

HOBBS OCD
SEP 25 2019
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Savage 2 State Com

#503H

OH

Design: OH

Midland PVA

20 April, 2019



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Savage 2 State Com
 Well: #503H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #503H
 TVD Reference: KB = 25' @ 3545.0usft
 MD Reference: KB = 25' @ 3545.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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 Eastem Zone		

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

Well	#503H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 9' 55.643 N
		Longitude:	103° 38' 56.970 W
		Ground Level:	3,520.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	2/21/2019	6.80
			Dip Angle
			59.97
			Field Strength
			47,721.69081000

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			180.73

Survey Program	Date 4/20/2019		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
145.0	15,414.0	Leam MWD (OH)	MWD
			Description
			OWSG MWD - Standard



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MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (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	0.0	0.0
145.0	0.40	27.90	145.0	0.4	0.2	0.28	0.28	0.00	-0.5	0.0
318.0	0.60	344.70	318.0	1.9	0.3	0.24	0.12	-24.97	-1.7	-0.8
493.0	1.10	353.00	493.0	4.4	-0.2	0.29	0.29	4.74	-4.4	-0.4
685.0	1.70	328.70	684.9	8.7	-1.9	0.43	0.31	-12.66	-8.4	-2.9
873.0	2.60	291.40	872.8	12.6	-7.3	0.86	0.48	-19.84	-11.4	-9.1
1,060.0	3.00	291.30	1,059.6	15.9	-15.8	0.21	0.21	-0.05	-20.5	-9.1
1,154.0	1.80	317.50	1,153.5	17.9	-19.1	1.70	-1.28	27.87	-26.1	2.0
1,247.0	1.70	326.60	1,246.4	20.1	-20.8	0.32	-0.11	9.78	-28.3	6.3
1,341.0	1.50	333.30	1,340.4	22.4	-22.2	0.29	-0.21	7.13	-30.0	9.7
1,434.0	1.50	333.30	1,433.4	24.6	-23.2	0.00	0.00	0.00	-32.4	9.7
1,527.0	1.40	332.00	1,526.3	26.7	-24.3	0.11	-0.11	-1.40	-35.0	9.0
1,621.0	1.20	324.80	1,620.3	28.5	-25.4	0.27	-0.21	-7.66	-37.9	4.4
1,715.0	1.10	329.80	1,714.3	30.1	-26.5	0.15	-0.11	5.32	-39.3	7.7
1,809.0	1.00	327.80	1,808.3	31.5	-27.3	0.11	-0.11	-2.13	-41.3	6.3
1,903.0	0.90	318.70	1,902.3	32.8	-28.3	0.19	-0.11	-9.68	-43.3	-0.4
1,997.0	0.80	333.80	1,996.3	33.9	-29.0	0.26	-0.11	16.06	-43.3	11.1
2,090.0	0.70	326.10	2,089.3	35.0	-29.7	0.15	-0.11	-8.28	-45.6	5.1
2,278.0	0.70	323.60	2,277.2	36.9	-31.0	0.02	0.00	-1.33	-48.1	3.0
2,372.0	0.50	335.40	2,371.2	37.7	-31.5	0.25	-0.21	12.55	-47.4	12.9
2,466.0	0.40	334.30	2,465.2	38.4	-31.8	0.11	-0.11	-1.17	-48.4	12.0
2,559.0	1.00	333.80	2,558.2	39.4	-32.3	0.65	0.65	-0.54	-49.6	11.6
2,653.0	2.60	341.40	2,652.2	42.2	-33.3	1.72	1.70	8.09	-49.6	18.3
2,746.0	4.00	346.30	2,745.0	47.3	-34.8	1.53	1.51	5.27	-49.2	22.7
2,840.0	4.80	348.40	2,838.7	54.3	-36.3	0.87	0.85	2.23	-48.4	24.5
2,934.0	5.10	351.20	2,932.4	62.3	-37.8	0.41	0.32	2.98	-45.7	26.5
3,028.0	5.20	351.90	3,026.0	70.7	-39.0	0.13	0.11	0.74	-44.0	26.3



