

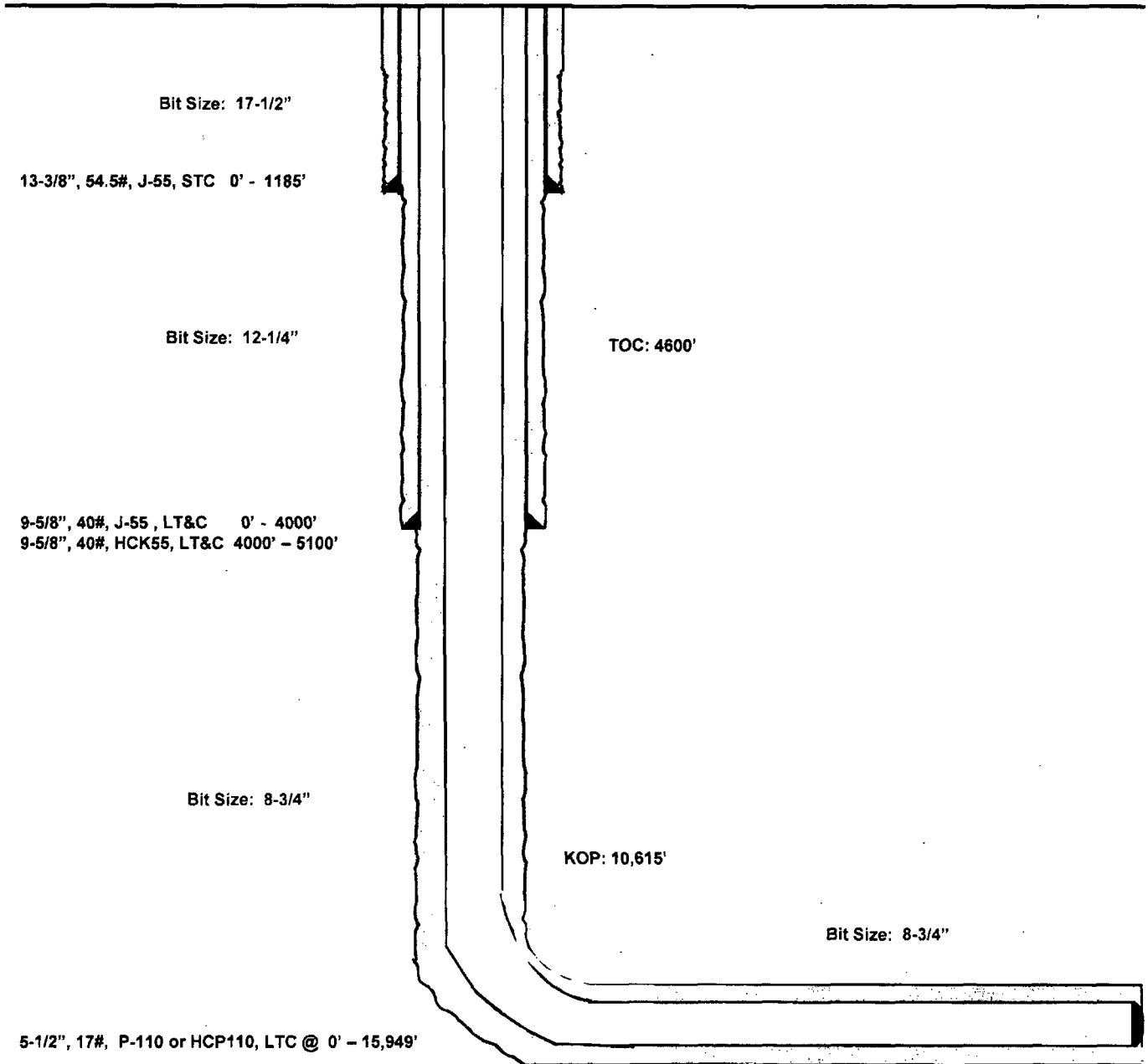
Dillon 31 #502H
Lea County, New Mexico

230' FSL
1170' FEL
Section 31
T-24-S, R-34-E

Proposed Wellbore

API: 30-025-*****

KB: 3,461'
GL: 3,436'



Lateral: 15,949' MD, 11,200' TVD

BH Location: 230' FNL & 1260' FEL
Section 31
T-24-S, R-34-E

FEB 12 2015



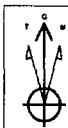
Lea County, NM (NAD 27 NME)

