

Permit Information:

HOBBS OCD

Well Name: Ruby 2 State Com No. 1H

MAY 05 2014

Location:

SL: 220' FSL & 622' FWL, Section 2, T-26-S, R-34-E, Lea Co., N.M.

RECEIVED

BHL: 230' FNL & 380' FWL, Section 2, T-26-S, R-34-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 - 965'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000' - 5200'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-14,297'	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
965'	500	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)
	200	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,200'	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
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
14,297'	375	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
	400	11.8	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
	1350	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 - 965'	Fresh - Gel	8.6-8.8	28-34	N/c
965' - 5,200'	Brine	10.0-10.2	28-34	N/c
5,200' - 9,162'	Cut Brine	8.4-9.0	28-34	N/c
KOP - 14,297' Lateral	Cut Brine	9.0-9.5	40-42	8-10

MAY 07 2014

HOBBS OCD

MAY 05 2014

Ruby 2 State Com #1H
Red Hills
Lea County, New Mexico

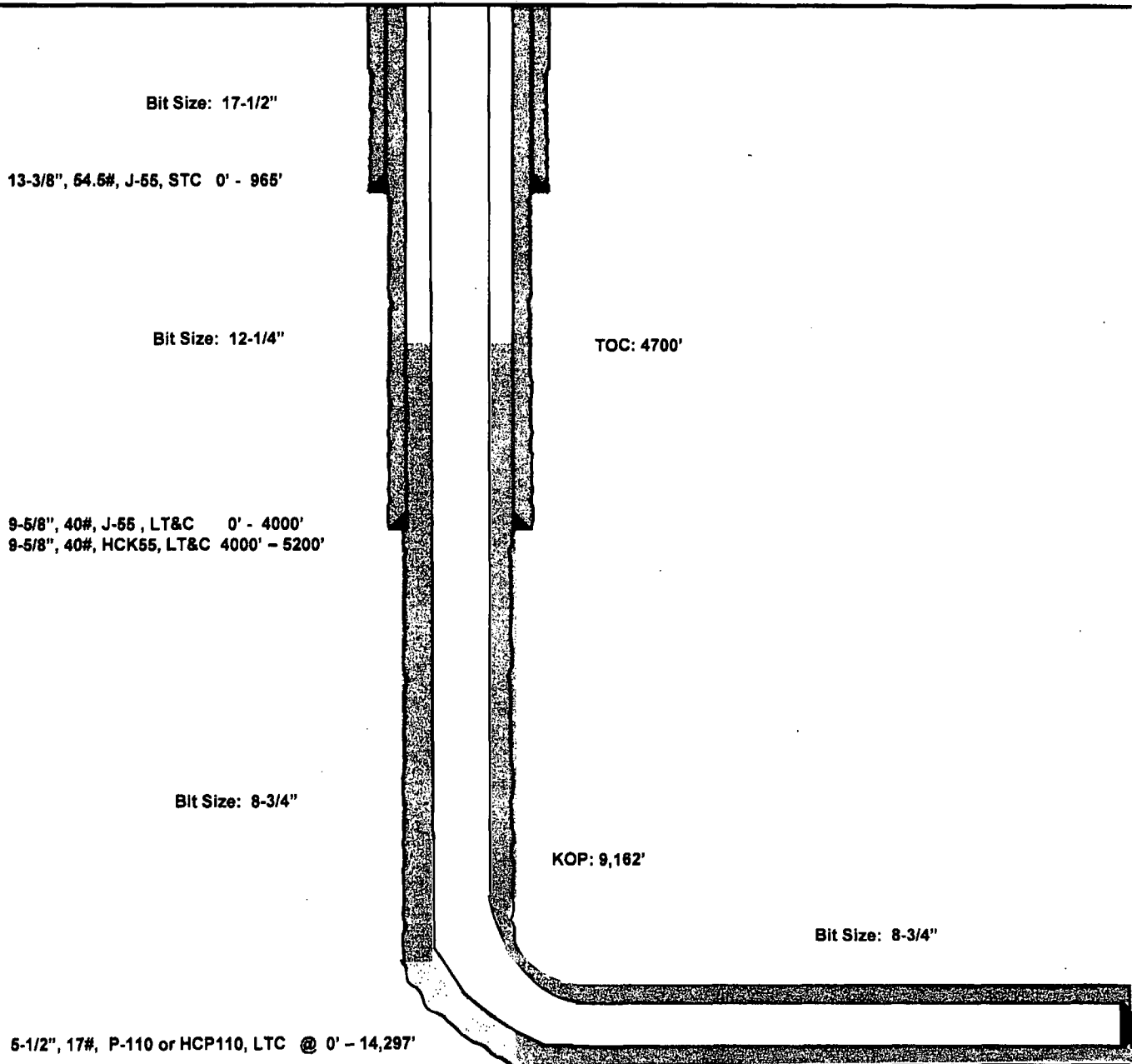
RECEIVED

220' FSL
622' FWL
Section 2
T-26-S, R-34-E

Proposed Wellbore

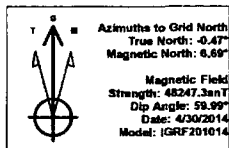
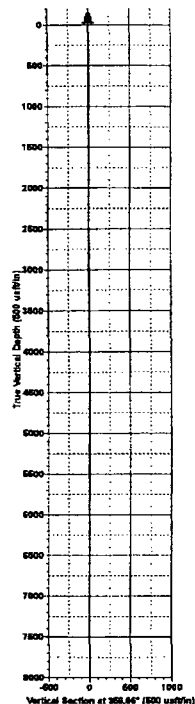
KB: 3,341'
GL: 3,311'

