



Lea County, NM (NAD 83 NME)

Savage 2 State Com #701H

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

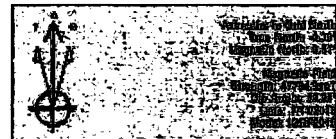
WELL DETAILS: #701H

KB = 25 @ 3540.0ust (HP 465) 3515.0
Northing 424770.00 Easting 751876.00 Latitude 32° 9' 57.389 N Longitude 103° 39' 10.546 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSeet	Target
1	11041.0	2.30	334.30	11016.5	256.2	53.0	0.00	0.00	-256.6	
2	11180.0	2.54	312.55	11155.4	260.8	49.5	0.68	-98.39	-261.0	
3	11254.1	5.88	287.97	11229.3	261.8	44.5	6.00	-68.14	-262.0	
4	11748.8	5.88	287.97	11721.4	260.0	-6.2	0.00	0.00	-260.0	
5	12565.5	90.00	179.58	12236.0	-261.3	-55.6	11.00	-88.40	261.5	
6	13304.1	90.00	179.58	12236.0	-999.8	-50.2	0.00	0.00	1000.0	TGT 1 (Savage 2 SC #701H)
7	13324.2	90.41	179.58	12237.9	-1019.9	-50.1	2.00	0.07	1020.1	
8	14304.1	90.41	179.58	12231.0	-1999.8	-42.9	0.00	0.00	2000.0	TGT 2 (Savage 2 SC #701H)
9	14304.9	90.42	179.58	12231.0	-2000.6	-42.9	2.00	-0.02	2000.7	
10	15804.3	90.42	179.58	12220.0	-3499.9	-32.0	0.00	0.00	3500.0	TGT 3 (Savage 2 SC #701H)
11	15810.5	90.54	179.58	12219.9	-3506.1	-31.9	2.00	0.00	3506.2	
12	17174.5	90.54	179.58	12207.0	-4870.0	-22.0	0.00	0.00	4870.0	PBHL(Savage 2 SC #701H)

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 0.36°

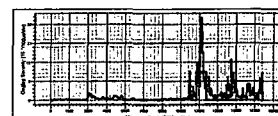
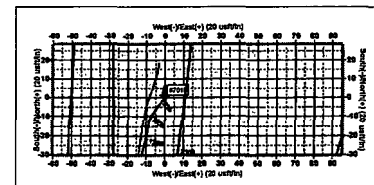
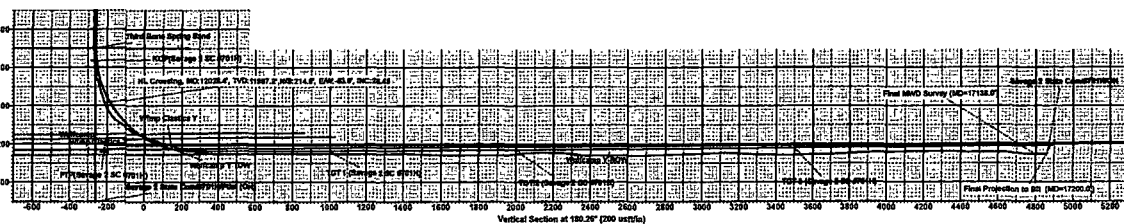
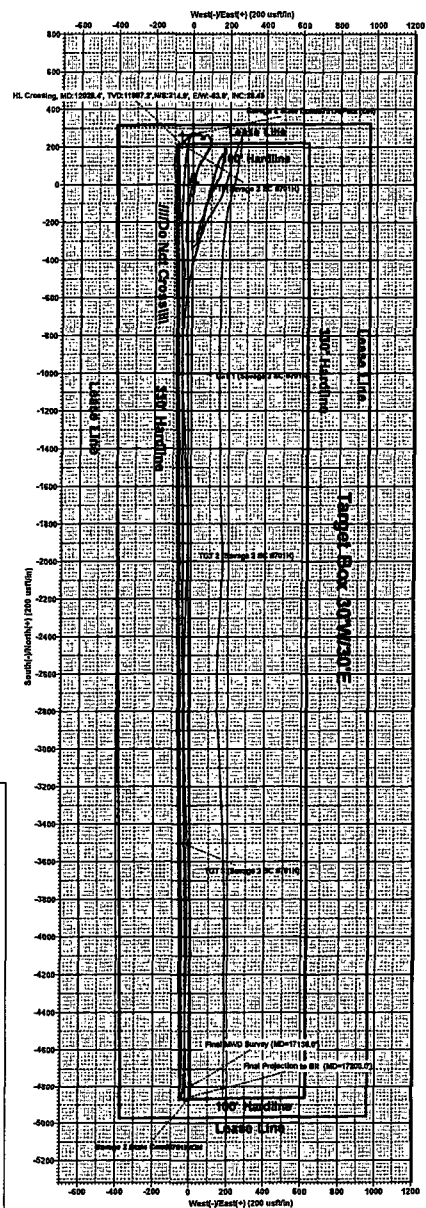
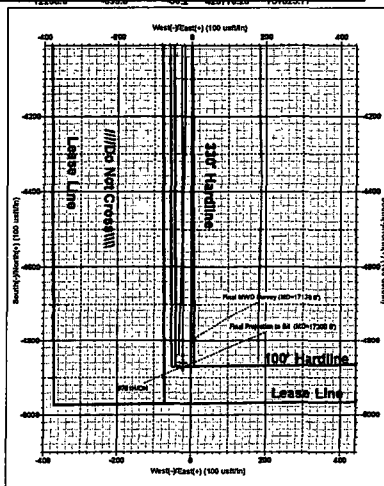
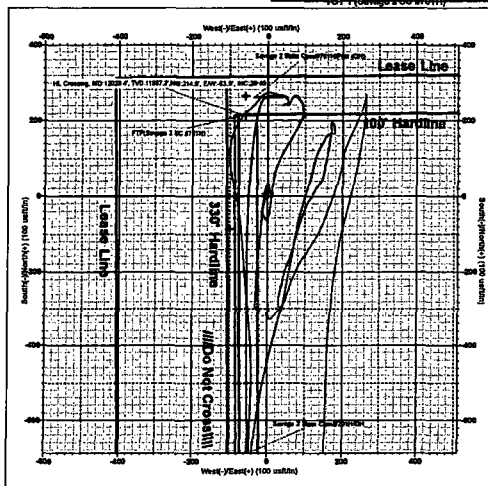


CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Savage 2 SC #701H)	11744.5	265.0	-59.0	425535.00	751917.00
Interp @ 12200.0 (#701H OH Projection)	12200.0	-56.1	-100.2	424684.89	751775.50
PBHL(Savage 2 SC #701H)	12207.0	-4870.0	-22.0	419900.00	751584.00
Interp @ 12207.0 (#701H OH Projection #1)	12207.0	-4859.7	-21.6	419810.32	751554.40
TGT 1 (Savage 2 SC #701H)	12220.0	-3499.9	-32.0	421270.10	751844.01
TGT 2 (Savage 2 SC #701H)	12231.0	-1999.8	-42.9	422770.20	751633.07
TGT 3 (Savage 2 SC #701H)	12251.0	-999.8	-50.2	423770.20	751620.97



Use Geog Resources (2010) Map
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Savage 2 State Com

#701H

OH

Design: OH

Final PVA

27 September, 2018

HOBBS OCD
DEC 18 2018
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Final PVA

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Savage 2 State Com Well: #701H Wellbore: OH Design: OH	Local Co-ordinate Reference: Well #701H TVD Reference: KB = 25 @ 3540.0usft (HP 465) MD Reference: KB = 25 @ 3540.0usft (HP 465) North Reference: Grid Survey Calculation Method: Minimum Curvature Database: EDM 5000.14
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Project Lea County, NM (NAD 83 NME)			
Map System: US State Plane 1983 Geo Datum: North American Datum 1983 Map Zone: New Mexico Eastern Zone	System Datum: Mean Sea Level		

Site Savage 2 State Com			
Site Position: From: Map Position Uncertainty: 0.0 usft	Northing: 424,469.00 usft Easting: 751,845.00 usft Slot Radius: 13-3/16 "	Latitude: 32° 9' 54.412 N Longitude: 103° 39' 10.929 W Grid Convergence: 0.36 °	

Well #701H			
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft	Northing: 424,770.00 usft Easting: 751,876.00 usft Wellhead Elevation: usft	Latitude: 32° 9' 57.389 N Longitude: 103° 39' 10.546 W Ground Level: 3,515.0 usft	

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/11/2018	6.87	59.98	47,784,89875183

Design OH					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	11,041.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	180.26	