Dillon 31 #502H

Plan #1

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

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



Azimuths to Grid North
True North: -0.44°
Magnetic North: 6.73°
Magnetic Field
Strength: 48154.9nT
Dip Angle: 60.05°
Date: 2/4/2015
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.73°
To convert a Magnetic Direction to a True Direction, Add 7.17° East
To convert a True Direction to a Grid Direction, Subtract 0.44°

WELL DETAILS: #502H

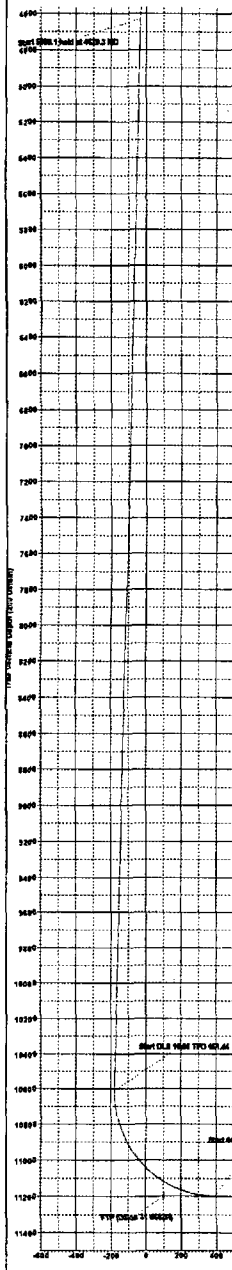
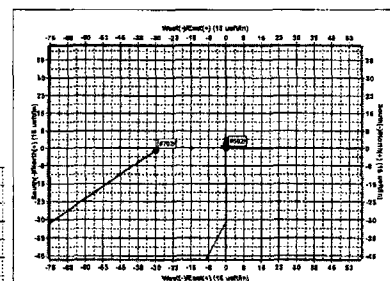
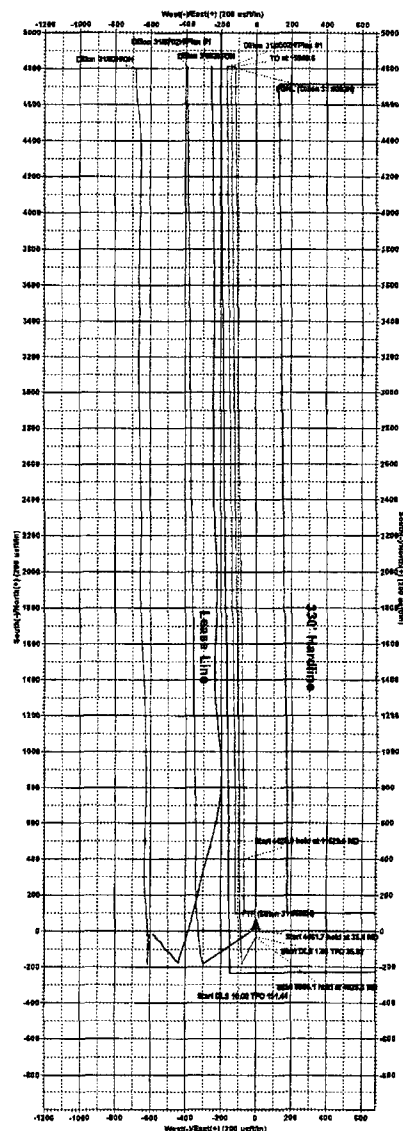
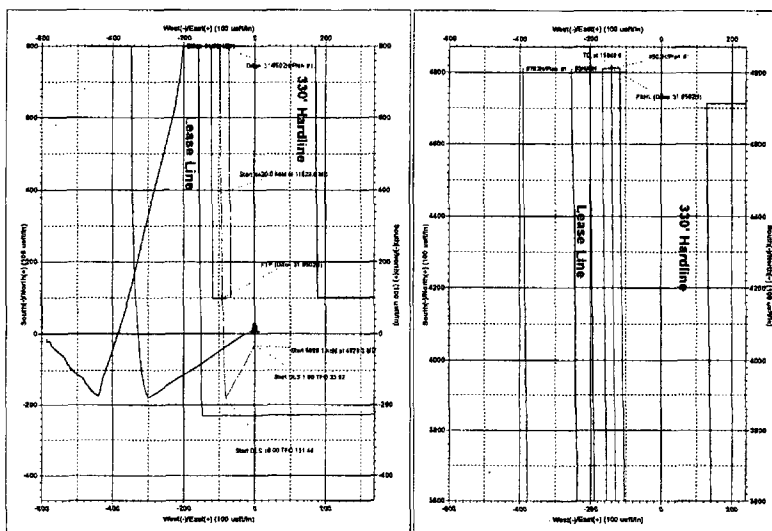
Ground Level: 3438.0
KB = 35' @ 3461.0m
Easting: 756702.00 32° 10' 2.250 N
Northing: 429575.00
Longitude: 103° 30' 13.503 W
Slot

