

SEP 19 2013

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

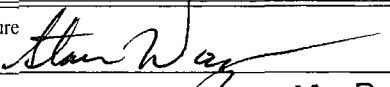
RECEIVED

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM19858
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. If Unit or CA Agreement, Name and No.
3a. Address P.O. BOX 2267 MIDLAND, TX 79702		8. Lease Name and Well No. <40142> Hawk 25 Fed 2H
3b. Phone No. (include area code) 432-686-3689		9. API Well No. 30-025- 41419
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 250' FNL & 1020' FWL, U/L M (SWSW) At proposed prod. zone 230' FNL & 971' FWL, U/L D (NWNW)		10. Field and Pool, or Exploratory Red Hills Bone Spring North
11. Sec., T. R. M. or Blk. and Survey or Area Sec 25, T24S, R33E 26430		12. County or Parish Lea
13. State NM		14. Distance in miles and direction from nearest town or post office* Approximately +/- 24 miles Southwest from Jal, NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 230'	16. No. of acres in lease 1440	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. 30'	19. Proposed Depth 14046' MD, 9487' TVD	20. BLM/BIA Bond No. on file NM 2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3538' GL	22. Approximate date work will start* 08/01/2013	23. Estimated duration 25 days

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Stan Wagner	Date 03/22/2013
Title Regulatory Analyst Isi George MacDonell		
Approved by (Signature)	Name (Printed/Typed)	Date
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	SEP 17 2013

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

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

SEP 23 2013

en

EOG RESOURCES, INC.
HAWK 25 FED NO. 2H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,200'
Top of Salt	1,347'
Base of Salt	5,044'
Lamar	5,300'
Bell Canyon	5,331'
Cherry Canyon	6,323'
Brushy Canyon	7,735'
Bone Spring Lime	9,217'
TD	9,487'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,323'	Oil
Brushy Canyon	7,735'	Oil
Bone Spring Lime	9,217'	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 1,230' and circulating cement back to surface.

4. CASING PROGRAM - NEW

See CDA

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,230'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000'-5,150'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0'-14,046'	5.500"	17#	P110 or HCP110	LTC	1.125	1.25	1.60

EOG RESOURCES, INC.
HAWK 25 FED NO. 2H

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,230'	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
5,150'	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
14,046'	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 @ 4650')
	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
	1300	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

*WOC -
must
reach
500 psi
compressil
within 48
hours,*

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:

*5 el
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.
HAWK 25 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.

See COA

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,230' 1315'	Fresh Water Gel	8.6-8.8	28-34	N/c
1,230' – 5,150' 520'	Saturated Brine	10.0-10.2	28-34	N/c
5,150' – 8,959'	Cut Brine Water	8.5-9.3	28-34	N/c
8,959' – 14,046' 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.

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

EOG RESOURCES, INC.
HAWK 25 FED NO. 2H

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

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

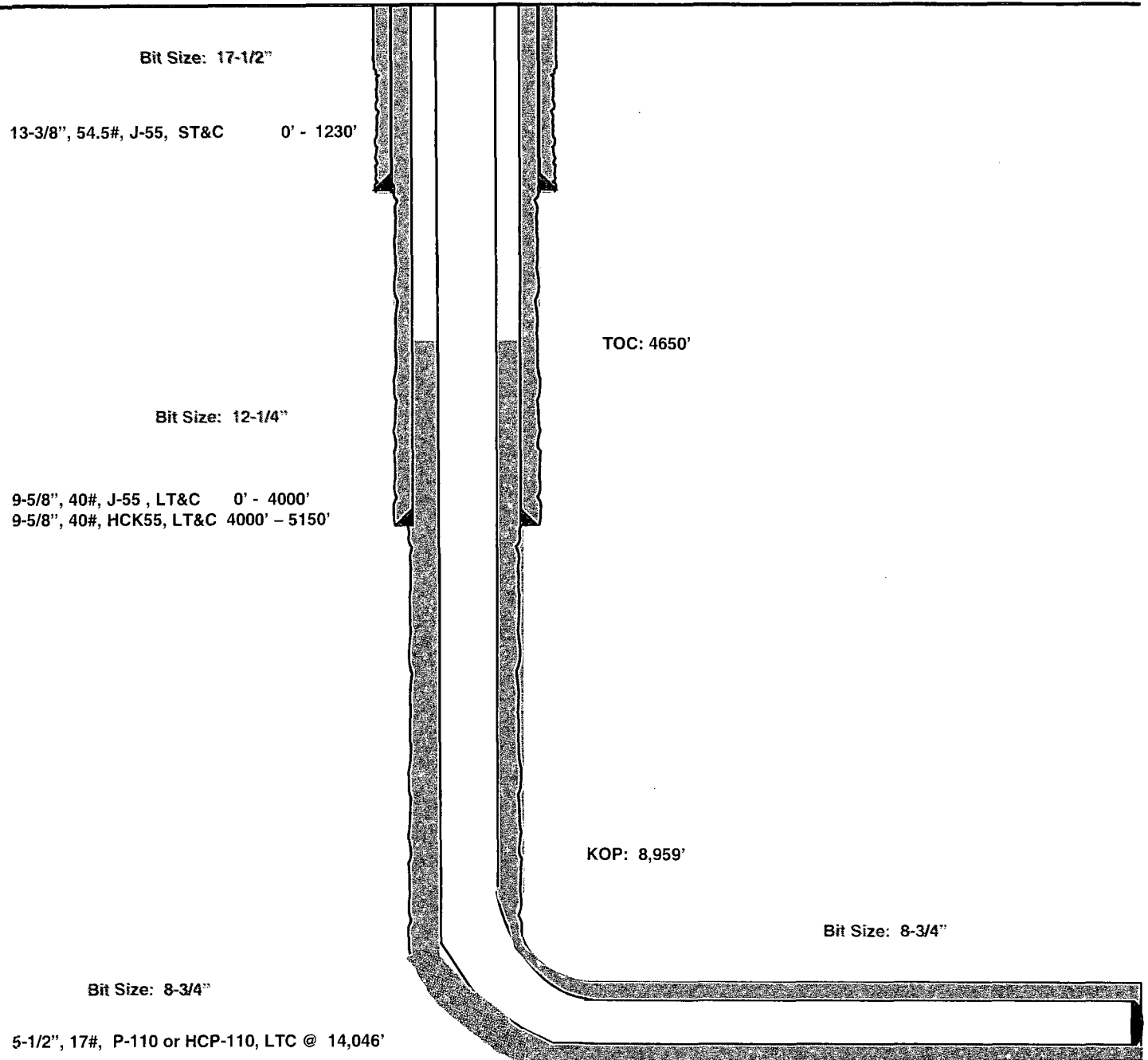
Hawk 25 Fed #2H
Red Hills
Lea County, New Mexico

