Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS
HOBBS OCD
APR 19 2012
RECEIVED

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

12-67

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM108504 SHL NMNM108503 BHL

1a. Type of Work [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name

1b. Type of Well [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.

2. Name of Operator
EOG Resources Inc. <73777>

8. Lease Name and Well No.
Vaca 24 Fed Com 3H <39180>

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

3b. Phone No. *(include area code)*
432-686-3689

9. API Well No.
30-025- 40530

4. Location of Well *(Report location clearly and in accordance with any State equirements)**

At surface 50 FSL & 1390 FWL, U/L N Sec 24 NON-STANDARD LOCATION

At proposed prod. zone 2310 FSL & 1310' FWL, U/L L Sec 13

10. Field and Pool, or Exploratory
Red Hills; Bone Spring <97900>

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 24, T25S, R33E

14 Distance in miles and direction from nearest town or post office*
+/- 28 miles Southwest 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)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
50'	2998	W/2 24, SW/4 13
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19 Proposed Depth**	**20. BLM/BIA Bond No. on file**
Cross Vaca 13-8H	16786 MD - 9450 TVD	NM 2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.	**22 Approximate date work will start***	**23. Estimated duration**
3339' GL	1/1/2012	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	Name *(Printed/Typed)*	Date
Stan Wagner	Stan Wagner	10/17/2011

Title
Regulatory Analyst

Approved by *(Signautre)*	Name *(Printed/Typed)*	Date
/s/ Don Peterson		APR 17 2012
Title	**Office**	
FIELD MANAGER	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 knowlingly 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)

Carlsbad Controlled Water Basin

04/20/12

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APR 23 2012

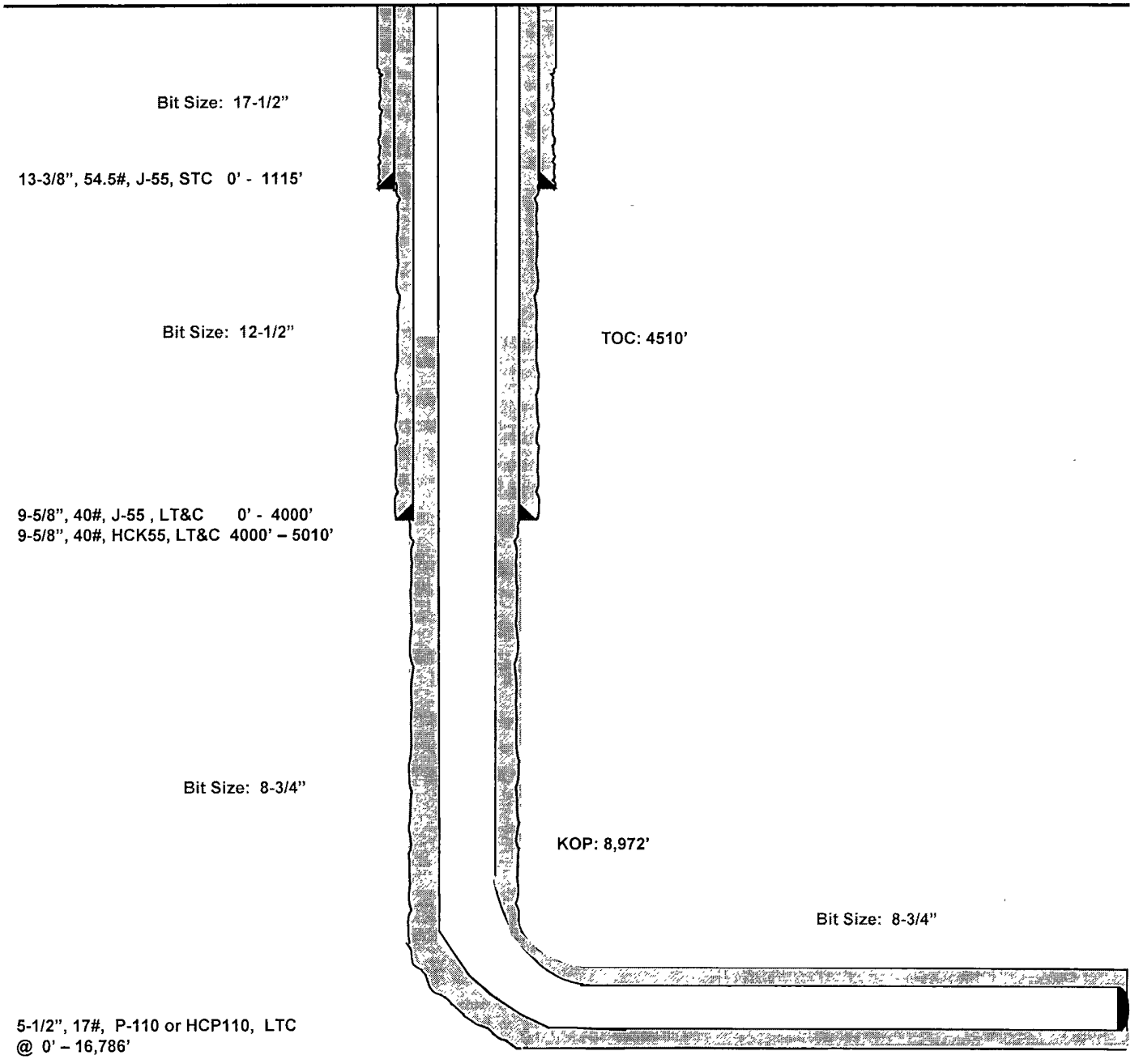
Vaca 24 Fed Com #3H
Red Hills
Lea County, New Mexico

50' FSL
1390' FWL
Section 24
T-25-S, R-33-E

Proposed Wellbore

API: 30-025-

KB: 3,369.4'
GL: 3,339.4'



Lateral: 16,786' MD, 9,450' TVD

BH Location: 2310' FSL & 1310' FWL
Section 13
T-25-S, R-33-E

EOG RESOURCES, INC.
VACA 24 FED COM NO. 3H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,085'
Top of Salt	1,450'
Base of Salt	4,915'
Lamar	5,150'
Bell Canyon	5,176'
Cherry Canyon	6,180'
Brushy Canyon	7,775'
Bone Spring Lime	9,255'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,180'	Oil
Brushy Canyon	7,775'	Oil
Bone Spring Lime	9,255'	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 1,115' 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
17.50"	0 – 1115'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0 - 4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000'-5010'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0'-16,786'	5.5"	17#	P110 or HCP110	LTC	1.125	1.25	1.60

See COA

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft^3/ft	Slurry Description
1,115' See COA	450	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% $CaCl_2$ + 0.25 lb/sk Cello-Flake
	200	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,010' See COA	800	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
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
16,786'	175	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
	300	11.8	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
See COA	2000	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.

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

See COA Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 3000/ 250 psig and the annular preventer to 2500/ 250 psig. The surface casing will be tested to 1400 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 2500/ 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:

See COA

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,115'	Fresh water + Gel	8.6-8.8	28-34	N/c
1,115' – 5,010'	Saturated Brine	10.0-10.2	28-34	N/c
5,010' – 8,972'	Cut Brine	8.6-9.5	28-34	N/c
8,972' – 16,786' Lateral	Cut Brine	8.6–9.5	28-34	N/c

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) 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.

See COA

GR–CCL	Will be run in cased hole during completions phase of operations.

