

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

NOV 26 2013
OCD Hobbs

RECEIVED

ATS-13-843

FORM 1
OMB NO. 1010-0188
Expires October 31, 2014

UNORTHODOX
LOCATION

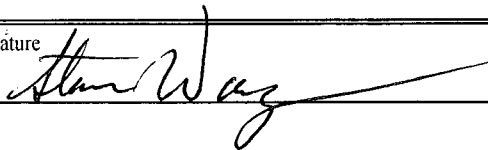
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. NNNM108503
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	3b. Phone No. (include area code) 432-686-3689	8. Lease Name and Well No. Vaca 11 Fed 2H
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 170' FSL & 1200' FEL, SESE, Sec 11, T25S, R33E At proposed prod. zone 230' FSL & 1200' FEL, SESE, Sec 14, T25S, R33E		9. API Well No. 30-025-41523
14. Distance in miles and direction from nearest town or post office* Approximately +/- 27 miles Southwest from Jal, NM		10. Field and Pool, or Exploratory Red Hills; BS Upper Shale
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 170		11. Sec., T., R., M., or Blk. and Survey or Area Sec 11, T25S, R33E
16. No. of Acres in lease 1480 bottom -1520 1600 surface		12. County or Parish Lea
17. Spacing Unit dedicated to this well 160		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 547' to Vaca 14-4H		20. BLM/BIA Bond No. on file NM 2308
19. Proposed Depth 14500' MD, 9485' TVD		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3363' GL
22. Approximate date work will start* 10/01/2013		23. Estimated duration 25 days

24. Attachments

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

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 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 5/29/13
Title Regulatory Analyst		
Approved by (Signature) /s/ STEPHEN J. CAFFEY	Name (Printed/Typed)	Date NOV 22 2013
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

Carlsbad Controlled Water Basin

SUBJECT TO LIKE
APPROVAL BY STATE - well does not drain
proposed acreage

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

DEC 02 2013

EOG RESOURCES, INC.
VACA 11 FED NO. 2H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,135'
Top of Salt	1,480'
Base of Salt	4,850'
Lamar	5,090'
Bell Canyon	5,120'
Cherry Canyon	6,180'
Brushy Canyon	7,735'
Bone Spring Lime	9,265'
TD	9,485'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,180'	Oil
Brushy Canyon	7,735'	Oil
Bone Spring Lime	9,265'	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 1,200' and circulating cement back to surface.

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 -1,200'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000'-5,000'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0'-14,500'	5.500"	17#	P110 or HCP110	LTC	1.125	1.25	1.60

EOG RESOURCES, INC.
VACA 11 FED NO. 2H

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,200'	600	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ surface)
	300	14.8	1.34	Tail: Class C + 0.005 pps Static Free + 1% CaCl ₂ + 0.25 pps CelloFlake + 0.005 gps FP-6L
5,000'	1100	12.7	2.22	Lead: Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ surface)
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
14,500'	375	10.8	3.68	Lead: 60:40:0 Class 'C' + 15.00 lb/sk BA-90 + 4.00% MPA-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free (TOC @ 4500')
	400	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
	1325	14.2	1.28	Tail: 50:50:2 Class 'H' + 0.65% FL-52 + 0.20% CD-32 + 0.15% SMS + 2.00% Salt + 0.10% R-3 + 0.005 lb/sk Static Free

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

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

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

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

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

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

EOG RESOURCES, INC.
VACA 11 FED NO. 2H

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

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

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

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,200'	Fresh Water Gel	8.6-8.8	28-34	N/c
1,200' – 5,000'	Saturated Brine	10.0-10.2	28-34	N/c
5,000' – 9,007'	Cut Brine Water	8.5-9.3	28-34	N/c
9,007' – 14,500' Lateral	Cut Brine Water	9.0-9.5	28-34	N/c

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

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H₂S 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 COP

