

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

(August 1999)

312

4678

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 03 2006

OCD-ARTESIA

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER		35049	
1b. Type of Well: Oil Well ☐ Gas Well ☒ Other ☐ Single Zone ☐ Multiple Zone			
2. Name of Operator EOG Resources, Inc.		7377	
3a. Address P.O. Box 2267 Midland, TX 79702		3b. Phone No. (Include area code) (432) 686-3714 7520	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 760' FWL (U/LM) At proposed prod. Zone 660' FNL & 760' FWL (U/LD)		SUBJECT TO LIKE APPROVAL BY STATE	
14. Distance in miles and direction from nearest town or post office* 4 mi. NW from Artesia		12. County or Parish Eddy	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. Unit line, if any)		16. No. of Acres in lease 1,120	
18. Distance from proposed location* to nearest well, drilling, completed applied for, on this lease, ft. 1120'		17. Spacing Unit dedicated to this well W/2	
21. Elevations (Show whether DF, KDB, RT, GL, etc) Gr 3643		19. Proposed Depth 5400' TVD TMD 8737"	
		20. BLM/BIA Bond No. on file NM2308	
		22. Approximate date work will start* 1/20/2006	
		23. Estimated duration 30 days	

24. Attachments

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

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

25. Signature <i>Mike Francis</i>	Name (Printed/Typed) Mike Francis	Date 12/19/2005
--------------------------------------	--------------------------------------	--------------------

Approved by (Signature) <i>/s/ Joe G. Lara</i>	Name (Printed/Typed) <i>/s/ Joe G. Lara</i>	Date FEB 02 2006
ACTING 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 thereon.

Conditions of approval, if any, are attached

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

*(Instructions on reverse)

Roswell Controlled Water Basin

WITNESS: 8-18" CSG CMT JOB
Drill only
SD required to produce

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, 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		2 Pool Code 75266		3 Pool Name UNdes Cottonwood Creek Wolfcamp, west	
4 Property Code		5 Property Name RIO GRANDE "23" FED			6 Well Number 4H
7 OGRID No. 7377		8 Operator Name EOG RESOURCES, INC.			9 Elevation 3643'

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
M	23	16 SOUTH	24 EAST, N.M.P.M.		660'	SOUTH	760'	WEST	EDDY

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
D	23	16 SOUTH	24 EAST, N.M.P.M.		660'	NORTH	760'	WEST	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

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Mike Francis</i> Signature Mike Francis Printed Name Agent Date 12/19/2005
	18 SURVEYOR CERTIFICATION I hereby certify that the information shown on this plat was obtained from a survey of the land shown or under my supervision, and that the same is true and correct to the best of my belief. NOVEMBER 24, 2005 Date of Survey Signature of Professional Surveyor V. A. BEZNER R.P.S. #7920 JOB #108530 / 101 SE / E.U.O.

e Planning Report

Company: eog resources				Date: 12/13/2005				Time: 16:41:11				Page: 1			
Field: Thames				Co-ordinate(NE) Reference:				Site: Rio Grande 23 Fed #4H, Grid North							
Site: Rio Grande 23 Fed #4H				Vertical (TVD) Reference:				SITE: 3658.0							
Well: Rio Grande 23 Fed #4H				Section (VS) Reference:				Well: (0.00N,0.00E,0.35Azi)							
Wellpath: Rio Grande 23 Fed #4H				Plan:				Plan: #1							

Field: Thames			
Map System: US State Plane Coordinate System 1927			
Geo Datum: NAD27 (Clarke 1866)			
Sys Datum: Mean Sea Level			
Map Zone: New Mexico, Eastern Zone			
Coordinate System: Site Centre			
Geomagnetic Model: igrf2000			

Site: Rio Grande 23 Fed #4H			
Site Position:	Northing: 692202.00 ft	Latitude: 32 54 9.818 N	
From: Map	Easting: 428864.00 ft	Longitude: 104 33 54.387 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 3643.00 ft		Grid Convergence: -0.13 deg	

Well: Rio Grande 23 Fed #4H				Slot Name:			
Well Position:	+N/-S 0.00 ft	Northing: 692202.00 ft	Latitude: 32 54 9.818 N				
	+E/-W 0.00 ft	Easting : 428864.00 ft	Longitude: 104 33 54.387 W				
Position Uncertainty: 0.00 ft							

Wellpath: Rio Grande 23 Fed #4H				Drilled From: Surface											
				Tie-on Depth: 0.00 ft											
Current Datum: SITE				Above System Datum: Mean Sea Level											
Magnetic Data: 12/13/2005				Declination: 9.02 deg											
Field Strength: 49665 nT				Mag Dip Angle: 60.87 deg											
Vertical Section: Depth From (TVD) ft				+N/-S ft				+E/-W ft				Direction deg			
4919.00				0.00				0.00				0.35			

Plan: Plan #1				Date Composed: 12/13/2005			
				Version: 1			
Principal: Yes				Tied-to: From Surface			