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 465)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey Program		Date	9/27/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
193.0	11,041.0	Intrepid MWD #1 (Pilot)	MWD	OWSG MWD - Standard	
11,184.0	11,247.0	Scientific Drilling gMWD #1 (OH)	MWD	OWSG MWD - Standard	
11,261.0	11,986.0	Scientific Drilling MWD #2 (OH)	MWD	OWSG MWD - Standard	
12,020.0	17,200.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard	

MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("*100usft)	Buid ("*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	0.00	0.0
193.0	0.10	199.50	193.0	-0.2	-0.1	0.05	0.05	0.00	0.0	0.0
370.0	0.30	197.80	370.0	-0.7	-0.2	0.11	0.11	-0.96	0.0	0.0
591.0	0.80	233.20	591.0	-2.2	-1.7	0.26	0.23	16.02	0.0	0.0
781.0	1.70	213.80	780.9	-5.4	-4.3	0.52	0.47	-10.21	0.0	0.0
971.0	1.30	213.60	970.9	-9.5	-7.1	0.21	-0.21	-0.11	0.0	0.0
1,158.0	1.00	186.40	1,157.8	-12.9	-8.4	0.33	-0.16	-14.55	0.0	0.0
1,347.0	1.60	189.40	1,346.8	-17.1	-9.0	0.32	0.32	1.59	0.0	0.0
1,538.0	2.00	193.50	1,537.7	-23.0	-10.2	0.22	0.21	2.15	0.0	0.0
1,728.0	2.20	195.90	1,727.6	-29.7	-12.0	0.11	0.11	1.26	0.0	0.0
1,918.0	1.70	189.00	1,917.5	-36.0	-13.4	0.29	-0.26	-3.63	0.0	0.0
2,107.0	1.50	181.30	2,106.4	-41.3	-13.9	0.16	-0.11	-4.07	0.0	0.0
2,297.0	1.20	165.50	2,296.3	-45.7	-13.5	0.25	-0.16	-8.32	0.0	0.0
2,487.0	1.20	149.80	2,486.3	-49.3	-12.0	0.17	0.00	-8.26	0.0	0.0
2,677.0	1.80	151.30	2,676.2	-53.7	-9.6	0.32	0.32	0.79	0.0	0.0
2,772.0	1.90	152.80	2,771.2	-56.4	-8.1	0.12	0.11	1.58	0.0	0.0
2,836.0	2.00	152.00	2,835.1	-58.3	-7.1	0.16	0.16	-1.25	0.0	0.0
2,867.0	2.00	152.80	2,866.1	-59.3	-6.6	0.09	0.00	2.58	0.0	0.0
2,931.0	2.00	150.40	2,930.1	-61.2	-5.6	0.13	0.00	-3.75	0.0	0.0
3,057.0	1.40	81.90	3,056.0	-62.9	-3.0	1.57	-0.48	-54.37	0.0	0.0



