

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM 108950
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator EOG Resources, Inc. 7377		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 2267 Midland, TX 79702		8. Lease Name and Well No. Rio Grande 23 Fed No. 1H 35049
3b. Phone No. (include area code) (432) 686-3714		9. API Well No. 30-015-34296
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 760' FEL (U/LP) At proposed prod. Zone 660' FNL & 760' FEL (U/LA)		10. Field and Pool, or Exploratory Wildcat Cottonwood Creek; Wolfcamp, West
14. Distance in miles and direction from nearest town or post office* 4 Mi. NW from Artesia NM		11. Sec., T., R., M., or Blk. And Survey or Area Sec 23 T-16-S; R-24-E
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 1,120	12. County or Parish Eddy
17. Spacing Unit dedicated to this well 320 ac. E/2 Sec 23	18. Distance from proposed location* to nearest well, drilling, completed applied for, on this lease, ft. na	13. State NM
19. Proposed Depth TVD 5200 TMD 9125	20. BLM/BIA Bond No. on file NM2308	
21. Elevations (Show whether DF, KDB, RT, GL, etc) Gr 3623	22. Approximate date work will start* 6/15/2005	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:

- | | |
|--|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office) | 6. 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 4/26/2005
Title Agent		
Approved by (Signature) <i>/s/ James Stovall</i>	Name (Printed/Typed) /s/ James Stovall	Date AUG 03 2005
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 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

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

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
State Lease - 4 copies
Fee Lease - 3 copies

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

OIL CONSERVATION DIVISION

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	² Pool Code 75255	³ Pool Name Unders. Cottonwood Creek Wolfcamp, West
⁴ Property Code	⁵ Property Name RIO GRANDE "23" FED	⁶ Well Number 1H
⁷ OGRID No. 7377	⁸ Operator Name BOG RESOURCES, INC.	⁹ Elevation 3623'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	23	16 SOUTH	24 EAST, N.M.P.M.		660'	SOUTH	760'	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
A	23	16 SOUTH	24 EAST, N.M.P.M.		660'	NORTH	760'	EAST	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

<div><p>¹⁶</p><p>Project Area</p><p>Producing Area</p></div> <div><p>BHL</p><p>X = 432673</p><p>Y = 696199</p><p>LAT: N 32.0477355</p><p>LONG: W 104.5527250</p></div> <div><p>NAD 27 NME ZONE</p><p>X = 432662</p><p>Y = 692274</p><p>LAT: N 32.0477355</p><p>LONG: W 104.5527336</p></div>	<div><p>17 OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p><i>Mike Francis</i></p><p>Signature</p><p>Mike Francis</p><p>Printed Name</p><p>Agent</p><p>Title</p><p>6/22/2005</p><p>Date</p></div> <div><p>18 SURVEYOR CERTIFICATION</p><p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p><p>MARCH 2, 2005</p><p>Date of Survey</p><p>Signature and Seal of Registered Surveyor</p><p>V. LYNN BEZNER</p><p>NO. 7920</p><p>PROFESSIONAL LAND SURVEYOR</p><p>STATE OF NEW MEXICO</p><p>Certificate Number</p><p>V. L. BEZNER R.P.S. #7920</p><p>JOB # 101802 / 101 SE / E.U.O.</p></div>
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DRILLING PROGRAM

EOG RESOURCES, INC.
Rio Grande 23 Fed No. 1H
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

Hole Size	Interval	OD Casing	Weight	Grade	Jt. Conn. Type	
11"	0-900'	8-5/8"	32#	J-55	LT&C	WITNESS
7-7/8"	0-9125'	5-1/2"	17#	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

5-1/2" 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)

DRILLING PROGRAM

EOG RESOURCES, INC.
Rio Grande 23 Fed No. 1H
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-psig pressure.

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

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer 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>Viscosity</u> <u>(sec)</u>	<u>Waterloss</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'-9,125'	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:

DRILLING PROGRAM

EOG RESOURCES, INC.
Rio Grande 23 Fed No. 1H
Eddy Co. NM

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

Possible sidewall cores based on shows.

