

**HOBBS OCD**  
**SEP 25 2019**  
**RECEIVED**



**EOG Resources - Midland**

Lea County, NM (NAD 83 NME)  
Savage 2 State Com  
#506H  
OH

Design: OH

**Midland PVA**

15 April, 2019



Midland PVA

<b>Company:</b> EOG Resources - Midland	<b>Local Co-ordinate Reference:</b> Well #506H
<b>Project:</b> Lea County, NM (NAD 83 NME)	<b>TVD Reference:</b> KB = 25' @ 3555.0usft
<b>Site:</b> Savage 2 State Com	<b>MD Reference:</b> KB = 25' @ 3555.0usft
<b>Well:</b> #506H	<b>North Reference:</b> Grid
<b>Wellbore:</b> OH	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> OH	<b>Database:</b> EDM 5000.14

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

<b>Site</b> Savage 2 State Com	<b>Site Position:</b>	<b>From:</b> Map	<b>Northing:</b> 424,469.00 usft	<b>Latitude:</b> 32° 8' 54.412 N
	<b>Position Uncertainty:</b> 0.0 usft		<b>Easting:</b> 751,845.00 usft	<b>Longitude:</b> 103° 39' 10.929 W
			<b>Slot Radius:</b> 13-3/16 "	<b>Grid Convergence:</b> 0.36 °

<b>Well</b> #506H	<b>Well Position</b>	<b>+N-S</b> 0.0 usft	<b>Northing:</b> 424,675.00 usft	<b>Latitude:</b> 32° 8' 56.278 N
	<b>+E-W</b> 0.0 usft		<b>Easting:</b> 754,577.00 usft	<b>Longitude:</b> 103° 38' 39.131 W
	<b>Position Uncertainty</b> 0.0 usft		<b>Wellhead Elevation:</b> usft	<b>Ground Level:</b> 3,530.0 usft

<b>Wellbore</b> OH	<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
		IGRF2015	2/21/2019	6.80	59.98	47,722.24048395

<b>Design</b> OH	<b>Audit Notes:</b>	<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL	<b>Tie On Depth:</b> 0.0	
	<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>
		0.0	0.0	0.0	173.41

<b>Survey Program</b>	<b>Date</b> 4/15/2019			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
200.0	15,443.0	Intrepid MWD (OH)	MWD	OWSG MWD - Standard



