



Lea County, NM (NAD 83 NME)

Streetcar 15 Fed

#703Y

Plan #2

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



Azimuths to Grid North
True North: -0.41°
Magnetic North: 6.50°

Magnetic Field
Strength: 47854.9snT
Dip Angle: 59.97°
Date: 9/17/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.50°
To convert a Magnetic Direction to a True Direction, Add 6.91° East
To convert a True Direction to a Grid Direction, Subtract 6.41°

WELL DETAILS: #703Y

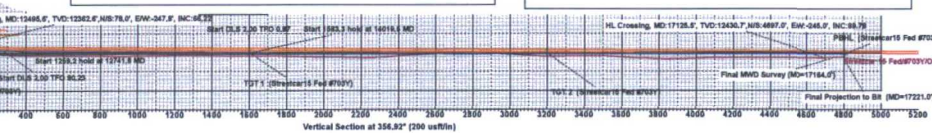
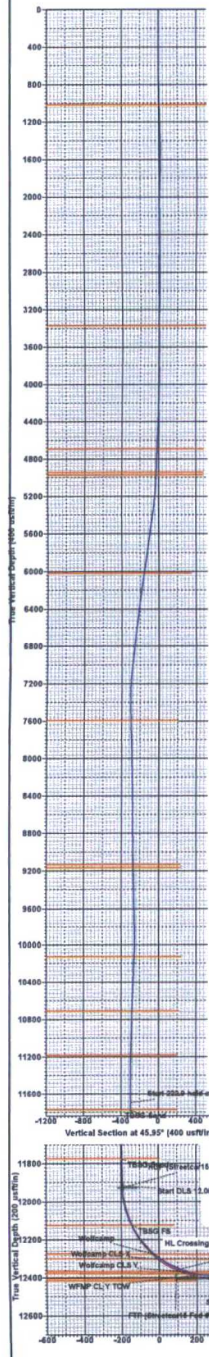
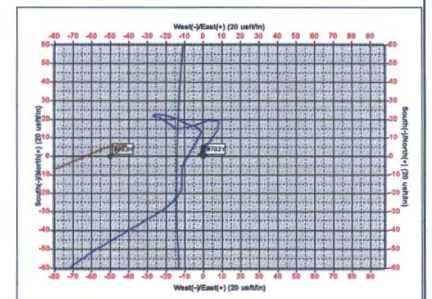
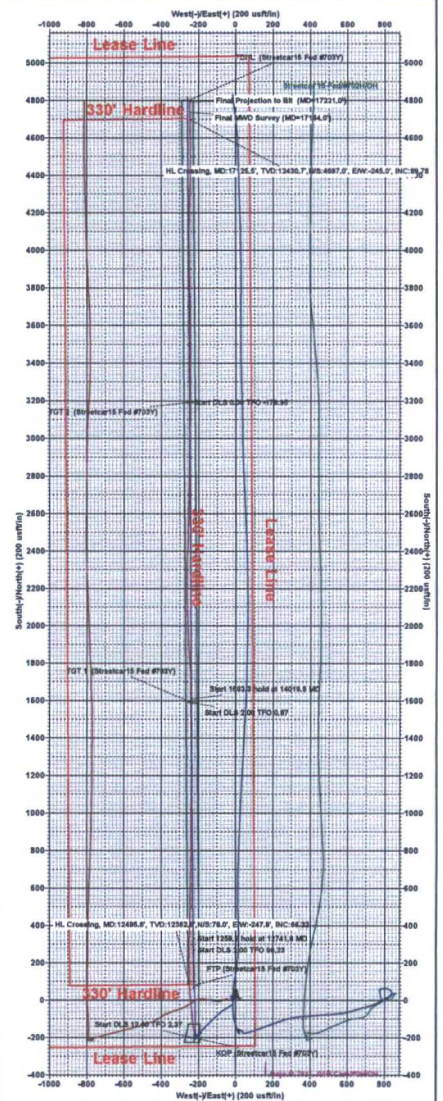
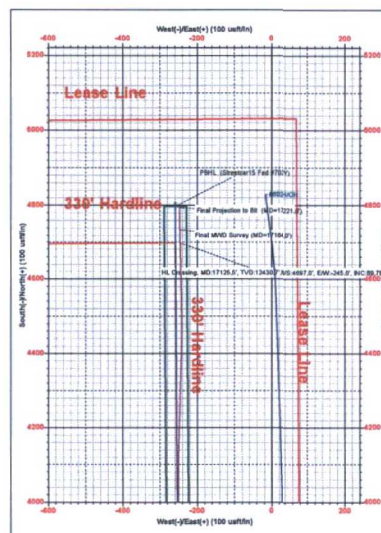
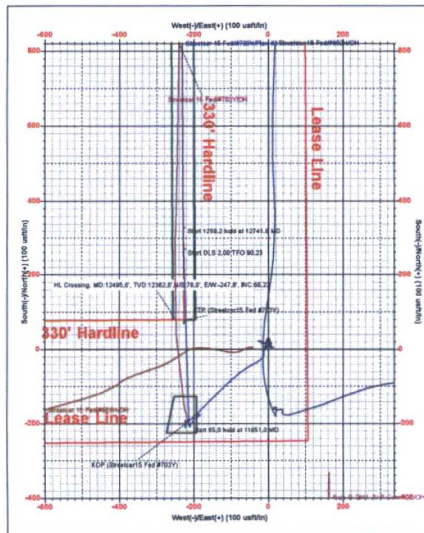
	+N/-S	+E/-W	Northing	KB = 25' @ 3378.0usft	Latitude	Longitude	Slot
	0.0	0.0	409708.00		32° 7' 26.334 N	103° 33' 22.611 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	11651.0	0.60	356.00	11629.7	-207.7	-212.6	0.00	0.00	-196.0	
2	11716.0	0.60	356.00	11694.7	-207.0	-212.7	0.00	0.00	-195.3	
3	11938.9	0.60	356.00	11917.6	-204.7	-212.8	0.00	0.00	-192.9	
4	12680.0	89.53	358.37	12390.1	268.7	-226.5	12.00	2.37	280.4	
5	12741.8	89.53	359.61	12390.6	330.4	-227.6	2.00	90.23	342.2	
6	14001.0	89.53	359.61	12401.0	1589.6	-236.2	0.00	0.00	1600.0	TGT 1 (Streetcar15 Fed #703Y)
7	14019.5	89.89	359.61	12401.1	1608.1	-236.4	2.00	0.87	1618.5	
