

Permit Information:

JAN 28 2014

Well Name: Mars 3 State No. 1H

RECEIVED

Location:

SHL: 220' FSL & 660' FEL, Section 3, T-24-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 660' FEL, Section 3, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,310'	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#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-15,804'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,310'	550	13.5	1.73	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	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,150'	800	12.7	2.22	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)
	225	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
15,804'	350	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1 (TOC @ 4,800')
	400	11.9	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1700	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,310'	Fresh - Gel	8.6-8.8	28-34	N/c
1,310' - 5,150'	Brine	10.0-10.2	28-34	N/c
5,150' - 10,687'	Cut Brine	8.4-9.0	28-34	N/c
10,687' - 15,804' Lateral	Cut Brine	9.0-9.5	40-42	8-10

JAN 29 2014

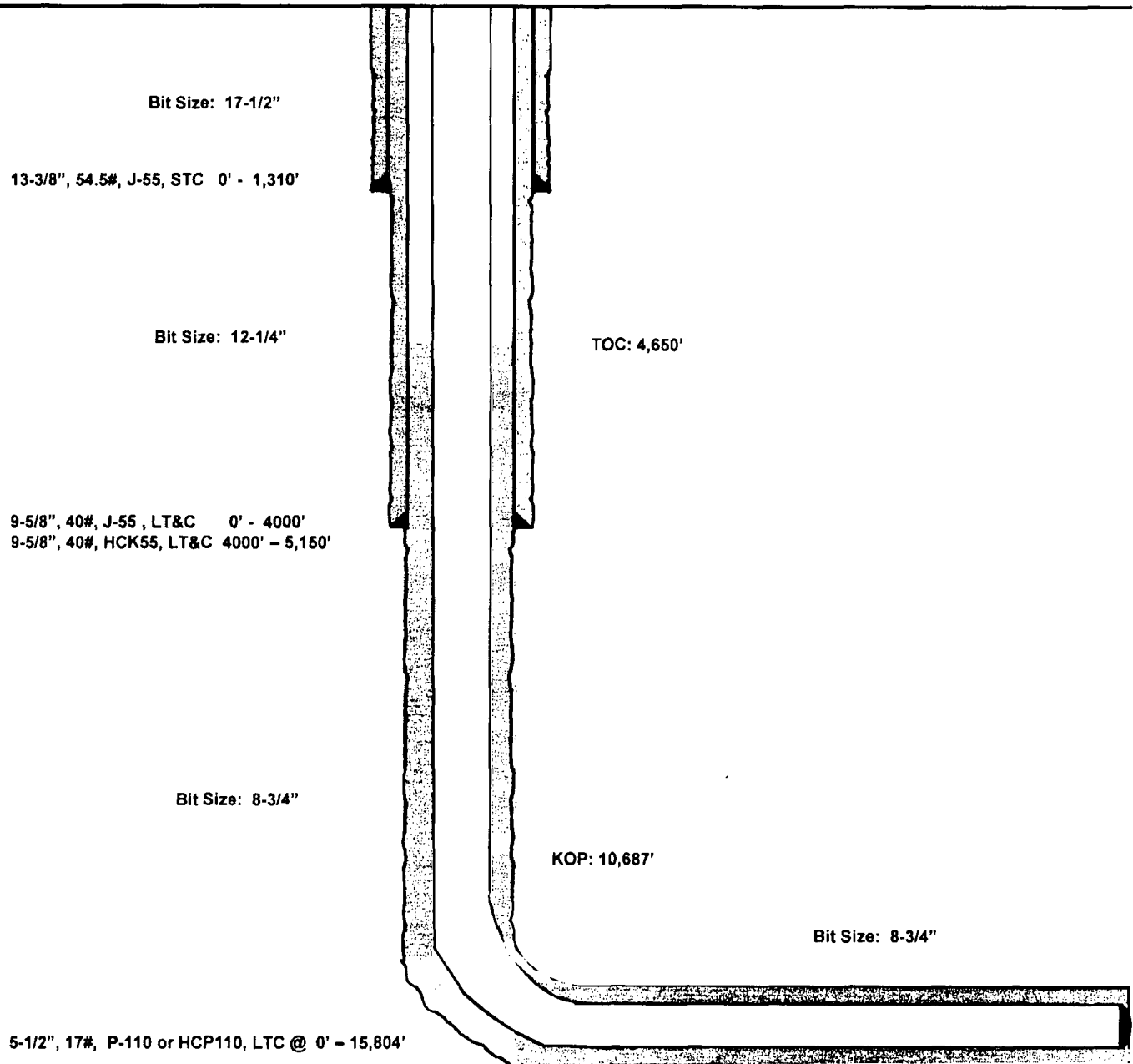
Mars 3 State #1H
Lea County, New Mexico

220' FSL
660' FEL
Section 3
T-24-S, R-33-E

Proposed Wellbore

API: 30-025-

KB: 3,631'
GL: 3,604'