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 Database: EDM 5000.14

Survey

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("#100usft)	Build ("#100usft)	Turn ("#100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0	0.0
200.0	0.70	162.44	200.0	-1.2	0.4	0.35	0.35	0.00	-1.2	0.0
323.0	0.88	161.03	323.0	-2.8	0.9	0.15	0.15	-1.15	-2.9	0.0
499.0	0.18	239.34	499.0	-4.2	1.1	0.49	-0.40	44.49	-1.2	4.2
678.0	0.53	276.69	678.0	-4.2	0.0	0.22	0.20	20.87	0.5	4.2
861.0	1.45	304.82	860.9	-2.8	-2.7	0.55	0.50	15.37	-0.6	3.9
994.0	2.64	301.83	993.9	-0.2	-8.7	0.90	0.89	-2.25	-5.6	3.7
1,041.0	2.55	356.94	1,040.8	1.4	-7.7	5.11	-0.19	117.26	-1.8	7.6
1,133.0	2.37	312.47	1,132.7	4.7	-9.2	2.03	-0.20	-48.34	-10.0	2.9
1,226.0	1.85	347.18	1,225.7	7.5	-10.9	1.45	-0.56	37.32	-8.5	11.5
1,316.0	1.58	11.35	1,315.6	10.1	-11.0	0.85	-0.30	26.86	-1.6	18.1
1,408.0	2.59	35.79	1,407.6	13.0	-9.5	1.44	1.10	26.57	10.8	20.1
1,499.0	4.97	58.35	1,498.4	16.9	-5.1	2.97	2.62	22.59	21.2	15.1
1,591.0	7.47	62.94	1,589.8	21.8	3.6	2.82	2.72	7.16	22.7	11.2
1,685.0	8.09	65.14	1,683.0	27.4	15.0	0.73	0.66	2.34	20.3	8.3
1,780.0	7.96	67.51	1,777.0	32.7	27.2	0.37	-0.14	2.49	17.4	5.1
1,875.0	7.52	70.33	1,871.2	37.3	38.1	0.61	-0.46	2.97	14.7	1.4
1,970.0	7.30	69.01	1,965.4	41.6	50.6	0.29	-0.23	-1.39	12.3	-1.4
2,064.0	6.86	69.87	2,058.7	45.6	61.4	0.48	-0.47	1.02	10.4	-4.6
2,159.0	6.73	68.39	2,153.0	49.6	72.0	0.24	-0.14	-1.66	9.3	-7.3
2,254.0	7.47	54.33	2,247.3	55.3	82.1	1.98	0.78	-14.80	9.5	-6.5
2,349.0	7.52	52.22	2,341.5	62.7	92.1	0.28	0.05	-2.22	7.7	-8.4
2,444.0	7.21	53.19	2,435.7	70.1	101.8	0.35	-0.33	1.02	5.7	-6.5
2,539.0	6.73	51.34	2,530.0	77.1	110.9	0.56	-0.51	-1.95	4.7	-6.3
2,634.0	6.29	54.33	2,624.4	83.6	119.5	0.58	-0.46	3.15	4.0	-6.6
2,729.0	5.45	52.05	2,718.9	89.4	127.2	0.92	-0.88	-2.40	4.9	-6.6
2,824.0	6.42	49.94	2,813.4	95.6	134.9	1.05	1.02	-2.22	5.6	-6.1



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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)
2,919.0	6.11	50.38	2,907.8	102.3	142.8	0.33	-0.33	0.46	5.6	-5.7
3,014.0	5.89	52.66	3,002.3	108.4	150.6	0.34	-0.23	2.40	5.8	-5.8
3,109.0	5.41	54.24	3,098.8	114.0	158.1	0.53	-0.51	1.66	6.6	-6.1
3,204.0	5.76	53.19	3,191.4	119.5	165.6	0.38	0.37	-1.11	7.8	-6.2
3,299.0	6.24	47.65	3,285.8	125.8	173.2	0.79	0.51	-5.83	8.8	-5.0
3,394.0	6.81	48.00	3,380.2	133.1	181.2	0.60	0.60	0.37	8.3	-4.2
3,488.0	6.64	46.42	3,473.6	140.5	189.3	0.27	-0.18	-1.68	7.6	-3.1
3,584.0	5.76	54.68	3,569.0	147.2	197.2	1.30	-0.92	8.60	7.2	-3.7
3,679.0	5.76	51.78	3,663.5	152.9	204.9	0.31	0.00	-3.05	8.2	-3.5
3,773.0	7.08	44.40	3,758.9	159.9	212.6	1.65	1.40	-7.85	8.2	-1.6
3,868.0	7.52	46.77	3,851.2	168.4	221.2	0.58	0.46	2.49	6.4	-0.6
3,963.0	6.95	47.65	3,945.4	176.5	230.0	0.61	-0.60	0.93	4.7	0.2
4,058.0	6.07	44.40	4,039.8	184.0	237.8	1.00	-0.93	-3.42	4.2	1.6
4,153.0	5.36	55.03	4,134.3	190.1	244.9	1.34	-0.75	11.19	5.4	1.3
4,248.0	5.58	58.99	4,228.9	195.0	252.5	0.46	0.23	4.17	6.7	0.1
4,343.0	7.52	57.32	4,323.3	200.7	261.7	2.05	2.04	-1.76	6.2	-0.8
4,438.0	7.38	59.87	4,417.5	207.2	272.2	0.38	-0.15	2.68	4.1	-2.1
4,533.0	6.90	72.28	4,511.7	212.0	282.9	1.69	-0.51	13.04	1.6	-5.1
4,628.0	6.51	79.73	4,606.1	214.7	293.7	1.00	-0.41	7.86	-0.9	-9.3
4,742.0	5.71	61.27	4,719.5	216.5	305.0	1.85	-0.70	-16.19	2.5	-13.0
4,810.0	3.74	64.26	4,886.9	224.9	317.3	1.18	-1.17	1.78	5.9	-16.4
5,004.0	4.04	62.24	4,980.7	227.8	323.0	0.35	0.32	-2.15	10.2	-18.1
5,099.0	6.81	56.00	5,075.2	232.5	330.6	2.98	2.92	-6.57	13.5	-17.9
5,194.0	7.69	56.79	5,169.5	239.2	340.6	0.93	0.93	0.83	11.6	-18.7
5,288.0	7.82	57.49	5,262.6	246.0	351.2	0.17	0.14	0.74	8.8	-19.7
5,383.0	7.34	56.68	5,356.8	252.8	361.8	0.51	-0.51	-0.64	6.8	-20.5
5,478.0	7.12	58.90	5,451.0	259.2	371.9	0.35	-0.23	2.13	4.4	-21.6