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

EOG RESOURCES, INC.
VACA 11 FED NO. 2H

**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 4107 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.

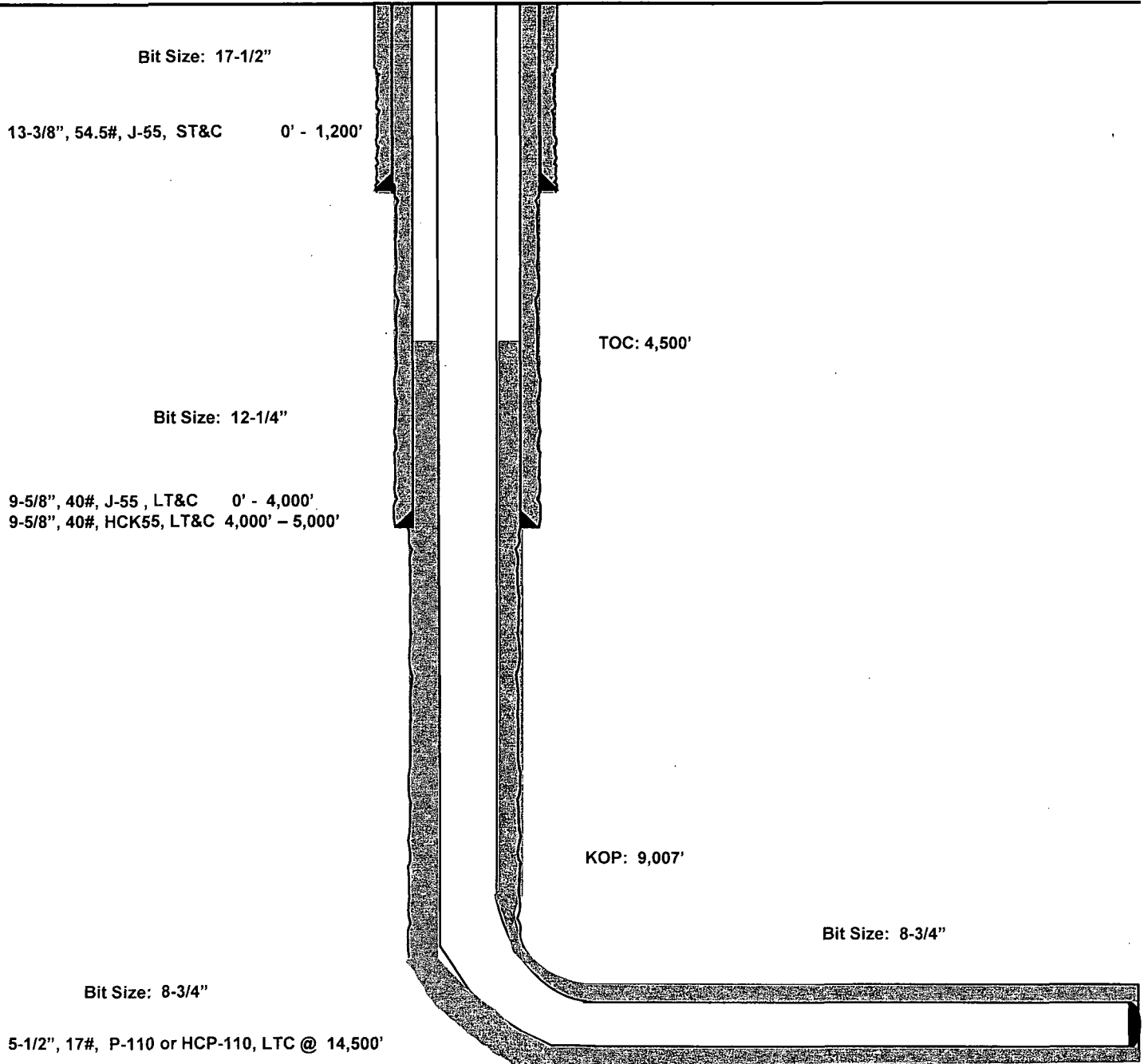
Vaca 11 Fed #2H
Red Hills
Lea County, New Mexico

170' FSL
1200' FEL
Section 11
T-25-S, R-33-E

Proposed Wellbore

API: 30-025- *****

KB: 3,393.5'
GL: 3,363.0'



Lateral: 14,500' MD, 9,485' TVD

BH Location: 230' FSL & 1200' FEL
Section 14
T-25-S, R-33-E



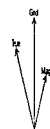
Cactus 123

Eog Resources

REV 0



WELL	Vaca 11 Fed 2H	FIELD	Lea County, NM (NAD 27)	STRUCTURE	Cactus 123
Magdec Parameters	Model: BGGM 2012	Dip: 40.020° Mag Dec: 7.429°	Date: May 28, 2013 PS: 48345.96T	Surface Location	NAD27 New Mexico State Plane, Santa Fe, US Feet Lat: N 32 8 17.322 Long: W 103 32 16.849 Easting: 746178.00 Northing: 414888.00 Scale Factor: 0.99997810
Miscellaneous	Site: Vaca 11 Fed 2H Plan: Rev0 mca 28May13	TVD Ref: RKB1393.50 above 1 Serv Date: May 28, 2013			