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

The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 5000 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

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

DRILLING PROGRAM

**EOG RESOURCES, INC.
Rio Grande 23 Fed No. 1H
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, 5000 psi W.P. minimum. Exhibit #1.
3. All fittings to be flanged
4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum.
5. All choke and fill lines to be securely anchored especially ends of choke lines.
6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
7. Kelly cock on kelly.
8. Extension wrenches and hand wheels to be properly installed.
9. Blow out preventer control to be located as close to driller's position as feasible.
10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

EOG Resources, Inc.

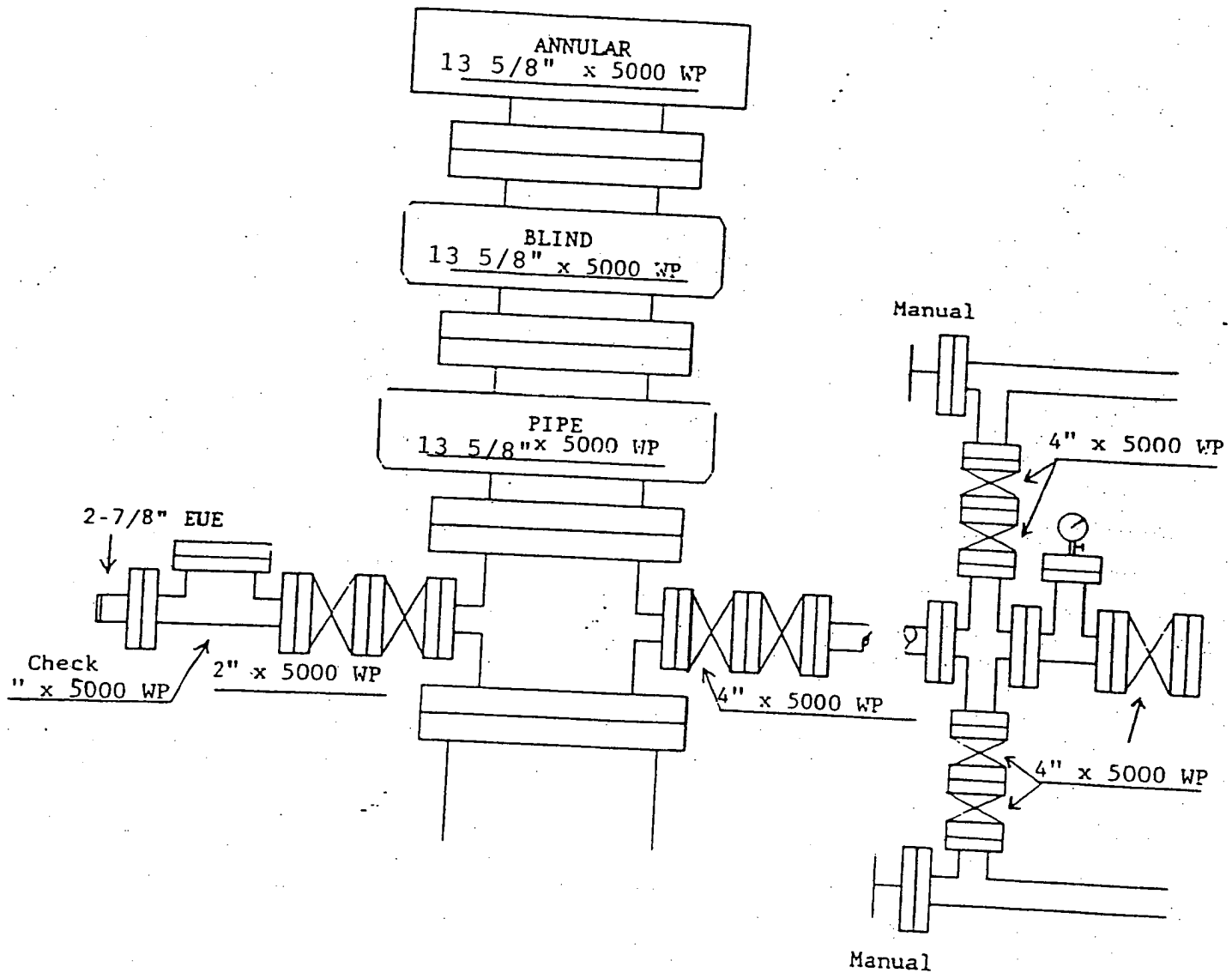
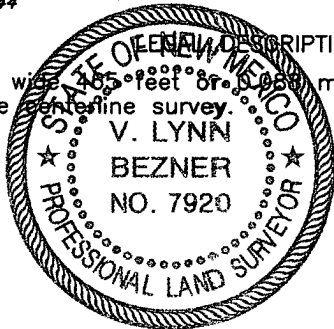
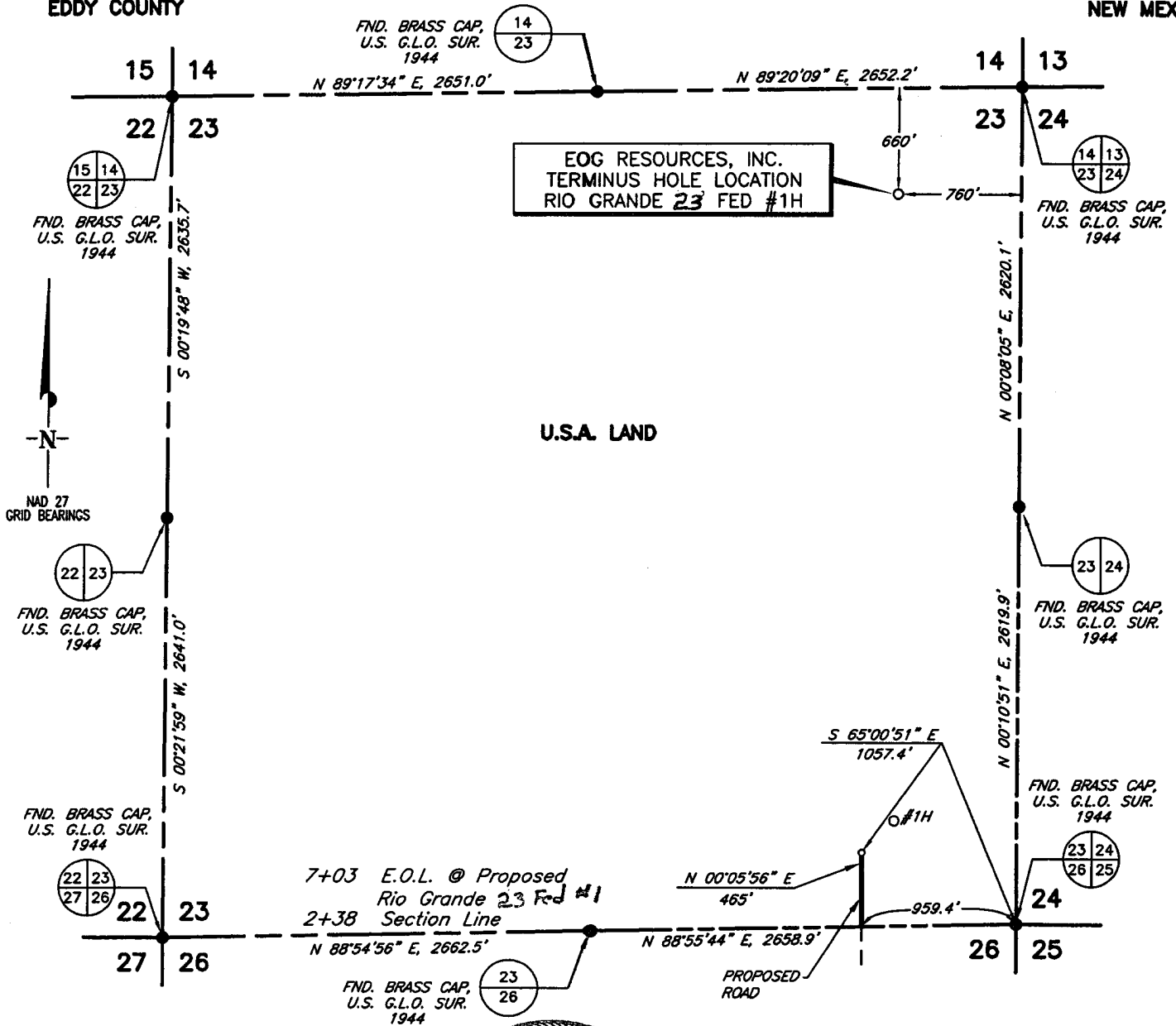


Exhibit 1

Exhibit 2a

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



A strip of land 30.0 feet wide, 465 feet or 0.008 miles in length and being 15.0 feet Left and 15.0 feet Right of the above centerline survey.