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5,574.0	7.12	58.11	5,546.3	265.4	382.0	0.10	0.00	-0.82	3.2	-22.7
5,669.0	7.16	57.49	5,640.5	271.7	392.0	0.09	0.04	-0.65	2.0	-23.6
5,764.0	7.08	48.44	5,734.8	278.8	401.4	1.18	-0.08	-9.53	4.2	-23.2
5,859.0	7.34	45.28	5,829.1	286.9	410.1	0.50	0.27	-3.33	3.8	-22.0
5,954.0	7.16	44.75	5,923.3	285.4	418.6	0.20	-0.19	-0.56	2.3	-20.6
6,049.0	6.95	43.96	6,017.6	303.7	426.7	0.24	-0.22	-0.83	1.1	-19.1
6,144.0	6.73	43.61	6,111.9	311.9	434.6	0.24	-0.23	-0.37	0.2	-17.6
6,239.0	6.51	44.14	6,206.3	319.8	442.2	0.24	-0.23	0.56	-0.7	-16.0
6,334.0	6.42	43.52	6,300.7	327.5	449.6	0.12	-0.09	-0.85	-1.0	-14.5
6,429.0	6.33	44.05	6,395.1	335.1	456.9	0.11	-0.09	0.56	-1.5	-12.9
6,524.0	6.02	41.06	6,489.5	342.6	463.8	0.47	-0.33	-3.15	-0.9	-11.2
6,619.0	5.63	41.23	6,584.0	349.9	470.1	0.41	-0.41	0.18	-0.4	-9.2
6,715.0	5.36	41.06	6,678.6	356.8	476.2	0.28	-0.28	-0.18	0.7	-7.1
6,810.0	5.01	43.87	6,774.2	363.2	482.0	0.46	-0.37	2.96	2.0	-5.4
6,905.0	4.70	45.01	6,868.9	368.9	487.6	0.34	-0.33	1.20	4.2	-4.0
7,000.0	4.75	45.89	6,963.5	374.4	493.2	0.09	0.05	0.93	6.6	-2.8
7,095.0	4.40	48.44	7,058.2	379.5	498.7	0.43	-0.37	2.68	7.5	-2.3
7,190.0	4.09	49.32	7,153.0	384.2	504.0	0.33	-0.33	0.93	5.8	-2.1
7,286.0	3.82	50.73	7,248.8	388.4	509.1	0.30	-0.28	1.47	1.5	-2.0
7,381.0	3.65	51.61	7,343.6	392.3	513.9	0.19	-0.18	0.93	-4.7	-2.0
7,476.0	3.65	49.85	7,438.4	396.1	518.6	0.12	0.00	-1.85	-10.6	-2.3
7,571.0	2.29	54.51	7,533.2	399.2	522.4	1.45	-1.43	4.91	-15.7	-1.1
7,666.0	1.23	85.09	7,628.2	400.4	525.0	1.45	-1.12	32.19	-16.7	8.0
7,762.0	1.45	88.08	7,724.2	400.5	527.2	0.24	0.23	3.11	-18.5	8.9
7,857.0	1.32	95.73	7,819.1	400.4	529.5	0.24	-0.14	8.05	-19.5	11.4
7,952.0	1.14	107.94	7,914.1	400.0	531.5	0.33	-0.19	12.85	-18.6	15.5
8,048.0	0.84	242.68	8,010.1	399.4	531.8	1.91	-0.31	140.35	24.1	3.0



