

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

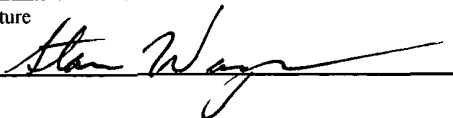
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNL2412	
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator EOG Resources Inc.		7. Unit or CA Agreement Name and No.	
3a. Address P.O. Box 2267 Midland, Texas 79702		8. Lease Name and Well No. Lusk 22 Federal 3H	
3b. Phone No. (include area code) 432-686-3689		9. API Well No. 30-025-40613	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1705' FNL & 330' FEL, U/L H At proposed prod. zone 1980' FNL & 330' FWL, U/L E		10. Field and Pool, or Exploratory Lusk; Bone Spring, East	
14. Distance in miles and direction from nearest town or post office* +/- 20 miles Southeast from Maljamar NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 22, T19S, R32E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 330'		12. County or Parish Lea	
16. No. of Acres in lease 2320		13. State NM	
17. Spacing Unit dedicated to this well S/2 of N/2 Sec 22			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 821' to Sloan Fed 2		19. Proposed Depth 13984 MD - 9550 TVD	
20. BLM/BIA Bond No. on file NM 2308			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3606' GL		22. Approximate date work will start* 2/1/2011	
		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 10/20/2011
Title Regulatory Analyst		
Approved by (Signature) 	Name (Printed/Typed) Cody Haffner	Date JUN - 5 2012
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)

*(Instructions on page 2)

Capitan Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUN 13 2012

EOG RESOURCES, INC.
LUSK 22 FEDERAL NO. 3H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	990'
Top of Salt	1,070'
Base of Salt	2,610'
Yates	2,780'
Seven Rivers	3,125'
Capitan	3,225'
Queen	3,960'
Base Capitan	4,720'
Cherry Canyon	5,080'
Brushy Canyon	5,820'
Bone Spring 1 Carb	7,495'
Bone Spring Sand I	8,565'
Bone Spring 2 Carb	8,870'
Bone Spring 2 Sand	9,330'
Bone Spring 2 F Sand	9,500'
TD	9,550'

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

Upper Permian Sands	0- 400'	Fresh Water
Brushy Canyon	5,820'	Oil
Bone Spring 2 F Sand	9,500'	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 1020' and circulating cement back to surface. 1095

4. CASING PROGRAM - NEW

See
OA

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
14.75"	0 - 1020' ¹⁰⁹⁵	11.750"	42#	H40	STC	1.125	1.25	1.60
11.00"	0 - 4000'	8.625"	32#	J55	LTC	1.125	1.25	1.60
11.00"	4000' - 4900'	8.625"	32#	HCK55	LTC	1.125	1.25	1.60
7.875"	0' - 13,984'	5.5"	17#	P110 or HCP110	LTC	1.125	1.25	1.60

EOG RESOURCES, INC.
LUSK 22 FEDERAL NO. 3H

Cementing Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1020'	200	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)
	250	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
4,900' Stage Tool @ 3100'	150	12.7	2.22	1 st Stage Lead: Class 'C' + 2.00% SMS + 10.00% Salt + 1.10% R-3 + 0.005 pps Static Free + 0.25 pps Cello Flake
	200	14.8	1.33	1 st Stage Tail: Class 'C' + 0.60% FL-62 + 0.45% CD-32 + 0.15% SMS + 0.30% R-3
	425	12.7	2.22	2 nd Stage Lead: Class 'C' + 2.00% SMS + 10.0% Salt + 0.65% R-3 + 0.25 pps Cello Flake + 0.005 pps Static Free
	100	14.8	1.32	2 nd Stage Tail: Classs 'C' + 0.60% FL-62 + 0.45% CD-32 + 0.15% SMS + 0.15% R-3 + 0.005 pps Static Free
13,984'	225	10.8	3.67	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 @ 3180')
	300	11.8	2.38	Middle: 50:50:10 Class 'H' + 0.80% FL-52 + 0.45% ASA-301 + 0.40% SMS + 2.00% Salt + 3.00 lb/sx LCM-1 + 0.20% R-21 + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
	850	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:

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.
LUSK 22 FEDERAL NO. 3H

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000/ 250 psig and the annular preventer to 2500/ 250 psig. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. The intermediate casing will be tested to 2000 psi for 30 minutes.

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 – 1020' / 1045'	Fresh Water Gel	8.6-8.8	28-34	N/c
1020' – 4,900'	Saturated Brine	10.0-10.2	28-34	N/c
4,900' – 9,073'	Fresh Water	8.4-8.6	28-34	N/c
9,073' – 13,984' Lateral	Cut Brine Water	8.6-9.3	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) A mud logging unit will be continuously monitoring drill penetration rate and hydrocarbon shows from intermediate casing point to TD.
- (D) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

EOG RESOURCES, INC.
LUSK 22 FEDERAL NO. 3H

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.

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

The estimated bottom-hole temperature (BHT) at TD is 165 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 4281 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.

