

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

415-11-011
FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SECRETARY'S POTASH

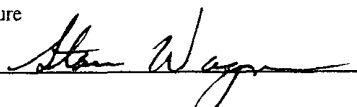
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. LC-063621a (SHL)
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator EOG Resources Inc.		7. Unit or CA Agreement Name and No
3a. Address P.O. Box 2267 Midland, Texas 79702		8. Lease Name and Well No. Sand Tank 17 Fed Com 2H
3b. Phone No. (include area code) 432-686-3689		9. API Well No. 30-015- 39167
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 560' FNL & 2385' FEL, U/L B Sec 17, T18S, R30E At proposed prod. zone 660' FNL & 2310' FWL, U/L C Sec 16, T18S, R30E		10. Field and Pool, or Exploratory Sand Tank, Bone Spring
14. Distance in miles and direction from nearest town or post office* Approximately +/- 6 miles South from Loco Hills, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 17, T18S, R30E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 560'	16. No. of Acres in lease 1280	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. 1420' to ST 17-3H	19. Proposed Depth 8134' TVD, 12552' MD	20. BLM/BIA Bond No. on file NM 2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3504' GL	22. Approximate date work will start* 8/1/11	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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM |

25. Signature 	Name (Printed/Typed) Stan Wagner	Date 4/15/11
Title Regulatory Analyst		
Approved by (Signautre) /s/ Jesse J. Juen	Name (Printed/Typed) /s/ Jesse J. Juen	Date JUN 21 2011
Title FOR STATE DIRECTOR	Office NM STATE 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)

ROS WELL CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

EOG RESOURCES, INC.
SAND TANK 17 FED COM NO. 2H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	260'
Top of Salt	450'
Base of Salt	1,270'
Yates	1,420'
Seven Rivers	1,840'
Queen	2,415'
Grayburg	2,800'
San Andres	3,320'
Bone Spring 1	4,350'
1 st Bone Spring Sand	7,020'
2 nd Bone Spring	7,320'
2 nd Bone Spring Sand	7,600'
Top "F" Sand	8,020'

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

Upper Permian Sands	0- 260'	Fresh Water
Queen	2,415'	Oil
Grayburg	2,800'	Oil
San Andres	3,320'	Oil
Bone Spring 1	4,350'	Oil
1 st Bone Spring Sand	7,020'	Oil
2 nd Bone Spring	7,320'	Oil
2 nd Bone Spring Sand	7,600'	Oil
Top "F" Sand	8,020'	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 11.75" casing at 350' 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
14.75"	0 - 350' 260'	11.75"	42#	H40	STC	1.125	1.25	1.60
11"	0-3,400'	8.625"	32#	J55	LTC	1.125	1.25	1.60
7.875"	0'-12,552'	5.500"	17#	L80 or N80	LTC	1.125	1.25	1.60

EOG RESOURCES, INC.
SAND TANK 17 FED COM NO. 2H

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
350'	250	14.8	1.35	Lead: Class C + 0.005 pps Static Free + 2% CaCl ₂ + 0.25 pps CelloFlake + 0.005 gps FP-6L (TOC @ surface)
3,400'	400	12.7	2.21	Lead: Class C + 2% SMS + 1.0% R-3 + 0.25 pps CelloFlake + 0.005 pps Static Free (TOC @ surface)
	200	14.8	1.32	Tail: Class C + 0.25 pps Celloflake + 0.005 pps Static Free + 0.005 gps FL-6L
12,552'	500	11.8	2.31	Lead: 50:50:10 Class C + 1.25% FL-52A + 0.30% ASA-301 + 0.15% ASA-301 + 0.15% SMS + 0.25 pps Celloflake + 0.005 pps Static Free (TOC @ 2,900')
	850	14.2	1.30	Tail: 50:50:2 Class 'H' + Class H + 0.65% FL-52A + 0.20% CD-32 + 0.20% SMS + 5% Salt + 0.15% R-3 + 0.005 pps 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:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a double ram-type (5,000 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 3000/ 250 psig and the annular preventer to 2500/ 250 psig.

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.

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.

EOG RESOURCES, INC.
SAND TANK 17 FED COM NO. 2H

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	Type	Weight (ppg)	Viscosity	Water Loss
0 - 350 2800	Fresh Water Gel	8.6-8.8	28-34	N/c
350' - 3,400'	Saturated Brine	10.0-10.2	28-34	N/c
3,400' - 7,582'	Fresh Water	8.4-8.6	28-34	N/c
7,582' - 12,552'	Cut Brine	8.5-9.0	28-34	N/c
Lateral				

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 intermediate casing point to TD.
- (D) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM: *See COA*

No open hole logs are planned.

GR-CCL logs may be run in cased hole for depth control.

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

The estimated bottom-hole temperature (BHT) at TD is 143 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 3522 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

