

**McVAY DRILLING COMPANY**

P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

HOBBS OCD
DEC 22 2016
RECEIVED

Well Name and Num: Vitalizer State #1H
Location: Sec 33, T21S, R34E
Operator: GMT
Drilling Contractor: McVay Drilling Company

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.70	160	0.40	6006	77.71	11162		
0.50	595	0.66	6485	90.50	11405		
0.90	1023	0.57	6964	90.02	11961		
1.00	1492	0.66	7445	90.89	12437		
0.70	1836	0.62	7829	90.90	12818		
1.05	1891	0.26	8309	91.11	13199		
1.76	2272	0.79	8787	95.88	13579		
1.36	2748	1.19	9072	93.53	13960		
1.19	3119	0.79	9452	92.32	14340		
2.24	3320	0.75	9832	91.75	14186		
0.88	3606	1.71	10289	90.85	14911		
0.31	3988	8.92	10402	89.35	15271		
0.84	4275	23.38	10497				
1.01	4561	32.00	10592				
1.62	4762	45.19	10687				
1.01	5037	59.91	10940				
1.32	5237	72.26	11144				

By: Mario A. Camacho

Subscribed and sworn to before me this 19th day of August, 2016

Tina Flemens
Notary Public, Lea County, New Mexico





GMT
Exploration Company LLC

GMT Exploration

Lea County, NM (NAD 83)

Vitalizer State #1H

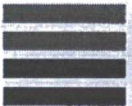
Vitalizer State #1H

Vitalizer State #1H

Survey: Survey #1

Standard Survey Report

11 August, 2016

 **NEWSCO**

Company:	GMT Exploration	Local Co-ordinate Reference:	Well Vitalizer State #1H
Project:	Lea County, NM (NAD 83)	TVD Reference:	WELL @ 3702.00ft (Original Well Elev)
Site:	Vitalizer State #1H	MD Reference:	WELL @ 3702.00ft (Original Well Elev)
Well:	Vitalizer State #1H	North Reference:	Grid
Wellbore:	Vitalizer State #1H	Survey Calculation Method:	Minimum Curvature
Design:	Vitalizer State #1H	Database:	EDM 5000.1 Single User Db

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

Site	Vitalizer State #1H				
Site Position:		Northing:	525,597.87 usft	Latitude:	32° 26' 31.410 N
From:	Lat/Long	Easting:	803,878.24 usft	Longitude:	103° 28' 56.280 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16"	Grid Convergence:	0.46 °

Well	Vitalizer State #1H					
Well Position	+N/-S	0.00 ft	Northing:	525,597.87 usft	Latitude:	32° 26' 31.410 N
	+E/-W	0.00 ft	Easting:	803,878.24 usft	Longitude:	103° 28' 56.280 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,682.00 ft

Wellbore	Vitalizer State #1H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/13/16	7.03	80.29	48,171

Design	Vitalizer State #1H			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.51

Survey Program	Date 08/11/16			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
77.00	15,341.00	Survey #1 (Vitalizer State #1H)	MWD	OWSG MWD - Standard

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
77.00	0.30	103.30	77.00	-0.05	0.20	0.05	0.39	0.39	0.00	
160.00	0.70	103.00	160.00	-0.21	0.90	0.22	0.48	0.48	-0.36	
235.00	0.70	146.80	234.99	-0.70	1.60	0.71	0.70	0.00	58.40	
327.00	0.80	136.80	326.98	-1.64	2.35	1.66	0.18	0.11	-10.87	
419.00	0.40	88.80	418.98	-2.10	3.11	2.12	0.66	-0.43	-52.17	
507.00	0.80	90.80	506.97	-2.10	4.03	2.13	0.48	0.45	2.27	
595.00	0.50	80.80	594.97	-2.05	5.02	2.09	0.36	-0.34	-11.36	
680.00	0.70	105.80	679.96	-2.13	5.89	2.18	0.38	0.24	29.41	
770.00	0.60	108.80	769.96	-2.43	6.66	2.49	0.12	-0.11	3.33	
833.00	0.40	84.80	832.96	-2.52	7.39	2.58	0.45	-0.32	-38.10	
928.00	0.70	59.80	927.95	-2.19	8.23	2.26	0.40	0.32	-26.32	
1,023.00	0.90	98.90	1,022.94	-2.02	9.46	2.10	0.60	0.21	41.16	