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

See COA

The estimated bottom hole temperature (BHT) at TD is 155 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 4092 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

See COA

The drilling operation should be finished in approximately one month. If the well is productive, an additional 90-120 days will be required for completion and testing before a decision is made to install permanent facilities.

eog resources

PATHFINDER
A Schlumberger Company

APR 2 3 2012

Azimuths to Grid North
True North: -0.43°
Magnetic North: 7.08°

Magnetic Field
Strength: 48558.7snT
Dip Angle: 60.10°
Date: 10/6/2011
Model: IGRF200510

Project: Lea County
Site: Vaca "24" Fed Com
Well: #3H
Wellbore: OH
Plan: Plan #1 (#3H/OH)

WELL DETAILS: #3H

Ground Elevation:: 3339.4
RKB Elevation: KB = 30 @ 3369.4usft (Cactus #123)
Rig Name: Cactus #123

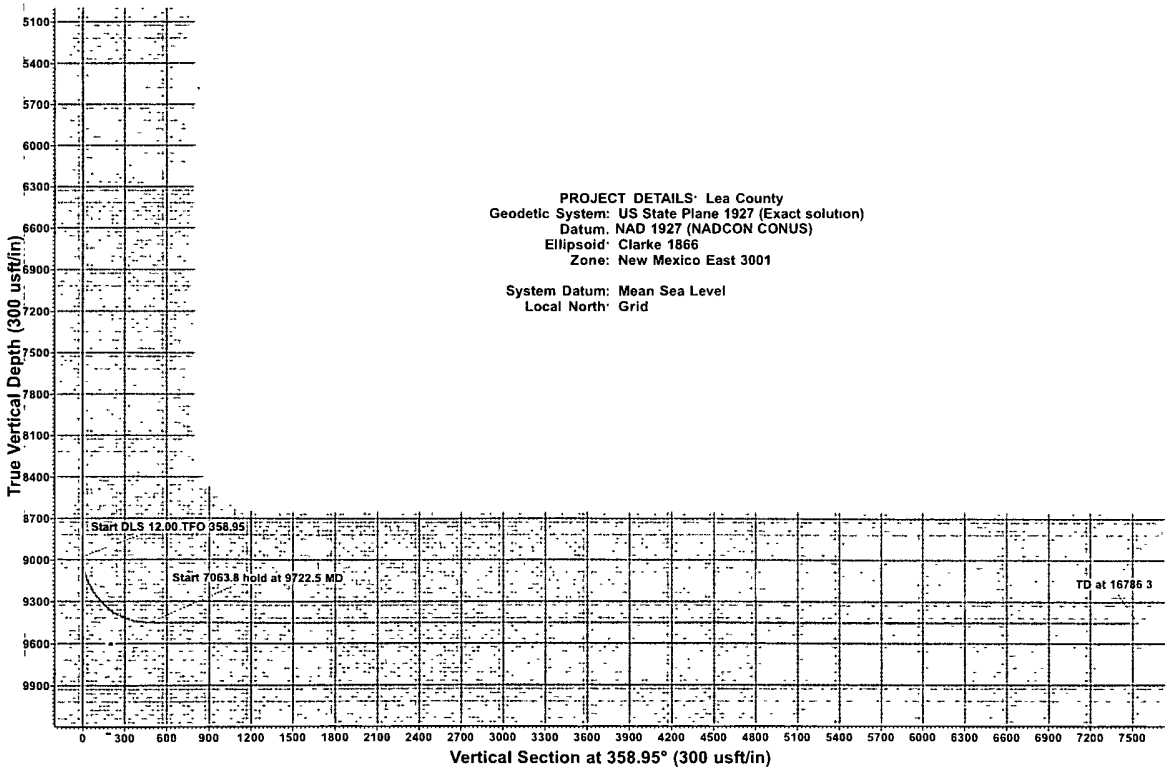
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	404224.300	748849.700	32° 6' 31.603 N	103° 31' 46.704 W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (#3H)	9450.0	7540.0	-137.7	411764.300	748712.000

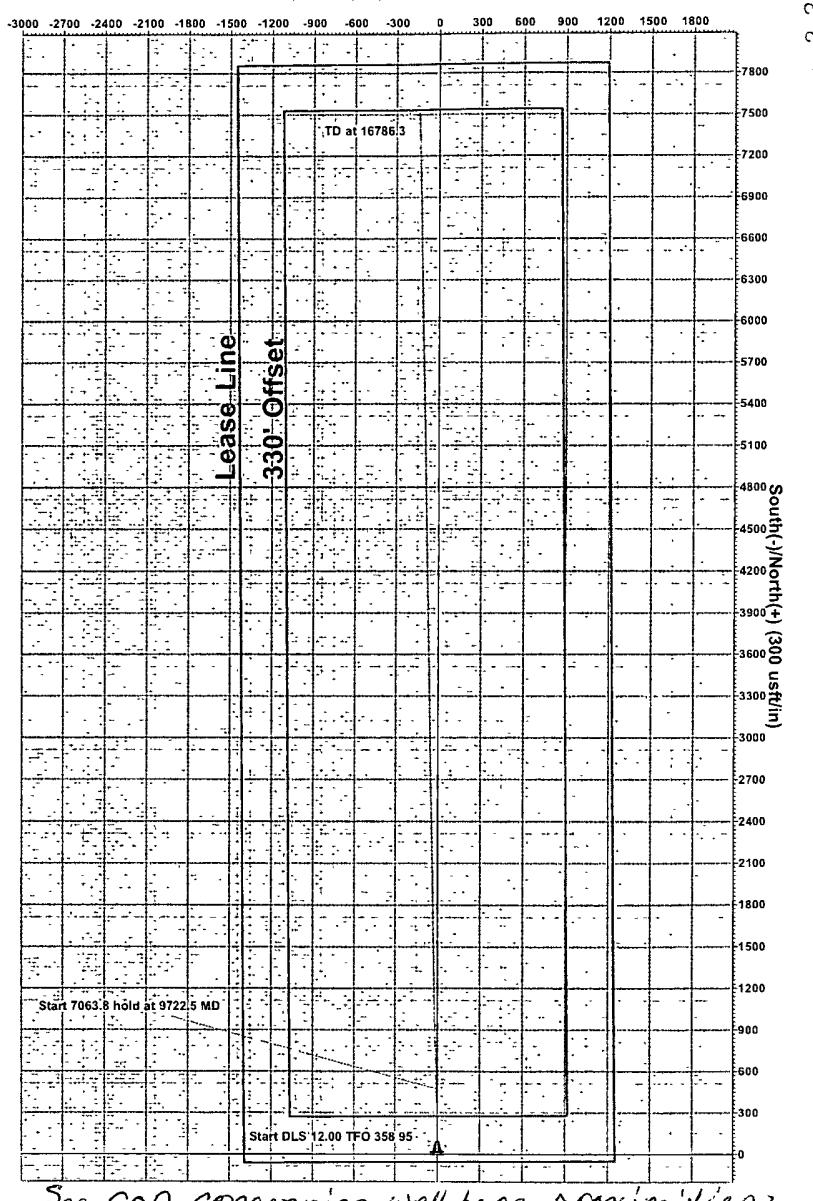
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	8972.5	0.00	0.00	8972.5	0.0	0.0	0.00	0.00	0.0	
3	9722.5	90.00	358.95	9450.0	477.4	-8.7	12.00	358.95	477.5	
4	16786.3	90.00	358.95	9450.0	7540.0	-137.7	0.00	0.00	7541.3	PBHL (#3H)



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



See COA concerning wellbore proximities for drilling + for stimulation considerations

Plan: Plan #1 (#3H/OH)
Created By Sam Biffle Date. 10 46, October 06 2011
Checked _____ Date: _____

ATTACHMENT TO EXHIBIT #1

1. Wear ring to be properly installed in head.

2. Blow out preventer and all fittings must be in good condition, 5000 psi W.P. minimum. Exhibit #1.

3. All fittings to be flanged

4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum.