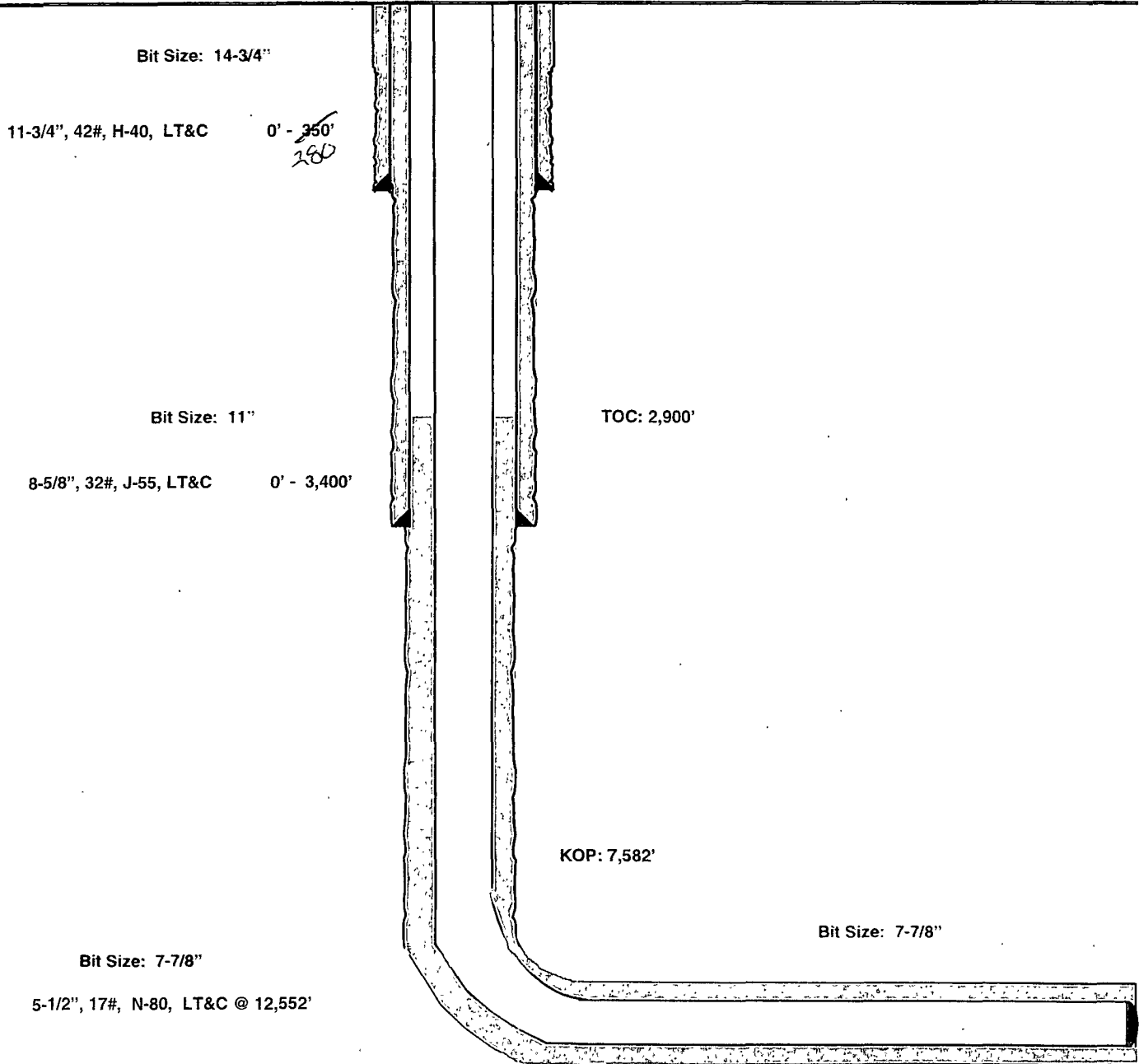
Sand Tank 17 Fed Com #2H
Sand Tank
Eddy County, New Mexico

560' FNL
2385' FEL
Section 17
T-18-S, R-30-E

Proposed Wellbore

API: 30-015-*****

KB: 3,523.5'
GL: 3,504.5'



1st Bone Spring Sand Lateral:
12,552' MD, 8134' TVD

BH Location: 660' FNL & 2310' FWL
Section 16
T-18-S, R-30-E



EOG Resources, Inc.

Eddy County

Sand Tank "17" Fed. Com

#2H

OH

Plan: Design #1

Pathfinder X & Y Planning Report

31 March, 2011

PATHFINDER
A Schlumberger Company

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

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

Site:	Sand Tank "17" Fed. Com
Site Position:	
From: Map	
Position Uncertainty:	0.00 usft
Northing:	637,852.200 usft
Easting:	604,691.600 usft
Slot Radius:	13-3/16 "
Latitude:	32° 45' 11.112 N
Longitude:	103° 59' 34.083 W
Grid Convergence:	0.18 °

Well:	#2H
Well Position	
+N/S	0.00 usft
+E/W	0.00 usft
Position Uncertainty	0.00 usft
Northing:	637,852.200 usft
Easting:	604,691.600 usft
Wellhead Elevation:	usft
Latitude:	32° 45' 11.112 N
Longitude:	103° 59' 34.083 W
Ground Level:	3,504.50 usft

Wellbore:	OH
Magnetics	
Model Name	Sample Date
Declination	Dip Angle
Field Strength	
IGRF200510	03/31/11
7.83	60.63
48,944	

Design:	Design #1
Audit Notes:	
Version:	Phase: PLAN Tie On Depth: 0.00
Vertical Section:	
Depth From (TVD)	+N/S
(usft)	(usft)
+E/W	Direction
(usft)	(°)
0.00	0.00
0.00	91.19

Survey Tool Program	Date 03/31/11
From	To
(usft)	(usft)
Survey (Wellbore)	Tool Name
Description	
0.00	12,551.67 Design #1 (OH)
MWD	MWD - Standard



Pathfinder
Pathfinder X & Y Planning Report



Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	3,523.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
100.00	0.00	0.00	100.00	3,423.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
200.00	0.00	0.00	200.00	3,323.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
300.00	0.00	0.00	300.00	3,223.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
400.00	0.00	0.00	400.00	3,123.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
500.00	0.00	0.00	500.00	3,023.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
600.00	0.00	0.00	600.00	2,923.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
700.00	0.00	0.00	700.00	2,823.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
800.00	0.00	0.00	800.00	2,723.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
900.00	0.00	0.00	900.00	2,623.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,000.00	0.00	0.00	1,000.00	2,523.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,100.00	0.00	0.00	1,100.00	2,423.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,200.00	0.00	0.00	1,200.00	2,323.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,300.00	0.00	0.00	1,300.00	2,223.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,400.00	0.00	0.00	1,400.00	2,123.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,500.00	0.00	0.00	1,500.00	2,023.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,600.00	0.00	0.00	1,600.00	1,923.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,700.00	0.00	0.00	1,700.00	1,823.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,800.00	0.00	0.00	1,800.00	1,723.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
1,900.00	0.00	0.00	1,900.00	1,623.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,000.00	0.00	0.00	2,000.00	1,523.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,100.00	0.00	0.00	2,100.00	1,423.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,200.00	0.00	0.00	2,200.00	1,323.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,300.00	0.00	0.00	2,300.00	1,223.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,400.00	0.00	0.00	2,400.00	1,123.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,500.00	0.00	0.00	2,500.00	1,023.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,600.00	0.00	0.00	2,600.00	923.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	



