

30-025-40435

EOG RESOURCES, INC.
PITCHBLEND 19 FED COM NO. 1H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1050'
Top of Salt	1,150'
Base of Salt	5,195'
Lamar	5,445'
Bell Canyon	5,475'
Cherry Canyon	6,445'
Brushy Canyon	8,065'
Bone Spring Lime	9,245'
TD	9,600'

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

Upper Permian Sands	0- 400'	Fresh Water
Lamar	5,445'	Oil
Bell Canyon	5,475'	Oil
Cherry Canyon	6,445'	Oil
Brushy Canyon	8,065'	Oil
Bone Spring Lime	9,245'	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 1075' 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 - 1075' _{1010'}	11.75"	42#	H40	STC	1.125	1.25	1.60
11"	0-4000'	8.625"	32#	J55	LTC	1.125	1.25	1.60
11"	4000'-5350'	8.625"	32#	HCK55	LTC	1.125	1.25	1.60
7.875"	0'-15,352'	5.500"	20#	HCP110	NSCC	1.125	1.25	1.60

EOG RESOURCES, INC.
PITCHBLEND 19 FED COM NO. 1H

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
10,75'	250	13.5	1.73	Lead: Class 'C' + 4.00% Bentonite + 0.40% CD-32 + 0.35% R-3 + 0.25 lb/sk Cello Flake
	250	14.8	1.33	Tail: Class 'C' + 0.15% R-3
5,350'	725	12.7	2.22	Lead: Class 'C' + 2.00% SMS + 10.00% Salt (10.331 lb/sk) + 1.00% R-3 + 0.25 lb/sk Cello Flake
	200	14.8	1.33	Tail: Class 'C' + 0.60% FL-62 + 0.45% CD-32 + 0.10% SMS + 0.30% R-3
BH Plug 9,400'- 9,600'	100	18.0	0.90	Class H + 0.005 lbs/sx Static Free + 5% Salt + 1.2% CD31 + 0.005 gps FP-6L
KO Plug 600'	300	18.0	0.90	Class H + 0.005 lbs/sx Static Free + 5% Salt + 1.2% CD31 + 0.005 gps FP-6L
15,352'	100	10.8	3.68	Lead 1: 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 + 2.55% R-21 + 8.00 lb/sk LCM-1
	300	11.8	2.38	Lead 2: 50:50:10 Class 'H' + 0.80% FL-52 + 0.30% ASA-301 + 0.50% SMS + 2.00% Salt (2.215 lb/sk) + 0.10% R-21 + 3.00 lb/sk LCM-1 + 0.25 lb/sk Cello Flake
	1100	14.2	1.28	Tail: 50:50:2 Class 'H' + 0.65% FL-52 + 0.50% CD-32 + 0.40% SMS + 2.00% Salt (0.961 lb/sk)

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:

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 3000/ 250 psig and the annular preventer to 2500/ 250 psig. The surface casing will be tested to 1400 psi for 30 minutes.

EOG RESOURCES, INC.
PITCHBLEND 19 FED COM NO. 1H

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. 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 – 1075' <i>1010'</i>	Fresh Water Gel	8.6-8.8	28-34	N/c
1075' – 5,350'	Saturated Brine	10.0-10.2	28-34	N/c
5,350' – 15,352'	Cut Brine	8.5-9.0	28-34	N/c

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) H₂S monitoring and detection equipment will be utilized from 1,100' to TD.

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

Open-hole logging are not planned for this well.

GR-CCL

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

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

EOG RESOURCES, INC.
PITCHBLEND 19 FED COM NO. 1H

The estimated bottom hole temperature (BHT) at TD is 160 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 4070 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