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

V. Lynn Bezner
V. Lynn Bezner

EOG RESOURCES, INC.

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
MIDLAND, TEXAS

SCALE: 1" = 1000'

DATE: MARCH 8, 2005

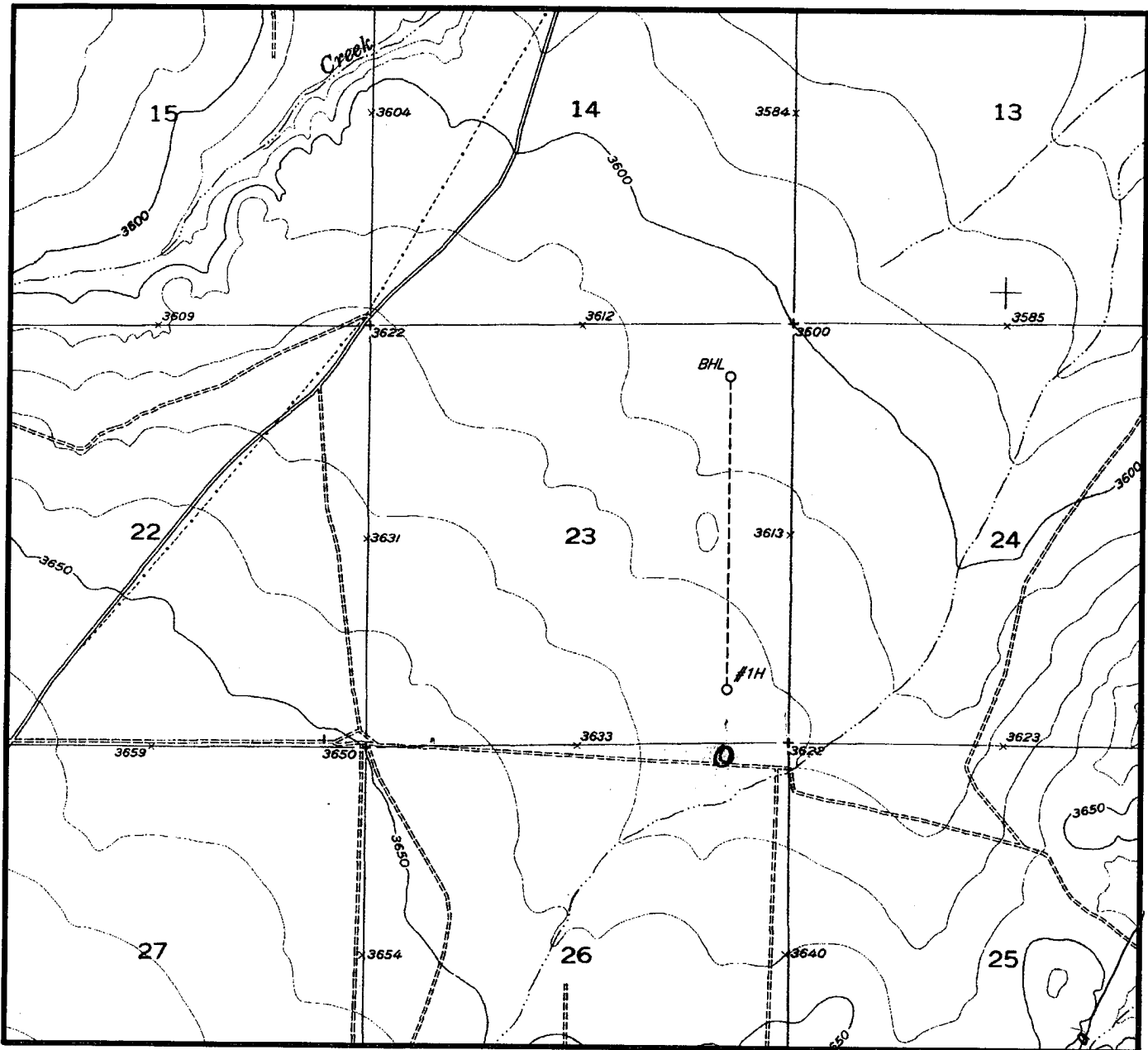
JOB NO.: 101802-RD2

QUAD NO.: 101SE

SHEET : 2 OF 2

NO.	REVISION	DATE	BY
SURVEYED BY:	J.T.		
DRAWN BY:	E.U.O.		
APPROVED BY:	V.L.B.		