5. All choke and fill lines to be securely anchored especially ends of choke lines.

6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

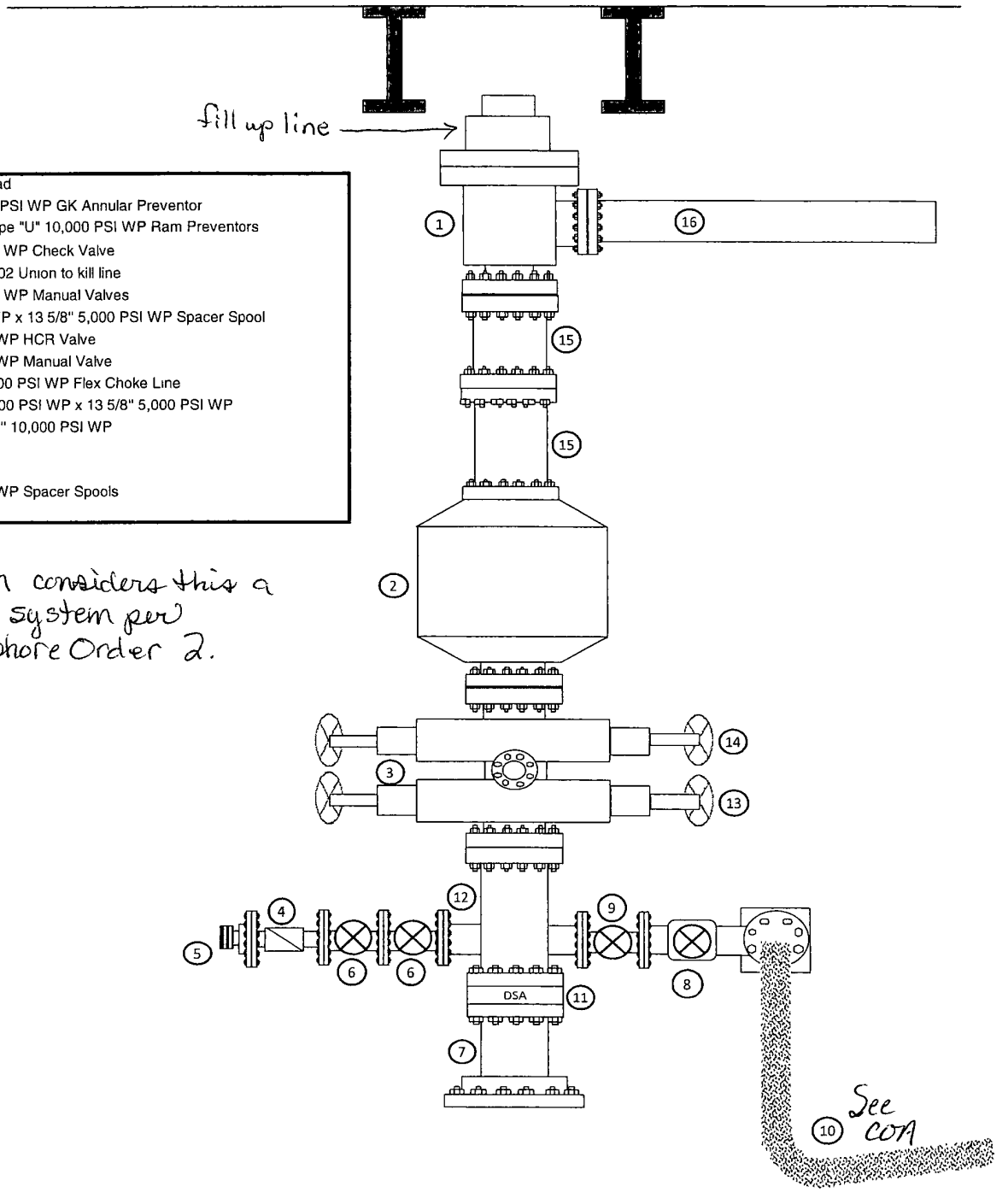
7. Kelly cock on kelly.

8. Extension wrenches and hand wheels to be properly installed.

9. Blow out preventer control to be located as close to driller's position as feasible.

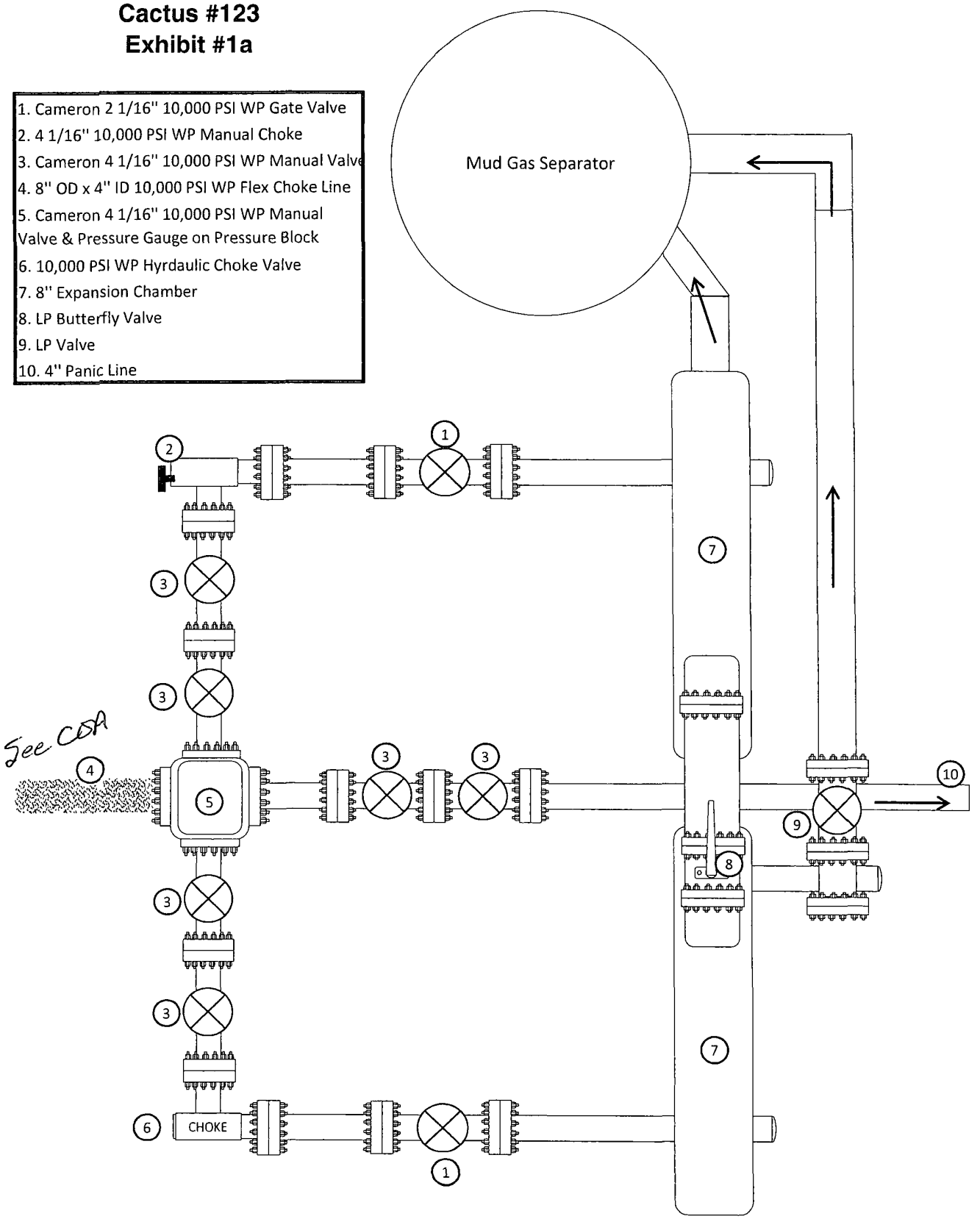
10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

EOG Resources
Cactus #123
Exhibit #1



EOG Resources
Cactus #123
Exhibit #1a

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



BLM considers this a 5M system per Onshore Order 2.