250' FSL
1020' FWL
Section 25
T-24-S, R-33-E

Proposed Wellbore

API: 30-025- *****

KB: 3,568'
GL: 3,538'



Lateral: 14,046' MD, 9,487' TVD

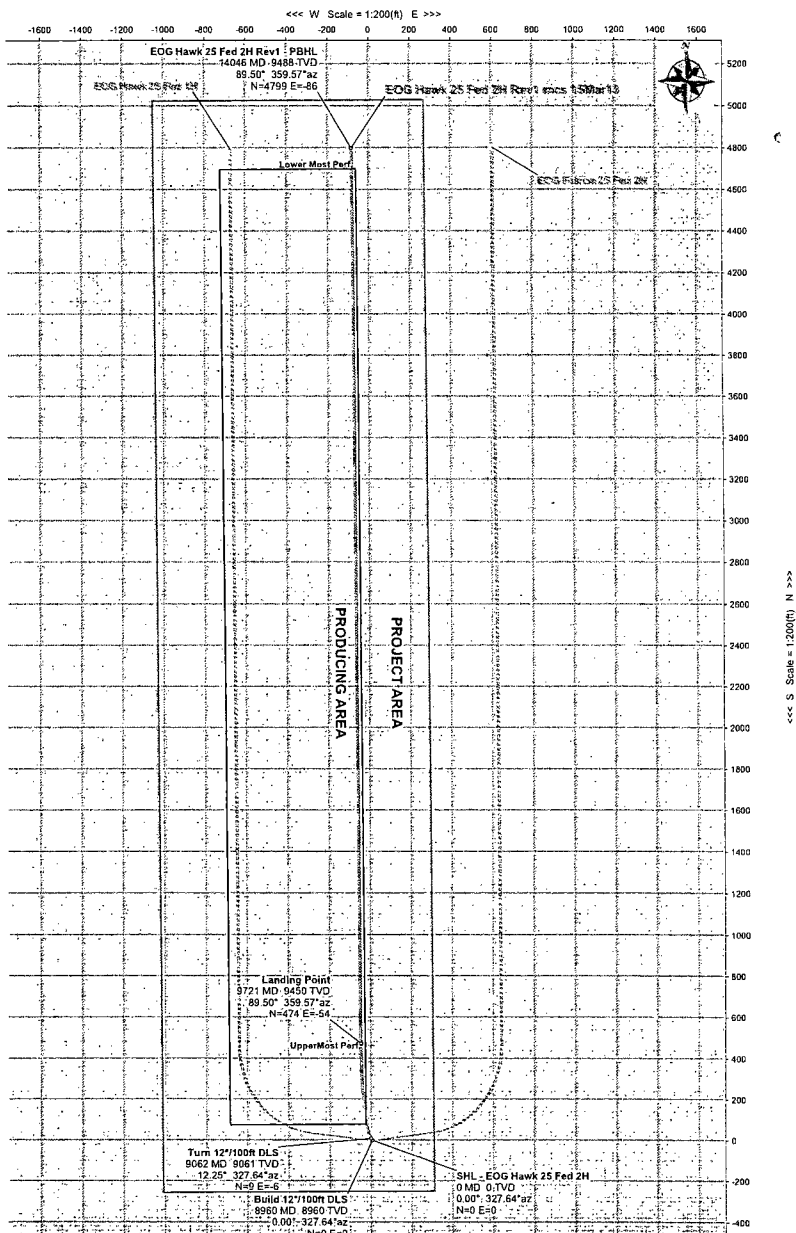
BH Location: 230' FNL & 971' FWL
Section 25
T-24-S, R-33-E

