13-1156

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

JUL 28 2014

RECEIVED

FORM APPROVED
OMB NO. 1004-0137
Expires October 31, 2014

NORTHODOX LOCATION

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: [X] DRILL [ ] REENTER	5. Lease Serial No.: NMNM14497 SHL NMNM19625 BHL
	6. If Indian, Allotee or Tribe Name:
1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone	7. Unit or CA Agreement Name and No.
	8. Lease Name and Well No. (313517): Diamond 5 Fed Com 8H
2. Name of Operator: EOG Resources, Inc. (7377)	9. API Well No.: 30-025- 41992
3a. Address: P.O. Box 2267 Midland, TX 79702	3b. Phone No. (include area code): 432-686-3689
	10. Field and Pool, or Exploratory (97900): Red Hills; Upper BS Shale
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface: 110 FSL & 1790 FEL, SWSE (O), Sec 5, 25S, 34E At proposed prod. zone: 230 FSL & 1293 FEL, SESE (P), Sec 8, 25S, 34E	11. Sec., T., R., M., or Blk. and Survey or Area: Sec 5, T25S, R34E
14. Distance in miles and direction from nearest town or post office*: Approximately +/-18 miles West Northwest from Jal, NM	12. County or Parish: Lea; 13. State: NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any): 110' OL - 28' PP	16. No. of Acres in lease: 799.84; 17. Spacing Unit dedicated to this well: 160 ac
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 699' frm Longway 1	19. Proposed Depth: 9534 TVD - 14523 MD; 20. BLM/BIA Bond No. on file: NM 2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3376' GL	22. Approximate date work will start*: 12/1/2013; 23. Estimated duration: 25 days

24. Attachments

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

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

25. Signature: Stan Wagner	Name (Printed/Typed): Stan Wagner	Date:
Title: Regulatory Analyst		
Approved by (Signature): Steve Caffey	Name (Printed/Typed):	Date: JUL 18 2014
Title: FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

*(Instructions on page 2)

KA 07/28/14

PM

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 29 2014

OPERATOR CERTIFICATION

I certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal Laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true, and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 6th day of August, 2013.

Name: Roger Motley
Position: Sr. Lease Operations ROW Representative
Address: P.O. Box 2267, Midland, TX 79705
Telephone: (432) 686-3642
Email: roger_motley@eogresources.com

Signed _____

eog resources

EOG Resources

Lea County, NM (NAD27 NME)
Diamond 5 Fed Com
#8H

WB1

Plan: Plan #2 08-28-13

Standard Planning Report

28 August, 2013

PHOENIX
TECHNOLOGY SERVICES

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #8H
Company:	EOG Resources	**TVD Reference:**	KB @ 3406.00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	KB @ 3406.00usft
Site:	Diamond 5 Fed Com	**North Reference:**	Grid
Well:	#8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2 08-28-13		

Project Lea County, NM (NAD27 NME)

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 5 Fed Com

Site Position:		**Northing:**	420,210.00 usft	**Latitude:**	32° 9' 8.84514 N
From:	Map	**Easting:**	761,321.00 usft	**Longitude:**	103° 29' 20.26014 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.45 °

Well #8H

Well Position	**+N/-S**	0.00 usft	**Northing:**	420,210.00 usft	**Latitude:**	32° 9' 8.84048 N
	+E/-W	60.00 usft	**Easting:**	761,381.00 usft	**Longitude:**	103° 29' 19.56227 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,376.00 usft

Wellbore WB1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	07/31/13	7.28	60.08	48,370

Design Plan #2 08-28-13

Audit Notes:

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	184.98

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,972.50	0.00	0.00	8,972.50	0.00	0.00	0.00	0.00	0.00	0.00	
9,714.33	89.00	148.00	9,450.00	-397.94	248.66	12.00	12.00	0.00	148.00	
10,780.72	89.00	180.00	9,469.12	-1,409.57	538.77	3.00	0.00	3.00	90.29	
14,523.72	89.00	180.00	9,534.50	-5,152.00	539.00	0.00	0.00	0.00	0.00	PBHL-Diamond #8H