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 485)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3540.0usft (HP 485)
Well:	#701H	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)	BuId (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,089.0	1.60	47.90	3,088.0	-62.6	-2.2	2.81	0.62	-106.25	0.0	0.0	
3,121.0	2.20	35.70	3,120.0	-61.8	-1.5	2.25	1.87	-38.12	0.0	0.0	
3,152.0	2.80	30.10	3,151.0	-60.6	-0.8	2.09	1.94	-18.08	0.0	0.0	
3,248.0	5.00	20.50	3,246.8	-54.7	1.8	2.38	2.29	-10.00	0.0	0.0	
3,298.0	5.70	18.90	3,296.5	-50.3	3.4	1.43	1.40	-3.20	0.0	0.0	
3,343.0	5.80	14.40	3,341.3	-46.0	4.7	1.03	0.22	-10.00	0.0	0.0	
3,438.0	7.00	2.80	3,435.7	-35.5	6.2	1.85	1.26	-12.21	0.0	0.0	
3,628.0	8.10	11.60	3,624.1	-10.9	9.4	0.84	0.58	4.63	0.0	0.0	
3,819.0	8.10	2.60	3,813.2	15.8	12.7	0.66	0.00	-4.71	0.0	0.0	
4,008.0	8.40	6.70	4,000.2	42.8	14.9	0.35	0.16	2.17	0.0	0.0	
4,188.0	9.40	20.70	4,188.0	71.1	22.1	1.25	0.53	7.37	0.0	0.0	
4,388.0	8.60	23.20	4,375.6	98.7	33.1	0.47	-0.42	1.32	0.0	0.0	
4,579.0	9.50	31.60	4,564.2	125.2	47.0	0.84	0.47	4.40	0.0	0.0	
4,665.0	9.20	30.60	4,649.1	137.2	54.2	0.40	-0.35	-1.16	0.0	0.0	
4,773.0	9.80	32.40	4,755.6	152.4	63.6	0.62	0.56	1.67	0.0	0.0	
4,962.0	9.40	29.40	4,942.0	179.4	79.8	0.34	-0.21	-1.59	0.0	0.0	
5,153.0	5.90	26.40	5,131.2	201.8	91.8	1.84	-1.83	-1.57	0.0	0.0	
5,343.0	4.40	357.50	5,320.5	217.8	95.8	1.55	-0.79	-15.21	0.0	0.0	
5,533.0	4.00	354.10	5,510.0	231.7	94.8	0.25	-0.21	-1.79	0.0	0.0	
5,723.0	0.70	5.30	5,699.8	239.4	94.2	1.75	-1.74	5.89	0.0	0.0	
5,913.0	0.80	345.80	5,889.8	241.9	94.0	0.14	0.05	-10.26	0.0	0.0	
6,103.0	0.70	343.70	6,079.8	244.3	93.4	0.05	-0.05	-1.11	0.0	0.0	
6,293.0	0.70	337.40	6,269.8	246.5	92.6	0.04	0.00	-3.32	0.0	0.0	
6,483.0	0.40	265.20	6,459.8	247.5	91.5	0.36	-0.16	-38.00	0.0	0.0	
6,672.0	2.00	325.10	6,648.7	250.1	88.9	0.97	0.85	31.69	0.0	0.0	
6,863.0	1.80	321.90	6,839.6	255.2	85.2	0.12	-0.10	-1.68	0.0	0.0	
7,053.0	1.70	324.00	7,029.5	258.8	81.7	0.06	-0.05	1.11	0.0	0.0	



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 465)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	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)	
7,243.0	0.80	308.80	7,219.5	283.0	79.0	0.50	-0.47	-8.00	0.0	0.0	0.0
7,432.0	0.80	304.90	7,408.4	264.5	76.9	0.03	0.00	-2.06	0.0	0.0	0.0
7,622.0	0.90	273.10	7,598.4	265.4	74.3	0.25	0.05	-16.74	0.0	0.0	0.0
7,813.0	0.70	243.10	7,789.4	264.9	71.8	0.24	-0.10	-15.71	0.0	0.0	0.0
8,003.0	0.80	234.20	7,979.4	263.6	69.7	0.08	0.05	-4.68	0.0	0.0	0.0
8,194.0	1.10	221.70	8,170.4	261.5	67.4	0.19	0.16	-6.54	0.0	0.0	0.0
8,384.0	1.20	213.40	8,360.3	258.5	65.0	0.10	0.05	-4.37	0.0	0.0	0.0
8,575.0	1.50	206.80	8,551.3	254.6	62.8	0.18	0.16	-3.46	0.0	0.0	0.0
8,764.0	1.90	204.50	8,740.2	249.5	60.4	0.21	0.21	-1.22	0.0	0.0	0.0
8,954.0	2.20	199.40	8,930.1	243.2	57.9	0.18	0.16	-2.68	0.0	0.0	0.0
9,144.0	0.40	196.40	9,120.0	239.1	56.5	0.95	-0.95	-1.58	0.0	0.0	0.0
9,334.0	0.50	309.10	9,310.0	239.0	55.7	0.40	0.05	59.32	0.0	0.0	0.0
9,524.0	1.10	330.60	9,500.0	241.1	54.1	0.35	0.32	11.32	0.0	0.0	0.0
9,714.0	1.80	271.10	9,689.9	242.8	50.2	0.82	0.37	-31.32	0.0	0.0	0.0
9,904.0	1.30	265.90	9,879.9	242.7	45.1	0.27	-0.26	-2.74	0.0	0.0	0.0
10,094.0	0.40	194.10	10,089.9	241.9	42.8	0.65	-0.47	-37.79	0.0	0.0	0.0
10,283.0	1.20	86.00	10,258.8	241.4	44.6	0.73	0.42	-57.20	0.0	0.0	0.0
10,473.0	1.60	77.00	10,448.8	242.1	49.2	0.24	0.21	-4.74	0.0	0.0	0.0
10,662.0	1.30	48.60	10,637.7	244.1	53.4	0.41	-0.16	-15.03	0.0	0.0	0.0
10,852.0	2.20	357.20	10,827.6	249.2	54.8	0.91	0.47	-27.05	0.0	0.0	0.0
11,041.0	2.30	334.30	11,016.5	256.2	53.0	0.48	0.05	-12.12	0.0	0.0	0.0
11,184.0	5.01	297.06	11,159.2	261.6	46.2	2.43	1.90	-26.04	-3.2	0.8	0.8
11,216.0	8.53	288.54	11,191.0	263.0	42.7	11.41	11.00	-26.62	-5.2	0.2	0.2
11,247.0	9.15	285.28	11,221.6	264.4	38.1	2.57	2.00	-10.52	-7.5	-0.7	-0.7
11,261.0	9.21	285.70	11,235.4	265.0	36.0	0.64	0.43	3.00	-8.4	-1.0	-1.0
11,293.0	9.41	287.10	11,267.0	266.5	31.0	0.94	0.62	4.37	-10.5	-1.8	-1.8
11,324.0	9.10	286.99	11,297.6	267.9	26.2	1.00	-1.00	-0.35	-12.5	-2.9	-2.9