Plan Section Information											
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4568.00	0.00	0.00	4568.00	0.00	0.00	0.00	0.00	0.00	0.00		
5168.00	90.00	0.35	4949.97	381.96	2.33	15.00	15.00	0.00	0.35		
5184.61	90.50	0.35	4949.90	398.58	2.43	3.00	3.00	-0.01	-0.25		
8737.14	90.50	0.35	4919.00	3950.91	24.00	0.00	0.00	0.00	0.00		
8737.24	90.50	0.35	4919.00	3951.00	24.00	3.00	1.81	2.39	52.86	BHL	

Section 1 : Start Hold											
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	
0.00	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	0.00	
200.00	0.00	0.00	200.00	0.00	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	0.00	
400.00	0.00	0.00	400.00	0.00	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	0.00	
600.00	0.00	0.00	600.00	0.00	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	0.00	
800.00	0.00	0.00	800.00	0.00	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	0.00	
1000.00	0.00	0.00	1000.00	0.							

e
Planning Report

Company: eog resources	Date: 12/13/2005	Time: 16:41:11	Page: 2
Field: Thames	Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #4H, Grid North		
Site: Rio Grande 23 Fed #4H	Vertical(TVD) Reference: SITE 3658.0		
Well: Rio Grande 23 Fed #4H	Section (VS) Reference: Well (0.00N,0.00E,0.35Azi)		
Wellpath: Rio Grande 23 Fed #4H	Plan: Plan #1		

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4568.00	0.00	0.00	4568.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start Build 15.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4575.00	1.05	0.35	4575.00	0.06	0.00	0.06	15.00	15.00	0.00	0.00
4600.00	4.80	0.35	4599.96	1.34	0.01	1.34	15.00	15.00	0.00	0.00
4625.00	8.55	0.35	4624.79	4.24	0.03	4.25	15.00	15.00	0.00	0.00
4650.00	12.30	0.35	4649.37	8.77	0.05	8.77	15.00	15.00	0.00	0.00
4675.00	16.05	0.35	4673.61	14.89	0.09	14.89	15.00	15.00	0.00	0.00
4700.00	19.80	0.35	4697.39	22.58	0.14	22.58	15.00	15.00	0.00	0.00
4725.00	23.55	0.35	4720.62	31.81	0.19	31.81	15.00	15.00	0.00	0.00
4750.00	27.30	0.35	4743.19	42.54	0.26	42.55	15.00	15.00	0.00	0.00
4775.00	31.05	0.35	4765.02	54.73	0.33	54.73	15.00	15.00	0.00	0.00
4800.00	34.80	0.35	4786.00	68.31	0.42	68.32	15.00	15.00	0.00	0.00
4825.00	38.55	0.35	4806.04	83.24	0.51	83.25	15.00	15.00	0.00	0.00
4850.00	42.30	0.35	4825.07	99.45	0.61	99.45	15.00	15.00	0.00	0.00
4875.00	46.05	0.35	4843.00	116.87	0.71	116.87	15.00	15.00	0.00	0.00
4900.00	49.80	0.35	4859.75	135.42	0.83	135.43	15.00	15.00	0.00	0.00
4925.00	53.55	0.35	4875.25	155.03	0.95	155.03	15.00	15.00	0.00	0.00
4950.00	57.30	0.35	4889.43	175.61	1.07	175.62	15.00	15.00	0.00	0.00
4975.00	61.05	0.35	4902.24	197.08	1.20	197.08	15.00	15.00	0.00	0.00
5000.00	64.80	0.35	4913.62	219.33	1.34	219.34	15.00	15.00	0.00	0.00
5025.00	68.55	0.35	4923.52	242.28	1.48	242.29	15.00	15.00	0.00	0.00
5050.00	72.30	0.35	4931.89	265.83	1.62	265.84	15.00	15.00	0.00	0.00
5075.00	76.05	0.35	4938.71	289.88	1.77	289.89	15.00	15.00	0.00	0.00
5100.00	79.80	0.35	4943.94	314.32	1.92	314.33	15.00	15.00	0.00	0.00
5125.00	83.55	0.35	4947.55	339.06	2.07	339.06	15.00	15.00	0.00	0.00
5150.00	87.30	0.35	4949.55	363.97	2.22	363.98	15.00	15.00	0.00	0.00
5168.00	90.00	0.35	4949.97	381.96	2.33	381.97	15.00	15.00	0.00	0.00

e

Date: 12/13/2005 Time: 16:41:11 Page: 3
Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #4H, Grid North
Vertical (TVD) Reference: SITE 3658.0
Section (VS) Reference: Well (0.00N 0.00E:0.35Az)
Plan: Plan #1

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
5184.61	90.50	0.35	4949.90	398.58	2.43	398.58	3.00	3.00	-0.01	-0.25