Pathfinder
Pathfinder X & Y Planning Report



Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,700.00	0.00	0.00	2,700.00	823.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,800.00	0.00	0.00	2,800.00	723.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
2,900.00	0.00	0.00	2,900.00	623.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,000.00	0.00	0.00	3,000.00	523.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,100.00	0.00	0.00	3,100.00	423.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,200.00	0.00	0.00	3,200.00	323.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,300.00	0.00	0.00	3,300.00	223.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,400.00	0.00	0.00	3,400.00	123.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,500.00	0.00	0.00	3,500.00	23.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,600.00	0.00	0.00	3,600.00	-76.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,700.00	0.00	0.00	3,700.00	-176.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,800.00	0.00	0.00	3,800.00	-276.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
3,900.00	0.00	0.00	3,900.00	-376.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,000.00	0.00	0.00	4,000.00	-476.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,100.00	0.00	0.00	4,100.00	-576.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,200.00	0.00	0.00	4,200.00	-676.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,300.00	0.00	0.00	4,300.00	-776.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,400.00	0.00	0.00	4,400.00	-876.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,500.00	0.00	0.00	4,500.00	-976.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,600.00	0.00	0.00	4,600.00	-1,076.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,700.00	0.00	0.00	4,700.00	-1,176.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,800.00	0.00	0.00	4,800.00	-1,276.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
4,900.00	0.00	0.00	4,900.00	-1,376.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,000.00	0.00	0.00	5,000.00	-1,476.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,100.00	0.00	0.00	5,100.00	-1,576.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,200.00	0.00	0.00	5,200.00	-1,676.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,300.00	0.00	0.00	5,300.00	-1,776.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
5,400.00	0.00	0.00	5,400.00	-1,876.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,500.00	0.00	0.00	5,500.00	-1,976.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,600.00	0.00	0.00	5,600.00	-2,076.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,700.00	0.00	0.00	5,700.00	-2,176.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,800.00	0.00	0.00	5,800.00	-2,276.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
5,900.00	0.00	0.00	5,900.00	-2,376.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,000.00	0.00	0.00	6,000.00	-2,476.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,100.00	0.00	0.00	6,100.00	-2,576.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,200.00	0.00	0.00	6,200.00	-2,676.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,300.00	0.00	0.00	6,300.00	-2,776.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,400.00	0.00	0.00	6,400.00	-2,876.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,500.00	0.00	0.00	6,500.00	-2,976.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,600.00	0.00	0.00	6,600.00	-3,076.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,700.00	0.00	0.00	6,700.00	-3,176.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,800.00	0.00	0.00	6,800.00	-3,276.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
6,900.00	0.00	0.00	6,900.00	-3,376.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,000.00	0.00	0.00	7,000.00	-3,476.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,100.00	0.00	0.00	7,100.00	-3,576.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,200.00	0.00	0.00	7,200.00	-3,676.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,300.00	0.00	0.00	7,300.00	-3,776.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,400.00	0.00	0.00	7,400.00	-3,876.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,500.00	0.00	0.00	7,500.00	-3,976.50	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
7,582.50	0.00	0.00	7,582.50	-4,059.00	0.00	0.00	0.00	0.00	637,852.20	604,691.60	
KOP-7582.50°MD,0.00°INC,0.00°AZI,7582.50°TVD											
7,600.00	2.10	91.19	7,600.00	-4,076.50	-0.01	0.32	0.32	12.00	637,852.19	604,691.92	
7,625.00	5.10	91.19	7,624.94	-4,101.44	-0.04	1.89	1.89	12.00	637,852.16	604,693.49	
7,650.00	8.10	91.19	7,649.78	-4,126.28	-0.10	4.76	4.76	12.00	637,852.10	604,696.36	

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
7,675.00	11.10	91.19	7,674.42	-4,150.92	-0.19	8.93	8.93	12.00	637,852.01	604,700.53	
7,700.00	14.10	91.19	7,698.82	-4,175.32	-0.30	14.38	14.38	12.00	637,851.90	604,705.98	
7,725.00	17.10	91.19	7,722.89	-4,199.39	-0.44	21.10	21.10	12.00	637,851.76	604,712.70	
7,750.00	20.10	91.19	7,746.59	-4,223.09	-0.60	29.07	29.07	12.00	637,851.60	604,720.67	
7,775.00	23.09	91.19	7,769.83	-4,246.33	-0.79	38.27	38.27	12.00	637,851.41	604,729.87	
7,800.00	26.09	91.19	7,792.56	-4,269.06	-1.01	48.67	48.68	12.00	637,851.19	604,740.27	
7,825.00	29.09	91.19	7,814.71	-4,291.21	-1.25	60.24	60.26	12.00	637,850.95	604,751.84	
7,850.00	32.09	91.19	7,836.23	-4,312.73	-1.52	72.96	72.98	12.00	637,850.68	604,764.56	
7,875.00	35.09	91.19	7,857.05	-4,333.55	-1.80	86.79	86.81	12.00	637,850.40	604,778.39	
7,900.00	38.09	91.19	7,877.12	-4,353.62	-2.11	101.69	101.71	12.00	637,850.09	604,793.29	
7,925.00	41.09	91.19	7,896.39	-4,372.89	-2.44	117.62	117.64	12.00	637,849.76	604,809.22	
7,950.00	44.09	91.19	7,914.79	-4,391.29	-2.79	134.53	134.56	12.00	637,849.41	604,826.13	
7,975.00	47.09	91.19	7,932.28	-4,408.78	-3.17	152.38	152.41	12.00	637,849.03	604,843.98	
8,000.00	50.09	91.19	7,948.82	-4,425.32	-3.55	171.12	171.16	12.00	637,848.65	604,862.72	
8,025.00	53.09	91.19	7,964.35	-4,440.85	-3.96	190.71	190.75	12.00	637,848.24	604,882.31	
8,050.00	56.09	91.19	7,978.83	-4,455.33	-4.38	211.08	211.12	12.00	637,847.82	604,902.68	
8,075.00	59.09	91.19	7,992.23	-4,468.73	-4.82	232.17	232.22	12.00	637,847.38	604,923.77	
8,100.00	62.09	91.19	8,004.51	-4,481.01	-5.28	253.94	254.00	12.00	637,846.92	604,945.54	
8,125.00	65.09	91.19	8,015.63	-4,492.13	-5.74	276.33	276.39	12.00	637,846.46	604,967.93	
8,150.00	68.08	91.19	8,025.56	-4,502.06	-6.22	299.26	299.32	12.00	637,845.98	604,990.86	
8,175.00	71.08	91.19	8,034.28	-4,510.78	-6.70	322.68	322.75	12.00	637,845.50	605,014.28	
8,200.00	74.08	91.19	8,041.76	-4,518.26	-7.20	346.53	346.60	12.00	637,845.00	605,038.13	
8,225.00	77.08	91.19	8,047.99	-4,524.49	-7.70	370.73	370.81	12.00	637,844.50	605,062.33	
8,250.00	80.08	91.19	8,052.94	-4,529.44	-8.21	395.23	395.32	12.00	637,843.99	605,086.83	
8,275.00	83.08	91.19	8,056.60	-4,533.10	-8.72	419.95	420.04	12.00	637,843.48	605,111.55	
8,300.00	86.08	91.19	8,058.96	-4,535.46	-9.24	444.83	444.93	12.00	637,842.96	605,136.43	