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 465)
Site:	Savage 2 State Corn	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
ND (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)	
11,356.0	8.83	285.99	11,329.2	269.4	21.4	0.97	-0.84	-3.12	-14.4	-4.2	
11,388.0	8.86	284.97	11,360.8	270.7	16.7	0.50	0.09	-3.19	-16.1	-5.4	
11,419.0	7.85	281.97	11,391.5	271.7	12.3	3.55	-3.26	-9.68	-17.2	-7.1	
11,451.0	6.73	281.62	11,423.3	272.6	8.4	3.50	-3.50	-1.09	-18.0	-8.0	
11,483.0	5.30	272.28	11,455.1	273.0	5.0	5.40	-4.47	-29.19	-16.6	-11.4	
11,515.0	4.82	263.56	11,487.0	272.9	2.2	2.83	-1.50	-27.25	-14.2	-13.7	
11,546.0	4.27	266.30	11,517.9	272.7	-0.2	1.91	-1.77	8.84	-14.1	-12.9	
11,609.0	2.82	252.05	11,580.7	272.1	-4.0	2.68	-2.30	-22.62	-8.1	-14.8	
11,641.0	2.37	245.08	11,612.7	271.5	-5.4	1.72	-1.41	-21.78	-4.7	-14.5	
11,673.0	2.50	254.39	11,644.7	271.1	-6.7	1.30	0.41	29.09	-5.1	-12.6	
11,736.0	2.66	243.10	11,707.6	270.0	-9.3	0.84	0.25	-17.82	0.5	-10.9	
11,783.0	7.04	225.47	11,754.4	267.5	-12.3	9.74	9.32	-37.51	4.1	-8.1	
11,798.3	8.04	225.89	11,769.6	266.1	-13.7	6.59	6.58	2.74	4.0	-7.9	
KOP(Savage 2 SC #701H)											
11,831.0	10.20	226.51	11,801.9	262.5	-17.5	6.59	6.58	1.90	4.0	-8.7	
11,874.0	16.36	217.43	11,843.7	255.1	-23.9	15.08	14.33	-21.12	4.8	-10.3	
11,926.0	21.28	223.36	11,892.9	242.4	-34.9	10.14	9.46	11.40	1.4	-16.4	
11,973.0	22.80	228.29	11,936.5	230.1	-47.5	5.09	3.23	10.49	-2.3	-25.8	
12,020.0	25.20	227.10	11,979.4	217.3	-61.7	5.21	5.11	-2.53	-2.6	-38.6	
12,028.4	26.45	224.20	11,987.0	214.7	-64.3	21.19	14.92	-34.54	-0.6	-41.2	
HL Crossing, MD:12028.4', TVD:11987.2', N/S:214.9', E/W:-63.9', INC:26.45'											
12,067.0	32.80	213.70	12,020.5	199.8	-76.1	21.19	16.44	-27.20	7.5	-50.6	
12,115.0	45.10	202.10	12,057.9	173.1	-89.8	29.70	25.62	-24.17	14.9	-57.9	
12,128.0	48.70	199.00	12,066.7	164.2	-93.1	32.71	27.69	-23.85	15.7	-59.2	
12,146.0	52.70	194.40	12,078.1	150.9	-97.1	29.74	22.22	-25.56	16.1	-60.4	
12,178.0	56.60	184.80	12,096.7	125.2	-101.4	27.32	12.19	-30.00	16.2	-60.1	