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
5200.00	90.50	0.35	4949.77	413.96	2.53	413.97	0.00	0.00	0.00	0.00
5300.00	90.50	0.35	4948.90	513.96	3.13	513.97	0.00	0.00	0.00	0.00
5400.00	90.50	0.35	4948.03	613.95	3.74	613.96	0.00	0.00	0.00	0.00
5500.00	90.50	0.35	4947.16	713.95	4.35	713.96	0.00	0.00	0.00	0.00
5600.00	90.50	0.35	4946.29	813.94	4.96	813.96	0.00	0.00	0.00	0.00
5700.00	90.50	0.35	4945.42	913.94	5.56	913.95	0.00	0.00	0.00	0.00
5800.00	90.50	0.35	4944.55	1013.93	6.17	1013.95	0.00	0.00	0.00	0.00
5900.00	90.50	0.35	4943.68	1113.92	6.78	1113.94	0.00	0.00	0.00	0.00
6000.00	90.50	0.35	4942.81	1213.92	7.38	1213.94	0.00	0.00	0.00	0.00
6100.00	90.50	0.35	4941.94	1313.91	7.99	1313.94	0.00	0.00	0.00	0.00
6200.00	90.50	0.35	4941.07	1413.91	8.60	1413.93	0.00	0.00	0.00	0.00
6300.00	90.50	0.35	4940.20	1513.90	9.21	1513.93	0.00	0.00	0.00	0.00
6400.00	90.50	0.35	4939.33	1613.90	9.81	1613.93	0.00	0.00	0.00	0.00
6500.00	90.50	0.35	4938.46	1713.89	10.42	1713.92	0.00	0.00	0.00	0.00
6600.00	90.50	0.35	4937.59	1813.88	11.03	1813.92	0.00	0.00	0.00	0.00
6700.00	90.50	0.35	4936.72	1913.88	11.63	1913.91	0.00	0.00	0.00	0.00
6800.00	90.50	0.35	4935.85	2013.87	12.24	2013.91	0.00	0.00	0.00	0.00
6900.00	90.50	0.35	4934.98	2113.87	12.85	2113.91	0.00	0.00	0.00	0.00
7000.00	90.50	0.35	4934.11	2213.86	13.45	2213.90	0.00	0.00	0.00	0.00
7100.00	90.50	0.35	4933.24	2313.86	14.06	2313.90	0.00	0.00	0.00	0.00
7200.00	90.50	0.35	4932.37	2413.85	14.67	2413.90	0.00	0.00	0.00	0.00
7300.00	90.50	0.35	4931.50	2513.85	15.28	2513.89	0.00	0.00	0.00	0.00
7400.00	90.50	0.35	4930.63	2613.84	15.88	2613.89	0.00	0.00	0.00	0.00
7500.00	90.50	0.35	4929.76	2713.83	16.49	2713.88	0.00	0.00	0.00	0.00
7600.00	90.50	0.35	4928.89	2813.83	17.10	2813.88	0.00	0.00	0.00	0.00
7700.00	90.50	0.35	4928.02	2913.82	17.70	2913.88	0.00	0.00	0.00	0.00
7800.00	90.50	0.35	4927.15	3013.82	18.31	3013.87	0.00	0.00	0.00	0.00
7900.00	90.50	0.35	4926.28	3113.81	18.92	3113.87	0.00	0.00	0.00	0.00
8000.00	90.50	0.35	4925.41	3213.81	19.52	3213.87	0.00	0.00	0.00	0.00
8100.00	90.50	0.35	4924.54	3313.80	20.13	3313.86	0.00	0.00	0.00	0.00
8200.00	90.50	0.35	4923.67	3413.79	20.74	3413.86	0.00	0.00	0.00	0.00
8300.00	90.50	0.35	4922.80	3513.79	21.35	3513.85	0.00	0.00	0.00	0.00
8400.00	90.50	0.35	4921.93	3613.78	21.95	3613.85	0.00	0.00	0.00	0.00
8500.00	90.50	0.35	4921.06	3713.78	22.56	3713.85	0.00			

MD ft	Incl deg	Azim deg	TVD ft	+N/S ft	+E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
8737.24	90.50	0.35	4919.00	3951.00	24.00	3951.07	3.00	1.81	2.39	52.86

[illegible]

e Planning Report

Company: eog resources
Field: Thames
Site: Rio Grande 23 Fed #4H
Well: Rio Grande 23 Fed #4H
Wellpath: Rio Grande 23 Fed #4H

Date: 12/13/2005 Time: 16:41:11 Page: 4
Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #4H, Grid North
Vertical (TVD) Reference: SITE 3658.0
Section (VS) Reference: Well (0.00N,0.00E,0.35Azi)
Plan: Plan #1

