



Lea County, NM (NAD 83 NME)

Savage 2 State Com #501H

HP 465

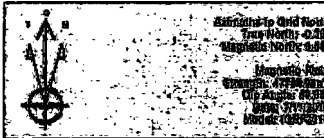
Plan #2

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

WELL DETAILS: #501H

KB = 28 @ 3541.0usft (HP 465) 3516.0
Northing 424769.00 Easting 751843.00 Longitude 32° 9' 57.381 N 103° 39' 10.930 W



To convert a Magnetic Direction to a Grid Direction, Add 6.51°
To convert a Magnetic Direction to a True Direction, Add 6.87° East
To convert a True Direction to a Grid Direction, Subtract 0.35°

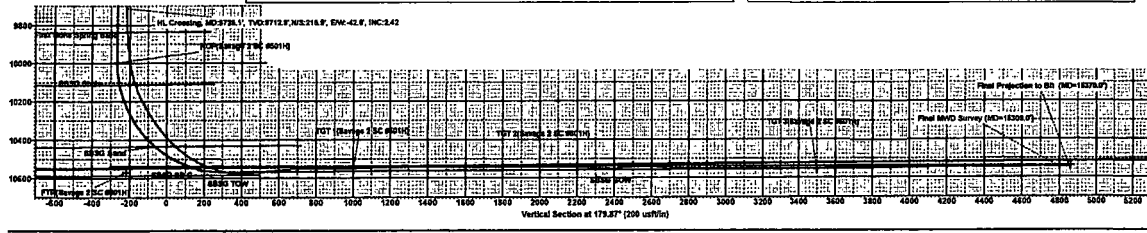
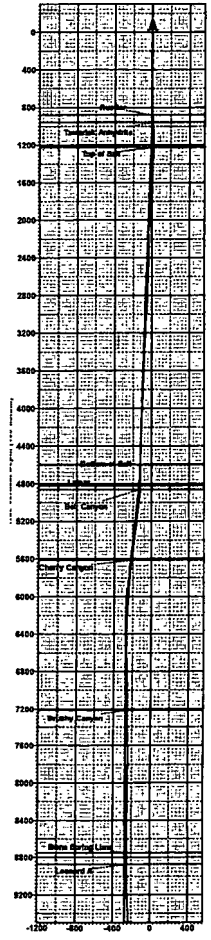
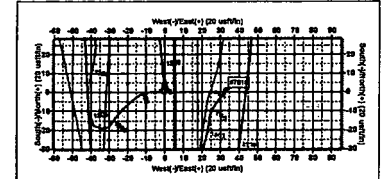
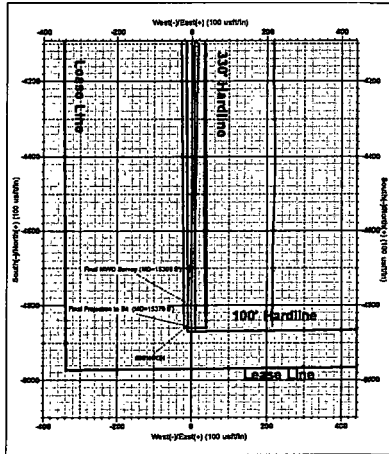
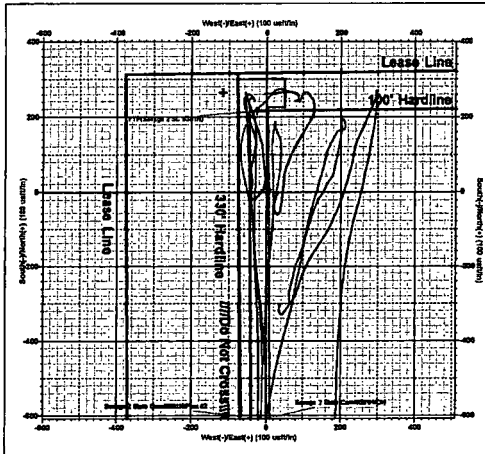
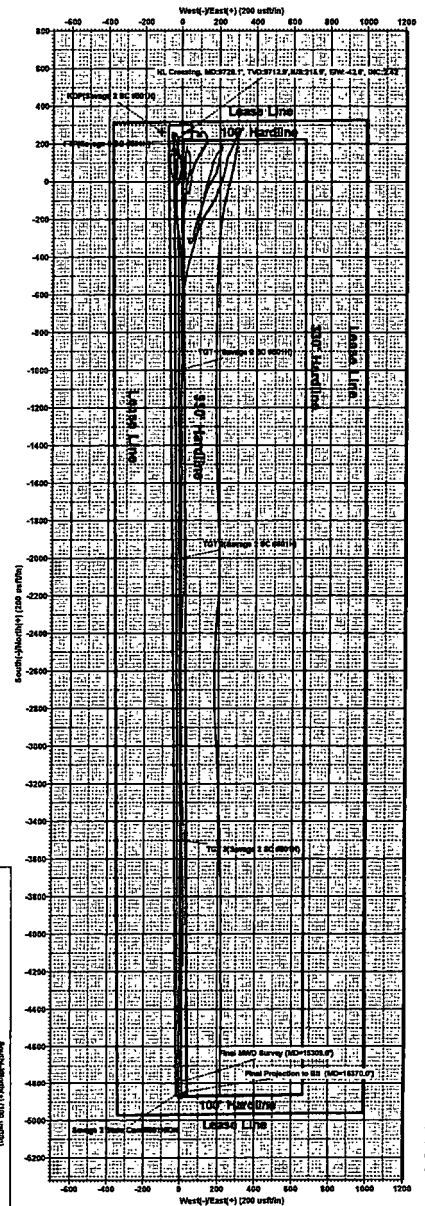
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1100.0	2.00	354.28	1100.0	1.7	-0.2	2.00	354.28	-1.7	
4	4697.2	2.00	354.28	4695.0	126.7	-12.7	0.00	0.00	-126.7	