API: 30-025-



Lateral: 14,297' MD, 9,640' TVD

BH Location: 230' FNL & 380' FWL
Section 2
T-26-S, R-34-E



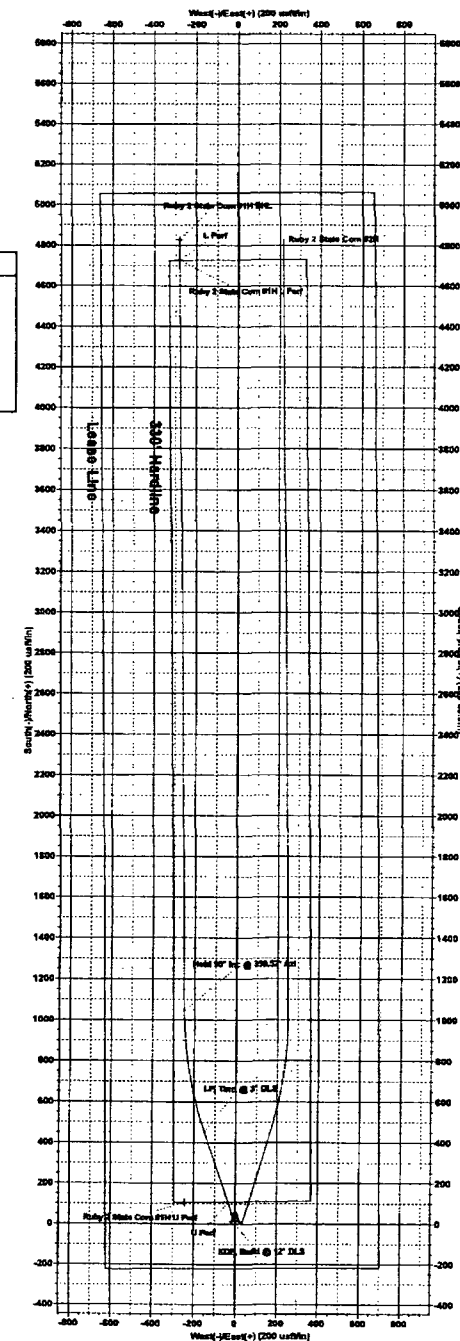
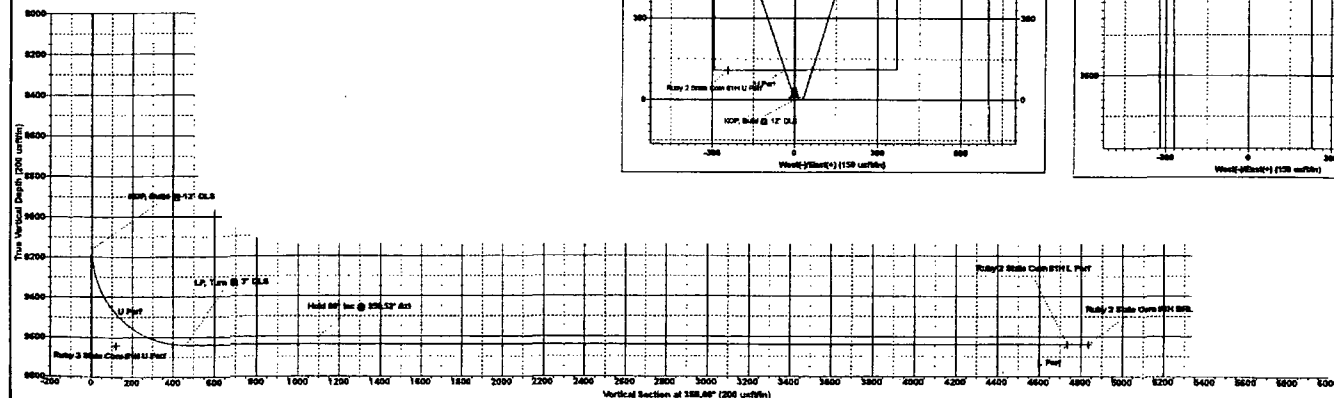
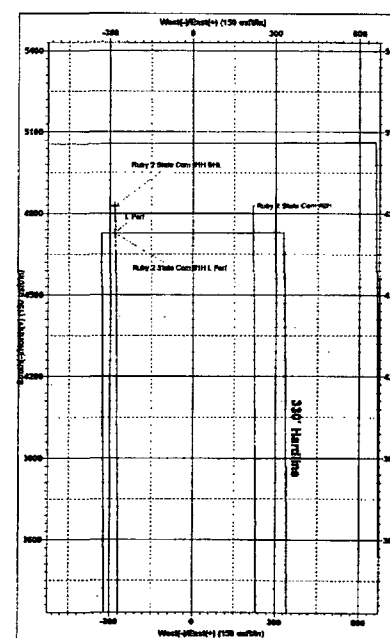
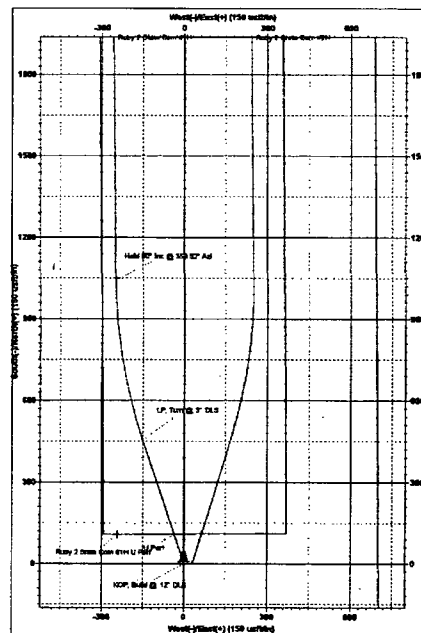
Lea County, NM
Ruby 2 State Com #1H
3311' GL + 30' KB
Plan #1

PROJECT DETAILS: Lea County, NM
 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

WELL DETAILS: Ruby 2 State Com #1H			
Ground Level:	3311.00	Longitude	
Northing	388748.00	Latitude	32° 3' 56.457 N
	774832.00		103° 20' 48.449 W

SECTION DETAILS									
Sec	MD	Inc	Ad	TVD	+N-S	+E-W	Diag	TFace	VFace
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	9182.54	0.00	0.00	9182.54	0.00	0.00	0.00	0.00	0.00
3	9912.54	90.00	341.50	9640.00	452.79	-191.50	12.00	341.50	480.88
4	10813.12	90.00	359.52	9640.00	1042.71	-280.13	3.00	90.00	1055.53
5	14297.54	90.00	359.52	9640.00	4827.00	-282.00	0.00	0.00	4833.23

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N-S	+E-W	Northing	Easting
Ruby 2 State Com #1H BHL	9640.00	4827.00	-282.00	393575.00	774350.00
Ruby 2 State Com #1H L Perf	9640.00	4727.00	-282.00	393475.00	774350.00
Ruby 2 State Com #1H U Perf	9640.00	108.00	-343.00	393886.00	774389.00