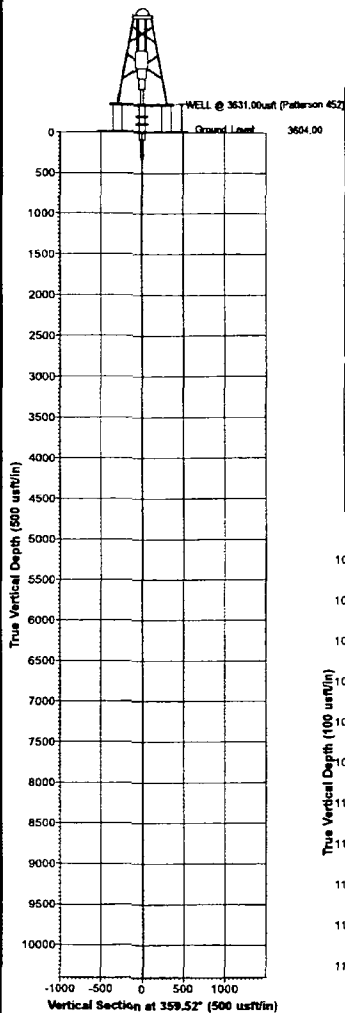
Lateral: 15,804' MD, 11,165' TVD
BH Location: 230' FNL & 660' FEL
Section 3
T-24-S, R-33-E



Project: Lea County, NM (NAD27 NME)
 Site: Mars 3 State
 Well: #1H
 Wellbore: Wellbore #1 Job #1410176
 Design: Plan #1 01-27-14
 Rig: Patterson 452



Azimuths to Grid North
 True North: -0.42°
 Magnetic North: 6.84°
 Magnetic Field
 Strength: 48364.3enT
 Dip Angle: 60.14°
 Date: 01/27/2014
 Model: KGRF2010_14