Pathfinder
Pathfinder X & Y Planning Report

PATHFINDER
A Schlumberger Company

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
8,324.33	89.00	91.19	8,060.00	-4,536.50	-9.75	469.14	469.24	12.00	637,842.45	605,160.74	
EOC-8324.33°MD,89.00°INC,91.19°AZI,8060.00°TVD											
8,400.00	89.00	91.19	8,061.32	-4,537.82	-11.32	544.77	544.89	0.00	637,840.88	605,236.37	
8,500.00	89.00	91.19	8,063.07	-4,539.57	-13.39	644.74	644.88	0.00	637,838.81	605,336.34	
8,600.00	89.00	91.19	8,064.81	-4,541.31	-15.47	744.70	744.86	0.00	637,836.73	605,436.30	
8,700.00	89.00	91.19	8,066.56	-4,543.06	-17.55	844.66	844.85	0.00	637,834.65	605,536.26	
8,800.00	89.00	91.19	8,068.30	-4,544.80	-19.62	944.63	944.83	0.00	637,832.58	605,636.23	
8,900.00	89.00	91.19	8,070.05	-4,546.55	-21.70	1,044.59	1,044.82	0.00	637,830.50	605,736.19	
9,000.00	89.00	91.19	8,071.79	-4,548.29	-23.78	1,144.55	1,144.80	0.00	637,828.42	605,836.15	
9,100.00	89.00	91.19	8,073.54	-4,550.04	-25.85	1,244.52	1,244.79	0.00	637,826.35	605,936.12	
9,200.00	89.00	91.19	8,075.28	-4,551.78	-27.93	1,344.48	1,344.77	0.00	637,824.27	606,036.08	
9,300.00	89.00	91.19	8,077.03	-4,553.53	-30.00	1,444.44	1,444.76	0.00	637,822.20	606,136.04	
9,400.00	89.00	91.19	8,078.77	-4,555.27	-32.08	1,544.41	1,544.74	0.00	637,820.12	606,236.01	
9,500.00	89.00	91.19	8,080.52	-4,557.02	-34.16	1,644.37	1,644.72	0.00	637,818.04	606,335.97	
9,600.00	89.00	91.19	8,082.26	-4,558.76	-36.23	1,744.33	1,744.71	0.00	637,815.97	606,435.93	
9,700.00	89.00	91.19	8,084.01	-4,560.51	-38.31	1,844.30	1,844.69	0.00	637,813.89	606,535.90	
9,800.00	89.00	91.19	8,085.75	-4,562.25	-40.39	1,944.26	1,944.68	0.00	637,811.81	606,635.86	
9,900.00	89.00	91.19	8,087.50	-4,564.00	-42.46	2,044.22	2,044.66	0.00	637,809.74	606,735.82	
10,000.00	89.00	91.19	8,089.24	-4,565.74	-44.54	2,144.19	2,144.65	0.00	637,807.66	606,835.79	
10,100.00	89.00	91.19	8,090.99	-4,567.49	-46.62	2,244.15	2,244.63	0.00	637,805.58	606,935.75	
10,200.00	89.00	91.19	8,092.73	-4,569.23	-48.69	2,344.11	2,344.62	0.00	637,803.51	607,035.71	
10,300.00	89.00	91.19	8,094.48	-4,570.98	-50.77	2,444.08	2,444.60	0.00	637,801.43	607,135.68	
10,400.00	89.00	91.19	8,096.23	-4,572.73	-52.85	2,544.04	2,544.59	0.00	637,799.35	607,235.64	
10,500.00	89.00	91.19	8,097.97	-4,574.47	-54.92	2,644.00	2,644.57	0.00	637,797.28	607,335.60	
10,600.00	89.00	91.19	8,099.72	-4,576.22	-57.00	2,743.97	2,744.56	0.00	637,795.20	607,435.57	
10,700.00	89.00	91.19	8,101.46	-4,577.96	-59.08	2,843.93	2,844.54	0.00	637,793.12	607,535.53	
10,800.00	89.00	91.19	8,103.21	-4,579.71	-61.15	2,943.89	2,944.53	0.00	637,791.05	607,635.49	

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed Com	MD Reference:	WELL @ 3523.50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
10,900.00	89.00	91.19	8,104.95	-4,581.45	-63.23	3,043.85	3,044.51	0.00	637,788.97	607,735.45	
11,000.00	89.00	91.19	8,106.70	-4,583.20	-65.30	3,143.82	3,144.50	0.00	637,786.90	607,835.42	
11,100.00	89.00	91.19	8,108.44	-4,584.94	-67.38	3,243.78	3,244.48	0.00	637,784.82	607,935.38	
11,200.00	89.00	91.19	8,110.19	-4,586.69	-69.46	3,343.74	3,344.47	0.00	637,782.74	608,035.34	
11,300.00	89.00	91.19	8,111.93	-4,588.43	-71.53	3,443.71	3,444.45	0.00	637,780.67	608,135.31	
11,400.00	89.00	91.19	8,113.68	-4,590.18	-73.61	3,543.67	3,544.44	0.00	637,778.59	608,235.27	
11,500.00	89.00	91.19	8,115.42	-4,591.92	-75.69	3,643.63	3,644.42	0.00	637,776.51	608,335.23	
11,600.00	89.00	91.19	8,117.17	-4,593.67	-77.76	3,743.60	3,744.40	0.00	637,774.44	608,435.20	
11,700.00	89.00	91.19	8,118.91	-4,595.41	-79.84	3,843.56	3,844.39	0.00	637,772.36	608,535.16	
11,800.00	89.00	91.19	8,120.66	-4,597.16	-81.92	3,943.52	3,944.37	0.00	637,770.28	608,635.12	
11,900.00	89.00	91.19	8,122.40	-4,598.90	-83.99	4,043.49	4,044.36	0.00	637,768.21	608,735.09	
12,000.00	89.00	91.19	8,124.15	-4,600.65	-86.07	4,143.45	4,144.34	0.00	637,766.13	608,835.05	
12,100.00	89.00	91.19	8,125.89	-4,602.39	-88.15	4,243.41	4,244.33	0.00	637,764.05	608,935.01	
12,200.00	89.00	91.19	8,127.64	-4,604.14	-90.22	4,343.38	4,344.31	0.00	637,761.98	609,034.98	
12,300.00	89.00	91.19	8,129.38	-4,605.88	-92.30	4,443.34	4,444.30	0.00	637,759.90	609,134.94	
12,400.00	89.00	91.19	8,131.13	-4,607.63	-94.38	4,543.30	4,544.28	0.00	637,757.82	609,234.90	
12,500.00	89.00	91.19	8,132.88	-4,609.38	-96.45	4,643.27	4,644.27	0.00	637,755.75	609,334.87	
12,552.16	89.00	91.19	8,133.79	-4,610.29	-97.53	4,695.41	4,696.42	0.00	637,754.67	609,387.01	
TD at 12552.16 - PBHL(ST17#2)											