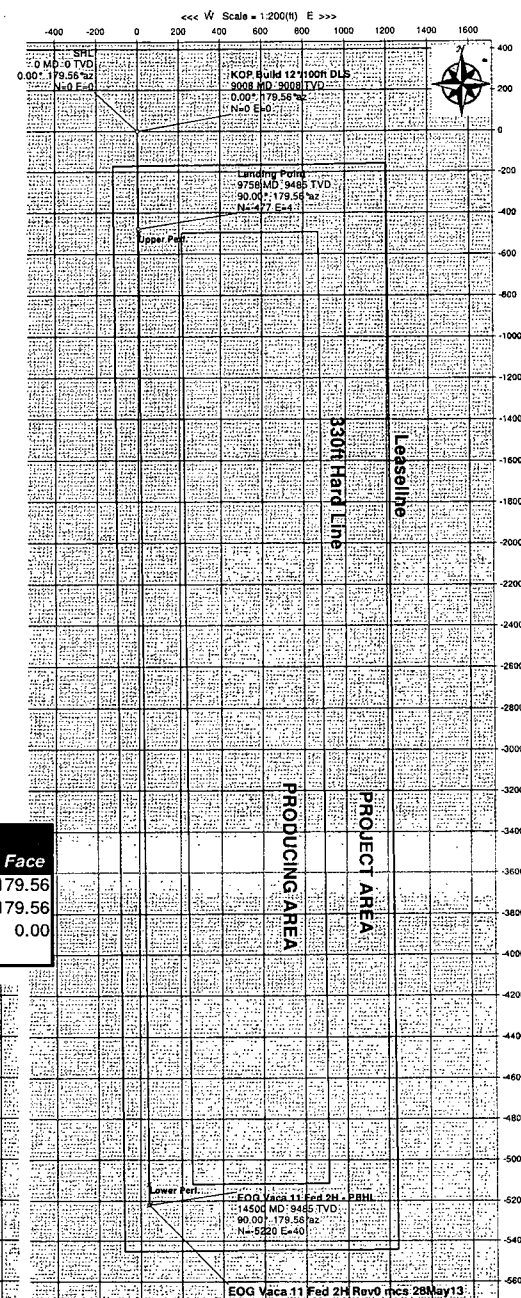
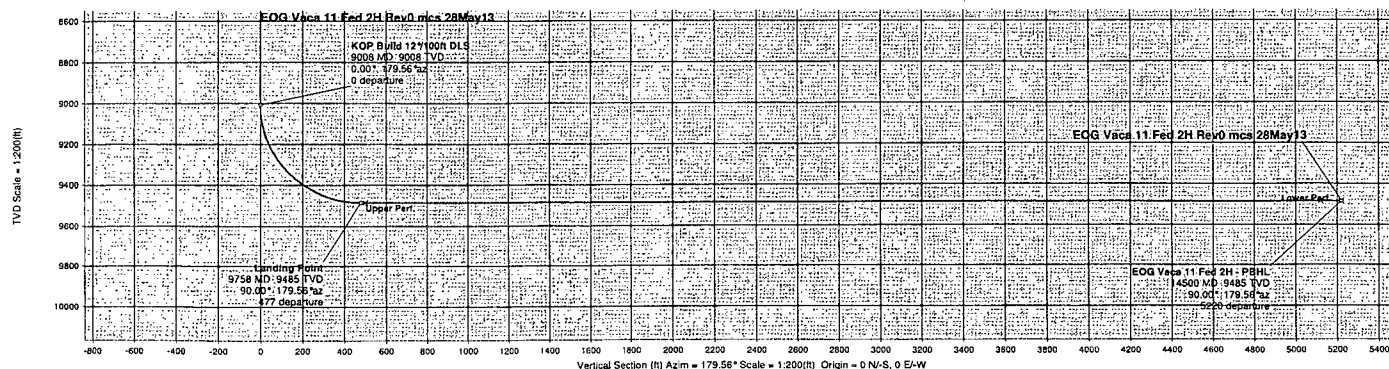
Grid North
Tot Corr (M->G 7.0060°)
Mag Dec (7.429°)
Grid Conv (0.423°)

Legend

EOG Vaca 11 Fed 2H Upper Part
EOG Vaca 11 Fed 2H Lower Part
EOG Vaca 11 Fed 2H Landing Point
EOG Vaca 11 Fed 2H PBHL
EOG Vaca 11 Fed 2H Rev0 mca 28May13

Critical Points

Comments	Survey MD	Inc	Azim	TVD	SSTVD	VS	NS	EW	Longitude	Latitude	Easting	Northing	DLS	Tool Face
SHL	0.00	0.00	179.56	0.00	-3393.50	0.00	0.00	0.00	N 32 8 17.322 W 103 32 16.849	746178.00	414888.00		179.56	
KOP Build 12"/100ft DLS	9007.54	0.00	179.56	9007.54	5614.04	0.00	0.00	0.00	N 32 8 17.322 W 103 32 16.849	746178.00	414888.00	0.00	179.56	
Landing Point	9757.54	90.00	179.56	9485.00	6091.50	477.47	-477.45	3.66	N 32 8 12.597 W 103 32 16.847	746181.66	414410.56	12.00	0.00	
PBHL	14500.35	90.00	179.56	9485.00	6091.50	5220.28	-5220.12	40.00	N 32 7 25.664 W 103 32 16.832	746218.00	409668.00	0.00		



Drawn By: MSB/shw
Date Created: May 28, 2013, 11:35:35 PM
Checked By:
Checked Date:
Approved By:
Approved Date:



EOG Vaca 11 Fed 2H Rev0 mcs 28May13 Proposal Geodetic Report

(Def Plan)



Report Date: May 28, 2013 - 10:54 PM
Client: Eog Resources
Field: NM Lea County (NAD 27)
Structure / Slot: EOG Vaca 11 Fed 2H / EOG Vaca 11 Fed 2H
Well: EOG Vaca 11 Fed 2H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: EOG Vaca 11 Fed 2H Rev0 mcs 28May13
Survey Date: May 28, 2013
Tort / AHD / DDI / ERD Ratio: 90.000 ° / 5220.276 ft / 5.856 / 0.550
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 8' 17.32225", W 103° 32' 16.84885"
Location Grid N/E Y/X: N 414888.000 ftUS, E 746178.000 ftUS
CRS Grid Convergence Angle: 0.4231 °
Grid Scale Factor: 0.9999785