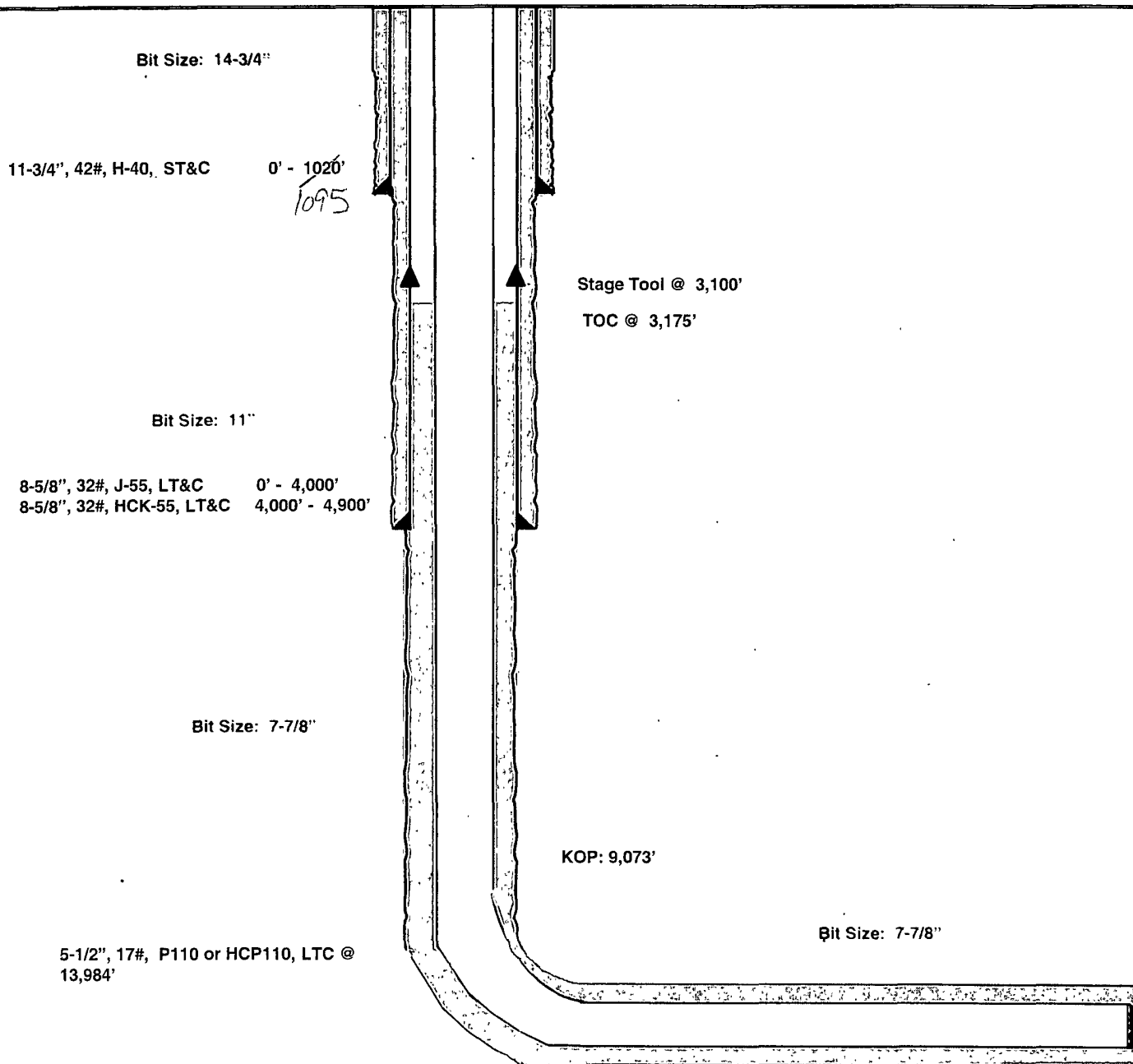
Lusk 22 Federal #3H
Lea County, New Mexico

1705' FNL
330' FEL
Section 22
T-19-S, R-32-E

Proposed Wellbore

API: 30-025-*****

KB: 3,636.5'
GL: 3,606.5'

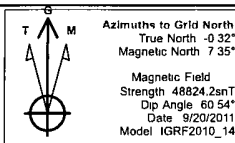


Lateral:
13,984' MD, 9,550' TVD *SH 12/25*
BH Location: *1080* 660' FNL & 330' FWL
Section 22
T-19-S, R-32-E

EOG Resources

Project: Lea County, NM (Nad27)
Site: Lusk 22 Federal
Well: Lusk 22 Fed 3H
Wellbore: Wellbore #1
Plan: Plan#1 092011
Rig: Cactus Rig No. 123

PROJECT DETAILS Lea County, NM (Nad27)
 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
 Location North Grd



WELL DETAILS: Lusk 22 Fed 3H

Northing 600074 80
 Ground Level 3606 50
 Easting 680775 80
 Latitude 32° 38' 54 00 N
 Longitude 103° 44' 45 64 W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Up Perf Lusk 22 Fed 3H	9526 83	-21 20	-329 30	600053 60	680446 50	Point
BHL Lusk 22 Fed 3H	9550 00	-297 40	-4629 01	599777 40	676146 80	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
9072 53	0 00	0 00	9072 53	0 00	0 00	0 00	0 00	0 00
9822 54	90 00	266 32	9550 00	-30 61	-476 48	12 00	266 32	477 47
13983 62	90 00	266 32	9550 00	-297 40	-4629 01	0 00	0 00	4638 55