Manufacturer: Midwest Hose & Specialty

Serial Number: SN#90067

Length: 35'

Size: OD = 8" ID = 4"

Ends: Flanges Size: 4-1/16"

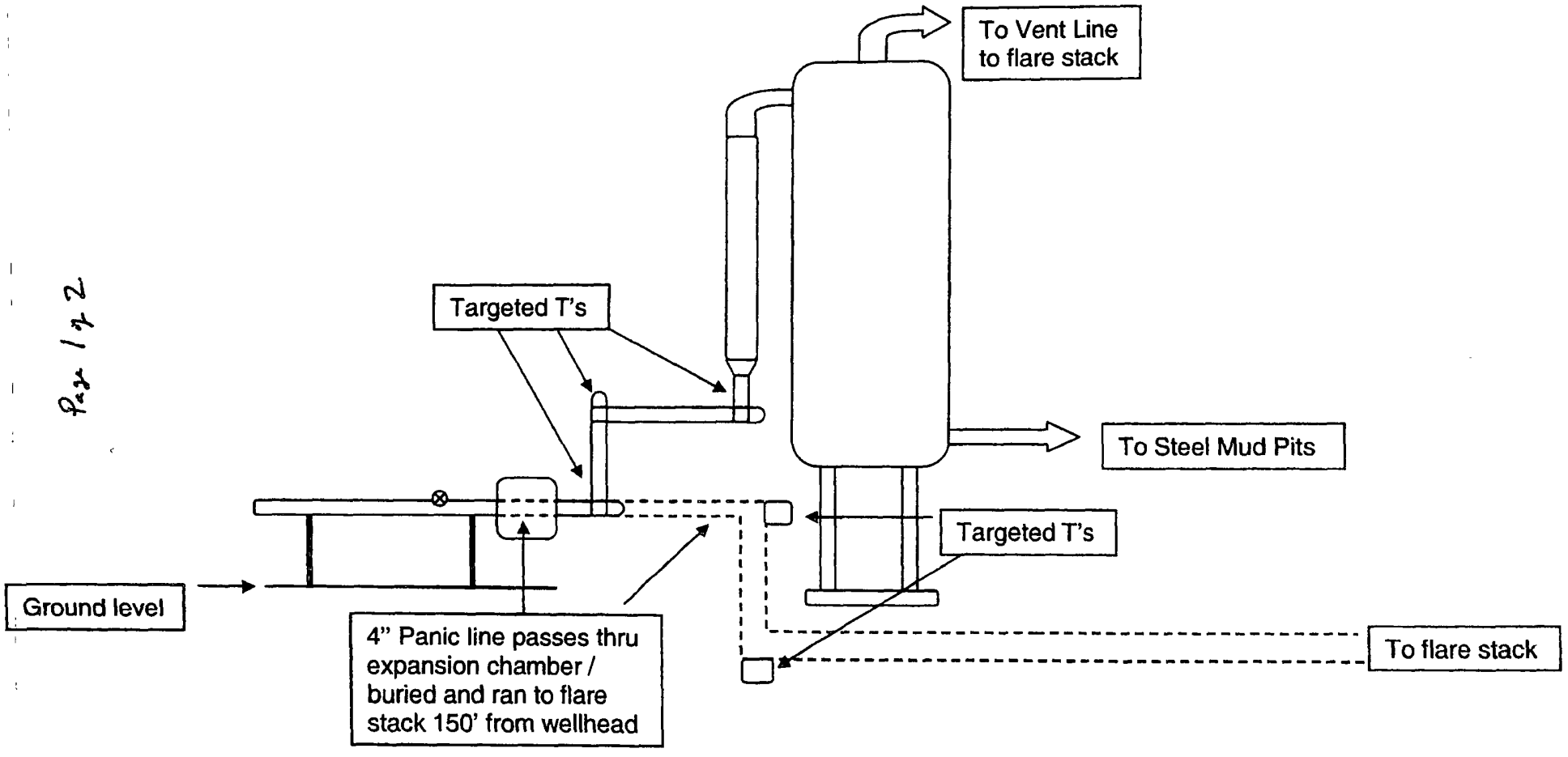
WP Rating: 10,000 psi Anchors required by manfacturer: No

MIDWEST

HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT		
Customer: CACTUS		**P.O. Number:** RIG #123
		Asset # M10761
HOSE SPECIFICATIONS		
Type: CHOKE LINE		**Length:** 35'
I.D. 4" *INCHES*		**O.D.** 8" *INCHES*
WORKING PRESSURE 10,000 *PSI*	**TEST PRESSURE** 15,000 *PSI*	**BURST PRESSURE** *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 1 *MIN.*	**ACTUAL BURST PRESSURE:** 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: 6/6/2011	**Tested By:** BOBBY FINK	**Approved:** MENDI JACKSON

Profile View of Piping from Choke Manifold to the Mud Gas Separator



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Aerial View of the Piping from the Choke Manifold to the Mud Gas Separator