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

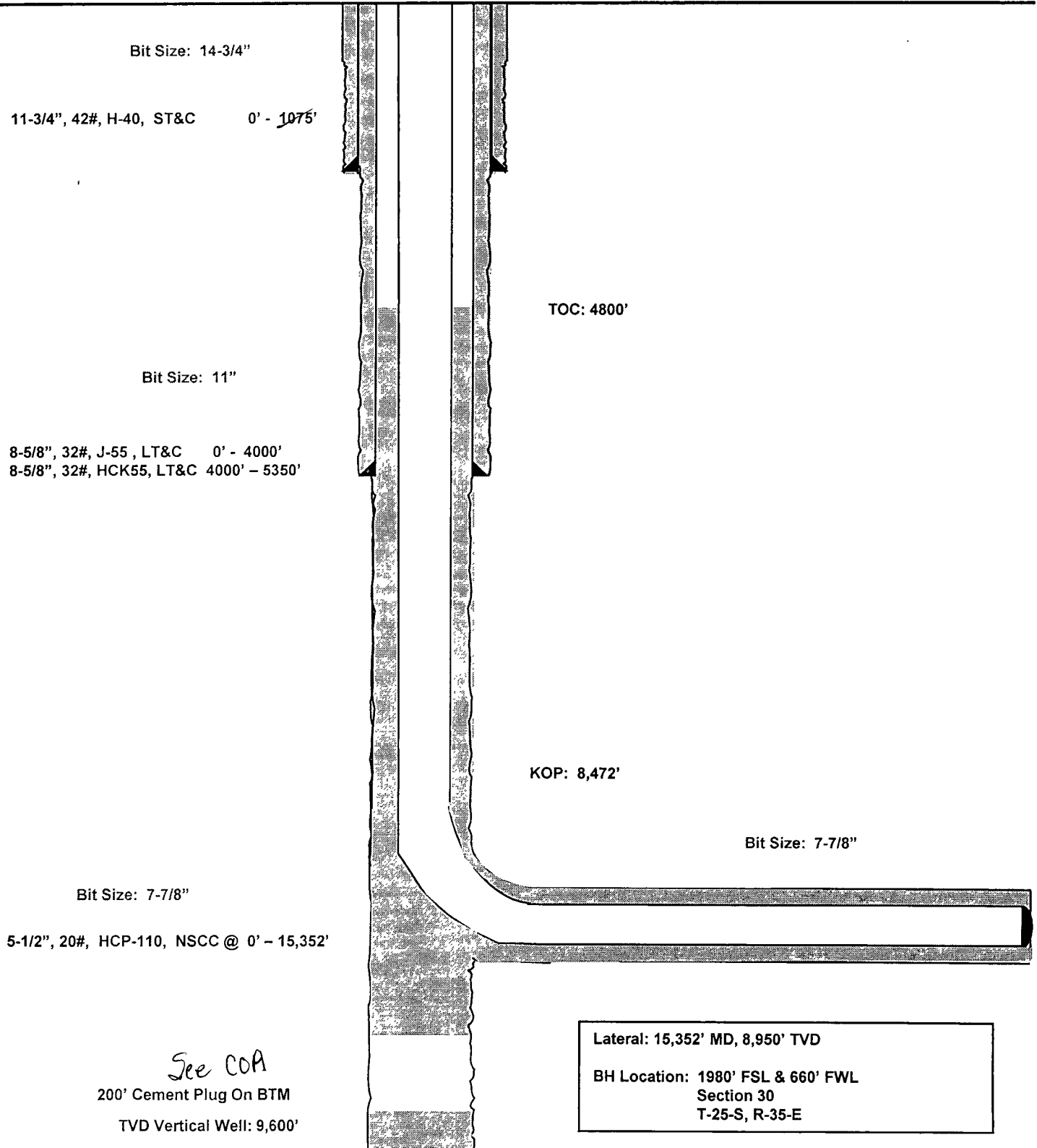
Pitchblende 19 Fed Com #1H
Red Hills
Lea County, New Mexico

1980' FNL
440' FWL
Section 19
T-25-S, R-35-E

Proposed Wellbore

KB: 3,372.3'
GL: 3,342.3'

API: 30-025-



Project: Red Hills
 Site: Pitchblende "19" Fed Com
 Well: #1H
 Wellbore: OH
 Plan: Design #1 (#1H/OH)

Azimuths to Grid North
 True North: -0.49°
 Magnetic North: 6.53°
 Magnetic Field
 Strength: 48548.8enT
 Dip Angle: 60.13°
 Date: 1/19/2012
 Model: IGRF200510

PROJECT DETAILS: Red Hills
 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