SECTION DETAILS

Sec	MD	Inc	Asl	TVD	+N-S	+E-W	Dipg	Tface	Vsect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	38.4	0.38	180.00	38.4	-0.1	0.0	1.00	180.00	-0.1		
3	4500.1	0.38	120.00	4500.0	-0.0	0.0	0.00	0.00	-0.0		
4	4829.3	1.82	207.30	4829.2	-32.0	-0.9	1.00	35.82	-32.0		
6	10615.4	1.42	207.30	10612.9	-191.4	-80.0	0.00	0.00	-179.0		
6	11520.8	90.00	358.38	11200.9	291.3	-84.2	10.00	161.44	351.9		
7	15848.8	90.00	358.38	11200.9	4811.0	-142.0	0.00	0.00	4812.1	PBHL (Dillon 31 #502H)	

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
FTP (Dillon 31 #502H)	11200.0	99.0	-81.0	429574.00	756611.00	Point
PBHL (Dillon 31 #502H)	11200.0	4811.0	-142.0	430386.00	756503.00	Rectangle (Sides: L:0.0 W:0.0)





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Dillon 31

#502H

OH

Plan: Plan #1

Standard Survey Report

05 February, 2015



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Dillon 31
Well: #502H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25' @ 3461.0usft
MD Reference: KB = 25' @ 3461.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 27 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	Dillon 31				
Site Position:		Northing:	425,706.00 usft	Latitude:	32° 10' 3.685 N
From:	Map	Easting:	755,398.00 usft	Longitude:	103° 30' 28.661 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.44 °

Well	#502H				
Well Position	+N-S	0.0 usft	Northing:	425,575.00 usft	Latitude: 32° 10' 2.290 N
	+E-W	0.0 usft	Easting:	756,702.00 usft	Longitude: 103° 30' 13.503 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,436.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/4/2015	7.17	60.05	48,155

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	358.31

Survey Tool Program		Date	2/5/2015	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	15,949.6	Plan #1 (OH)	MWD	MWD - Standard

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
38.4	0.38	180.00	38.4	-0.1	0.0	-0.1	1.00	1.00	0.00
100.0	0.38	180.00	100.0	-0.5	0.0	-0.5	0.00	0.00	0.00
200.0	0.38	180.00	200.0	-1.2	0.0	-1.2	0.00	0.00	0.00
300.0	0.38	180.00	300.0	-1.9	0.0	-1.9	0.00	0.00	0.00
400.0	0.38	180.00	400.0	-2.5	0.0	-2.5	0.00	0.00	0.00
500.0	0.38	180.00	500.0	-3.2	0.0	-3.2	0.00	0.00	0.00
600.0	0.38	180.00	600.0	-3.9	0.0	-3.9	0.00	0.00	0.00
700.0	0.38	180.00	700.0	-4.6	0.0	-4.6	0.00	0.00	0.00
800.0	0.38	180.00	800.0	-5.2	0.0	-5.2	0.00	0.00	0.00