WELL	Hawk 25 Fed 2H	FIELD	Lea County, NM (NAD 27)	STRUCTURE	Cactus 123
Magnetic Parameters	Model: BGDH 2012	Dip: 40.872°	Date: February 07, 2013	Surface Location	NAD27 New Mexico State Plane, Eastern Zone, US Feet
	Mag Dec: 7.464°	FS	44410 Tot	Lat: N 32 10 54.803	Northing: 438818.08 BUS
				Lon: W 103 31 50.918	Eastng: 748289.00 BUS
					Grid Conv: 0.427°
					Scale Fact: 0.99997970
Miscellaneous	She: Hawk 25 Fed 2H	TVD Ref: RKB(3548 above)	Rev: rev 11/10/13	Shy Date: February 07, 2013	

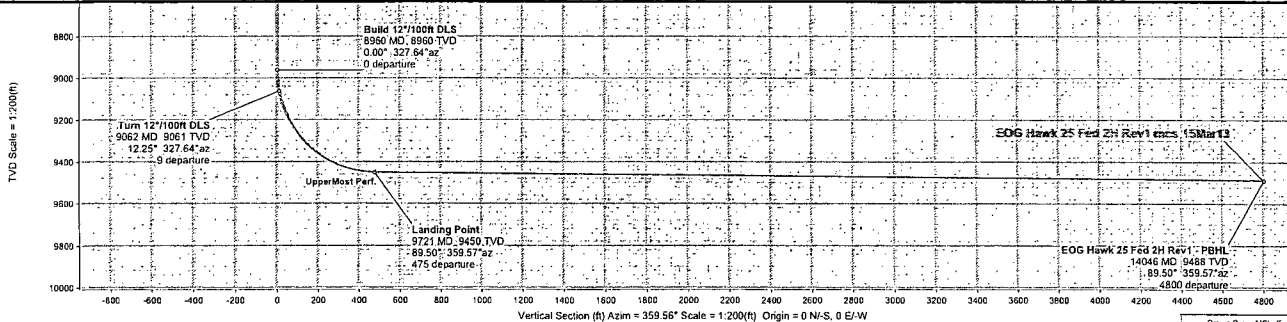
Legend

-----	PRODUCING AREA
-----	EOG Hawk 25 Fed 2H Rev1 PBHL
-----	SHL
-----	Lower Most Part
-----	Upper Most Part
-----	Turn 12°/100ft DLS
-----	Build 12°/100ft DLS
-----	Land Point

Grid North
Tot Corr (M->G 7.0367°)
Mag Dec (7.464°)
Grid Conv (0.427°)



Comments	Survey MD	Inc	Azim	TVD	SSTVD	VS	NS	EW	Longitude	Latitude	Easting	Northng	DLS	Tool Face
SHL	0.00	0.00	327.64	0.00	-3568.00	0.00	0.00	0.00	W 103 31 50.918	N 32 10 54.803	748289.00	430818.00		327.64
Build 12°/100ft DLS	8959.74	0.00	327.64	8959.74	5391.74	0.00	0.00	0.00	W 103 31 50.918	N 32 10 54.803	748289.00	430818.00	0.00	327.64
Turn 12°/100ft DLS	9061.82	12.25	327.64	9061.05	5493.05	9.23	9.18	-5.82	W 103 31 50.985	N 32 10 54.894	748283.18	430827.18	12.00	32.58
Landing Point	9721.23	89.50	359.57	9450.00	5882.00	474.76	474.36	-53.58	W 103 31 51.500	N 32 10 59.501	748235.42	431292.35	12.00	94.98
PBHL	14046.27	89.50	359.57	9487.75	5919.75	4799.63	4799.11	-86.00	W 103 31 51.502	N 32 11 42.298	748203.00	435617.00	0.00	



Drawn By: MShaffer
Date Created: March 15, 2013 02:23:09 PM
Checked By: MShaffer
Checked Date: March 15, 2013 02:23:09 PM
Approved By: MShaffer
Approved Date: March 15, 2013 02:23:09 PM



EOG Hawk 25 Fed 2H Rev1 mcs 15Mar13 Proposal Geodetic Report



(Def Plan)

Report Date: March 15, 2013 - 02:18 PM
Client: EOG Resources
Field: NM Lea County (NAD 27)
Structure / Slot: EOG Hawk 25 Fed 2H / EOG Hawk 25 Fed 2H
Well: EOG Hawk 25 Fed 2H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: EOG Hawk 25 Fed 2H Rev1 mcs 15Mar13
Survey Date: February 07, 2013
Tort / AHD / DDI / ERD Ratio: 91.380 * / 4805.516 ft / 5.813 / 0.506
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 10' 54.80282", W 103° 31' 50.91783"
Location Grid N/E Y/X: N 430818.000 ftUS, E 748289.000 ftUS
CRS Grid Convergence Angle: 0.4275 °
Grid Scale Factor: 0.9999797