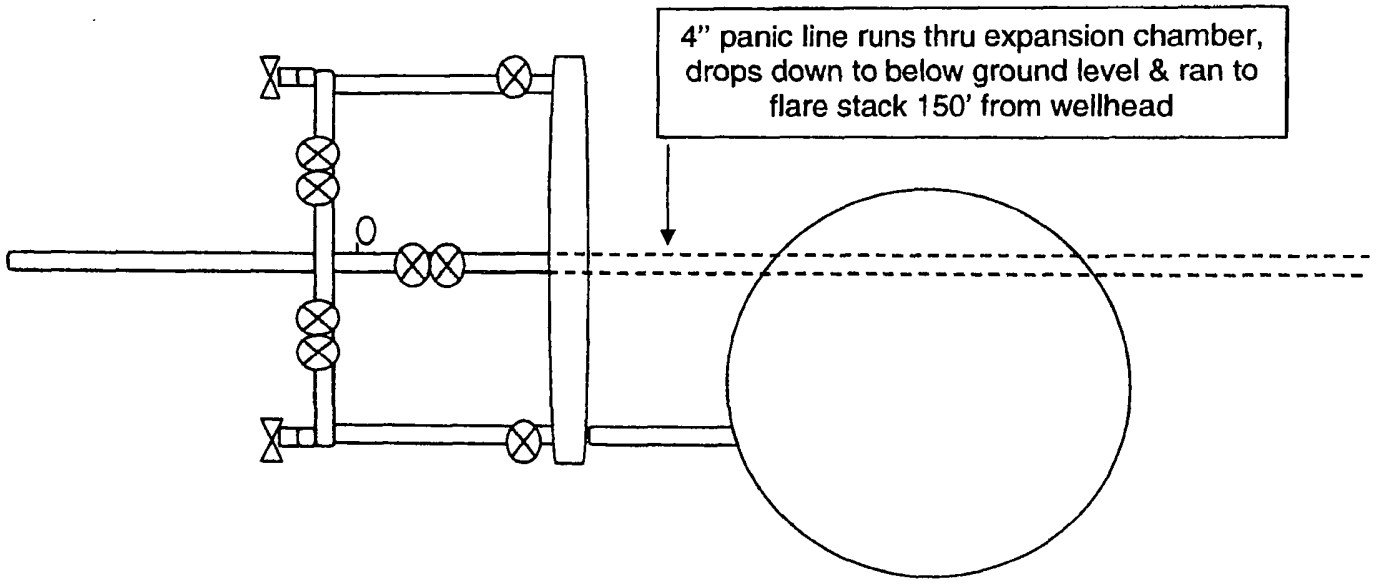

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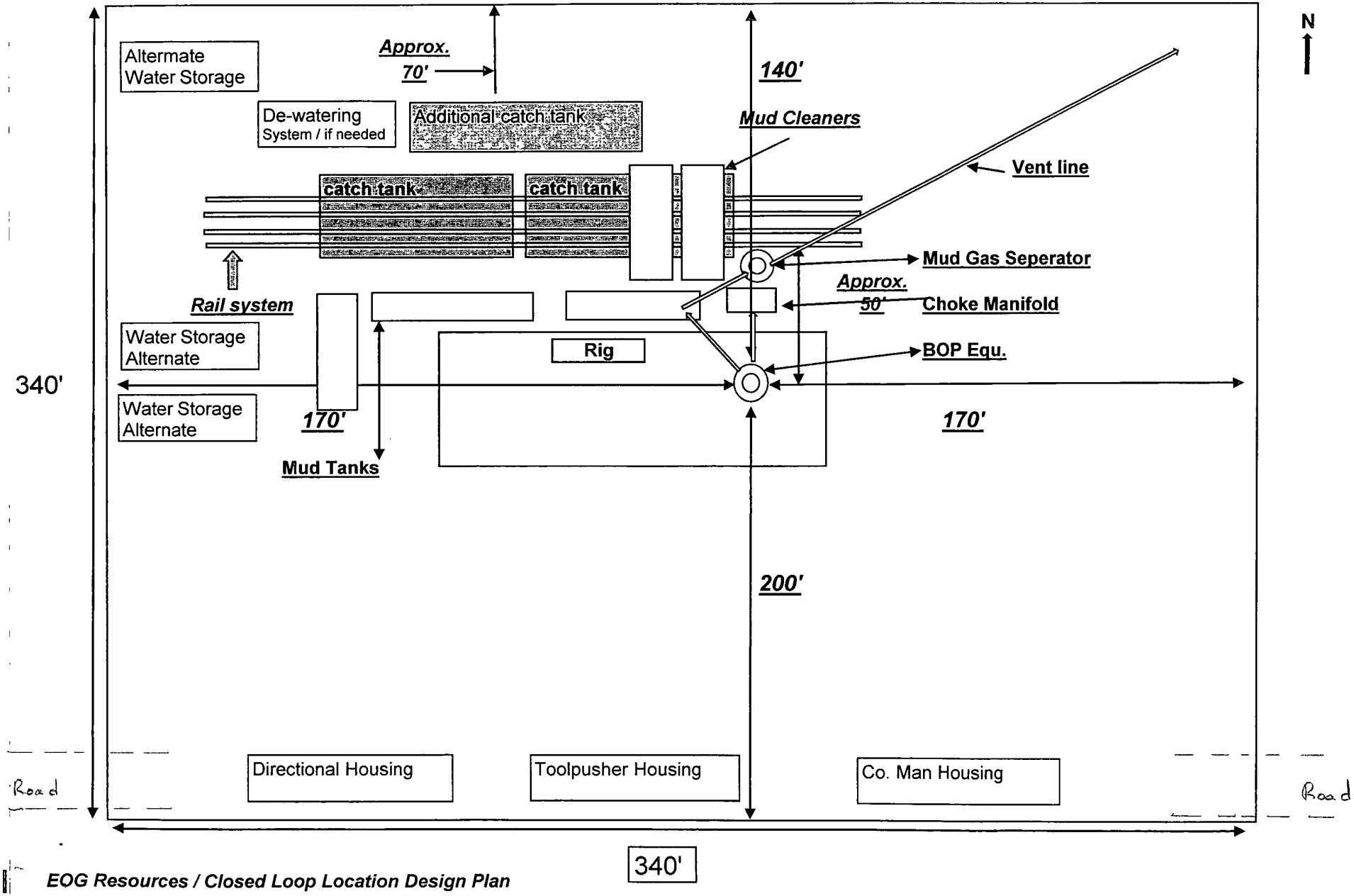
EXHIBIT 4
Vaca 24 Fed Com 3H



EOG Resources / Closed Loop Location Design Plan

Not to scale

6/30/2008

PATHFINDER

A Schlumberger Company

EOG Resources, Inc.

Lea County
Vaca "24" Fed Com
#3H
OH

Plan: Plan #1

Pathfinder X & Y Report

06 October, 2011

PATHFINDER

A Schlumberger Company

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

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 Vaca "24" Fed Com

Site Position:		**Northing:**	404,217 700 usft	**Latitude:**	32° 6' 31.608 N
From:	Map	**Easting:**	747,889.800 usft	**Longitude:**	103° 31' 57.864 W
Position Uncertainty:	0 0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.43 °

Well #3H

Well Position	**+N/-S**	0.0 usft	**Northing:**	404,224.300 usft	**Latitude:**	32° 6' 31.603 N
	+E/-W	0.0 usft	**Easting:**	748,849.700 usft	**Longitude:**	103° 31' 46.704 W
Position Uncertainty		0 0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,339.4 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/6/2011	7 51	60.10	48,559

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	358 95

Survey Tool Program **Date** 10/6/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
- 0.0	16,786.3	Plan #1 (OH)	MWD	MWD - Standard

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0.0	0.00	0.00	0 0	-3,369.4	0.0	0.0	0.0	0.00	404,224.30	748,849.70
100.0	0.00	0.00	100.0	-3,269.4	0 0	0.0	0.0	0.00	404,224.30	748,849.70
200 0	0.00	0.00	200.0	-3,169.4	0.0	0 0	0.0	0 00	404,224.30	748,849 70
300 0	0.00	0.00	300 0	-3,069.4	0.0	0.0	0 0	0.00	404,224.30	748,849 70
400.0	0.00	0.00	400.0	-2,969.4	0.0	0.0	0 0	0 00	404,224.30	748,849.70
500.0	0.00	0 00	500.0	-2,869.4	0.0	0 0	0.0	0.00	404,224.30	748,849 70
600.0	0.00	0 00	600.0	-2,769 4	0 0	0.0	0.0	0.00	404,224 30	748,849 70
700.0	0.00	0.00	700.0	-2,669.4	0 0	0.0	0 0	0 00	404,224.30	748,849.70
800.0	0.00	0 00	800 0	-2,569.4	0.0	0.0	0.0	0.00	404,224.30	748,849.70
900 0	0.00	0.00	900.0	-2,469 4	0.0	0 0	0.0	0.00	404,224.30	748,849.70
1,000.0	0.00	0.00	1,000.0	-2,369 4	0.0	0.0	0.0	0.00	404,224.30	748,849.70
1,100.0	0 00	0.00	1,100.0	-2,269 4	0 0	0.0	0 0	0 00	404,224.30	748,849.70
1,200.0	0.00	0.00	1,200.0	-2,169.4	0 0	0.0	0.0	0.00	404,224.30	748,849.70
1,300.0	0.00	0 00	1,300.0	-2,069 4	0.0	0.0	0.0	0 00	404,224 30	748,849.70
1,400.0	0 00	0 00	1,400.0	-1,969.4	0 0	0 0	0.0	0.00	404,224.30	748,849.70
1,500 0	0 00	0 00	1,500.0	-1,869.4	0 0	0 0	0 0	0.00	404,224 30	748,849.70
1,600.0	0.00	0.00	1,600.0	-1,769.4	0.0	0.0	0.0	0.00	404,224.30	748,849.70
1,700 0	0.00	0.00	1,700 0	-1,669.4	0.0	0.0	0.0	0.00	404,224.30	748,849.70
1,800 0	0.00	0.00	1,800 0	-1,569 4	0 0	0.0	0 0	0.00	404,224 30	748,849.70
1,900.0	0.00	0 00	1,900.0	-1,469.4	0.0	0.0	0.0	0.00	404,224 30	748,849.70
2,000.0	0 00	0.00	2,000.0	-1,369.4	0.0	0 0	0.0	0 00	404,224.30	748,849 70
2,100.0	0.00	0.00	2,100.0	-1,269.4	0 0	0 0	0.0	0.00	404,224.30	748,849 70
2,200.0	0.00	0 00	2,200.0	-1,169.4	0 0	0 0	0.0	0.00	404,224.30	748,849 70
2,300 0	0 00	0 00	2,300.0	-1,069.4	0 0	0.0	0.0	0.00	404,224.30	748,849.70
2,400 0	0 00	0.00	2,400.0	-969.4	0.0	0 0	0.0	0.00	404,224.30	748,849.70
2,500.0	0.00	0 00	2,500.0	-869.4	0.0	0.0	0 0	0.00	404,224.30	748,849.70
2,600.0	0 00	0.00	2,600.0	-769 4	0.0	0.0	0.0	0.00	404,224.30	748,849.70

