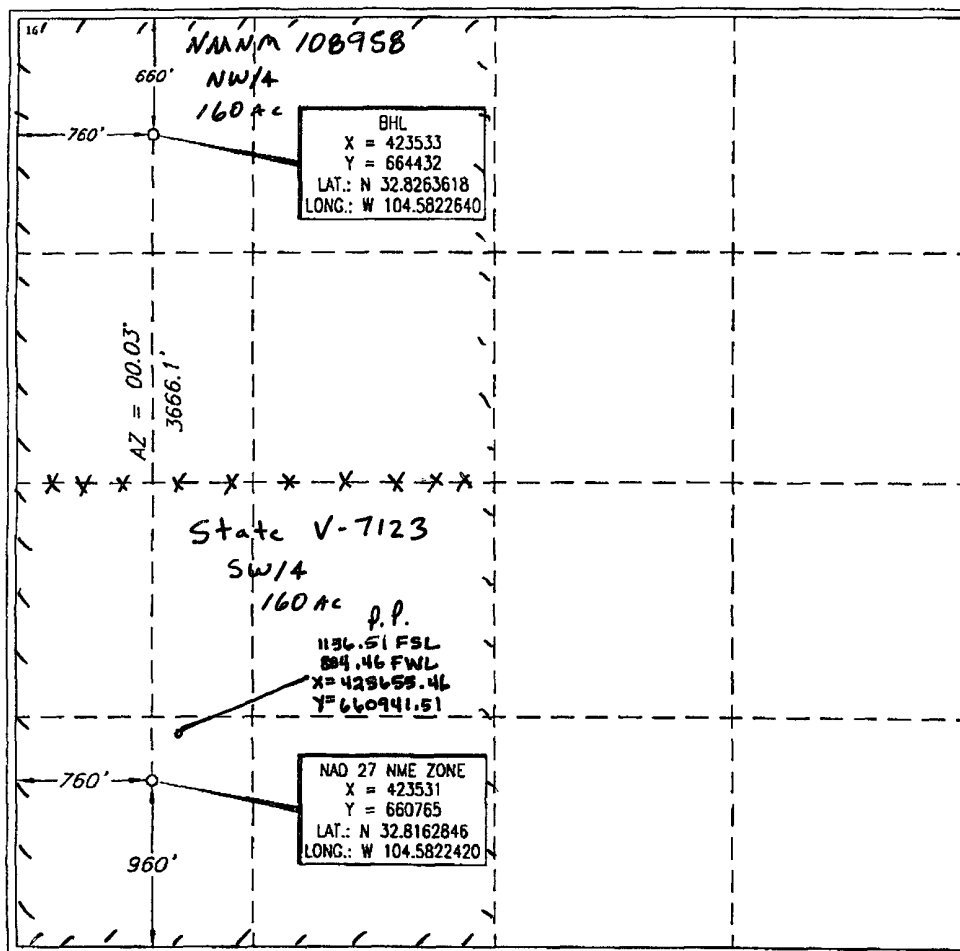
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	17 SOUTH	24 EAST, N.M.P.M.		960'	SOUTH	760'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no. D	Section 22	Township 17 SOUTH	Range 24 EAST, N.M.P.M.	Lot Idn	Feet from the 660'	North/South line NORTH	Feet from the 760'	East/West line WEST	County EDDY
¹² Dedicated Acres 320		¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.					

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

	<h3>¹⁷ OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Donny G. Glanton</i> Signature Donny G. Glanton Printed Name Sr. Lease Operations Rep Title 7/16/07 Date</p> <h3>¹⁸ SURVEYOR CERTIFICATION</h3> <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>SEPTEMBER 30, 2005 Date of Survey Signature and Seal of Professional Surveyor</p> <p>Certificate Number V. L. BEZNER R.P.S. #7920 JOB #106714 / 101 SE / E.U.O.</p>
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EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Nile 22 State Com #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3783.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3783 00ft (Original Well Elev)
Site:	Nile 22 State Com #2H	North Reference:	Grid
Well:	Nile 22 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Nile 22 State Com #2H		
Design:	Original Plan		

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

Site		Nile 22 State Com #2H			
Site Position:		Northing:	660,765.00ft	Latitude:	32° 48' 58.620 N
From:	Map	Easting:	423,531.00ft	Longitude:	104° 34' 56.070 W
Position Uncertainty:	0 00 ft	Slot Radius:	"	Grid Convergence:	-0 13 °

Well:	Nile 22 State Com #2H					
Well Position	+N/-S	0.00 ft	Northing:	660,765.00 ft	Latitude:	32° 48' 58.620 N
	+E/-W	0.00 ft	Easting:	423,531.00 ft	Longitude:	104° 34' 56.070 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,765 00ft

Wellbore	Nile 22 State Com #2H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	9.08	60.79	49,653

Design		Original Plan		
Audit Notes:				
Version:		Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0 00	0.03

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
0.00	0.00	0.00	0 00	0.00	0.00	0.00	0.00	0 00	0.00	
4,568.00	0.00	0.00	4,568 00	0.00	0 00	0 00	0.00	0.00	0.00	
5,168.04	90 00	0.03	4,950.00	382 00	0 20	15.00	15.00	0.00	0.03	
5,233.16	91.76	0 03	4,949 00	447.10	0 23	2.70	2.70	0.00	0.00	
8,454.60	91.76	0 03	4,850.06	3,667.03	1.92	0 00	0.00	0 00	0.00	

EOG RESOURCES INC.

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Well:	Nile 22 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Nile 22 State Com #2H		
Design:	Original Plan		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,568.00	0.00	0.00	4,568.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	4.80	0.03	4,599.96	1.34	0.00	1.34	15.00	15.00	0.00
4,700.00	19.80	0.03	4,697.39	22.58	0.01	22.58	15.00	15.00	0.00
4,800.00	34.80	0.03	4,786.00	68.31	0.04	68.31	15.00	15.00	0.00
4,900.00	49.80	0.03	4,859.75	135.42	0.07	135.42	15.00	15.00	0.00
5,000.00	64.80	0.03	4,913.63	219.32	0.11	219.32	15.00	15.00	0.00
5,100.00	79.79	0.03	4,943.96	314.32	0.16	314.32	15.00	15.00	0.00
5,168.04	90.00	0.03	4,950.00	382.00	0.20	382.00	15.00	15.00	0.00

EOG RESOURCES INC.