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.558 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3568.000 ft above
Seabed / Ground Elevation: 3538.000 ft above
Magnetic Declination: 7.464 °
Total Gravity Field Strength: 998.4700mgn (9.80665 Based)
Total Magnetic Field Strength: 48410.650 nT
Magnetic Dip Angle: 60.072 °
Declination Date: February 07, 2013
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.4275 °
Total Corr Mag North->Grid North: 7.0367 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL - EOG Hawk 25 Fed 2H	0.00	0.00	327.64	0.00	0.00	0.00	0.00	N/A	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	100.00	0.00	327.64	100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	200.00	0.00	327.64	200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	300.00	0.00	327.64	300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	400.00	0.00	327.64	400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	500.00	0.00	327.64	500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	600.00	0.00	327.64	600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	700.00	0.00	327.64	700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	800.00	0.00	327.64	800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	900.00	0.00	327.64	900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1000.00	0.00	327.64	1000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1100.00	0.00	327.64	1100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1200.00	0.00	327.64	1200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1300.00	0.00	327.64	1300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1400.00	0.00	327.64	1400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1500.00	0.00	327.64	1500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1600.00	0.00	327.64	1600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1700.00	0.00	327.64	1700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1800.00	0.00	327.64	1800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	1900.00	0.00	327.64	1900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2000.00	0.00	327.64	2000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2100.00	0.00	327.64	2100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2200.00	0.00	327.64	2200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2300.00	0.00	327.64	2300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2400.00	0.00	327.64	2400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2500.00	0.00	327.64	2500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2600.00	0.00	327.64	2600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2700.00	0.00	327.64	2700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2800.00	0.00	327.64	2800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	2900.00	0.00	327.64	2900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3000.00	0.00	327.64	3000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3100.00	0.00	327.64	3100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3200.00	0.00	327.64	3200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3300.00	0.00	327.64	3300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3400.00	0.00	327.64	3400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3500.00	0.00	327.64	3500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3600.00	0.00	327.64	3600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3700.00	0.00	327.64	3700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3800.00	0.00	327.64	3800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	3900.00	0.00	327.64	3900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4000.00	0.00	327.64	4000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4100.00	0.00	327.64	4100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4200.00	0.00	327.64	4200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4300.00	0.00	327.64	4300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4400.00	0.00	327.64	4400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4500.00	0.00	327.64	4500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4600.00	0.00	327.64	4600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4700.00	0.00	327.64	4700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4800.00	0.00	327.64	4800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	4900.00	0.00	327.64	4900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5000.00	0.00	327.64	5000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5100.00	