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8,143.0	1.41	256.22	8,105.1	398.8	530.0	0.68	0.80	14.25	22.3	-2.6
8,238.0	1.54	254.98	8,200.1	398.2	527.7	0.14	0.14	-1.31	19.9	-2.1
8,334.0	1.49	256.39	8,298.0	397.6	525.2	0.06	-0.05	1.47	17.3	-2.6
8,429.0	1.49	251.47	8,391.0	396.9	522.8	0.13	0.00	-5.18	15.0	-1.2
8,524.0	1.54	252.08	8,488.0	396.1	520.5	0.06	0.05	0.64	12.5	-1.3
8,620.0	1.67	248.13	8,581.9	395.2	517.9	0.18	0.14	-4.11	9.9	-0.6
8,715.0	1.67	246.48	8,676.9	394.1	515.4	0.05	0.00	-1.76	7.1	-0.3
8,811.0	1.71	245.49	8,772.8	393.0	512.8	0.05	0.04	-1.01	4.3	-0.2
8,906.0	1.54	245.05	8,867.8	391.9	510.4	0.18	-0.18	-0.46	1.6	-0.2
9,001.0	1.38	230.29	8,962.8	390.6	508.3	0.43	-0.19	-15.54	-0.8	-0.1
9,096.0	0.84	232.66	9,057.7	389.4	508.9	0.55	-0.55	2.49	-2.6	0.0
9,192.0	0.97	239.52	9,153.7	388.6	505.6	0.18	0.14	7.15	-4.1	0.4
9,288.0	1.10	233.80	9,249.7	387.7	504.2	0.17	0.14	-5.96	-5.8	-0.1
9,383.0	1.14	241.71	9,344.7	386.7	502.6	0.17	0.04	8.33	-7.7	0.8
9,478.0	0.53	228.71	9,439.7	385.9	501.5	0.67	-0.84	-13.68	-8.0	-1.2
9,574.0	1.05	181.70	9,535.7	384.8	501.0	0.73	0.54	-38.55	-7.7	-6.6
9,669.0	2.02	218.16	9,630.6	382.6	499.7	1.24	1.02	27.85	-12.3	-2.1
9,764.0	2.15	239.96	9,725.6	380.4	497.2	0.84	0.14	22.95	-15.5	3.3
9,810.0	2.24	242.15	9,771.6	379.5	495.6	0.27	0.20	4.76	-17.2	3.9
9,902.0	2.42	244.52	9,863.5	377.9	492.3	0.22	0.20	2.58	-20.7	4.7
9,998.0	3.82	182.74	9,957.4	373.9	490.3	3.64	1.49	-65.72	-18.0	-17.8
10,091.0	14.81	188.10	10,051.0	358.7	488.5	11.59	11.57	5.64	-34.7	-16.2
10,186.0	20.92	167.27	10,141.4	330.0	490.5	9.21	6.43	-21.93	-48.5	-30.2
10,281.0	30.46	169.73	10,226.9	289.7	488.6	10.10	10.04	2.59	-68.7	-22.8
10,376.0	37.67	173.42	10,305.6	237.1	508.2	7.89	7.59	3.88	-84.9	-11.9
10,471.0	41.85	177.82	10,378.6	176.6	510.7	5.30	4.40	4.63	-91.3	-2.0
10,566.0	48.48	179.93	10,445.6	109.2	512.0	7.15	6.98	2.22	-87.4	1.2