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.561 ° (Grid North)
Vertical Section Origin: 0.000 R, 0.000 R
TVD Reference Datum: RKB
TVD Reference Elevation: 3393.500 ft above
Seabed / Ground Elevation: 3363.000 ft above
Magnetic Declination: 7.429 °
Total Gravity Field Strength: 998.4831mgn (9.80665 Based)
Total Magnetic Field Strength: 48345.895 nT
Magnetic Dip Angle: 60.020 °
Declination Date: May 28, 2013
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.4231 °
Total Corr Mag North-Grid North: 7.0060 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	179.56	0.00	-3393.50	0.00	0.00	0.00	N/A	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	100.00	0.00	179.56	100.00	-3293.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	200.00	0.00	179.56	200.00	-3193.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	300.00	0.00	179.56	300.00	-3093.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	400.00	0.00	179.56	400.00	-2993.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	500.00	0.00	179.56	500.00	-2893.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	600.00	0.00	179.56	600.00	-2793.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	700.00	0.00	179.56	700.00	-2693.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	800.00	0.00	179.56	800.00	-2593.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	900.00	0.00	179.56	900.00	-2493.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
1000.00	0.00	179.56	1000.00	-2393.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1100.00	0.00	179.56	1100.00	-2293.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1200.00	0.00	179.56	1200.00	-2193.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1300.00	0.00	179.56	1300.00	-2093.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1400.00	0.00	179.56	1400.00	-1993.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1500.00	0.00	179.56	1500.00	-1893.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1600.00	0.00	179.56	1600.00	-1793.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1700.00	0.00	179.56	1700.00	-1693.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1800.00	0.00	179.56	1800.00	-1593.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
1900.00	0.00	179.56	1900.00	-1493.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2000.00	0.00	179.56	2000.00	-1393.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2100.00	0.00	179.56	2100.00	-1293.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2200.00	0.00	179.56	2200.00	-1193.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2300.00	0.00	179.56	2300.00	-1093.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2400.00	0.00	179.56	2400.00	-993.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2500.00	0.00	179.56	2500.00	-893.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2600.00	0.00	179.56	2600.00	-793.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2700.00	0.00	179.56	2700.00	-693.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2800.00	0.00	179.56	2800.00	-593.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
2900.00	0.00	179.56	2900.00	-493.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3000.00	0.00	179.56	3000.00	-393.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3100.00	0.00	179.56	3100.00	-293.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3200.00	0.00	179.56	3200.00	-193.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3300.00	0.00	179.56	3300.00	-93.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3400.00	0.00	179.56	3400.00	6.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3500.00	0.00	179.56	3500.00	106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3600.00	0.00	179.56	3600.00	206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3700.00	0.00	179.56	3700.00	306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3800.00	0.00	179.56	3800.00	406.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
3900.00	0.00	179.56	3900.00	506.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4000.00	0.00	179.56	4000.00	606.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4100.00	0.00	179.56	4100.00	706.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4200.00	0.00	179.56	4200.00	806.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4300.00	0.00	179.56	4300.00	906.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4400.00	0.00	179.56	4400.00	1006.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4500.00	0.00	179.56	4500.00	1106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4600.00	0.00	179.56	4600.00	1206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4700.00	0.00	179.56	4700.00	1306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4800.00	0.00	179.56	4800.00	1406.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