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Wellbore:	Nile 22 State Com #2H		
Design:	Original Plan		

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)
5,200.00	90.86	0.03	4,949.76	413.95	0.22	413.95	2.70	2.70	0.00
5,233.16	91.76	0.03	4,949.00	447.10	0.23	447.10	2.70	2.70	0.00
5,300.00	91.76	0.03	4,946.95	513.91	0.27	513.91	0.00	0.00	0.00
5,400.00	91.76	0.03	4,943.88	613.87	0.32	613.87	0.00	0.00	0.00
5,500.00	91.76	0.03	4,940.80	713.82	0.37	713.82	0.00	0.00	0.00
5,600.00	91.76	0.03	4,937.73	813.77	0.43	813.77	0.00	0.00	0.00
5,700.00	91.76	0.03	4,934.66	913.73	0.48	913.73	0.00	0.00	0.00
5,800.00	91.76	0.03	4,931.59	1,013.68	0.53	1,013.68	0.00	0.00	0.00
5,900.00	91.76	0.03	4,928.52	1,113.63	0.58	1,113.63	0.00	0.00	0.00
6,000.00	91.76	0.03	4,925.45	1,213.58	0.64	1,213.58	0.00	0.00	0.00
6,100.00	91.76	0.03	4,922.38	1,313.54	0.69	1,313.54	0.00	0.00	0.00
6,200.00	91.76	0.03	4,919.31	1,413.49	0.74	1,413.49	0.00	0.00	0.00
6,300.00	91.76	0.03	4,916.23	1,513.44	0.79	1,513.44	0.00	0.00	0.00
6,400.00	91.76	0.03	4,913.16	1,613.39	0.84	1,613.40	0.00	0.00	0.00
6,500.00	91.76	0.03	4,910.09	1,713.35	0.90	1,713.35	0.00	0.00	0.00
6,600.00	91.76	0.03	4,907.02	1,813.30	0.95	1,813.30	0.00	0.00	0.00
6,700.00	91.76	0.03	4,903.95	1,913.25	1.00	1,913.25	0.00	0.00	0.00
6,800.00	91.76	0.03	4,900.88	2,013.21	1.05	2,013.21	0.00	0.00	0.00
6,900.00	91.76	0.03	4,897.81	2,113.16	1.11	2,113.16	0.00	0.00	0.00
7,000.00	91.76	0.03	4,894.74	2,213.11	1.16	2,213.11	0.00	0.00	0.00
7,100.00	91.76	0.03	4,891.66	2,313.06	1.21	2,313.06	0.00	0.00	0.00
7,200.00	91.76	0.03	4,888.59	2,413.02	1.26	2,413.02	0.00	0.00	0.00
7,300.00	91.76	0.03	4,885.52	2,512.97	1.32	2,512.97	0.00	0.00	0.00
7,400.00	91.76	0.03	4,882.45	2,612.92	1.37	2,612.92	0.00	0.00	0.00
7,500.00	91.76	0.03	4,879.38	2,712.88	1.42	2,712.88	0.00	0.00	0.00
7,600.00	91.76	0.03	4,876.31	2,812.83	1.47	2,812.83	0.00	0.00	0.00
7,700.00	91.76	0.03	4,873.24	2,912.78	1.53	2,912.78	0.00	0.00	0.00
7,800.00	91.76	0.03	4,870.16	3,012.73	1.58	3,012.73	0.00	0.00	0.00
7,900.00	91.76	0.03	4,867.09	3,112.69	1.63	3,112.69	0.00	0.00	0.00
8,000.00	91.76	0.03	4,864.02	3,212.64	1.68	3,212.64	0.00	0.00	0.00
8,100.00	91.76	0.03	4,860.95	3,312.59	1.73	3,312.59	0.00	0.00	0.00
8,200.00	91.76	0.03	4,857.88	3,412.55	1.79	3,412.55	0.00	0.00	0.00
8,300.00	91.76	0.03	4,854.81	3,512.50	1.84	3,512.50	0.00	0.00	0.00
8,400.00	91.76	0.03	4,851.74	3,612.45	1.89	3,612.45	0.00	0.00	0.00
8,452.46	91.76	0.03	4,850.13	3,664.88	1.92	3,664.88	0.00	0.00	0.00
BHL(Nile#2H)									
8,454.60	91.76	0.03	4,850.06	3,667.03	1.92	3,667.03	0.00	0.00	0.00

Targets

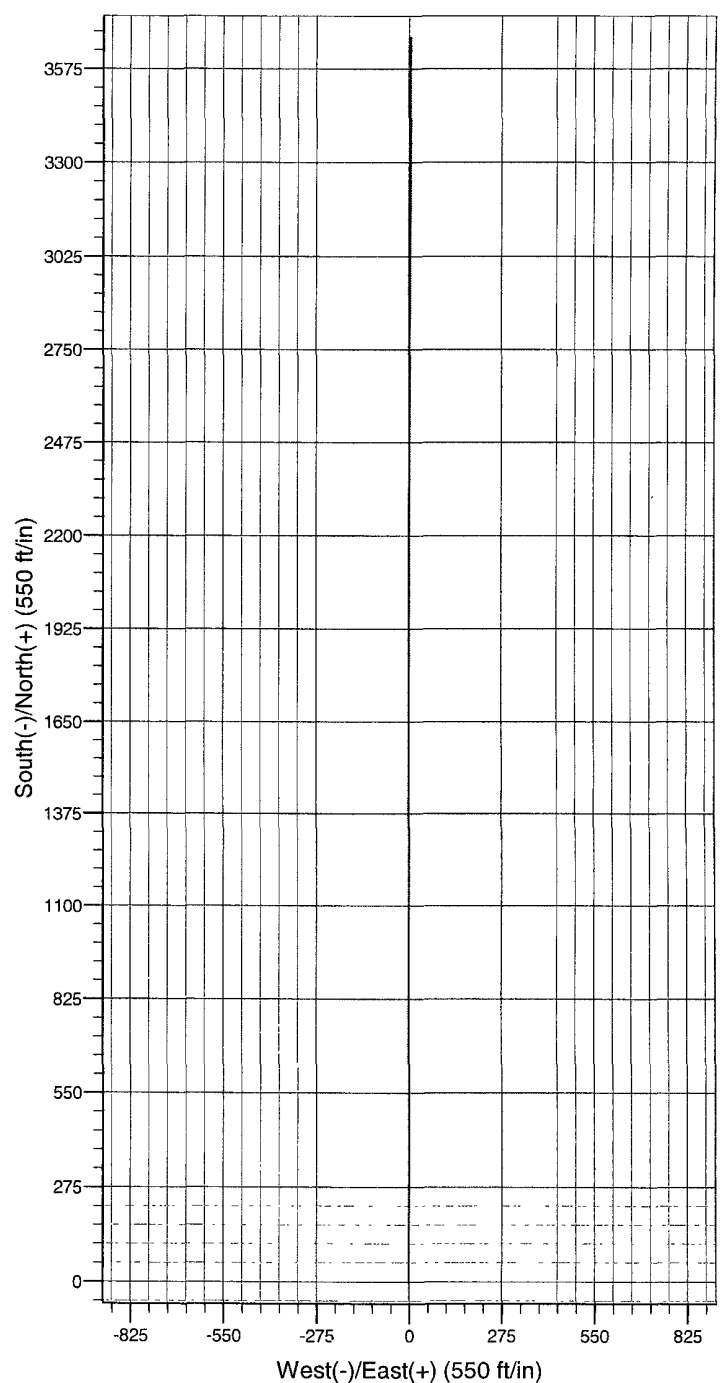
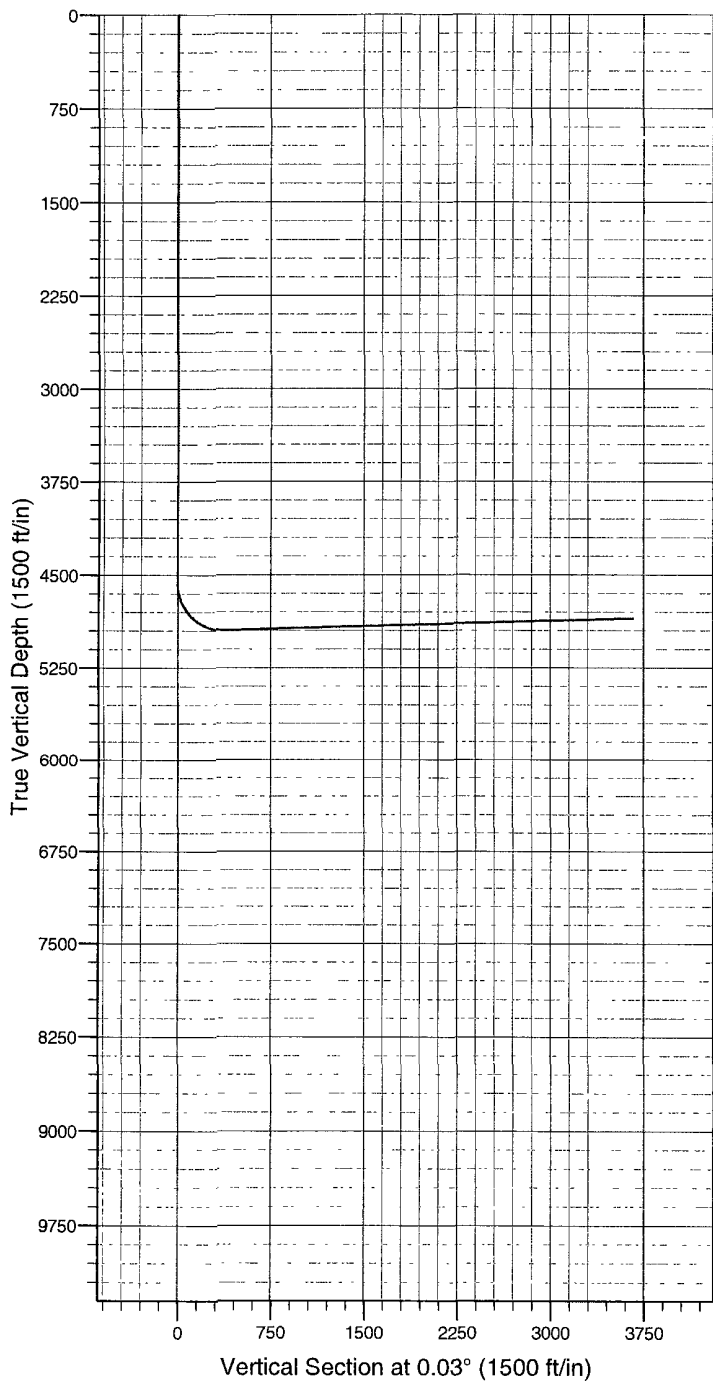
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL(Nile#2H)		0.00	0.00	4,919.00	3,667.00	2.00	664,432.00	423,533.00	32° 49' 34.907 N	104° 34' 56.148 W
- plan misses by 68.91ft at 8452.46ft MD (4850.13 TVD, 3664.88 N, 1.92 E)										
- Point										