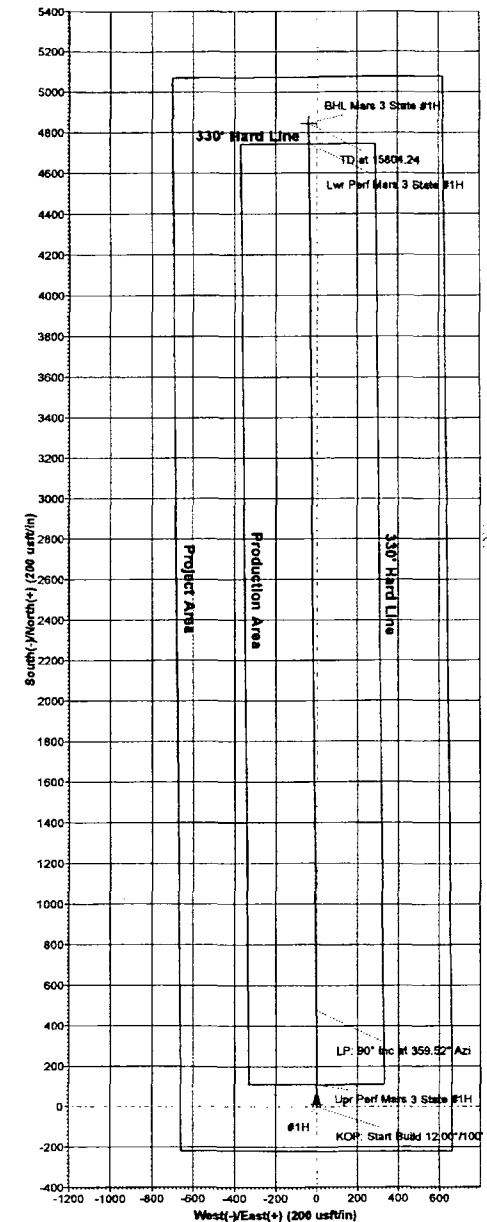
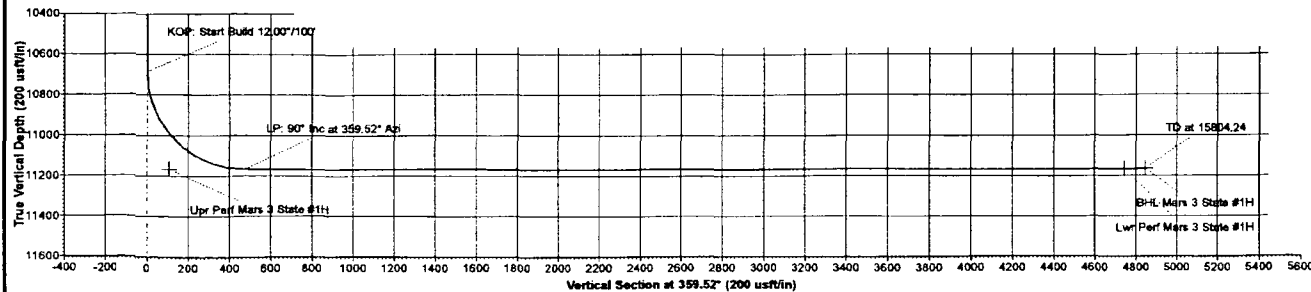
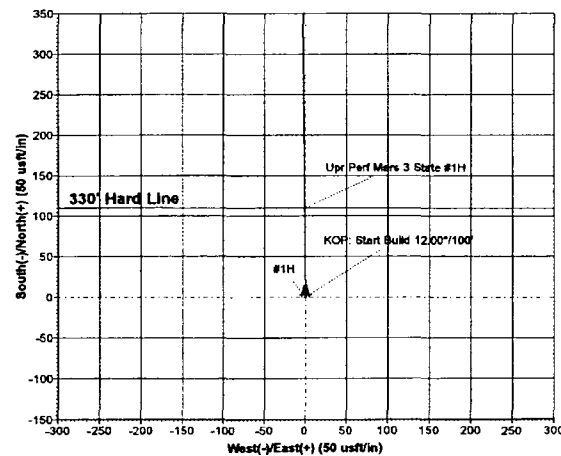
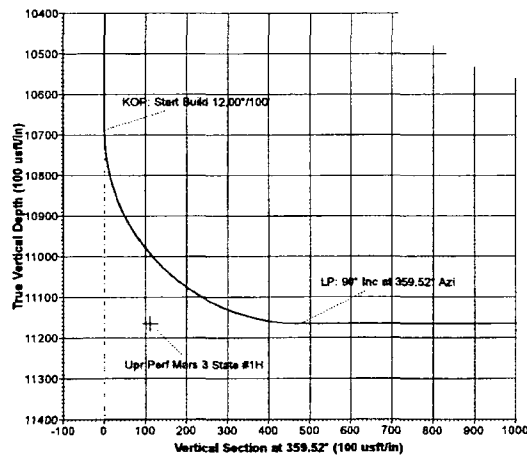
WELL DETAILS											
	-N/S	-E/W	North	Ground Level	3604.00	Latitude	Longitude				
	0.00	0.00	451838.00	741178.00	32° 14' 23.3237 N	103° 33' 11.87959 W					

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	-N/S	-E/W	Dleg	TFace	VSed	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	10687.54	0.00	0.00	10687.54	0.00	0.00	0.00	0.00	0.00		KOP: Start Build 12.00°/100°
3	11437.54	90.00	359.52	11185.00	477.45	-4.04	12.00	359.52	477.44		LP: 90° Inc at 359.52° Azi
4	15804.24	90.00	359.52	11185.00	4844.00	-41.00	9.00	0.00	4844.17	BHL Mars 3 State #1H	TD at 15804.24

DESIGN TARGET DETAILS											
Name	TVD	-N/S	-E/W	North	Easting	Latitude	Longitude	Shape			
BHL Mars 3 State #1H	11185.00	4844.00	-41.00	456682.00	741137.00	32° 15' 11.25977 N	103° 33' 11.94726 W	Point			
Lwr Perf Mars 3 State #1H	11185.00	4744.00	-40.00	456542.00	741138.00	32° 15' 10.27015 N	103° 33' 11.94407 W	Point			
Upr Perf Mars 3 State #1H	11185.00	110.00	0.00	451948.00	741178.00	32° 14' 24.1187 N	103° 33' 11.87029 W	Point			