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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
3,121.0	5.60	346.50	3,118.6	79.3	-40.7	0.69	0.43	-5.81	-45.3	21.9
3,215.0	6.30	343.50	3,212.1	88.7	-43.2	0.81	0.74	-3.19	-46.3	20.0
3,309.0	6.10	340.50	3,305.5	98.3	-46.3	0.40	-0.21	-3.19	-47.7	18.5
3,403.0	6.50	348.40	3,399.0	108.2	-49.1	1.01	0.43	8.40	-45.1	25.4
3,497.0	6.60	353.70	3,492.4	118.8	-50.7	0.65	0.11	5.64	-43.5	28.9
3,590.0	6.10	355.10	3,584.8	129.0	-51.7	0.56	-0.54	1.51	-43.4	28.9
3,684.0	5.80	0.30	3,678.3	138.8	-52.1	0.66	-0.32	5.53	-40.8	31.0
3,777.0	5.50	359.30	3,770.8	147.9	-52.2	0.34	-0.32	-1.08	-41.0	28.2
3,871.0	5.10	358.40	3,864.4	156.6	-52.3	0.43	-0.43	-0.96	-40.4	25.7
3,965.0	5.60	348.70	3,958.0	165.3	-53.4	1.10	0.53	-10.32	-43.0	17.7
4,059.0	6.00	346.60	4,051.5	174.6	-55.4	0.48	0.43	-2.23	-43.3	16.1
4,152.0	5.10	351.40	4,144.1	183.4	-57.1	1.09	-0.97	5.16	-41.1	19.5
4,246.0	5.60	351.70	4,237.7	192.0	-58.4	0.53	0.53	0.32	-39.9	19.0
4,339.0	6.30	350.90	4,330.2	201.6	-59.9	0.76	0.75	-0.86	-40.1	17.8
4,434.0	5.40	356.10	4,424.7	211.2	-61.0	1.10	-0.95	5.47	-38.2	20.4
4,527.0	4.70	1.00	4,517.3	219.4	-61.3	0.88	-0.75	5.27	-35.0	21.7
4,621.0	4.10	3.70	4,611.1	226.6	-61.0	0.88	-0.64	2.87	-31.7	20.8
4,688.0	4.30	4.80	4,677.9	231.5	-60.6	0.33	0.30	1.79	-29.4	19.4
4,787.0	4.30	5.80	4,786.6	239.6	-59.8	0.08	0.00	0.83	-26.5	16.4
4,890.0	5.80	1.20	4,879.2	247.8	-59.4	1.67	1.61	-4.95	-26.4	11.7
4,984.0	6.30	2.80	4,972.7	257.7	-59.0	0.56	0.53	1.70	-26.5	10.0
5,078.0	6.20	343.60	5,066.1	267.7	-60.2	2.22	-0.11	-20.43	-28.4	-0.2
5,172.0	6.30	340.70	5,159.6	277.4	-63.4	0.35	0.11	-3.09	-28.9	-0.7
5,266.0	6.30	341.40	5,253.0	287.2	-66.7	0.08	0.00	0.74	-29.4	0.8
5,359.0	5.70	341.20	5,345.5	296.4	-69.8	0.65	-0.65	-0.22	-29.5	1.8
5,453.0	7.30	345.40	5,438.9	306.6	-72.6	1.77	1.70	4.47	-30.1	4.7
5,547.0	8.00	347.50	5,532.1	318.7	-75.8	0.80	0.74	2.23	-32.6	6.0