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 485)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3540.0usft (HP 485)
Well:	#701H	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)
12,179.4	56.68	184.50	12,097.5	124.0	-101.5	18.72	5.61	-21.39	16.1	-60.1
FTP(Savage 2 SC #701H)										
12,209.0	58.50	178.30	12,113.3	99.1	-102.1	18.72	6.15	-20.95	14.2	-57.7
12,241.0	60.70	171.60	12,129.5	71.6	-99.6	19.32	6.87	-20.94	12.0	-52.7
12,273.0	64.80	166.50	12,144.2	43.7	-94.2	19.10	12.81	-15.94	7.8	-45.7
12,304.0	68.70	166.00	12,156.4	16.0	-87.4	12.67	12.58	-1.61	1.3	-38.0
12,351.0	70.70	170.20	12,172.7	-27.1	-78.4	9.40	4.26	8.94	-7.6	-27.3
12,399.0	71.80	173.90	12,188.2	-72.1	-72.1	7.65	2.29	7.71	-12.9	-19.3
12,446.0	73.20	176.00	12,202.3	-116.7	-68.1	5.20	2.98	4.47	-14.5	-13.9
12,494.0	75.30	175.80	12,215.3	-162.8	-64.8	4.39	4.37	-0.42	-13.0	-9.7
12,541.0	78.20	175.30	12,226.1	-208.4	-61.3	6.26	6.17	-1.06	-9.2	-5.7
12,589.0	79.80	174.70	12,235.3	-255.3	-57.2	3.55	3.33	-1.25	-2.7	-1.5
12,636.0	81.20	173.80	12,243.0	-301.5	-52.5	3.53	2.98	-1.91	5.0	2.8
12,684.0	84.70	174.90	12,248.9	-348.9	-47.8	7.64	7.29	2.29	10.9	7.2
12,731.0	87.20	176.30	12,252.2	-395.6	-44.2	6.09	5.32	2.98	14.2	10.4
12,779.0	89.70	180.00	12,253.5	-443.6	-42.7	9.30	5.21	7.71	15.5	11.6
12,826.0	90.70	180.80	12,253.4	-490.5	-43.0	2.72	2.13	1.70	15.3	10.9
12,873.0	91.60	181.80	12,252.4	-537.5	-44.1	2.86	1.91	2.13	14.4	9.5
12,919.0	92.00	182.60	12,251.0	-583.5	-45.9	1.94	0.87	1.74	13.0	7.4
12,966.0	91.10	180.60	12,249.7	-630.4	-47.2	4.66	-1.91	-4.26	11.7	5.8
13,061.0	89.60	181.70	12,249.1	-725.4	-49.1	1.98	-1.58	1.16	11.1	3.2
13,156.0	89.00	180.60	12,250.3	-820.4	-51.0	1.32	-0.63	-1.16	12.3	0.6
13,251.0	89.10	180.30	12,251.9	-915.4	-51.7	0.33	0.11	-0.32	13.9	-0.9
13,335.3	90.08	180.66	12,252.5	-999.7	-52.4	1.23	1.16	0.42	14.5	-2.2
TGT 1 (Savage 2 SC #701H)										
13,346.0	90.20	180.70	12,252.4	-1,010.4	-52.6	1.23	1.16	0.42	14.5	-2.4
13,441.0	88.80	179.90	12,253.3	-1,105.3	-53.0	1.70	-1.47	-0.84	15.9	-3.6