4900.00	0.00	179.56	4900.00	1506.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5000.00	0.00	179.56	5000.00	1606.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5100.00	0.00	179.56	5100.00	1706.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5200.00	0.00	179.56	5200.00	1806.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5300.00	0.00	179.56	5300.00	1906.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5400.00	0.00	179.56	5400.00	2006.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5500.00	0.00	179.56	5500.00	2106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5600.00	0.00	179.56	5600.00	2206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5700.00	0.00	179.56	5700.00	2306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5800.00	0.00	179.56	5800.00	2406.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
5900.00	0.00	179.56	5900.00	2506.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6000.00	0.00	179.56	6000.00	2606.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6100.00	0.00	179.56	6100.00	2706.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6200.00	0.00	179.56	6200.00	2806.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6300.00	0.00	179.56	6300.00	2906.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6400.00	0.00	179.56	6400.00	3006.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6500.00	0.00	179.56	6500.00	3106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6600.00	0.00	179.56	6600.00	3206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6700.00	0.00	179.56	6700.00	3306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85	
6800.00	0.00	179.56	6800.										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (1/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7200.00	0.00	179.56	7200.00	3806.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7300.00	0.00	179.56	7300.00	3906.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7400.00	0.00	179.56	7400.00	4006.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7500.00	0.00	179.56	7500.00	4106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7600.00	0.00	179.56	7600.00	4206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7700.00	0.00	179.56	7700.00	4306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7800.00	0.00	179.56	7800.00	4406.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	7900.00	0.00	179.56	7900.00	4506.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8000.00	0.00	179.56	8000.00	4606.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8100.00	0.00	179.56	8100.00	4706.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8200.00	0.00	179.56	8200.00	4806.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8300.00	0.00	179.56	8300.00	4906.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8400.00	0.00	179.56	8400.00	5006.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8500.00	0.00	179.56	8500.00	5106.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8600.00	0.00	179.56	8600.00	5206.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8700.00	0.00	179.56	8700.00	5306.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8800.00	0.00	179.56	8800.00	5406.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	8900.00	0.00	179.56	8900.00	5506.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
KOP Build 12"/100ft DLS	9000.00	0.00	179.56	9000.00	5606.50	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	9007.54	0.00	179.56	9007.54	5614.04	0.00	0.00	0.00	0.00	414888.00	746178.00	N 32 8 17.32	W 103 32 16.85
	9100.00	11.10	179.56	9099.42	5705.92	8.92	-8.92	0.07	12.00	414879.08	746178.07	N 32 8 17.23	W 103 32 16.85
	9200.00	23.10	179.56	9194.83	5801.33	38.27	-38.27	0.29	12.00	414849.74	746178.29	N 32 8 16.94	W 103 32 16.85
	9300.00	35.10	179.56	9282.05	5888.55	86.80	-86.80	0.87	12.00	414801.20	746178.67	N 32 8 16.46	W 103 32 16.85
	9400.00	47.10	179.56	9357.28	5963.78	152.42	-152.41	1.17	12.00	414735.59	746179.17	N 32 8 15.81	W 103 32 16.85
	9500.00	59.10	179.56	9417.22	6023.72	232.23	-232.23	1.78	12.00	414655.78	746179.78	N 32 8 15.02	W 103 32 16.85
	9600.00	71.10	179.56	9459.25	6065.75	322.77	-322.76	2.47	12.00	414565.25	746180.47	N 32 8 14.13	W 103 32 16.85
Landing Point	9700.00	83.10	179.56	9481.54	6088.04	420.06	-420.05	3.22	12.00	414467.96	746181.22	N 32 8 13.17	W 103 32 16.85
	9757.54	90.00	179.56	9485.00	6091.50	477.47	-477.45	3.66	12.00	414410.56	746181.66	N 32 8 12.60	W 103 32 16.85
	9800.00	90.00	179.56	9485.00	6091.50	519.92	-519.91	3.98	0.00	414368.10	746181.98	N 32 8 12.18	W 103 32 16.85
	9900.00	90.00	179.56	9485.00	6091.50	619.92	-619.91	4.75	0.00	414268.11	746182.75	N 32 8 11.19	W 103 32 16.85