8	15602.8	89.89	359.61	12404.0	3191.3	-247.1	0.00	0.00	3200.0	TGT 2 (Streetcar15 Fed #703Y)
9	17208.5	89.82	359.61	12408.0	4797.0	-258.0	0.00	-179.95	4803.9	PBHL (Streetcar15 Fed #703Y)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
KCP (Streetcar15 Fed #703Y)	11929.5	-201.3	-223.1	409508.73	781669.94	Polygon
FTF (Streetcar15 Fed #703Y)	12400.0	79.0	-236.0	409787.00	781687.00	Point
TGT 1 (Streetcar15 Fed #703Y)	12401.0	1589.6	-236.2	411287.60	781656.75	Point
TGT 2 (Streetcar15 Fed #703Y)	12404.0	3191.3	-247.1	412899.30	781645.89	Point
PBHL (Streetcar15 Fed #703Y)	12408.0	4797.0	-258.0	414606.00	781635.00	Rectangle (Sides: L0.0 W0.0)



Lea County, NM (NAD 83 NME)
Streetcar 15 Fed #703Y
Plan #2
12/08/2017
HOBBS OCD

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Streetcar 15 Fed

#703Y

OH

Design: OH

PVA Report

23 October, 2017

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3378.0usft
Site:	Streetcar 15 Fed	MD Reference:	KB = 25' @ 3378.0usft
Well:	#703Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project	Lea County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Streetcar 15 Fed		
Site Position:		Northing:	409,714.00 usft
From:	Map	Easting:	782,680.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 7' 26.337 N
		Longitude:	103° 33' 13.460 W
		Grid Convergence:	0.41 °