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Wellbore:	Vitalizer State #1H	Survey Calculation Method:	Minimum Curvature
Design:	Vitalizer State #1H	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,117.00	0.90	113.80	1,116.93	-2.43	10.87	2.52	0.25	0.00	15.85
1,196.00	0.50	84.00	1,195.92	-2.64	11.78	2.74	0.67	-0.51	-37.72
1,302.00	1.20	96.00	1,301.91	-2.71	13.34	2.83	0.68	0.66	11.32
1,397.00	0.80	70.00	1,396.90	-2.59	14.96	2.72	0.63	-0.42	-27.37
1,492.00	1.00	95.00	1,491.89	-2.43	16.41	2.57	0.46	0.21	26.32
1,587.00	1.20	112.00	1,586.87	-2.88	18.15	3.03	0.40	0.21	17.89
1,690.00	0.70	101.80	1,689.86	-3.41	19.77	3.58	0.51	-0.49	-9.90
1,891.00	1.05	78.55	1,890.83	-3.30	22.78	3.49	0.24	0.17	-11.57
1,986.00	1.58	75.21	1,985.81	-2.79	24.90	3.00	0.56	0.56	-3.52
2,081.00	2.37	81.01	2,080.75	-2.15	28.10	2.39	0.86	0.83	6.11
2,176.00	2.42	67.48	2,175.67	-1.07	31.89	1.35	0.60	0.05	-14.24
2,272.00	1.76	51.66	2,271.60	0.62	34.92	-0.32	0.91	-0.69	-16.48
2,367.00	0.18	7.19	2,366.59	1.67	36.09	-1.36	1.72	-1.68	-46.81
2,462.00	0.92	265.06	2,461.58	1.75	35.35	-1.45	1.03	0.78	-107.51
2,558.00	1.05	281.98	2,557.57	1.56	33.71	-1.28	0.15	0.14	-3.21
2,653.00	0.92	269.27	2,652.56	1.43	32.08	-1.16	0.19	-0.14	7.67
2,748.00	1.36	258.11	2,747.54	1.19	30.22	-0.93	0.52	0.46	-11.75
2,843.00	1.67	257.76	2,842.50	0.66	27.76	-0.43	0.33	0.33	-0.37
2,939.00	0.97	232.71	2,938.48	-0.12	25.75	0.34	0.93	-0.73	-26.09
3,034.00	1.23	207.66	3,033.46	-1.51	24.63	1.72	0.57	0.27	-26.37
3,129.00	1.19	178.31	3,128.44	-3.40	24.19	3.61	0.65	-0.04	-30.89
3,225.00	1.14	133.57	3,224.42	-5.06	24.91	5.27	0.92	-0.05	-46.60
3,320.00	2.24	107.82	3,319.38	-6.28	27.36	6.51	1.38	1.16	-27.11
3,416.00	2.07	118.98	3,415.31	-7.69	30.67	7.95	0.47	-0.18	11.63
3,511.00	0.75	144.47	3,510.28	-9.03	32.53	9.31	1.51	-1.39	26.83
3,606.00	0.88	107.64	3,605.27	-9.76	33.58	10.04	0.56	0.14	-38.77
3,702.00	1.49	103.51	3,701.25	-10.27	35.50	10.57	0.64	0.64	-4.30
3,798.00	2.15	99.12	3,797.20	-10.85	38.49	11.18	0.70	0.69	-4.57
3,893.00	0.79	116.26	3,892.17	-11.42	40.84	11.77	1.49	-1.43	18.04
3,988.00	0.31	81.54	3,987.17	-11.67	41.68	12.03	0.59	-0.51	-36.55
4,084.00	0.35	115.99	4,083.17	-11.76	42.20	12.12	0.21	0.04	35.89
4,179.00	0.70	62.91	4,178.16	-11.63	42.98	11.99	0.59	0.37	-55.87
4,275.00	0.84	59.39	4,274.15	-11.00	44.11	11.38	0.15	0.15	-3.67
4,370.00	0.97	51.57	4,369.14	-10.15	45.34	10.53	0.19	0.14	-8.23
4,465.00	0.48	56.05	4,464.13	-9.42	46.30	9.82	0.52	-0.52	4.72
4,561.00	1.01	358.84	4,560.13	-8.35	46.61	8.75	0.89	0.55	-59.59
4,656.00	2.07	2.97	4,655.09	-5.80	46.68	6.20	1.12	1.12	4.35
4,752.00	0.62	307.42	4,751.06	-3.76	46.36	4.15	1.87	-1.51	-57.86
4,846.00	1.58	237.37	4,845.05	-4.15	44.87	4.53	1.58	1.02	-74.52
4,942.00	1.05	247.13	4,941.02	-5.20	42.94	5.57	0.60	-0.55	10.17
5,037.00	1.01	235.35	5,036.01	-6.02	41.45	6.37	0.23	-0.04	-12.40
5,132.00	1.10	226.12	5,130.99	-7.12	40.10	7.46	0.20	0.09	-9.72
5,227.00	1.32	228.41	5,225.97	-8.48	38.63	8.81	0.24	0.23	2.41
5,323.00	1.76	230.08	5,321.94	-10.16	36.67	10.47	0.46	0.46	1.74
5,387.00	2.11	232.45	5,385.90	-11.51	34.98	11.81	0.56	0.55	3.70
5,483.00	2.99	230.43	5,481.80	-14.18	31.65	14.45	0.92	0.92	-2.10
5,577.00	3.27	227.30	5,575.66	-17.56	27.79	17.80	0.35	0.30	-3.33
5,721.00	3.91	171.80	5,719.42	-25.21	25.47	25.43	2.35	0.44	-38.54
5,815.00	1.85	142.10	5,813.30	-29.58	26.86	29.81	2.64	-2.19	-31.60
5,911.00	1.80	353.39	5,909.28	-29.30	27.64	29.54	3.66	-0.05	-154.91
6,006.00	0.40	309.53	6,004.26	-27.61	27.21	27.84	1.62	-1.47	-46.17
6,102.00	0.40	258.55	6,100.26	-27.46	26.63	27.69	0.36	0.00	-53.10
6,198.00	0.57	248.09	6,196.26	-27.71	25.85	27.93	0.20	0.18	-10.90
6,294.00	0.44	256.57	6,292.25	-27.97	25.05	28.19	0.16	-0.14	8.83