	10000.00	90.00	179.56	9485.00	6091.50	719.92	-719.90	5.52	0.00	414168.11	746183.52	N 32 8 10.20	W 103 32 16.85
	10100.00	90.00	179.56	9485.00	6091.50	819.92	-819.90	6.28	0.00	414068.12	746184.28	N 32 8 9.21	W 103 32 16.85
	10200.00	90.00	179.56	9485.00	6091.50	919.92	-919.90	7.05	0.00	413968.12	746185.05	N 32 8 8.22	W 103 32 16.85
	10300.00	90.00	179.56	9485.00	6091.50	1019.92	-1019.89	7.82	0.00	413868.13	746185.82	N 32 8 7.23	W 103 32 16.85
	10400.00	90.00	179.56	9485.00	6091.50	1119.92	-1119.89	8.58	0.00	413768.13	746186.58	N 32 8 6.24	W 103 32 16.85
	10500.00	90.00	179.56	9485.00	6091.50	1219.92	-1219.89	9.35	0.00	413668.14	746187.35	N 32 8 5.25	W 103 32 16.84
	10600.00	90.00	179.56	9485.00	6091.50	1319.92	-1319.89	10.11	0.00	413568.14	746188.11	N 32 8 4.26	W 103 32 16.84
	10700.00	90.00	179.56	9485.00	6091.50	1419.92	-1419.88	10.88	0.00	413468.15	746188.88	N 32 8 3.27	W 103 32 16.84
	10800.00	90.00	179.56	9485.00	6091.50	1519.92	-1519.88	11.65	0.00	413368.16	746189.65	N 32 8 2.28	W 103 32 16.84
	10900.00	90.00	179.56	9485.00	6091.50	1619.92	-1619.88	12.41	0.00	413268.16	746190.41	N 32 8 1.29	W 103 32 16.84
	11000.00	90.00	179.56	9485.00	6091.50	1719.92	-1719.87	13.18	0.00	413168.17	746191.18	N 32 8 0.30	W 103 32 16.84
	11100.00	90.00	179.56	9485.00	6091.50	1819.92	-1819.87	13.95	0.00	413068.17	746191.95	N 32 7 59.31	W 103 32 16.84
	11200.00	90.00	179.56	9485.00	6091.50	1919.92	-1919.87	14.71	0.00	412968.18	746192.71	N 32 7 58.32	W 103 32 16.84
	11300.00	90.00	179.56	9485.00	6091.50	2019.92	-2019.87	15.48	0.00	412868.18	746193.48	N 32 7 57.33	W 103 32 16.84
	11400.00	90.00	179.56	9485.00	6091.50	2119.92	-2119.86	16.24	0.00	412768.19	746194.24	N 32 7 56.34	W 103 32 16.84
	11500.00	90.00	179.56	9485.00	6091.50	2219.92	-2219.86	17.01	0.00	412668.19	746195.01	N 32 7 55.35	W 103 32 16.84
	11600.00	90.00	179.56	9485.00	6091.50	2319.92	-2319.86	17.78	0.00	412568.20	746195.78	N 32 7 54.37	W 103 32 16.84
	11700.00	90.00	179.56	9485.00	6091.50	2419.92	-2419.85	18.54	0.00	412468.20	746196.54	N 32 7 53.38	W 103 32 16.84
	11800.00	90.00	179.56	9485.00	6091.50	2519.92	-2519.85	19.31	0.00	412368.21	746197.31	N 32 7 52.39	W 103 32 16.84
	11900.00	90.00	179.56	9485.00	6091.50	2619.92	-2619.85	20.08	0.00	412268.21	746198.07	N 32 7 51.40	W 103 32 16.84
	12000.00	90.00	179.56	9485.00	6091.50	2719.92	-2719.84	20.84	0.00	412168.22	746198.84	N 32 7 50.41	W 103 32 16.84
	12100.00	90.00	179.56	9485.00	6091.50	2819.92	-2819.84	21.61	0.00	412068.22	746199.61	N 32 7 49.42	W 103 32 16.84
	12200.00	90.00	179.56	9485.00	6091.50	2919.92	-2919.84	22.37	0.00	411968.23	746200.37	N 32 7 48.43	W 103 32 16.84
	12300.00	90.00	179.56	9485.00	6091.50	3019.92	-3019.84	23.14	0.00	411868.23	746201.14	N 32 7 47.44	W 103 32 16.84
	12400.00	90.00	179.56	9485.00	6091.50	3119.92	-3119.83	23.91	0.00	411768.24	746201.91	N 32 7 46.45	W 103 32 16.84
	12500.00	90.00	179.56	9485.00	6091.50	3219.92	-3219.83	24.67	0.00	411668.25	746202.67	N 32 7 45.46	W 103 32 16.84
	12600.00	90.00	179.56	9485.00	6091.50	3319.92	-3319.83	25.44	0.00	411568.25	746203.44	N 32 7 44.47	W 103 32 16.84
	12700.00	90.00	179.56	9485.00	6091.50	3419.92	-3419.82	26.21	0.00	411468.26	746204.20	N 32 7 43.48	W 103 32 16.84
	12800.00	90.00	179.56	9485.00	6091.50	3519.92	-3519.82	26.97	0.00	411368.26	746204.97	N 32 7 42.49	W 103 32 16.84
	12900.00	90.00	179.56	9485.00	6091.50	3619.92	-3619.82	27.74	0.00	411268.27	746205.74	N 32 7 41.50	W 103 32 16.84
	13000.00	90.00	179.56	9485.00	6091.50	3719.92	-3719.82	28.50	0.00	411168.27	746206.50	N 32 7 40.51	W 103 32 16.84
	13100.00	90.00	179.56	9485.00	6091.50	3819.92	-3819.81	29.27	0.00	411068.28	746207.27	N 32 7 39.52	W 103 32 16.84
	13200.00	90.00	179.56	9485.00	6091.50	3919.92	-3919.81	30.04	0.00	410968.28	746208.04	N 32 7 38.53	W 103 32 16.84
	13300.00	90.00	179.56	9485.00	6091.50	4019.92	-4019.81	30.80	0.00	410868.29	746208.80	N 32 7 37.54	W 103 32 16.84
	13400.00	90.00	179.56	9485.00	6091.50	4119.92	-4119.80	31.57	0.00	410768.29	746209.57	N 32 7 36.55	W 103 32 16.84
	13500.00	90.00	179.56	9485.00	6091.50	4219.92	-4219.80	32.34	0.00	410668.30	746210.33	N 32 7 35.56	W 103 32 16.84
	13600.00	90.00	179.56	9485.00	6091.50	4319.92	-4319.80	33.10	0.00	410568.30	746211.10	N 32 7 34.57	W 103 32 16.83
	13700.00	90.00	179.56	9485.00	6091.50	4419.92	-4419.80	33.87	0.00	410468.31	746211.87	N 32 7 33.58	W 103 32 16.83
	13800.00	90.00	179.56	9485.00	6091.50	4519.92	-4519.79	34.63	0.00	410368.31	746212.63	N 32 7 32.59	W 103 32 16.83
	13900.00	90.00	179.56	9485.00	6091.50	4619.92	-4619.79	35.40	0.00	410268.32	746213.40	N 32 7 31.61	W 103 32 16.83
	14000.00	90.00	179.56	9485.00	6091.50	4719.92	-4719.79	36.17	0.00	410168.32	746214.17	N 32 7 30.62	W 103 32 16.83
	14100.00	90.00	179.56	9485.00	6091.50	4819.92	-4819.78	36.93					