Well	#703Y		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 7' 26.334 N
		Longitude:	103° 33' 22.611 W
		Ground Level:	3,353.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	9/17/2017	6.91
			Dip Angle (°)
			59.97
			Field Strength (nT)
			47,854.89692047

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
		Direction (°)	356.92

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #703Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703Y
 TVD Reference: KB = 25' @ 3378.0usft
 MD Reference: KB = 25' @ 3378.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey Program		Date 10/23/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
112.0	1,182.0	Wildfire MWD (OH)	MWD	MWD - Standard	
1,365.0	17,221.0	Intrepid MWD (OH)	MWD	MWD - Standard	

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
112.0	0.40	347.94	112.0	0.4	-0.1	0.36	0.36	0.00	0.0	0.0
129.0	0.50	19.94	129.0	0.5	-0.1	1.56	0.59	188.24	0.0	0.0
158.0	0.50	319.94	158.0	0.7	-0.1	1.72	0.00	-206.90	0.0	0.0
191.0	0.30	37.94	191.0	0.9	-0.1	1.60	-0.61	236.36	0.0	0.0
219.0	0.50	336.94	219.0	1.1	-0.1	1.58	0.71	-217.86	0.0	0.0
247.0	0.20	13.94	247.0	1.2	-0.2	1.29	-1.07	132.14	0.0	0.0
276.0	0.30	26.94	276.0	1.4	-0.1	0.39	0.34	44.83	0.0	0.0
308.0	0.20	348.94	308.0	1.5	-0.1	0.59	-0.31	-118.75	0.0	0.0
339.0	0.40	15.94	339.0	1.6	-0.1	0.77	0.65	87.10	0.0	0.0
371.0	0.20	4.94	371.0	1.8	-0.1	0.65	-0.63	-34.38	0.0	0.0
402.0	0.20	349.94	402.0	1.9	-0.1	0.17	0.00	-48.39	0.0	0.0
433.0	0.40	30.94	433.0	2.1	0.0	0.91	0.65	132.26	0.0	0.0
497.0	0.10	50.94	497.0	2.3	0.1	0.48	-0.47	31.25	0.0	0.0
528.0	0.10	32.94	528.0	2.3	0.2	0.10	0.00	-58.06	0.0	0.0
559.0	0.10	341.94	559.0	2.4	0.2	0.28	0.00	-164.52	0.0	0.0
591.0	0.40	47.94	591.0	2.5	0.3	1.16	0.94	206.25	0.0	0.0
622.0	0.10	41.94	622.0	2.6	0.4	0.97	-0.97	-19.35	0.0	0.0
653.0	0.40	41.94	653.0	2.7	0.4	0.97	0.97	0.00	0.0	0.0
716.0	0.60	32.94	716.0	3.1	0.8	0.34	0.32	-14.29	0.0	0.0
748.0	0.60	35.94	748.0	3.4	1.0	0.10	0.00	9.38	0.0	0.0