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4568.00	0.00	0.00	4568.00	0.00	0.00	0.00	0.00	0.00	0.00	
4575.00	1.05	0.35	4575.00	0.06	0.00	0.06	15.00	15.00	0.00	
4600.00	4.80	0.35	4599.96	1.34	0.01	1.34	15.00	15.00	0.00	
4625.00	8.55	0.35	4624.79	4.24	0.03	4.25	15.00	15.00	0.00	
4650.00	12.30	0.35	4649.37	8.77	0.05	8.77	15.00	15.00	0.00	
4675.00	16.05	0.35	4673.61	14.89	0.09	14.89	15.00	15.00	0.00	
4700.00	19.80	0.35	4697.39	22.58	0.14	22.58	15.00	15.00	0.00	
4725.00	23.55	0.35	4720.62	31.81	0.19	31.81	15.00	15.00	0.00	
4750.00	27.30	0.35	4743.19	42.54	0.26	42.55	15.00	15.00	0.00	
4775.00	31.05	0.35	4765.02	54.73	0.33	54.73	15.00	15.00	0.00	
4800.00	34.80	0.35	4786.00	68.31	0.42	68.32	15.00	15.00	0.00	
4825.00	38.55	0.35	4806.04	83.24	0.51	83.25	15.00	15.00	0.00	
4850.00	42.30	0.35	4825.07	99.45	0.61	99.45	15.00	15.00	0.00	
4875.00	46.05	0.35	4843.00	116.87	0.71	116.87	15.00	15.00	0.00	
4900.00	49.80	0.35	4859.75	135.42	0.83	135.43	15.00	15.00	0.00	
4925.00	53.55	0.35	4875.25	155.03	0.95	155.03	15.00	15.00	0.00	

e Planning Report

Company: eog resources	Date: 12/13/2005	Time: 16:41:11	Page: 5
Field: Thames	Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #4H, Grd North		
Site: Rio Grande 23 Fed #4H	Vertical (TVD) Reference: SITE 3658.0		
Well: Rio Grande 23 Fed #4H	Section (VS) Reference: Well (0.00N,0.00E,0.35Azi)		
Wellpath: Rio Grande 23 Fed #4H	Plan: Plan #1		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/S ft	+E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
4950.00	57.30	0.35	4889.43	175.61	1.07	175.62	15.00	15.00	0.00	
4975.00	61.05	0.35	4902.24	197.08	1.20	197.08	15.00	15.00	0.00	
5000.00	64.80	0.35	4913.62	219.33	1.34	219.34	15.00	15.00	0.00	
5025.00	68.55	0.35	4923.52	242.28	1.48	242.29	15.00	15.00	0.00	
5050.00	72.30	0.35	4931.89	265.83	1.62	265.84	15.00	15.00	0.00	
5075.00	76.05	0.35	4938.71	289.88	1.77	289.89	15.00	15.00	0.00	
5100.00	79.80	0.35	4943.94	314.32	1.92	314.33	15.00	15.00	0.00	
5125.00	83.55	0.35	4947.55	339.06	2.07	339.06	15.00	15.00	0.00	
5150.00	87.30	0.35	4949.55	363.97	2.22	363.98	15.00	15.00	0.00	
5168.00	90.00	0.35	4949.97	381.96	2.33	381.97	15.00	15.00	0.00	
5184.61	90.50	0.35	4949.90	398.58	2.43	398.58	3.00	3.00	-0.01	
5200.00	90.50	0.35	4949.77	413.96	2.53	413.97	0.00	0.00	0.00	
5300.00	90.50	0.35	4948.90	513.96	3.13	513.97	0.00	0.00	0.00	
5400.00	90.50	0.35	4948.03	613.95	3.74	613.96	0.00	0.00	0.00	
5500.00	90.50	0.35	4947.16	713.95	4.35	713.96	0.00	0.00	0.00	
5600.00	90.50	0.35	4946.29	813.94	4.96	813.96	0.00	0.00	0.00	
5700.00	90.50	0.35	4945.42	913.94	5.56	913.95	0.00	0.00	0.00	
5800.00	90.50	0.35	4944.55	1013.93	6.17	1013.95	0.00	0.00	0.00	
5900.00	90.50	0.35	4943.68	1113.92	6.78	1113.94	0.00	0.00	0.00	
6000.00	90.50	0.35	4942.81	1213.92	7.38	1213.94	0.00	0.00	0.00	
6100.00	90.50	0.35	4941.94	1313.91	7.99	1313.94	0.00	0.00	0.00	
6200.00	90.50	0.35	4941.07	1413.91	8.60	1413.93	0.00	0.00	0.00	
6300.00	90.50	0.35	4940.20	1513.90	9.21	1513.93	0.00	0.00	0.00	
6400.00	90.50	0.35	4939.33	1613.90	9.81	1613.93	0.00	0.00	0.00	
6500.00	90.50	0.35	4938.46	1713.89	10.42	1713.92	0.00	0.00	0.00	
6600.00	90.50	0.35	4937.59	1813.88	11.03	1813.92	0.00	0.00	0.00	
6700.00	90.50	0.35	4936.72	1913.88	11.63	1913.91	0.00	0.00	0.00	
6800.00	90.50	0.35	4935.85	2013.87	12.24	2013.91	0.00	0.00	0.00	
6900.00	90.50	0.35	4934.98	2113.87	12.85	2113.91	0.00	0.00	0.00	
7000.00	90.50	0.35	4934.11	2213.86	13.45	2213.90	0.00	0.00	0.00	
7100.00	90.50	0.35	4933.24	2313.86	14.06	2313.90	0.00	0.00	0.00	
7200.00	90.50	0.35	4932.37	2413.85	14.67	2413.90	0.00	0.00	0.00	
7300.00	90.50	0.35	4931.50	2513.85	15.28	2513.89	0.00	0.00	0.00	
7400.00	90.50	0.35	4930.63	2613.84	15.88	2613.89	0.00	0.00	0.00	
7500.00	90.50	0.35	4929.76	2713.83	16.49	2713.88	0.00	0.00	0.00	
7600.00	90.50	0.35	4928.89	2813.83	17.10	2813.88	0.00	0.00	0.00	
7700.00	90.50	0.35	4928.02	2913.82	17.70	2913.88	0.00	0.00	0.00	
7800.00	90.50	0.35	4927.15	3013.82	18.31	3013.87	0.00	0.00	0.00	
7900.00	90.50	0.35	4926.28	3113.81	18.92	3113.87	0.00	0.00	0.00	
8000.00	90.50	0.35	4925.41	3213.81	19.52	3213.87	0.00	0.00	0.00	
8100.00	90.50	0.35	4924.54	3313.80	20.13	3313.86	0.00	0.00	0.00	
8200.00	90.50	0.35	4923.67	3413.79	20.74	3413.86	0.00	0.00	0.00	
8300.00	90.50	0.35	4922.80	3513.79	21.35	3513.85	0.00	0.00	0.00	
8400.00	90.50	0.35	4921.93	3613.78	21.95	3613.85	0.00	0.00	0.00	
8500.00	90.50	0.35	4921.06	3713.78	22.56	3713.85	0.00	0.00	0.00	
8600.00	90.50	0.35	4920.19	3813.77	23.17	3813.84	0.00	0.00	0.00	
8700.00	90.50	0.35	4919.32	3913.77	23.77	3913.84	0.00	0.00	0.00	
8737.14	90.50	0.35	4919.00	3950.91	24.00	3950.98	0.00	0.00	0.00	
8737.24	90.50	0.35	4919.00	3951.00	24.00	3951.07	3.00	1.81	2.39	