WELL DETAILS: Nile 22 State Com #2H

+N/-S	+E/-W	Northing	Ground Level:	3765.00			
0.00	0.00	660765.00	Easting	423531.00	Latitude	Longitude	Slot
				32° 48' 58.620 N	104° 34' 56.070 W		

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFactor	TargetSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4568.00	0.00	0.00	4568.00	0.00	0.00	0.00	0.00	0.00
3	5168.04	90.00	0.03	4950.00	382.00	0.20	15.00	0.03	382.00
4	5233.16	91.76	0.03	4949.00	447.10	0.23	2.70	0.00	447.10
5	8454.60	91.76	0.03	4850.06	3667.03	1.92	0.00	0.00	3667.03



DRILLING PROGRAM

EOG RESOURCES, INC.

Nile State 22 Com 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:

Quaternary 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"	0-8,55'	5.5"	17#	N-80	LT&C

0-8, 4551

Cementing Program:

8.625" Surface Casing:

Cement to surface, Lead: 150 sx Prem Plus, 3% Econolite + 1/4 pps Flocele, 2% Calcium Chloride, Tail: 175 sx Prem Plus + 2% Calcium Chloride + 1/4 pps Flocele

5.50" Production:

Cement to surface: 450sx: 1st Stage: Premium Cement, 100% Acid Soluble Additive, + 0.6% Halad®-344 + 0.8% Econolite+ 0.2% HR-55

ECP/DV Tool @ 4374'

2nd Stage Lead: 640 sx Interfill C + 1/4 pps Flocele
100 sx: 2nd Stage Tail: Premium Plus

See
COA

DRILLING PROGRAM

EOG RESOURCES, INC.
Nile State 22 Com 2H
Eddy Co. NM

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. for a 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:

<u>Depth</u>	<u>Type</u>	<u>Wt</u> <u>(PPG)</u>	<u>Viscosit</u> <u>(sec)</u>	<u>Waterloss</u> <u>(cc)</u>
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'-5,400'	Cut Brine	8.8-9.2	28-34	10-15
4,568'-8,455'	Polymer (Lateral)	9.0-9.4	40-45	10-20

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.

DRILLING PROGRAM

EOG RESOURCES, INC.

Nile State 22 Com 2H

Eddy Co. NM

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

The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 2000 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.

District II

1301 W. Grand Ave., Artesia, NM 88210
 Phone:(505) 748-1283 Fax:(505) 748-9720

State of New Mexico

Energy, Minerals and Natural
 Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

Form C-101

Permit 17260

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address EOG RESOURCES INC PO Box 2267 Midland , TX 79702		2. OGRID Number 7377
		3. API Number 30-015-34422
4. Property Code 34244	5. Property Name NILE 22 STATE COM	6. Well No. 002H

7. Surface Location

UL - Lot M	Section 22	Township 17S	Range 24E	Lot Idn M	Feet From 960	N/S Line S	Feet From 760	E/W Line W	County EDDY
------------------	---------------	-----------------	--------------	-----------------	---------------------	------------------	---------------------	------------------	----------------

8. Pool Information

COLLINS RANCH; WOLFCAMP (GAS)	75010
-------------------------------	-------

Additional Well Information

9. Work Type New Well	10. Well Type GAS	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3765
14. Multiple N	15. Proposed Depth 5400	16. Formation Wolfcamp	17. Contractor	18. Spud Date 11/15/2005
Depth to Ground water 100		Distance from nearest fresh water well > 1000		Distance to nearest surface water 300
Pit: Liner: <input type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 7000 bbls Drilling Method: Synthetic <input type="checkbox"/> Closed Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	32	900	325	0
Prod	7.875	4.5	11.6	8455	900	0

Casing/Cement Program: Additional Comments

--

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
		Approved By: Bryan Arrant	
Printed Name: Electronically filed by Mike Francis		Title: Geologist	
Title: ROW Agent		Approved Date: 11/11/2005	Expiration Date: 11/11/2006
Email Address: mike francis@eogresources.com			
Date: 10/21/2005	Phone: 4326863714	Conditions of Approval Attached	

Permit Information:

Well Name: Nile 22 State Com #2H

Location:

SL 960' FSL & 760' FWL, Section 22, T-17-S, R-24-E, Eddy Co., N.M.