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #8H
Company:	EOG Resources	**TVD Reference:**	KB @ 3406.00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	KB @ 3406.00usft
Site:	Diamond 5 Fed Com	**North Reference:**	Grid
Well:	#8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2 08-28-13		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,972.50	0.00	0.00	8,972.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 12.00									
9,000.00	3.30	148.00	8,999.99	-0.67	0.42	0.63	12.00	12.00	0.00
9,100.00	15.30	148.00	9,098.49	-14.35	8.97	13.52	12.00	12.00	0.00
9,200.00	27.29	148.00	9,191.49	-45.09	28.18	42.48	12.00	12.00	0.00
9,300.00	39.29	148.00	9,274.93	-91.56	57.21	86.25	12.00	12.00	0.00
9,400.00	51.29	148.00	9,345.15	-151.71	94.80	142.92	12.00	12.00	0.00
9,500.00	63.29	148.00	9,399.10	-222.94	139.31	210.01	12.00	12.00	0.00
9,600.00	75.28	148.00	9,434.40	-302.12	188.78	284.59	12.00	12.00	0.00
9,700.00	87.28	148.00	9,449.54	-385.79	241.07	363.41	12.00	12.00	0.00
9,714.33	89.00	148.00	9,450.00	-397.94	248.66	374.86	12.00	12.00	0.00
LP Start DLS 3.00 TFO 90.29									
9,800.00	88.99	150.57	9,451.50	-471.57	292.40	444.42	3.00	-0.01	3.00
9,884.93	88.98	153.12	9,453.01	-546.43	332.47	515.52	3.00	-0.01	3.00
Upper-Diamond #8H									
9,900.00	88.98	153.57	9,453.28	-559.90	339.23	528.35	3.00	-0.01	3.00
10,000.00	88.97	156.57	9,455.07	-650.55	381.37	615.01	3.00	-0.01	3.00
10,100.00	88.96	159.57	9,456.88	-743.29	418.70	704.16	3.00	-0.01	3.00
10,200.00	88.96	162.57	9,458.69	-837.86	451.13	795.55	3.00	0.00	3.00
10,300.00	88.96	165.57	9,460.51	-933.99	478.56	888.95	3.00	0.00	3.00
10,400.00	88.96	168.57	9,462.32	-1,031.43	500.93	984.08	3.00	0.00	3.00
10,500.00	88.97	171.57	9,464.13	-1,129.91	518.16	1,080.68	3.00	0.01	3.00
10,600.00	88.98	174.57	9,465.92	-1,229.15	530.22	1,178.51	3.00	0.01	3.00
10,700.00	88.99	177.57	9,467.70	-1,328.89	537.06	1,277.28	3.00	0.01	3.00
10,780.72	89.00	180.00	9,469.12	-1,409.57	538.77	1,357.50	3.00	0.01	3.00
Start 3743.00 hold at 10780.72 MD									
10,800.00	89.00	180.00	9,469.46	-1,428.85	538.77	1,376.71	0.00	0.00	0.00
10,900.00	89.00	180.00	9,471.20	-1,528.83	538.78	1,476.32	0.00	0.00	0.00
11,000.00	89.00	180.00	9,472.95	-1,628.82	538.79	1,575.92	0.00	0.00	0.00
11,100.00	89.00	180.00	9,474.70	-1,728.80	538.79	1,675.53	0.00	0.00	0.00
11,200.00	89.00	180.00	9,476.44	-1,828.79	538.80	1,775.14	0.00	0.00	0.00
11,300.00	89.00	180.00	9,478.19	-1,928.77	538.80	1,874.75	0.00	0.00	0.00
11,400.00	89.00	180.00	9,479.94	-2,028.76	538.81	1,974.35	0.00	0.00	0.00
11,500.00	89.00	180.00	9,481.68	-2,128.74	538.82	2,073.96	0.00	0.00	0.00
11,600.00	89.00	180.00	9,483.43	-2,228.73	538.82	2,173.57	0.00	0.00	0.00
11,700.00	89.00	180.00	9,485.18	-2,328.71	538.83	2,273.17	0.00	0.00	0.00
11,800.00	89.00	180.00	9,486.92	-2,428.70	538.83	2,372.78	0.00	0.00	0.00
11,900.00	89.00	180.00	9,488.67	-2,528.68	538.84	2,472.39	0.00	0.00	0.00
12,000.00	89.00	180.00	9,490.42	-2,628.67	538.85	2,572.00	0.00	0.00	0.00
12,100.00	89.00	180.00	9,492.16	-2,728.65	538.85	2,671.60	0.00	0.00	0.00
12,200.00	89.00	180.00	9,493.91	-2,828.64	538.86	2,771.21	0.00	0.00	0.00
12,300.00	89.00	180.00	9,495.66	-2,928.62	538.87	2,870.82	0.00	0.00	0.00
12,400.00	89.00	180.00	9,497.40	-3,028.61	538.87	2,970.42	0.00	0.00	0.00
12,500.00	89.00	180.00	9,499.15	-3,128.59	538.88	3,070.03	0.00	0.00	0.00
12,600.00	89.00	180.00	9,500.90	-3,228.57	538.88	3,169.64	0.00	0.00	0.00
12,700.00	89.00	180.00	9,502.64	-3,328.56	538.89	3,269.25	0.00	0.00	0.00
12,800.00	89.00	180.00	9,504.39	-3,428.54	538.90	3,368.85	0.00	0.00	0.00
12,900.00	89.00	180.00	9,506.14	-3,528.53	538.90	3,468.46	0.00	0.00	0.00
13,000.00	89.00	180.00	9,507.88	-3,628.51	538.91	3,568.07	0.00	0.00	0.00
13,100.00	89.00	180.00	9,509.63	-3,728.50	538.91	3,667.67	0.00	0.00	0.00
13,200.00	89.00	180.00	9,511.38	-3,828.48	538.92	3,767.28	0.00	0.00	0.00
13,300.00	89.00	180.00	9,513.12	-3,928.47	538.93	3,866.89	0.00	0.00	0.00
13,400.00	89.00	180.00	9,514.87	-4,028.45	538.93	3,966.49	0.00	0.00	0.00

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #8H
Company:	EOG Resources	**TVD Reference:**	KB @ 3406.00usft
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	KB @ 3406.00usft
Site:	Diamond 5 Fed Com	**North Reference:**	Grid
Well:	#8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2 08-28-13		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.00	89.00	180.00	9,516.62	-4,128.44	538.94	4,066.10	0.00	0.00	0.00
13,600.00	89.00	180.00	9,518.36	-4,228.42	538.94	4,165.71	0.00	0.00	0.00
13,700.00	89.00	180.00	9,520.11	-4,328.41	538.95	4,265.32	0.00	0.00	0.00
13,800.00	89.00	180.00	9,521.86	-4,428.39	538.96	4,364.92	0.00	0.00	0.00
13,900.00	89.00	180.00	9,523.61	-4,528.38	538.96	4,464.53	0.00	0.00	0.00
14,000.00	89.00	180.00	9,525.35	-4,628.36	538.97	4,564.14	0.00	0.00	0.00
14,100.00	89.00	180.00	9,527.10	-4,728.35	538.97	4,663.74	0.00	0.00	0.00
14,200.00	89.00	180.00	9,528.85	-4,828.33	538.98	4,763.35	0.00	0.00	0.00
14,300.00	89.00	180.00	9,530.59	-4,928.32	538.99	4,862.96	0.00	0.00	0.00
14,400.00	89.00	180.00	9,532.34	-5,028.30	538.99	4,962.57	0.00	0.00	0.00
14,500.00	89.00	180.00	9,534.09	-5,128.29	539.00	5,062.17	0.00	0.00	0.00
14,523.72	89.00	180.00	9,534.50	-5,152.00	539.00	5,085.80	0.00	0.00	0.00
TD at 14523.72 - PBHL-Diamond #8H									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Upper-Diamond #8H	0.00	0.00	9,450.00	-437.00	539.00	419,773.00	761,920.00	32° 9' 4.47430 N	103° 29' 13.33306 W
- plan misses target center by 233.75usft at 9884.93usft MD (9453.01 TVD, -546.43 N, 332.47 E)									
- Point									
PBHL-Diamond #8H	0.00	0.00	9,534.50	-5,152.00	539.00	415,058.00	761,920.00	32° 8' 17.81737 N	103° 29' 13.76401 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,972.50	8,972.50	0.00	0.00	KOP Start Build 12.00
9,714.33	9,450.00	-397.94	248.66	LP Start DLS 3.00 TFO 90.29
10,780.72	9,469.12	-1,409.57	538.77	Start 3743.00 hold at 10780.72 MD
14,523.72	9,534.50	-5,152.00	539.00	TD at 14523.72

EOG RESOURCES, INC.
DIAMOND 5 FED COM #8H

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.