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #3H
Project:	Lea County	TVD Reference:	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	MD Reference:	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,700.0	0 00	0 00	2,700.0	-669.4	0 0	0.0	0.0	0.00	404,224.30	748,849.70
2,800.0	0.00	0.00	2,800.0	-569.4	0 0	0.0	0.0	0.00	404,224.30	748,849.70
2,900.0	0 00	0.00	2,900 0	-469 4	0 0	0.0	0.0	0 00	404,224.30	748,849 70
3,000.0	0 00	0.00	3,000 0	-369.4	0.0	0.0	0 0	0.00	404,224 30	748,849.70
3,100 0	0.00	0.00	3,100.0	-269.4	0.0	0 0	0.0	0.00	404,224 30	748,849.70
3,200.0	0.00	0.00	3,200.0	-169.4	0 0	0 0	0.0	0.00	404,224.30	748,849 70
3,300.0	0.00	0 00	3,300 0	-69 4	0 0	0.0	0.0	0 00	404,224.30	748,849.70
3,400 0	0 00	0 00	3,400.0	30.6	0 0	0.0	0.0	0 00	404,224 30	748,849 70
3,500.0	0 00	0.00	3,500 0	130.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
3,600 0	0 00	0.00	3,600.0	230.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
3,700 0	0.00	0.00	3,700.0	330.6	0.0	0.0	0.0	0.00	404,224 30	748,849.70
3,800.0	0 00	0.00	3,800 0	430 6	0 0	0.0	0 0	0.00	404,224.30	748,849.70
3,900 0	0.00	0.00	3,900.0	530 6	0 0	0.0	0.0	0.00	404,224 30	748,849 70
4,000.0	0.00	0 00	4,000.0	630.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
4,100 0	0.00	0.00	4,100 0	730.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
4,200 0	0.00	0 00	4,200 0	830.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
4,300.0	0.00	0 00	4,300.0	930 6	0 0	0.0	0.0	0 00	404,224.30	748,849.70
4,400.0	0 00	0.00	4,400 0	1,030 6	0.0	0.0	0.0	0 00	404,224 30	748,849.70
4,500.0	0 00	0.00	4,500.0	1,130.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
4,600.0	0.00	0.00	4,600.0	1,230.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
4,700.0	0 00	0 00	4,700.0	1,330.6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
4,800.0	0 00	0.00	4,800 0	1,430.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
4,900.0	0 00	0.00	4,900.0	1,530.6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
5,000.0	0 00	0.00	5,000 0	1,630.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
5,100 0	0.00	0.00	5,100 0	1,730.6	0.0	0 0	0.0	0 00	404,224 30	748,849.70
5,200.0	0.00	0.00	5,200 0	1,830.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
5,300 0	0.00	0 00	5,300.0	1,930.6	0.0	0.0	0.0	0 00	404,224.30	748,849.70

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,400 0	0 00	0 00	5,400 0	2,030.6	0 0	0.0	0 0	0.00	404,224.30	748,849.70
5,500 0	0.00	0 00	5,500 0	2,130 6	0 0	0 0	0.0	0 00	404,224 30	748,849 70
5,600.0	0 00	0.00	5,600.0	2,230.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
5,700 0	0 00	0.00	5,700.0	2,330 6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
5,800 0	0 00	0 00	5,800.0	2,430.6	0 0	0.0	0.0	0.00	404,224.30	748,849.70
5,900 0	0 00	0 00	5,900.0	2,530.6	0 0	0 0	0.0	0 00	404,224.30	748,849.70
6,000.0	0 00	0 00	6,000 0	2,630 6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
6,100.0	0.00	0 00	6,100.0	2,730.6	0 0	0.0	0.0	0.00	404,224.30	748,849.70
6,200.0	0 00	0.00	6,200.0	2,830 6	0.0	0.0	0.0	0 00	404,224.30	748,849 70
6,300.0	0.00	0.00	6,300.0	2,930 6	0.0	0.0	0.0	0.00	404,224 30	748,849 70
6,400 0	0.00	0 00	6,400.0	3,030.6	0 0	0 0	0.0	0.00	404,224.30	748,849.70
6,500.0	0 00	0 00	6,500 0	3,130.6	0 0	0 0	0.0	0.00	404,224 30	748,849 70
6,600.0	0.00	0 00	6,600.0	3,230.6	0.0	0.0	0.0	0 00	404,224.30	748,849.70
6,700.0	0.00	0.00	6,700.0	3,330 6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
6,800 0	0 00	0.00	6,800.0	3,430.6	0 0	0.0	0 0	0.00	404,224.30	748,849 70
6,900 0	0 00	0.00	6,900.0	3,530.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
7,000 0	0.00	0.00	7,000.0	3,630.6	0 0	0.0	0.0	0.00	404,224.30	748,849 70
7,100.0	0.00	0.00	7,100.0	3,730.6	0 0	0.0	0 0	0 00	404,224.30	748,849.70
7,200.0	0 00	0.00	7,200.0	3,830.6	0 0	0.0	0.0	0.00	404,224.30	748,849.70
7,300.0	0.00	0.00	7,300.0	3,930 6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
7,400.0	0.00	0.00	7,400.0	4,030 6	0 0	0.0	0.0	0 00	404,224 30	748,849.70
7,500 0	0.00	0 00	7,500 0	4,130.6	0.0	0 0	0 0	0.00	404,224.30	748,849 70
7,600.0	0 00	0.00	7,600 0	4,230.6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
7,700 0	0 00	0.00	7,700 0	4,330 6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
7,800.0	0 00	0.00	7,800 0	4,430.6	0.0	0.0	0.0	0 00	404,224 30	748,849.70
7,900 0	0 00	0.00	7,900 0	4,530.6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
8,000.0	0.00	0 00	8,000.0	4,630.6	0.0	0.0	0.0	0 00	404,224.30	748,849.70