5	4917.7	6.34	342.16	4914.8	142.1	-16.8	2.00	-17.56	-142.1	
6	5934.5	6.34	342.16	5925.4	249.0	-51.2	0.00	0.00	-249.2	
7	6251.7	0.00	0.00	6242.0	265.8	-56.6	2.00	180.00	-265.9	
8	10004.8	0.00	0.00	9995.1	265.8	-56.6	0.00	0.00	-265.9	
9	10909.0	90.42	176.82	10568.0	-310.5	-24.6	10.00	176.82	310.5	
10	11001.1	90.42	179.58	10567.4	-402.5	-21.7	3.00	90.01	402.5	
11	11598.6	90.42	179.58	10563.0	-1000.0	-17.3	0.00	0.00	1000.0	TGT 1(Savage 2 SC #501H)
12	11605.2	90.29	179.58	10563.0	-1006.6	-17.3	2.00	-179.46	1006.6	
13	12598.6	90.29	179.58	10558.0	-2000.0	-10.0	0.00	0.00	2000.0	TGT 2(Savage 2 SC #501H)
14	12603.4	90.19	179.58	10558.0	-2004.8	-10.0	2.00	180.00	2004.7	
15	14098.7	90.19	179.58	10553.0	-3500.0	1.0	0.00	0.00	3500.0	TGT 3(Savage 2 SC #501H)
16	14120.9	90.64	179.58	10552.8	-3522.3	1.1	2.00	-0.02	3522.3	
17	15457.8	90.64	179.58	10538.0	-4859.0	10.9	0.00	0.00	4859.0	PBHL(Savage 2 SC #501H)