Map System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone Name: New Mexico East 3001
 Local Origin: Well #1H, Grid North
 Latitude: 32° 14' 23.3237 N
 Longitude: 103° 33' 11.87959 W
 Grid East: 741178.00
 Grid North: 451838.00
 Scale Factor: 1.000
 Geomagnetic Model: KGRF2010_14
 Sample Date: 27-Jan-14
 Magnetic Declination: 7.26°
 Dip Angle from Horizontal: 60.14°
 Magnetic Field Strength: 48364
 To convert a Magnetic Direction to a Grid Direction, Add 6.84°
 To convert a Magnetic Direction to a True Direction, Add 7.26° East
 To convert a True Direction to a Grid Direction, Subtract 0.42°

LEGEND
 — Plan #1 01-27-14





EOG Resources

Lea County, NM (NAD27 NME)

Mars 3 State

#1H

Wellbore #1 Job #1410176

Plan: Plan #1 01-27-14

Planning Report

27 January, 2014





Phoenix Technology Services
Planning Report



Company: EOG Resources
Project: Lea County, NM (NAD27 NME)
Site: Mars 3 State
Well: #1H
Wellbore: Wellbore #1 Job #1410176
Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3631.00usft (Patterson 452)
MD Reference: WELL @ 3631.00usft (Patterson 452)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR DB

Project Lea County, NM (NAD27 NME)

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 Mars 3 State

Site Position:		Northing:	451,838.00 usft	Latitude:	32° 14' 23.32337 N
From:	Map	Easting:	741,178.00 usft	Longitude:	103° 33' 11.87959 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.42 °

Well #1H

Well Position	+N/-S	0.00 usft	Northing:	451,838.00 usft	Latitude:	32° 14' 23.32337 N
	+E/-W	0.00 usft	Easting:	741,178.00 usft	Longitude:	103° 33' 11.87959 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,604.00 usft

Wellbore Wellbore #1 Job #1410176

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	01/27/14	7.26	60.14	48,364

Design Plan #1 01-27-14

Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	-9.00	0.00	0.00	359.52

Survey Tool Program Date 01/27/14

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,804.24	Plan #1 01-27-14 (Wellbore #1 Job #1410)	MWD	MWD - Standard



Phoenix Technology Services Planning Report



Company: EOG Resources
Project: Lea County, NM (NAD27 NME)
Site: Mars 3 State
Well: #1H
Wellbore: Wellbore #1 Job #1410176
Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3631.00usft (Patterson 452)
MD Reference: WELL @ 3631.00usft (Patterson 452)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR DB

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLeg (°/100usft)
0.00	0.00	0.00	-3,631.00	0.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
100.00	0.00	0.00	-3,531.00	100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
200.00	0.00	0.00	-3,431.00	200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
300.00	0.00	0.00	-3,331.00	300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
400.00	0.00	0.00	-3,231.00	400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
500.00	0.00	0.00	-3,131.00	500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
600.00	0.00	0.00	-3,031.00	600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
700.00	0.00	0.00	-2,931.00	700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
800.00	0.00	0.00	-2,831.00	800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
900.00	0.00	0.00	-2,731.00	900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,000.00	0.00	0.00	-2,631.00	1,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,100.00	0.00	0.00	-2,531.00	1,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,200.00	0.00	0.00	-2,431.00	1,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,300.00	0.00	0.00	-2,331.00	1,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,400.00	0.00	0.00	-2,231.00	1,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,500.00	0.00	0.00	-2,131.00	1,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,600.00	0.00	0.00	-2,031.00	1,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,700.00	0.00	0.00	-1,931.00	1,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,800.00	0.00	0.00	-1,831.00	1,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
1,900.00	0.00	0.00	-1,731.00	1,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,000.00	0.00	0.00	-1,631.00	2,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,100.00	0.00	0.00	-1,531.00	2,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,200.00	0.00	0.00	-1,431.00	2,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,300.00	0.00	0.00	-1,331.00	2,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,400.00	0.00	0.00	-1,231.00	2,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,500.00	0.00	0.00	-1,131.00	2,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,600.00	0.00	0.00	-1,031.00	2,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00



