Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
OMB No 1004-0137
Expires. March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- *Other instructions on reverse side.*

5 Lease Serial No
NM19625(SHL);NM14497(BHL)

6 If Indian, Allottee or Tribe Name

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

1 Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No
DIAMOND 8 FED COM 2H

2. Name of Operator **EOG RESOURCES, INC.**

9 API Well No
30-025-39578

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

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

10 Field and Pool, or Exploratory Area
Red Hills; Bone Spring

4 Location of Well *(Footage, Sec., T., R., M., or Survey Description)*

330' FSL & 430' FEL of Section 8, T25S-R34E, N.M.P.M. (UL/P) SHL

330'FNL & 660'FEL of Section 8, T25S-R34E, N.M.P.M, UL/A BHL

11 County or Parish, State
Lea County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **MOVE SURFACE LOCATION**
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA Required subsequent reports must be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

("EOG") has restaked the location as identified by the plats attched hereto. As a result of the location change, please find revised C102, area maps, production facility layout and amended Casing, Cementing and Mud Program.

RECEIVED
FEB 22 2010
HOBBSOCD

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Donny G. Glanton Title **Senior Lease Operations ROW Representative**

Signature Donny G. Glanton Date **01/13/2010**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Don Peterson Title Date FEB 18 2010

Conditions of approval, if any, are attached Approval of this notice 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.

Office CARLSBAD FIELD OFFICE

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)

PETROLEUM ENGINEER FEB 25 2010

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3 - 4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
BLM would like you to know that you do not have to respond to this or any other Federal agency sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington D.C. 20240

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

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

RECEIVED
FEB 22 2010
HOBBSOCD

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

★ ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-39578	51020	Red Hills; Bone Spring

Property Code	Property Name	Well Number
	DIAMOND "8" FED. COM	2H

OGRID No.	Operator Name	Elevation
7377	EOG RESOURCES, INC.	3343.7'

Surface Location

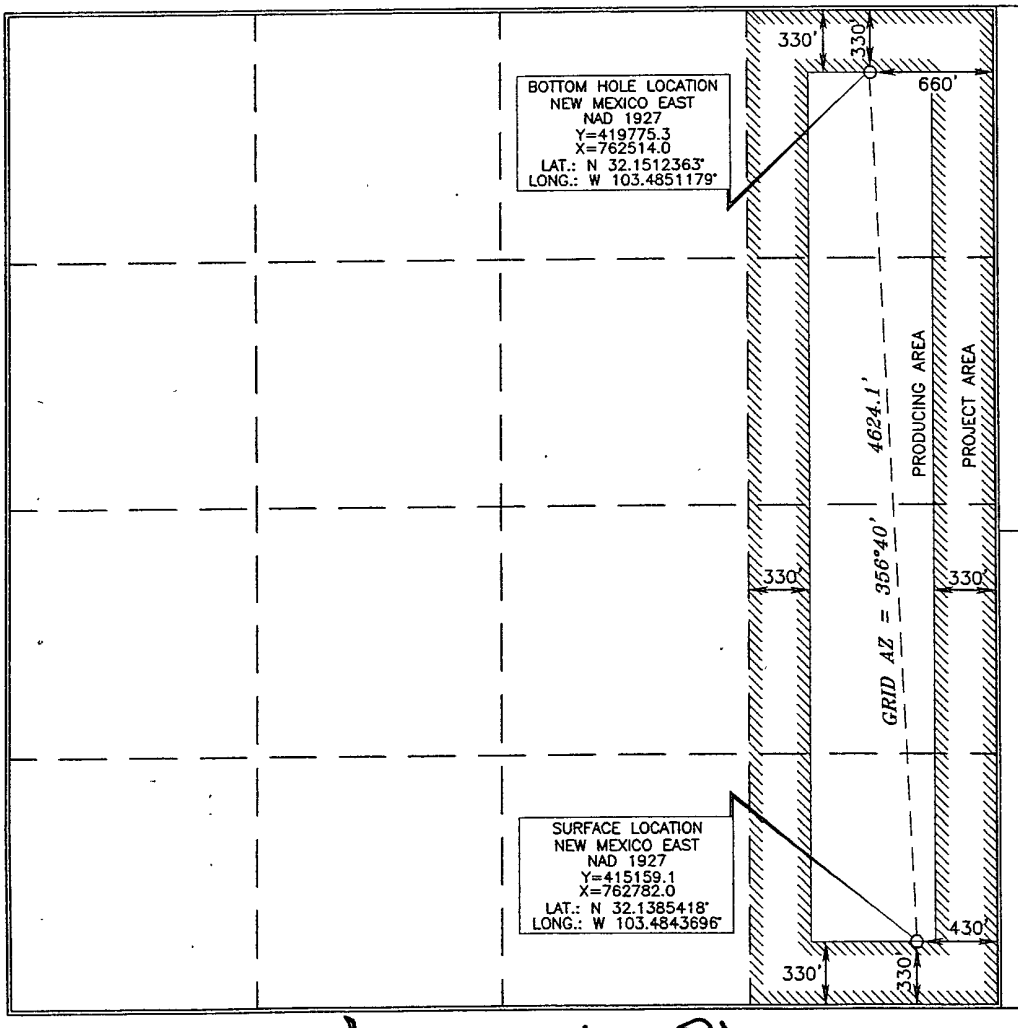
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
★ P	8	25 SOUTH	34 EAST, N.M.P.M.		330	SOUTH	430	EAST	LEA

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	8	25 SOUTH	34 EAST, N.M.P.M.		330	NORTH	660	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

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

Donny J. Glanton 1-13-2010
Signature Date

Donny G. Glanton
Printed Name

SURVEYOR CERTIFICATION

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

NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

DECEMBER 14, 2009
Date of Survey

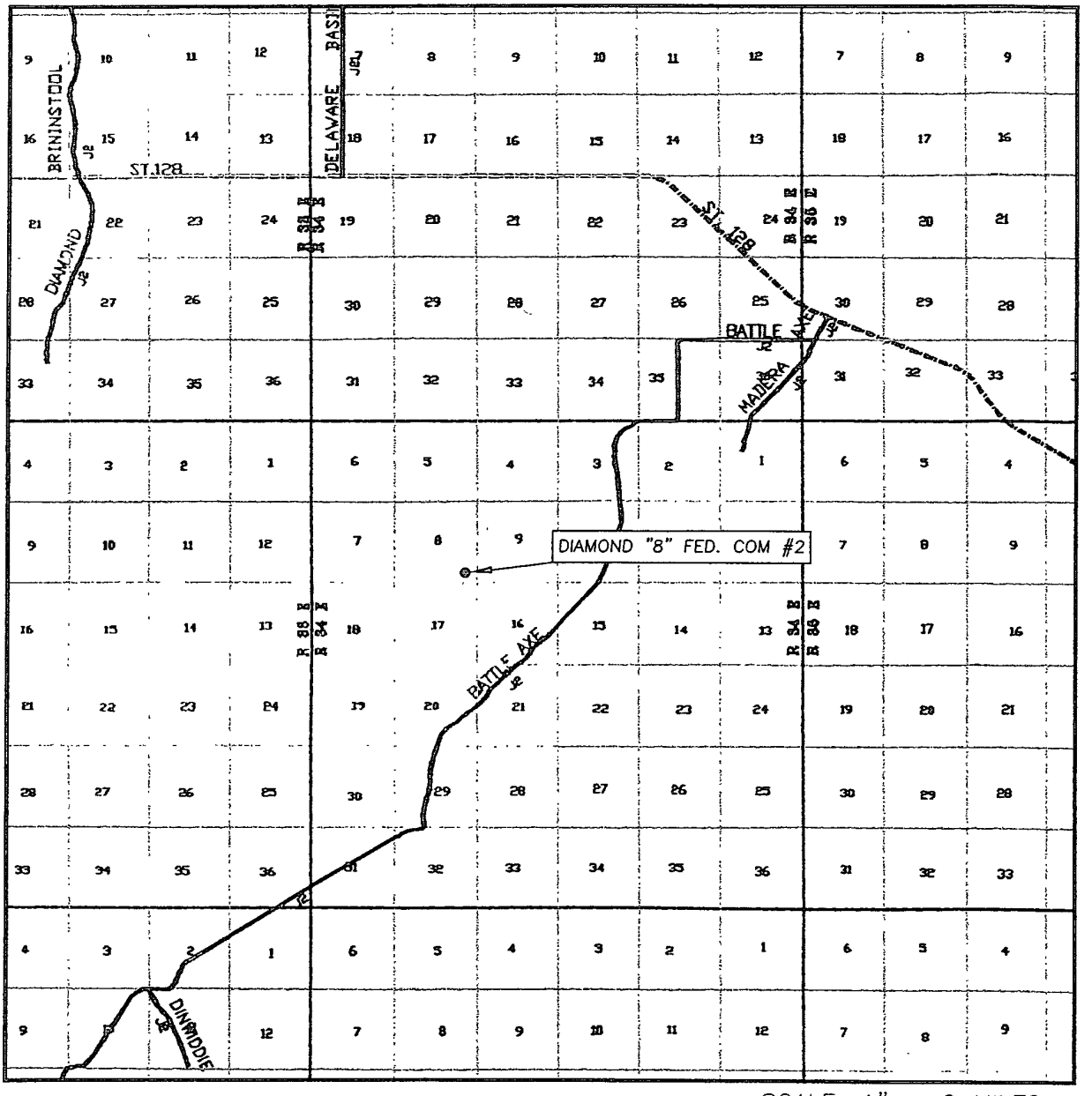
Signature and Seal of Professional Surveyor

Terry J. Asel 12/16/2009
Certificate Number 15079

WO# 081103WL (Rev. C) (KA)

Amended Plat

VICINITY MAP



SEC. 8 TWP. 25-S RGE. 34-E
SURVEY N.M.P.M.
COUNTY LEA
DESCRIPTION 330' FSL & 430' FEL
ELEVATION 3343.7'
OPERATOR EOG RESOURCES, INC.
LEASE DIAMOND "8" FED. COM #2