SITE DETAILS

Rio Grande 23 Fed #4H

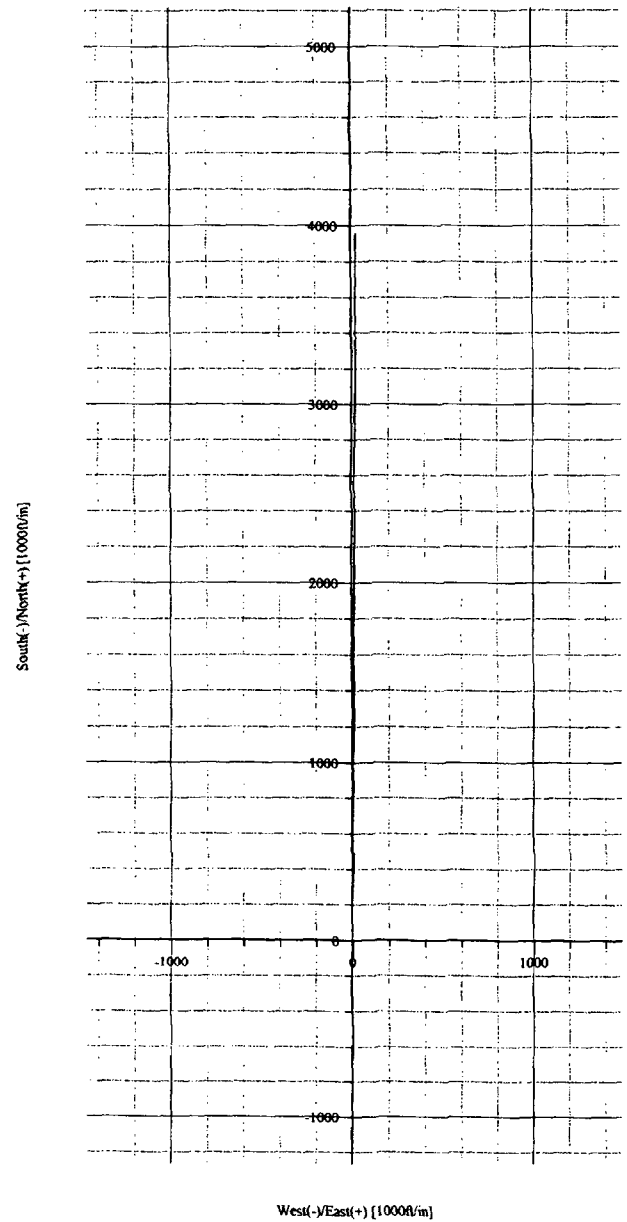
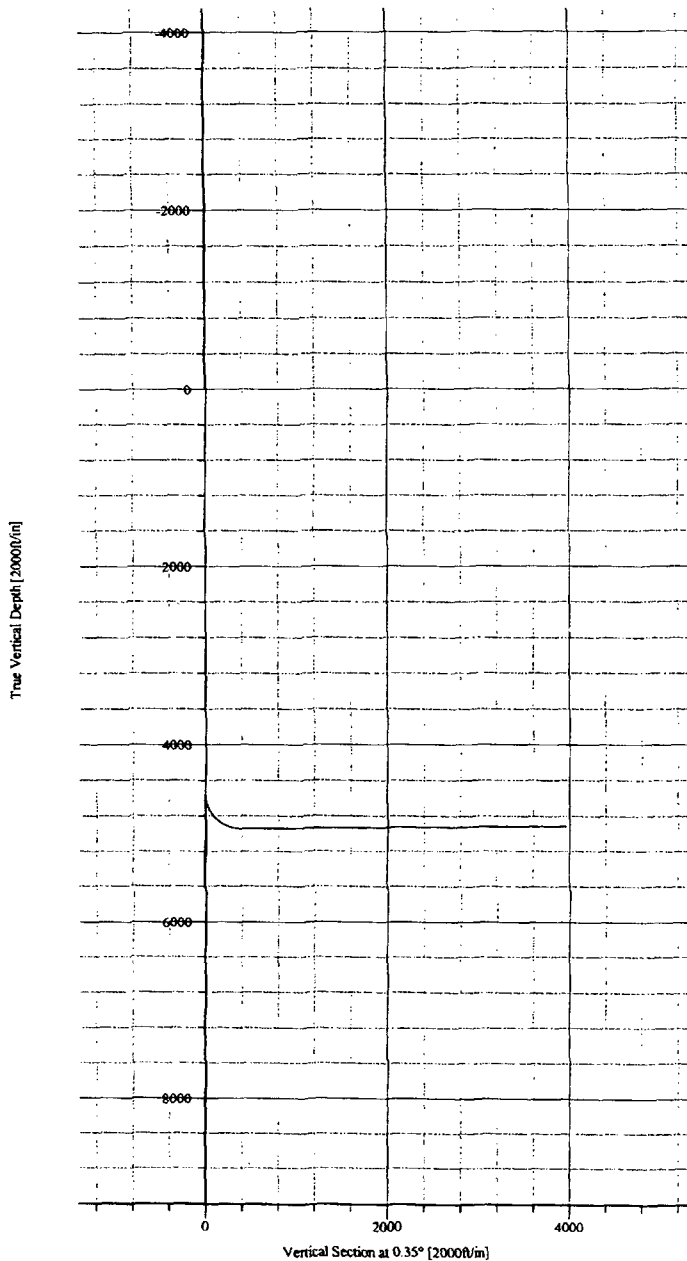
Site Centre Northing: 692202.00
Easting: 428864.00