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 5 FEET

SECTION 23 TWP 17-S RGE 25-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 660' FSL & 760' FEL
 ELEVATION 3623'

OPERATOR EOG RESOURCES INC.
 LEASE RIO GRANDE "23" FED #1H

U.S.G.S. TOPOGRAPHIC MAP
HOPE SE, NEW MEXICO
 LAT. LAT.: N 32.9029466
 LONG. LONG.: W 104.5527336

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

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 plat and notify us immediately of any possible discrepancy.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: EOG Resources, Inc.
Well Name & No. Rio Grande 23 Federal #1
SH Location: 660' FSL, 760' FEL, Section 23, T. 16 S., R. 24 E., Eddy County, New Mexico
BH Location: 660' FNL, 760' FEL, Section 23, T. 16 S., R. 24 E., Eddy County, New Mexico
Lease: NM-108950

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 13-3/8 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) shall be 2000 psi.

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.



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

August 16, 2005

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 Rio Grande 23 Fed #1H. 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

RECEIVED
AUG 17 2005
OCD-ARTESIA

Permit Information:

Well Name: Rio Grande 23 Fed #1H

Location:

SL 660' FSL & 760' FEL, Section 23, T-16-S, R-24-E, Eddy Co., N.M.

BHL 660' FNL & 760' FEL, Section 23, 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'	12-1/4"	8-5/8"	32#	J-55	Surface
Production	8,661'	7-7/8"	5 1/2"	17#	P-110	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
8,661'	400	Lead: Interfill C + 1/4 pps Flocele
	300	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' – 5,100'	Cut Brine	8.8-9.2	28-34	10-15
4,400' – 8,661'	Polymer (Lateral)	9.0-9.4	40-45	10-25

EOG Resources Inc

Planning Report

Company: EOG Resources
Field: Thames
Site: Rio Grande 23 Fed #1H
Well: Rio Grande 23 Fed #1H
Wellpath: Lateral

Date: 7/27/2005 **Time:** 16:23:10 **Page:** 1
Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #1H, Grid North
Vertical (TVD) Reference: SITE 3641.0
Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)
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 #1H

Site Position:	Northing:	692274.00 ft	Latitude:	32 54	10.611 N
From: Map	Easting:	432662.00 ft	Longitude:	104 33	9.840 W
Position Uncertainty:	0.00 ft		North Reference:		Grid
Ground Level:	3623.00 ft		Grid Convergence:		-0.12 deg

Well: Rio Grande 23 Fed #1H

Slot Name:

Well Position:	+N/-S	0.00 ft	Northing:	692274.00 ft	Latitude:	32	54	10.611 N
	+E/-W	0.00 ft	Easting :	432662.00 ft	Longitude:	104	33	9.840 W
Position Uncertainty:		0.00 ft						

Wellpath: Lateral

Drilled From:	Surface
Tie-on Depth:	0.00 ft
Above System Datum:	Mean Sea Level
Declination:	9.04 deg
Mag Dip Angle:	60.88 deg
+E/-W	Direction
ft	deg

Current Datum:	SITE	Height	3641.00 ft
Magnetic Data:	7/27/2005		
Field Strength:	49696 nT		
Vertical Section:	Depth From (TVD)	+N/-S	
	ft	ft	
	4900.00	0.00	

Plan: Plan #1

Date Composed: 7/27/2005
Version: 1
Tied-to: From Surface

Principal: Yes

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	
4518.00	0.00	0.00	4518.00	0.00	0.00	0.00	0.00	0.00	0.00	
5118.04	90.00	0.16	4900.00	382.00	1.07	15.00	15.00	0.00	0.16	
5118.07	90.00	0.16	4900.00	382.02	1.07	3.00	0.00	3.00	89.93	
8661.04	90.00	0.16	4900.00	3924.98	11.00	0.00	0.00	0.00	0.00	
8661.06	90.00	0.16	4900.00	3925.00	11.00	3.00	0.00	-3.00	-90.07	BHL

Survey

[illegible]

EOG Resources Inc

Planning Report

Company: EOG Resources
Field: Thames
Site: Rio Grande 23 Fed #1H
Well: Rio Grande 23 Fed #1H
Wellpath: Lateral