BHL 660' FNL & 760' FWL, Section 22, T-17-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'	12-1/4"	8-5/8"	32#	J-55	Surface
Production	8,455'	7-7/8"	5 1/2"	17#	N-80	Surface

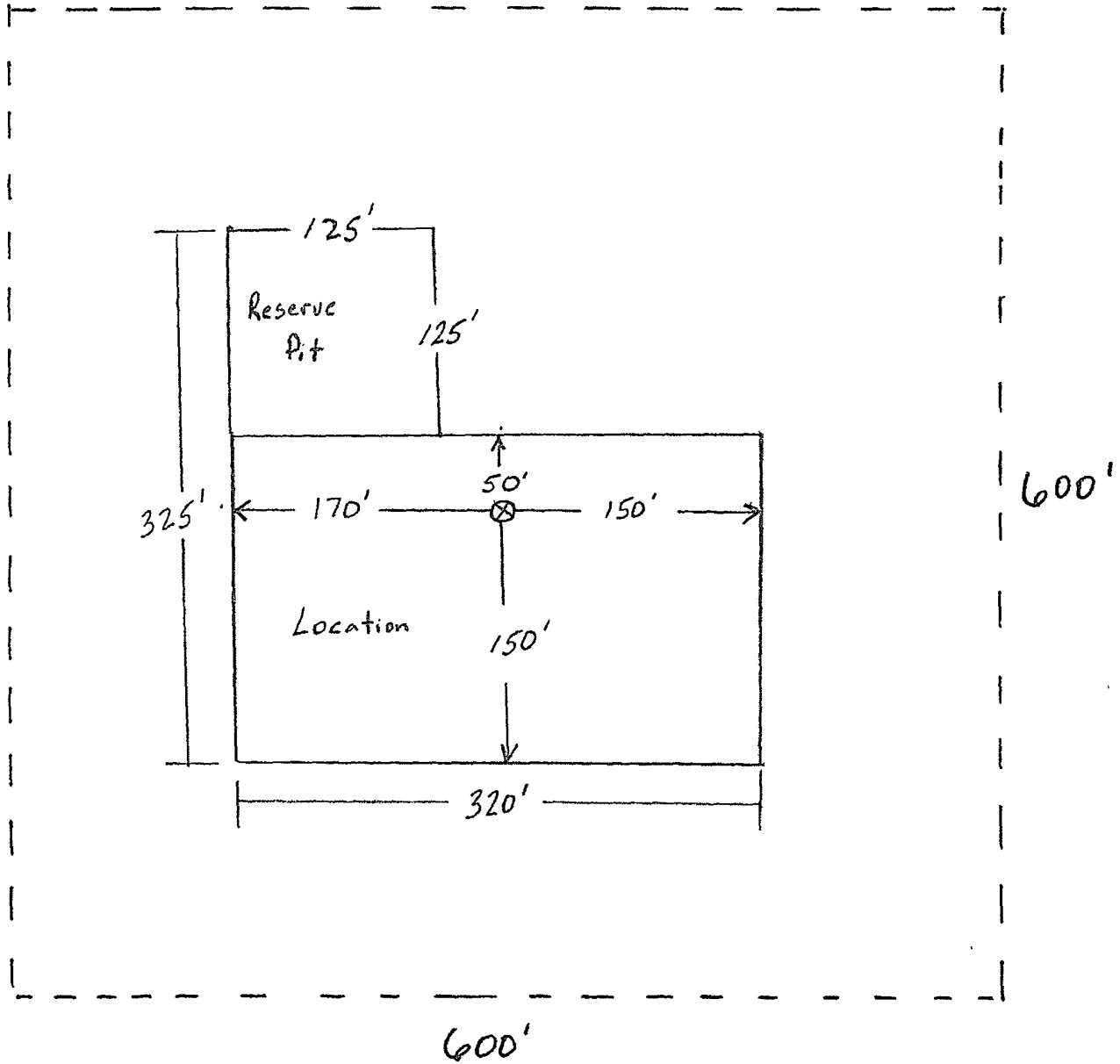
Cement Program:

Depth	No. Sacks	Slurries:
900'	150	Lead: Premium Plus + 2% CaCl ₂ + 3% Econolite + 1/4 pps Flocele
	175	Tail: Premium Plus + 2% CaCl ₂ + 1/4 pps Flocele
8,455'	450	1 st Stage: Premium Cement + 100% Acid Soluble Additive + 0.6% Halad®-344 + 0.8% Econolite + 0.2% HR-55
ECP/ DV Tool at 4374'	640	2 nd Stage Lead: Interfill C + 1/4 pps Flocele
	100	2 nd Stage Tail: Premium Plus

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' – 5,400'	Cut Brine	8.8-9.2	28-34	10-15
4,568' – 8,455'	Polymer (Lateral)	9.0-9.4	40-45	10-20

Nile 22 State Com 2H



DRILLING PROGRAM

EOG RESOURCES, INC.

Nile State 22 Com 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.

EOG Resources, Inc.