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Survey

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("/100usft)	Bulld ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
5,640.0	7.70	346.10	5,624.2	331.1	-78.7	0.38	-0.32	-1.51	-35.7	5.3
5,734.0	6.90	347.20	5,717.4	342.7	-81.4	0.86	-0.85	1.17	-37.8	6.2
5,828.0	7.00	346.50	5,810.7	353.8	-84.0	0.14	0.11	-0.74	-39.4	5.9
5,921.0	6.80	347.50	5,903.1	364.5	-86.5	0.45	-0.43	1.08	-40.6	6.7
6,015.0	6.30	348.60	5,996.5	374.9	-88.7	0.35	-0.32	1.17	-41.2	7.4
6,109.0	6.20	345.60	6,089.9	384.8	-91.0	0.36	-0.11	-3.19	-41.9	5.4
6,202.0	6.20	346.60	6,182.4	394.6	-93.4	0.12	0.00	1.08	-42.1	6.4
6,296.0	6.20	349.60	6,275.8	404.5	-95.5	0.34	0.00	3.19	-42.1	8.5
6,389.0	5.00	359.30	6,368.4	413.5	-96.4	1.64	-1.29	10.43	-39.5	14.3
6,483.0	2.90	11.80	6,462.2	419.9	-96.0	2.40	-2.23	13.30	-32.9	19.4
6,576.0	2.60	16.20	6,555.1	424.3	-94.9	0.39	-0.32	4.73	-27.2	17.4
6,670.0	2.40	14.80	6,649.0	428.2	-93.8	0.22	-0.21	-1.49	-22.9	12.2
6,763.0	2.50	11.80	6,741.9	432.1	-92.9	0.17	0.11	-3.23	-18.6	6.9
6,857.0	2.30	24.80	6,835.8	435.8	-91.7	0.82	-0.21	13.83	-12.6	5.4
6,950.0	0.90	2.50	6,928.8	438.2	-90.9	1.62	-1.51	-23.98	-6.8	-2.9
7,044.0	1.00	351.40	7,022.7	439.8	-91.0	0.22	0.11	-11.81	0.0	-4.8
7,137.0	0.40	358.60	7,115.7	440.9	-91.1	0.65	-0.65	7.74	2.7	-5.5
7,231.0	0.60	78.20	7,209.7	441.3	-90.6	0.70	0.21	84.68	-5.5	-4.9
7,325.0	1.10	83.50	7,303.7	441.5	-89.2	0.54	0.53	5.64	-7.3	-4.3
7,419.0	1.40	103.50	7,397.7	441.4	-87.2	0.58	0.32	21.28	-10.4	-1.3
7,512.0	1.10	137.80	7,490.7	440.4	-85.5	0.85	-0.32	36.68	-11.1	5.4
7,606.0	0.80	132.00	7,584.7	439.3	-84.4	0.33	-0.32	-6.17	-13.1	4.2
7,700.0	1.50	146.90	7,678.7	437.9	-83.3	0.80	0.74	15.85	-13.5	7.6
7,793.0	1.70	148.40	7,771.6	435.7	-81.9	0.22	0.22	1.61	-15.9	8.0
7,887.0	1.70	152.20	7,865.6	433.2	-80.5	0.12	0.00	4.04	-18.1	9.1
7,980.0	2.00	160.70	7,958.5	430.5	-79.3	0.44	0.32	9.14	-19.5	11.9
8,074.0	1.60	161.20	8,052.5	427.7	-78.4	0.43	-0.43	0.53	-22.4	12.1