Exhibit 1
EOG Resources
10M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. Hydril 13 5/8" 5,000 PSI WP GK Annular Preventor
3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
4. 2 1/16" - 10,000 PSI WP Check Valve
5. 10,000 PSI WP - 1502 Union to kill line
6. 2 1/16" - 10,000 PSI WP Manual Valves
7. 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
8. 4 1/16" 10,000 PSI WP HCR Valve
9. 4 1/16" 10,000 PSI WP Manual Valve
10. 8" OD x 4" ID 10,000 PSI WP Flex Choke Line
11. DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
12. Mud Cross - 13 5/8" 10,000 PSI WP
13. Blind Rams
14. Pipe Rams
15. 13 5/8" 5,000 PSI WP Spacer Spools
16. Flow Line
17. 2" Fill Line

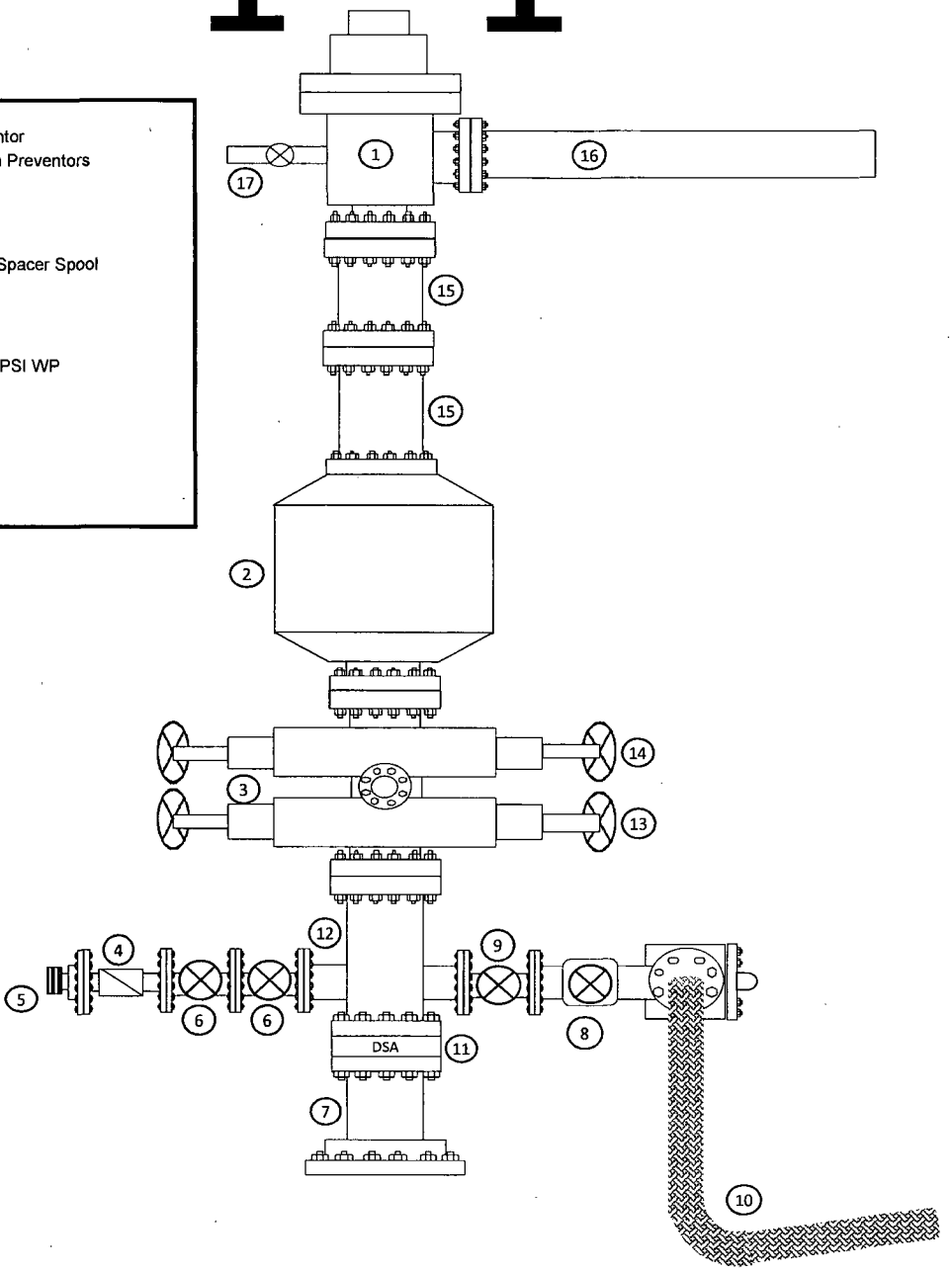
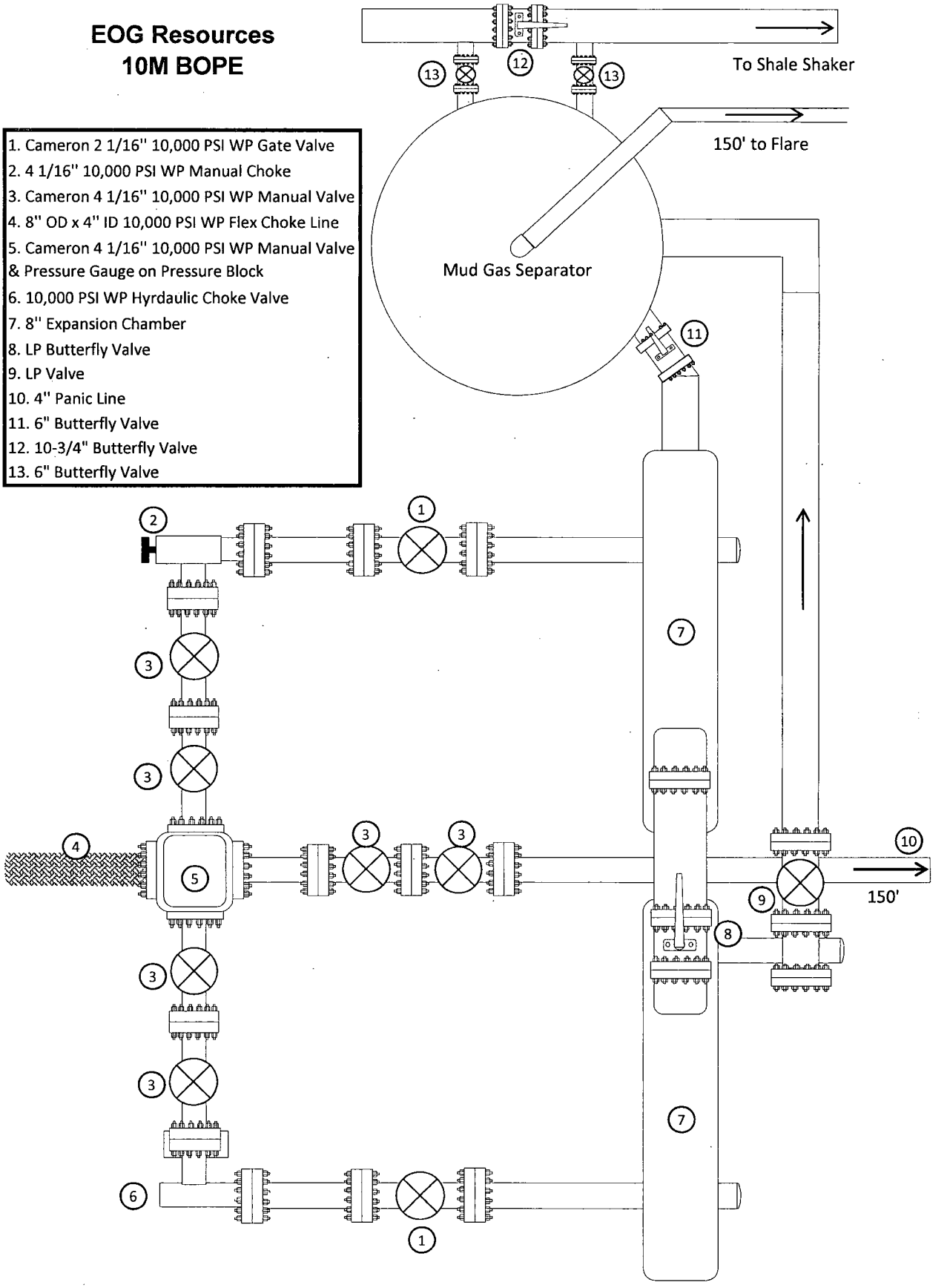