EOG RESOURCES, INC.
VACA 11 FED #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

10M BOPE

Rig Floor

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

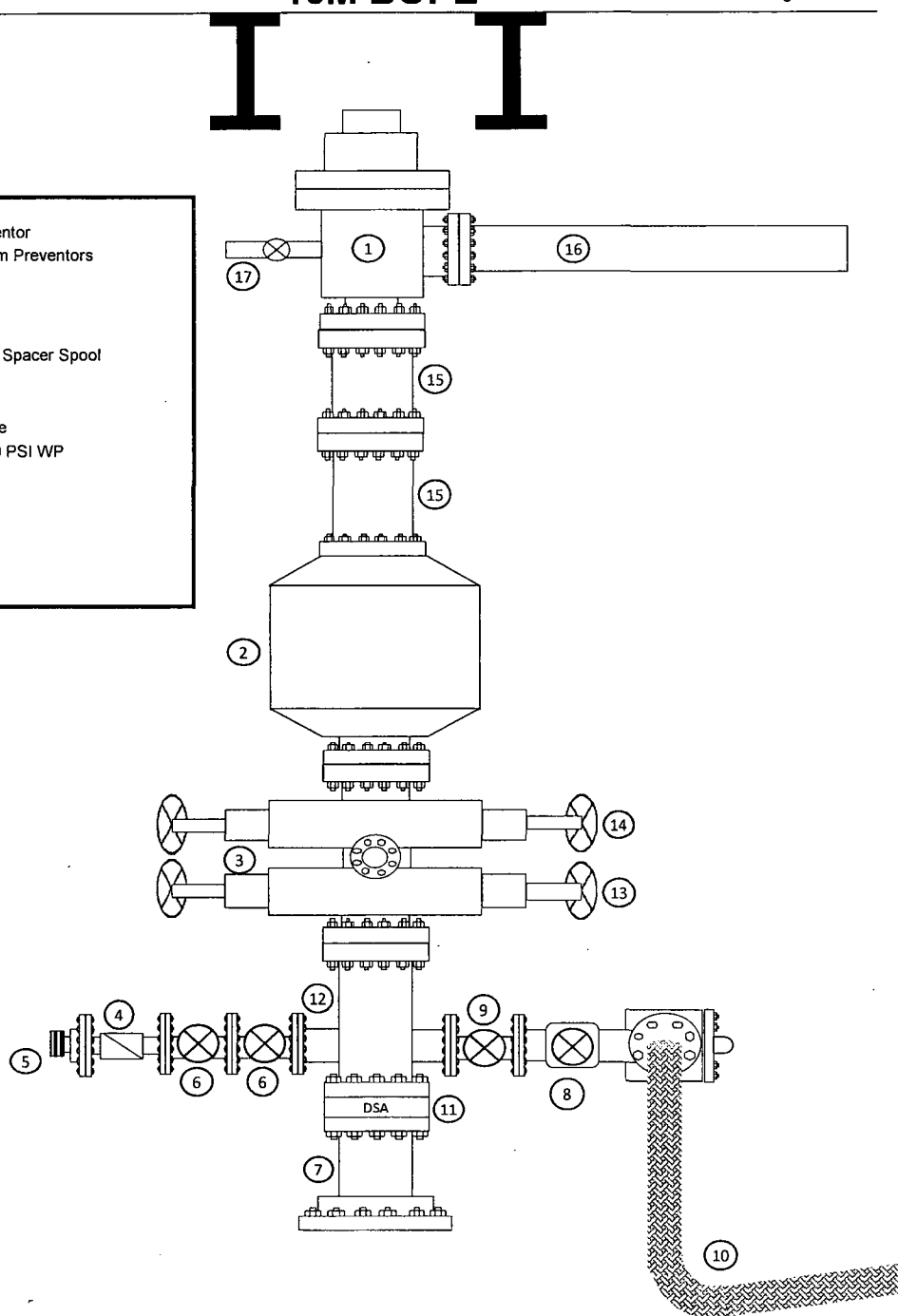
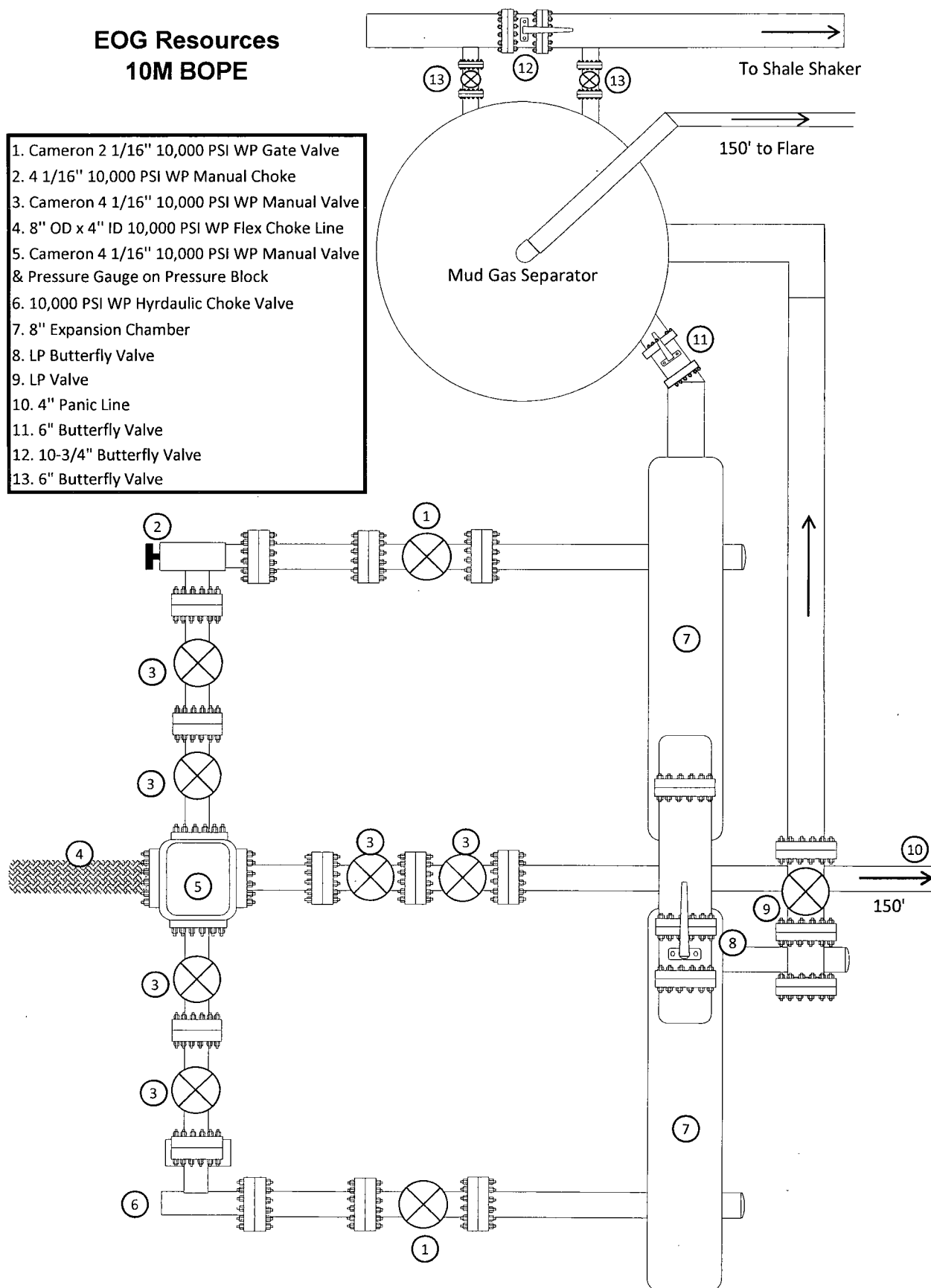