CASING DETAILS
No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Savage 2 SC #501H)	9995.1	265.8	-116.8	425034.75	751726.35
PBHL(Savage 2 SC #501H)	10538.0	-4859.0	10.9	419910.01	751853.93
TGT 1(Savage 2 SC #501H)	10663.0	-3500.0	1.0	421259.00	751843.98
TGT 2(Savage 2 SC #501H)	10663.0	-2000.0	-10.0	422759.00	751832.99
TGT 3(Savage 2 SC #501H)	10663.0	-1000.0	-17.3	423769.00	751825.67
FTP(Savage 2 SC #501H)	10568.0	216.0	-26.0	424985.00	751817.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Savage 2 State Com

#501H

OH

Design: OH

Final PVA Report

10 October, 2018

HOBBS OCD

DEC 18 2018

RECEIVED



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3541.0usft (HP 465)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3541.0usft (HP 465)
Well:	#501H	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	Savage 2 State Com				
Site Position:		Northing:	424,469.00 usft	Latitude:	32° 9' 54.412 N
From:	Map	Easting:	751,845.00 usft	Longitude:	103° 39' 10.929 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.36 "

Well	#501H					
Well Position	+N-S	0.0 usft	Northing:	424,769.00 usft	Latitude:	32° 9' 57.381 N
	+E-W	0.0 usft	Easting:	751,843.00 usft	Longitude:	103° 39' 10.930 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,516.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/11/2018	6.87	59.98	47,784.87892862

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)	Direction (°)	
	0.0	0.0	0.0	179.87	

Survey Program	Date	10/10/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
143.0	15,370.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3541.0usft (HP 465)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3541.0usft (HP 465)
Well:	#501H	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
143.0	1.00	254.20	143.0	-0.3	-1.2	0.70	0.70	0.00	-1.2	0.0	
323.0	1.40	291.10	323.0	0.0	-4.8	0.47	0.22	20.50	-4.5	1.7	
500.0	1.70	255.50	499.9	0.1	-9.3	0.56	0.17	-20.11	-9.0	-2.5	
681.0	2.70	237.40	680.8	-2.8	-15.5	0.67	0.55	-10.00	-14.6	-6.0	
878.0	3.10	223.10	877.5	-9.2	-23.1	0.42	0.20	-7.26	-22.5	-10.6	
1,014.0	3.50	215.30	1,013.3	-15.3	-28.0	0.44	0.29	-5.74	-28.7	-14.0	
1,163.0	1.80	263.70	1,162.1	-19.3	-32.9	1.79	-1.14	32.48	-34.9	19.4	
1,353.0	1.80	310.00	1,352.1	-17.7	-38.2	0.74	0.00	24.37	-10.3	45.4	
1,543.0	3.50	355.00	1,541.9	-10.0	-41.0	1.35	0.89	23.68	23.5	41.5	
1,733.0	2.70	2.80	1,731.6	0.3	-41.3	0.48	-0.42	4.11	25.3	37.7	
1,923.0	2.40	13.00	1,921.4	8.6	-40.1	0.29	-0.16	5.37	29.4	31.3	
2,113.0	2.30	11.90	2,111.2	16.2	-38.5	0.08	-0.05	-0.58	27.4	29.8	
2,303.0	1.80	2.50	2,301.1	23.1	-37.5	0.28	-0.21	-4.95	21.8	32.3	
2,493.0	3.20	353.50	2,490.9	31.5	-38.0	0.71	0.68	-4.74	14.7	34.9	
2,683.0	2.20	351.90	2,680.7	40.4	-39.1	0.53	-0.53	-0.84	11.4	35.4	
2,873.0	3.10	355.10	2,870.5	49.1	-40.1	0.48	0.47	1.68	11.2	34.8	
3,063.0	2.40	357.30	3,060.3	58.2	-40.7	0.37	-0.37	1.16	10.0	34.2	
3,253.0	2.90	11.00	3,250.1	66.9	-40.0	0.42	0.26	7.21	15.5	29.9	
3,443.0	2.60	8.00	3,439.9	75.9	-38.5	0.18	-0.16	-1.58	11.3	28.9	
3,633.0	2.50	15.50	3,629.7	84.2	-36.7	0.18	-0.05	3.95	12.7	25.3	
3,729.0	3.20	4.90	3,725.6	88.9	-36.0	0.91	0.73	-11.04	6.4	26.2	
3,919.0	2.00	8.40	3,915.4	97.4	-35.0	0.64	-0.63	1.84	5.8	24.5	
4,109.0	2.10	21.90	4,105.2	103.9	-33.2	0.26	0.05	7.11	10.5	20.1	
4,299.0	2.40	355.20	4,295.1	111.1	-32.3	0.57	0.16	-14.05	-0.1	21.0	
4,489.0	1.60	21.10	4,485.0	117.6	-31.6	0.63	-0.42	13.63	8.8	17.7	
4,678.0	1.30	59.20	4,673.9	121.1	-28.9	0.52	-0.16	20.16	16.4	4.2	