EOG Resources - Midland

Lea County, NM

Ruby 2 State Com

Ruby 2 State Com #1H

OH

Plan: Plan #1

Standard Survey Report

01 May, 2014



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM
Site: Ruby 2 State Com
Well: Ruby 2 State Com #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Ruby 2 State Com #1H
TVD Reference: Well @ 3341.00usft (3311' GL + 30' KB)
MD Reference: Well @ 3341.00usft (3311' GL + 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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

Site	Ruby 2 State Com		
Site Position:		Northing:	388,748.00 usft
From:	Map	Easting:	774,632.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 3' 56.457 N
		Longitude:	103° 26' 48.449 W
		Grid Convergence:	0.47 °

Well	Ruby 2 State Com #1H		
Well Position	+N/-S	0.00 usft	Northing: 388,748.00 usft
	+E/-W	0.00 usft	Easting: 774,632.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 3' 56.457 N
		Longitude:	103° 26' 48.449 W
		Ground Level:	3,311.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF201014	4/30/2014	(°)
			7.16
			Dip Angle (°)
			59.99
			Field Strength (nT)
			48,247

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction (°)
			358.66

Survey Tool Program	Date 5/1/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
0.00	14,297.04	Plan #1 (OH)	MWD
			Description
			MWD - Standard

Planned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00



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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)
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM
Site: Ruby 2 State Com
Well: Ruby 2 State Com #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Ruby 2 State Com #1H
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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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,162.54	0.00	0.00	9,162.54	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Build @ 12° DLS									
9,175.00	1.50	341.50	9,175.00	0.15	-0.05	0.16	12.00	12.00	0.00
9,200.00	4.50	341.50	9,199.96	1.39	-0.47	1.42	12.00	12.00	0.00
9,225.00	7.50	341.50	9,224.82	3.87	-1.29	3.94	12.00	12.00	0.00



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Well: Ruby 2 State Com #1H
Wellbore: OH
Design: Plan #1