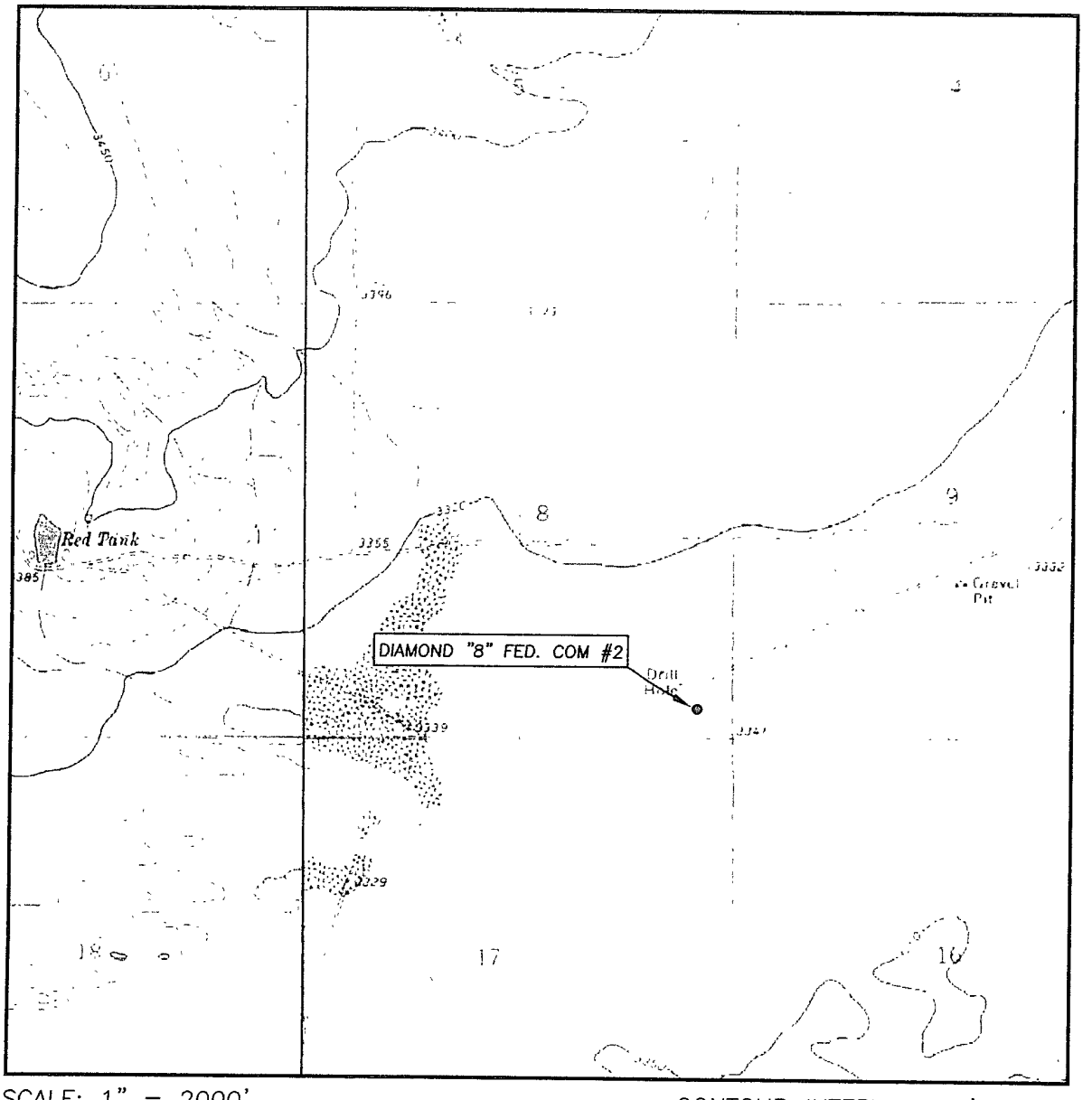
SCALE: 1" = 2 MILES

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
HOBBS, NEW MEXICO - 575-393-9146

DIRECTIONS BEGINNING IN JAL AT THE INTERSECTION OF N.M. STATE HWY. #18 AND N.M. STATE HWY. #128, GO WEST ON N.M. STATE HWY. #128 FOR 14.1 MILES TO COUNTY ROAD #2 (BATTLE AXE ROAD), TURN LEFT AND GO SOUTHWEST ON COUNTY ROAD #2 FOR 0.3 MILES, TURN RIGHT AND GO WEST FOR 1.6 MILES, TURN LEFT AND GO SOUTH FOR 1.0 MILES, TURN RIGHT AND GO WEST FOR 0.5 MILES, TURN LEFT AND GO SOUTH/SOUTHWEST FOR 2.3 MILES, TURN RIGHT OFF CO. ROAD #2 AND GO NORTHWEST ON LEASE ROAD FOR 1.0 MILES, TURN LEFT AND GO SOUTHWEST ON OLD LEASE ROAD FOR 0.8 MILES, TURN LEFT ON PROPOSED ROAD AND GO SOUTH FOR 0.1 MILES TO LOCATION.

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 8 TWP. 25-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 430' FEL

ELEVATION 3343.7'

OPERATOR EOG RESOURCES, INC.

LEASE DIAMOND "8" FED. COM #2

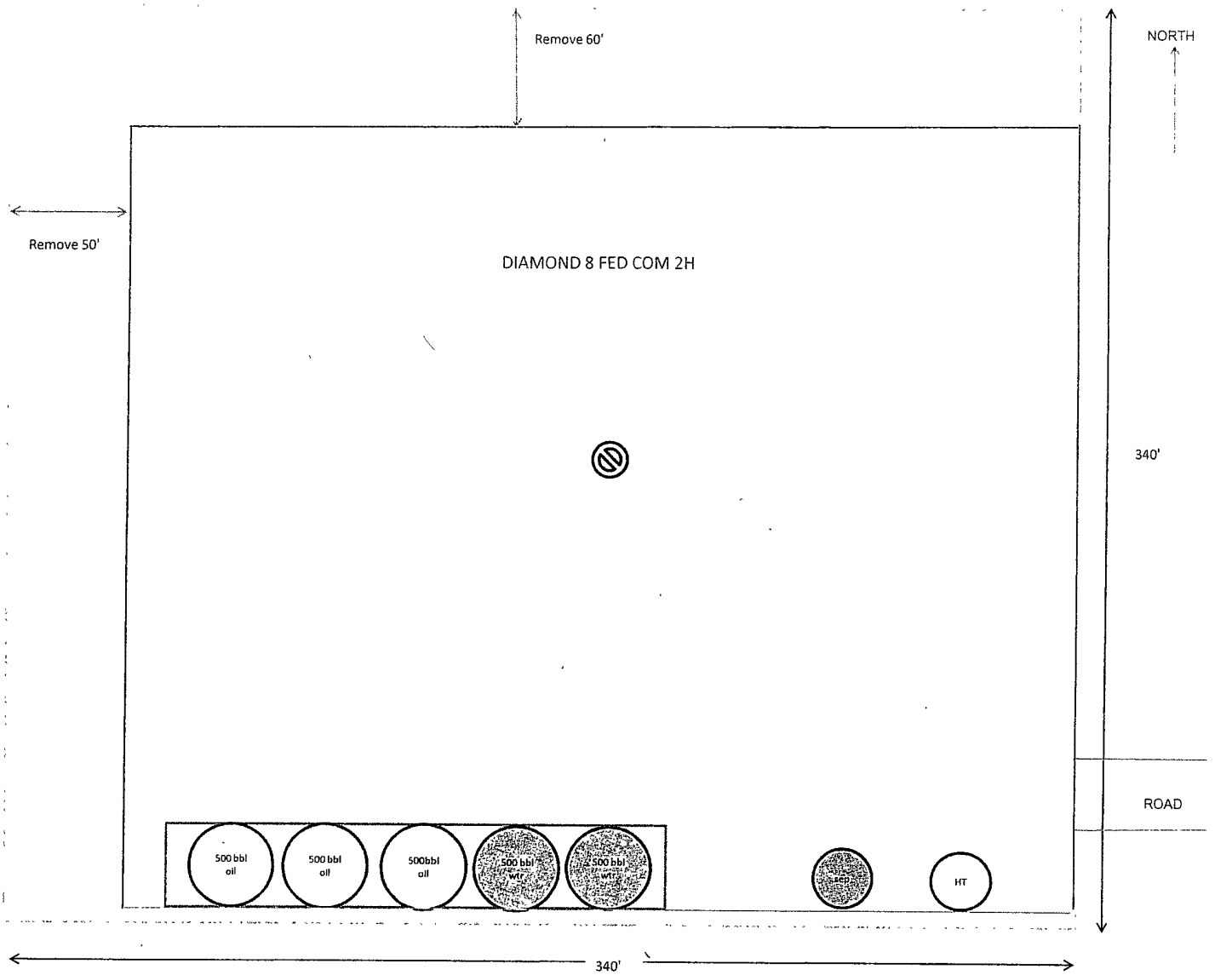
U.S.G.S. TOPOGRAPHIC MAP
WOODLEY FLAT, N.M.

Asel Surveying

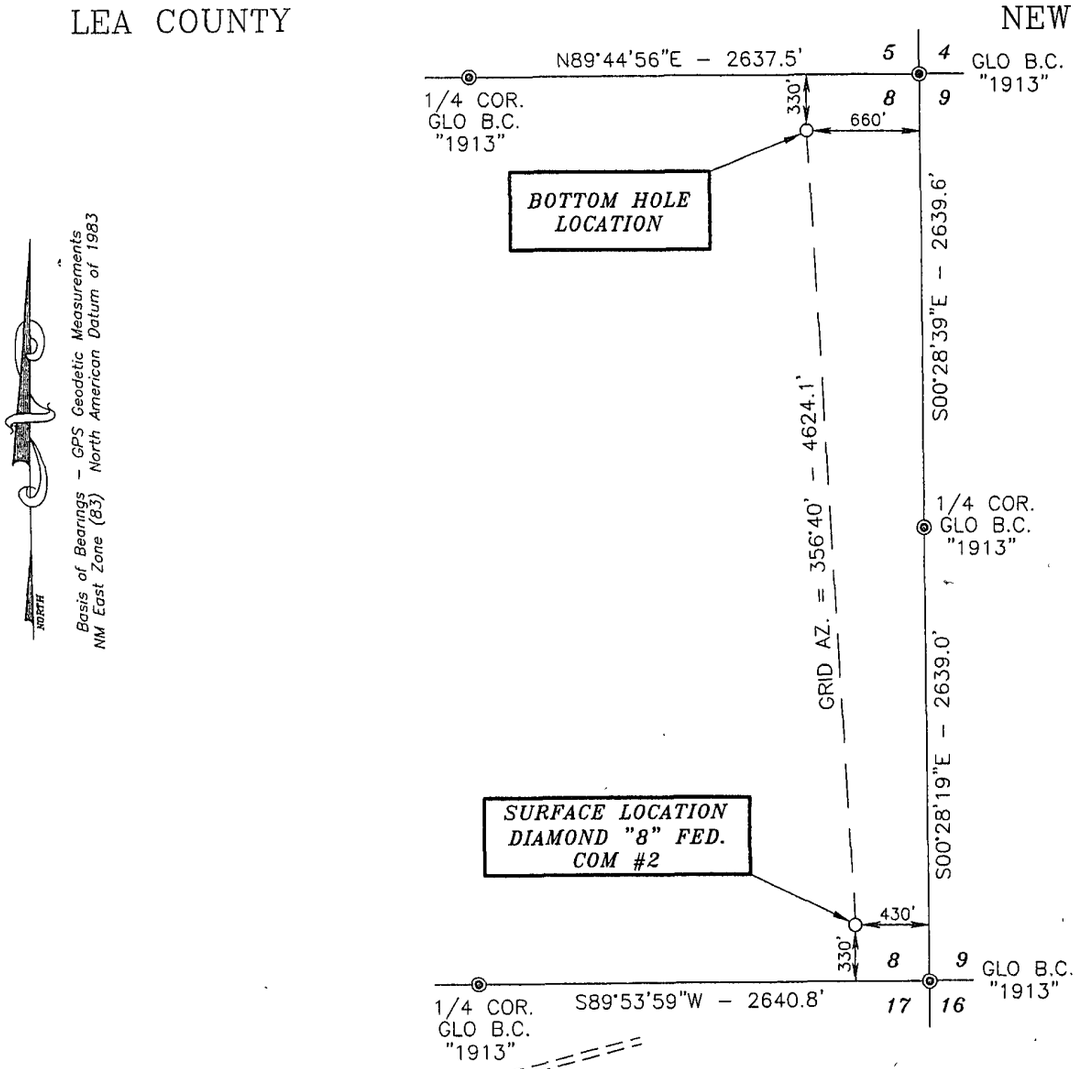
P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 575-393-9146