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8,168.0	2.20	159.40	8,148.4	424.8	-77.3	0.64	0.64	-1.91	-25.9	11.3
8,262.0	1.10	199.50	8,240.4	422.2	-77.0	1.63	-1.17	42.66	-14.8	26.5
8,355.0	1.10	218.30	8,333.4	420.7	-77.8	0.39	0.00	20.22	-7.2	30.1
8,449.0	1.60	215.90	8,427.3	418.9	-79.1	0.54	0.53	-2.55	-10.7	29.8
8,542.0	1.20	199.20	8,520.3	416.9	-80.2	0.61	-0.43	-17.96	-21.0	25.1
8,636.0	1.80	195.60	8,614.3	414.6	-80.9	0.65	0.64	-3.83	-25.0	23.6
8,730.0	0.80	254.30	8,708.3	413.0	-82.0	1.64	-1.06	62.45	5.8	34.9
8,824.0	0.60	249.60	8,802.3	412.6	-83.1	0.22	-0.21	-5.00	1.8	35.2
8,917.0	1.10	267.50	8,895.2	412.4	-84.4	0.60	0.54	19.25	11.1	33.1
9,010.0	1.10	237.10	8,988.2	411.9	-86.1	0.62	0.00	-32.69	-8.8	33.7
9,105.0	1.40	251.90	9,083.2	411.1	-87.9	0.46	0.32	15.58	-1.9	35.1
9,198.0	1.80	286.50	9,178.2	411.1	-90.4	1.10	0.43	37.20	15.9	30.6
9,292.0	1.80	315.90	9,270.1	412.6	-92.9	0.97	0.00	31.28	26.1	19.6
9,386.0	3.10	296.70	9,364.0	414.8	-96.1	1.62	1.38	-20.43	14.3	28.8
9,480.0	2.10	302.50	9,457.9	416.9	-99.9	1.10	-1.06	6.17	12.7	25.3
9,573.0	3.40	294.20	9,550.8	418.9	-103.8	1.46	1.40	-8.92	4.5	26.6
9,667.0	3.00	284.10	9,644.7	420.7	-108.8	0.73	-0.43	-10.74	-5.5	26.5
9,761.0	2.80	283.50	9,738.6	421.8	-113.4	0.22	-0.21	-0.64	-10.5	26.4
9,855.0	3.10	268.60	9,832.4	422.3	-118.1	0.87	0.32	-15.85	-21.7	22.2
9,949.0	3.60	259.80	9,926.3	421.7	-123.6	0.76	0.53	-9.36	-30.3	18.3
9,978.0	3.50	262.40	9,955.2	421.4	-125.4	0.65	-0.34	8.97	-31.2	19.7
10,072.0	9.30	187.60	10,048.7	413.5	-129.2	9.61	6.17	-79.57	-33.7	-28.1
10,165.0	22.20	178.90	10,138.1	388.4	-129.9	14.06	13.87	-9.35	-39.1	-33.9
10,258.0	33.90	176.70	10,220.0	344.7	-128.0	12.63	12.58	-2.37	-52.0	-34.5
10,352.0	39.60	174.50	10,285.3	288.7	-123.7	6.22	6.06	-2.34	-63.1	-32.5
10,444.0	44.60	176.30	10,363.5	227.2	-116.8	5.59	5.43	1.96	-87.5	-26.1
10,538.0	49.30	172.40	10,427.7	158.9	-111.9	5.85	5.00	-4.15	-81.1	-21.4



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10,585.0	52.30	174.70	10,457.4	122.8	-107.8	7.42	6.38	4.89	-55.5	-15.6
10,631.0	50.60	177.00	10,486.1	88.9	-105.2	5.38	-3.70	5.00	-48.2	-12.1
10,724.0	61.80	177.40	10,537.7	9.8	-101.5	12.05	12.04	0.43	-23.0	-8.1
10,818.0	71.60	181.20	10,574.9	-78.4	-100.5	11.08	10.43	4.04	-1.3	-7.3
10,911.0	85.80	180.20	10,593.0	-167.3	-101.6	15.30	15.27	-1.08	14.6	-9.1
11,005.0	90.70	179.10	10,595.9	-261.3	-101.0	5.34	5.21	-1.17	17.6	-9.1
11,099.0	91.30	179.30	10,594.3	-355.2	-99.7	0.67	0.64	0.21	16.0	-8.5
11,192.0	89.50	179.10	10,593.6	-448.2	-98.4	1.85	-1.94	-0.22	15.5	-7.9
11,285.0	89.40	179.80	10,594.5	-541.2	-97.4	0.55	-0.11	0.54	16.5	-7.5
11,378.0	90.10	180.20	10,594.9	-634.2	-97.2	0.99	0.75	0.85	17.0	-8.0
11,472.0	90.00	179.60	10,594.8	-728.2	-97.1	0.65	-0.11	-0.64	17.0	-8.5
11,565.0	90.30	179.50	10,594.6	-821.2	-96.3	0.34	0.32	-0.11	16.9	-8.4
11,658.0	89.30	178.80	10,594.9	-914.2	-84.9	1.31	-1.08	-0.75	17.3	-7.7
11,752.0	89.10	178.10	10,596.2	-1,008.2	-92.4	0.77	-0.21	-0.74	18.7	-5.9
11,846.0	88.70	177.20	10,598.0	-1,102.1	-88.5	1.05	-0.43	-0.96	20.6	-2.7
11,939.0	91.50	177.40	10,597.9	-1,194.9	-84.2	3.02	3.01	0.22	20.5	1.0
12,033.0	92.00	177.20	10,595.0	-1,288.8	-79.7	0.57	0.53	-0.21	17.8	4.8
12,127.0	92.00	176.70	10,591.7	-1,382.6	-74.7	0.53	0.00	-0.53	14.6	9.1
12,221.0	91.40	177.50	10,588.9	-1,476.4	-70.0	1.08	-0.84	0.85	11.9	13.2
12,314.0	92.20	177.00	10,586.0	-1,569.3	-65.5	1.01	0.86	-0.54	9.2	16.9
12,408.0	92.20	178.40	10,582.4	-1,663.1	-61.6	1.49	0.00	1.49	5.7	20.0
12,501.0	89.70	181.40	10,580.9	-1,756.1	-61.6	4.20	-2.69	3.23	4.4	19.5
12,596.0	89.30	182.30	10,581.7	-1,851.1	-64.7	1.04	-0.42	0.95	5.4	15.8
12,689.0	89.20	182.10	10,582.9	-1,944.0	-68.2	0.24	-0.11	-0.22	6.8	11.5
12,782.0	90.20	182.60	10,583.4	-2,036.9	-72.0	1.20	1.08	0.54	7.5	7.1
12,877.0	90.10	181.90	10,583.1	-2,131.8	-75.8	0.74	-0.11	-0.74	7.4	2.7
12,971.0	90.90	182.30	10,582.3	-2,225.8	-79.2	0.95	0.85	0.43	6.8	-1.5