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #703Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703Y
 TVD Reference: KB = 25' @ 3378.0usft
 MD Reference: KB = 25' @ 3378.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
780.0	0.50	35.94	780.0	3.6	1.1	0.31	-0.31	0.00	0.0	0.0	
811.0	0.70	29.94	811.0	3.9	1.3	0.68	0.65	-19.35	0.0	0.0	
843.0	0.80	30.94	843.0	4.3	1.5	0.32	0.31	3.13	0.0	0.0	
905.0	0.90	22.94	905.0	5.1	1.9	0.25	0.16	-12.90	0.0	0.0	
935.0	1.00	33.94	935.0	5.5	2.2	0.69	0.33	36.67	0.0	0.0	
967.0	0.90	36.94	967.0	5.9	2.5	0.35	-0.31	9.38	0.0	0.0	
999.0	1.00	25.94	999.0	6.4	2.8	0.65	0.31	-34.38	0.0	0.0	
1,062.0	1.00	39.94	1,062.0	7.3	3.4	0.39	0.00	22.22	0.0	0.0	
1,093.0	0.90	38.94	1,092.9	7.7	3.7	0.33	-0.32	-3.23	0.0	0.0	
1,125.0	1.00	26.94	1,124.9	8.2	4.0	0.69	0.31	-37.50	0.0	0.0	
1,156.0	1.10	40.94	1,155.9	8.6	4.3	0.89	0.32	45.16	0.0	0.0	
1,182.0	1.30	33.94	1,181.9	9.1	4.6	0.95	0.77	-26.92	0.0	0.0	
1,365.0	2.40	33.70	1,364.8	14.0	7.9	0.60	0.60	-0.13	0.0	0.0	
1,550.0	1.40	317.20	1,549.8	18.8	8.5	1.34	-0.54	-41.35	0.0	0.0	
1,737.0	2.30	253.90	1,736.7	19.5	3.4	1.12	0.48	-33.85	0.0	0.0	
1,925.0	3.80	247.80	1,924.4	16.1	-6.0	0.82	0.80	-3.24	0.0	0.0	
2,114.0	1.30	290.60	2,113.2	14.5	-13.8	1.58	-1.32	22.65	0.0	0.0	
2,301.0	1.80	313.90	2,300.1	17.3	-17.9	0.42	0.27	12.46	0.0	0.0	
2,489.0	2.10	296.00	2,488.0	20.8	-23.2	0.36	0.16	-9.52	0.0	0.0	
2,676.0	0.50	194.90	2,675.0	21.5	-26.5	1.20	-0.86	-54.06	0.0	0.0	
2,864.0	0.80	352.20	2,863.0	22.0	-26.9	0.68	0.16	83.67	0.0	0.0	
3,051.0	1.60	109.20	3,050.0	22.5	-24.6	1.12	0.43	62.57	0.0	0.0	
3,238.0	1.90	90.00	3,236.9	21.6	-19.0	0.35	0.16	-10.27	0.0	0.0	
3,425.0	1.50	130.40	3,423.8	20.0	-14.0	0.66	-0.21	21.60	0.0	0.0	
3,612.0	2.00	107.00	3,610.7	17.5	-9.0	0.46	0.27	-12.51	0.0	0.0	
3,799.0	1.70	109.00	3,797.6	15.6	-3.3	0.16	-0.16	1.07	0.0	0.0	
3,987.0	1.00	180.40	3,985.6	13.1	-0.7	0.89	-0.37	37.98	0.0	0.0	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3378.0usft
Site:	Streetcar 15 Fed	MD Reference:	KB = 25' @ 3378.0usft
Well:	#703Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,174.0	2.60	216.30	4,172.5	8.0	-3.2	1.01	0.86	19.20	0.0	0.0	
4,361.0	1.80	202.10	4,359.3	1.9	-6.8	0.51	-0.43	-7.59	0.0	0.0	
4,548.0	2.20	216.90	4,546.2	-3.7	-10.1	0.35	0.21	7.91	0.0	0.0	
4,736.0	3.60	173.40	4,734.0	-12.5	-11.6	1.34	0.74	-23.14	0.0	0.0	
4,924.0	1.80	216.90	4,921.8	-20.7	-12.7	1.39	-0.96	23.14	0.0	0.0	
5,018.0	1.50	221.00	5,015.8	-22.8	-14.4	0.34	-0.32	4.36	0.0	0.0	
5,111.0	3.20	225.20	5,108.7	-25.5	-17.0	1.84	1.83	4.52	0.0	0.0	
5,299.0	8.20	240.10	5,295.7	-35.9	-32.4	2.75	2.66	7.93	0.0	0.0	
5,486.0	8.50	239.80	5,480.7	-49.5	-55.9	0.16	0.16	-0.16	0.0	0.0	
5,674.0	8.60	230.20	5,666.6	-65.5	-78.7	0.76	0.05	-5.11	0.0	0.0	
5,861.0	8.80	227.10	5,851.5	-84.2	-99.9	0.27	0.11	-1.66	0.0	0.0	
6,048.0	8.00	226.40	6,036.5	-102.9	-119.8	0.43	-0.43	-0.37	0.0	0.0	
6,235.0	7.50	226.10	6,221.8	-120.3	-138.0	0.27	-0.27	-0.16	0.0	0.0	
6,422.0	7.10	225.00	6,407.3	-137.0	-155.0	0.23	-0.21	-0.59	0.0	0.0	
6,610.0	7.30	224.30	6,593.8	-153.7	-171.5	0.12	0.11	-0.37	0.0	0.0	
6,798.0	7.30	221.70	6,780.3	-171.2	-187.8	0.18	0.00	-1.38	0.0	0.0	
6,985.0	6.00	231.20	6,966.0	-186.2	-203.3	0.91	-0.70	5.08	0.0	0.0	
7,172.0	4.60	238.70	7,152.2	-196.2	-217.4	0.83	-0.75	4.01	0.0	0.0	
7,360.0	0.40	334.50	7,340.0	-199.6	-224.1	2.48	-2.23	50.96	0.0	0.0	
7,547.0	1.30	55.20	7,527.0	-197.8	-222.6	0.69	0.48	43.16	0.0	0.0	
7,735.0	1.80	56.20	7,714.9	-194.9	-218.4	0.27	0.27	0.53	0.0	0.0	
7,923.0	1.20	51.10	7,902.8	-192.0	-214.4	0.33	-0.32	-2.71	0.0	0.0	
8,111.0	1.00	58.20	8,090.8	-189.9	-211.5	0.13	-0.11	3.78	0.0	0.0	
8,298.0	1.10	74.10	8,277.8	-188.6	-208.4	0.16	0.05	8.50	0.0	0.0	
8,485.0	1.10	46.80	8,464.7	-186.8	-205.4	0.28	0.00	-14.60	0.0	0.0	
8,669.0	0.40	37.30	8,648.7	-185.1	-203.7	0.39	-0.38	-5.16	0.0	0.0	
8,856.0	0.50	60.30	8,835.7	-184.2	-202.6	0.11	0.05	12.30	0.0	0.0	