0.00	327.64	5100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5200.00	0.00	327.64	5200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5300.00	0.00	327.64	5300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5400.00	0.00	327.64	5400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5500.00	0.00	327.64	5500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5600.00	0.00	327.64	5600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5700.00	0.00	327.64	5700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5800.00	0.00	327.64	5800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	5900.00	0.00	327.64	5900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6000.00	0.00	327.64	6000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6100.00	0.00	327.64	6100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6200.00	0.00	327.64	6200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6300.00	0.00	327.64	6300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6400.00	0.00	327.64	6400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6500.00	0.00	327.64	6500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6600.00	0.00	327.64	6600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6700.00	0.00	327.64	6700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6800.00	0.00	327.64	6800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	6900.00	0.00	327.64	6900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7000.00	0.00	327.64	7000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7100.00	0.00	327.64	7100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7200.00	0.00	327.64	7200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7300.00	0.00	327.64	7300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7400.00	0.00	327.64	7400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7500.00	0.00	327.64	7500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7600.00	0.00	327.64	7600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7700.00	0.00	327.64	7700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7800.00	0.00	327.64	7800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	7900.00	0.00	327.64	7900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8000.00	0.00	327.64	8000.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8100.00	0.00	327.64	8100.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8200.00	0.00	327.64	8200.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8300.00	0.00	327.64	8300.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8400.00	0.00	327.64	8400.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8500.00	0.00	327.64	8500.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8600.00	0.00	327.64	8600.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8700.00	0.00	327.64	8700.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8800.00	0.00	327.64	8800.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	8900.00	0.00	327.64	8900.00	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
Build 12"/100ft DLS	8959.74	0.00	327.64	8959.74	0.00	0.00	0.00	0.00	430818.00	748289.00	N 32 10 54.80	W 103 31 50.92
	9000.00	4.83	327.64	8999.95	1.44	1.43	-0.91	12.00	430819.43	748288.09	N 32 10 54.82	W 103 31 50.93
Turn 12"/100ft DLS	9061.82	12.25	327.64	9061.05	9.23	9.18	-5.82	12.00	430827.18	748283.18	N 32 10 54.89	W 103 31 50.98
	9100.00	16.30	336.46	9098.04	17.60	17.52	-10.13	12.00	430835.52	748278.87	N 32 10 54.80	W 103 31 51.03
	9200.00	27.68	346.96	9190.65	53.30	53.14	-21.01	12.00	430871.14	748267.99	N 32 10 55.33	W 103 31 51.16
	9300.00	39.41	351.58	9273.87	107.60	107.36	-30.94	12.00	430925.36	748258.07	N 32 10 55.87	W 103 31 51.27
	9400.00	51.25	354.33	9344.05	178.13	177.83	-39.47	12.00	430995.82	748249.54	N 32 10 56.57	W 103 31 51.36
	9500.00	63.14	356.29	9398.13	261.80	261.45	-46.23	12.00	431079.44	748242.77	N 32 10 57.39	W 103 31 51.43
	9600.00	75.05	357.87	9433.75	354.96	354.58	-50.93	12.00	431172.57	748238.07	N 32 10 58.32	W 103 31 51.48
	9700.00	86.97	359.28	9449.35	453.54	453.14	-53.37	12.00	431271.13	748235.63	N 32 10 59.29	W 103 31 51.50
Landing Point	9721.23	89.50	359.57	9450.00	474.76	474.36	-53.58	12.00	431292.35	748235.42	N 32 10 59.50	W 103 31 51.50
	9800.00	89.50	359.57	9450.69	553.52	553.12	-54.17	0.00	431371.11	748234.83	N 32 11 0.28	W 103 31 51.50
	9900.00	89.50	359.57	9451.56	653.52	653.11	-54.92	0.00	431471.10	748234.08	N 32 11 1.27	W 103 31 51.50