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10,661.0	60.04	179.31	10,501.0	32.3	512.5	12.18	12.17	-0.65	-80.0	0.7
10,755.0	66.77	177.64	10,543.0	-51.7	514.8	7.33	7.16	-1.78	-69.8	1.9
10,850.0	72.31	176.32	10,576.2	-140.5	519.5	5.97	5.83	-1.39	-52.1	6.5
10,945.0	77.23	178.87	10,601.2	-232.1	523.3	5.79	5.18	2.68	-28.5	9.9
11,038.0	85.67	181.60	10,615.0	-324.0	522.9	9.53	9.08	2.94	-14.4	8.6
11,132.0	88.40	182.65	10,619.9	-417.8	519.4	3.11	2.90	1.12	-9.2	4.4
11,227.0	88.22	182.56	10,622.7	-512.6	515.1	0.21	-0.19	-0.09	-6.0	-0.6
11,322.0	88.48	182.83	10,625.4	-607.5	510.6	0.39	0.27	0.28	-3.0	-5.7
11,417.0	88.79	180.81	10,627.7	-702.4	507.8	2.15	0.33	-2.13	-0.3	-9.5
11,512.0	89.05	180.37	10,628.4	-797.4	506.7	0.54	0.27	-0.46	1.8	-11.2
11,607.0	89.32	180.10	10,630.8	-892.4	506.3	0.40	0.28	-0.28	3.5	-12.2
11,702.0	89.60	180.01	10,631.5	-987.4	506.2	0.51	0.51	-0.09	4.6	-13.0
11,797.0	90.59	180.28	10,631.2	-1,082.4	505.9	0.88	0.83	0.28	4.7	-14.0
11,892.0	87.38	179.14	10,632.9	-1,177.3	506.4	3.59	-3.38	-1.20	6.7	-14.2
11,987.0	87.69	179.57	10,637.0	-1,272.2	507.5	0.56	0.33	0.45	11.2	-13.8
12,081.0	87.69	179.22	10,640.8	-1,368.2	508.5	0.37	0.00	-0.37	15.3	-13.6
12,177.0	88.00	179.31	10,644.4	-1,462.1	509.7	0.34	0.32	0.09	19.3	-13.0
12,272.0	88.00	179.40	10,647.7	-1,557.0	510.8	0.09	0.00	0.09	23.0	-12.7
12,367.0	89.01	177.90	10,650.2	-1,652.0	513.0	1.90	1.06	-1.58	25.8	-11.1
12,462.0	89.58	177.73	10,651.3	-1,746.9	516.6	0.63	0.60	-0.18	27.3	-8.2
12,556.0	89.36	177.47	10,652.2	-1,840.8	520.8	0.36	-0.23	-0.28	28.8	-5.0
12,651.0	89.41	177.20	10,653.2	-1,935.7	525.0	0.29	0.05	-0.28	29.9	-1.3
12,746.0	89.10	177.03	10,654.5	-2,030.6	529.8	0.37	-0.33	-0.18	31.6	2.8
12,841.0	91.60	178.70	10,653.9	-2,125.5	533.3	3.16	2.63	1.76	31.8	5.7
12,936.0	92.00	178.70	10,650.9	-2,220.4	535.5	0.42	0.42	0.00	29.6	7.1
13,031.0	93.58	178.87	10,646.3	-2,315.3	537.5	1.67	1.66	0.18	25.8	8.4
13,127.0	92.04	180.54	10,641.6	-2,411.1	538.0	2.36	-1.60	1.74	21.9	8.2



Midland PVA

Company: EOG Resources - Midland  
 Project: Lea County, NM (NAD 83 NME)  
 Site: Savage 2 State Com  
 Well: #506H  
 Wellbore: OH  
 Design: OH

Local Co-ordinate Reference: Well #506H  
 TVD Reference: KB = 25' @ 3555.0usft  
 MD Reference: KB = 25' @ 3555.0usft  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 5000.14