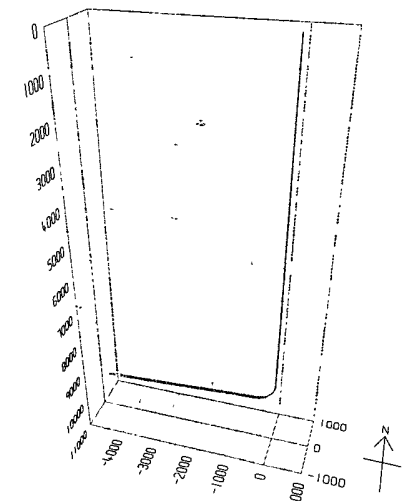
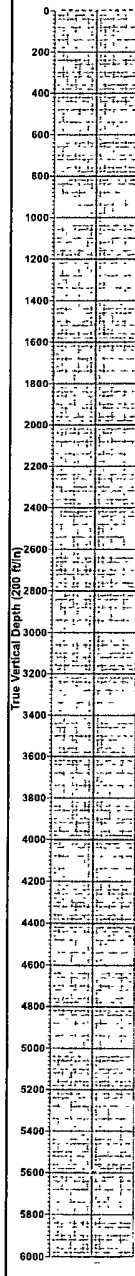
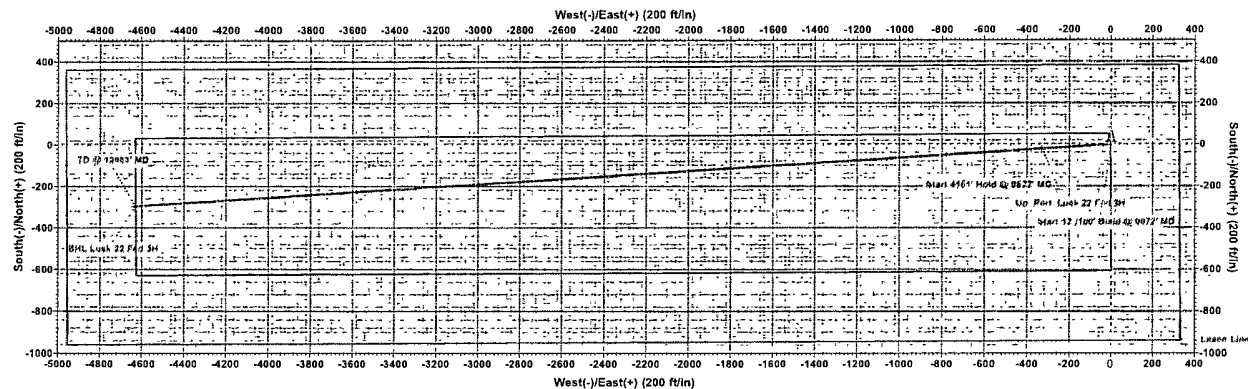
BHL Lusk 22 Fed 3H

ANNOTATIONS

TVD	MD	Annotation
9072 53	9072 53	Start 12°/100' Build @ 9072' MD
9550 00	9822 54	Start 4161' Hold @ 9822' MD
9550 00	13983 62	TD @ 13983' MD

FORMATION TOP DETAILS

No formation data is available



EOG Resources

Lea County, NM (Nad27)

Lusk 22 Federal

Lusk 22 Fed 3H

Wellbore #1

Plan: Plan#1 092011

EOG Resources

20 September, 2011



Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Project: Lea County, NM (Nad27)	
Map System:	US State Plane 1927 (Exact solution)
Geo Datum:	NAD 1927 (NADCON CONUS)
Map Zone:	New Mexico East 3001
System Datum:	Mean Sea Level

Site		Lusk 22 Federal			
Site Position:		Northing:		601,119.70 ft	
From: Map		Easting:		680,769.40 ft	
Position Uncertainty:		Slot Radius:		"	
0.00 ft				Latitude: 32° 39' 4.34 N	
				Longitude: 103° 44' 45.64 W	
				Grid Convergence: 0.32 °	

Well		Lusk 22 Fed 3H				
Well Position	+N/-S	0.00 ft	Northing:	600,074.80 ft	Latitude:	32° 38' 54.00 N
	+E/-W	0.00 ft	Easting:	680,775.80 ft	Longitude:	103° 44' 45.64 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,606.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	9/20/2011	7.67	60.54	48,824

Design		Plan#1 092011		
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	266.32

Survey Tool Program		Date 9/20/2011		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
0.00	13,983.62	Plan#1 092011 (Wellbore #1)	MWD	MWD - Standard