Phoenix Technology Services
Planning Report



Company: EOG Resources
Project: Lea County, NM (NAD27 NME)
Site: Mars 3 State
Well: #1H
Wellbore: Wellbore #1 Job #1410176
Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3631.00usft (Patterson 452)
MD Reference: WELL @ 3631.00usft (Patterson 452)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR DB

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	EW (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLog (°/100usft)
2,700.00	0.00	0.00	-931.00	2,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,800.00	0.00	0.00	-831.00	2,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
2,900.00	0.00	0.00	-731.00	2,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,000.00	0.00	0.00	-631.00	3,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,100.00	0.00	0.00	-531.00	3,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,200.00	0.00	0.00	-431.00	3,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,300.00	0.00	0.00	-331.00	3,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,400.00	0.00	0.00	-231.00	3,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,500.00	0.00	0.00	-131.00	3,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,600.00	0.00	0.00	-31.00	3,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,700.00	0.00	0.00	69.00	3,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,800.00	0.00	0.00	169.00	3,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
3,900.00	0.00	0.00	269.00	3,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,000.00	0.00	0.00	369.00	4,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,100.00	0.00	0.00	469.00	4,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,200.00	0.00	0.00	569.00	4,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,300.00	0.00	0.00	669.00	4,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,400.00	0.00	0.00	769.00	4,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,500.00	0.00	0.00	869.00	4,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,600.00	0.00	0.00	969.00	4,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,700.00	0.00	0.00	1,069.00	4,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,800.00	0.00	0.00	1,169.00	4,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
4,900.00	0.00	0.00	1,269.00	4,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,000.00	0.00	0.00	1,369.00	5,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,100.00	0.00	0.00	1,469.00	5,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,200.00	0.00	0.00	1,569.00	5,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,300.00	0.00	0.00	1,669.00	5,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00



Phoenix Technology Services
Planning Report



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Site: Mars 3 State
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Wellbore: Wellbore #1 Job #1410176
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5,400.00	0.00	0.00	1,769.00	5,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,500.00	0.00	0.00	1,869.00	5,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,600.00	0.00	0.00	1,969.00	5,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,700.00	0.00	0.00	2,069.00	5,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,800.00	0.00	0.00	2,169.00	5,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
5,900.00	0.00	0.00	2,269.00	5,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,000.00	0.00	0.00	2,369.00	6,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,100.00	0.00	0.00	2,469.00	6,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,200.00	0.00	0.00	2,569.00	6,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,300.00	0.00	0.00	2,669.00	6,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,400.00	0.00	0.00	2,769.00	6,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,500.00	0.00	0.00	2,869.00	6,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,600.00	0.00	0.00	2,969.00	6,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,700.00	0.00	0.00	3,069.00	6,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,800.00	0.00	0.00	3,169.00	6,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
6,900.00	0.00	0.00	3,269.00	6,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,000.00	0.00	0.00	3,369.00	7,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,100.00	0.00	0.00	3,469.00	7,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,200.00	0.00	0.00	3,569.00	7,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,300.00	0.00	0.00	3,669.00	7,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,400.00	0.00	0.00	3,769.00	7,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,500.00	0.00	0.00	3,869.00	7,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,600.00	0.00	0.00	3,969.00	7,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,700.00	0.00	0.00	4,069.00	7,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,800.00	0.00	0.00	4,169.00	7,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
7,900.00	0.00	0.00	4,269.00	7,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,000.00	0.00	0.00	4,369.00	8,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00



Phoenix Technology Services
Planning Report



Company: EOG Resources
Project: Lea County, NM (NAD27 NME)
Site: Mars 3 State
Well: #1H
Wellbore: Wellbore #1 Job #1410176
Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3631.00usft (Patterson 452)
MD Reference: WELL @ 3631.00usft (Patterson 452)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR DB