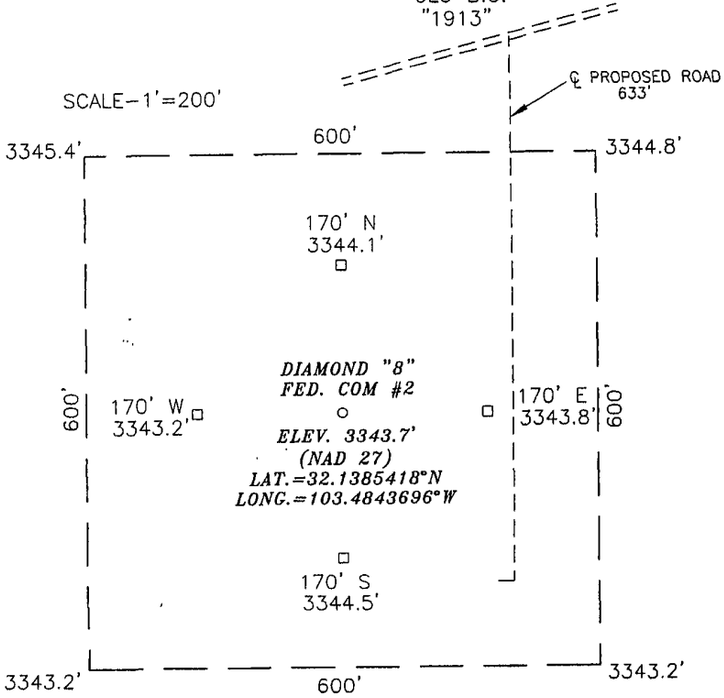
Production Facility Layout

"NOT TO SCALE"



SECTION 8, TOWNSHIP 25 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY NEW MEXICO





DIRECTIONS:
BEGINNING IN JAL AT THE INTERSECTION OF N.M. STATE HWY. #18 AND N.M. STATE HWY. #128, GO WEST ON N.M. STATE HWY. #128 FOR 14.1 MILES TO COUNTY ROAD #2 (BATTLE AXE ROAD), TURN LEFT AND GO SOUTHWEST FOR 0.3 MILES, TURN RIGHT AND GO WEST FOR 1.6 MILES, TURN LEFT AND GO SOUTH FOR 1.0 MILES, TURN RIGHT AND GO WEST FOR 0.5 MILES, TURN LEFT AND GO SOUTH/SOUTHWEST FOR 2.3 MILES, TURN RIGHT OFF COUNTY ROAD #2 AND GO NORTHWEST ON LEASE ROAD FOR 1.0 MILES, TURN LEFT AND GO SOUTHWEST ON OLD LEASE ROAD FOR 0.8 MILES, TURN LEFT ON PROPOSED ROAD AND GO SOUTH FOR 0.1 MILES TO LOCATION.

LEGEND

◉ – DENOTES FOUND MONUMENT AS NOTED

1000' 0 1000' 2000' FEET
SCALE: 1"=1000'

SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

Terry J. Asel 12/16/2009
Terry J. Asel N.M. R.P.S. No. 15079

TERRY J. ASEL NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

Asel Surveying
P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 575-393-9146

EOG RESOURCES, INC.

DIAMOND "8" FED. COM #2 LOCATED AT 330' FSL & 430' FEL IN SECTION 8, TOWNSHIP 25 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 12/14/09	Sheet 1 of 1 Sheets	
W.O. Number: 081103WL (Rev. C)	Drawn By: KA	Rev: C
Date: 12/15/09	081103WL	Scale: 1"=1000'

Permit Information:

Well Name: Diamond 8 Fed Com No. 2H

Location:
SL: 330' FSL & 430' FEL, Section 8, T-25-S, R-34-E, Lea Co., N.M.
BHL: 330' FNL & 660' FEL, Section 8, T-25-S, R-34-E, Lea Co., N.M.

Casing Program:

Casing	Setting Depth	Hole Size	Casing Size	Casing Weight	Casing Grade	Desired TOC
Surface	1,075'	17-1/2"	13-3/8"	54.5#	J-55	Surface
Intermediate	4,000' 5,100'	12-1/4" 12-1/4"	9-5/8" 9-5/8"	40# 40#	J-55 HCK-55	Surface
Production	13,899'	8-3/4"	5-1/2"	17#	HCP-110	4600'

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft^3/ft	Slurry Description
1,075'	500	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl2 + 0.25 lb/sk Cello-Flake
	300	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
5,100'	1000	12.7	2.01	Lead: Class 'C' + 1.25% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate
	200	14.8	1.34	Tail: Class 'C' + 0.50% FL-62 + 0.10% SMS + 1.00% CaCl2 + 0.50% R-3 + 0.005 lb/sk Static Free
11,000'	50	18.0	0.90	100' plug at TD - Class 'H' + 1.20% CD-31 + 0.20% R-3 + 5.00% Salt (1.252 lb/sk)
9000'	300	18.0	0.90	600' sidetrack plug - Class 'H' + 1.20% CD-31 + 0.20% R-3 + 5.00% Salt (1.252 lb/sk)
13,899'	850	11.8	2.37	Lead: 50:50:10 Class 'H' + 0.80% FL-52A + 0.30% ASA-301 + 0.30% SMS + 2.00% Salt (2.259 lb/sk) + 0.20% R-21 + 0.25 lb/sk Cello Flake
	1000	14.2	1.30	Tail: 50:50:2 Class 'H' + 0.65% FL-52A + 0.20% CD-32 + 0.15% SMS + 5.00% Salt (2.452 lb/sk) + 0.10% R-3

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,075'	Fresh - Gel	8.6-8.8	28-34	N/C
1,075' – 5,100'	Brine	10.0-10.2	28-34	N/C
5,100' – 8,500'	Fresh Water	8.4-8.6	28-34	N/C
8,500'– 11,000' Pilot hole	Cut Brine - XCD	9.0-9.5	28-34	N/C
9,000'– 13,899' Lateral	Cut Brine - XCD	9.0-9.5	40-42	8-10

EOG RESOURCES, INC.
DIAMOND 8 FED COM NO. 2H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,050'
Base of Salt	5,000'
Delaware	5,280'
Cherry Canyon	6,260'
Bone Springs	9,060'
1st Bone Spring Sand	10,230'
2nd Bone Spring Sand	10,840'
Pilot hole TD	11,000'

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware	5,280'	Oil
Cherry Canyon	6,260'	Oil
Bone Springs	9,060'	Oil
1st Bone Spring Sand	10,230'	Oil
2nd Bone Spring Sand	10,840'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 1,075' and circulating cement back to surface.

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
17.50"	0 – 1,075'	13.375"	54.5#	J55	STC	1.10	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.10	1.25	1.60
12.25"	4000'-5100'	9.625"	40#	HCK55	LTC	1.10	1.25	1.60
8.75"	0'-13,899'	5.5"	17#	HCP110	LTC	1.10	1.25	1.60

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft^3/ft	Slurry Description
1,075'	500	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl2 + 0.25 lb/sk Cello-Flake
	300	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
5,100'	1000	12.7	2.01	Lead: Class 'C' + 1.25% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate
	200	14.8	1.34	Tail: Class 'C' + 0.50% FL-62 + 0.10% SMS + 1.00% CaCl2 + 0.50% R-3 + 0.005 lb/sk Static Free
11,000'	50	18.0	0.90	100' plug at TD - Class 'H' + 1.20% CD-31 + 0.20% R-3 + 5.00% Salt (1.252 lb/sk)
9000'	300	18.0	0.90	600' sidetrack plug - Class 'H' + 1.20% CD-31 + 0.20% R-3 + 5.00% Salt (1.252 lb/sk)
13,899'	850	11.8	2.37	Lead: 50:50:10 Class 'H' + 0.80% FL-52A + 0.30% ASA-301 + 0.30% SMS + 2.00% Salt (2.259 lb/sk) + 0.20% R-21 + 0.25 lb/sk Cello Flake
	1000	14.2	1.30	Tail: 50:50:2 Class 'H' + 0.65% FL-52A + 0.20% CD-32 + 0.15% SMS + 5.00% Salt (2.452 lb/sk) + 0.10% R-3

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 bottom and drill pipe rams on top. All BOP's and accessory equipment will be tested in accordance with Onshore Oil & Gas order No. 2. EOG Resources request authorization to use a 2M system, providing for an annular preventer to be used prior to drilling out of the surface casing shoe and while drilling the intermediate section. Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 2500/ 250 psig.

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.

Hydraulically operated choke will not be installed prior to the setting and cementing of the intermediate casing string, but will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,075'	Fresh - Gel	8.6-8.8	28-34	N/C
1,075' – 5,100'	Brine	10.0-10.2	28-34	N/C
5,100' – 8,500'	Fresh Water	8.4-8.6	28-34	N/C
8,500'– 11,000' Pilot hole	Cut Brine - XCD	9.0-9.5	28-34	N/C
9,000'– 13,899' Lateral	Cut Brine - XCD	9.0-9.5	40-42	8-10

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 will be continuously monitoring drill penetration rate and hydrocarbon shows from 1,075' to TD.

(D) H_2S monitoring and detection equipment will be utilized from 1,075' to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logging is anticipated in the 8-3/4" hole section. The logging suites for this hole section are listed below:

NGT–CNL–LDT w/ Pe	In pilot hole. From TD to previous casing shoe. At casing pull GR – Neutron to surface.
HR Laterolog Array	In pilot hole. From TD to previous casing shoe.
FMI	Possible in pilot hole and/or lateral.

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

The estimated bottom hole temperature (BHT) at TD is 160 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 5000 psig. 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 two months. 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.

eog resources

Project: Lea County
Site: Diamond "8" Fed Com
Well: #2H
Wellbore: OH
Plan: Plan #1 (#2H/OH)

T G M

Azimuths to Grid North
True North: -0.45°
Magnetic North: 7.28°

Magnetic Field
Strength: 48770.7snT
Dip Angle: 60.18°
Date: 10/15/2009
Model: IGRF200510

PATHFINDER

WELL DETAILS: #2H

Ground Elevation: 3344.90
RKB Elevation: WELL @ 3363.90ft (Original Well Elev)
Rig Name: Original Well Elev

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	415159.100	762782.000	32° 8' 18.751 N	103° 29' 3.730 W	

PROJECT DETAILS: Lea County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

SECTION DETAILS

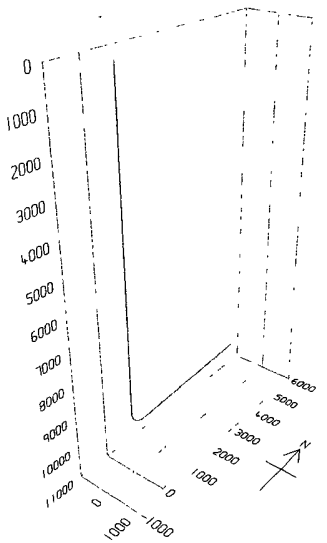
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	9002.50	0.00	0.00	9002.50	0.00	0.00	0.00	0.00	0.00	
3	9752.56	90.00	356.68	9480.00	476.70	-27.65	12.00	356.68	477.50	
4	13899.03	90.00	356.68	9480.00	4616.21	-267.79	0.00	0.00	4623.97	PBHL(diamond#2H)