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey											
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
0.00	0.00	0.00	-3,606.50	0.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
100.00	0.00	0.00	-3,506.50	100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
200.00	0.00	0.00	-3,406.50	200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
300.00	0.00	0.00	-3,306.50	300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
400.00	0.00	0.00	-3,206.50	400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
500.00	0.00	0.00	-3,106.50	500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
600.00	0.00	0.00	-3,006.50	600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
700.00	0.00	0.00	-2,906.50	700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
800.00	0.00	0.00	-2,806.50	800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
900.00	0.00	0.00	-2,706.50	900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,000.00	0.00	0.00	-2,606.50	1,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,100.00	0.00	0.00	-2,506.50	1,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,200.00	0.00	0.00	-2,406.50	1,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,300.00	0.00	0.00	-2,306.50	1,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,400.00	0.00	0.00	-2,206.50	1,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,500.00	0.00	0.00	-2,106.50	1,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,600.00	0.00	0.00	-2,006.50	1,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,700.00	0.00	0.00	-1,906.50	1,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,800.00	0.00	0.00	-1,806.50	1,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
1,900.00	0.00	0.00	-1,706.50	1,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,000.00	0.00	0.00	-1,606.50	2,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,100.00	0.00	0.00	-1,506.50	2,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,200.00	0.00	0.00	-1,406.50	2,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,300.00	0.00	0.00	-1,306.50	2,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,400.00	0.00	0.00	-1,206.50	2,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,500.00	0.00	0.00	-1,106.50	2,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,600.00	0.00	0.00	-1,006.50	2,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey											
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	D Leg (°/100ft)	Northing (ft)	Easting (ft)	
2,700.00	0.00	0.00	-906.50	2,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,800.00	0.00	0.00	-806.50	2,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
2,900.00	0.00	0.00	-706.50	2,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,000.00	0.00	0.00	-606.50	3,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,100.00	0.00	0.00	-506.50	3,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,200.00	0.00	0.00	-406.50	3,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,300.00	0.00	0.00	-306.50	3,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,400.00	0.00	0.00	-206.50	3,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,500.00	0.00	0.00	-106.50	3,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,600.00	0.00	0.00	-6.50	3,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,700.00	0.00	0.00	93.50	3,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,800.00	0.00	0.00	193.50	3,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
3,900.00	0.00	0.00	293.50	3,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,000.00	0.00	0.00	393.50	4,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,100.00	0.00	0.00	493.50	4,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,200.00	0.00	0.00	593.50	4,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,300.00	0.00	0.00	693.50	4,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,400.00	0.00	0.00	793.50	4,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,500.00	0.00	0.00	893.50	4,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,600.00	0.00	0.00	993.50	4,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,700.00	0.00	0.00	1,093.50	4,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,800.00	0.00	0.00	1,193.50	4,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
4,900.00	0.00	0.00	1,293.50	4,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,000.00	0.00	0.00	1,393.50	5,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,100.00	0.00	0.00	1,493.50	5,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,200.00	0.00	0.00	1,593.50	5,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,300.00	0.00	0.00	1,693.50	5,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey											
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
5,400.00	0.00	0 00	1,793.50	5,400.00	0.00	0 00	0.00	0.00	600,074.80	680,775.80	
5,500.00	0.00	0 00	1,893.50	5,500.00	0.00	0 00	0.00	0.00	600,074.80	680,775.80	
5,600.00	0.00	0 00	1,993.50	5,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,700.00	0.00	0.00	2,093.50	5,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,800.00	0.00	0 00	2,193.50	5,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
5,900.00	0.00	0 00	2,293.50	5,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,000.00	0.00	0 00	2,393.50	6,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,100.00	0.00	0.00	2,493.50	6,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,200.00	0.00	0 00	2,593.50	6,200.00	0.00	0 00	0.00	0.00	600,074.80	680,775.80	
6,300.00	0.00	0.00	2,693.50	6,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,400.00	0.00	0 00	2,793.50	6,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,500.00	0.00	0.00	2,893.50	6,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,600.00	0.00	0.00	2,993.50	6,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,700.00	0.00	0.00	3,093.50	6,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,800.00	0.00	0 00	3,193.50	6,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
6,900.00	0.00	0 00	3,293.50	6,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,000.00	0.00	0 00	3,393.50	7,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,100.00	0.00	0 00	3,493.50	7,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,200.00	0.00	0.00	3,593.50	7,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,300.00	0.00	0 00	3,693.50	7,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,400.00	0.00	0.00	3,793.50	7,400.00	0.00	0 00	0.00	0.00	600,074.80	680,775.80	
7,500.00	0.00	0.00	3,893.50	7,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,600.00	0.00	0 00	3,993.50	7,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,700.00	0.00	0.00	4,093.50	7,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,800.00	0.00	0.00	4,193.50	7,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
7,900.00	0.00	0 00	4,293.50	7,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,000.00	0.00	0.00	4,393.50	8,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey											
MD (ft)	Inc. (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec. (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
8,100.00	0.00	0.00	4,493.50	8,100.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,200.00	0.00	0.00	4,593.50	8,200.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,300.00	0.00	0.00	4,693.50	8,300.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,400.00	0.00	0.00	4,793.50	8,400.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,500.00	0.00	0.00	4,893.50	8,500.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,600.00	0.00	0.00	4,993.50	8,600.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,700.00	0.00	0.00	5,093.50	8,700.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,800.00	0.00	0.00	5,193.50	8,800.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
8,900.00	0.00	0.00	5,293.50	8,900.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
9,000.00	0.00	0.00	5,393.50	9,000.00	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
9,072.53	0.00	0.00	5,466.03	9,072.53	0.00	0.00	0.00	0.00	600,074.80	680,775.80	
Start 12°/100' Build @ 9072' MD											
9,100.00	3.30	266.32	5,493.48	9,099.98	-0.05	-0.79	0.79	12.00	600,074.75	680,775.01	
9,200.00	15.30	266.32	5,591.99	9,198.49	-1.08	-16.88	16.91	12.00	600,073.72	680,758.92	
9,300.00	27.30	266.32	5,684.99	9,291.49	-3.41	-53.06	53.17	12.00	600,071.39	680,722.74	
9,400.00	39.30	266.32	5,768.42	9,374.92	-6.92	-107.74	107.96	12.00	600,067.88	680,668.06	
9,500.00	51.30	266.32	5,838.64	9,445.14	-11.47	-178.54	178.91	12.00	600,063.33	680,597.26	
9,600.00	63.30	266.32	5,892.57	9,499.07	-16.86	-262.36	262.90	12.00	600,057.94	680,513.44	
9,700.00	75.30	266.32	5,927.86	9,534.36	-22.84	-355.54	356.27	12.00	600,051.96	680,420.26	
9,800.00	87.30	266.32	5,942.97	9,549.47	-29.17	-454.00	454.94	12.00	600,045.63	680,321.80	
9,822.54	90.00	266.32	5,943.50	9,550.00	-30.61	-476.48	477.47	12.00	600,044.19	680,299.32	
Start 4161' Hold @ 9822' MD											
9,900.00	90.00	266.32	5,943.50	9,550.00	-35.58	-553.79	554.93	0.00	600,039.22	680,222.01	
10,000.00	90.00	266.32	5,943.50	9,550.00	-41.99	-653.58	654.93	0.00	600,032.81	680,122.22	
10,100.00	90.00	266.32	5,943.50	9,550.00	-48.40	-753.38	754.93	0.00	600,026.40	680,022.42	
10,200.00	90.00	266.32	5,943.50	9,550.00	-54.81	-853.17	854.93	0.00	600,019.99	679,922.63	
10,300.00	90.00	266.32	5,943.50	9,550.00	-61.23	-952.97	954.93	0.00	600,013.57	679,822.84	