	10000.00	89.50	359.57	9452.44	753.51	753.11	-55.67	0.00	431571.09	748233.33	N 32 11 2.26	W 103 31 51.50
	10100.00	89.50	359.57	9453.31	853.51	853.10	-56.42	0.00	431671.08	748232.58	N 32 11 3.25	W 103 31 51.50
	10200.00	89.50	359.57	9454.18	953.51	953.09	-57.17	0.00	431771.07	748231.83	N 32 11 4.24	W 103 31 51.50
	10300.00	89.50	359.57	9455.06	1053.50	1053.09	-57.92	0.00	431871.06	748231.08	N 32 11 5.23	W 103 31 51.50
	10400.00	89.50	359.57	9455.93	1153.50	1153.08	-58.67	0.00	431971.05	748230.33	N 32 11 6.22	W 103 31 51.50
	10500.00	89.50	359.57	9456.80	1253.49	1253.07	-59.42	0.00	432071.05	748229.58	N 32 11 7.21	W 103 31 51.50
	10600.00	89.50	359.57	9457.67	1353.49	1353.07	-60.17	0.00	432171.04	748228.83	N 32 11 8.20	W 103 31 51.50
	10700.00	89.50	359.57	9458.55	1453.49	1453.06	-60.92	0.00	432271.03	748228.08	N 32 11 9.19	W 103 31 51.50
	10800.00	89.50	359.57	9459.42	1553.48	1553.05	-61.67	0.00	432371.02	748227.33	N 32 11 10.18	W 103 31 51.50
	10900.00	89.50	359.57	9460.29	1653.48	1653.05	-62.42	0.00	432471.01	748226.58	N 32 11 11.16	W 103 31 51.50
	11000.00	89.50	359.57	9461.16	1753.47	1753.04	-63.17	0.00	432571.00	748225.84	N 32 11 12.15	W 103 31 51.50
	11100.00	89.50	359.57	9462.04	1853.47	1853.03	-63.92	0.00	432670.99	748225.09	N 32 11 13.14	W 103 31 51.50
	11200.00	89.50	359.57	9462.91	1953.47	1953.03	-64.67	0.00	432770.98	748224.34	N 32 11 14.13	W 103 31 51.50
	11300.00	89.50	359.57	9463.78	2053.46	2053.02	-65.42	0.00	432870.97	748223.59	N 32 11 15.12	W 103 31 51.50
	11400.00	89.50	359.57	9464.66	2153.46	2153.01	-66.16	0.00	432970.97	748222.84	N 32 11 16.11	W 103 31 51.50
	11500.00	89.50	359.57	9465.53	2253.46	2253.01	-66.91	0.00	433070.96	748222.09	N 32 11 17.10	W 103 31 51.50
	11600.00	89.50	359.57	9466.40	2353.45	2353.00	-67.66	0.00	433170.95	748221.34	N 32 11 18.09	W 103 31 51.50
	11700.00	89.50	359.57	9467.27	2453.45	2452.99	-68.41	0.00	433270.94	748220.59	N 32 11 19.08	W 103 31 51.50
	11800.00	89.50	359.57	9468.15	2553.44	2552.99	-69.16	0.00	433370.93	748219.84	N 32 11 20.07	W 103 31 51.50
	11900.00	89.50	359.57	9469.02	2653.44	2652.98	-69.91	0.00	433470.92	748219.09	N 32 11 21.06	W 103 31 51.50
	12000.00	89.50	359.57	9469.89	2753.44	2752.97	-70.66	0.00	433570.91	748218.34	N 32 11 22.05	W 103 31 51.50
	12100.00	89.50	359.57	9470.76	2853.43	2852.97	-71.41	0.00	433670.90	748217.59	N 32 11 23.04	W 103 31 51.50
	12200.00	89.50	359.57	9471.64	2953.43	2952.96	-72.16	0.00	433770.89	748216.84	N 32 11 24.03	W 103 31 51.50
	12300.00	89.50	359.57	9472.51	3053.43	3052.95	-72.91	0.00	433870.89	748216.09	N 32 11 25.02	W 103 31 51.50
	12400.00	89.50	359.57	9473.38	3153.42	3152.95	-73.66	0.00	433970.88	748215.34	N 32 11 26.01	W 103 31 51.50
	12500.00	89.50	359.57	9474.26	3253.42	3252.94	-74.41	0.00	434070.87	748214.59	N 32 11 27.00	W 103 31 51.50
	12600.00	89.50	359.57	9475.13	3353.41	3352.93	-75.16	0.00	434170.86	748213.84	N 32 11 27.99	W 103 31 51.50
	12700.00	89.50	359.57	9476.00	3453.41	3452.93	-75.91	0.00	434270.85	748213.09	N 32 11 28.98	W 103 31 51.50
	12800.00	89.50	359.57	9476.87	3553.41	3552.92	-76.66	0.00	434370.84	748212.34	N 32 11 29.97	W 103 31 51.50
	12900.00	89.50	359.57	9477.75	3653.40	3652.91	-77.41	0.00	434470.83	748211.59	N 32 11 30.96	W 103 31 51.50
	13000.00	89.50	359.57	9478.62	3753.40	3752.91	-78.16	0.00	434570.82	748210.84	N 32 11 31.94	W 103 31 51.50
	13100.00	89.50	359.57	9479.49	3853.39	3852.90	-78.91	0.00	434670.82	748210.09	N 32 11 32.93	W 103 31 51.50
	13200.00	89.50	359.57	9480.36	3953.39	3952.89	-79.66	0.00	434770.81	748209.34	N 32 11 33.92	W 103 31 51.50
	13300.00	89.50	359.57	9481.24	4053.39	4052.89	-80.41	0.00	434870.80	748208.59	N 32 11 34.91	W 103 31 51.50
	13400.00	89.50	359.57	9482.11	4153.38	4152.88	-81.16	0.00	434970.79	748207.84	N 32 11 35.90	W 103 31 51.50
	13500.00	89.50	359.57	9482.98	4253.38	4252.87	-81.91	0.00	435070.78	748207.09	N 32 11 36.89	W 103 31 51.50
	13600.00	89.50	359.57	9483.86	4353.38	4352.87	-82.66	0.00	435170.77	748206.35	N 32 11 37.88	W 103 31 51.50
	13700.00	89.50	359.57	9484.73	4453.37	4452.86	-83.41	0.00	435270.76	748205.60	N 32 11 38.87	W 103 31 51.50
	13800.00	89.50	359.57	9485.60	4553.37	4552.85	-84.16	0.00	435370.75	748204.85	N 32 11 39.86	W 103 31 51.50
	13900.00	89.50	359.57	9486.47	4653.36	4652.85	-84.91	0.00	435470.74	748204.10	N 32 11 40.85	W 103 31 51.50
	14000.00	89.50	359.57	9487.35	4753.36	4752.84	-85.66	0.00	435570.74	748203.35	N 32 11 41.84	W 103 31 51.50
EOG Hawk 25 Fed 2H Rev1 - PBHL	14046.27	89.50	359.57	9487.75	4799.63	4799.11	-86.00	0.00	435617.00	74820		