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,582.50	7,582.50	0.00	0.00	KOP-7582.50°MD,0.00°INC,0.00°AZI,7582.50°TVD
8,324.33	8,060.00	-9.75	469.14	EOC-8324.33°MD,89.00°INC,91.19°AZI,8060.00°TVD
12,552.16	8,133.79	-97.53	4,695.41	TD at 12552.16



Pathfinder
Pathfinder X & Y Planning Report



Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3523.50usft (McVay #4)
Site:	Sand Tank "17" Fed. Com	MD Reference:	WELL @ 3523 50usft (McVay #4)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------

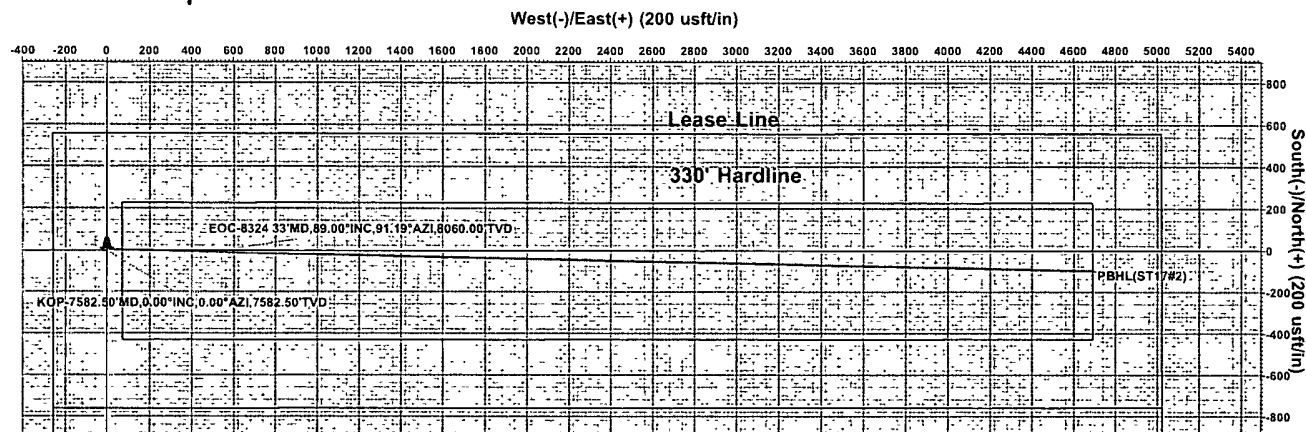


Azimuths to Grid North
True North: -0.18°
Magnetic North: 7.65°

Magnetic Field
Strength: 48943.8snT
Dip Angle: 60.63°
Date: 03/31/2011
Model: IGRF200510

PATHFINDER
A Schlumberger Company

Project: Eddy County
Site: Sand Tank "17" Fed. Com
Well: #2H
Wellbore: OH
Plan: Design #1 (#2H/OH)



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7582.50	0.00	0.00	7582.50	0.00	0.00	0.00	0.00	0.00	0.00
8324.33	89.00	91.19	8060.00	-9.75	469.14	12.00	91.19	469.24	
12552.16	89.00	91.19	8133.79	-97.53	4695.41	0.00	0.00	4695.42	PBHL(ST17#2)

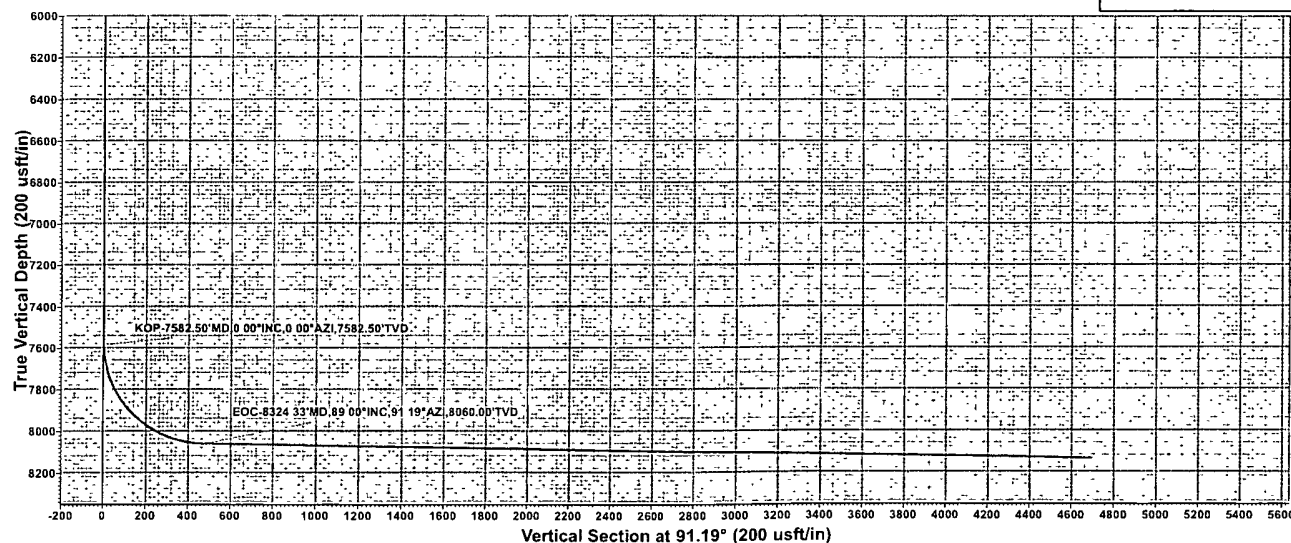
WELL DETAILS: #2H

Ground Elevation: 3504.50
RKB Elevation: WELL @ 3523.50usft (McVay #4)
Rig Name: McVay #4

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	637852.200	604691.600	32° 45' 11.112 N	103° 59' 34.083 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(ST17#2)	8133.79	-98.00	4695.40	637754.200	609387.000	Point



LEGEND

◆ Design #1

PROJECT DETAILS: Eddy 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

Plan Design #1 (#2H/OH)

Created By: Nate Bingham Date: 11/33, March 31/2011

Checked: _____ Date: _____

EOG RESOURCES, INC.
SAND TANK 17 FED COM 2H

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
5000 PSI BOPE
Sand Tank 17 Fed Com #2H