Date: 7/27/2005 **Time:** 16:23:10 **Page:** 2
Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #1H, Grid North
Vertical (TVD) Reference: SITE 3641.0
Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)
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
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4518.00	0.00	0.00	4518.00	0.00	0.00	0.00	0.00	0.00	0.00	Keeper Cone
4600.00	12.30	0.16	4599.37	8.77	0.02	8.77	15.00	15.00	0.00	Keeper Cone
4700.00	27.30	0.16	4693.19	42.54	0.12	42.54	15.00	15.00	0.00	Keeper Cone
4800.00	42.30	0.16	4775.08	99.45	0.28	99.45	15.00	15.00	0.00	Keeper Cone
4900.00	57.30	0.16	4839.44	175.60	0.49	175.60	15.00	15.00	0.00	Keeper Cone
5000.00	72.29	0.16	4881.91	265.82	0.74	265.83	15.00	15.00	0.00	Keeper Cone
5100.00	87.29	0.16	4899.57	363.96	1.02	363.96	15.00	15.00	0.00	Keeper Cone
5118.04	90.00	0.16	4900.00	382.00	1.07	382.00	15.00	15.00	0.00	Keeper Cone
5200.00	90.00	0.16	4900.00	463.95	1.30	463.96	0.00	0.00	0.00	Keeper Cone
5300.00	90.00	0.16	4900.00	563.95	1.58	563.96	0.00	0.00	0.00	Keeper Cone
5400.00	90.00	0.16	4900.00	663.95	1.86	663.96	0.00	0.00	0.00	Keeper Cone
5500.00	90.00	0.16	4900.00	763.95	2.14	763.96	0.00	0.00	0.00	Keeper Cone
5600.00	90.00	0.16	4900.00	863.95	2.42	863.96	0.00	0.00	0.00	Keeper Cone
5700.00	90.00	0.16	4900.00	963.95	2.70	963.96	0.00	0.00	0.00	Keeper Cone
5800.00	90.00	0.16	4900.00	1063.95	2.98	1063.96	0.00	0.00	0.00	Keeper Cone
5900.00	90.00	0.16	4900.00	1163.95	3.26	1163.96	0.00	0.00	0.00	Keeper Cone
6000.00	90.00	0.16	4900.00	1263.95	3.54	1263.96	0.00	0.00	0.00	Keeper Cone
6100.00	90.00	0.16	4900.00	1363.95	3.82	1363.96	0.00	0.00	0.00	Keeper Cone
6200.00	90.00	0.16	4900.00	1463.95	4.10	1463.96	0.00	0.00	0.00	Keeper Cone
6300.00	90.00	0.16	4900.00	1563.95	4.38	1563.96	0.00	0.00	0.00	Keeper Cone
6400.00	90.00	0.16	4900.00	1663.95	4.66	1663.96	0.00	0.00	0.00	Keeper Cone
6500.00	90.00	0.16	4900.00	1763.95	4.94	1763.96	0.00	0.00	0.00	Keeper Cone
6600.00	90.00	0.16	4900.00	1863.95	5.22	1863.96	0.00	0.00	0.00	Keeper Cone