Survey

MD (usft)	Inc (")	Azd (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
13,222.0	92.40	181.33	10,637.9	-2,508.1	538.4	0.91	0.38	0.83	19.0	6.0
13,318.0	89.88	181.16	10,635.9	-2,602.0	534.3	2.53	-2.52	-0.18	17.8	3.2
13,413.0	90.33	181.42	10,635.6	-2,697.0	532.2	0.46	0.37	0.27	18.3	0.3
13,508.0	90.99	181.68	10,634.5	-2,791.9	529.8	0.75	0.89	0.27	18.0	-3.0
13,603.0	89.58	182.12	10,634.1	-2,886.9	526.5	1.55	-1.48	0.46	18.3	-8.8
13,698.0	89.27	181.33	10,635.0	-2,981.8	523.6	0.89	-0.33	-0.83	20.1	-10.4
13,794.0	89.80	181.51	10,635.8	-3,077.8	521.2	0.58	0.55	0.19	21.8	-13.5
13,889.0	91.08	179.66	10,635.1	-3,172.8	520.3	2.37	1.35	-1.95	21.7	-15.1
13,983.0	92.04	179.14	10,632.5	-3,266.7	521.2	1.16	1.02	-0.55	20.0	-14.9
14,078.0	90.51	179.14	10,630.4	-3,361.7	522.7	1.81	-1.81	0.00	18.9	-14.1
14,173.0	91.03	179.40	10,629.1	-3,456.7	523.9	0.61	0.55	0.27	18.6	-13.8
14,268.0	89.49	178.61	10,628.7	-3,551.7	525.5	1.82	-1.82	-0.83	19.2	-12.7
14,363.0	89.27	178.17	10,629.7	-3,646.6	528.2	0.52	-0.23	-0.46	21.2	-10.7
14,457.0	89.10	177.64	10,631.1	-3,740.8	531.6	0.59	-0.18	-0.56	23.5	-8.0
14,552.0	88.79	177.38	10,632.8	-3,835.5	535.8	0.43	-0.33	-0.27	26.3	-4.8
14,647.0	89.41	177.20	10,634.3	-3,930.3	540.3	0.68	0.65	-0.19	28.8	-0.8
14,743.0	89.76	177.38	10,635.0	-4,026.2	544.8	0.41	0.36	0.19	30.5	3.1
14,838.0	90.46	177.82	10,634.8	-4,121.1	548.8	0.87	0.74	0.46	31.3	6.3
14,933.0	90.73	178.26	10,633.8	-4,216.1	552.0	0.54	0.28	0.46	31.2	8.9
15,028.0	91.34	178.43	10,632.1	-4,311.0	554.8	0.87	0.64	0.18	30.4	10.9
15,123.0	91.78	179.84	10,629.5	-4,406.0	558.2	1.55	0.46	1.48	28.8	11.7
15,218.0	90.99	180.98	10,627.2	-4,500.9	555.5	1.46	-0.83	1.20	27.1	10.3
15,313.0	91.82	181.24	10,624.9	-4,595.9	553.7	0.92	0.87	0.27	25.6	7.7
15,382.0	92.26	181.33	10,622.4	-4,684.8	552.1	0.85	0.64	0.13	23.8	5.7
15,443.0	92.26	181.33	10,620.0	-4,725.8	550.7	0.00	0.00	0.00	21.9	3.8





Midland PVA

<b>Company:</b>	EOG Resources - Midland	<b>Local Co-ordinate Reference:</b>	Well #506H
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>TVD Reference:</b>	KB = 25' @ 3555.0usft
<b>Site:</b>	Savage 2 State Com	<b>MD Reference:</b>	KB = 25' @ 3555.0usft
<b>Well:</b>	#506H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.14

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
9,940.0	9,901.4	376.8	491.1	KOP, MD:9940.0', TVD:9901.4',N/S:376.8', E/W:491.1', INC:2.56
10,153.0	10,110.4	341.0	488.6	FTP Crossing, MD:10153.0', TVD:10110.4',N/S:341.0', E/W:488.6', INC:18.57
15,382.0	10,622.4	-4,664.8	552.1	Last MWD Survey (MD=15382.0')
15,443.0	10,620.0	-4,725.6	550.7	Projection to Bit (MD=15443.0')