Ground Level: 3643.00
Positional Uncertainty: 0.00
Convergence: -0.13

WELLPATH DETAILS

Rio Grande 23 Fed #4H

Rig:	SITE	3658.00ft
Ref. Datum:		
V. Section Angle	Origin +N/-S	Origin +E/-W
0.35°	0.00	0.00
		Starting From TVD
		4919.00



DRILLING PROGRAM

EOG RESOURCES, INC.
Rio Grande 23 Fed No. 4H
Eddy Co. NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

Quaternary Alluvium 0-200

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

San Andres	406'
Glorieta	1,727'
Tubb	3,038'
Abo Shale	3,671'
Wolfcamp Pay	4,706'

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

Quaternary Alluvium	0- 200'	Fresh Water
San Andres	406'	Oil
Glorieta	1,727'	Oil/Gas
Tubb	3,038'	Oil/Gas
Abo/Wolfcamp Pay	4,732'	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 9-5/8" casing at 900' and circulating cement back to surface.

4. CASING PROGRAM

<u>Hole Size</u>	<u>Interval</u>	<u>OD Casing</u>	<u>Weight</u>	<u>Grade</u>	<u>Jt. Conn.</u>	<u>Type</u>
12 1/4"	0-900'	8-5/8"	32#	J-55	LT&C	
7-7/8"	0-8737'	4-1/2"	11.6/13.5#	P-110	LT&C	

Cementing Program:

8-5/8" Surface Casing: Cement to surface with 150 sx Prem Plus, 3% Econolite, 2% Calcium Chloride, 0.25#/sx Flocele; 175 sx Prem Plus, 2% Calcium Chloride, 0.25#/sx Flocele

4-1/2" Production: Cement w/350sx Interfill C, + .25#/sx Flocele; 400 sx premium Cement, 100% Acid soluble Additive, .6% Halad-344 + .8% Econolite + .2% HR-55. This cement slurry is designed to bring cement to surface

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

1.

DRILLING PROGRAM

EOG RESOURCES, INC.
Rio Grande 23 Fed No. 4H
Eddy Co. NM

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

<u>Depth</u>	<u>Type</u>	Wt	Viscosity		Waterloss
		<u>(PPG)</u>	<u>(sec)</u>	<u>(cc)</u>	
0-900'	Fresh Water (Spud Mud)	8.6-8.8	28-34		N/c
900'-4400'	Cut Brine	8.8-9.2	28-34		N/c
4,400'-5,100'	Cut Brine	8.8-9.2	28-34		10-15
4,400'-8737'	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:

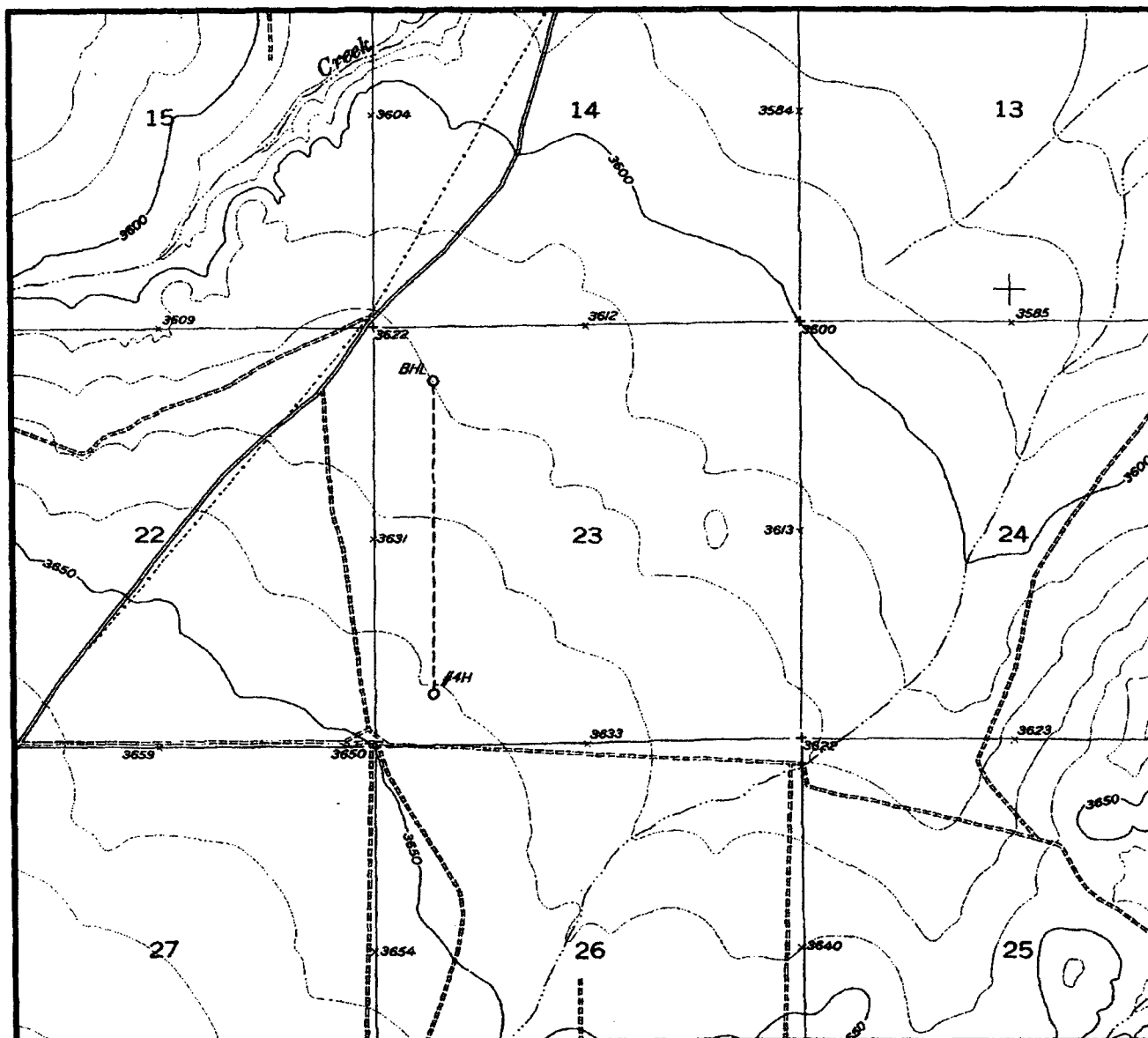
(A) A kelly cock will be kept in the drill string at all times.

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

(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:

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000' CONTOUR INTERVAL 5 FEET

SECTION 23 TWP 16-S RGE 24-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 660' FSL & 760' FWL
 ELEVATION 3643'

OPERATOR EOG RESOURCES INC.
 LEASE RIO GRANDE "23" FED #4H

U.S.G.S. TOPOGRAPHIC MAP
HOPE SE, NEW MEXICO
 LAT. LAT.: N 32.9027262
 LONG. LONG.: W 104.5651078

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

Exhibit 2

-N-

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.