WELL DETAILS: #1H

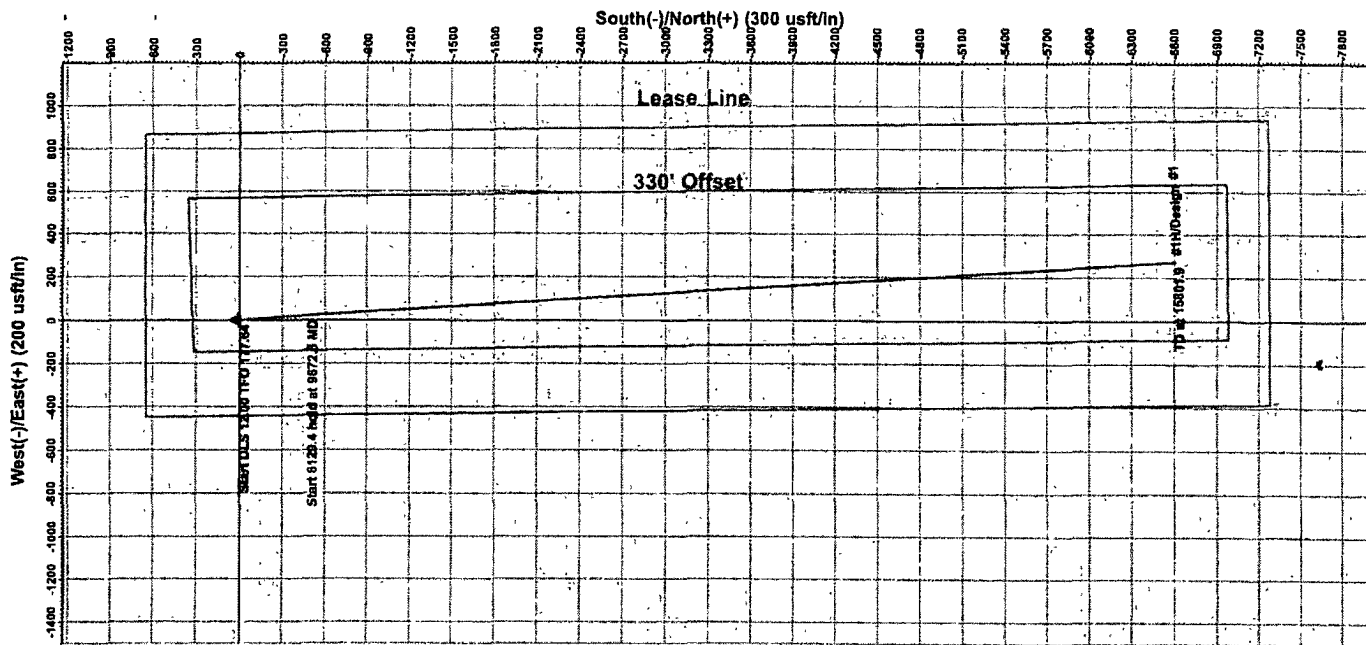
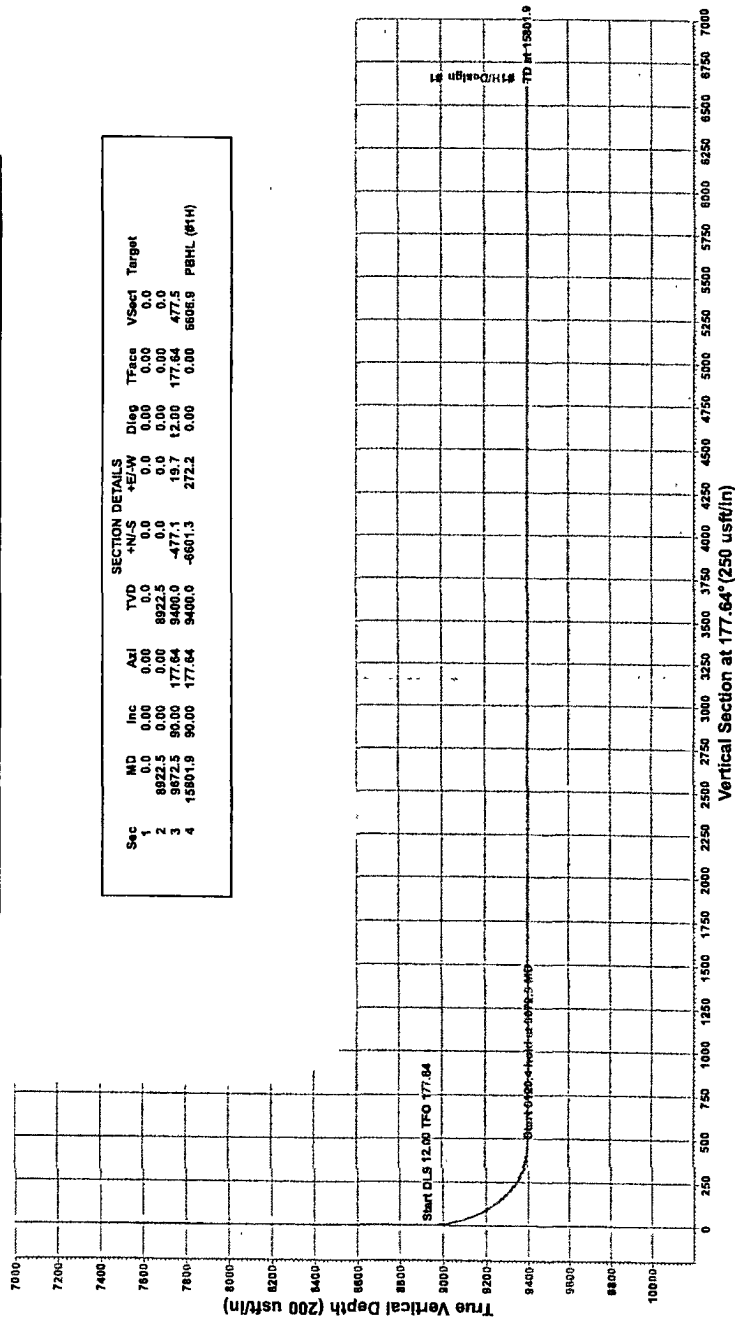
Ground Elevation: 3342.3						
RKB Elevation: KB +25 @ 3387 3uoft (Cactus 139)						
Rig Name: Cactus 139						
+N/S	+E/W	North	East	Latitude	Longitude	Spot

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	PBHL (#1H)	TVD	+N/S	+E/W	North	East	Shape
		9403.0	-8601.3	272.2	401138.00	785134.30	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	8922.5	0.00	0.00	8922.5	0.0	0.0	0.00	0.00	0.0	
3	9872.5	90.00	177.64	9400.0	-477.1	19.7	12.00	177.64	477.5	
4	15901.9	90.00	177.64	9400.0	-8601.3	272.2	0.00	0.00	8606.9	PBHL (#1H)



Plan: Design #1 (#1H/OH)

Created By: Sam Bille Date: 5/4, January 23 2012

Checked: _____ Date: _____

Midland - New Mexico

Red Hills

Pitchblende "19" Fed Com

#1H

OH

Plan: Design #1

Standard Survey Report

19 January, 2012

EOG Resources, Inc.