Exhibit 1a

EOG Resources
10M BOPE

1. Cameron 2 1/16" 10,000 PSI WP Gate Valve
2. 4 1/16" 10,000 PSI WP Manual Choke
3. Cameron 4 1/16" 10,000 PSI WP Manual Valve
4. 8" OD x 4" ID 10,000 PSI WP Flex Choke Line
5. Cameron 4 1/16" 10,000 PSI WP Manual Valve & Pressure Gauge on Pressure Block
6. 10,000 PSI WP Hyrdaulic Choke Valve
7. 8" Expansion Chamber
8. LP Butterfly Valve
9. LP Valve
10. 4" Panic Line
11. 6" Butterfly Valve
12. 10-3/4" Butterfly Valve
13. 6" Butterfly Valve



EOG 10M Choke Manifold Diagram (rev. 5/1/12)

Manufacturer: Midwest Hose & Specialty

Serial Number: SN#90067

Length: 35'

Size: OD = 8" ID = 4"

Ends: Flanges Size: 4-1/16"

WP Rating: 10,000 psi Anchors required by manfacturer: No

MIDWEST

HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
CACTUS	RIG #123
	Asset # M10761

HOSE SPECIFICATIONS

Type: CHOKE LINE		Length: 35'	
I.D. 4"	INCHES	O.D. 8"	INCHES

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 PSI	15,000 PSI	PSI

COUPLINGS

Type of End Fitting	
4 1/16 10K FLANGE	
Type of Coupling: SWEDGED	MANUFACTURED BY MIDWEST HOSE & SPECIALTY

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
1 MIN.	0 PSI

COMMENTS:

SN#90067 M10761
Hose is covered with stainless steel armour cover and wraped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes

Date:	Tested By:	Approved:
6/6/2011	BOBBY FINK	MENDI JACKSON

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: CACTUS

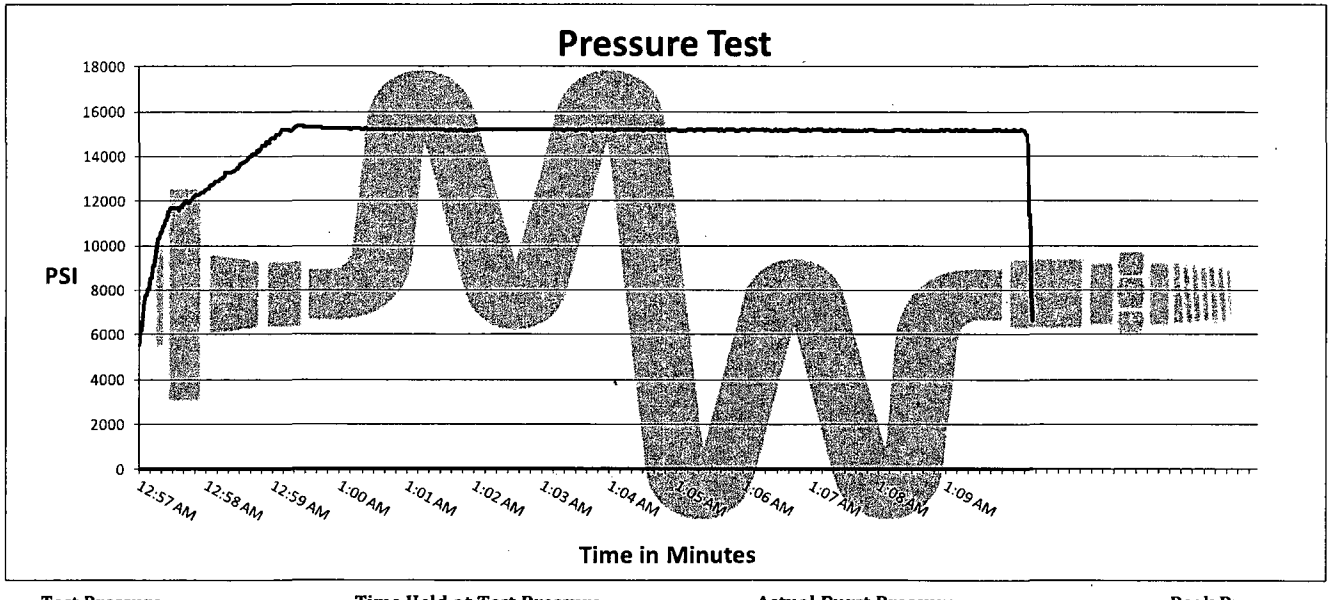
SALES ORDER# 90067

Hose Specifications

Hose Type	Length
C & K	35'
I.D.	**O.D.**
4"	8"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4 1/16 10K	Swage
Die Size	**Final O.D.**
6.62"	6.68"
Hose Serial #	**Hose Assembly Serial #**
	90067



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 1/4 Minutes		15439 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Bobby Fink*

Approved By: *Mendi Jackson*

Mendi Jackson

Closure Plan for Closed Loop Drilling System

1. METHODS OF HANDLING WASTE MATERIALS

a. Drill cuttings shall be disposed of in steel cuttings bins (catch tanks) on the drilling pad (behind the steel mud tanks). The bin and cuttings shall be hauled to a division approved facility by an approved transporter. At the facility, the cuttings shall be removed from the bin and the bin shall be returned to the drilling site for reuse, moved to the next drilling site or returned to the provider.

b. Remaining drilling fluids shall be hauled off by approved transports to a division approved disposal facility. Water produced during completion shall be put in storage tanks and disposed of at a division approved facility. Oil and condensate produced shall be put in a storage tank and sold or put in a sales pipeline.

2. RECLAMATION

a. Within 120 days after the drilling and completion of the well, the location area shall be reduced as determined by operator to the minimum area necessary to safely and effectively operate the well. The reclaimed location area shall be restored to the condition that existed prior to oil and gas operations.

OPERATING AND MAINTENANCE PLAN – CLOSED LOOP SYSTEM

19.15.17.12 OPERATIONAL REQUIREMENTS:

A. General specifications. An operator shall maintain and operate a pit, closed-loop system, below-grade tank or sump in accordance with the following requirements.

(1) The operator shall operate and maintain a pit, closed-loop system, below-grade tank or sump to contain liquids and solids and maintain the integrity of the liner, liner system or secondary containment system, prevent contamination of fresh water and protect public health and the environment.

Operator shall operate and maintain a closed loop system.

(2) The operator shall recycle, reuse or reclaim all drilling fluids in a manner that prevents the contamination of fresh water and protects public health and the environment.

Operator shall recycle, reuse or reclaim all drilling fluids used. Excess or unused fluid shall be disposed of at division approved facilities.

(3) The operator shall not discharge into or store any hazardous waste in a pit, closed-loop system, below-grade tank or sump.

Operator shall not knowingly discharge hazardous waste into the closed loop system.

(4) If the integrity of the pit liner is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the liner.

No Pit liner. Closed loop system.

(5) If a lined pit develops a leak, or if any penetration of the liner occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line from the pit within 48 hours and repair the damage or replace the liner.

No Pit liner. Closed loop system. If a leak develops in any of the closed loop tanks, all liquid shall be removed from the effected tank within 48 hours and any damage shall be repaired prior to putting the tank back in service.

(6) The operator shall install a level measuring device in a lined pit containing fluids to monitor the level of the fluid surface, so that the operator may recognize unanticipated change in volume of fluids.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks.

(7) The injection or withdrawal of liquids from a lined pit shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks using a re-circulating pump or vacuum trucks.

(8) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.

Operator shall berm or collect surface water run- on and dispose of at a division approved facility.

(9) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain and remove oil from a pit's surface.

Operator shall install a skimmer system on catch tanks, circulating tanks and over-flow tanks as needed to collect oil.