Final PVA Report

Company: EOG Resources - Midland		Local Co-ordinate Reference: Well #501H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference: KB = 25 @ 3541.0usft (HP 465)	
Site: Savage 2 State Com		MD Reference: KB = 25 @ 3541.0usft (HP 465)	
Well: #501H		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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,769.0	1.20	56.00	4,764.9	122.2	-27.2	0.13	-0.11	-3.52	15.8	1.4	
4,959.0	5.50	346.10	4,954.6	132.1	-27.7	2.74	2.26	-36.79	11.4	12.7	
5,149.0	7.00	344.30	5,143.4	152.1	-33.0	0.80	0.79	-0.95	11.3	12.0	
5,340.0	7.10	342.50	5,333.0	174.6	-39.7	0.13	0.05	-0.94	8.5	11.8	
5,530.0	7.20	341.70	5,521.5	197.1	-47.0	0.07	0.05	-0.42	5.7	11.9	
5,720.0	6.20	336.80	5,710.2	217.8	-54.8	0.61	-0.53	-2.58	3.5	13.3	
5,910.0	4.60	356.70	5,899.4	234.9	-59.3	1.28	-0.84	10.47	10.8	9.6	
6,100.0	3.80	359.40	6,088.9	248.8	-59.8	0.43	-0.42	1.42	13.0	4.6	
6,290.0	4.00	58.40	6,278.5	258.5	-54.2	2.02	0.11	31.05	1.7	-7.4	
6,479.0	1.60	125.00	6,467.3	260.5	-46.4	1.94	-1.27	35.24	-11.4	1.5	
6,669.0	1.20	125.30	6,657.2	257.8	-42.6	0.21	-0.21	0.16	-16.0	1.6	
6,859.0	1.00	140.10	6,847.2	255.4	-39.9	0.18	-0.11	7.79	-18.6	6.1	
7,049.0	1.00	129.20	7,037.2	253.1	-37.6	0.10	0.00	-5.74	-22.8	2.2	
7,239.0	0.90	151.90	7,227.2	250.7	-35.6	0.20	-0.05	11.95	-23.2	11.4	
7,429.0	1.20	156.30	7,417.1	247.6	-34.1	0.16	0.16	2.32	-25.7	13.3	
7,619.0	1.40	171.90	7,607.1	243.4	-33.0	0.21	0.11	8.21	-25.4	20.3	
7,809.0	0.30	5.40	7,797.1	241.6	-32.6	0.89	-0.58	-87.63	21.7	-26.2	
8,000.0	1.20	358.60	7,988.0	244.1	-32.6	0.47	0.47	-3.56	22.2	-23.5	
8,190.0	1.10	349.40	8,178.0	247.9	-33.0	0.11	-0.05	-4.84	21.9	-19.9	
8,381.0	0.90	305.50	8,369.0	250.6	-34.5	0.40	-0.10	-22.98	26.8	-0.5	
8,571.0	0.90	265.00	8,559.0	251.3	-37.2	0.33	0.00	-21.32	18.0	16.1	
8,762.0	0.90	230.10	8,749.9	250.2	-39.9	0.28	0.00	-18.27	2.9	22.6	
8,952.0	0.80	268.40	8,939.9	249.2	-42.4	0.30	-0.05	20.16	13.8	16.9	
9,142.0	1.50	225.40	9,129.9	247.5	-45.4	0.56	0.37	-22.63	-4.9	20.9	
9,332.0	4.30	192.60	9,319.6	238.8	-48.8	1.66	1.47	-17.26	-24.6	13.6	
9,522.0	4.10	160.00	9,509.1	225.4	-48.0	1.24	-0.11	-17.16	-40.8	-5.7	
9,712.0	2.30	135.80	9,698.8	216.3	-43.0	1.16	-0.95	-12.74	-44.9	-24.8	