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLeg (°/100usft)
8,100.00	0.00	0.00	4,469.00	8,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,200.00	0.00	0.00	4,569.00	8,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,300.00	0.00	0.00	4,669.00	8,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,400.00	0.00	0.00	4,769.00	8,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,500.00	0.00	0.00	4,869.00	8,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,600.00	0.00	0.00	4,969.00	8,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,700.00	0.00	0.00	5,069.00	8,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,800.00	0.00	0.00	5,169.00	8,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
8,900.00	0.00	0.00	5,269.00	8,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,000.00	0.00	0.00	5,369.00	9,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,100.00	0.00	0.00	5,469.00	9,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,200.00	0.00	0.00	5,569.00	9,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,300.00	0.00	0.00	5,669.00	9,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,400.00	0.00	0.00	5,769.00	9,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,500.00	0.00	0.00	5,869.00	9,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,600.00	0.00	0.00	5,969.00	9,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,700.00	0.00	0.00	6,069.00	9,700.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,800.00	0.00	0.00	6,169.00	9,800.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
9,900.00	0.00	0.00	6,269.00	9,900.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,000.00	0.00	0.00	6,369.00	10,000.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,100.00	0.00	0.00	6,469.00	10,100.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,200.00	0.00	0.00	6,569.00	10,200.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,300.00	0.00	0.00	6,669.00	10,300.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,400.00	0.00	0.00	6,769.00	10,400.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,500.00	0.00	0.00	6,869.00	10,500.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00
10,600.00	0.00	0.00	6,969.00	10,600.00	0.00	0.00	451,838.00	741,178.00	0.00	0.00



Phoenix Technology Services Planning Report



Company: EOG Resources
Project: Lea County, NM (NAD27 NME)
Site: Mars 3 State
Well: #1H
Wellbore: Wellbore #1 Job #1410176
Design: Plan #1 01-27-14

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLeg (°/100usft)
10,687.54	0.00	0.00	7,056.54	10,687.54	0.00	0.00	451,838.00	741,178.00	0.00	0.00
KOP: Start Build 12.00°/100'										
10,700.00	1.50	359.52	7,069.00	10,700.00	0.16	0.00	451,838.16	741,178.00	0.16	12.00
10,725.00	4.50	359.52	7,093.96	10,724.96	1.47	-0.01	451,839.47	741,177.99	1.47	12.00
10,750.00	7.50	359.52	7,118.82	10,749.82	4.08	-0.03	451,842.08	741,177.97	4.08	12.00
10,775.00	10.50	359.52	7,143.51	10,774.51	7.99	-0.07	451,845.99	741,177.93	7.99	12.00
10,800.00	13.50	359.52	7,167.96	10,798.96	13.18	-0.11	451,851.18	741,177.89	13.18	12.00
10,825.00	16.50	359.52	7,192.11	10,823.11	19.65	-0.17	451,857.65	741,177.83	19.65	12.00
10,850.00	19.50	359.52	7,215.88	10,846.88	27.37	-0.23	451,865.37	741,177.77	27.37	12.00
10,875.00	22.50	359.52	7,239.22	10,870.22	36.33	-0.31	451,874.33	741,177.69	36.33	12.00
10,900.00	25.50	359.52	7,262.06	10,893.06	46.50	-0.39	451,884.50	741,177.61	46.50	12.00
10,925.00	28.50	359.52	7,284.33	10,915.33	57.84	-0.49	451,895.84	741,177.51	57.84	12.00
10,950.00	31.50	359.52	7,305.98	10,936.98	70.34	-0.60	451,908.34	741,177.40	70.34	12.00
10,975.00	34.50	359.52	7,326.95	10,957.95	83.95	-0.71	451,921.95	741,177.29	83.95	12.00
11,000.00	37.50	359.52	7,347.17	10,978.17	98.64	-0.83	451,936.64	741,177.17	98.65	12.00
11,025.00	40.50	359.52	7,366.60	10,997.60	114.37	-0.97	451,952.37	741,177.03	114.37	12.00
11,050.00	43.50	359.52	7,385.17	11,016.17	131.10	-1.11	451,969.10	741,176.89	131.10	12.00
11,075.00	46.50	359.52	7,402.85	11,033.85	148.77	-1.26	451,986.77	741,176.74	148.77	12.00
11,100.00	49.50	359.52	7,419.58	11,050.58	167.34	-1.42	452,005.34	741,176.58	167.35	12.00
11,125.00	52.50	359.52	7,435.31	11,066.31	186.77	-1.58	452,024.77	741,176.42	186.77	12.00
11,150.00	55.50	359.52	7,450.01	11,081.01	206.99	-1.75	452,044.99	741,176.25	207.00	12.00
11,175.00	58.50	359.52	7,463.62	11,094.62	227.95	-1.93	452,065.95	741,176.07	227.96	12.00
11,200.00	61.50	359.52	7,476.12	11,107.12	249.60	-2.11	452,087.60	741,175.89	249.61	12.00
11,225.00	64.50	359.52	7,487.47	11,118.47	271.87	-2.30	452,109.87	741,175.70	271.88	12.00
11,250.00	67.50	359.52	7,497.64	11,128.64	294.70	-2.49	452,132.70	741,175.51	294.71	12.00
11,275.00	70.50	359.52	7,506.60	11,137.60	318.04	-2.69	452,156.04	741,175.31	318.05	12.00
11,300.00	73.50	359.52	7,514.33	11,145.33	341.81	-2.89	452,179.81	741,175.11	341.82	12.00