Survey Report

Company:	Midland - New Mexico	Local Co-ordinate Reference:	Site Pitchblende "19" Fed Com
Project:	Red Hills	TVD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Site:	Pitchblende "19" Fed Com	MD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	edm

Project	Red Hills		
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		Pitchblende "19" Fed Com			
Site Position:		Northing:	407,727.30 usft	Latitude:	32° 7' 3.416 N
From:	Map	Easting:	784,862.60 usft	Longitude:	103° 24' 47.689 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.49 °

Well	#1H					
Well Position	+N/-S	0.0 usft	Northing:	407,727.30 usft	Latitude:	32° 7' 3.416 N
	+E/-W	0.0 usft	Easting:	784,862.60 usft	Longitude:	103° 24' 47.689 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,342.3 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	1/19/2012	7.42	60.13	48,549

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	177.64

Survey Tool Program		Date	1/19/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,801.9	Design #1 (OH)	Gyro	Gyro	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00

EOG Resources, Inc.

Survey Report

Company:	Midland - New Mexico	Local Co-ordinate Reference:	Site Pitchblende "19" Fed Com
Project:	Red Hills	TVD Reference:	KB = 25' @ 3367.3usft (Cactus 139)
Site:	Pitchblende "19" Fed Com	MD Reference:	KB = 25' @ 3367.3usft (Cactus 139)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	edm

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)
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00

EOG Resources, Inc.

Survey Report

Company:	Midland - New Mexico	Local Co-ordinate Reference:	Site Pitchblende "19" Fed Com
Project:	Red Hills	TVD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Site:	Pitchblende "19" Fed Com	MD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	edm

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)
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,922.5	0.00	0.00	8,922.5	0.0	0.0	0.0	0.00	0.00	0.00
8,925.0	0.30	177.64	8,925.0	0.0	0.0	0.0	12.00	12.00	0.00
8,950.0	3.30	177.64	8,950.0	-0.8	0.0	0.8	12.00	12.00	0.00
8,975.0	6.30	177.64	8,974.9	-2.9	0.1	2.9	12.00	12.00	0.00
9,000.0	9.30	177.64	8,999.7	-6.3	0.3	6.3	12.00	12.00	0.00
9,025.0	12.30	177.64	9,024.2	-11.0	0.5	11.0	12.00	12.00	0.00
9,050.0	15.30	177.64	9,048.5	-16.9	0.7	16.9	12.00	12.00	0.00
9,075.0	18.30	177.64	9,072.4	-24.1	1.0	24.1	12.00	12.00	0.00
9,100.0	21.30	177.64	9,095.9	-32.6	1.3	32.6	12.00	12.00	0.00
9,125.0	24.30	177.64	9,119.0	-42.3	1.7	42.3	12.00	12.00	0.00
9,150.0	27.30	177.64	9,141.5	-53.1	2.2	53.2	12.00	12.00	0.00
9,175.0	30.30	177.64	9,163.4	-65.2	2.7	65.2	12.00	12.00	0.00
9,200.0	33.30	177.64	9,184.6	-78.3	3.2	78.4	12.00	12.00	0.00
9,225.0	36.30	177.64	9,205.2	-92.6	3.8	92.7	12.00	12.00	0.00
9,250.0	39.30	177.64	9,224.9	-107.9	4.4	108.0	12.00	12.00	0.00
9,275.0	42.30	177.64	9,243.8	-124.2	5.1	124.3	12.00	12.00	0.00
9,300.0	45.30	177.64	9,261.9	-141.5	5.8	141.6	12.00	12.00	0.00
9,325.0	48.30	177.64	9,279.0	-159.7	6.6	159.8	12.00	12.00	0.00
9,350.0	51.30	177.64	9,295.1	-178.8	7.4	178.9	12.00	12.00	0.00
9,375.0	54.30	177.64	9,310.2	-198.7	8.2	198.8	12.00	12.00	0.00
9,400.0	57.30	177.64	9,324.3	-219.3	9.0	219.5	12.00	12.00	0.00
9,425.0	60.30	177.64	9,337.2	-240.7	9.9	240.9	12.00	12.00	0.00
9,450.0	63.30	177.64	9,349.1	-262.7	10.8	262.9	12.00	12.00	0.00
9,475.0	66.30	177.64	9,359.7	-285.3	11.8	285.5	12.00	12.00	0.00
9,500.0	69.30	177.64	9,369.1	-308.4	12.7	308.7	12.00	12.00	0.00
9,525.0	72.30	177.64	9,377.4	-332.0	13.7	332.3	12.00	12.00	0.00
9,550.0	75.30	177.64	9,384.3	-356.0	14.7	356.3	12.00	12.00	0.00
9,575.0	78.30	177.64	9,390.0	-380.3	15.7	380.6	12.00	12.00	0.00
9,600.0	81.30	177.64	9,394.5	-404.9	16.7	405.2	12.00	12.00	0.00
9,625.0	84.30	177.64	9,397.6	-429.7	17.7	430.0	12.00	12.00	0.00
9,650.0	87.30	177.64	9,399.4	-454.6	18.7	455.0	12.00	12.00	0.00

EOG Resources, Inc.