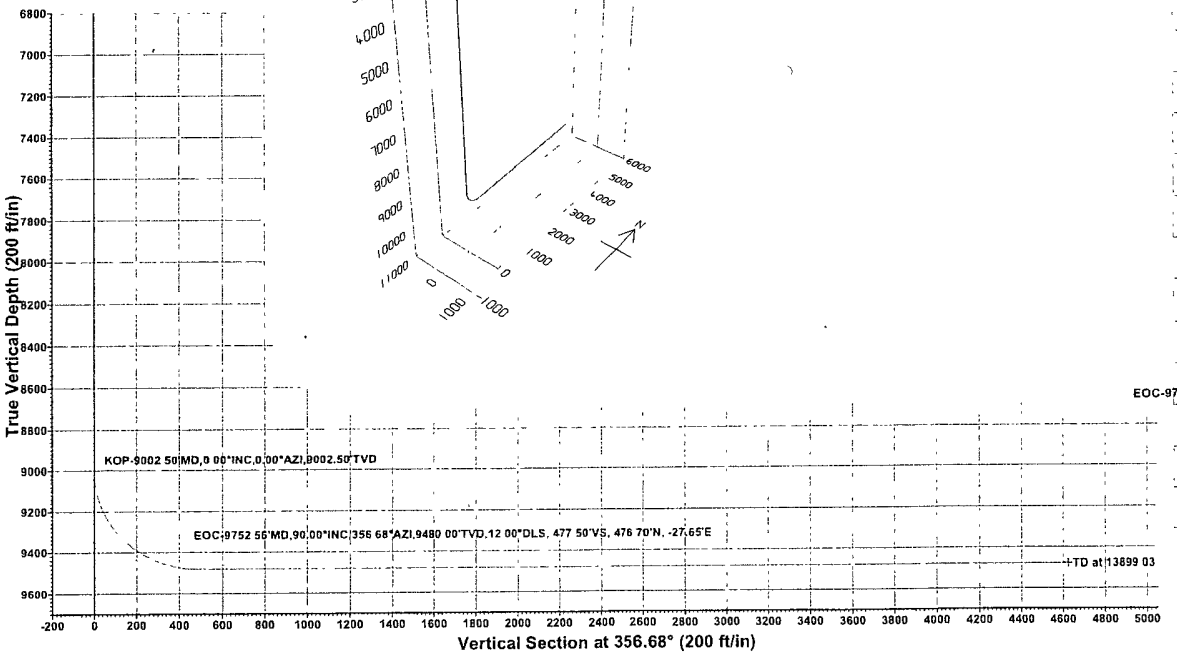
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

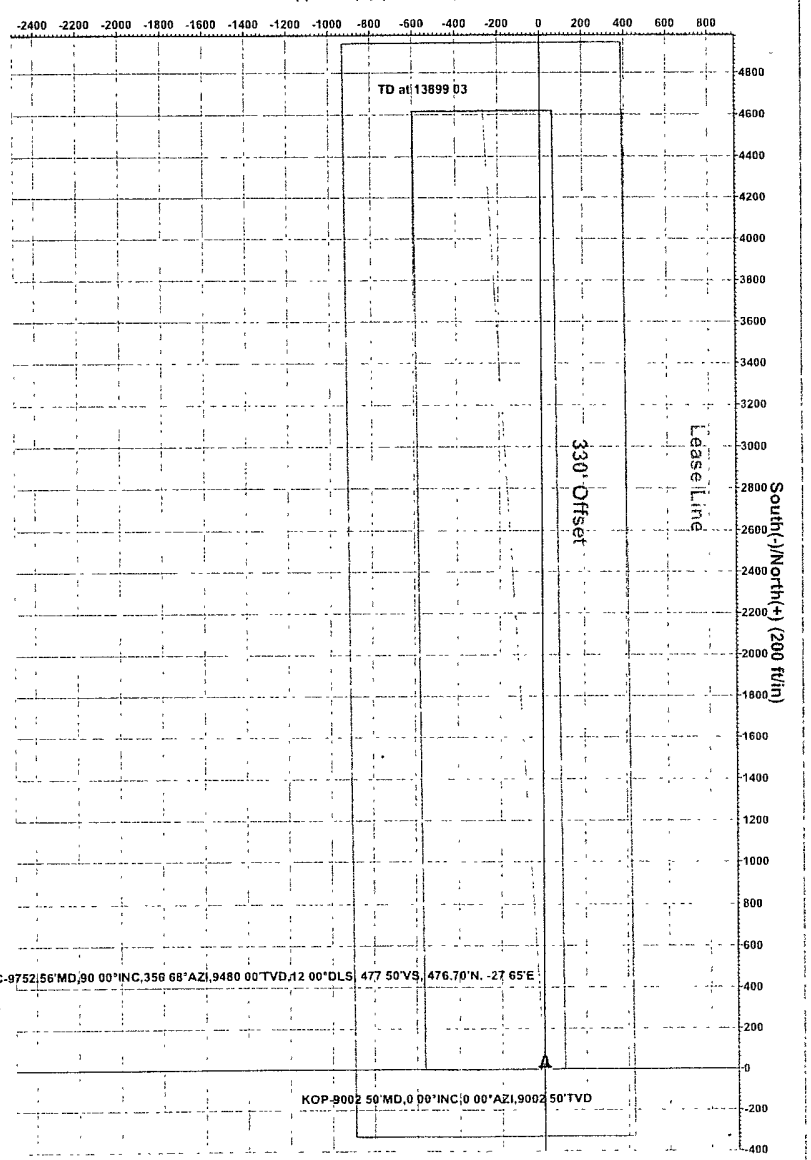
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(diamond#2H)	9480.00	4616.20	-268.00	419775.300	762514.000	Point

LEGEND

+ Plan #1







Plan: Plan #1 (#2H/OH)
Created By: Nate Bingham Date: 10:25, January 12 2010
Checked: _____ Date: _____

eog resources

EOG Resources, Inc.

Lea County
Diamond "8" Fed Com
#2H
OH

RECEIVED
FEB 22 2010
HOBBSOCD

Plan: Plan #1

Pathfinder X & Y Planning Report

12 January, 2010

PATHFINDER

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County	**TVD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Project Lea County

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

Site Diamond "8" Fed Com

Site Position:		**Northing:**	415,538 700 ft	**Latitude:**	32° 8' 22 525 N
From:	Map	**Easting:**	762,548 900 ft	**Longitude:**	103° 29' 6 406 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.45 °

Well #2H

Well Position	**+N/-S**	0.00 ft	**Northing:**	415,159.100 ft	**Latitude:**	32° 8' 18 751 N
	+E/-W	0.00 ft	**Easting:**	762,782.000 ft	**Longitude:**	103° 29' 3 730 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,344.90 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	10/15/2009	7 73	60.18	48,771

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	356 68

Survey Tool Program **Date** 01/12/2010

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	13,899.03	Plan #1 (OH)	MWD	MWD - Standard

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County	**TVD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0.00	0.00	0.00	0 00	-3,363 90	0.00	0 00	0.00	0.00	415,159.10	762,782.00
100.00	0.00	0.00	100 00	-3,263 90	0.00	0.00	0 00	0 00	415,159 10	762,782 00
200.00	0.00	0.00	200.00	-3,163 90	0 00	0 00	0.00	0 00	415,159.10	762,782.00
300 00	0.00	0.00	300.00	-3,063 90	0 00	0 00	0.00	0 00	415,159.10	762,782.00
400.00	0 00	0.00	400.00	-2,963 90	0.00	0.00	0 00	0 00	415,159.10	762,782.00
500 00	0.00	0 00	500.00	-2,863.90	0 00	0 00	0.00	0.00	415,159 10	762,782 00
600.00	0.00	0.00	600.00	-2,763.90	0.00	0.00	0 00	0.00	415,159 10	762,782.00
700.00	0.00	0.00	700 00	-2,663.90	0.00	0.00	0 00	0.00	415,159 10	762,782.00
800.00	0.00	0.00	800.00	-2,563.90	0 00	0.00	0 00	0.00	415,159.10	762,782 00
900 00	0 00	0.00	900.00	-2,463 90	0.00	0 00	0 00	0.00	415,159 10	762,782 00
1,000.00	0 00	0 00	1,000 00	-2,363.90	0 00	0 00	0 00	0 00	415,159 10	762,782.00
1,100.00	0 00	0.00	1,100.00	-2,263.90	0.00	0 00	0.00	0.00	415,159 10	762,782.00
1,200.00	0.00	0.00	1,200.00	-2,163.90	0.00	0.00	0.00	0.00	415,159 10	762,782.00
1,300.00	0.00	0.00	1,300.00	-2,063 90	0.00	0.00	0.00	0 00	415,159.10	762,782.00
1,400.00	0.00	0.00	1,400 00	-1,963 90	0.00	0.00	0 00	0 00	415,159.10	762,782.00
1,500.00	0.00	0 00	1,500 00	-1,863.90	0.00	0.00	0 00	0.00	415,159 10	762,782.00
1,600.00	0.00	0.00	1,600.00	-1,763.90	0.00	0.00	0.00	0 00	415,159.10	762,782.00
1,700.00	0 00	0.00	1,700.00	-1,663 90	0.00	0.00	0.00	0 00	415,159.10	762,782 00
1,800.00	0.00	0 00	1,800.00	-1,563.90	0.00	0.00	0.00	0 00	415,159 10	762,782 00
1,900.00	0.00	0.00	1,900.00	-1,463.90	0.00	0.00	0.00	0.00	415,159.10	762,782 00
2,000.00	0.00	0.00	2,000.00	-1,363 90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
2,100.00	0.00	0.00	2,100.00	-1,263.90	0 00	0 00	0.00	0.00	415,159.10	762,782.00
2,200.00	0 00	0 00	2,200.00	-1,163.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
2,300.00	0.00	0.00	2,300.00	-1,063.90	0 00	0 00	0.00	0 00	415,159 10	762,782.00
2,400.00	0 00	0 00	2,400.00	-963.90	0.00	0 00	0.00	0 00	415,159 10	762,782 00
2,500.00	0 00	0 00	2,500 00	-863.90	0.00	0 00	0.00	0 00	415,159.10	762,782 00
2,600.00	0 00	0.00	2,600.00	-763.90	0 00	0.00	0 00	0 00	415,159 10	762,782.00