Phoenix Technology Services
Planning Report



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Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLog (°/100usft)
11,325.00	76.50	359.52	7,520.80	11,151.80	365.96	-3.10	452,203.96	741,174.90	365.97	12.00
11,350.00	79.50	359.52	7,526.00	11,157.00	390.41	-3.30	452,228.41	741,174.70	390.42	12.00
11,375.00	82.50	359.52	7,529.91	11,160.91	415.09	-3.51	452,253.09	741,174.49	415.11	12.00
11,400.00	85.50	359.52	7,532.53	11,163.53	439.95	-3.72	452,277.95	741,174.28	439.97	12.00
11,425.00	88.50	359.52	7,533.84	11,164.84	464.91	-3.94	452,302.91	741,174.06	464.93	12.00
11,437.54	90.00	359.52	7,534.00	11,165.00	477.45	-4.04	452,315.45	741,173.96	477.47	12.00
LP: 90° Inc at 359.52° Azi										
11,500.00	90.00	359.52	7,534.00	11,165.00	539.91	-4.57	452,377.91	741,173.43	539.93	0.00
11,600.00	90.00	359.52	7,534.00	11,165.00	639.91	-5.42	452,477.91	741,172.58	639.93	0.00
11,700.00	90.00	359.52	7,534.00	11,165.00	739.90	-6.26	452,577.90	741,171.74	739.93	0.00
11,800.00	90.00	359.52	7,534.00	11,165.00	839.90	-7.11	452,677.90	741,170.89	839.93	0.00
11,900.00	90.00	359.52	7,534.00	11,165.00	939.90	-7.96	452,777.90	741,170.04	939.93	0.00
12,000.00	90.00	359.52	7,534.00	11,165.00	1,039.89	-8.80	452,877.89	741,169.20	1,039.93	0.00
12,100.00	90.00	359.52	7,534.00	11,165.00	1,139.89	-9.65	452,977.89	741,168.35	1,139.93	0.00
12,200.00	90.00	359.52	7,534.00	11,165.00	1,239.89	-10.49	453,077.89	741,167.51	1,239.93	0.00
12,300.00	90.00	359.52	7,534.00	11,165.00	1,339.88	-11.34	453,177.88	741,166.66	1,339.93	0.00
12,400.00	90.00	359.52	7,534.00	11,165.00	1,439.88	-12.19	453,277.88	741,165.81	1,439.93	0.00
12,500.00	90.00	359.52	7,534.00	11,165.00	1,539.87	-13.03	453,377.87	741,164.97	1,539.93	0.00
12,600.00	90.00	359.52	7,534.00	11,165.00	1,639.87	-13.88	453,477.87	741,164.12	1,639.93	0.00
12,700.00	90.00	359.52	7,534.00	11,165.00	1,739.87	-14.73	453,577.87	741,163.27	1,739.93	0.00
12,800.00	90.00	359.52	7,534.00	11,165.00	1,839.86	-15.57	453,677.86	741,162.43	1,839.93	0.00
12,900.00	90.00	359.52	7,534.00	11,165.00	1,939.86	-16.42	453,777.86	741,161.58	1,939.93	0.00
13,000.00	90.00	359.52	7,534.00	11,165.00	2,039.86	-17.27	453,877.86	741,160.73	2,039.93	0.00
13,100.00	90.00	359.52	7,534.00	11,165.00	2,139.85	-18.11	453,977.85	741,159.89	2,139.93	0.00
13,200.00	90.00	359.52	7,534.00	11,165.00	2,239.85	-18.96	454,077.85	741,159.04	2,239.93	0.00
13,300.00	90.00	359.52	7,534.00	11,165.00	2,339.85	-19.80	454,177.85	741,158.20	2,339.93	0.00
13,400.00	90.00	359.52	7,534.00	11,165.00	2,439.84	-20.65	454,277.84	741,157.35	2,439.93	0.00