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Wellbore:	Vitalizer State #1H	Survey Calculation Method:	Minimum Curvature
Design:	Vitalizer State #1H	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,389.00	0.62	240.89	6,387.25	-28.31	24.25	28.51	0.24	0.19	-16.51	
6,485.00	0.66	226.56	6,483.24	-28.94	23.39	29.14	0.17	0.04	-14.93	
6,581.00	0.57	228.32	6,579.24	-29.64	22.64	29.83	0.10	-0.09	1.83	
6,676.00	0.53	235.09	6,674.23	-30.20	21.92	30.39	0.08	-0.04	7.13	
6,772.00	0.70	254.42	6,770.23	-30.62	20.99	30.79	0.28	0.18	20.14	
6,868.00	0.48	261.80	6,866.22	-30.83	20.03	31.00	0.24	-0.23	7.69	
6,964.00	0.57	237.28	6,962.22	-31.15	19.23	31.31	0.25	0.09	-25.54	
7,060.00	0.57	256.79	7,058.22	-31.51	18.36	31.67	0.20	0.00	20.32	
7,156.00	0.44	257.94	7,154.21	-31.70	17.54	31.85	0.14	-0.14	1.20	
7,252.00	0.48	234.82	7,250.21	-32.01	16.85	32.15	0.20	0.04	-24.08	
7,349.00	0.40	225.68	7,347.21	-32.48	16.28	32.62	0.11	-0.08	-9.42	
7,445.00	0.66	211.00	7,443.20	-33.19	15.75	33.32	0.30	0.27	-15.29	
7,541.00	0.57	226.38	7,539.20	-33.99	15.12	34.12	0.20	-0.09	16.02	
7,637.00	0.62	216.10	7,635.19	-34.74	14.47	34.86	0.12	0.05	-10.71	
7,733.00	0.70	204.68	7,731.18	-35.69	13.92	35.81	0.16	0.08	-11.90	
7,829.00	0.62	189.91	7,827.18	-36.74	13.58	36.85	0.20	-0.08	-15.39	
7,925.00	0.53	175.76	7,923.17	-37.69	13.53	37.80	0.17	-0.09	-14.74	
8,021.00	0.31	233.42	8,019.17	-38.29	13.35	38.40	0.47	-0.23	60.06	
8,117.00	0.48	229.46	8,115.17	-38.70	12.84	38.81	0.18	0.18	-4.13	
8,214.00	0.26	224.10	8,212.17	-39.13	12.38	39.23	0.23	-0.23	-5.53	
8,309.00	0.26	237.37	8,307.17	-39.40	12.04	39.50	0.06	0.00	13.97	
8,404.00	0.26	175.50	8,402.16	-39.73	11.88	39.83	0.28	0.00	-65.13	
8,501.00	0.22	154.84	8,499.16	-40.12	11.98	40.22	0.10	-0.04	-21.30	
8,596.00	0.35	151.77	8,594.16	-40.54	12.19	40.64	0.14	0.14	-3.23	
8,692.00	0.57	126.10	8,690.16	-41.08	12.72	41.18	0.31	0.23	-26.74	
8,787.00	0.79	117.05	8,785.15	-41.65	13.68	41.77	0.26	0.23	-9.53	
8,882.00	1.10	134.98	8,880.14	-42.60	14.91	42.72	0.45	0.33	18.87	
8,977.00	0.84	129.97	8,975.13	-43.69	16.09	43.82	0.29	-0.27	-5.27	
9,072.00	1.19	124.08	9,070.11	-44.69	17.44	44.83	0.38	0.37	-6.20	
9,167.00	0.84	31.36	9,165.10	-44.65	18.62	44.80	1.57	-0.37	-97.60	