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County	**TVD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
2,700.00	0.00	0.00	2,700.00	-663.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
2,800.00	0.00	0.00	2,800.00	-563.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
2,900.00	0.00	0.00	2,900.00	-463.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,000.00	0.00	0.00	3,000.00	-363.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,100.00	0.00	0.00	3,100.00	-263.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,200.00	0.00	0.00	3,200.00	-163.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,300.00	0.00	0.00	3,300.00	-63.90	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,400.00	0.00	0.00	3,400.00	36.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,500.00	0.00	0.00	3,500.00	136.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,600.00	0.00	0.00	3,600.00	236.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,700.00	0.00	0.00	3,700.00	336.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,800.00	0.00	0.00	3,800.00	436.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
3,900.00	0.00	0.00	3,900.00	536.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,000.00	0.00	0.00	4,000.00	636.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,100.00	0.00	0.00	4,100.00	736.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,200.00	0.00	0.00	4,200.00	836.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,300.00	0.00	0.00	4,300.00	936.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,400.00	0.00	0.00	4,400.00	1,036.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,500.00	0.00	0.00	4,500.00	1,136.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,600.00	0.00	0.00	4,600.00	1,236.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,700.00	0.00	0.00	4,700.00	1,336.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,800.00	0.00	0.00	4,800.00	1,436.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
4,900.00	0.00	0.00	4,900.00	1,536.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
5,000.00	0.00	0.00	5,000.00	1,636.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
5,100.00	0.00	0.00	5,100.00	1,736.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
5,200.00	0.00	0.00	5,200.00	1,836.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
5,300.00	0.00	0.00	5,300.00	1,936.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #2H
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Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,400.00	0 00	0.00	5,400.00	2,036.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
5,500.00	0.00	0.00	5,500 00	2,136.10	0 00	0.00	0 00	0.00	415,159 10	762,782 00
5,600.00	0.00	0.00	5,600 00	2,236.10	0.00	0.00	0.00	0.00	415,159.10	762,782 00
5,700 00	0.00	0.00	5,700 00	2,336.10	0 00	0 00	0 00	0.00	415,159.10	762,782 00
5,800.00	0.00	0 00	5,800 00	2,436 10	0 00	0.00	0.00	0.00	415,159.10	762,782 00
5,900.00	0 00	0 00	5,900 00	2,536.10	0.00	0.00	0.00	0 00	415,159 10	762,782.00
6,000.00	0.00	0 00	6,000 00	2,636.10	0.00	0.00	0.00	0 00	415,159.10	762,782 00
6,100.00	0.00	0.00	6,100.00	2,736.10	0 00	0.00	0 00	0 00	415,159.10	762,782.00
6,200.00	0 00	0 00	6,200.00	2,836 10	0.00	0 00	0.00	0.00	415,159.10	762,782 00
6,300.00	0.00	0.00	6,300.00	2,936 10	0 00	0.00	0 00	0.00	415,159.10	762,782.00
6,400.00	0.00	0.00	6,400.00	3,036.10	0.00	0 00	0.00	0 00	415,159.10	762,782 00
6,500.00	0 00	0.00	6,500.00	3,136.10	0.00	0.00	0.00	0.00	415,159 10	762,782 00
6,600.00	0.00	0 00	6,600.00	3,236.10	0.00	0.00	0.00	0 00	415,159.10	762,782 00
6,700.00	0 00	0 00	6,700.00	3,336.10	0.00	0.00	0 00	0 00	415,159 10	762,782 00
6,800.00	0.00	0 00	6,800 00	3,436.10	0.00	0.00	0.00	0.00	415,159 10	762,782.00
6,900.00	0.00	0 00	6,900 00	3,536 10	0.00	0 00	0.00	0 00	415,159 10	762,782 00
7,000.00	0.00	0.00	7,000.00	3,636.10	0.00	0 00	0.00	0 00	415,159 10	762,782.00
7,100.00	0.00	0 00	7,100.00	3,736 10	0 00	0 00	0 00	0 00	415,159.10	762,782.00
7,200.00	0.00	0 00	7,200.00	3,836 10	0.00	0 00	0.00	0.00	415,159 10	762,782 00
7,300 00	0.00	0 00	7,300.00	3,936.10	0.00	0.00	0 00	0.00	415,159 10	762,782 00
7,400 00	0 00	0 00	7,400.00	4,036 10	0.00	0 00	0 00	0.00	415,159.10	762,782.00
7,500.00	0 00	0 00	7,500 00	4,136 10	0 00	0 00	0.00	0 00	415,159 10	762,782.00
7,600.00	0.00	0.00	7,600.00	4,236 10	0.00	0.00	0 00	0.00	415,159.10	762,782.00
7,700.00	0 00	0 00	7,700.00	4,336.10	0 00	0 00	0 00	0.00	415,159 10	762,782.00
7,800.00	0 00	0 00	7,800.00	4,436.10	0.00	0 00	0 00	0.00	415,159.10	762,782.00
7,900.00	0.00	0.00	7,900.00	4,536.10	0 00	0.00	0.00	0.00	415,159.10	762,782.00
8,000.00	0 00	0 00	8,000.00	4,636.10	0.00	0.00	0.00	0.00	415,159 10	762,782 00

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #2H
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Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,100.00	0.00	0.00	8,100.00	4,736.10	0.00	0.00	0.00	0.00	415,159.10	762,782.00
8,200.00	0.00	0.00	8,200.00	4,836.10	0.00	0 00	0 00	0.00	415,159 10	762,782.00
8,300.00	0 00	0 00	8,300.00	4,936.10	0.00	0.00	0.00	0 00	415,159.10	762,782.00
8,400.00	0 00	0 00	8,400.00	5,036.10	0.00	0.00	0.00	0.00	415,159 10	762,782.00
8,500.00	0 00	0.00	8,500.00	5,136 10	0.00	0 00	0 00	0.00	415,159 10	762,782.00
8,600.00	0.00	0 00	8,600.00	5,236.10	0.00	0.00	0.00	0 00	415,159.10	762,782.00
8,700.00	0.00	0 00	8,700.00	5,336.10	0.00	0.00	0.00	0 00	415,159 10	762,782.00
8,800.00	0.00	0 00	8,800.00	5,436.10	0.00	0 00	0.00	0 00	415,159.10	762,782 00
8,900.00	0.00	0.00	8,900.00	5,536.10	0.00	0.00	0.00	0 00	415,159 10	762,782.00
9,002.50	0.00	0.00	9,002.50	5,638.60	0 00	0.00	0.00	0 00	415,159 10	762,782.00
KOP-9002.50'MD,0.00°INC,0.00°AZI,9002.50'TVD										
9,025.00	2 70	356.68	9,024.99	5,661 09	0 53	-0.03	0 53	12.00	415,159.63	762,781 97
9,050.00	5 70	356 68	9,049.92	5,686.02	2.36	-0 14	2 36	12.00	415,161 46	762,781.86
9,075.00	8.70	356.68	9,074.72	5,710 82	5.48	-0.32	5.49	12.00	415,164 58	762,781.68
9,100.00	11 70	356.68	9,099 32	5,735.42	9.90	-0.57	9.92	12 00	415,169 00	762,781 43
9,125 00	14.70	356.68	9,123.66	5,759.76	15.60	-0.91	15 63	12.00	415,174 70	762,781.09
9,150 00	17.70	356.68	9,147.67	5,783.77	22.56	-1.31	22 60	12.00	415,181 66	762,780 69
9,175.00	20.70	356 68	9,171 27	5,807.37	30.77	-1.78	30.82	12 00	415,189 87	762,780 22
9,200.00	23 70	356 68	9,194.42	5,830 52	40.20	-2.33	40.27	12.00	415,199 30	762,779.67
9,225.00	26 70	356.68	9,217.04	5,853.14	50.82	-2.95	50.91	12.00	415,209 92	762,779.05
9,250.00	29.70	356.68	9,239.07	5,875.17	62.61	-3 63	62.72	12.00	415,221.71	762,778 37
9,275.00	32.70	356.68	9,260.45	5,896 55	75 54	-4.38	75 67	12.00	415,234 64	762,777.62
9,300.00	35 70	356.68	9,281 12	5,917 22	89 57	-5 20	89.72	12 00	415,248.67	762,776.80
9,325.00	38 70	356.68	9,301 03	5,937 13	104.65	-6.07	104 83	12.00	415,263.75	762,775 93
9,350.00	41.70	356.68	9,320 13	5,956 23	120.76	-7 01	120.96	12 00	415,279 86	762,774 99
9,375.00	44.70	356.68	9,338.35	5,974 45	137 84	-8.00	138 07	12.00	415,296 94	762,774 00
9,400.00	47 70	356.68	9,355.65	5,991.75	155.85	-9.04	156 11	12 00	415,314.95	762,772.96

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County	**TVD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363.90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
9,425 00	50.70	356.68	9,371.99	6,008.09	174 74	-10.14	175.04	12.00	415,333.84	762,771.86
9,450.00	53 70	356.68	9,387 31	6,023.41	194 46	-11 28	194.79	12 00	415,353 56	762,770.72
9,475 00	56.70	356.68	9,401.58	6,037.68	214.95	-12.47	215.31	12 00	415,374 05	762,769 53
9,500.00	59.70	356 68	9,414.75	6,050 85	236.16	-13 70	236.56	12 00	415,395 26	762,768.30
9,525 00	62.70	356.68	9,426.80	6,062 90	258.03	-14.97	258 46	12 00	415,417 13	762,767 03
9,550.00	65.70	356.68	9,437.68	6,073 78	280 49	-16.27	280 97	12.00	415,439.59	762,765 73
9,575 00	68.69	356.68	9,447.37	6,083.47	303.50	-17.61	304.01	12.00	415,462.60	762,764 39
9,600.00	71.69	356 68	9,455.84	6,091.94	326.98	-18 97	327.53	12 00	415,486 08	762,763.03
9,625 00	74.69	356 68	9,463.06	6,099.16	350.87	-20 35	351.46	12 00	415,509 97	762,761 65
9,650.00	77 69	356.68	9,469.03	6,105.13	375 10	-21.76	375.73	12.00	415,534 20	762,760.24
9,675.00	80.69	356.68	9,473.72	6,109.82	399.61	-23.18	400.29	12.00	415,558 71	762,758 82
9,700.00	83.69	356 68	9,477.11	6,113 21	424.34	-24.62	425.05	12.00	415,583 44	762,757 38
9,725 00	86.69	356 68	9,479.21	6,115.31	449 20	-26.06	449.96	12 00	415,608.30	762,755.94
9,750 00	89.69	356.68	9,479.99	6,116.09	474.15	-27 51	474.94	12 00	415,633 25	762,754.49
9,752.56	90.00	356.68	9,480 00	6,116.10	476 70	-27.65	477.50	12 00	415,635 80	762,754.35
EOC-9752.56'MD,90.00°INC,356.68°AZI,9480.00'TVD,12.00°DLS, 477.50'VS, 476.70'N, -27.65'E										
9,800.00	90.00	356.68	9,480 00	6,116.10	524 06	-30.40	524.94	0 00	415,683 16	762,751 60
9,900.00	90 00	356 68	9,480.00	6,116.10	623.90	-36.19	624 94	0.00	415,783.00	762,745.81
10,000.00	90.00	356.68	9,480.00	6,116 10	723.73	-41.98	724.94	0.00	415,882.83	762,740.02
10,100.00	90.00	356.68	9,480.00	6,116 10	823.56	-47.77	824 94	0.00	415,982 66	762,734.23
10,200.00	90.00	356.68	9,480 00	6,116.10	923.39	-53.57	924.94	0 00	416,082 49	762,728 43
10,300 00	90.00	356.68	9,480.00	6,116 10	1,023.22	-59 36	1,024 94	0.00	416,182 32	762,722.64
10,400:00	90 00	356.68	9,480.00	6,116.10	1,123.06	-65.15	1,124.94	0 00	416,282.16	762,716.85
10,500 00	90 00	356 68	9,480 00	6,116.10	1,222.89	-70 94	1,224 94	0 00	416,381 99	762,711.06
10,600.00	90 00	356.68	9,480.00	6,116 10	1,322.72	-76 73	1,324 94	0.00	416,481 82	762,705 27
10,700.00	90.00	356 68	9,480.00	6,116.10	1,422.55	-82 52	1,424 94	0 00	416,581 65	762,699.48
10,800.00	90.00	356.68	9,480.00	6,116.10	1,522.39	-88.31	1,524.94	0.00	416,681 49	762,693.69

Company:	EOG Resources, Inc.
Project:	Lea County
Site:	Diamond "8" Fed Com
Well:	#2H
Wellbore:	OH
Design:	Plan #1