Final PVA Report

Company: EOG Resources - Midland		Local Co-ordinate Reference: Well #501H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference: KB = 25 @ 3541.0usft (HP 485)	
Site: Savage 2 State Com		MD Reference: KB = 25 @ 3541.0usft (HP 485)	
Well: #501H		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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
9,726.1	2.42	133.26	9,712.9	215.9	-42.6	1.13	0.85	-18.01	-44.3	-26.7	
HL Crossing, MD:9726.1', TVD:9712.9', N/S:215.9', EW:-42.6', INC:2.42											
9,830.0	3.40	120.50	9,816.7	212.8	-38.4	1.13	0.94	-12.28	-42.5	-36.4	
9,925.0	4.10	152.20	9,911.5	208.4	-34.3	2.27	0.74	33.37	-61.1	-7.1	
9,998.9	8.57	169.30	9,984.9	200.7	-32.1	6.50	6.04	23.14	-68.5	12.1	
KOP(Savage 2 SC #501H)											
10,020.0	9.90	171.30	10,005.8	197.3	-31.5	6.50	6.32	9.49	-71.3	14.6	
10,067.0	14.10	173.80	10,051.7	187.6	-30.3	9.00	8.94	5.32	-77.2	18.1	
10,114.0	18.10	174.40	10,096.9	174.7	-29.0	8.52	8.51	1.28	-82.7	19.2	
10,161.0	22.60	179.40	10,140.9	158.4	-28.2	10.26	9.57	10.64	-85.4	26.2	
10,209.0	26.80	181.40	10,184.5	138.3	-28.3	8.92	8.75	4.17	-88.3	27.8	
10,256.0	29.60	181.70	10,226.0	116.1	-28.9	5.97	5.96	0.64	-90.2	26.1	
10,304.0	32.60	180.30	10,267.0	91.3	-29.3	6.43	6.25	-2.92	-90.5	22.1	
10,351.0	35.10	179.40	10,306.1	65.1	-29.3	5.42	5.32	-1.91	-88.1	19.3	
10,398.0	38.80	181.00	10,343.6	36.9	-29.4	8.13	7.87	3.40	-83.1	18.9	
10,445.0	41.60	184.90	10,379.5	6.6	-31.0	8.01	5.96	8.30	-76.0	18.2	
FTP(Savage 2 SC #501H)											
10,493.0	45.00	181.40	10,414.5	-26.2	-32.8	8.67	7.08	-7.29	-68.2	10.9	
10,540.0	50.20	179.90	10,446.1	-60.9	-33.1	11.31	11.06	-3.19	-59.3	7.0	
10,588.0	53.90	179.50	10,475.7	-98.8	-32.9	7.74	7.71	-0.83	-49.4	4.4	
10,635.0	60.50	177.30	10,501.1	-138.2	-31.8	14.58	14.04	-4.68	-39.7	2.5	
10,683.0	64.80	176.40	10,523.2	-180.8	-29.4	9.11	8.96	-1.87	-30.2	2.3	
10,745.0	70.40	172.40	10,546.8	-237.8	-23.8	10.82	9.03	-6.45	-17.1	4.7	
10,778.0	74.10	172.10	10,556.8	-268.9	-19.6	11.25	11.21	-0.91	-10.0	7.3	
10,825.0	79.60	173.50	10,567.5	-314.3	-13.9	12.06	11.70	2.98	-0.6	10.5	
10,873.0	85.80	174.60	10,573.6	-361.7	-8.9	13.11	12.92	2.29	5.9	13.5	
10,920.0	91.90	176.70	10,574.6	-408.5	-5.4	13.73	12.98	4.47	7.3	16.3	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3541.0usft (HP 465)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3541.0usft (HP 465)
Well:	#501H	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)	Buikd (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,968.0	94.00	178.10	10,572.1	-456.4	-3.2	5.26	4.37	2.92	5.1	18.1	
11,015.0	95.00	177.50	10,568.4	-503.2	-1.4	2.48	2.13	-1.28	1.8	19.6	