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Savage 2 State Corn
 Well: #503H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #503H
 TVD Reference: KB = 25' @ 3545.0usft
 MD Reference: KB = 25' @ 3545.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
13,064.0	90.90	181.60	10,580.9	-2,318.7	-82.4	0.75	0.00	-0.75	5.5	-5.3
13,158.0	89.60	180.90	10,580.4	-2,412.7	-84.4	1.57	-1.38	-0.74	5.3	-8.0
13,251.0	88.70	180.20	10,581.8	-2,505.7	-85.3	1.23	-0.97	-0.75	6.8	-9.6
13,345.0	89.30	180.30	10,583.5	-2,599.6	-85.7	0.65	0.64	0.11	9.1	-10.7
13,439.0	89.50	180.20	10,584.5	-2,693.6	-86.1	0.24	0.21	-0.11	10.8	-11.8
13,532.0	89.90	179.10	10,584.9	-2,786.6	-85.6	1.26	0.43	-1.18	12.0	-11.9
13,626.0	91.20	179.30	10,584.0	-2,880.6	-84.3	1.40	1.38	0.21	11.7	-11.2
13,719.0	92.20	179.30	10,581.3	-2,973.6	-83.1	1.08	1.08	0.00	9.6	-10.8
13,813.0	90.80	178.60	10,578.8	-3,067.5	-81.4	1.67	-1.49	-0.74	7.8	-9.7
13,907.0	90.20	178.60	10,578.0	-3,161.5	-79.1	0.64	-0.64	0.00	7.7	-8.1
14,001.0	90.10	178.20	10,577.7	-3,255.4	-76.5	0.44	-0.11	-0.43	8.1	-6.1
14,094.0	90.70	181.40	10,577.1	-3,348.4	-78.2	3.50	0.65	3.44	8.2	-6.5
14,188.0	91.30	177.50	10,575.5	-3,442.4	-75.3	4.20	0.64	-4.15	7.2	-6.3
14,281.0	91.50	178.90	10,573.2	-3,535.3	-72.3	1.52	0.22	1.51	5.6	-4.0
14,374.0	90.00	179.80	10,572.0	-3,628.3	-71.3	1.88	-1.61	0.97	5.0	-3.6
14,468.0	88.90	180.90	10,572.9	-3,722.3	-71.9	1.65	-1.17	1.17	6.6	-4.9
14,562.0	89.70	181.00	10,574.0	-3,816.3	-73.4	0.86	0.85	0.11	8.4	-7.1
14,657.0	90.70	181.60	10,573.7	-3,911.2	-75.6	1.23	1.05	0.63	8.8	-10.0
14,750.0	89.30	181.40	10,573.7	-4,004.2	-78.0	1.52	-1.51	-0.22	10.0	-13.1
14,844.0	88.50	180.20	10,575.5	-4,098.2	-79.3	1.53	-0.85	-1.28	13.0	-15.1
14,937.0	90.00	180.30	10,576.7	-4,191.2	-79.7	1.62	1.61	0.11	15.4	-16.2
15,031.0	91.40	180.20	10,575.6	-4,285.2	-80.1	1.49	1.49	-0.11	15.5	-17.2
15,124.0	92.00	180.20	10,572.8	-4,378.1	-80.5	0.65	0.65	0.00	13.9	-16.3
15,218.0	93.20	180.70	10,568.5	-4,472.0	-81.2	1.38	1.28	0.53	10.9	-19.7
15,312.0	93.40	180.90	10,563.1	-4,565.8	-82.5	0.30	0.21	0.21	6.7	-21.7
15,354.0	93.50	181.00	10,560.6	-4,607.6	-83.2	0.34	0.24	0.24	4.7	-22.7
15,414.0	93.50	181.00	10,556.9	-4,667.6	-84.3	0.00	0.00	0.00	1.8	-24.2