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
EOG Hawk 25 Fed 2H - PBHL	14045.50	89.50	359.56	9487.75	4800.25	4800.11	-37.00	0.00	435618.00	748252.00	N 32 11 42.30	W 103 31 50.93

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	30.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	Original Borehole / EOG Hawk 25 Fed 2H Rev0 mcs 7Feb13
	30.000	14045.499	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / EOG Hawk 25 Fed 2H Rev0 mcs 7Feb13

EOG RESOURCES, INC.
HAWK 25 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

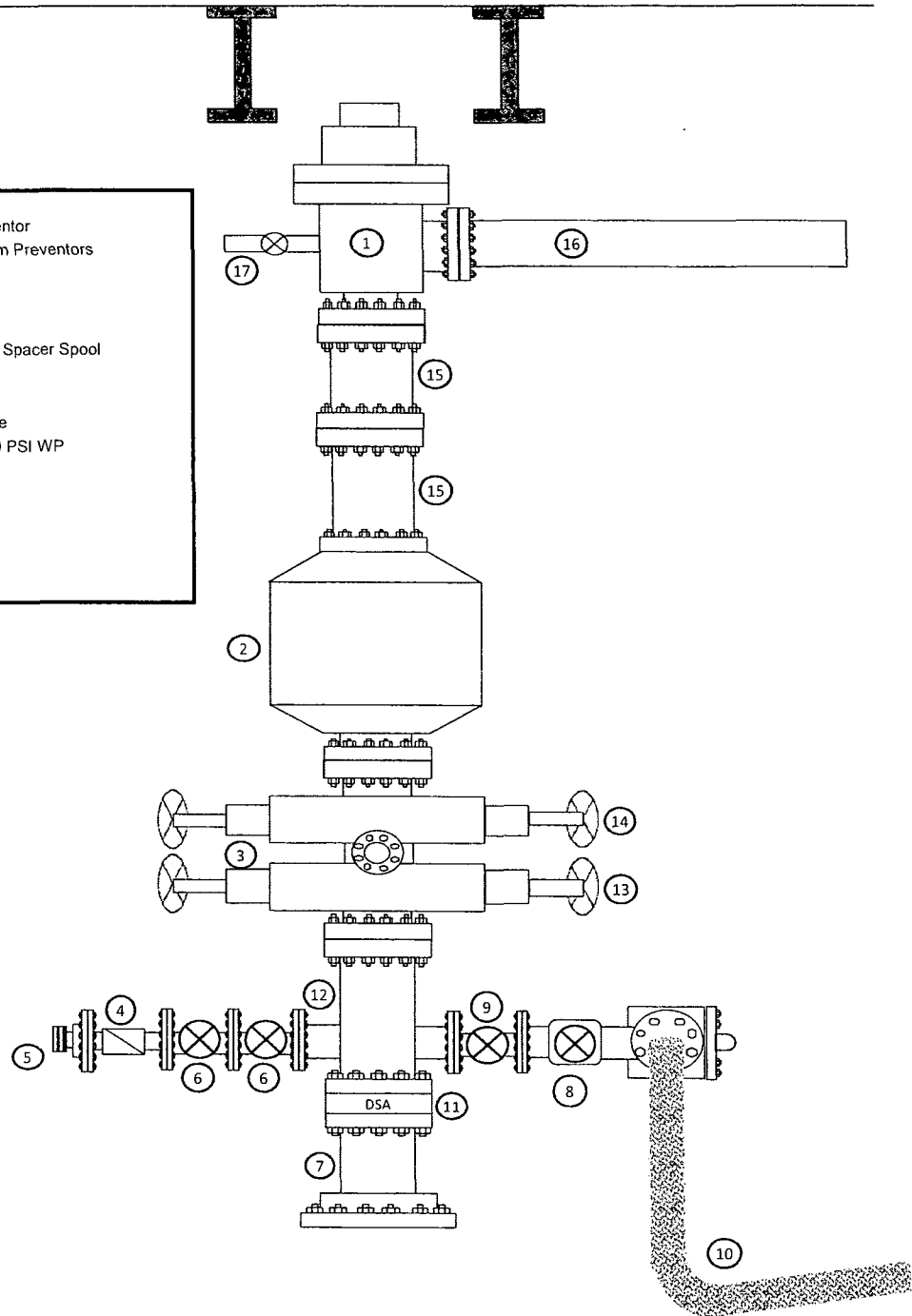
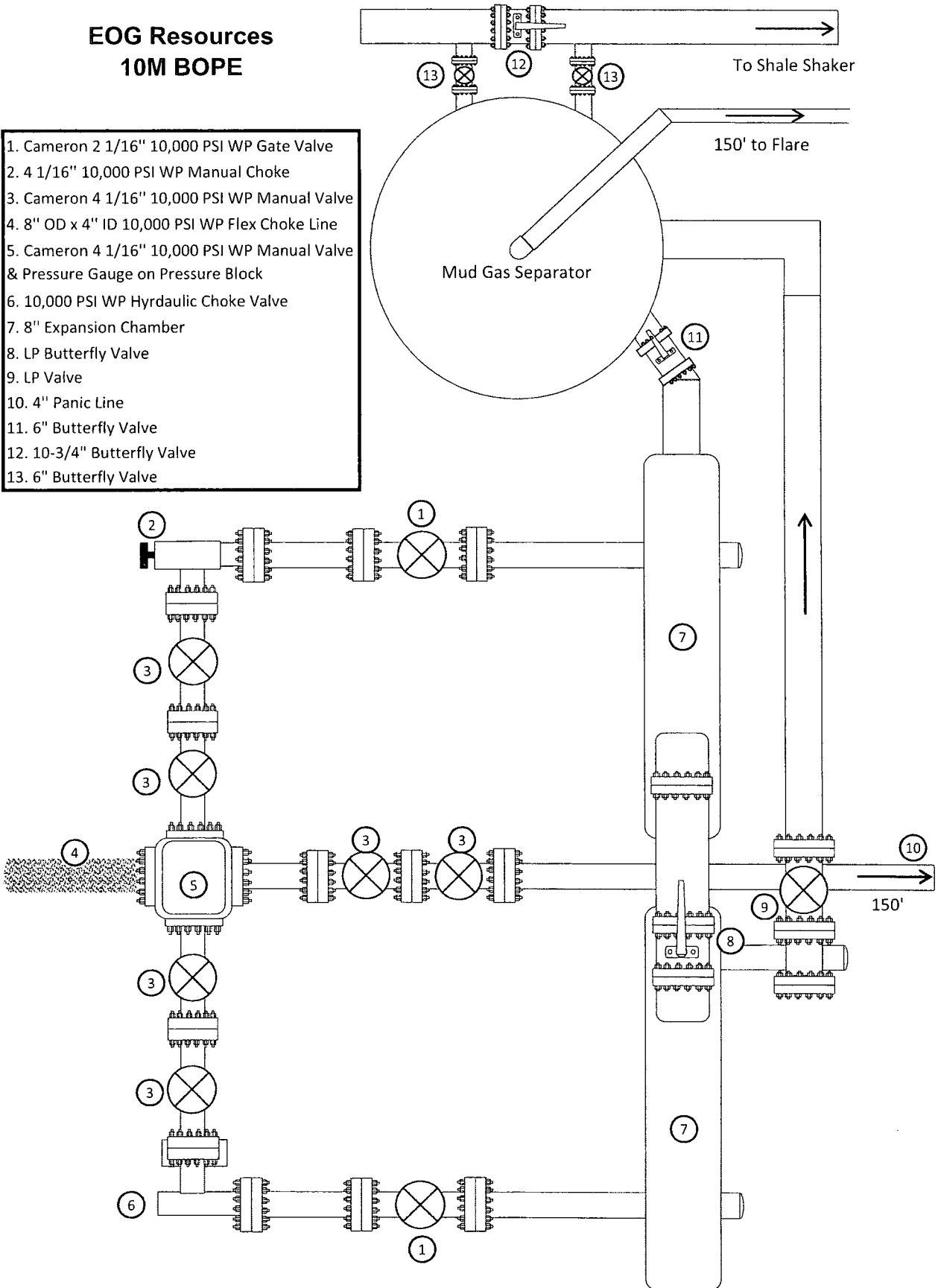