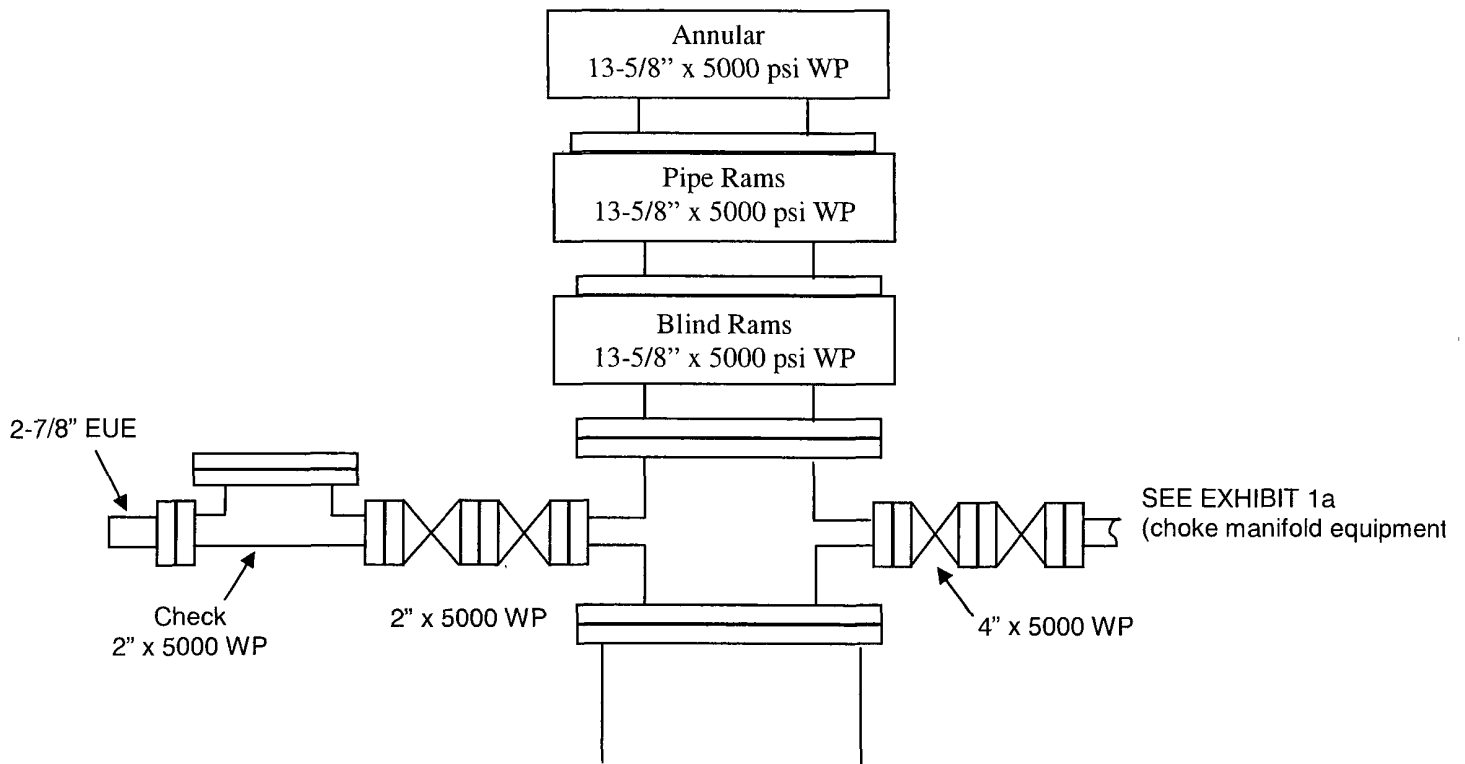
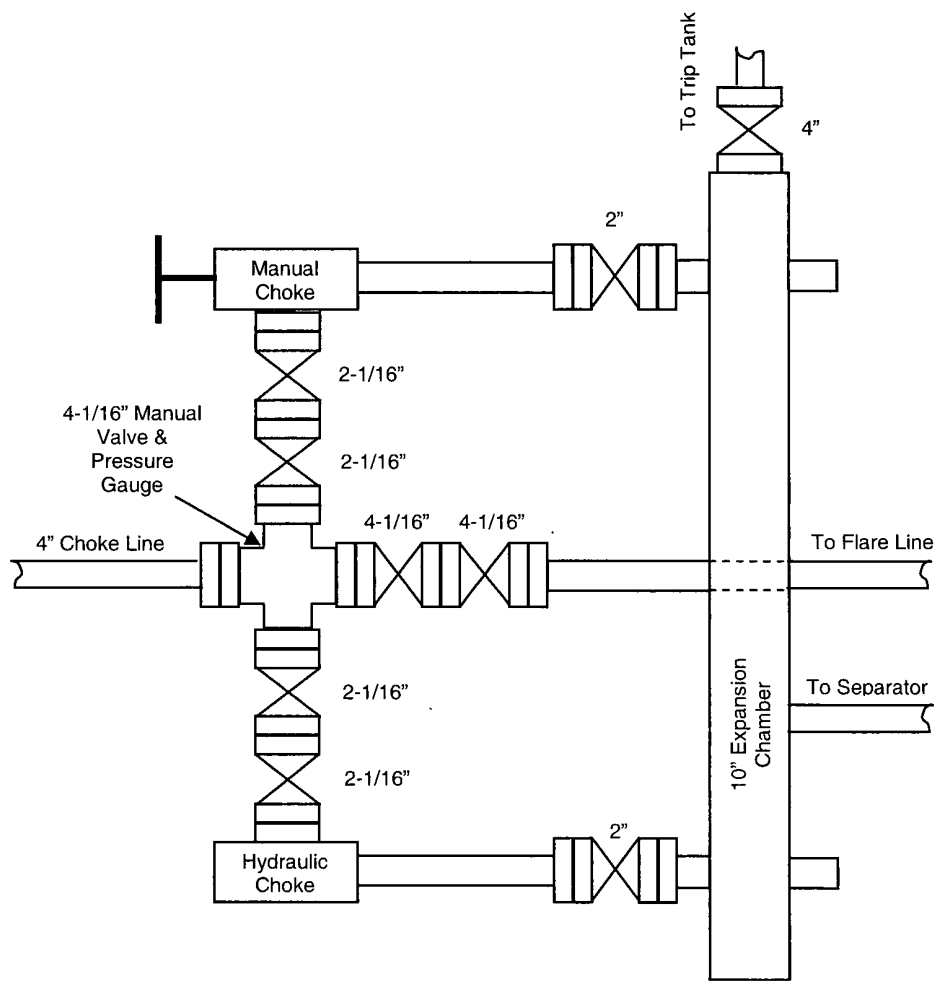
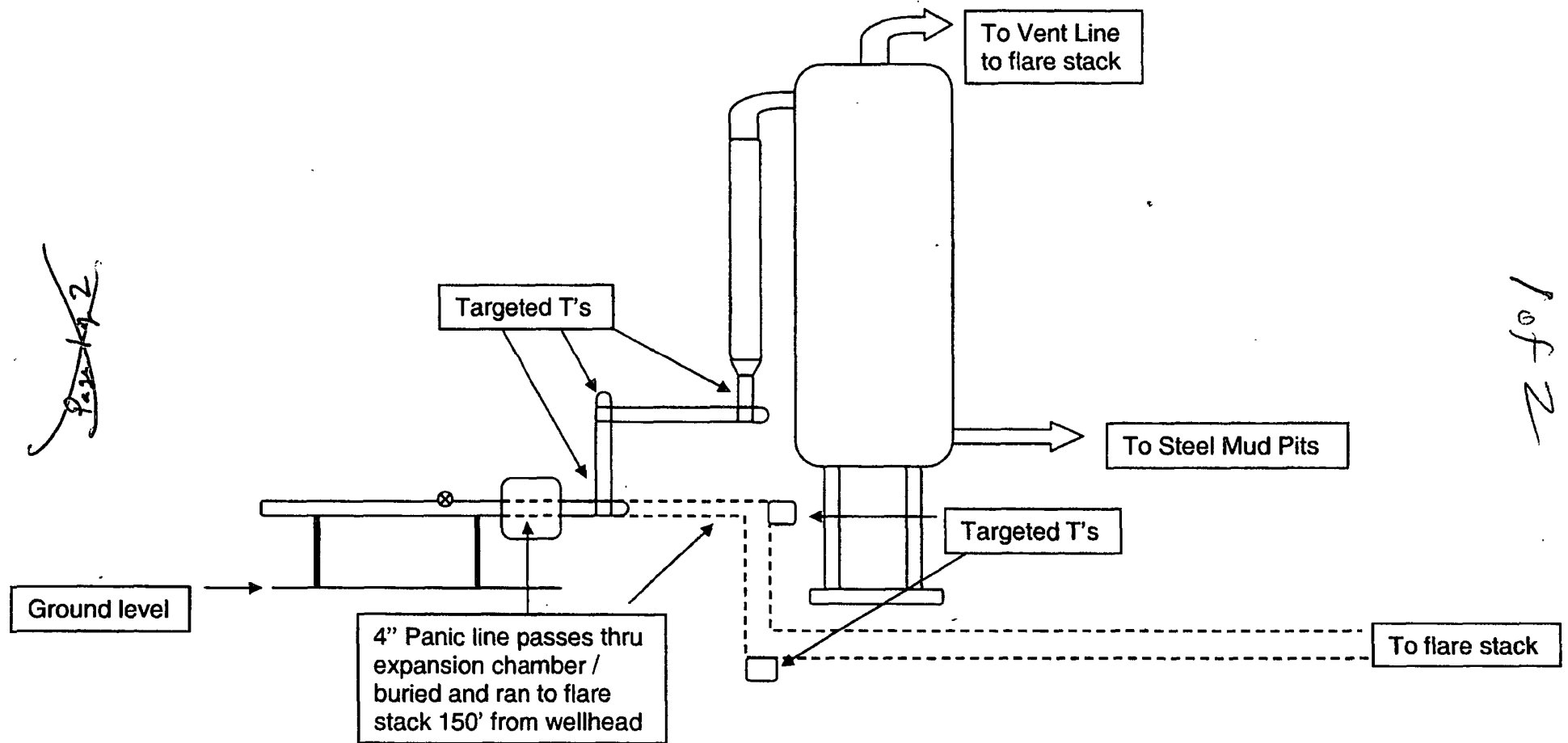