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Savage 2 State Com
Well: #503H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #503H
TVD Reference: KB = 25' @ 3545.0usft
MD Reference: KB = 25' @ 3545.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
10,009.0	9,986.2	420.4	-127.0	KOP, MD:10009.0', TVD:9986.2', N/S:420.4', E/W:-127.0', INC:4.33
10,146.5	10,120.8	395.0	-130.0	FTP Crossing, MD:10146.5', TVD:10120.8', N/S:395.0', E/W:-130.0', INC:19.62
15,354.0	10,560.6	-4,607.8	-83.2	Last MWD Survey (MD=15354.0')
15,414.0	10,556.9	-4,667.6	-84.3	Projection to Bit (MD=15414.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Savage 2 State Com #503H

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: #503H

KB = 25' @ 3545.0usd 3520.0
Northing 424601.00 Easting 753044.00 Latitude 32° 9' 53.643 N Longitude 103° 38' 56.970 W

To convert a Magnetic Direction to a Grid Direction, Add 6.44°
To convert a Magnetic Direction to a True Direction, Add 8.80° East
To convert a True Direction to a Grid Direction, Subtract 0.36°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2578.0	0.00	0.00	2578.0	0.0	0.0	0.00	0.00	0.0	
3	2878.1	8.00	347.70	2877.6	15.3	-3.3	2.00	347.70	-15.3	
4	6933.2	6.00	347.70	6910.4	429.7	-83.7	0.00	0.00	-429.4	
5	7233.3	0.00	0.00	7210.0	445.0	-87.0	2.00	180.00	-443.7	
6	10028.8	0.00	0.00	10005.5	445.0	-87.0	0.00	0.00	-443.7	
7	10929.4	90.06	179.59	10578.5	-128.6	-92.9	10.00	179.59	129.7	
8	12300.0	90.06	179.59	10577.0	-1499.1	-83.0	0.00	0.00	1500.0	
9	12302.7	90.11	179.59	10577.0	-1501.8	-83.0	2.00	0.00	1502.7	
10	13300.2	90.11	179.59	10575.0	-2499.2	-75.8	0.00	0.00	2500.0	
11	13315.0	90.41	179.59	10574.9	-2514.0	-75.7	2.00	0.00	2514.8	
12	14700.5	90.41	179.59	10565.0	-3899.5	-65.7	0.00	0.00	3900.0	
13	14716.8	90.74	179.59	10564.8	-3915.8	-65.6	2.00	-0.94	3916.3	
14	15482.1	90.74	179.59	10555.0	-4681.0	-60.0	0.00	0.00	4681.4	

CASING DETAILS
No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Savage 2 State Com #503H)	7215.0	445.0	-87.0	425048.00	752947.00
PDH(Savage 2 State Com #503H)	10565.0	-4681.0	-60.0	419820.00	752994.00
TGT#1(Savage 2 State Com #503H)	10565.0	-3899.5	-65.7	420701.00	752978.30
TGT#2(Savage 2 State Com #503H)	10575.0	-2499.2	-75.8	422101.00	752965.21
TGT#3(Savage 2 State Com #503H)	10577.0	-1499.1	-83.0	423101.00	752961.01
FTF(Savage 2 State Com #503H)	10578.0	390.0	-87.0	424398.00	752947.00