Nile 22 State Com 2H

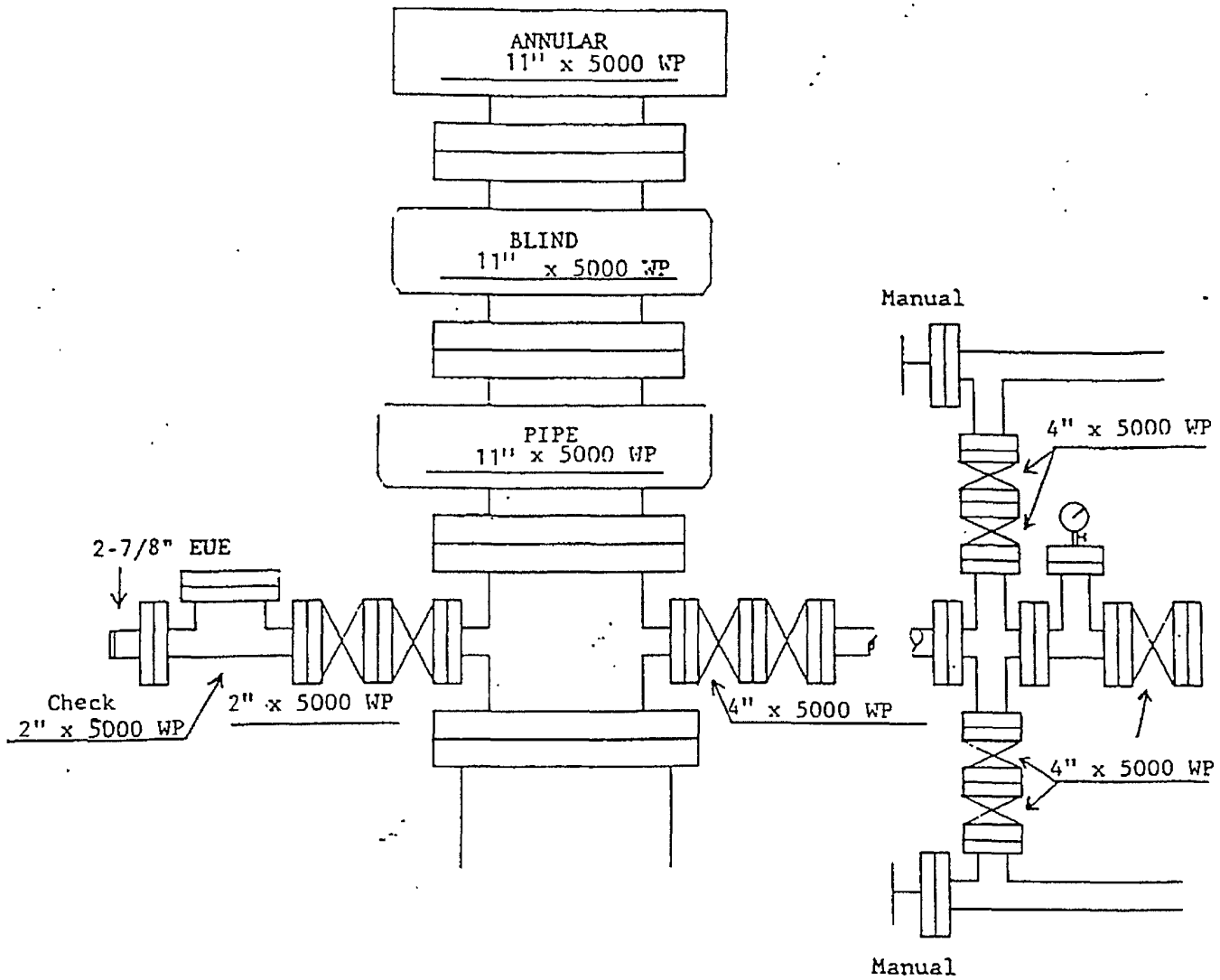


Exhibit 1



EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3600

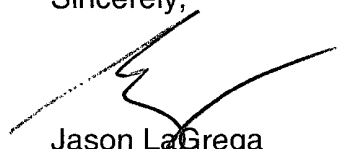
July 17, 2007

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 H₂S Contingency Plan for the Nile 22 State Com #2H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any H₂S bearing formations during drilling operations.

Sincerely,



Jason LaGrega
Drilling Engineer

DRILLING PROGRAM

EOG RESOURCES, INC.
Nile State 22 Com 2H
Eddy Co. NM

SURFACE USE AND OPERATIONS PLAN

Surface is owned by State of New Mexico

Directions to Well Site: From the Intersection of U.S. Hwy 82 & U.S. Hwy 285, Go west on Hwy 82 for 10.0 miles; Thence south on lease road for 1.9 miles; thence west 0.1 miles to 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:

See Exhibit 2a.

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.

DRILLING PROGRAM

EOG RESOURCES, INC.

Nile State 22 Com 2H

Eddy Co. NM

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 with rock. The vegetation is native scrub grass.

DRILLING PROGRAM

EOG RESOURCES, INC.
Nile State 22 Com 2H
Eddy Co. NM

COMPANY REPRESENTATIVES:

Permitting & Land

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

Drilling

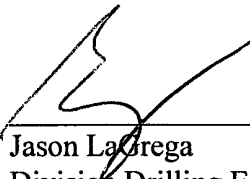
Mr. Jason LaGrega
Division Drilling Engineer
EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3633 Office

Operations

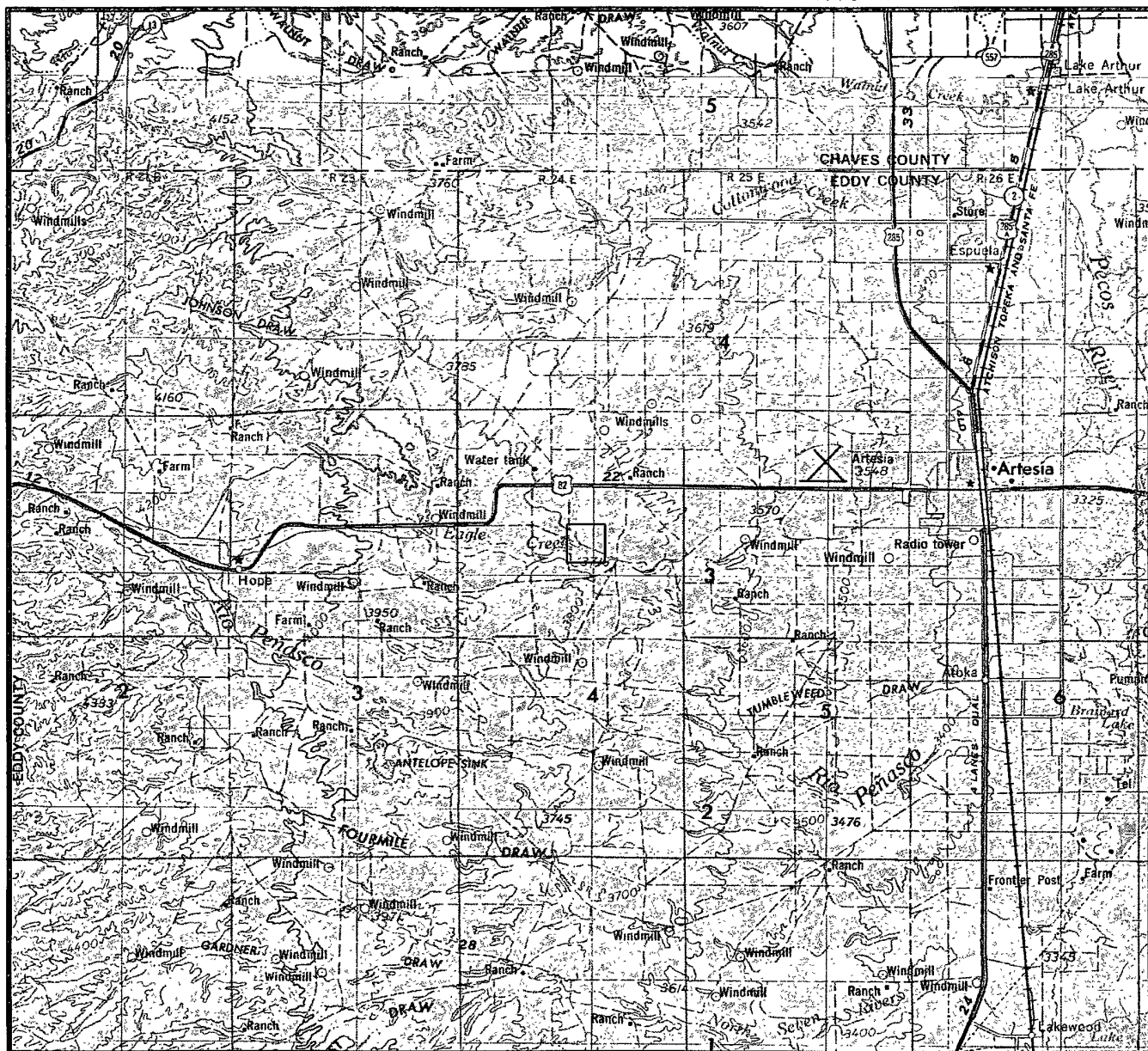
Mr. Howard Kemp
Production Manager
EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3704 Office