Phoenix Technology Services
Planning Report



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Design: Plan #1 01-27-14

Local Co-ordinate Reference: Well #1H
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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	EW (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLeg (°/100usft)
13,500.00	90.00	359.52	7,534.00	11,165.00	2,539.84	-21.50	454,377.84	741,156.50	2,539.93	0.00
13,600.00	90.00	359.52	7,534.00	11,165.00	2,639.84	-22.34	454,477.84	741,155.66	2,639.93	0.00
13,700.00	90.00	359.52	7,534.00	11,165.00	2,739.83	-23.19	454,577.83	741,154.81	2,739.93	0.00
13,800.00	90.00	359.52	7,534.00	11,165.00	2,839.83	-24.04	454,677.83	741,153.96	2,839.93	0.00
13,900.00	90.00	359.52	7,534.00	11,165.00	2,939.82	-24.88	454,777.82	741,153.12	2,939.93	0.00
14,000.00	90.00	359.52	7,534.00	11,165.00	3,039.82	-25.73	454,877.82	741,152.27	3,039.93	0.00
14,100.00	90.00	359.52	7,534.00	11,165.00	3,139.82	-26.58	454,977.82	741,151.42	3,139.93	0.00
14,200.00	90.00	359.52	7,534.00	11,165.00	3,239.81	-27.42	455,077.81	741,150.58	3,239.93	0.00
14,300.00	90.00	359.52	7,534.00	11,165.00	3,339.81	-28.27	455,177.81	741,149.73	3,339.93	0.00
14,400.00	90.00	359.52	7,534.00	11,165.00	3,439.81	-29.11	455,277.81	741,148.89	3,439.93	0.00
14,500.00	90.00	359.52	7,534.00	11,165.00	3,539.80	-29.96	455,377.80	741,148.04	3,539.93	0.00
14,600.00	90.00	359.52	7,534.00	11,165.00	3,639.80	-30.81	455,477.80	741,147.19	3,639.93	0.00
14,700.00	90.00	359.52	7,534.00	11,165.00	3,739.80	-31.65	455,577.80	741,146.35	3,739.93	0.00
14,800.00	90.00	359.52	7,534.00	11,165.00	3,839.79	-32.50	455,677.79	741,145.50	3,839.93	0.00
14,900.00	90.00	359.52	7,534.00	11,165.00	3,939.79	-33.35	455,777.79	741,144.65	3,939.93	0.00
15,000.00	90.00	359.52	7,534.00	11,165.00	4,039.78	-34.19	455,877.78	741,143.81	4,039.93	0.00
15,100.00	90.00	359.52	7,534.00	11,165.00	4,139.78	-35.04	455,977.78	741,142.96	4,139.93	0.00
15,200.00	90.00	359.52	7,534.00	11,165.00	4,239.78	-35.89	456,077.78	741,142.11	4,239.93	0.00
15,300.00	90.00	359.52	7,534.00	11,165.00	4,339.77	-36.73	456,177.77	741,141.27	4,339.93	0.00
15,400.00	90.00	359.52	7,534.00	11,165.00	4,439.77	-37.58	456,277.77	741,140.42	4,439.93	0.00
15,500.00	90.00	359.52	7,534.00	11,165.00	4,539.77	-38.42	456,377.77	741,139.58	4,539.93	0.00
15,600.00	90.00	359.52	7,534.00	11,165.00	4,639.76	-39.27	456,477.76	741,138.73	4,639.93	0.00
15,700.00	90.00	359.52	7,534.00	11,165.00	4,739.76	-40.12	456,577.76	741,137.88	4,739.93	0.00
15,804.24	90.00	359.52	7,534.00	11,165.00	4,844.00	-41.00	456,682.00	741,137.00	4,844.17	0.00

TD at 15804.24



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Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
10,687.54	10,687.54	0.00	0.00	KOP: Start Build 12.00°/100'
11,437.54	11,165.00	477.45	-4.04	LP: 90° Inc at 359.52° Azi
15,804.24	11,165.00	4,844.00	-41.00	TD at 15804.24