EXHIBIT 1a
EOG Resources, Inc.
5M Choke Manifold Equipment



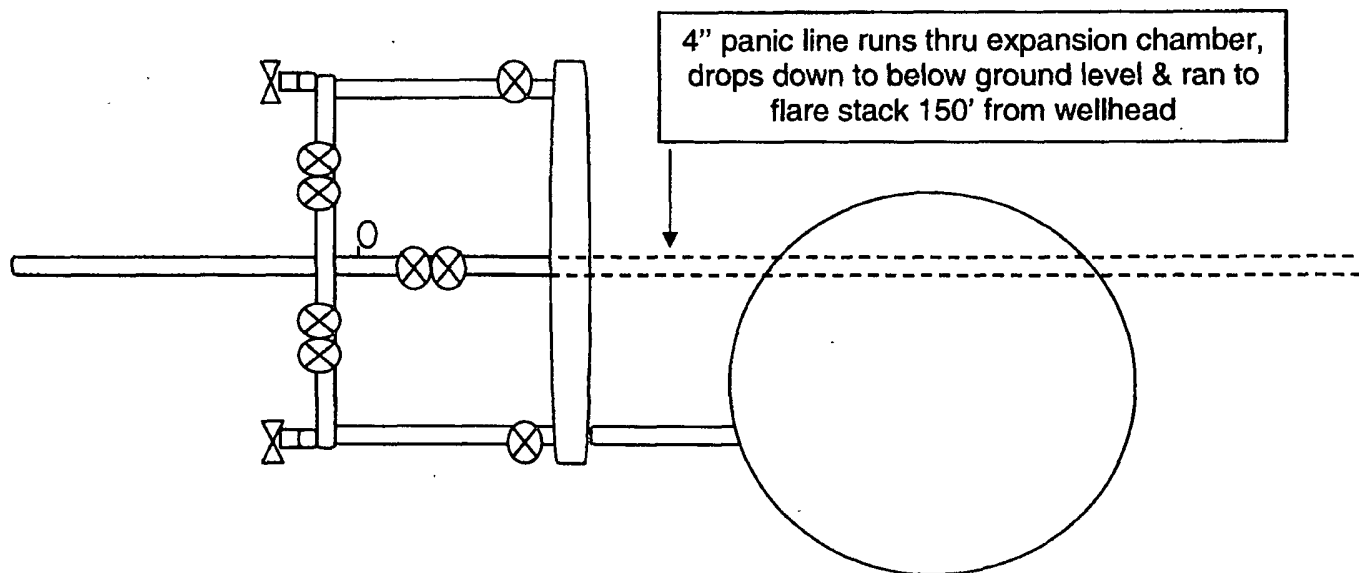
Profile View of Piping from Choke Manifold
to the Mud Gas Separator