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: 7/27/07



SECTION 22 TWP 17-S RGE 24-E
SURVEY NEW MEXICO PRINCIPAL MERIDIAN
COUNTY EDDY STATE NM
DESCRIPTION 960' FSL & 760' FWL

OPERATOR EOG RESOURCES INC.
LEASE NILE STATE "22" COM #2H

DISTANCE & DIRECTION FROM INT. OF HWY. 82 & HWY. 285
GO WEST ON HWY. 82 10.0 MILES, THENCE SOUTH ON LEASE
ROAD 1.9 MILES, THENCE WEST 0.1 MILES TO A POINT ±1200'
EAST OF THE LOCATION.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plot and notify us immediately of any possible discrepancy.

1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

6709 N. CLASSEN BLVD.
OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

SECTION 22, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M.
EDDY COUNTY NEW MEXICO

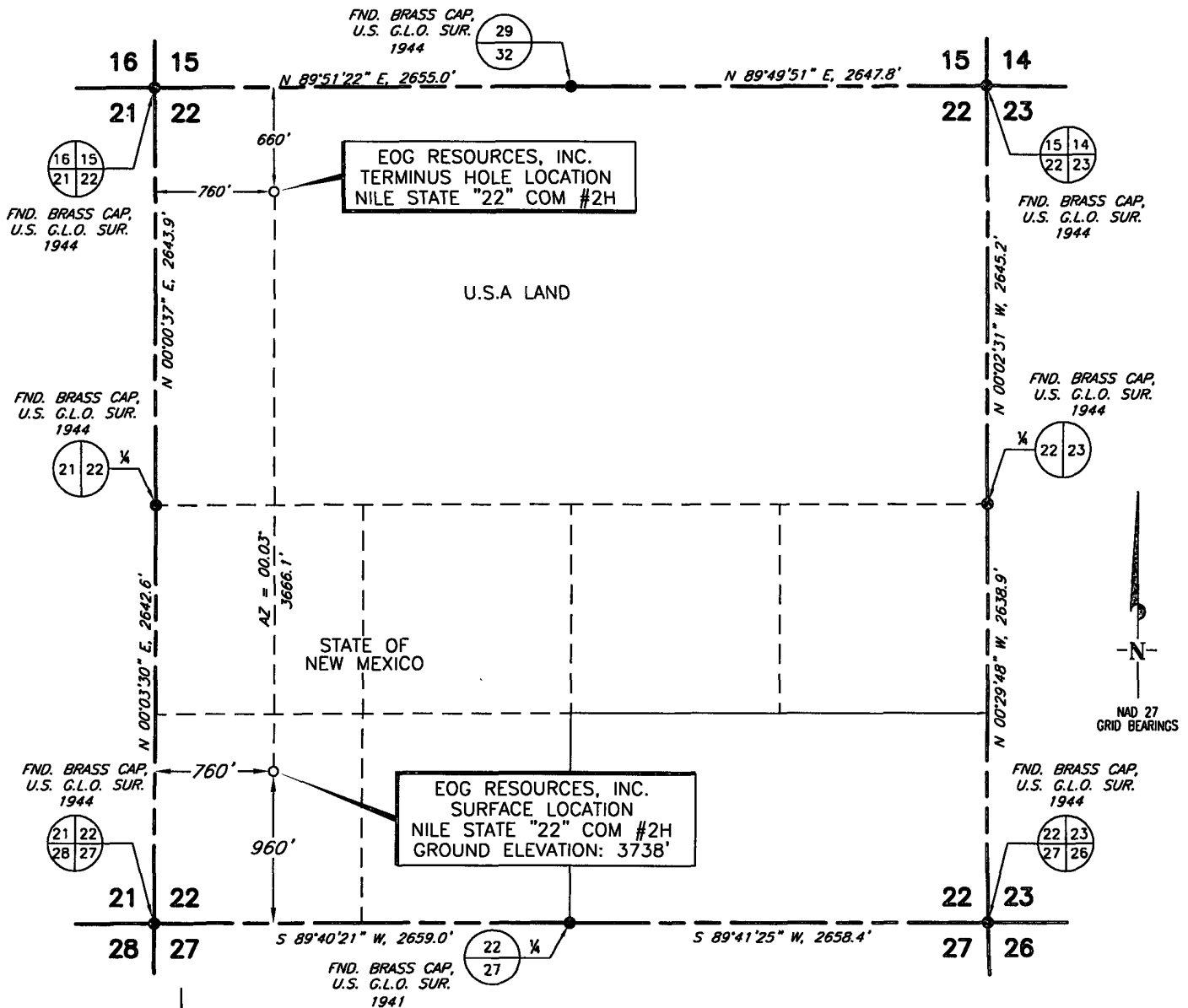
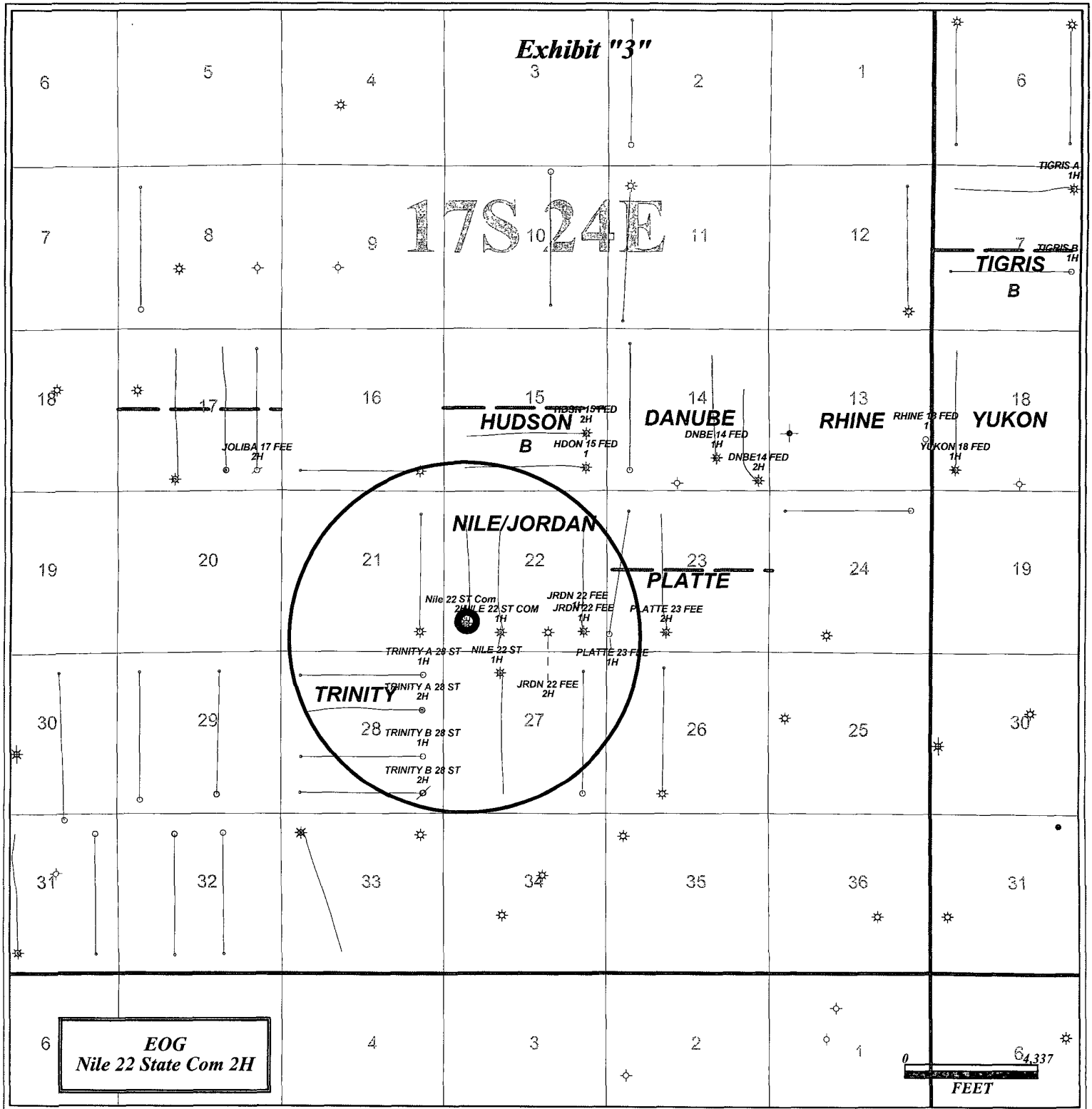
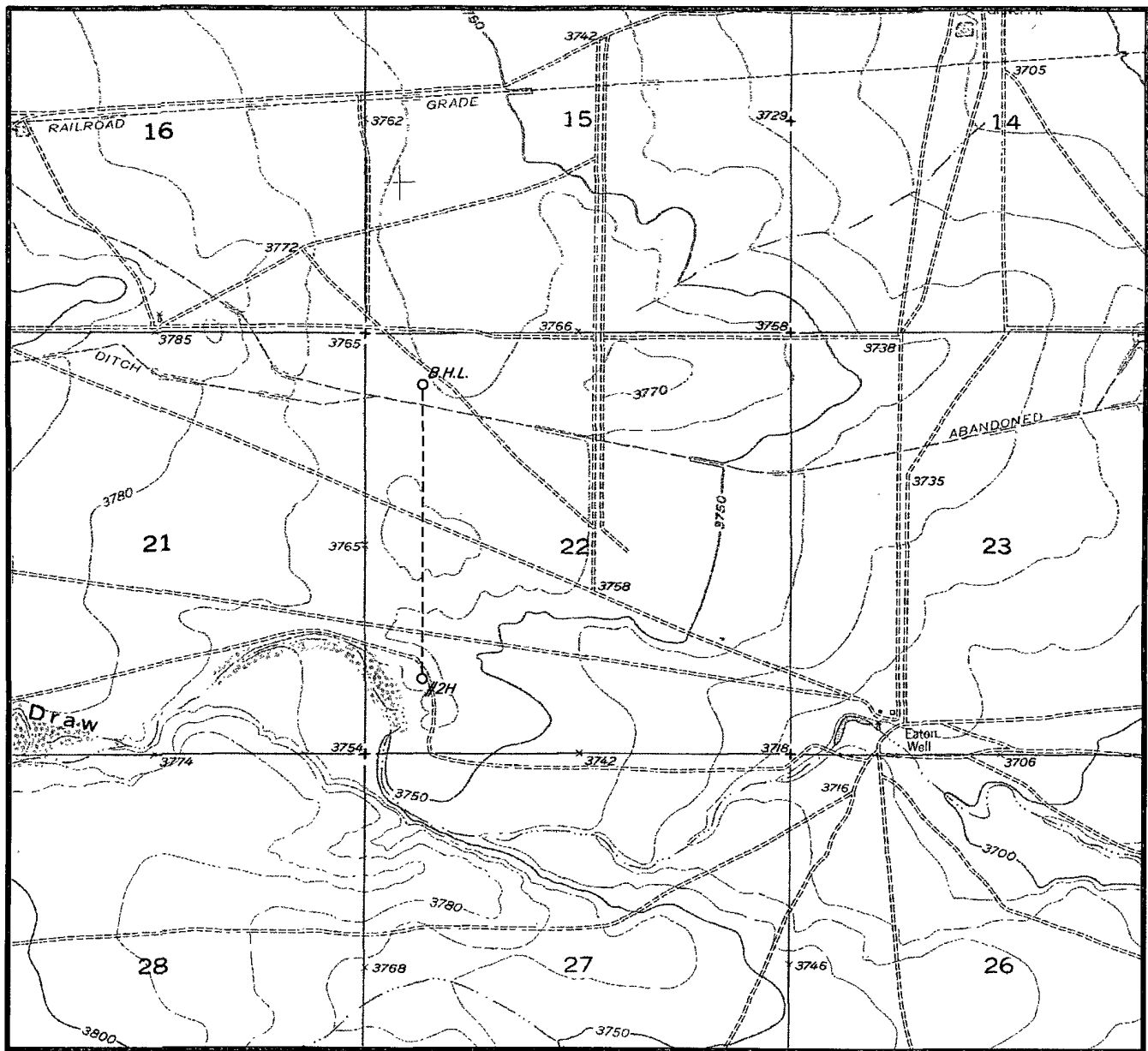


Exhibit "3"

17S 24E



LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000' CONTOUR INTERVAL 5 FEET

SECTION 22 TWP 17-S RGE 24-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 960' FSL & 760' FWL
 ELEVATION 3765'

OPERATOR EOG RESOURCES INC.
 LEASE NILE STATE "22" COM #2H

U.S.G.S. TOPOGRAPHIC MAP
HOPE SE, NEW MEXICO

LAT. LAT.: N 32.8162846
 LONG. LONG.: W 104.5822420



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plot and notify us immediately of any possible discrepancy.

1307 N. HOBART
 PAMPA, TX. 79065
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 (800) 654-3219

2903 N. BIG SPRING
 MIDLAND, TX. 79705
 (800) 767-1653

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	EOG RESOURCES INC
LEASE NO.:	NM108958
WELL NAME & NO.:	2H-NILE STATE 22 COM
SURFACE HOLE FOOTAGE:	960' FSL & 760' FWL
BOTTOM HOLE FOOTAGE:	660' FNL & 760' FWL
LOCATION:	Section 22, T. 17S., R 24E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Aplomado Falcon
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Aplomado Falcon Stipulations: All **active** Raptor nests will be avoided by a minimum of 400 meters by all activities or curtail activities until fledging is complete.