Local Co-ordinate Reference:	Well #2H
TVD Reference:	WELL @ 3363.90ft (Original Well Elev)
MD Reference:	WELL @ 3363 90ft (Original Well Elev)
North Reference:	Grid
Survey Calculation Method:	Minimum Curvature
Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,900.00	90.00	356.68	9,480.00	6,116.10	1,622.22	-94.10	1,624.94	0.00	416,781.32	762,687 90
11,000.00	90.00	356.68	9,480.00	6,116 10	1,722.05	-99.90	1,724.94	0 00	416,881.15	762,682 10
11,100.00	90.00	356 68	9,480.00	6,116.10	1,821.88	-105.69	1,824.94	0.00	416,980.98	762,676 31
11,200.00	90.00	356.68	9,480.00	6,116.10	1,921.71	-111.48	1,924 94	0.00	417,080.81	762,670.52
11,300 00	90.00	356.68	9,480.00	6,116 10	2,021.55	-117.27	2,024.94	0 00	417,180 65	762,664 73
11,400.00	90 00	356.68	9,480.00	6,116 10	2,121.38	-123 06	2,124.94	0 00	417,280 48	762,658.94
11,500 00	90.00	356 68	9,480.00	6,116.10	2,221.21	-128 85	2,224 94	0.00	417,380.31	762,653.15
11,600.00	90.00	356.68	9,480.00	6,116.10	2,321.04	-134.64	2,324.94	0 00	417,480.14	762,647.36
11,700.00	90.00	356.68	9,480 00	6,116 10	2,420 87	-140.43	2,424.94	0 00	417,579 97	762,641.57
11,800.00	90.00	356.68	9,480.00	6,116.10	2,520.71	-146.23	2,524.94	0 00	417,679 81	762,635.77
11,900.00	90.00	356.68	9,480 00	6,116 10	2,620.54	-152.02	2,624 94	0.00	417,779 64	762,629.98
12,000.00	90.00	356.68	9,480.00	6,116.10	2,720 37	-157.81	2,724 94	0.00	417,879 47	762,624 19
12,100.00	90.00	356.68	9,480.00	6,116 10	2,820.20	-163 60	2,824 94	0.00	417,979 30	762,618 40
12,200.00	90.00	356 68	9,480.00	6,116 10	2,920.04	-169.39	2,924 94	0 00	418,079 14	762,612.61
12,300 00	90.00	356 68	9,480.00	6,116 10	3,019.87	-175 18	3,024.94	0 00	418,178.97	762,606 82
12,400.00	90.00	356.68	9,480.00	6,116.10	3,119.70	-180.97	3,124.94	0.00	418,278 80	762,601.03
12,500 00	90.00	356.68	9,480 00	6,116.10	3,219.53	-186.76	3,224 94	0 00	418,378.63	762,595.24
12,600 00	90.00	356.68	9,480.00	6,116.10	3,319.36	-192.56	3,324 94	0.00	418,478 46	762,589.44
12,700 00	90.00	356 68	9,480 00	6,116.10	3,419 20	-198.35	3,424.94	0.00	418,578 30	762,583.65
12,800 00	90.00	356.68	9,480.00	6,116 10	3,519 03	-204.14	3,524 94	0.00	418,678 13	762,577.86
12,900 00	90.00	356 68	9,480.00	6,116.10	3,618.86	-209.93	3,624 94	0 00	418,777 96	762,572 07
13,000.00	90 00	356.68	9,480.00	6,116 10	3,718.69	-215 72	3,724 94	0.00	418,877 79	762,566 28
13,100.00	90 00	356.68	9,480.00	6,116.10	3,818.53	-221 51	3,824.94	0 00	418,977.63	762,560 49
13,200 00	90 00	356.68	9,480.00	6,116 10	3,918.36	-227.30	3,924.94	0.00	419,077 46	762,554 70
13,300 00	90 00	356.68	9,480.00	6,116.10	4,018.19	-233 09	4,024.94	0.00	419,177.29	762,548.91
13,400 00	90.00	356.68	9,480.00	6,116.10	4,118.02	-238.89	4,124.94	0 00	419,277 12	762,543 11
13,500 00	90.00	356 68	9,480 00	6,116.10	4,217.85	-244.68	4,224 94	0.00	419,376 95	762,537.32

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County	**TVD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Site:	Diamond "8" Fed Com	**MD Reference:**	WELL @ 3363 90ft (Original Well Elev)
Well:	#2H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
13,600.00	90 00	356.68	9,480.00	6,116.10	4,317 69	-250 47	4,324.94	0 00	419,476 79	762,531 53
13,700.00	90.00	356.68	9,480 00	6,116 10	4,417.52	-256.26	4,424 94	0.00	419,576.62	762,525.74
13,800.00	90.00	356.68	9,480 00	6,116.10	4,517.35	-262 05	4,524 94	0 00	419,676 45	762,519.95
13,899.03	90.00	356.68	9,480.00	6,116 10	4,616.21	-267.79	4,623.97	0.00	419,775 31	762,514.21

TD at 13899.03 - PBHL(diamond#2H)

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(diamond#2H) - plan hits target center - Point	0.00	0.00	9,480 00	4,616 20	-268 00	419,775.300	762,514.000	32° 9' 4.451 N	103° 29' 6.424 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	11,988.00	Top 3rd BS Sand		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
9,002.50	9,002.50	0.00	0.00	KOP-9002.50'MD,0.00°INC,0.00°AZI,9002 50'TVD
9,752.56	9,480 00	476 70	-27.65	EOC-9752 56'MD,90.00°INC,356 68°AZI,9480 00'TVD,12 00°DLS, 477
13,899 03	9,480.00	4,616.21	-267 79	TD at 13899 03

Checked By: _____ Approved By: _____ Date: _____

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

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	DIAMOND "8" FED. COM	2
OGRID No.	Operator Name	Elevation
	EOG RESOURCES, INC.	3343.7'

Surface Location

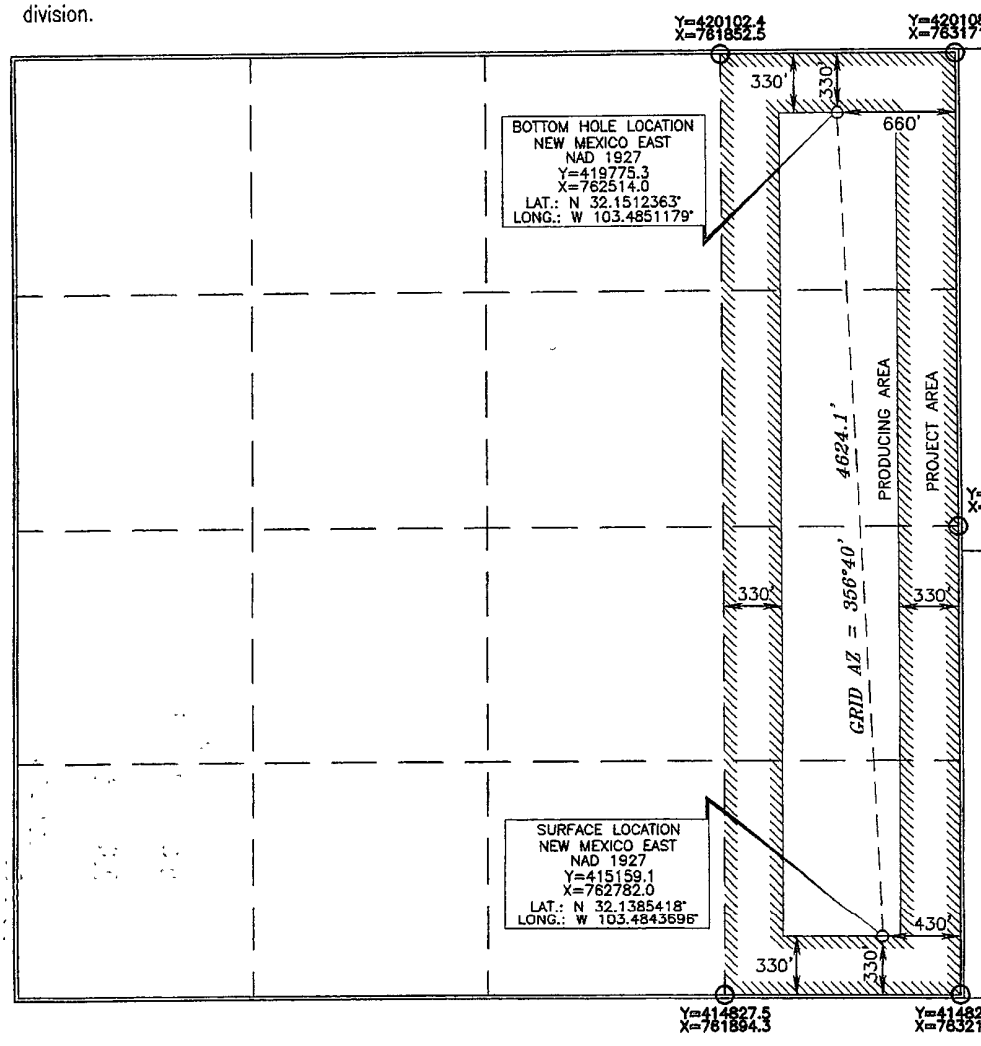
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	25 SOUTH	34 EAST, N.M.P.M.		330	SOUTH	430	EAST	LEA

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	8	25 SOUTH	34 EAST, N.M.P.M.		330	NORTH	660	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

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

Signature *Date*

Printed Name

SURVEYOR CERTIFICATION

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

NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

DECEMBER 14, 2009
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number 15079

12/16/2009

WO# 081103WL-XY (Rev. C) (KA)

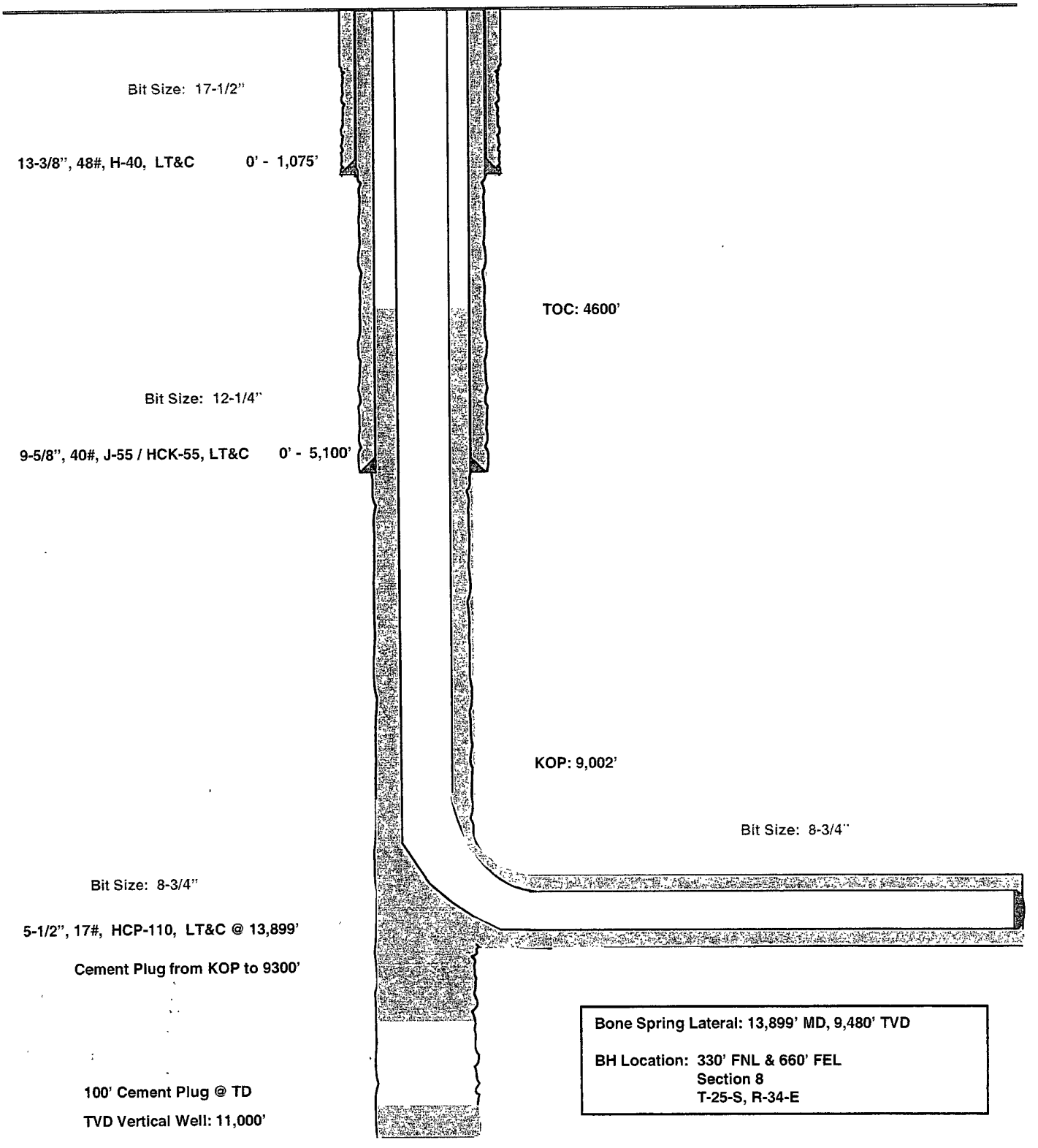
Diamond 8 Fed Com #2H
Red Hills
Lea County, New Mexico

330' FSL
430' FEL
Section 8
T-25-S, R-34-E

Proposed Wellbore

API: 30-025-

KB: 3,373.7'
GL: 3,343.7'



EOG Resources, Inc.