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey										
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,400.00	90.00	266.32	5,943.50	9,550.00	-67.64	-1,052.76	1,054.93	0.00	600,007.16	679,723.04
10,500.00	90.00	266.32	5,943.50	9,550.00	-74.05	-1,152.55	1,154.93	0.00	600,000.75	679,623.25
10,600.00	90.00	266.32	5,943.50	9,550.00	-80.46	-1,252.35	1,254.93	0.00	599,994.34	679,523.45
10,700.00	90.00	266.32	5,943.50	9,550.00	-86.87	-1,352.14	1,354.93	0.00	599,987.93	679,423.66
10,800.00	90.00	266.32	5,943.50	9,550.00	-93.28	-1,451.94	1,454.93	0.00	599,981.52	679,323.87
10,900.00	90.00	266.32	5,943.50	9,550.00	-99.69	-1,551.73	1,554.93	0.00	599,975.11	679,224.07
11,000.00	90.00	266.32	5,943.50	9,550.00	-106.11	-1,651.53	1,654.93	0.00	599,968.69	679,124.28
11,100.00	90.00	266.32	5,943.50	9,550.00	-112.52	-1,751.32	1,754.93	0.00	599,962.28	679,024.48
11,200.00	90.00	266.32	5,943.50	9,550.00	-118.93	-1,851.11	1,854.93	0.00	599,955.87	678,924.69
11,300.00	90.00	266.32	5,943.50	9,550.00	-125.34	-1,950.91	1,954.93	0.00	599,949.46	678,824.90
11,400.00	90.00	266.32	5,943.50	9,550.00	-131.75	-2,050.70	2,054.93	0.00	599,943.05	678,725.10
11,500.00	90.00	266.32	5,943.50	9,550.00	-138.16	-2,150.50	2,154.93	0.00	599,936.64	678,625.31
11,600.00	90.00	266.32	5,943.50	9,550.00	-144.57	-2,250.29	2,254.93	0.00	599,930.23	678,525.51
11,700.00	90.00	266.32	5,943.50	9,550.00	-150.99	-2,350.08	2,354.93	0.00	599,923.81	678,425.72
11,800.00	90.00	266.32	5,943.50	9,550.00	-157.40	-2,449.88	2,454.93	0.00	599,917.40	678,325.93
11,900.00	90.00	266.32	5,943.50	9,550.00	-163.81	-2,549.67	2,554.93	0.00	599,910.99	678,226.13
12,000.00	90.00	266.32	5,943.50	9,550.00	-170.22	-2,649.47	2,654.93	0.00	599,904.58	678,126.34
12,100.00	90.00	266.32	5,943.50	9,550.00	-176.63	-2,749.26	2,754.93	0.00	599,898.17	678,026.54
12,200.00	90.00	266.32	5,943.50	9,550.00	-183.04	-2,849.06	2,854.93	0.00	599,891.76	677,926.75
12,300.00	90.00	266.32	5,943.50	9,550.00	-189.46	-2,948.85	2,954.93	0.00	599,885.35	677,826.96
12,400.00	90.00	266.32	5,943.50	9,550.00	-195.87	-3,048.64	3,054.93	0.00	599,878.93	677,727.16
12,500.00	90.00	266.32	5,943.50	9,550.00	-202.28	-3,148.44	3,154.93	0.00	599,872.52	677,627.37
12,600.00	90.00	266.32	5,943.50	9,550.00	-208.69	-3,248.23	3,254.93	0.00	599,866.11	677,527.57
12,700.00	90.00	266.32	5,943.50	9,550.00	-215.10	-3,348.03	3,354.93	0.00	599,859.70	677,427.78
12,800.00	90.00	266.32	5,943.50	9,550.00	-221.51	-3,447.82	3,454.93	0.00	599,853.29	677,327.99
12,900.00	90.00	266.32	5,943.50	9,550.00	-227.92	-3,547.62	3,554.93	0.00	599,846.88	677,228.19
13,000.00	90.00	266.32	5,943.50	9,550.00	-234.34	-3,647.41	3,654.93	0.00	599,840.46	677,128.40

Phoenix Technology Services
EOG Resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Lusk 22 Fed 3H
Project:	Lea County, NM (Nad27)	TVD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Site:	Lusk 22 Federal	MD Reference:	WELL @ 3606.50ft (Original Well Elev +30' KB)
Well:	Lusk 22 Fed 3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan#1 092011	Database:	GCR3

Planned Survey										
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVDSS (ft)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
13,100.00	90.00	266.32	5,943.50	9,550.00	-240.75	-3,747.20	3,754.93	0.00	599,834.05	677,028.60
13,200.00	90.00	266.32	5,943.50	9,550.00	-247.16	-3,847.00	3,854.93	0.00	599,827.64	676,928.81
13,300.00	90.00	266.32	5,943.50	9,550.00	-253.57	-3,946.79	3,954.93	0.00	599,821.23	676,829.02
13,400.00	90.00	266.32	5,943.50	9,550.00	-259.98	-4,046.59	4,054.93	0.00	599,814.82	676,729.22
13,500.00	90.00	266.32	5,943.50	9,550.00	-266.39	-4,146.38	4,154.93	0.00	599,808.41	676,629.43
13,600.00	90.00	266.32	5,943.50	9,550.00	-272.80	-4,246.18	4,254.93	0.00	599,802.00	676,529.63
13,700.00	90.00	266.32	5,943.50	9,550.00	-279.22	-4,345.97	4,354.93	0.00	599,795.58	676,429.84
13,800.00	90.00	266.32	5,943.50	9,550.00	-285.63	-4,445.76	4,454.93	0.00	599,789.17	676,330.04
13,900.00	90.00	266.32	5,943.50	9,550.00	-292.04	-4,545.56	4,554.93	0.00	599,782.76	676,230.25
13,983.62	90.00	266.32	5,943.50	9,550.00	-297.40	-4,629.01	4,638.55	0.00	599,777.40	676,146.80

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
9,072.53	9,072.53	0.00	0.00	Start 12"/100' Build @ 9072' MD
9,822.54	9,550.00	-30.61	-476.48	Start 4161' Hold @ 9822' MD
13,983.62	9,550.00	-297.40	-4,629.01	TD @ 13983' MD

Checked By: _____ Approved By: _____ Date: _____

EOG RESOURCES, INC.
LUSK FED #3H

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.