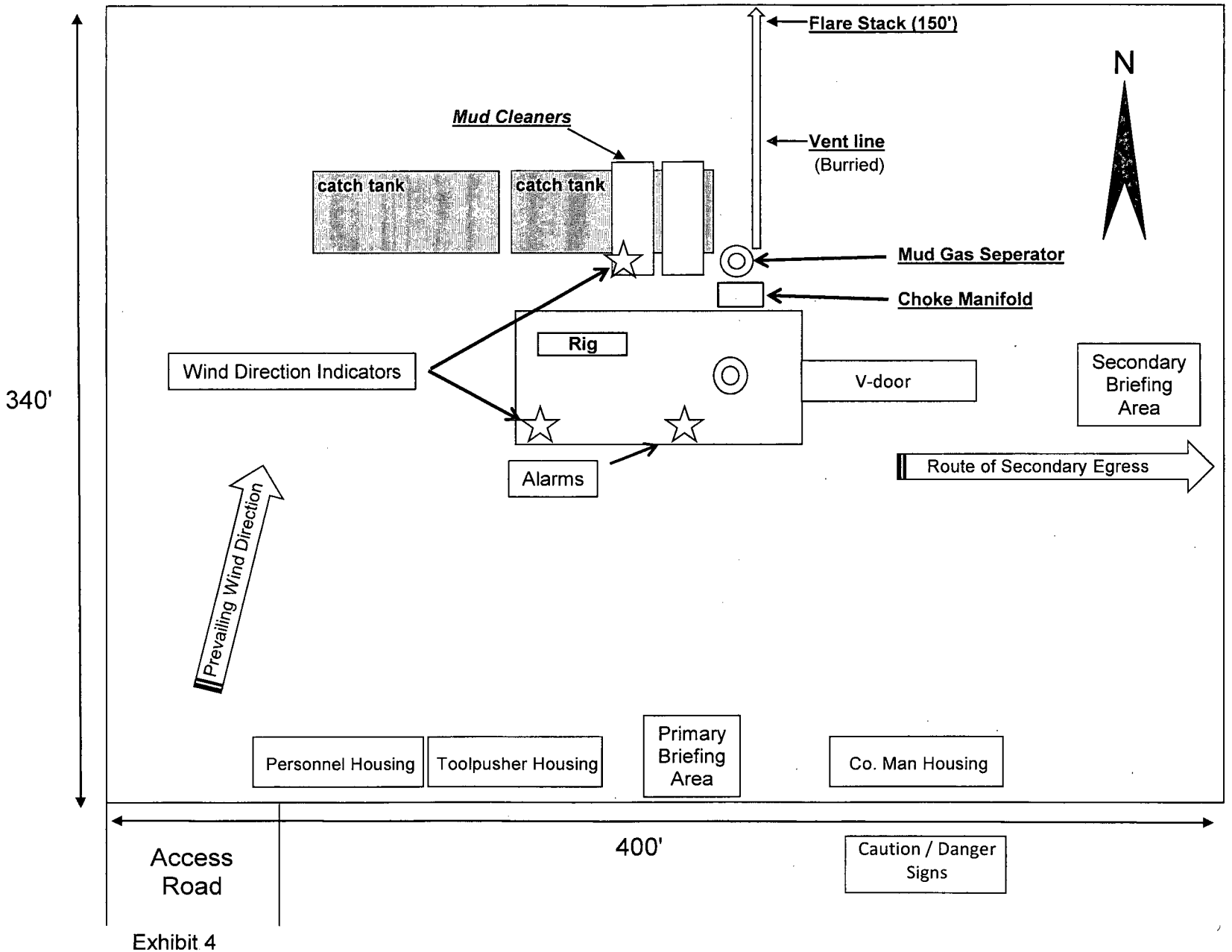


Exhibit 4

EOG Resources

Diamond 5 Fed Com #8H

Well Site Diagram

EOG RESOURCES, INC.
DIAMOND 5 FED COM #8H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,090'
Top of Salt	1,490'
Base of Salt	5,067'
Anhydrite	5,067'
Lamar	5,295'
Bell Canyon	5,321'
Cherry Canyon	6,270'
Brushy Canyon	7,830'
Bone Spring Lime	9,273'
TD	9,534'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,270'	Oil
Brushy Canyon	7,830'	Oil
Bone Spring Lime	9,273'	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 ~~1,150'~~ 1200' and circulating cement back to surface.

4. CASING PROGRAM - NEW

See COA

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
17.5"	0 ~~-1,150'~~ 1200'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000'-5,150'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0'-14,523'	5.500"	17#	P110 or HCP110	LTC	1.125	1.25	1.60

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft^3/ft	Slurry Description
~~1,150'~~ 1200'	500	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% $CaCl_2$ + 0.25 lb/sk Cello-Flake (TOC @ surface)
	250	14.8	1.34	Tail: Class C + 0.005 pps Static Free + 1% $CaCl_2$ + 0.25 pps CelloFlake + 0.005 gps FP-6L
5,150'	850	12.7	2.22	Lead: Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ surface)
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
14,523'	300	10.8	3.68	Lead: 60:40:0 Class 'C' + 15.00 lb/sk BA-90 + 4.00% MPA-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free (TOC @ 4650')
	325	11.9	2.38	Middle: 50:50:10 Class 'H' + 0.80% FL-52 + 0.45% ASA-301 + 0.40% SMS + 2.00% Salt + 3.00 lb/sx LCM-1 + 0.20% R-21 + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
	1400	14.2	1.28	Tail: 50:50:2 Class 'H' + 0.65% FL-52 + 0.20% CD-32 + 0.15% SMS + 2.00% Salt + 0.10% R-3 + 0.005 lb/sk Static Free

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

See COA

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a double ram-type (10,000 psi WP) preventer and an annular preventer (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

3000 psi BOPE is adequate for this application. Due to the 3000 psi BOPE requirement no FIT tests are planned.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 2000/ 250 psig and the annular preventer to 2000/ 250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000/ 250 psig and the annular preventer to 3000/ 250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

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.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The applicable depths and properties of the drilling fluid systems are as follows. Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Depth 1200'	Type	Weight (ppg)	Viscosity	Water Loss
0 – ~~1,150'~~	Fresh Water Gel	8.6-8.8	28-34	N/c
~~1,150'~~ – 5,150'	Saturated Brine	10.0-10.2	28-34	N/c
5,150' – 8,972'	Cut Brine Water	8.5-9.3	28-34	N/c
8,972'– 14,523' Lateral	Cut Brine Water	9.0-9.5	28-34	N/c

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

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.

See COA (C) H_2S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR–CCL Will be run in cased hole during completions phase of operations, from kick off point to intermediate casing point.

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

The estimated bottom-hole temperature (BHT) at TD is 155 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 4127 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.

See COA

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 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