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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)
9,250.00	10.50	341.50	9,249.51	7.58	-2.53	7.71	12.00	12.00	0.00
9,275.00	13.50	341.50	9,273.96	12.50	-4.18	12.72	12.00	12.00	0.00
9,300.00	16.50	341.50	9,298.11	18.64	-8.24	18.97	12.00	12.00	0.00
9,325.00	19.50	341.50	9,321.88	25.96	-8.69	26.42	12.00	12.00	0.00
9,350.00	22.50	341.50	9,345.22	34.45	-11.53	35.07	12.00	12.00	0.00
9,375.00	25.50	341.50	9,368.06	44.09	-14.75	44.88	12.00	12.00	0.00
9,400.00	28.50	341.50	9,390.33	54.85	-18.35	55.83	12.00	12.00	0.00
9,425.00	31.50	341.50	9,411.98	66.70	-22.32	67.89	12.00	12.00	0.00
9,450.00	34.50	341.50	9,432.95	79.61	-26.64	81.03	12.00	12.00	0.00
9,475.00	37.50	341.50	9,453.17	93.54	-31.30	95.21	12.00	12.00	0.00
9,499.25	40.41	341.50	9,472.03	108.00	-36.14	109.92	12.00	12.00	0.00
U Perf									
9,500.00	40.50	341.50	9,472.60	108.46	-36.29	110.39	12.00	12.00	0.00
9,525.00	43.50	341.50	9,491.18	124.32	-41.60	126.54	12.00	12.00	0.00
9,550.00	46.50	341.50	9,508.85	141.08	-47.21	143.60	12.00	12.00	0.00
9,575.00	49.50	341.50	9,525.58	158.70	-53.10	161.52	12.00	12.00	0.00
9,600.00	52.50	341.50	9,541.31	177.12	-59.26	180.27	12.00	12.00	0.00
9,625.00	55.50	341.50	9,556.01	196.30	-65.68	199.79	12.00	12.00	0.00
9,650.00	58.50	341.50	9,569.63	216.18	-72.33	220.03	12.00	12.00	0.00
9,675.00	61.50	341.50	9,582.13	236.70	-79.20	240.92	12.00	12.00	0.00
9,700.00	64.50	341.50	9,593.48	257.83	-86.27	262.42	12.00	12.00	0.00
9,725.00	67.50	341.50	9,603.64	279.48	-93.51	284.46	12.00	12.00	0.00
9,750.00	70.50	341.50	9,612.61	301.61	-100.92	306.98	12.00	12.00	0.00
9,775.00	73.50	341.50	9,620.33	324.16	-108.46	329.93	12.00	12.00	0.00
9,800.00	76.50	341.50	9,626.80	347.05	-116.12	353.23	12.00	12.00	0.00
9,825.00	79.50	341.50	9,632.00	370.24	-123.88	376.83	12.00	12.00	0.00
9,850.00	82.50	341.50	9,635.92	393.65	-131.71	400.66	12.00	12.00	0.00
9,875.00	85.50	341.50	9,638.53	417.23	-139.60	424.66	12.00	12.00	0.00
9,900.00	88.50	341.50	9,639.84	440.90	-147.52	448.75	12.00	12.00	0.00
9,912.54	90.00	341.50	9,640.01	452.79	-151.50	460.86	12.00	12.00	0.00
LP, Turn @ 3° DLS									
10,000.00	90.00	344.12	9,640.01	536.34	-177.34	545.77	3.00	0.00	3.00
10,100.00	90.00	347.12	9,640.01	633.20	-202.17	643.91	3.00	0.00	3.00
10,200.00	90.00	350.12	9,640.00	731.22	-221.89	742.92	3.00	0.00	3.00
10,300.00	90.00	353.12	9,640.00	830.14	-236.46	842.52	3.00	0.00	3.00
10,400.00	90.00	356.12	9,640.00	929.69	-245.83	942.44	3.00	0.00	3.00
10,500.00	90.00	359.12	9,640.00	1,029.59	-249.97	1,042.42	3.00	0.00	3.00
10,513.12	90.00	359.52	9,640.00	1,042.71	-250.13	1,055.53	3.00	0.00	3.00
Hold 90° Inc @ 359.52° Azl									
10,600.00	90.00	359.52	9,640.00	1,129.59	-250.86	1,142.30	0.00	0.00	0.00
10,700.00	90.00	359.52	9,640.00	1,229.59	-251.70	1,242.17	0.00	0.00	0.00
10,800.00	90.00	359.52	9,640.00	1,329.58	-252.54	1,342.05	0.00	0.00	0.00
10,900.00	90.00	359.52	9,640.00	1,429.58	-253.39	1,441.92	0.00	0.00	0.00
11,000.00	90.00	359.52	9,640.00	1,529.57	-254.23	1,541.80	0.00	0.00	0.00