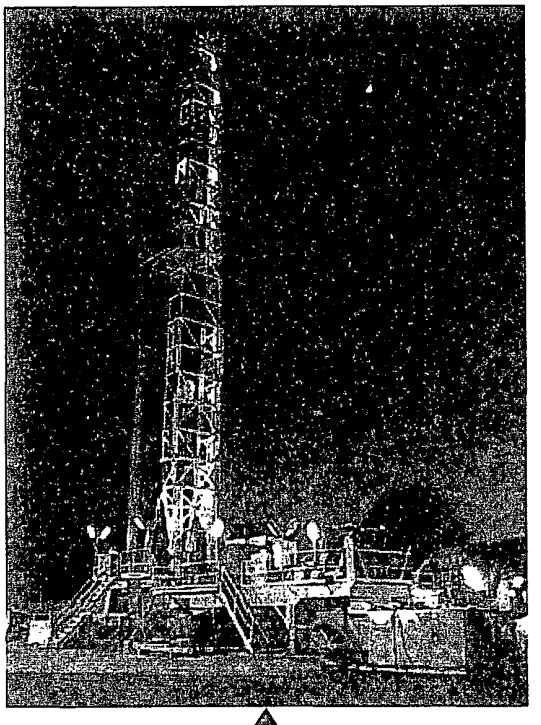
Legals:
Diamond "8" FED. COM #2
Lea Co. New Mexico

330' 430'
~~740'~~ FSL & ~~660'~~ FEL Surface Location
Section 8
T-25-S, R-34-E
~~Lat: N 32.1395902~~
~~Long: W 103.4851129~~

330' FNL & 660' FEL Bottom Hole Location
Section 8
T-25-S, R-34-E
Lat: N 32.1512363
Long: W 103.4851179

H_2S

"Contingency Plan"



SAFETY
SOLUTIONS, LLC.

Safety Solutions, LLC (432) 686-8555
3222 Commercial Dr. Midland, TX 79701

Table of Contents

H_2S CONTINGENCY PLAN SECTION

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H_2S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H_2S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan:

Suspected Problem Zones:

Implementation: This plan, with all details, is to be fully implemented 1000' before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000' before drilling into the first sour zone.

Emergency call list: Included are the telephone numbers of all persons that would need to be contacted, should an H_2S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

EMERGENCY PROCEDURES SECTION

I. In the event of any evidence of H_2S level above 10ppm, take the following steps immediately:

   a. Secure breathing apparatus.

   b. Order non-essential personnel out of the danger zone.

   c. Take steps to determine if the H_2S level can be corrected or suppressed, and if so, proceed with normal operations.

II. If uncontrollable conditions occur, proceed with the following:

   a. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil Conservation Division of the situation.

   b. Remove all personnel to the Safe Briefing Area.

   c. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.

   d. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.

III. Responsibility:

   a. The Company Approved Supervisor shall be responsible for the total implementation of the plan.

   b. The Company Approved Supervisor shall be in complete command during any emergency.

   c. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

EMERGENCY PROCEDURE IMPLEMENTATION

I. Drilling or Tripping

a. *All Personnel*

i. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.

ii. Check status of other personnel (buddy system).

iii. Secure breathing apparatus.

iv. Wait for orders from supervisor.

b. *Drilling Foreman*

i. Report to the upwind Safe Briefing Area.

ii. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).

iii. Determine the concentration of H_2S.

iv. Assess the situation and take appropriate control measures.

c. *Tool Pusher*

i. Report to the upwind Safe Briefing Area.

ii. Don Breathing Apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).

iii. Determine the concentration of H_2S.

iv. Assess the situation and take appropriate control measures.

d. *Driller*

i. Check the status of other personnel (in a rescue attempt, always use the buddy system).

ii. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.

iii. Assume the responsiblility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

e. *Derrick Man and Floor Hands*

i. Remain in the upwind Safe Briefing Area until otherwise instructed by a supervisor.

f. *Mud Engineer*

i. Report to the upwind Safe Briefing Area.

ii. When instructed, begin check of mud for pH level and H_2S level.

g. *Safety Personnel*

i. Don Breathing Apparatus.

ii. Check status of personnel.

iii. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick

a. All Personnel report to the upwind Safe Briefing Area.

b. Follow standard BOP procedures.

III. Open Hole Logging

a. All unnecessary personnel should leave the rig floor.

b. Drilling Foreman and Safety Personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging

a. Follow "Drilling or Tripping" procedures.

b. Assure that all personnel have access to protective equipment.

SIMULATED BLOWOUT CONTROL DRILLS

All drills will be initiated by activating alarm devices (air horn). One long blast, on the air horn, for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill #1 Bottom Drilling

Drill #2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.:
Reaction Time to Shut-In: minutes, seconds.
Total Time to Complete Assignment: minutes, seconds.

I. Drill Overviews

a. Drill No. 1 – Bottom Drilling

i. Sound the alarm immediately.

ii. Stop the rotary and hoist Kelly joint above the rotary table.

iii. Stop the circulatory pump.

iv. Close the drill pipe rams.

v. Record casing and drill pipe shut-in pressures and pit volume increases.

b. Drill No. 2 – Tripping Drill Pipe

i. Sound the alarm immediately.

ii. Position the upper tool joint just above the rotary table and set the slips.

iii. Install a full opening valve or inside blowout preventer tool in order to close the drill pipe.

iv. Close the drill pipe rams.

v. Record the shut-in annular pressure.

II. Crew Assignments

a. Drill No. 1 – Bottom Drilling

i. Driller

1. Stop the rotary and hoist Kelly joint above the rotary table.
2. Stop the circulatory pump.
3. Check Flow.
4. If flowing, sound the alarm immediately
5. Record the shit-in drill pipe pressure
6. Determine the mud weight increase needed or other courses of action.

ii. Derrickman

1. Open choke line valve at BOP.
2. Signal Floor Man #1 at accumulator that choke line is open.
3. Close choke and upstream valve after pipe tam have been closed.
4. Read the shut-in annular pressure and report readings to Driller.

iii. Floor Man #1

1. Close the pipe rams after receiving the signal from the Derrickman.
2. Report to Driller for further instructions.

iv. Floor Man #2

1. Notify the Tool Pusher and Operator representative of the H_2S alarms.
2. Check for open fires and, if safe to do so, extinguish them.
3. Stop all welding operations.
4. Turn-off all non-explosions proof lights and instruments.
5. Report to Driller for further instructions.

v. Tool Pusher

1. Report to the rig floor.
2. Have a meeting with all crews.

3. Compile and summarize all information.

4. Calculate the proper kill weight.

5. Ensure that proper well procedures are put into action.

vi. Operator Representative

1. Notify the Drilling Superintendent.

2. Determine if an emergency exists and if so, activate the contingency plan.

b. Drill No. 2 – Tripping Pipe

i. Driller

1. Sound the alarm immediately when mud volume increase has been detected.

2. Position the upper tool joint just above the rotary table and set slips.

3. Install a full opening valve or inside blowout preventer tool to close the drill pipe.

4. Check flow.

5. Record all data reported by the crew.

6. Determine the course of action.

ii. Derrickman

1. Come down out of derrick.

2. Notify Tool Pusher and Operator Representative.

3. Check for open fires and, if safe to do so , extinguish them.

4. Stop all welding operations.

5. Report to Driller for further instructions.

iii. Floor Man #1

1. Pick up full opening valve or inside blowout preventer tool and stab into tool joint above rotary table (with Floor Man #2).

2. Tighten valve with back-up tongs.

3. Close pipe rams after signal from Floor Man #2.

4. Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.

5. Report to Driller for further instructions.

iv. Floor Man #2

1. Pick-up full opening valve or inside blowout preventer tool and stab into tool joint above rotary table (with Floor Man #1).

2. Position back-up tongs on drill pipe.

3. Open choke line valve at BOP.

4. Signal Floor Man #1 at accumulator that choke line is open.

5. Close choke and upstream valve after pipe rams have been closed.

6. Check for leaks on BOP stack and choke manifold.

7. Read annular pressure.

8. Report readings to the Driller.

v. Tool Pusher

1. Report to the rig floor.

2. Have a meeting with all of the crews.

3. Compile and summarize all information.

4. See that proper well kill procedures are put into action.

vi. Operator Representative

1. Notify Drilling Superintendent

2. Determine if an emergency exists, and if so, activate the contingency plan.

IGNITION PROCEDURES

Responsibility:

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.

2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.

2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.

3. Ignite from upwind and do not approach any closer than is warranted.

4. Select the ignition site best suited for protection and which offers an easy escape route.

5. Before igniting, check for the presence of combustible gases.

6. After igniting, continue emergency actions and procedures as before.

7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

Note: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

TRAINING PROGRAM

When working in an area where Hydrogen Sulfide (H_2S) might be encountered, definite training requirements must be carried out. The Company Supervisor will ensure that all personnel, at the well site, have had adequate training in the following:

1. Hazards and characteristics of Hydrogen Sulfide.
2. Physicals effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H_2S detection, Emergency alarm and sensor location.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of Hydrogen Sulfide on metals.
9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H_2S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

EMERGENCY EQUIPMENT REQUIREMENTS

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION – POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the safe briefing areas and should include the following:
- Two SCBA's at each briefing area.
- Enough air line units to operate safely, anytime the H_2S concentration reaches the IDLH level (100 ppm).
- Cascade system with enough breathing air hose and manifolds to reach the rig floor, the derrickman and the other operation areas.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they may be seen from any point on location.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1 - Four channel H_2S monitor with alarms.
- Four (4) sensors located as follows: #1 – Rig Floor, #2 – Bell Nipple, #3 – Shale Shaker, #4 – Mud Pits.
- Gastec or Draeger pump with tubes.
- Sensor test gas.

Well Condition Sign and Flags:

The Well Condition Sign w/flags should be placed a minimum of 150' before you enter the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN – Normal Operating Conditions
YELLOW – Potential Danger
RED – Danger, H_2S Gas Present

Auxiliary Rescue Equipment:

- Stretcher
- 2 – 100' Rescue lines.
- First Aid Kit properly stocked.

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations.

Blowout Preventer:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (O_2, LEL H_2S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided.

Communication Equipment:

- Proper communication equipment such as cell phones or 2-way radios should be available at the rig.
- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.

- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

Note:

- Additional equipment will be available at the Safety Solutions, LLC office.
- Additional personal H_2S monitors are available for all employees on location.
- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note: Date each item as they are implemented.