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Streetcar 15 Fed
Well: #703Y
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703Y
TVD Reference: KB = 25' @ 3378.0usft
MD Reference: KB = 25' @ 3378.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
9,044.0	0.50	34.50	9,023.7	-183.1	-201.4	0.12	0.00	-13.72	0.0	0.0
9,233.0	1.80	53.90	9,212.7	-180.7	-198.5	0.71	0.69	10.26	0.0	0.0
9,420.0	1.20	57.00	9,399.6	-177.9	-194.5	0.32	-0.32	1.66	0.0	0.0
9,608.0	1.40	103.40	9,587.6	-177.3	-190.6	0.55	0.11	24.68	0.0	0.0
9,795.0	1.50	62.10	9,774.5	-176.7	-186.3	0.55	0.05	-22.09	0.0	0.0
9,982.0	0.40	125.10	9,961.5	-176.0	-183.6	0.73	-0.59	33.69	0.0	0.0
10,169.0	2.60	217.20	10,148.4	-179.7	-185.6	1.41	1.18	49.25	0.0	0.0
10,357.0	2.70	235.70	10,336.2	-185.6	-191.8	0.46	0.05	9.84	0.0	0.0
10,545.0	1.90	248.50	10,524.1	-189.2	-198.4	0.50	-0.43	6.81	0.0	0.0
10,732.0	1.10	182.70	10,711.0	-192.2	-201.4	0.94	-0.43	-35.19	0.0	0.0
10,919.0	1.90	216.20	10,898.0	-196.5	-203.3	0.62	0.43	17.91	0.0	0.0
11,106.0	2.50	223.10	11,084.8	-202.0	-207.9	0.35	0.32	3.69	0.0	0.0
11,293.0	1.00	180.60	11,271.7	-206.6	-210.7	1.01	-0.80	-22.73	0.0	0.0
11,481.0	0.60	258.90	11,459.7	-208.4	-211.7	0.56	-0.21	41.65	0.0	0.0
11,651.0	0.60	356.00	11,629.7	-207.7	-212.6	0.53	0.00	57.12	0.0	0.0
11,754.0	1.80	34.60	11,732.7	-205.8	-211.7	1.34	1.17	37.48	-1.2	-0.3
11,847.0	1.30	32.90	11,825.7	-203.7	-210.3	0.54	-0.54	-1.83	-2.9	-1.0
11,942.0	1.70	241.20	11,920.6	-203.5	-211.0	3.06	0.42	-159.68	2.2	-0.1
11,989.0	8.50	330.70	11,967.5	-200.8	-213.3	18.41	14.47	190.43	-0.8	0.0
12,036.0	16.90	345.10	12,013.3	-191.1	-216.8	18.97	17.87	30.64	-3.6	2.8
12,083.0	17.20	343.90	12,058.2	-177.9	-220.4	0.98	0.64	-2.55	-5.6	5.6
12,130.0	18.90	346.50	12,102.9	-163.8	-224.1	4.00	3.62	5.53	-3.4	9.6
12,177.0	26.20	353.90	12,146.3	-146.0	-227.0	16.64	15.53	15.74	0.9	12.5
12,224.0	32.40	353.90	12,187.3	-123.2	-229.5	13.19	13.19	0.00	3.1	14.4
12,271.0	38.90	353.90	12,225.4	-96.0	-232.4	13.83	13.83	0.00	4.7	16.6
12,317.0	43.10	353.30	12,260.1	-66.0	-235.7	9.17	9.13	-1.30	6.2	19.3
12,364.0	47.90	354.50	12,293.1	-32.6	-239.3	10.37	10.21	2.55	9.0	21.8