All **inactive** raptor nests will be avoided by a minimum of 200 meters by all activities.

No yuccas over 5 feet in height will be damaged by vehicular use or any other activity associated with this project.

Reclamation will consist of disking, mulching and drilling seed with the following seed mixture, and application of water to encourage seed germination:

Buffalograss (<i>Buchloe dactyloides</i>)-----	4 lbs/acre
Blue grama (<i>Bouteloua gracilis</i>)-----	1 lb/acre
Cane bluestem (<i>Bothriochloa barbinodis</i>)-----	5 lbs/acre
Sideoats grama (<i>Bouteloua curtipendula</i>) -----	5 lbs/acre
Plains bristlegrass (<i>Setaria macrostachya</i>) -----	6 lbs/acre

A sign stating "This Pipeline Corridor is Closed to Vehicular Traffic Due to Reclamation Efforts in Progress" will be placed where the pipeline crosses any road (both sides of the road), and at the beginning and end of the pipeline route on BLM administered lands.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 125' X 125' on the North side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

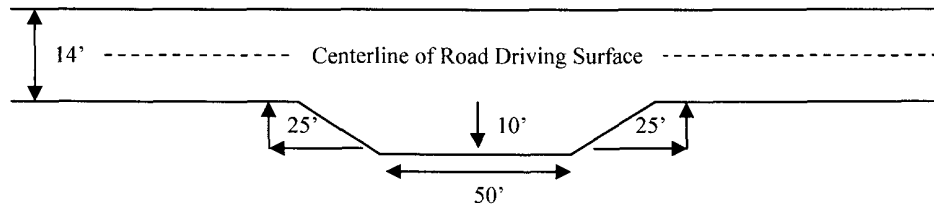
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

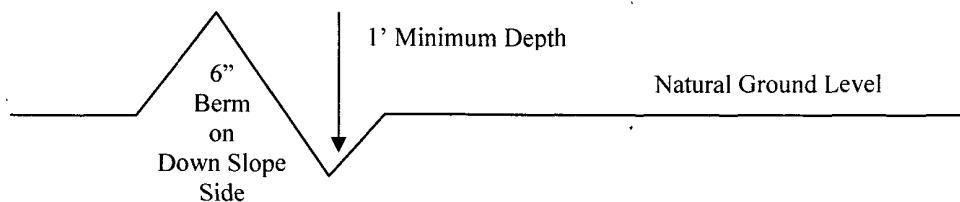


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

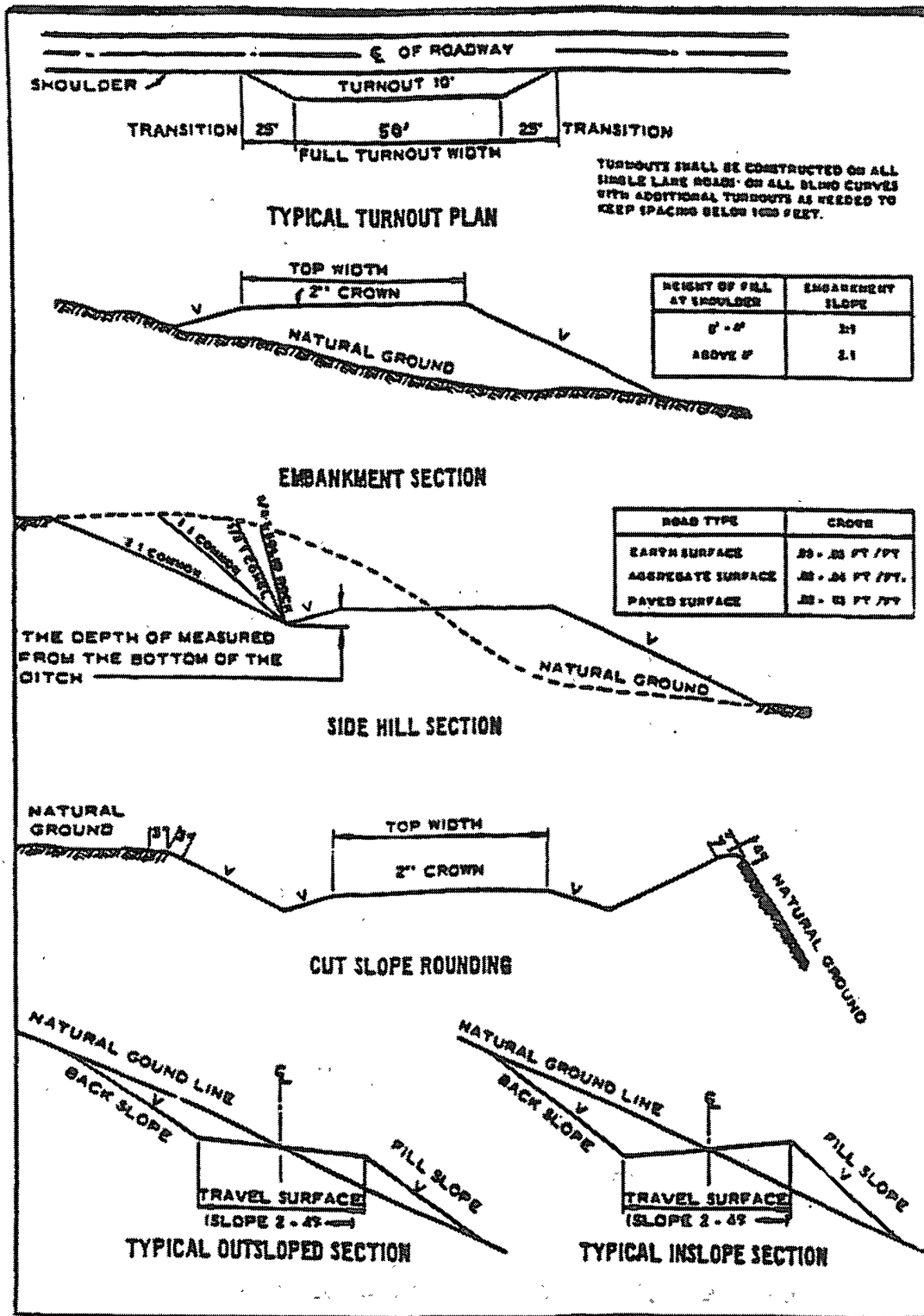
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(505) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard.**
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. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The **8-5/8** inch surface casing shall be set **within the San Andres Formation at approximately 900** feet and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Grayburg and San Andres formation.

Possible high pressure gas bursts in the Wolfcamp.

- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:

☒ Cement to surface. If cement does not circulate see B.1.a-d above. **Both stages to circulate. May need additional cement to circulate first stage. Operator to provide verification of cement circulating.**

- 3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days.** This test

does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 100307

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

VRM Facility Requirement

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (<i>Eragrostis intermedia</i>)	0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sideoats grama (<i>Bouteloua curtipendula</i>)	5.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.