11,063.0	95.80	177.80	10,563.9	-550.9	0.6	1.78	1.67	0.62	-2.3	21.2	
11,112.0	97.10	177.30	10,558.4	-599.6	2.7	2.84	2.65	-1.02	-7.4	23.0	
11,158.0	93.70	177.30	10,554.1	-645.3	4.8	7.39	-7.39	0.00	-11.5	24.8	
11,190.0	92.70	178.10	10,552.3	-677.2	6.1	4.00	-3.12	2.50	-13.1	25.8	
11,253.0	92.80	178.70	10,549.3	-740.1	7.8	0.96	0.16	0.95	-15.6	27.1	
11,300.0	88.60	180.70	10,548.7	-787.1	8.1	9.90	-8.94	4.26	-15.9	27.0	
11,348.0	88.60	180.50	10,549.9	-835.1	7.6	0.42	0.00	-0.42	-14.3	26.1	
11,395.0	89.30	180.20	10,550.7	-882.1	7.3	1.62	1.49	-0.64	-13.1	25.5	
11,443.0	89.90	179.60	10,551.0	-930.1	7.4	1.77	1.25	-1.25	-12.5	25.2	
11,513.0	91.45	181.37	10,550.2	-1,000.1	6.8	3.36	2.21	2.53	-12.8	24.1	
TOT 1(Savage 2 SC #501H)											
11,538.0	92.00	182.00	10,549.5	-1,025.1	6.1	3.36	2.21	2.53	-13.4	23.2	
11,585.0	93.20	182.00	10,547.3	-1,072.0	4.4	2.55	2.55	0.00	-15.3	21.2	
11,633.0	94.20	182.20	10,544.2	-1,119.9	2.7	2.12	2.08	0.42	-18.2	19.1	
11,696.0	89.30	182.00	10,542.3	-1,182.8	0.4	7.78	-7.78	-0.32	-19.8	16.4	
11,728.0	89.40	182.40	10,542.7	-1,214.7	-0.9	1.29	0.31	1.25	-19.2	14.9	
11,791.0	90.70	182.60	10,542.6	-1,277.7	-3.6	2.09	2.08	0.32	-19.0	11.7	
11,823.0	92.00	182.70	10,541.9	-1,309.6	-5.1	4.07	4.06	0.31	-19.6	10.0	
11,886.0	89.10	182.20	10,541.3	-1,372.6	-7.8	4.67	-4.60	-0.79	-19.9	6.8	
11,918.0	89.50	182.20	10,541.7	-1,404.5	-9.0	1.25	1.25	0.00	-19.3	5.3	
12,013.0	88.70	180.80	10,543.2	-1,499.5	-11.5	1.70	-0.84	-1.47	-17.3	2.2	
12,108.0	90.20	181.10	10,544.1	-1,594.5	-13.1	1.61	1.58	0.32	-16.0	-0.1	
12,203.0	89.20	181.30	10,544.6	-1,689.5	-15.1	1.07	-1.05	0.21	-15.0	-2.8	
12,298.0	90.60	181.70	10,544.7	-1,784.4	-17.6	1.53	1.47	0.42	-14.3	-6.0	
12,393.0	89.50	179.40	10,544.6	-1,879.4	-18.5	2.68	-1.16	-2.42	-14.0	-7.6	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3541.0usft (HP 465)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3541.0usft (HP 465)
Well:	#501H	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)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,488.0	90.50	179.40	10,544.6	-1,974.4	-17.5	1.05	1.05	0.00	-13.5	-7.3	
12,513.6	90.50	179.40	10,544.4	-2,000.0	-17.2	0.00	0.00	0.00	-13.6	-7.2	
TGT 2(Savage 2 SC #501H)											
12,582.0	90.50	179.40	10,543.8	-2,068.4	-16.5	0.00	0.00	0.00	-13.9	-7.0	
12,678.0	88.70	179.40	10,544.5	-2,164.4	-15.5	1.87	-1.87	0.00	-13.0	-6.7	
12,772.0	89.10	179.20	10,546.3	-2,258.4	-14.3	0.48	0.43	-0.21	-10.8	-6.2	
12,867.0	90.00	179.10	10,547.0	-2,353.3	-12.9	0.95	0.95	-0.11	-9.8	-5.5	
12,962.0	91.70	179.00	10,545.6	-2,448.3	-11.3	1.79	1.79	-0.11	-10.9	-4.6	
13,057.0	91.50	179.50	10,543.0	-2,543.3	-10.1	0.57	-0.21	0.53	-13.2	-4.1	
13,152.0	87.30	179.60	10,544.0	-2,638.2	-9.4	4.42	-4.42	0.11	-11.9	-4.0	