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 465)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asd (grid_north_azim)	TVD (usft)	NS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,536.0	90.50	179.60	12,253.8	-1,200.3	-52.6	1.82	1.79	-0.32	17.2	-3.9	
13,631.0	92.00	179.40	12,251.8	-1,295.3	-51.8	1.59	1.58	-0.21	15.8	-3.7	
13,726.0	89.80	179.60	12,250.3	-1,390.3	-51.0	2.33	-2.32	0.21	15.0	-3.6	
13,821.0	86.90	179.60	12,253.0	-1,485.2	-50.3	3.05	-3.05	0.00	18.4	-3.6	
13,916.0	87.10	179.40	12,258.0	-1,580.1	-49.5	0.30	0.21	-0.21	24.0	-3.5	
14,011.0	89.50	179.40	12,260.8	-1,675.0	-48.5	2.53	2.53	0.00	27.5	-3.2	
14,106.0	90.30	179.60	12,261.0	-1,770.0	-47.7	0.87	0.84	0.21	28.3	-3.1	
14,201.0	89.70	179.60	12,261.0	-1,865.0	-47.0	0.63	-0.63	0.00	29.0	-3.1	
14,264.0	93.30	179.80	12,259.3	-1,928.0	-46.7	5.72	5.71	0.32	27.8	-3.2	
14,296.0	95.00	179.50	12,257.0	-1,959.9	-46.5	5.39	5.31	-0.94	25.7	-3.3	
14,318.0	97.00	179.40	12,254.7	-1,981.8	-46.3	9.10	9.09	-0.45	23.6	-3.2	
14,338.4	96.08	179.59	12,252.4	-2,002.1	-46.1	4.82	-4.52	0.95	21.4	-3.2	
TOT 2 (Savage 2 SC #701H)											
14,360.0	95.10	179.80	12,250.3	-2,023.6	-46.0	4.62	-4.52	0.95	19.5	-3.2	
14,391.0	94.20	180.60	12,247.8	-2,054.5	-46.1	3.88	-2.90	2.58	17.2	-3.5	
14,423.0	92.60	180.80	12,245.9	-2,086.4	-46.5	5.04	-5.00	0.62	15.5	-4.2	
14,455.0	90.60	181.00	12,245.0	-2,118.4	-47.0	6.28	-6.25	0.62	14.8	-4.9	
14,486.0	89.40	180.50	12,245.0	-2,149.4	-47.4	4.19	-3.87	-1.61	15.1	-5.5	
14,518.0	88.20	180.40	12,245.6	-2,181.4	-47.6	3.76	-3.75	-0.31	16.0	-6.0	
14,550.0	88.30	180.70	12,246.6	-2,213.4	-47.9	0.99	0.31	0.94	17.2	-6.6	
14,581.0	88.70	181.10	12,247.4	-2,244.3	-48.4	1.82	1.29	1.29	18.2	-7.3	
14,613.0	84.50	179.60	12,249.3	-2,276.3	-48.6	13.93	-13.12	-4.69	20.3	-7.7	
14,645.0	83.80	178.80	12,252.6	-2,308.1	-48.2	3.09	-2.19	-2.19	23.8	-7.6	
14,676.0	83.30	178.70	12,256.1	-2,338.9	-47.8	1.74	-1.61	-0.65	27.6	-7.1	
14,723.0	86.40	178.80	12,260.3	-2,385.7	-46.5	6.60	6.60	0.21	32.1	-6.4	
14,771.0	91.50	179.70	12,261.2	-2,433.7	-45.9	10.79	10.62	1.87	33.4	-6.1	
14,866.0	89.40	178.30	12,260.4	-2,528.6	-44.3	2.66	-2.21	-1.47	33.3	-5.2	