EOG Resources Inc

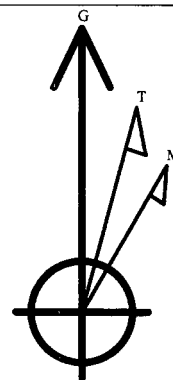
Planning Report

Company: EOG Resources Field: Thames Site: Rio Grande 23 Fed #1H Well: Rio Grande 23 Fed #1H Wellpath: Lateral	Date: 7/27/2005 Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #1H, Grid North Vertical (TVD) Reference: SITE 3641.0 Section (VS) Reference: Well (0.00N,0.00E,0.16Azi) Plan: Plan #1
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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
6700.00	90.00	0.16	4900.00	1963.95	5.50	1963.96	0.00	0.00	0.00	Keeper Cone
6800.00	90.00	0.16	4900.00	2063.95	5.78	2063.96	0.00	0.00	0.00	Keeper Cone
6900.00	90.00	0.16	4900.00	2163.95	6.06	2163.96	0.00	0.00	0.00	Keeper Cone
7000.00	90.00	0.16	4900.00	2263.95	6.34	2263.96	0.00	0.00	0.00	Keeper Cone
7100.00	90.00	0.16	4900.00	2363.95	6.62	2363.96	0.00	0.00	0.00	Keeper Cone
7200.00	90.00	0.16	4900.00	2463.95	6.90	2463.96	0.00	0.00	0.00	Keeper Cone
7300.00	90.00	0.16	4900.00	2563.95	7.18	2563.96	0.00	0.00	0.00	Keeper Cone
7400.00	90.00	0.16	4900.00	2663.95	7.46	2663.96	0.00	0.00	0.00	Keeper Cone
7500.00	90.00	0.16	4900.00	2763.94	7.74	2763.96	0.00	0.00	0.00	Keeper Cone
7600.00	90.00	0.16	4900.00	2863.94	8.03	2863.96	0.00	0.00	0.00	Keeper Cone
7700.00	90.00	0.16	4900.00	2963.94	8.31	2963.96	0.00	0.00	0.00	Keeper Cone
7800.00	90.00	0.16	4900.00	3063.94	8.59	3063.96	0.00	0.00	0.00	Keeper Cone
7900.00	90.00	0.16	4900.00	3163.94	8.87	3163.96	0.00	0.00	0.00	Keeper Cone
8000.00	90.00	0.16	4900.00	3263.94	9.15	3263.96	0.00	0.00	0.00	Keeper Cone
8100.00	90.00	0.16	4900.00	3363.94	9.43	3363.96	0.00	0.00	0.00	Keeper Cone
8200.00	90.00	0.16	4900.00	3463.94	9.71	3463.96	0.00	0.00	0.00	Keeper Cone
8300.00	90.00	0.16	4900.00	3563.94	9.99	3563.96	0.00	0.00	0.00	Keeper Cone
8400.00	90.00	0.16	4900.00	3663.94	10.27	3663.96	0.00	0.00	0.00	Keeper Cone
8500.00	90.00	0.16	4900.00	3763.94	10.55	3763.96	0.00	0.00	0.00	Keeper Cone
8600.00	90.00	0.16	4900.00	3863.94	10.83	3863.96	0.00	0.00	0.00	Keeper Cone
8661.06	90.00	0.16	4900.00	3925.00	11.00	3925.02	0.00	0.00	0.00	Keeper Cone

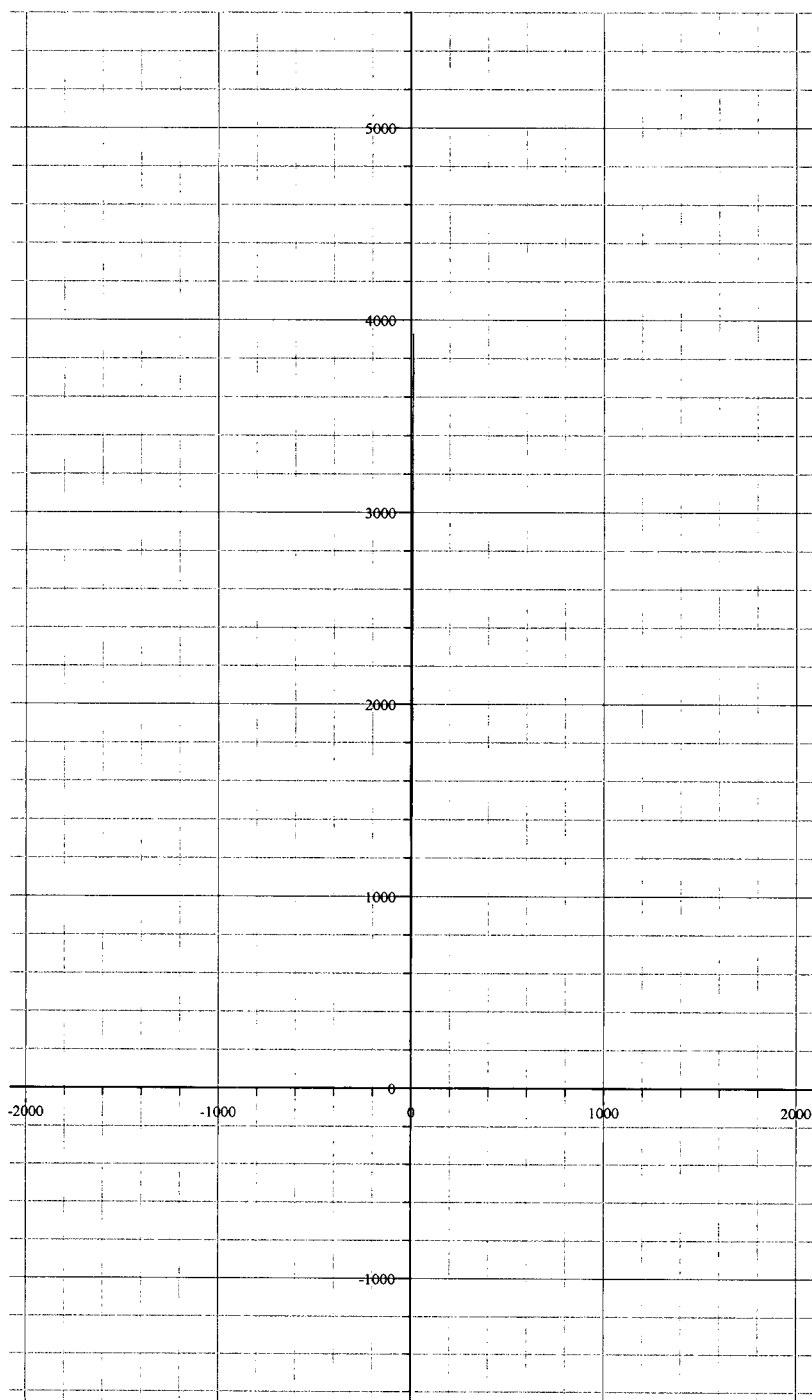
Field: Thames
 Site: Rio Grande 23 Fed #1H
 Well: Rio Grande 23 Fed #1H
 Wellpath: Lateral
 Plan: Plan #1