Exhibit 1a

EOG Resources 10M BOPE

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



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#90057 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



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: CACTUS

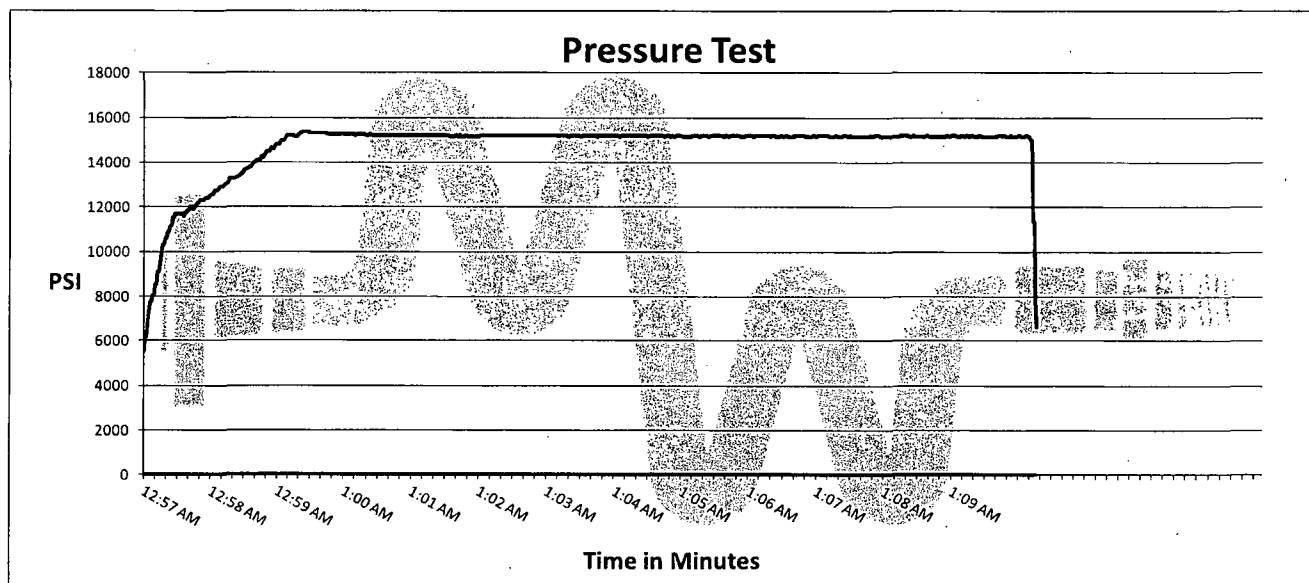
SALES ORDER# 90067

Hose Specifications

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

Verification

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



Test Pressure
15000 PSI

Time Held at Test Pressure
11 1/4 Minutes

Actual Burst Pressure

Peak Pressure
15439 PSI

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

Tested By: Bobby Fink

Approved By: Mendi Jackson

Bobby Fink

Mendi Jackson

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

Closure Plan for Closed Loop Drilling System

1. METHODS OF HANDLING WASTE MATERIALS

- a. Drill cuttings shall be disposed of in steel cuttings bins (catch tanks) on the drilling pad (behind the steel mud tanks). The bin and cuttings shall be hauled to a division approved facility by an approved transporter. At the facility, the cuttings shall be removed from the bin and the bin shall be returned to the drilling site for reuse, moved to the next drilling site or returned to the provider.
- b. Remaining drilling fluids shall be hauled off by approved transports to a division approved disposal facility. Water produced during completion shall be put in storage tanks and disposed of at a division approved facility. Oil and condensate produced shall be put in a storage tank and sold or put in a sales pipeline.

2. RECLAMATION

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