SECTION 23, TOWNSHIP 16 SOUTH, RANGE 24 EAST, N.M.P.M.
EDDY COUNTY NEW MEXICO

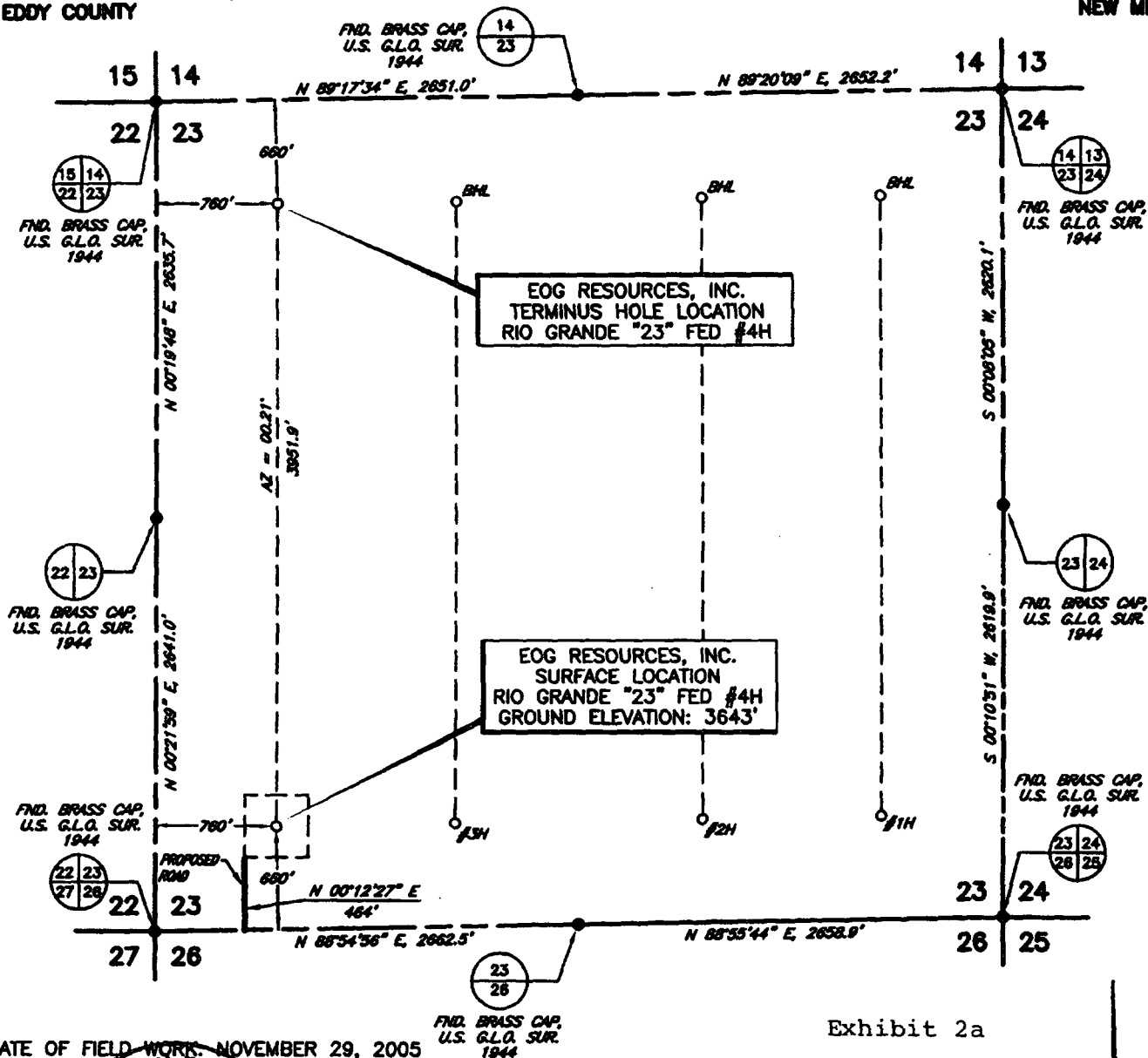


Exhibit 2a

DATE OF FIELD WORK: NOVEMBER 29, 2005

I, V. L. BEZNER, A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO, AND AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS PLAT TO BE A TRUE REPRESENTATION OF A SURVEY PERFORMED IN THE FIELD UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS PLAT AND FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. (RULE 500.6 EASEMENT SURVEYING)

V. L. Bezner
V. L. BEZNER, P.S. NO. 2920

0 1000
1" = 1000'

BEARINGS AND COORDINATES
BASED ON NEW MEXICO
STATE PLANE GRID - EAST
ZONE, NAD 27

EOG RESOURCES, INC.

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
MIDLAND, TEXAS

SCALE: 1" = 1000'

DATE: NOVEMBER 29, 2005

JOB NO.: 108530-F

QUAD NO.: 101 SE

SHEET : 1 OF 2

NO.	REVISION	DATE	BY
SURVEYED BY: R.M.			
DRAWN BY: E.U.O.			
APPROVED BY: V.L.B.			

Statement Accepting Responsibility For Operations
Rio Grande 23 Fed. No.4H

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 108950

Legal Description of Land W/2 Sec.23 T-16-S; R-24-E Eddy Co. NM **Formation(s)**
(if applicable):

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

BLM Bond File No.: NM2308

Authorized Signature: *Mike Francis*
Mike Francis

Title: Agent

Date 1/27/2006

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: EOG RESOURCES, INC.
Well Name & No. 4H - RIO GRANDE 23 FEDERAL
Location: 660' FSL & 760' FWL - SEC 23 - T16S - R24E - EDDY COUNTY (SHL)
660' FNL & 760' FWL - SEC 23 - T16S - R24E - EDDY COUNTY (BHL)
Lease: NM-108950

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 8-5/8 inch 4-1/2 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 900 feet, below usable water 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 4-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

CIRCULATE TO SURFACE.

52

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 the surface shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 8-5/8 inch casing shall be ~~3000~~ psi. 2000 

3. 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.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. 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. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.