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369 4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,100 0	0.00	0.00	8,100 0	4,730.6	0.0	0 0	0.0	0.00	404,224 30	748,849.70
8,200.0	0.00	0.00	8,200 0	4,830 6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
8,300 0	0.00	0 00	8,300 0	4,930 6	0.0	0.0	0 0	0.00	404,224 30	748,849.70
8,400 0	0 00	0.00	8,400 0	5,030 6	0.0	0.0	0.0	0.00	404,224.30	748,849.70
8,500 0	0.00	0.00	8,500.0	5,130.6	0.0	0 0	0 0	0.00	404,224.30	748,849.70
8,600.0	0.00	0.00	8,600.0	5,230.6	0.0	0.0	0.0	0.00	404,224.30	748,849 70
8,700.0	0.00	0.00	8,700.0	5,330 6	0 0	0.0	0.0	0 00	404,224 30	748,849 70
8,800.0	0.00	0.00	8,800 0	5,430.6	0.0	0 0	0.0	0.00	404,224.30	748,849.70
8,900 0	0.00	0 00	8,900 0	5,530.6	0.0	0.0	0 0	0.00	404,224.30	748,849 70
8,972.5	0.00	0.00	8,972 5	5,603.1	0.0	0.0	0 0	0.00	404,224.30	748,849.70
8,975.0	0.30	358.95	8,975.0	5,605.6	0 0	0 0	0 0	12.00	404,224.31	748,849.70
9,000.0	3.30	358.95	9,000.0	5,630.6	0.8	0.0	0 8	12 00	404,225.09	748,849.69
9,025 0	6.30	358.95	9,024.9	5,655 5	2.9	-0.1	2 9	12 00	404,227.18	748,849 65
9,050 0	9.30	358.95	9,049 7	5,680 3	6.3	-0 1	6 3	12.00	404,230.57	748,849.59
9,075.0	12.30	358.95	9,074 2	5,704.8	11.0	-0.2	11.0	12.00	404,235.26	748,849.50
9,100.0	15 30	358 95	9,098.5	5,729.1	16 9	-0.3	16 9	12.00	404,241.22	748,849.39
9,125.0	18 30	358.95	9,122.4	5,753 0	24.1	-0 4	24 1	12.00	404,248.44	748,849.26
9,150 0	21.30	358.95	9,145 9	5,776.5	32.6	-0.6	32.6	12.00	404,256.91	748,849.10
9,175.0	24.30	358 95	9,169.0	5,799 6	42.3	-0.8	42.3	12 00	404,266.59	748,848 93
9,200 0	27 30	358.95	9,191.5	5,822.1	53 2	-1.0	53.2	12.00	404,277.47	748,848.73
9,225 0	30.30	358.95	9,213.4	5,844 0	65 2	-1.2	65 2	12.00	404,289 51	748,848 51
9,250.0	33.30	358.95	9,234.6	5,865 2	78 4	-1 4	78.4	12.00	404,302.68	748,848 27
9,275.0	36.30	358.95	9,255.2	5,885.8	92.6	-1.7	92.7	12.00	404,316.95	748,848.01
9,300.0	39.30	358 95	9,274 9	5,905.5	108.0	-2 0	108.0	12.00	404,332.27	748,847 73
9,325.0	42 30	358.95	9,293.8	5,924.4	124 3	-2 3	124 3	12.00	404,348.60	748,847.43
9,350.0	45.30	358.95	9,311 9	5,942.5	141 6	-2.6	141.6	12.00	404,365.89	748,847.11
9,375.0	48.30	358.95	9,329.0	5,959.6	159 8	-2 9	159.8	12.00	404,384.11	748,846 78

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,400 0	51.30	358.95	9,345.1	5,975.7	178.9	-3.3	178 9	12.00	404,403.20	748,846.43
9,425.0	54.30	358.95	9,360.2	5,990.8	198 8	-3.6	198.8	12 00	404,423.11	748,846.07
9,450 0	57.30	358 95	9,374 3	6,004 9	219.5	-4.0	219.5	12.00	404,443 78	748,845.69
9,475 0	60 30	358 95	9,387.2	6,017.8	240.9	-4.4	240.9	12.00	404,465 16	748,845.30
9,500.0	63.30	358.95	9,399.1	6,029.7	262 9	-4 8	262 9	12.00	404,487.19	748,844.90
9,525.0	66.30	358.95	9,409.7	6,040.3	285.5	-5.2	285.5	12 00	404,509.80	748,844 49
9,550.0	69.30	358.95	9,419 1	6,049 7	308 6	-5.6	308.7	12.00	404,532.94	748,844.06
9,575.0	72.30	358.95	9,427.4	6,058.0	332.2	-6.1	332.3	12.00	404,556.54	748,843.63
9,600 0	75 30	358.95	9,434 3	6,064.9	356.2	-6.5	356.3	12.00	404,580.54	748,843.19
9,625 0	78.30	358.95	9,440.0	6,070.6	380.6	-7 0	380.6	12.00	404,604.88	748,842 75
9,650.0	81.30	358 95	9,444 5	6,075.1	405.2	-7.4	405.2	12.00	404,629.48	748,842 30
9,675.0	84 30	358 95	9,447.6	6,078 2	430 0	-7 9	430.0	12 00	404,654 27	748,841.85
9,700.0	87 30	358.95	9,449.4	6,080 0	454 9	-8.3	455.0	12 00	404,679.20	748,841 39
9,722.5	90.00	358.95	9,450 0	6,080.6	477.4	-8 7	477.5	12.00	404,701.68	748,840.98
9,800.0	90.00	358.95	9,450.0	6,080.6	554.9	-10.1	555.0	0.00	404,779 17	748,839.57
9,900.0	90 00	358.95	9,450.0	6,080 6	654.9	-12.0	655.0	0.00	404,879.16	748,837.74
10,000.0	90 00	358.95	9,450.0	6,080.6	754.8	-13.8	755.0	0.00	404,979.14	748,835.91
10,100 0	90.00	358.95	9,450.0	6,080 6	854 8	-15.6	855.0	0 00	405,079.12	748,834.09
10,200.0	90.00	358.95	9,450.0	6,080 6	954 8	-17.4	955.0	0 00	405,179.11	748,832.26
10,300 0	90.00	358.95	9,450.0	6,080.6	1,054 8	-19.3	1,055 0	0.00	405,279 09	748,830.44
10,400 0	90.00	358 95	9,450.0	6,080.6	1,154.8	-21.1	1,155 0	0.00	405,379.07	748,828 61
10,500.0	90.00	358.95	9,450.0	6,080.6	1,254.8	-22 9	1,255.0	0 00	405,479.06	748,826.78
10,600.0	90.00	358.95	9,450.0	6,080 6	1,354.7	-24.7	1,355.0	0.00	405,579.04	748,824.96
10,700.0	90.00	358.95	9,450 0	6,080 6	1,454.7	-26 6	1,455 0	0.00	405,679 02	748,823 13
10,800 0	90.00	358.95	9,450.0	6,080 6	1,554.7	-28 4	1,555.0	0.00	405,779.01	748,821.31
10,900 0	90 00	358.95	9,450 0	6,080.6	1,654.7	-30 2	1,655.0	0.00	405,878 99	748,819.48
11,000.0	90.00	358 95	9,450.0	6,080 6	1,754 7	-32.0	1,755.0	0.00	405,978.97	748,817.66