1. Sign at location entrance. _____
2. Two (2) wind socks (in required locations). _____
3. Wind Streamers (if required). _____
4. SCBA's on location for all rig personnel and mud loggers. _____
5. Air packs, inspected and ready for use. _____
6. Spare bottles for each air pack (if required). _____
7. Cascade system for refilling air bottles. _____
8. Cascade system and hose line hook up. _____
9. Choke manifold hooked-up and tested. (before drilling out surface casing.) _____
10. Remote Hydraulic BOP control (hooked-up and tested before drilling out surface casing). _____
11. BOP tested (before drilling out surface casing). _____
12. Mud engineer on location with equipment to test mud for H_2S. _____
13. Safe Briefing Areas set-up _____
14. Well Condition sign and flags on location and ready. _____
15. Hydrogen Sulfide detection system hooked -up & tested. _____
16. Hydrogen Sulfide alarm system hooked-up & tested. _____
17. Stretcher on location at Safe Briefing Area. _____
18. 2 – 100' Life Lines on location. _____
19. 1 – 20# Fire Extinguisher in safety trailer. _____
20. Confined Space Monitor on location and tested. _____
21. All rig crews and supervisor trained (as required). _____

22. Access restricted for unauthorized personnel. _____

23. Drills on H_2S and well control procedures. _____

24. All outside service contractors advised of potential H_2S on the well. _____

25. NO SMOKNG sign posted. _____

26. H_2S Detector Pump w/tubes on location. _____

27. 25mm Flare Gun on location w/flares. _____

28. Automatic Flare Igniter installed on rig. _____

Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.
2. Check breathing equipment to insure that they have not been tampered with.
3. Check pressure on the supply air bottles to make sure they are capable of recharging.
4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and masks are properly working. Negative and Positive pressure should be conducted on all masks.
2. BOP skills.
3. Check supply pressure on BOP accumulator stand-by source.
4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready for use.
5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.
6. Check all cascade system regulators to make sure they work properly.
7. Perform breathing drills with on-site personnel.
8. Check the following supplies for availability:
    - Stretcher
    - Safety Belts and Ropes
    - Spare air Bottles
    - Spare Oxygen Bottles (if resuscitator required)
    - Gas Detector Pump and Tubes
    - Emergency telephone lists
9. Test the Confined Space Monitor to verify the batteries are good

BRIEFING PROCEDURES

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.

Attendance:
- Drilling Supervisor
- Drilling Engineer
- Drilling Foreman
- Rig Tool Pushers
- Rig Drillers
- Mud Engineer
- All Safety Personnel
- Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to insure complete understanding of assignments and responsibilities.

EVACUATION PLAN

General Plan

The direct lines of action prepared by SAFETY SOLUTIONS, LLC to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foreman, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the area map.

2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.

3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.

4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Action Plan

Emergency Assistance Telephone List

PUBLIC SAFETY:	911 or
Eddy County Sheriff's Department	(575) 887-7551
Kent Waller	
Fire Department:	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals:	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
New Mexico Oil Conservation	(575) 476-3440
U.S. Dept. of Labor	(575) 887-1174

EOG Resources, Inc.

EOG / Midland	Office	(432) 686-3600
Company Drilling Consultants:		
Danny Kiser	Cell	(281) 833-2749
Drilling Engineer		
Steve Munsell	Office	(432) 686-3609
	Cell	(432) 894-1256
Operations Manager		
Joel Pettit	Office	(432) 686-3705
	Cell	(432)894-1226
Drilling Superintendent		
Barney Thompson	Office	(432) 686-3678
	Cell	(432) 254-9056
Field Drilling Superintendent		
Ron Welch	Cell	(432) 386-0592
McVay Drilling		
McVay Drilling / Hobbs	Office	(575) 397-3311
McVay Drilling Rig #4	Rig	(575) 370-5598
Tool Pusher:		
Terry Johnson	Cell	(575) 370-5620
Safety Consultants		
Safety Solutions, LLC	Office	(432) 686-8555
Cliff Strasner	Cell	(432) 894-9789
Craig Strasner	Cell	(432) 894-0341

MAPS AND PLATS
(Maps & Plats Attached)

Affected Notification List

(within a 65' radius of exposure @100ppm)

The geologic zones that will be encountered during drilling are known to contain hazardous quantities of H_2S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:
Residents: **THERE ARE NO RESIDENTS WITHIN 3000' ROE.**

Notification Process:

A continuous siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:
All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

GENERAL INFORMATION

Toxic Effects of H_2S Poisoning

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume. Hydrogen Sulfide is heavier than air (specific gravity – 1.192) and is colorless and transparent. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is 5-6 times more toxic than Carbon Monoxide. Occupational exposure limits for Hydrogen Sulfide and other gases are compared below in Table 1. Toxicity table for H_2S and physical effects are shown in Table 2.

Table 1
Permissible Exposure Limits of Various Gases

Common Name	Symbol	Sp. Gravity	TLV	STEL	IDLH
Hydrogen Cyanide	HCN	.94	4.7 ppm	C	
Hydrogen Sulfide	H_2S	1.192	10 ppm	15 ppm	100 ppm
Sulfide Dioxide	SO_2	2.21	2 ppm	5 ppm	
Chlorine	CL	2.45	.5 ppm	1 ppm	
Carbon Monoxide	CO	.97	25 ppm	200 ppm	
Carbon Dioxide	CO_2	1.52	5000 ppm	30,000 ppm	
Methane	CH_4	.55	4.7% LEL	14% UEL	

Definitions

A. TLV – Threshold Limit Value is the concentration employees may be exposed based on a TWA (time weighted average) for eight (8) hours in one day for 40 hours in one (1) week. This is set by ACGIH (American Conference of Governmental Hygienists) and regulated by OSHA.

B. STEL – Short Term Exposure Limit is the 15 minute average concentration an employee may be exposed to providing that the highest exposure never exceeds the OEL (Occupational Exposure Limit). The OEL for H_2S is 19 PPM.

C. IDLH – Immediately Dangerous to Life and Health is the concentration that has been determined by the ACGIH to cause serious health problems or death if exposed to this level. The IDLH for H_2S is 100 PPM.

D. TWA – Time Weighted Average is the average concentration of any chemical or gas for an eight (8) hour period. This is the concentration that any employee may be exposed based on an TWA.

TABLE 2

Toxicity Table of H_2S

Percent %	PPM	Physical Effects
.0001	1	Can smell less than 1 ppm.
.001	10	TLV for 8 hours of exposure.
.0015	15	STEL for 15 minutes of exposure.
.01	100	Immediately Dangerous to Life & Health. Kills sense of smell in 3 to 5 minutes.
.02	200	Kills sense of smell quickly, may burn eyes and throat.
.05	500	Dizziness, cessation of breathing begins **in a few minutes.**
.07	700	Unconscious quickly, death will result if not rescued promptly.
.10	1000	Death will result unless rescued promptly. Artificial resuscitation may be necessary.

PHYSICAL PROPERTIES OF H_2S

The properties of all gases are usually described in the context of seven major categories:

COLOR
ODOR
VAPOR DENSITY
EXPLOSIVE LIMITS
FLAMMABILITY
SOLUBILITY (IN WATER)
BOILING POINT

Hydrogen Sulfide is no exception. Information from these categories should be considered in order to provide a fairly complete picture of the properties of the gas.

COLOR – TRANSPARENT

Hydrogen Sulfide is colorless so it is invisible. This fact simply means that you can't rely on your eyes to detect its presence. In fact that makes this gas extremely dangerous to be around.

ODOR – ROTTEN EGGS

Hydrogen Sulfide has a distinctive offensive smell, similar to "rotten eggs". For this reason it earned its common name "sour gas". However, H_2S, even in low concentrations, is so toxic that it attacks and quickly impairs a victim's sense of smell, so it could be fatal to rely on your nose as a detection device.

VAPOR DENSITY – SPECIFIC GRAVITY OF 1.192

Hydrogen Sulfide is heavier than air so it tends to settle in low-lying areas like pits, cellars or tanks. If you find yourself in a location where H_2S is known to exist, protect yourself. Whenever possible, work in an area upwind and keep to higher ground.

EXPLOSIVE LIMITS – 4.3% TO 46%

Mixed with the right proportion of air or oxygen, H_2S will ignite and burn or explode, producing another alarming element of danger besides poisoning.

FLAMMABILITY

Hydrogen Sulfide will burn readily with a distinctive clear blue flame, producing Sulfur Dioxide (SO_2), another hazardous gas that irritates the eyes and lungs.

SOLUBILITY – 4 TO 1 RATIO WITH WATER

Hydrogen Sulfide can be dissolved in liquids, which means that it can be present in any container or vessel used to carry or hold well fluids including oil, water, emulsion and sludge. The solubility of H_2S is dependent on temperature and pressure, but if conditions are right, simply agitating a fluid containing H_2S may release the gas into the air.

BOILING POINT – (-76 degrees Fahrenheit)

Liquefied Hydrogen Sulfide boils at a very low temperature, so it is usually found as a gas.

RESPIRATOR USE

The Occupational Safety and Health Administration (OSHA) regulate the use of respiratory protection to protect the health of employees. OSHA's requirements are written in the Code of Federal Regulations, Title 29, Part 1910, Section 134, Respiratory Protection. This regulation requires that all employees who might be required to wear respirators, shall complete a OSHA mandated medical evaluation questionnaire. The employee then should be fit tested prior to wearing any respirator while being exposed to hazardous gases.

Written procedures shall be prepared covering safe use of respirators in dangerous atmospheric situations, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

Respirators shall be inspected prior to and after each use to make sure that the respirator has been properly cleaned, disinfected and that the respirator works properly. The unit should be fully charged prior to being used.

Anyone who may use respirators shall be properly trained in how to properly seal the face piece. They shall wear respirators in normal air and then in a test atmosphere. (Note: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal.) Anyone that may be expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.

Respirators shall be worn during the following conditions:

A. Any employee who works near the top or on the top of any tank unless tests reveal less than 20 ppm of H_2S.

B. When breaking out any line where H_2S can reasonably be expected.

C. When sampling air in areas where H_2S may be present.

D. When working in areas where the concentration of H_2S exceeds the Threshold Limit Value for H_2S (10 ppm).

E. At any time where there is a doubt as to the H_2S level in the area to be entered.

EMERGENCY RESCUE PROCEDURES

DO NOT PANIC!!!

Remain Calm – Think

1. Before attempting any rescue you must first get out of the hazardous area yourself. Go to a safe briefing area.

2. Sound alarm and activate the 911 system.

3. Put on breathing apparatus. At least two persons should do this, when available use the buddy system.

4. Rescue the victim and return them to a safe briefing area.

5. Perform an initial assessment and begin proper First Aid/CPR procedures.

6. Keep victim lying down with a blanket or coat, etc.., under the shoulders to keep airway open. Conserve body heat and do not leave unattended.

7. If the eyes are affected by H_2S, wash them thoroughly with potable water. For slight irritation, cold compresses are helpful.

8. In case a person has only minor exposure and does not lose consciousness totally, it's best if he doesn't return to work until the following day.

9. Any personnel overcome by H_2S should always be examined by medical personnel. They should always be transported to a hospital or doctor.

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	EOG Resources, Inc.
LEASE NO.:	SHL: NM-19625, BHL: NM-14497
WELL NAME & NO.:	Diamond 8 Fed Com 2H
SURFACE HOLE FOOTAGE:	330' FSL & 430' FEL
BOTTOM HOLE FOOTAGE	330' FNL & 660' FEL
LOCATION:	Section 8, T. 25 S., R 34 E., NMPM
COUNTY:	Lea County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

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

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Bone Springs** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

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. Floor controls are required for 3M or Greater systems. These 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.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

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 for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

Possible lost circulation in the Chinle, Salado, and the Castile groups.
Possible high bottom hole pressure in the Wolfcamp (pilot hole).

1. The **13-3/8** inch surface casing shall be set at **approximately 1075 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** 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 is to include the lead cement slurry.

    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 cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
   Set casing within the Lamar Limestone at approximately 5280 feet.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

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

   ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

4. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi. **5M/10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. Casing cut-off and BOP installation will not be initiated until the cement has had 4-6 hours of setup time in a water basin and 12 hours in the potash areas. This time will start after the cement plug is bumped. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.

    b. The tests shall be done by an independent service company utilizing a test plug.

    c. The results of the test shall be reported to the appropriate BLM office.

    d. 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.**

    e. 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.

    f. 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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

DHW 020310