Survey Report

Company:	Midland - New Mexico	Local Co-ordinate Reference:	Site Pitchblende "19" Fed Com
Project:	Red Hills	TVD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Site:	Pitchblende "19" Fed Com	MD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	edm

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)
9,672.5	90.00	177.64	9,400.0	-477.1	19.7	477.5	12.00	12.00	0.00
9,700.0	90.00	177.64	9,400.0	-504.5	20.8	505.0	0.00	0.00	0.00
9,800.0	90.00	177.64	9,400.0	-604.5	24.9	605.0	0.00	0.00	0.00
9,900.0	90.00	177.64	9,400.0	-704.4	29.0	705.0	0.00	0.00	0.00
10,000.0	90.00	177.64	9,400.0	-804.3	33.2	805.0	0.00	0.00	0.00
10,100.0	90.00	177.64	9,400.0	-904.2	37.3	905.0	0.00	0.00	0.00
10,200.0	90.00	177.64	9,400.0	-1,004.1	41.4	1,005.0	0.00	0.00	0.00
10,300.0	90.00	177.64	9,400.0	-1,104.0	45.5	1,105.0	0.00	0.00	0.00
10,400.0	90.00	177.64	9,400.0	-1,203.9	49.6	1,205.0	0.00	0.00	0.00
10,500.0	90.00	177.64	9,400.0	-1,303.9	53.8	1,305.0	0.00	0.00	0.00
10,600.0	90.00	177.64	9,400.0	-1,403.8	57.9	1,405.0	0.00	0.00	0.00
10,700.0	90.00	177.64	9,400.0	-1,503.7	62.0	1,505.0	0.00	0.00	0.00
10,800.0	90.00	177.64	9,400.0	-1,603.6	66.1	1,605.0	0.00	0.00	0.00
10,900.0	90.00	177.64	9,400.0	-1,703.5	70.2	1,705.0	0.00	0.00	0.00
11,000.0	90.00	177.64	9,400.0	-1,803.4	74.4	1,805.0	0.00	0.00	0.00
11,100.0	90.00	177.64	9,400.0	-1,903.3	78.5	1,905.0	0.00	0.00	0.00
11,200.0	90.00	177.64	9,400.0	-2,003.3	82.6	2,005.0	0.00	0.00	0.00
11,300.0	90.00	177.64	9,400.0	-2,103.2	86.7	2,105.0	0.00	0.00	0.00
11,400.0	90.00	177.64	9,400.0	-2,203.1	90.8	2,205.0	0.00	0.00	0.00
11,500.0	90.00	177.64	9,400.0	-2,303.0	95.0	2,305.0	0.00	0.00	0.00
11,600.0	90.00	177.64	9,400.0	-2,402.9	99.1	2,405.0	0.00	0.00	0.00
11,700.0	90.00	177.64	9,400.0	-2,502.8	103.2	2,505.0	0.00	0.00	0.00
11,800.0	90.00	177.64	9,400.0	-2,602.8	107.3	2,605.0	0.00	0.00	0.00
11,900.0	90.00	177.64	9,400.0	-2,702.7	111.4	2,705.0	0.00	0.00	0.00
12,000.0	90.00	177.64	9,400.0	-2,802.6	115.6	2,805.0	0.00	0.00	0.00
12,100.0	90.00	177.64	9,400.0	-2,902.5	119.7	2,905.0	0.00	0.00	0.00
12,200.0	90.00	177.64	9,400.0	-3,002.4	123.8	3,005.0	0.00	0.00	0.00
12,300.0	90.00	177.64	9,400.0	-3,102.3	127.9	3,105.0	0.00	0.00	0.00
12,400.0	90.00	177.64	9,400.0	-3,202.2	132.0	3,205.0	0.00	0.00	0.00
12,500.0	90.00	177.64	9,400.0	-3,302.2	136.2	3,305.0	0.00	0.00	0.00
12,600.0	90.00	177.64	9,400.0	-3,402.1	140.3	3,405.0	0.00	0.00	0.00
12,700.0	90.00	177.64	9,400.0	-3,502.0	144.4	3,505.0	0.00	0.00	0.00
12,800.0	90.00	177.64	9,400.0	-3,601.9	148.5	3,605.0	0.00	0.00	0.00
12,900.0	90.00	177.64	9,400.0	-3,701.8	152.6	3,705.0	0.00	0.00	0.00
13,000.0	90.00	177.64	9,400.0	-3,801.7	156.8	3,805.0	0.00	0.00	0.00
13,100.0	90.00	177.64	9,400.0	-3,901.6	160.9	3,905.0	0.00	0.00	0.00
13,200.0	90.00	177.64	9,400.0	-4,001.6	165.0	4,005.0	0.00	0.00	0.00
13,300.0	90.00	177.64	9,400.0	-4,101.5	169.1	4,105.0	0.00	0.00	0.00
13,400.0	90.00	177.64	9,400.0	-4,201.4	173.2	4,205.0	0.00	0.00	0.00
13,500.0	90.00	177.64	9,400.0	-4,301.3	177.4	4,305.0	0.00	0.00	0.00
13,600.0	90.00	177.64	9,400.0	-4,401.2	181.5	4,405.0	0.00	0.00	0.00
13,700.0	90.00	177.64	9,400.0	-4,501.1	185.6	4,505.0	0.00	0.00	0.00
13,800.0	90.00	177.64	9,400.0	-4,601.1	189.7	4,605.0	0.00	0.00	0.00
13,900.0	90.00	177.64	9,400.0	-4,701.0	193.8	4,705.0	0.00	0.00	0.00
14,000.0	90.00	177.64	9,400.0	-4,800.9	198.0	4,805.0	0.00	0.00	0.00
14,100.0	90.00	177.64	9,400.0	-4,900.8	202.1	4,905.0	0.00	0.00	0.00
14,200.0	90.00	177.64	9,400.0	-5,000.7	206.2	5,005.0	0.00	0.00	0.00
14,300.0	90.00	177.64	9,400.0	-5,100.6	210.3	5,105.0	0.00	0.00	0.00
14,400.0	90.00	177.64	9,400.0	-5,200.5	214.4	5,205.0	0.00	0.00	0.00
14,500.0	90.00	177.64	9,400.0	-5,300.5	218.6	5,305.0	0.00	0.00	0.00
14,600.0	90.00	177.64	9,400.0	-5,400.4	222.7	5,405.0	0.00	0.00	0.00
14,700.0	90.00	177.64	9,400.0	-5,500.3	226.8	5,505.0	0.00	0.00	0.00
14,800.0	90.00	177.64	9,400.0	-5,600.2	230.9	5,605.0	0.00	0.00	0.00
14,900.0	90.00	177.64	9,400.0	-5,700.1	235.0	5,705.0	0.00	0.00	0.00