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Streetcar 15 Fed
Well: #703Y
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703Y
TVD Reference: KB = 25' @ 3378.0usft
MD Reference: KB = 25' @ 3378.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,411.0	55.40	353.00	12,322.2	4.0	-243.3	16.15	15.96	-3.19	10.8	25.0
12,458.0	62.70	357.40	12,346.4	44.1	-246.6	17.48	15.53	9.36	12.3	26.6
12,495.6	66.22	358.61	12,362.6	78.0	-247.8	9.80	9.36	3.21	12.6	26.7
HL Crossing, MD:12495.6', TVD:12362.6', N/S:78.0', E/W:-247.8', INC:66.22										
12,505.0	67.10	358.90	12,366.3	86.6	-248.0	9.80	9.37	3.10	12.7	26.7
12,552.0	71.30	359.40	12,383.0	130.5	-248.7	8.99	8.94	1.06	13.8	26.0
12,599.0	74.70	359.40	12,396.7	175.5	-249.1	7.23	7.23	0.00	16.3	25.2
12,646.0	79.50	358.70	12,407.2	221.3	-249.9	10.32	10.21	-1.49	19.7	24.7
12,692.0	86.70	1.50	12,412.7	266.9	-249.8	16.78	15.65	6.09	22.7	23.3
12,817.0	89.30	1.10	12,417.1	391.8	-247.0	2.10	2.08	-0.32	26.0	18.9
12,910.0	89.40	1.00	12,418.2	484.8	-245.3	0.15	0.11	-0.11	26.3	16.6
13,004.0	89.50	0.90	12,419.1	578.7	-243.7	0.15	0.11	-0.11	26.4	14.4
13,098.0	89.20	0.90	12,420.1	672.7	-242.2	0.32	-0.32	0.00	26.7	12.3
13,193.0	90.00	0.60	12,420.8	767.7	-241.0	0.90	0.84	-0.32	26.6	10.4
13,287.0	88.50	0.20	12,422.0	861.7	-240.3	1.65	-1.60	-0.43	27.1	9.1
13,381.0	91.30	1.10	12,422.2	955.7	-239.3	3.13	2.98	0.96	26.4	7.4
13,474.0	90.50	1.10	12,420.7	1,048.7	-237.5	0.86	-0.86	0.00	24.2	4.9
13,568.0	91.40	0.60	12,419.2	1,142.6	-236.1	1.10	0.96	-0.53	21.9	2.9
13,662.0	89.80	359.80	12,418.2	1,236.6	-235.8	1.90	-1.70	-0.85	20.1	1.9
13,756.0	90.40	358.90	12,418.0	1,330.6	-236.8	1.15	0.64	-0.96	19.2	2.4
13,845.0	87.30	358.60	12,419.8	1,419.6	-238.8	3.50	-3.48	-0.34	20.2	3.7
13,939.0	90.50	359.60	12,421.6	1,513.5	-240.2	3.57	3.40	1.06	21.2	4.5
14,033.0	90.20	359.90	12,421.0	1,607.5	-240.6	0.45	-0.32	0.32	19.9	4.3
14,129.0	90.00	359.00	12,420.9	1,703.5	-241.6	0.96	-0.21	-0.94	19.6	4.5
14,221.0	87.50	357.00	12,422.9	1,795.4	-244.8	3.48	-2.72	-2.17	21.4	7.1
14,314.0	89.40	357.00	12,425.4	1,888.3	-249.6	2.04	2.04	0.00	23.8	11.4
14,409.0	88.40	356.60	12,427.2	1,983.1	-254.9	1.13	-1.05	-0.42	25.4	16.0