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Dillon 31
Well: #502H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25' @ 3461.0usft
MD Reference: KB = 25' @ 3461.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
900.0	0.38	180.00	900.0	-5.9	0.0	-5.9	0.00	0.00	0.00
1,000.0	0.38	180.00	1,000.0	-6.6	0.0	-6.6	0.00	0.00	0.00
1,100.0	0.38	180.00	1,100.0	-7.2	0.0	-7.2	0.00	0.00	0.00
1,200.0	0.38	180.00	1,200.0	-7.9	0.0	-7.9	0.00	0.00	0.00
1,300.0	0.38	180.00	1,300.0	-8.6	0.0	-8.6	0.00	0.00	0.00
1,400.0	0.38	180.00	1,400.0	-9.2	0.0	-9.2	0.00	0.00	0.00
1,500.0	0.38	180.00	1,500.0	-9.9	0.0	-9.9	0.00	0.00	0.00
1,600.0	0.38	180.00	1,600.0	-10.6	0.0	-10.6	0.00	0.00	0.00
1,700.0	0.38	180.00	1,700.0	-11.3	0.0	-11.2	0.00	0.00	0.00
1,800.0	0.38	180.00	1,800.0	-11.9	0.0	-11.9	0.00	0.00	0.00
1,900.0	0.38	180.00	1,900.0	-12.6	0.0	-12.6	0.00	0.00	0.00
2,000.0	0.38	180.00	2,000.0	-13.3	0.0	-13.3	0.00	0.00	0.00
2,100.0	0.38	180.00	2,100.0	-13.9	0.0	-13.9	0.00	0.00	0.00
2,200.0	0.38	180.00	2,200.0	-14.6	0.0	-14.6	0.00	0.00	0.00
2,300.0	0.38	180.00	2,299.9	-15.3	0.0	-15.3	0.00	0.00	0.00
2,400.0	0.38	180.00	2,399.9	-15.9	0.0	-15.9	0.00	0.00	0.00
2,500.0	0.38	180.00	2,499.9	-16.6	0.0	-16.6	0.00	0.00	0.00
2,600.0	0.38	180.00	2,599.9	-17.3	0.0	-17.3	0.00	0.00	0.00
2,700.0	0.38	180.00	2,699.9	-17.9	0.0	-17.9	0.00	0.00	0.00
2,800.0	0.38	180.00	2,799.9	-18.6	0.0	-18.6	0.00	0.00	0.00
2,900.0	0.38	180.00	2,899.9	-19.3	0.0	-19.3	0.00	0.00	0.00
3,000.0	0.38	180.00	2,999.9	-20.0	0.0	-19.9	0.00	0.00	0.00
3,100.0	0.38	180.00	3,099.9	-20.6	0.0	-20.6	0.00	0.00	0.00
3,200.0	0.38	180.00	3,199.9	-21.3	0.0	-21.3	0.00	0.00	0.00
3,300.0	0.38	180.00	3,299.9	-22.0	0.0	-22.0	0.00	0.00	0.00
3,400.0	0.38	180.00	3,399.9	-22.6	0.0	-22.6	0.00	0.00	0.00
3,500.0	0.38	180.00	3,499.9	-23.3	0.0	-23.3	0.00	0.00	0.00
3,600.0	0.38	180.00	3,599.9	-24.0	0.0	-24.0	0.00	0.00	0.00
3,700.0	0.38	180.00	3,699.9	-24.6	0.0	-24.6	0.00	0.00	0.00
3,800.0	0.38	180.00	3,799.9	-25.3	0.0	-25.3	0.00	0.00	0.00
3,900.0	0.38	180.00	3,899.9	-26.0	0.0	-26.0	0.00	0.00	0.00
4,000.0	0.38	180.00	3,999.9	-26.7	0.0	-26.6	0.00	0.00	0.00
4,100.0	0.38	180.00	4,099.9	-27.3	0.0	-27.3	0.00	0.00	0.00
4,200.0	0.38	180.00	4,199.9	-28.0	0.0	-28.0	0.00	0.00	0.00
4,300.0	0.38	180.00	4,299.9	-28.7	0.0	-28.6	0.00	0.00	0.00
4,400.0	0.38	180.00	4,399.9	-29.3	0.0	-29.3	0.00	0.00	0.00
4,500.1	0.38	180.00	4,500.0	-30.0	0.0	-30.0	0.00	0.00	0.00
4,600.0	1.33	206.17	4,599.9	-31.4	-0.5	-31.3	1.00	0.95	26.20
4,629.3	1.62	207.93	4,629.2	-32.0	-0.9	-32.0	1.00	0.99	6.00
4,700.0	1.62	207.93	4,699.8	-33.8	-1.8	-33.7	0.00	0.00	0.00
4,800.0	1.62	207.93	4,799.8	-36.3	-3.1	-36.2	0.00	0.00	0.00
4,900.0	1.62	207.93	4,899.8	-38.8	-4.4	-38.7	0.00	0.00	0.00
5,000.0	1.62	207.93	4,999.7	-41.3	-5.8	-41.1	0.00	0.00	0.00
5,100.0	1.62	207.93	5,099.7	-43.8	-7.1	-43.6	0.00	0.00	0.00