13,199.0	87.60	179.80	10,546.1	-2,685.2	-9.1	0.77	0.64	0.43	-9.6	-4.1	
13,247.0	88.60	179.70	10,547.7	-2,733.2	-8.9	2.09	2.08	-0.21	-7.9	-4.3	
13,342.0	90.50	179.80	10,548.4	-2,828.2	-8.5	2.00	2.00	0.11	-6.8	-4.5	
13,437.0	89.50	178.60	10,548.4	-2,923.1	-7.2	1.64	-1.05	-1.26	-6.5	-3.9	
13,532.0	90.40	177.70	10,548.5	-3,018.1	-4.1	1.34	0.95	-0.95	-6.1	-1.5	
13,627.0	92.40	178.60	10,546.2	-3,113.0	-1.0	2.31	2.11	0.95	-8.1	0.8	
13,722.0	90.40	178.50	10,543.8	-3,207.9	1.4	2.11	-2.11	-0.11	-10.1	2.5	
13,817.0	91.20	178.70	10,542.5	-3,302.9	3.7	0.87	0.84	0.21	-11.1	4.2	
13,912.0	89.30	178.30	10,542.1	-3,397.9	6.2	2.04	-2.00	-0.42	-11.2	6.0	
14,007.0	89.80	178.70	10,542.9	-3,492.8	8.7	0.67	0.53	0.42	-10.2	7.7	
14,014.2	89.69	178.75	10,542.9	-3,500.0	8.8	1.60	-1.47	0.63	-10.1	7.9	
TGT 3(Savage 2 SC #501H)											
14,102.0	88.40	179.30	10,544.3	-3,587.8	10.3	1.60	-1.47	0.63	-7.8	8.7	
14,198.0	88.60	179.40	10,546.9	-3,683.8	11.4	0.23	0.21	0.10	-4.2	9.1	
14,293.0	90.40	180.20	10,547.7	-3,778.8	11.7	2.07	1.89	0.84	-2.3	8.7	
14,388.0	91.40	180.60	10,546.2	-3,873.7	11.1	1.13	1.05	0.42	-2.7	7.4	
14,483.0	90.80	180.20	10,544.4	-3,968.7	10.4	0.76	-0.63	-0.42	-3.5	6.0	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3541.0usft (HP 485)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3541.0usft (HP 465)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)
14,577.0	91.50	181.00	10,542.5	-4,062.7	9.4	1.13	0.74	0.85	-4.4	4.3
14,673.0	89.10	180.10	10,542.0	-4,158.7	8.5	2.67	-2.50	-0.94	-3.8	2.7
14,768.0	89.90	180.20	10,542.8	-4,253.7	8.3	0.85	0.84	0.11	-1.9	1.8
14,863.0	88.90	180.90	10,543.8	-4,348.7	7.4	1.28	-1.05	0.74	0.1	0.2
14,957.0	89.10	180.90	10,545.4	-4,442.6	5.9	0.21	0.21	0.00	2.8	-2.0
15,052.0	90.20	182.10	10,546.0	-4,537.6	3.4	1.71	1.16	1.26	4.5	-5.2
15,116.0	91.80	182.20	10,544.9	-4,601.5	1.0	2.50	2.50	0.16	4.1	-8.0
15,148.0	92.50	182.90	10,543.7	-4,633.5	-0.4	3.09	2.19	2.19	3.2	-9.7
15,243.0	88.40	182.40	10,543.0	-4,728.4	-4.8	4.35	-4.32	-0.53	3.5	-14.8
15,309.0	88.90	182.80	10,544.5	-4,794.3	-7.8	0.97	0.76	0.61	5.8	-18.3
Final MWD Survey (MD=15309.0)										
15,370.0	88.90	182.80	10,545.7	-4,855.2	-10.8	0.00	0.00	0.00	7.6	-21.7
Final Projection to Bit (MD=15370.0) - PBHL(Savage 2 SC #501H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
9,726.1	9,712.9	215.9	-42.6	HL Crossing, MD:9726.1, TVD:9712.9, N/S:215.9, E/W:-42.6, INC:2.42
15,309.0	10,544.5	-4,794.3	-7.8	Final MWD Survey (MD=15309.0)
15,370.0	10,545.7	-4,855.2	-10.8	Final Projection to Bit (MD=15370.0)

Checked By: _____	Approved By: _____	Date: _____
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