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM
Site: Ruby 2 State Com
Well: Ruby 2 State Com #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Ruby 2 State Com #1H
TVD Reference: Well @ 3341.00usft (3311' GL + 30' KB)
MD Reference: Well @ 3341.00usft (3311' GL + 30' KB)
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)
11,100.00	90.00	359.52	9,640.00	1,829.57	-255.07	1,841.67	0.00	0.00	0.00
11,200.00	90.00	359.52	9,640.00	1,729.57	-255.91	1,741.55	0.00	0.00	0.00
11,300.00	90.00	359.52	9,640.00	1,829.56	-256.76	1,841.42	0.00	0.00	0.00
11,400.00	90.00	359.52	9,640.00	1,929.56	-257.60	1,941.30	0.00	0.00	0.00
11,500.00	90.00	359.52	9,640.00	2,029.56	-258.44	2,041.18	0.00	0.00	0.00
11,600.00	90.00	359.52	9,640.00	2,129.55	-259.28	2,141.05	0.00	0.00	0.00
11,700.00	90.00	359.52	9,640.00	2,229.55	-260.12	2,240.93	0.00	0.00	0.00
11,800.00	90.00	359.52	9,640.00	2,329.55	-260.97	2,340.80	0.00	0.00	0.00
11,900.00	90.00	359.52	9,640.00	2,429.54	-261.81	2,440.68	0.00	0.00	0.00
12,000.00	90.00	359.52	9,640.00	2,529.54	-262.65	2,540.55	0.00	0.00	0.00
12,100.00	90.00	359.52	9,640.00	2,629.54	-263.49	2,640.43	0.00	0.00	0.00
12,200.00	90.00	359.52	9,640.00	2,729.53	-264.34	2,740.30	0.00	0.00	0.00
12,300.00	90.00	359.52	9,640.00	2,829.53	-265.18	2,840.18	0.00	0.00	0.00
12,400.00	90.00	359.52	9,640.00	2,929.53	-266.02	2,940.05	0.00	0.00	0.00
12,500.00	90.00	359.52	9,640.00	3,029.52	-266.86	3,039.93	0.00	0.00	0.00
12,600.00	90.00	359.52	9,640.00	3,129.52	-267.70	3,139.80	0.00	0.00	0.00
12,700.00	90.00	359.52	9,640.00	3,229.51	-268.55	3,239.68	0.00	0.00	0.00
12,800.00	90.00	359.52	9,640.00	3,329.51	-269.39	3,339.55	0.00	0.00	0.00
12,900.00	90.00	359.52	9,640.00	3,429.51	-270.23	3,439.43	0.00	0.00	0.00
13,000.00	90.00	359.52	9,640.00	3,529.50	-271.07	3,539.31	0.00	0.00	0.00
13,100.00	90.00	359.52	9,640.00	3,629.50	-271.91	3,639.18	0.00	0.00	0.00
13,200.00	90.00	359.52	9,640.00	3,729.50	-272.76	3,739.06	0.00	0.00	0.00
13,300.00	90.00	359.52	9,640.00	3,829.49	-273.60	3,838.93	0.00	0.00	0.00
13,400.00	90.00	359.52	9,640.00	3,929.49	-274.44	3,938.81	0.00	0.00	0.00
13,500.00	90.00	359.52	9,640.00	4,029.49	-275.28	4,038.68	0.00	0.00	0.00
13,600.00	90.00	359.52	9,640.00	4,129.48	-276.13	4,138.56	0.00	0.00	0.00
13,700.00	90.00	359.52	9,640.00	4,229.48	-276.97	4,238.43	0.00	0.00	0.00
13,800.00	90.00	359.52	9,640.00	4,329.48	-277.81	4,338.31	0.00	0.00	0.00
13,900.00	90.00	359.52	9,640.00	4,429.47	-278.65	4,438.18	0.00	0.00	0.00
14,000.00	90.00	359.52	9,640.00	4,529.47	-279.49	4,538.06	0.00	0.00	0.00
14,100.00	90.00	359.52	9,640.00	4,629.46	-280.34	4,637.93	0.00	0.00	0.00
14,197.54	90.00	359.52	9,640.00	4,727.00	-281.16	4,735.35	0.00	0.00	0.00
L Perf									
14,200.00	90.00	359.52	9,640.00	4,729.46	-281.18	4,737.81	0.00	0.00	0.00
14,297.54	90.00	359.52	9,640.00	4,827.00	-282.00	4,835.23	0.00	0.00	0.00
TD at 14297.54									

**EOG Resources, Inc.****Survey Report**

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Well: Ruby 2 State Com #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Ruby 2 State Com #1H
TVD Reference: Well @ 3341.00usft (3311' GL + 30' KB)
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Design Targets**Target Name**

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Ruby 2 State Com #1H I - plan misses target center by 213.93usft at 9647.72usft MD (9568.43 TVD, 214.33 N, -71.71 E) - Point	0.00	0.00	9,640.00	108.00	-243.00	388,856.00	774,389.00	32° 3' 57.546 N	103° 28' 51.283 W
Ruby 2 State Com #1H I - plan hits target center - Point	0.00	0.00	9,640.00	4,827.00	-282.00	393,575.00	774,350.00	32° 4' 44.246 N	103° 28' 51.266 W
Ruby 2 State Com #1H I - plan misses target center by 0.84usft at 14197.55usft MD (9640.00 TVD, 4727.01 N, -281.16 E) - Point	0.00	0.00	9,640.00	4,727.00	-282.00	393,475.00	774,350.00	32° 4' 43.256 N	103° 28' 51.275 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9163	9163	0	0	KOP, Build @ 12° DLS
9499	9472	108	-36	U Perf
9913	9640	453	-152	LP, Turn @ 3° DLS
10,513	9640	1043	-250	Hold 90° Inc @ 359.52° Azi
14,198	9640	4727	-281	L Perf
14,298	9640	4827	-282	TD at 14287.54

Checked By: _____ Approved By: _____ Date: _____