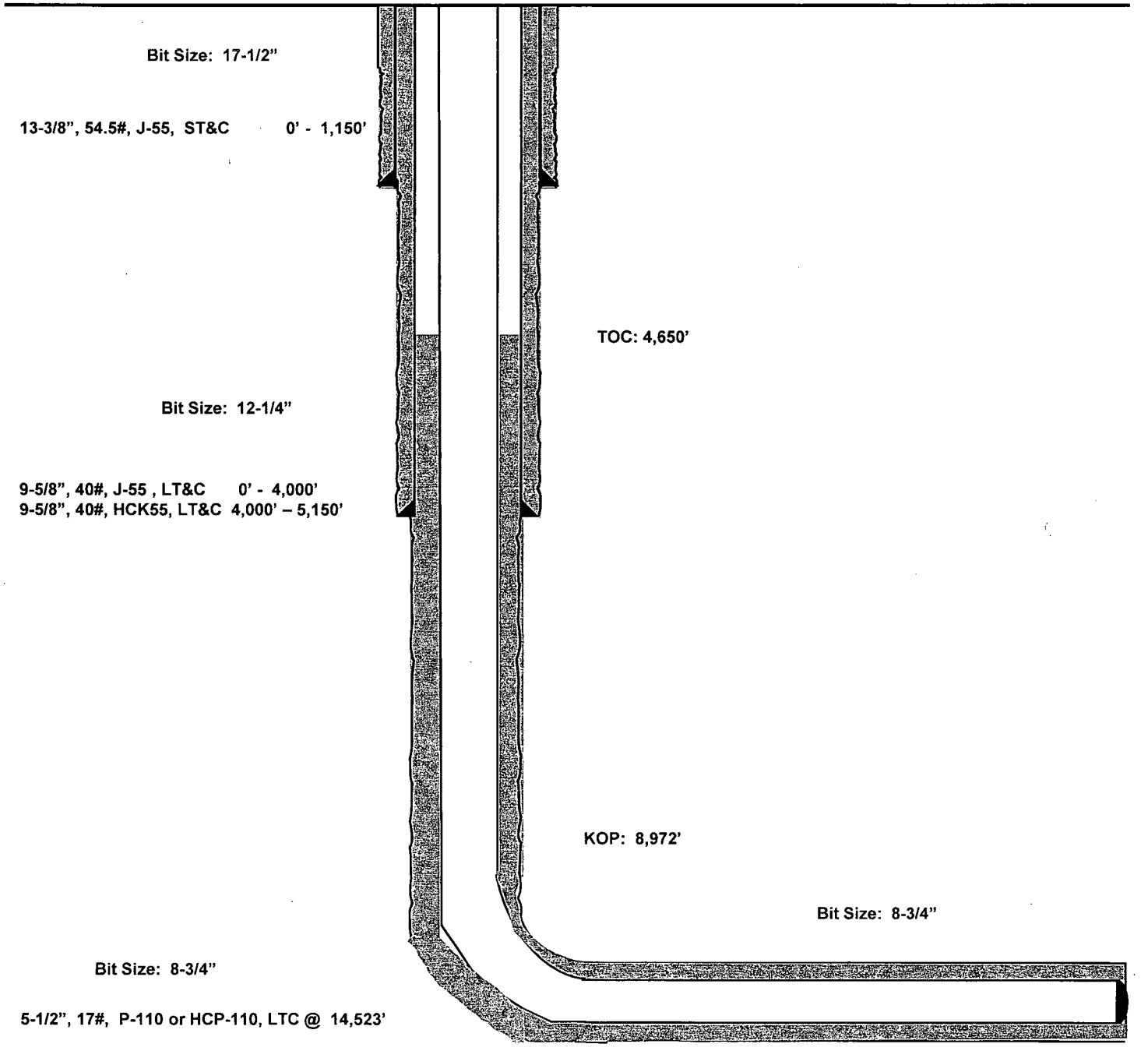
Diamond 5 Fed Com #8H
Red Hills
Lea County, New Mexico

110' FSL
1790' FEL
Section 5
T-25-S, R-34-E

Proposed Wellbore

API: 30-025- *****

KB: 3,406'
GL: 3,376'



Lateral: 14,523' MD, 9,534' TVD

BH Location: 230' FSL & 1293' FEL
Section 8
T-25-S, R-34-E

Project: Lea County, NM (NAD27 NME)
Site: Diamond 5 Fed Com
Well: #8H
Wellbore: WB1
Design: Plan #2 08-28-13

PHOENIX TECHNOLOGY SERVICES

Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.83°

Magnetic Field
Strength: 48369.6snT
Dip Angle: 60.08°
Date: 07/31/2013
Model: IGRF2010_14

WELL DETAILS

Ground Level: 3376.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	420210.00	761381.00	32° 9' 8.84048 N	103° 29' 19.56227 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	8972.50	0.00	0.00	8972.50	0.00	0.00	0.00	0.00	0.00		KOP Start Build 12.00
3	9714.33	89.00	148.00	9450.00	-397.94	248.66	12.00	148.00	374.86		LP Start DLS 3.00 TFO 90.29
4	10780.72	89.00	180.00	9469.12	-1409.57	538.77	3.00	90.29	1367.50		Start 3743.00 hold at 10780.72 MD
5	14523.72	89.00	180.00	9534.50	-5152.00	539.00	0.00	0.00	5085.80	PBHL-Diamond #8H	TD at 14523.72

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Upper-Diamond #8H	9450.00	-437.00	539.00	419773.00	761920.00	32° 9' 4.47430 N	103° 29' 13.33306 W	Point
- plan misses target center by 233.75usft at 9884.93usft MD (9453.01 TVD, -546.43 N, 332.47 E)								
PBHL-Diamond #8H	9534.50	-5152.00	539.00	415058.00	761920.00	32° 8' 17.81736 N	103° 29' 13.76401 W	Point
- plan hits target center								

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

Local Origin: Well #8H, Grid North

Latitude: 32° 9' 8.84048 N
Longitude: 103° 29' 19.56227 W

Grid East: 761381.00
Grid North: 420210.00
Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14
Sample Date: 31-Jul-13
Magnetic Declination: 7.28°
Dip Angle from Horizontal: 60.08°
Magnetic Field Strength: 48370

To convert a Magnetic Direction to a Grid Direction, Add 6.83°
To convert a Magnetic Direction to a True Direction, Add 7.28° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

PROJECT DETAILS: Lea County, NM (NAD27 NME)