EOG Resources, Inc.
Survey Report

Company:	Midland - New Mexico	Local Co-ordinate Reference:	Site Pitchblende "19" Fed Com
Project:	Red Hills	TVD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Site:	Pitchblende "19" Fed Com	MD Reference:	KB =25' @ 3367.3usft (Cactus 139)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	edm

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)
15,000.0	90.00	177.64	9,400.0	-5,800.0	239.2	5,805.0	0.00	0.00	0.00
15,100.0	90.00	177.64	9,400.0	-5,900.0	243.3	5,905.0	0.00	0.00	0.00
15,200.0	90.00	177.64	9,400.0	-5,999.9	247.4	6,005.0	0.00	0.00	0.00
15,300.0	90.00	177.64	9,400.0	-6,099.8	251.5	6,105.0	0.00	0.00	0.00
15,400.0	90.00	177.64	9,400.0	-6,199.7	255.6	6,205.0	0.00	0.00	0.00
15,500.0	90.00	177.64	9,400.0	-6,299.6	259.8	6,305.0	0.00	0.00	0.00
15,600.0	90.00	177.64	9,400.0	-6,399.5	263.9	6,405.0	0.00	0.00	0.00
15,700.0	90.00	177.64	9,400.0	-6,499.4	268.0	6,505.0	0.00	0.00	0.00
15,801.9	90.00	177.64	9,400.0	-6,601.3	272.2	6,606.9	0.00	0.00	0.00

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (#1H)	0.00	0.00	9,400.0	-6,601.3	272.2	401,126.00	785,134.80	32° 5' 58.072 N	103° 24' 45.180 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
8,922.5	8,922.5	0.0	0.0	Start 12"/100' Build @ 8922.5' MD
9,672.5	9,400.0	-477.1	19.7	Start Lateral Section Hold @ 9672.5' @ 90°
15,801.9	9,400.0	-6,601.3	272.2	TD @ 15801.9'

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

EOG RESOURCES, INC.
PITCHBLENDE 19 FED COM 1H

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.