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3378.0usft
Site:	Streetcar 15 Fed	MD Reference:	KB = 25' @ 3378.0usft
Well:	#703Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,502.0	91.00	357.70	12,427.7	2,076.0	-259.6	3.04	2.80	1.18	25.8	20.0
14,597.0	87.60	358.30	12,428.9	2,170.9	-262.9	3.63	-3.58	0.63	26.7	22.7
14,690.0	92.30	1.40	12,428.9	2,263.8	-263.1	6.05	5.05	3.33	26.6	22.3
14,784.0	94.20	2.10	12,423.6	2,357.6	-260.3	2.15	2.02	0.74	21.1	18.8
14,877.0	94.70	2.50	12,416.4	2,450.3	-256.5	0.69	0.54	0.43	13.7	14.5
14,971.0	92.90	0.70	12,410.2	2,544.0	-253.9	2.71	-1.91	-1.91	7.3	11.2
15,065.0	91.90	1.00	12,406.2	2,637.9	-252.5	1.11	-1.06	0.32	3.2	9.2
15,159.0	90.30	1.70	12,404.4	2,731.9	-250.3	1.86	-1.70	0.74	1.3	6.3
15,252.0	88.30	0.00	12,405.6	2,824.9	-248.9	2.82	-2.15	-1.83	2.2	4.3
15,347.0	88.70	1.00	12,408.1	2,919.8	-248.1	1.13	0.42	1.05	4.6	2.8
15,440.0	86.40	1.40	12,412.0	3,012.7	-246.2	2.51	-2.47	0.43	8.4	0.3
15,487.0	85.30	1.10	12,415.4	3,059.6	-245.1	2.43	-2.34	-0.64	11.7	-1.1
15,534.0	85.50	1.00	12,419.2	3,106.4	-244.3	0.48	0.43	-0.21	15.4	-2.3
15,581.0	87.20	0.20	12,422.2	3,153.3	-243.8	4.00	3.62	-1.70	18.3	-3.1
15,628.0	89.90	359.60	12,423.4	3,200.3	-243.9	5.88	5.74	-1.28	19.4	-3.3
15,675.0	91.10	0.20	12,423.0	3,247.3	-243.9	2.85	2.55	1.28	18.9	-3.5
15,721.0	90.90	0.50	12,422.2	3,293.3	-243.7	0.78	-0.43	0.65	18.0	-4.1
15,768.0	90.50	1.00	12,421.6	3,340.3	-243.1	1.36	-0.85	1.06	17.3	-5.1
15,815.0	89.80	0.50	12,421.5	3,387.3	-242.4	1.83	-1.49	-1.06	17.1	-6.0
15,862.0	89.80	359.80	12,421.6	3,434.3	-242.3	1.49	0.00	-1.49	17.2	-6.4
15,909.0	90.40	359.80	12,421.6	3,481.3	-242.5	1.28	1.28	0.00	17.0	-6.6
15,956.0	86.80	359.00	12,422.7	3,528.3	-243.0	7.85	-7.66	-1.70	18.0	-6.4
16,002.0	85.80	358.80	12,425.7	3,574.2	-243.9	2.22	-2.17	-0.43	20.9	-5.9
16,095.0	88.40	359.90	12,430.4	3,667.0	-244.9	3.03	2.80	1.18	25.4	-5.4
16,189.0	86.90	359.60	12,434.2	3,760.9	-245.3	1.63	-1.60	-0.32	29.0	-5.7
16,283.0	90.10	358.70	12,436.7	3,854.9	-246.7	3.54	3.40	-0.96	31.3	-4.9
16,376.0	92.90	358.80	12,434.3	3,947.8	-248.7	3.01	3.01	0.11	28.6	-3.5