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #3H
Project:	Lea County	TVD Reference:	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	MD Reference:	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
11,100.0	90 00	358.95	9,450.0	6,080 6	1,854.7	-33.9	1,855.0	0.00	406,078.96	748,815.83
11,200.0	90.00	358.95	9,450.0	6,080.6	1,954 6	-35.7	1,955.0	0 00	406,178.94	748,814.00
11,300 0	90.00	358.95	9,450.0	6,080.6	2,054.6	-37.5	2,055.0	0.00	406,278.92	748,812.18
11,400.0	90.00	358.95	9,450 0	6,080.6	2,154.6	-39 3	2,155 0	0.00	406,378.91	748,810.35
11,500.0	90 00	358 95	9,450.0	6,080.6	2,254.6	-41.2	2,255.0	0 00	406,478.89	748,808.53
11,600 0	90.00	358 95	9,450 0	6,080 6	2,354 6	-43.0	2,355.0	0.00	406,578 87	748,806.70
11,700.0	90.00	358.95	9,450.0	6,080.6	2,454.6	-44.8	2,455 0	0.00	406,678.86	748,804.87
11,800.0	90.00	358.95	9,450 0	6,080 6	2,554 5	-46.7	2,555.0	0.00	406,778.84	748,803 05
11,900.0	90.00	358 95	9,450 0	6,080.6	2,654.5	-48.5	2,655.0	0.00	406,878 82	748,801.22
12,000.0	90.00	358 95	9,450.0	6,080 6	2,754.5	-50.3	2,755 0	0.00	406,978.81	748,799.40
12,100.0	90.00	358 95	9,450.0	6,080.6	2,854.5	-52.1	2,855.0	0.00	407,078.79	748,797.57
12,200.0	90.00	358 95	9,450.0	6,080.6	2,954.5	-54.0	2,955.0	0 00	407,178.77	748,795.74
12,300.0	90.00	358.95	9,450.0	6,080.6	3,054 5	-55.8	3,055.0	0 00	407,278.76	748,793.92
12,400.0	90 00	358.95	9,450 0	6,080.6	3,154 4	-57 6	3,155 0	0.00	407,378 74	748,792.09
12,500.0	90.00	358.95	9,450.0	6,080 6	3,254 4	-59.4	3,255.0	0 00	407,478.72	748,790.27
12,600 0	90 00	358 95	9,450 0	6,080.6	3,354 4	-61.3	3,355.0	0.00	407,578.71	748,788.44
12,700 0	90 00	358 95	9,450.0	6,080 6	3,454 4	-63.1	3,455.0	0.00	407,678.69	748,786.61
12,800 0	90.00	358 95	9,450 0	6,080 6	3,554 4	-64.9	3,555 0	0.00	407,778.67	748,784 79
12,900 0	90.00	358.95	9,450 0	6,080 6	3,654 4	-66 7	3,655.0	0 00	407,878.66	748,782.96
13,000.0	90.00	358.95	9,450.0	6,080.6	3,754.3	-68 6	3,755.0	0.00	407,978.64	748,781.14
13,100.0	90.00	358.95	9,450.0	6,080.6	3,854 3	-70.4	3,855.0	0.00	408,078.62	748,779.31
13,200.0	90.00	358.95	9,450.0	6,080.6	3,954.3	-72.2	3,955.0	0.00	408,178 61	748,777 48
13,300.0	90.00	358.95	9,450.0	6,080 6	4,054.3	-74.0	4,055 0	0 00	408,278.59	748,775.66
13,400.0	90 00	358.95	9,450.0	6,080.6	4,154.3	-75.9	4,155.0	0.00	408,378 57	748,773.83
13,500.0	90.00	358 95	9,450.0	6,080 6	4,254 3	-77 7	4,255.0	0.00	408,478 56	748,772 01
13,600.0	90.00	358 95	9,450.0	6,080 6	4,354.2	-79 5	4,355.0	0.00	408,578.54	748,770.18
13,700.0	90.00	358.95	9,450.0	6,080 6	4,454.2	-81.3	4,455.0	0.00	408,678 52	748,768.35

Company:	EOG Resources, Inc	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
13,800 0	90.00	358.95	9,450 0	6,080 6	4,554.2	-83 2	4,555.0	0.00	408,778 51	748,766.53
13,900.0	90.00	358.95	9,450.0	6,080.6	4,654.2	-85.0	4,655.0	0 00	408,878.49	748,764.70
14,000 0	90 00	358.95	9,450.0	6,080.6	4,754.2	-86 8	4,755.0	0.00	408,978.47	748,762 88
14,100 0	90 00	358 95	9,450 0	6,080 6	4,854 2	-88.6	4,855.0	0 00	409,078.46	748,761 05
14,200 0	90.00	358.95	9,450 0	6,080 6	4,954 1	-90.5	4,955 0	0.00	409,178.44	748,759.22
14,300.0	90.00	358.95	9,450.0	6,080 6	5,054.1	-92.3	5,055.0	0.00	409,278.42	748,757.40
14,400 0	90.00	358.95	9,450 0	6,080.6	5,154.1	-94 1	5,155 0	0 00	409,378.41	748,755 57
14,500.0	90.00	358.95	9,450.0	6,080.6	5,254.1	-96.0	5,255.0	0.00	409,478.39	748,753.75
14,600.0	90.00	358.95	9,450.0	6,080 6	5,354 1	-97.8	5,355 0	0.00	409,578.37	748,751.92
14,700 0	90 00	358.95	9,450.0	6,080.6	5,454.1	-99.6	5,455.0	0.00	409,678.36	748,750 09
14,800.0	90.00	358.95	9,450.0	6,080 6	5,554.0	-101.4	5,555.0	0.00	409,778.34	748,748.27
14,900.0	90.00	358.95	9,450.0	6,080.6	5,654.0	-103 3	5,655.0	0 00	409,878.32	748,746.44
15,000.0	90 00	358 95	9,450 0	6,080 6	5,754.0	-105.1	5,755 0	0 00	409,978.31	748,744.62
15,100.0	90.00	358.95	9,450 0	6,080.6	5,854.0	-106.9	5,855.0	0 00	410,078.29	748,742.79
15,200 0	90.00	358 95	9,450.0	6,080 6	5,954.0	-108 7	5,955.0	0.00	410,178.27	748,740 96
15,300.0	90 00	358 95	9,450 0	6,080.6	6,054.0	-110 6	6,055.0	0.00	410,278.26	748,739 14
15,400.0	90.00	358.95	9,450 0	6,080.6	6,153.9	-112.4	6,155.0	0.00	410,378.24	748,737.31
15,500.0	90 00	358.95	9,450 0	6,080.6	6,253.9	-114.2	6,255 0	0.00	410,478.22	748,735 49
15,600.0	90.00	358 95	9,450.0	6,080.6	6,353.9	-116.0	6,355.0	0.00	410,578.21	748,733.66
15,700 0	90.00	358.95	9,450.0	6,080.6	6,453 9	-117 9	6,455 0	0.00	410,678.19	748,731.84
15,800 0	90.00	358 95	9,450 0	6,080.6	6,553.9	-119 7	6,555.0	0 00	410,778 17	748,730 01
15,900.0	90.00	358.95	9,450.0	6,080.6	6,653 9	-121.5	6,655.0	0.00	410,878.16	748,728.18
16,000.0	90 00	358 95	9,450.0	6,080 6	6,753.8	-123.3	6,755.0	0.00	410,978.14	748,726.36
16,100.0	90.00	358.95	9,450.0	6,080 6	6,853 8	-125.2	6,855 0	0 00	411,078.12	748,724.53
16,200 0	90 00	358.95	9,450.0	6,080 6	6,953.8	-127.0	6,955 0	0.00	411,178.11	748,722.71
16,300 0	90 00	358.95	9,450.0	6,080.6	7,053 8	-128 8	7,055 0	0.00	411,278.09	748,720.88
16,400.0	90 00	358 95	9,450.0	6,080 6	7,153.8	-130.6	7,155 0	0.00	411,378 07	748,719 05

Company:	EOG Resources, Inc.	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County	**TVD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Site:	Vaca "24" Fed Com	**MD Reference:**	KB = 30 @ 3369.4usft (Cactus #123)
Well:	#3H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
16,500.0	90 00	358 95	9,450.0	6,080.6	7,253.8	-132 5	7,255.0	0.00	411,478.06	748,717.23
16,600.0	90.00	358.95	9,450.0	6,080 6	7,353.7	-134.3	7,355.0	0.00	411,578.04	748,715.40
16,700.0	90.00	358.95	9,450.0	6,080 6	7,453.7	-136.1	7,455 0	0.00	411,678.02	748,713.58
16,786.3	90.00	358.95	9,450.0	6,080.6	7,540.0	-137.7	7,541 3	0.00	411,764 30	748,712 00

Checked By: _____ Approved By: _____ Date: _____