~~Page 1 of 2~~

1 of 2

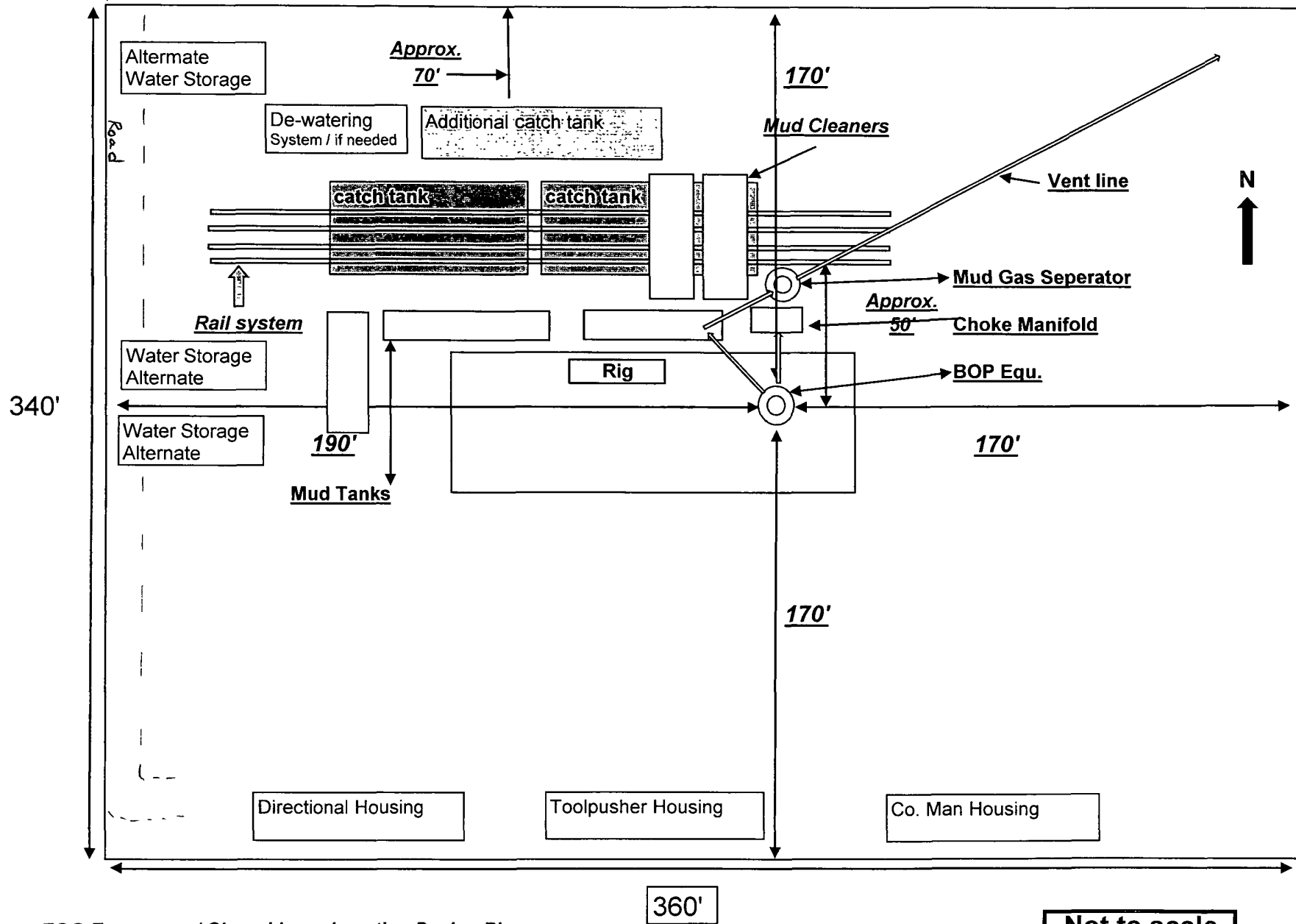
Aerial View of the Piping from the Choke
Manifold to the Mud Gas Separator



~~Per 242~~

2 of 2

EXHIBIT 4
Sand Tank 17 Fed Com 2H



DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator EOG RESOURCES INC OGRID # 7377
 20944 Well Name & # SAND TANK 17 FED COM # 2H Surface Type (F)(S)(P)
 Location: UL B, Sect 17, Township 18 s, RNG 30 e,
C - 10 - 18 - 30 Sub-surface Type (F)(S)(P)

A. Date C101 rec'd / / C101 reviewed / /

B. 1. Check mark, Information is OK on Forms:

OGRID X BONDING FED PROP CODE X WELL # X SIGNATURE X

2. Inactive Well list as of: 2/5/11 # wells 431, # Inactive wells 4

a. District Grant APD but see number of inactive wells:

No letter required X; Sent Letter to Operator , to Santa Fe

3. Additional Bonding as of: 2/11/11

a. District Denial because operator needs addition bonding:

No Letter required X; Sent Letter to Operator , To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required X; Sent Letter to Operator , To Santa Fe

C. C102 YES X, NO , Signature

1. Pool SAND TANK; BONE SPRING, Code 96832

a. Dedicated acreage 160, What Units 17: AB 165CD

b. SUR. Location Standard ; Non-Standard Location X OP Standard X

c. Well shares acres: Yes , No X, # of wells plus this well #

2. 2nd. Operator in same acreage, Yes , No X

Agreement Letter , Disagreement letter

3. Intent to Directional Drill Yes X, No

a. Dedicated acreage 160, What Units 17: AB 165CD

b. Bottomhole Location Standard , Non-Standard Bottomhole

4. Downhole Commingle: Yes , No X

a. Pool #2 , Code , Acres

Pool #3 , Code , Acres

Pool #4 , Code , Acres

5. POTASH Area Yes , No X

D. Blowout Preventer Yes X, No

E. H2S Yes X, No

F. C144 Pit Registration Yes X, No

G. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes , No X, NSL #

2. Non-Standard Proration: Yes , No X, NSP #

3. Simultaneous Dedication: Yes , No X, SD #

Number of wells Plus #

4. Injection order Yes , No X; PMX # or WFX #

5. SWD order Yes , NO X; SWD #

6. DHC from SF ; DHC-HOB ; Holding

7. OCD Approval Date 02/05/11

API #30-015-- 39167

8. Reviewers KB