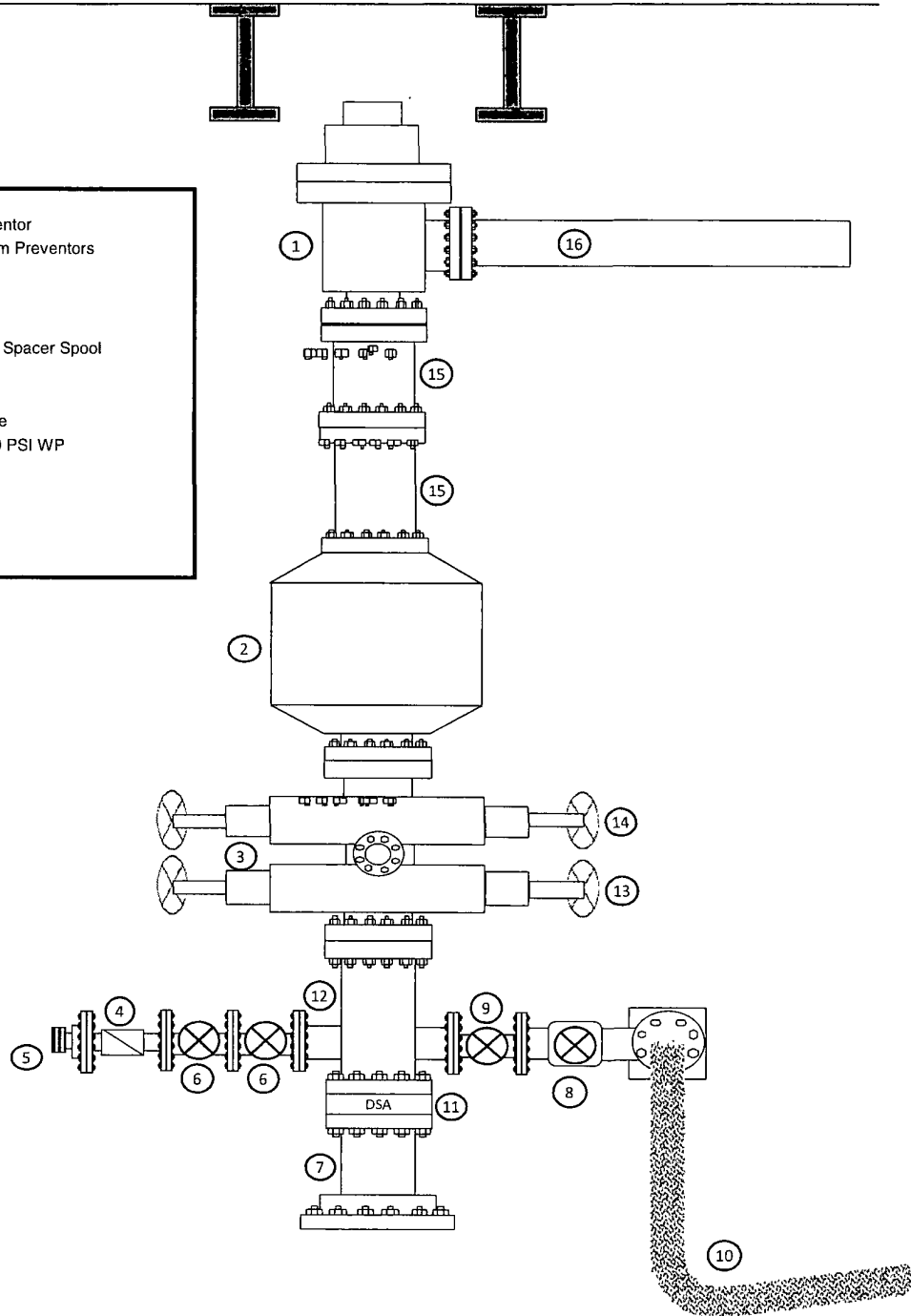
EOG Resources

Cactus #123

Exhibit #1

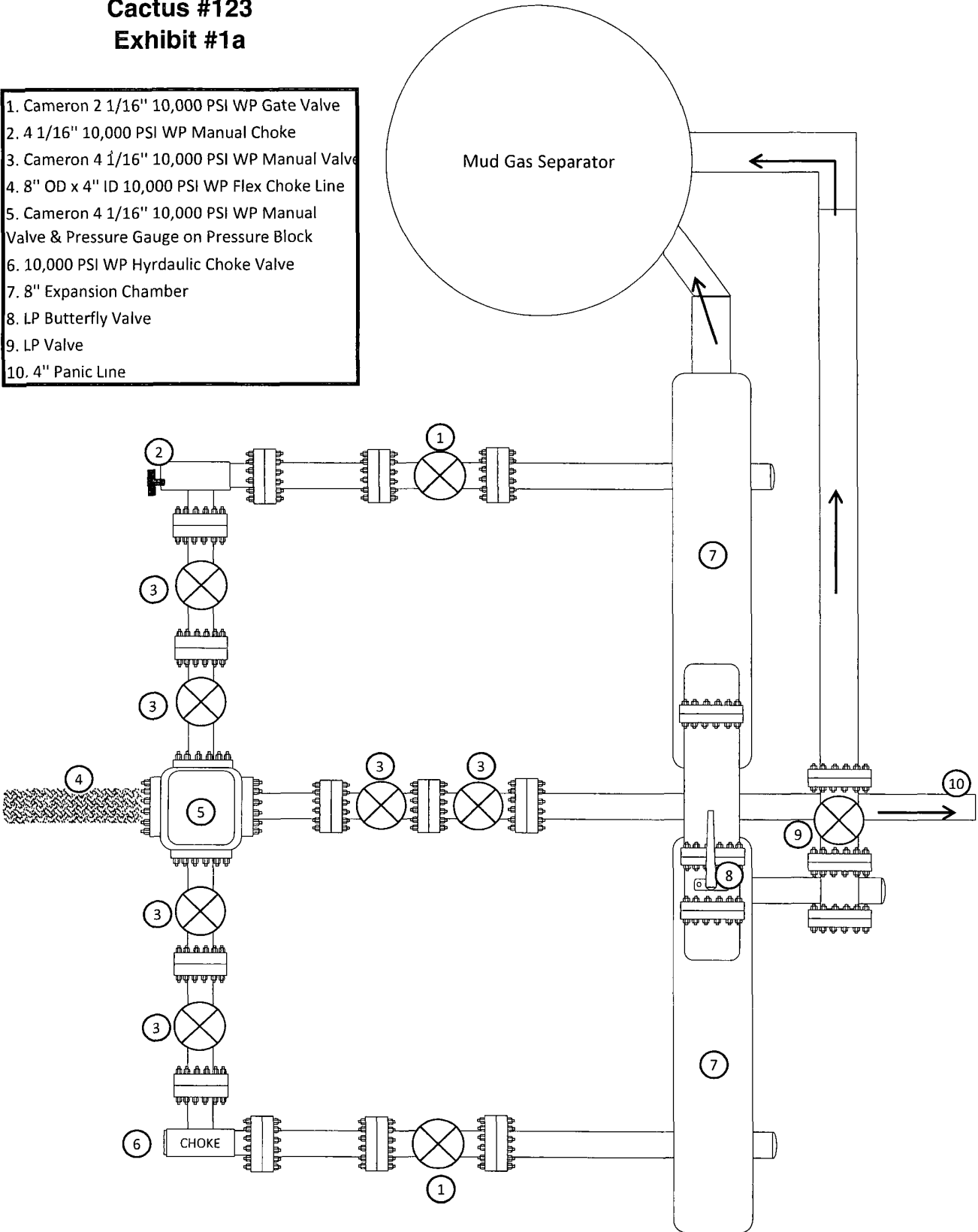
Rig Floor

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

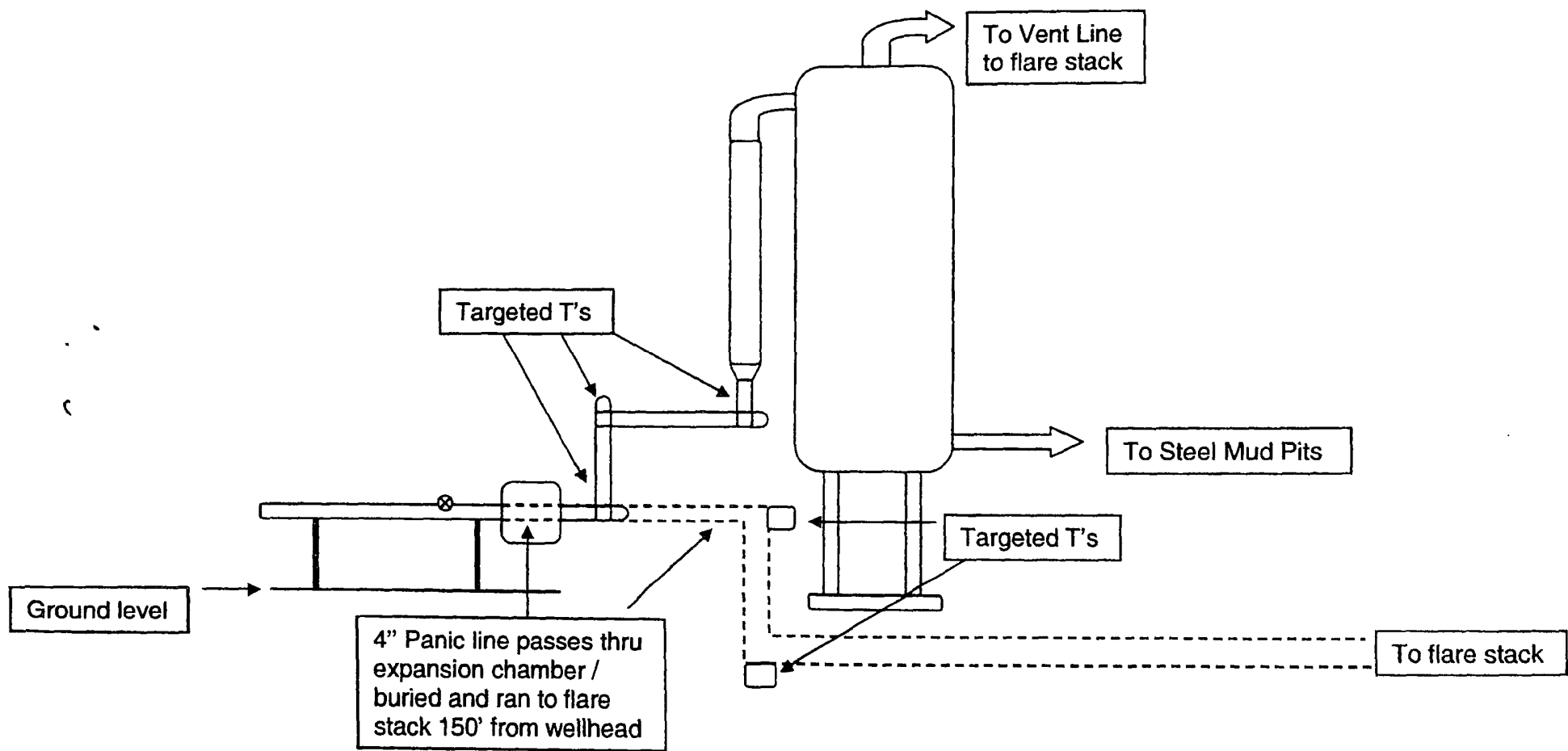


EOG Resources
Cactus #123
Exhibit #1a

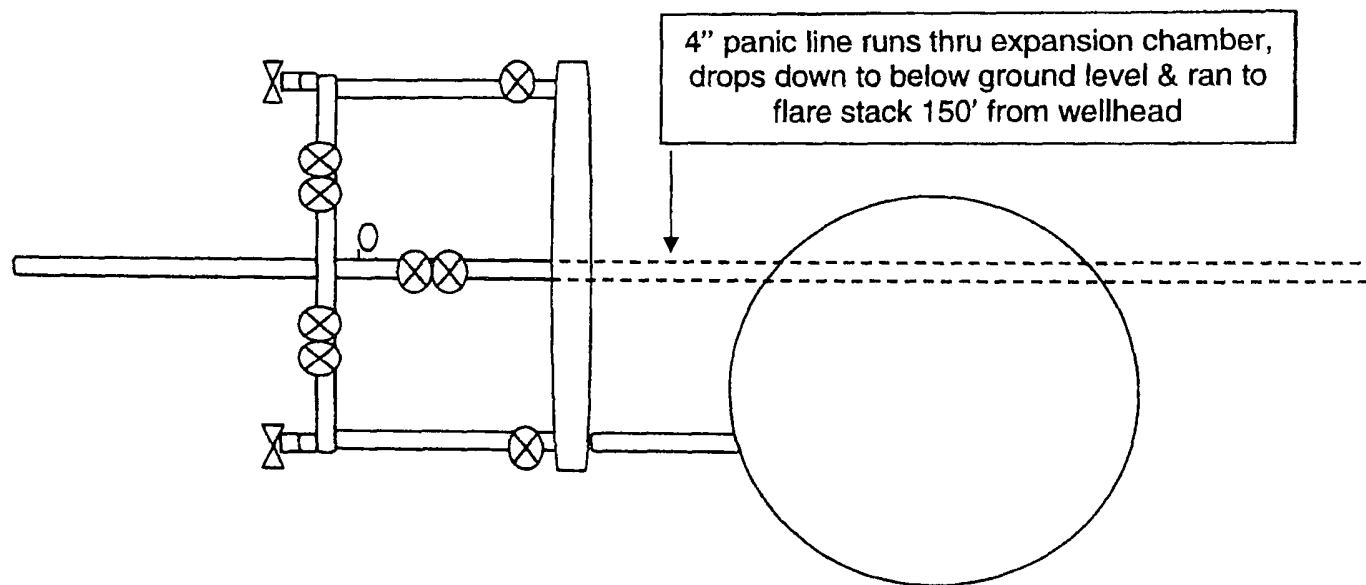
1. Cameron 2 1/16" 10,000 PSI WP Gate Valve
2. 4 1/16" 10,000 PSI WP Manual Choke
3. Cameron 4 1/16" 10,000 PSI WP Manual Valve
4. 8" OD x 4" ID 10,000 PSI WP Flex Choke Line
5. Cameron 4 1/16" 10,000 PSI WP Manual Valve & Pressure Gauge on Pressure Block
6. 10,000 PSI WP Hydraulic Choke Valve
7. 8"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



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



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

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.

OPERATING AND MAINTENANCE PLAN – CLOSED LOOP SYSTEM

19.15.17.12 OPERATIONAL REQUIREMENTS:

A. General specifications. An operator shall maintain and operate a pit, closed-loop system, below-grade tank or sump in accordance with the following requirements.