Exhibit 1a

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 Hyrdraulic 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





Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: CACTUS

SALES ORDER# 90067

Hose Specifications

Hose Type

C & K

I.D.

4"

Working Pressure

10000 PSI

Length

35'

O.D.

8"

Burst Pressure

Standard Safety Multiplier Applies

Verification

Type of Fitting

4 1/16 10K

Die Size

6.62"

Hose Serial

Coupling Method

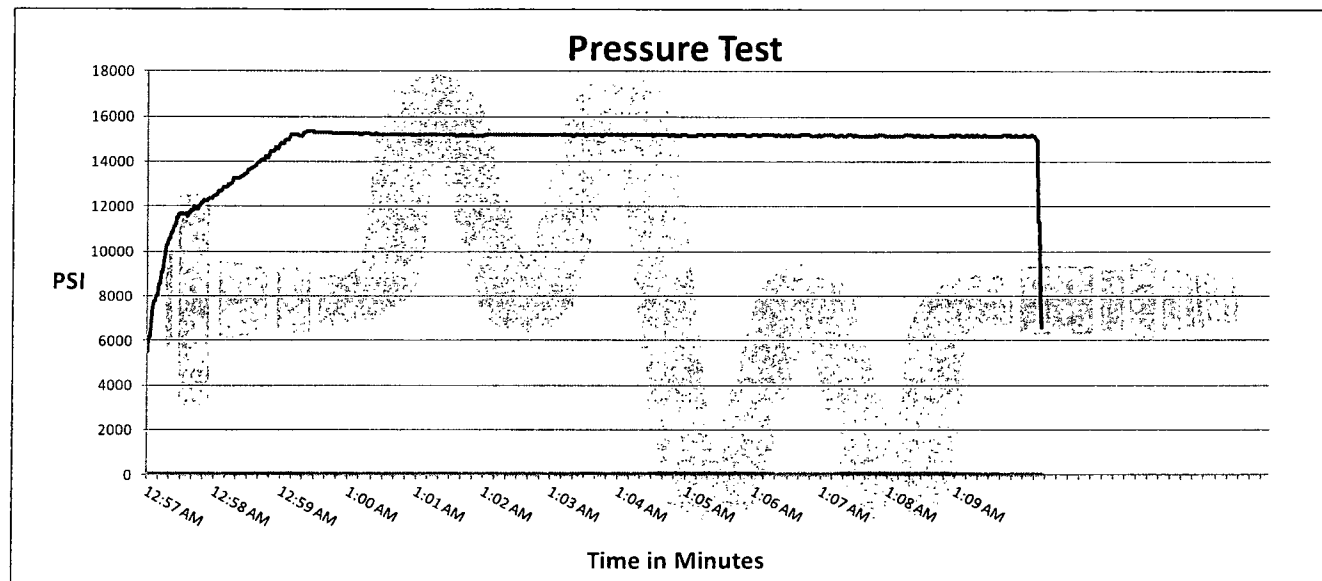
Swage

Final O.D.

6.68"

Hose Assembly Serial

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

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#90067 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