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



Lea County, NM (NAD 83 NME)

Savage 2 State Com #506H

Plan #1

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

Geodetic System: US State Plane 1083  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone  
 System Datum: Mean Sea Level

WELL DETAILS: #506H

KB = 25' @ 3555.0usR 3630.0  
 Northing 424675.00 Easting 784577.00 Latitude 32° 9' 56.278 N Longitude 103° 38' 35.131 W

To convert a Magnetic Direction to a Grid Direction, Add 6.43°  
 To convert a Magnetic Direction to a True Direction, Add 6.80° East  
 To convert a True Direction to a Grid Direction, Subtract 0.37°

SECTION DETAILS

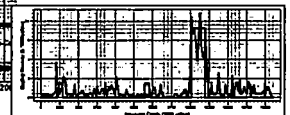
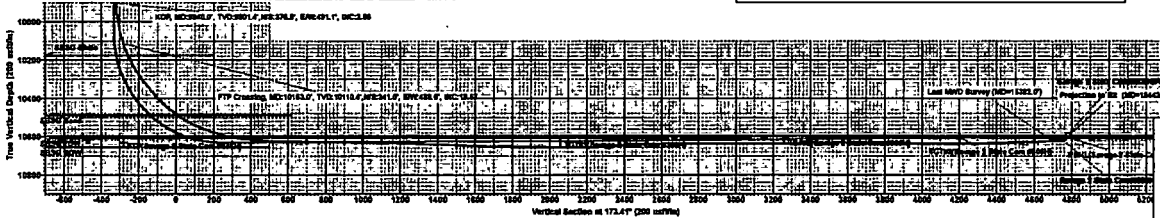
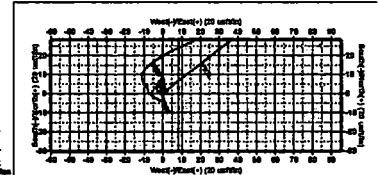
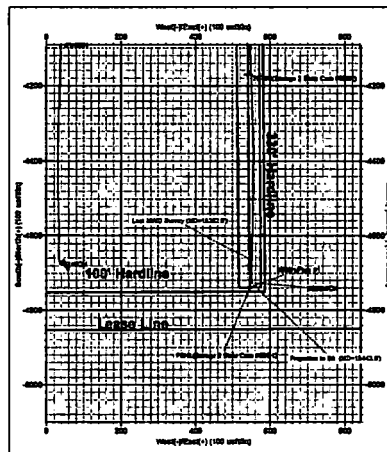
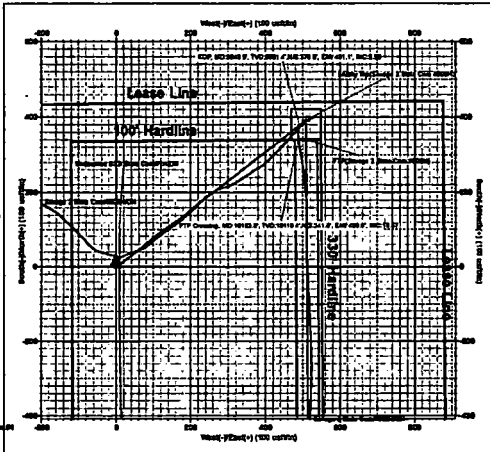
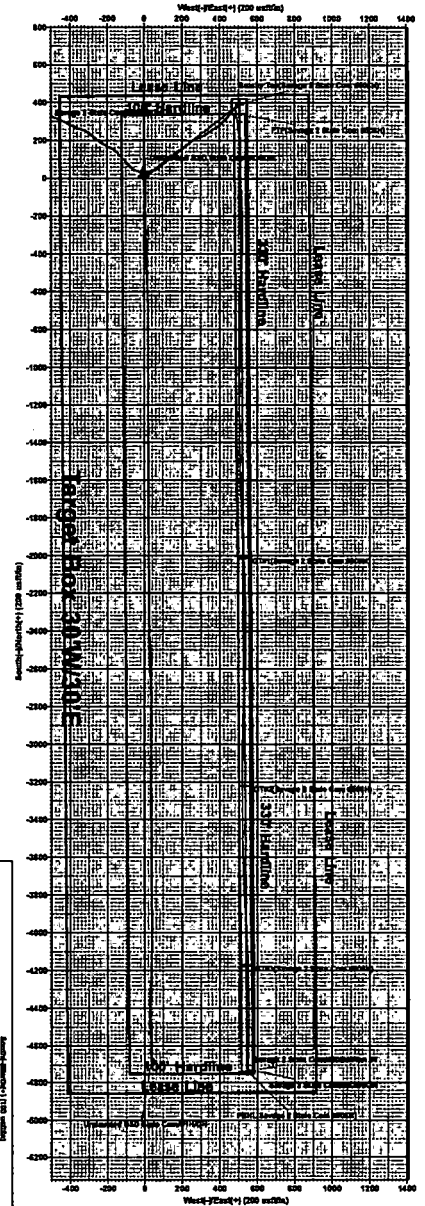
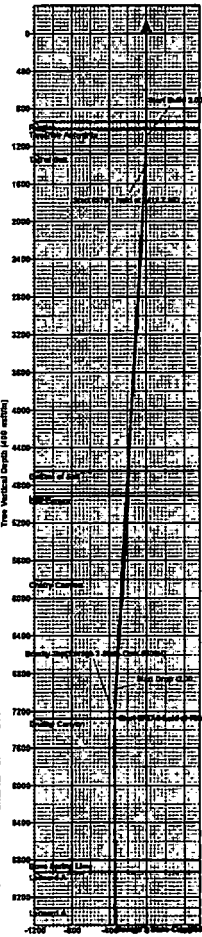
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Target
2	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	1412.7	6.25	52.47	1412.1	10.4	13.5	2.00	52.47	-8.8	
4	6991.7	6.25	52.47	6957.9	380.6	495.5	0.00	0.00	-321.3	Brushy Top(Savage 2 State Com #506H)
5	7304.4	0.00	0.00	7270.0	391.0	509.0	2.00	180.00	-330.0	