(1) The operator shall operate and maintain a pit, closed-loop system, below-grade tank or sump to contain liquids and solids and maintain the integrity of the liner, liner system or secondary containment system, prevent contamination of fresh water and protect public health and the environment.

Operator shall operate and maintain a closed loop system.

(2) The operator shall recycle, reuse or reclaim all drilling fluids in a manner that prevents the contamination of fresh water and protects public health and the environment.

Operator shall recycle, reuse or reclaim all drilling fluids used. Excess or unused fluid shall be disposed of at division approved facilities.

(3) The operator shall not discharge into or store any hazardous waste in a pit, closed-loop system, below-grade tank or sump.

Operator shall not knowingly discharge hazardous waste into the closed loop system.

(4) If the integrity of the pit liner is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the liner.

No Pit liner. Closed loop system.

(5) If a lined pit develops a leak, or if any penetration of the liner occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line from the pit within 48 hours and repair the damage or replace the liner.

No Pit liner. Closed loop system. If a leak develops in any of the closed loop tanks, all liquid shall be removed from the effected tank within 48 hours and any damage shall be repaired prior to putting the tank back in service.

OPERATING AND MAINTENANCE PLAN – CLOSED LOOP SYSTEM

(6) The operator shall install a level measuring device in a lined pit containing fluids to monitor the level of the fluid surface, so that the operator may recognize unanticipated change in volume of fluids.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks.

(7) The injection or withdrawal of liquids from a lined pit shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks using a re-circulating pump or vacuum trucks.

(8) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.

Operator shall berm or collect surface water run- on and dispose of at a division approved facility.

(9) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain and remove oil from a pit's surface.

Operator shall install a skimmer system on catch tanks, circulating tanks and over-flow tanks as needed to collect oil.