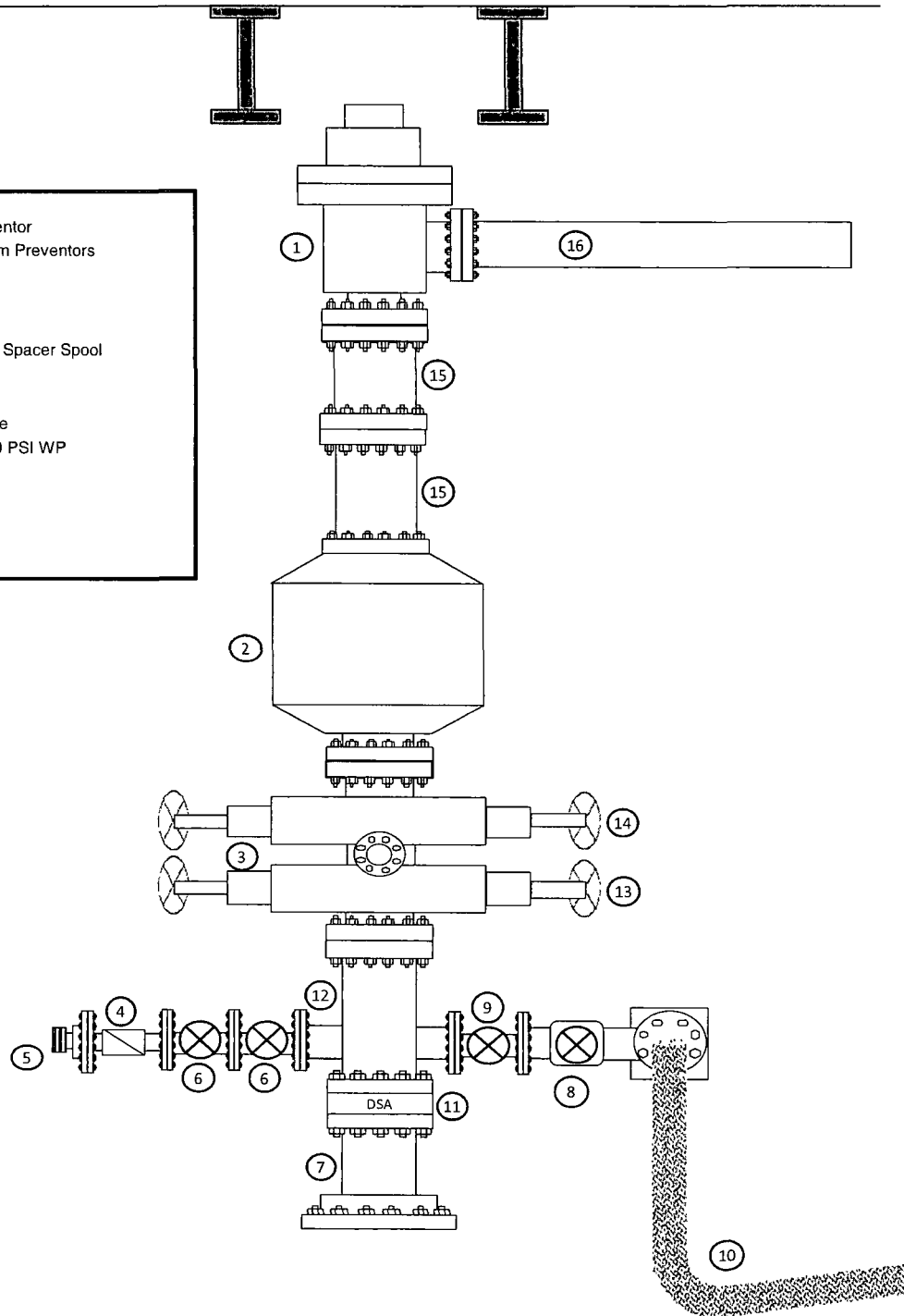
EOG Resources

Cactus #123

Exhibit #1

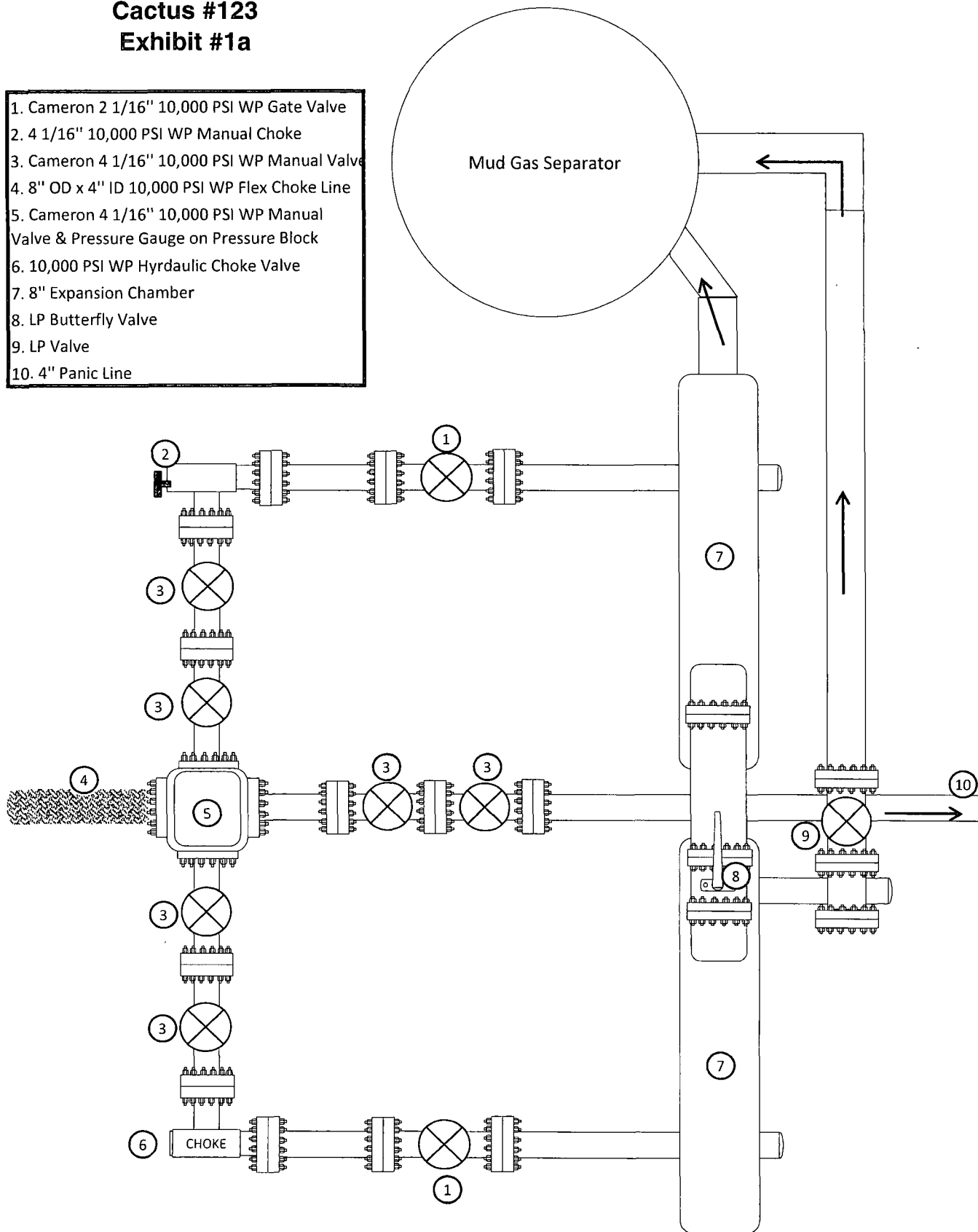
Rig Floor

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



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 Hydraulic Choke Valve
7. 8" Expansion Chamber
8. LP Butterfly Valve
9. LP Valve
10. 4" Panic Line



Manufacturer: Midwest Hose & Specialty

Serial Number: SN#90067

Length: 35'

Size: OD = 8" ID = 4"

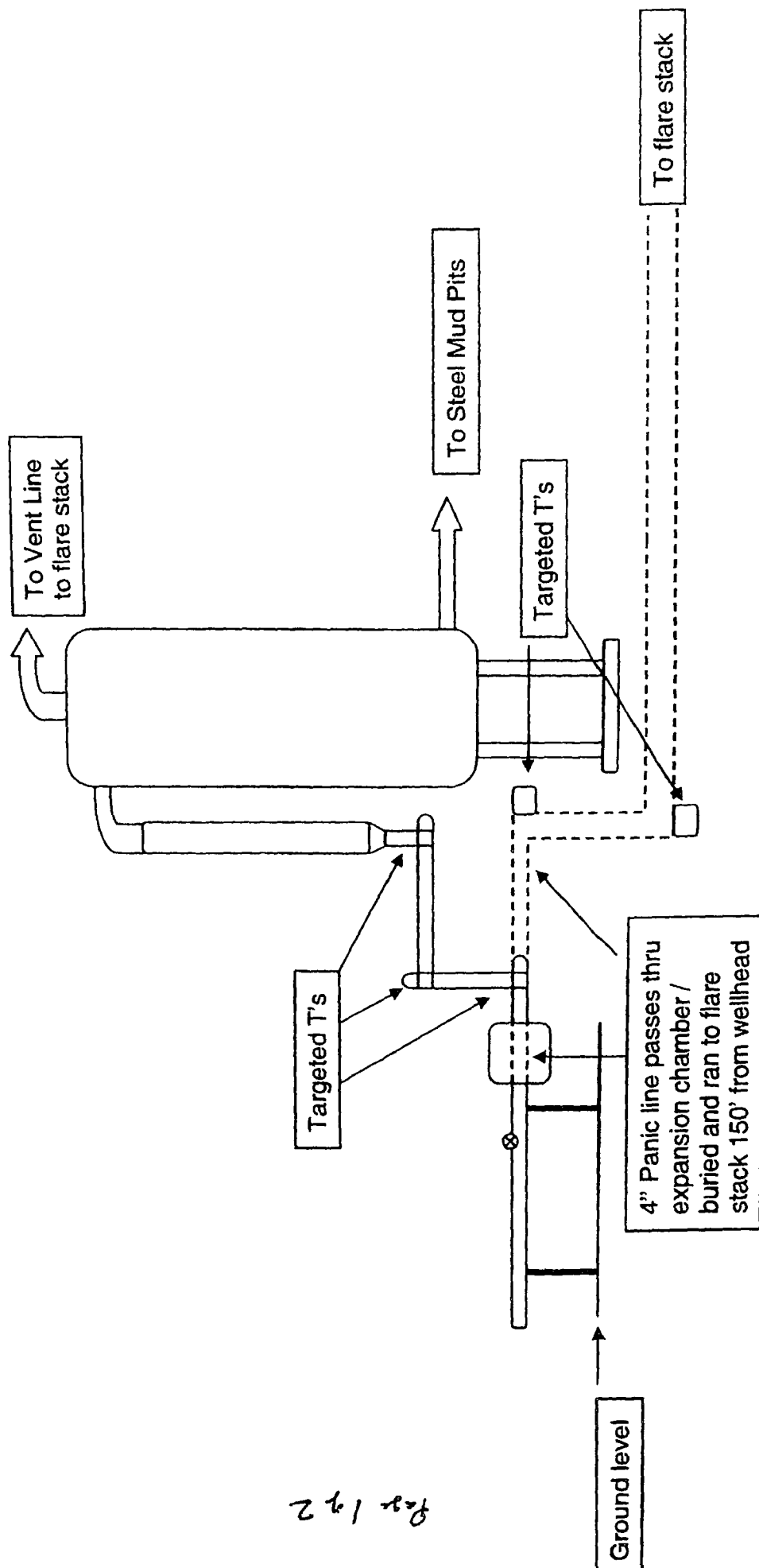
Ends: Flanges Size: 4-1/16"

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

M I D W E S T
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: CACTUS		P.O. Number: RIG #123 Asset # M10761	
HOSE SPECIFICATIONS			
Type: CHOKER 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			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 1 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
COMMENTS: SN#90087 M10761 Hose is covered with stainless steel armour cover and wrapped 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



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