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 465)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	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)	
14,898.0	91.80	178.90	12,260.1	-2,560.6	-43.5	7.73	7.50	1.87	33.2	-4.6	
14,981.0	88.60	178.20	12,259.9	-2,623.6	-41.9	5.20	-5.08	-1.11	33.4	-3.5	
15,056.0	92.40	178.70	12,259.0	-2,718.5	-39.3	4.03	4.00	0.53	33.3	-1.6	
15,151.0	91.30	178.20	12,256.0	-2,813.5	-36.7	1.27	-1.16	-0.53	30.9	0.3	
15,246.0	92.30	178.80	12,253.0	-2,908.4	-34.3	1.23	1.05	0.63	28.7	2.1	
15,341.0	91.40	178.30	12,249.9	-3,003.3	-31.9	1.08	-0.95	-0.53	26.3	3.8	
15,437.0	91.30	178.20	12,247.7	-3,099.2	-28.9	0.15	-0.10	-0.10	24.7	6.0	
15,531.0	87.00	177.90	12,249.1	-3,193.1	-25.7	4.59	-4.57	-0.32	26.8	8.5	
15,626.0	87.80	177.40	12,253.4	-3,288.0	-21.8	0.99	0.84	-0.53	31.8	11.7	
15,721.0	88.70	176.60	12,256.3	-3,382.8	-16.9	1.27	0.95	-0.84	35.4	16.0	
15,816.0	90.20	177.30	12,257.2	-3,477.6	-11.8	1.74	1.58	0.74	37.0	20.3	
15,838.0	90.76	177.81	12,257.0	-3,499.6	-10.9	3.46	2.55	2.34	37.0	21.1	
TGT 3 (Savage 2 SC #701H)											
15,863.0	91.40	178.40	12,256.5	-3,524.6	-10.0	3.46	2.55	2.34	36.8	21.8	
15,891.0	90.20	177.60	12,256.1	-3,552.8	-9.1	5.15	-4.29	-2.86	36.6	22.5	
15,911.0	89.50	177.30	12,256.2	-3,572.6	-8.2	3.81	-3.50	-1.50	36.9	23.3	
15,957.0	92.00	178.90	12,255.6	-3,618.5	-6.7	6.45	5.43	3.48	36.7	24.5	
16,006.0	93.50	179.40	12,253.2	-3,667.5	-5.9	3.23	3.06	1.02	34.8	24.9	
16,053.0	90.50	178.80	12,251.6	-3,714.4	-5.2	6.51	-6.38	-1.28	33.6	25.2	
16,101.0	93.20	178.90	12,250.0	-3,762.4	-4.2	5.63	5.62	0.21	32.5	25.9	
16,148.0	93.50	179.50	12,247.3	-3,809.3	-3.6	1.43	0.64	1.28	30.2	26.2	
16,196.0	92.90	179.00	12,244.6	-3,857.2	-2.9	1.63	-1.25	-1.04	28.0	26.4	
16,291.0	89.40	179.50	12,242.7	-3,952.2	-1.7	3.72	-3.68	0.53	27.0	27.0	
16,323.0	89.20	178.90	12,243.1	-3,984.2	-1.3	1.98	-0.62	-1.87	27.7	27.2	
16,386.0	92.30	179.00	12,242.3	-4,047.1	-0.1	4.92	4.92	0.16	27.5	27.9	
16,449.0	91.30	180.40	12,240.3	-4,110.1	0.2	2.73	-1.59	2.22	26.1	27.8	
16,481.0	90.70	180.50	12,239.7	-4,142.1	0.0	1.90	-1.87	0.31	25.8	27.3	



Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3540.0usft (HP 485)
Site:	Savage 2 State Com	MD Reference:	KB = 25 @ 3540.0usft (HP 465)
Well:	#701H	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)	
16,527.0	90.50	180.50	12,239.3	-4,188.1	-0.4	0.43	-0.43	0.00	25.8	26.6	
16,611.0	90.20	180.50	12,238.7	-4,272.1	-1.2	0.36	-0.36	0.00	26.1	25.2	
16,706.0	87.70	179.60	12,240.5	-4,367.1	-1.2	2.80	-2.63	-0.95	28.7	24.4	
16,801.0	88.00	179.70	12,244.1	-4,462.0	-0.7	0.33	0.32	0.11	33.2	24.3	
16,896.0	91.60	179.60	12,244.4	-4,557.0	-0.1	3.79	3.79	-0.11	34.4	24.2	
16,956.0	89.90	179.40	12,243.6	-4,617.0	0.4	2.85	-2.83	-0.33	34.2	24.3	
16,991.0	86.90	179.00	12,244.6	-4,652.0	0.9	8.65	-8.57	-1.14	35.5	24.6	
17,086.0	84.30	178.90	12,251.9	-4,746.7	2.7	2.74	-2.74	-0.11	43.6	25.7	
17,136.0	89.80	178.90	12,254.4	-4,796.6	3.6	11.00	11.00	0.00	46.7	26.2	
Final MWD Survey (MD=17136.0)											
17,200.0	89.80	178.90	12,254.7	-4,860.5	4.9	0.00	0.00	0.00	47.8	26.9	
Final Projection to Bit (MD=17200.0) - PBHL(Savage 2 SC #701H)											

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
12,028.4	11,987.0	214.7	-64.3	HL Crossing, MD:12028.4', TVD:11987.2', N/S:214.9', E/W:-63.9', INC:26.45
17,136.0	12,254.4	-4,796.6	3.6	Final MWD Survey (MD=17136.0')
17,200.0	12,254.7	-4,860.5	4.9	Final Projection to Bit (MD=17200.0')

Checked By: _____ Approved By: _____ Date: _____