Azimuths to Grid North
 True North: 0.12°
 Magnetic North: 9.16°

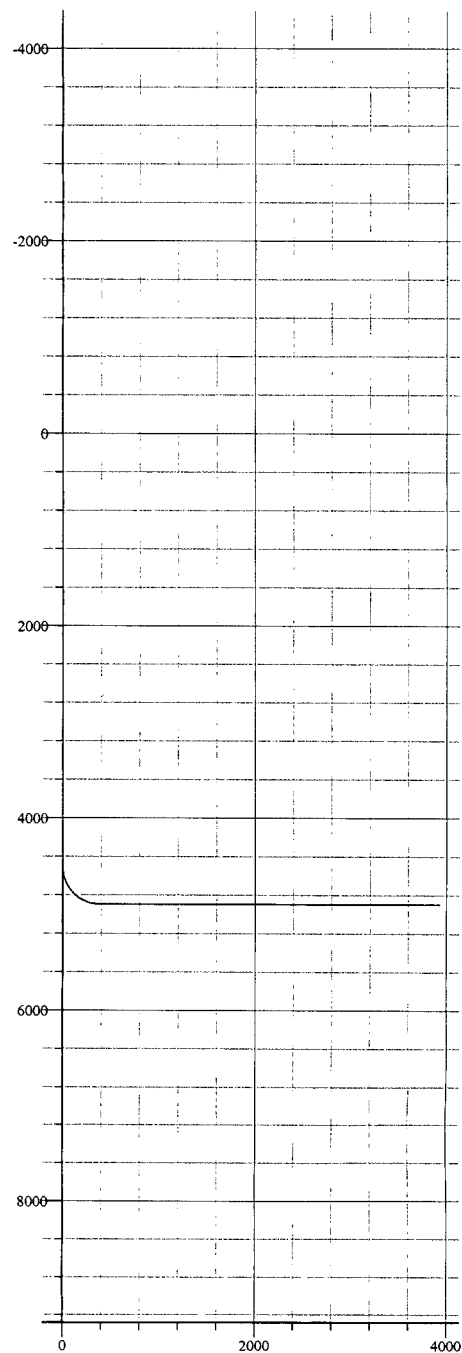
Magnetic Field
 Strength: 49696nT
 Dip Angle: 60.88°
 Date: 7/27/2005
 Model: igr2000

South(-)/North(+) [1000ft/in]



West(-)/East(+) [1000ft/in]

True Vertical Depth [2000ft/in]



Vertical Section at 0.16° [2000ft/in]