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

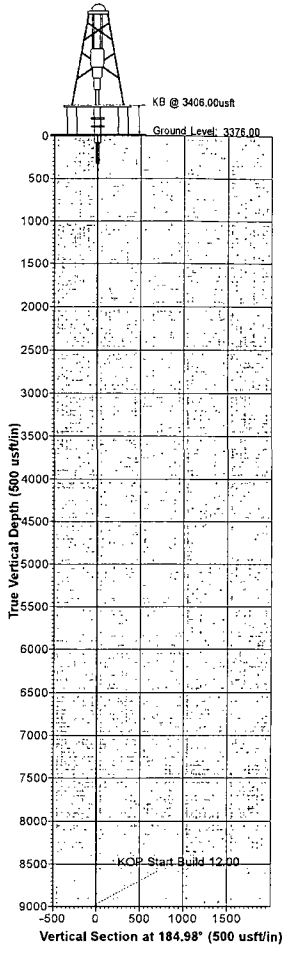
SITE DETAILS: Diamond 5 Fed Com

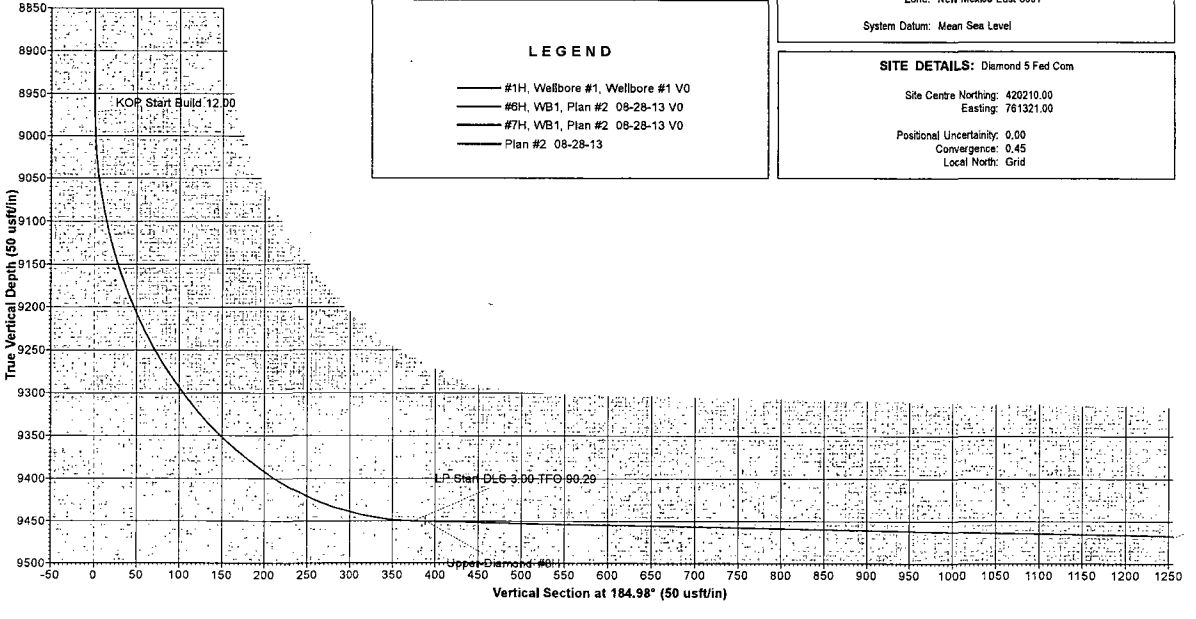
Site Centre Northing: 420210.00
Easting: 761321.00

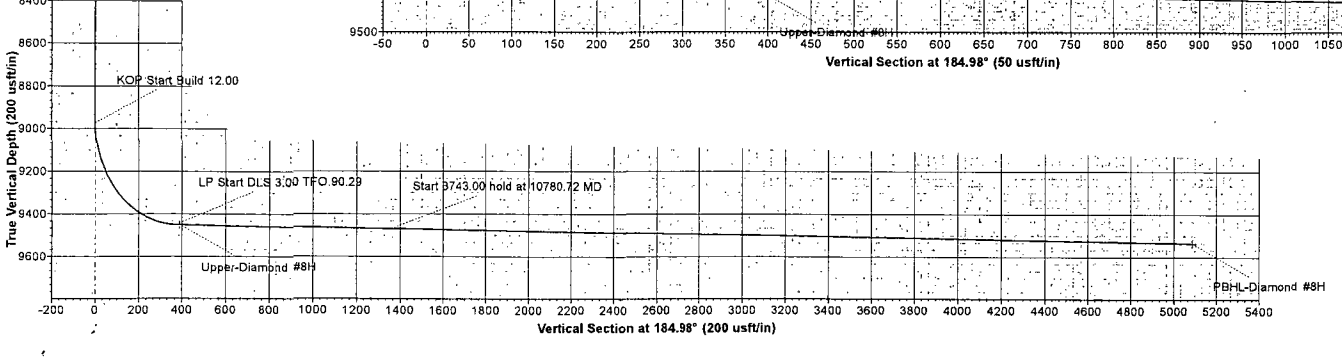
Positional Uncertainty: 0.00
Convergence: 0.45
Local North: Grid

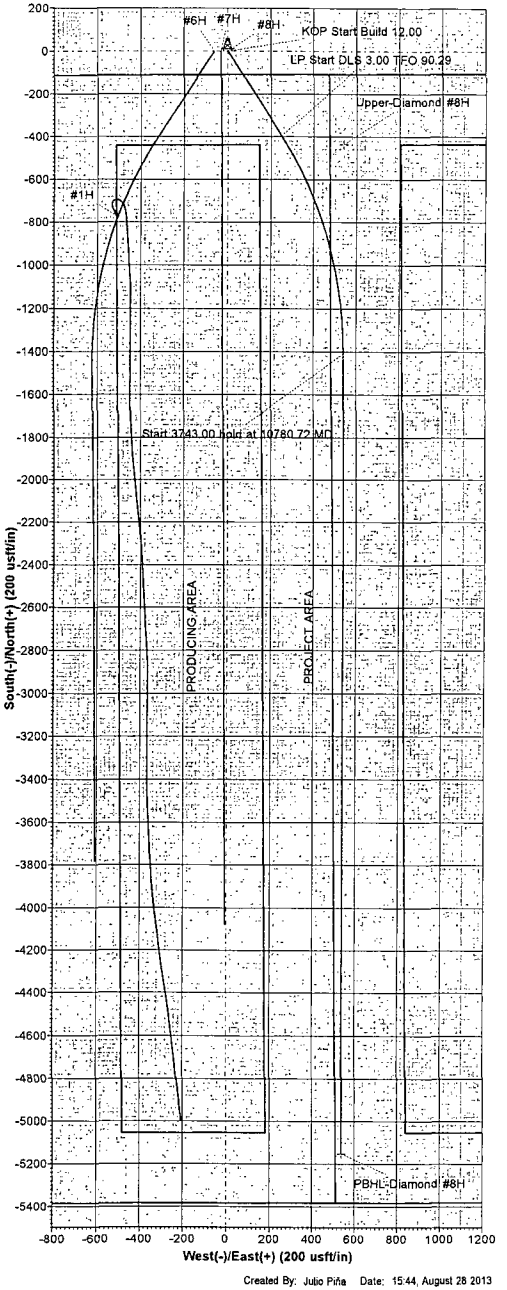
LEGEND

- #1H, Wellbore #1, Wellbore #1 V0
- #6H, WB1, Plan #2 08-28-13 V0
- #7H, WB1, Plan #2 08-28-13 V0
- Plan #2 08-28-13









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