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Streetcar 15 Fed
Well: #703Y
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703Y
TVD Reference: KB = 25' @ 3378.0usft
MD Reference: KB = 25' @ 3378.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
16,470.0	91.40	359.90	12,430.7	4,041.7	-249.8	1.98	-1.60	1.17	24.9	-3.1
16,564.0	89.30	0.70	12,430.2	4,135.7	-249.3	2.39	-2.23	0.85	24.1	-4.2
16,657.0	90.90	2.10	12,430.0	4,228.7	-247.0	2.29	1.72	1.51	23.6	-7.1
16,752.0	89.80	1.90	12,429.4	4,323.6	-243.7	1.18	-1.16	-0.21	22.8	-11.1
16,846.0	89.70	0.60	12,429.8	4,417.6	-241.7	1.39	-0.11	-1.38	23.0	-13.8
16,940.0	91.30	359.70	12,429.0	4,511.6	-241.4	1.95	1.70	-0.96	21.9	-14.6
17,034.0	88.40	358.50	12,429.2	4,605.6	-242.9	3.34	-3.09	-1.28	21.8	-13.8
17,125.5	89.78	358.89	12,430.7	4,697.0	-245.0	1.57	1.51	0.43	23.0	-12.3
HL Crossing, MD:17125.5', TVD:12430.7', N/S:4697.0', E/W:-245.0', INC:89.78										
17,127.0	89.80	358.90	12,430.7	4,698.5	-245.0	1.57	1.51	0.43	23.0	-12.3
17,164.0	92.20	359.10	12,430.1	4,735.5	-245.7	6.51	6.49	0.54	22.2	-11.9
Final MWD Survey (MD=17164.0')										
17,221.0	92.20	359.10	12,427.9	4,792.5	-246.6	0.00	0.00	0.00	19.9	-11.4
Final Projection to Bit (MD=17221.0')										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,495.6	12,362.6	78.0	-247.8	HL Crossing, MD:12495.6', TVD:12362.6', N/S:78.0', E/W:-247.8', INC:66.22
17,125.5	12,430.7	4,697.0	-245.0	HL Crossing, MD:17125.5', TVD:12430.7', N/S:4697.0', E/W:-245.0', INC:89.78
17,164.0	12,430.1	4,735.5	-245.7	Final MWD Survey (MD=17164.0')
17,221.0	12,427.9	4,792.5	-246.6	Final Projection to Bit (MD=17221.0')

Checked By: _____ Approved By: _____ Date: _____