6	10091.4	0.00	0.00	10057.0	391.0	509.0	0.00	0.00	-330.0	
7	10993.6	90.22	179.58	10630.0	-184.1	513.3	10.00	179.58	241.8	
8	12819.4	90.22	179.58	10623.0	-2009.8	526.6	0.00	0.00	2057.0	TGT#1(Savage 2 State Com #506H)
9	12832.2	90.48	179.58	10622.9	-2022.7	526.9	2.00	0.00	2089.7	
10	14028.4	90.48	179.58	10613.0	-3218.8	535.7	0.00	0.00	3259.0	TGT#2(Savage 2 State Com #506H)
11	14034.8	90.60	179.58	10612.9	-3225.2	535.8	2.00	0.00	3285.3	
12	14980.0	90.60	179.58	10603.0	-4170.3	542.8	0.00	0.00	4205.0	TGT#3(Savage 2 State Com #506H)
13	14984.9	90.50	179.58	10603.0	-4175.2	542.8	2.00	-180.00	4209.9	
14	15547.8	90.50	179.58	10598.0	-4738.0	547.0	0.00	0.00	4769.5	PBHL(Savage 2 State Com #506H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Savage 2 State Com #506H)	7270.0	391.0	608.0	425068.00	785068.00
PBHL(Savage 2 State Com #506H)	10598.0	-4738.0	547.0	418937.00	785134.00
TGT#1(Savage 2 State Com #506H)	10603.0	-4170.3	542.8	420504.70	785119.79
TGT#2(Savage 2 State Com #506H)	10613.0	-3218.8	535.7	424498.30	785112.14
TGT#3(Savage 2 State Com #506H)	10623.0	-2009.8	526.6	422845.30	785103.79
FTP(Savage 2 State Com #506H)	10831.0	341.0	609.0	425018.00	785068.00



Vertical Section at 173.47° (200 units)