9,262.00	0.75	44.45	9,260.09	-43.61	19.42	43.77	0.21	-0.09	13.78	
9,357.00	0.84	45.86	9,355.08	-42.68	20.35	42.85	0.10	0.09	1.48	
9,452.00	0.79	90.59	9,450.07	-42.20	21.50	42.38	0.65	-0.05	47.08	
9,547.00	0.92	127.86	9,545.06	-42.68	22.76	42.87	0.59	0.14	39.23	
9,642.00	1.10	147.28	9,640.05	-43.91	23.86	44.11	0.40	0.19	20.44	
9,737.00	1.54	178.75	9,735.03	-45.95	24.38	46.18	0.88	0.46	33.13	
9,832.00	0.75	269.19	9,830.01	-47.24	23.78	47.44	1.81	-0.83	95.20	
9,928.00	0.31	12.02	9,924.01	-47.00	23.22	47.20	0.93	-0.47	109.39	
10,021.00	0.88	120.56	10,019.01	-47.12	23.90	47.32	1.08	0.60	114.25	
10,116.00	1.14	96.31	10,113.99	-47.59	25.47	47.81	0.52	0.27	-25.53	
10,211.00	1.45	100.53	10,208.97	-47.92	27.59	48.15	0.34	0.33	4.44	
10,289.00	1.71	108.44	10,286.94	-48.47	29.67	48.72	0.43	0.33	10.14	
10,402.00	8.92	165.04	10,399.42	-57.48	33.53	57.76	7.17	6.38	50.09	
10,497.00	23.38	164.16	10,490.42	-82.86	40.82	83.20	15.22	15.22	-0.93	
10,592.00	32.00	179.36	10,574.57	-126.30	46.06	126.69	11.67	9.07	16.00	
10,687.00	45.19	184.02	10,648.67	-185.36	43.97	185.73	14.21	13.88	4.91	
10,719.00	44.88	184.02	10,671.28	-207.94	42.38	208.30	0.97	-0.97	0.00	
10,750.00	44.18	184.28	10,693.38	-229.63	40.81	229.97	2.33	-2.26	0.84	
10,782.00	45.36	183.58	10,716.10	-252.11	39.27	252.43	4.00	3.69	-2.19	
10,854.00	49.76	184.11	10,764.68	-305.11	35.70	305.40	6.14	6.11	0.74	
10,877.00	51.38	183.32	10,779.28	-322.84	34.55	323.12	7.53	7.04	-3.43	
10,922.00	57.49	181.91	10,805.45	-359.39	32.89	359.65	13.81	13.58	-3.13	
10,940.00	59.91	181.38	10,814.80	-374.76	32.45	375.02	13.68	13.44	-2.94	
10,969.00	63.03	180.51	10,828.65	-400.23	32.04	400.49	11.08	10.76	-3.00	

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Survey

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11,016.00	63.60	180.15	10,849.75	-442.23	31.79	442.48	1.39	1.21	-0.77
11,067.00	69.32	182.18	10,870.12	-488.95	30.83	489.19	11.79	11.22	3.98
11,114.00	72.26	182.00	10,885.58	-533.30	29.21	533.53	6.27	6.26	-0.38
11,162.00	77.71	180.42	10,898.01	-579.63	28.24	579.85	11.79	11.35	-3.29
11,209.00	78.07	179.98	10,907.87	-625.58	28.08	625.80	1.19	0.77	-0.94
11,254.00	82.29	179.89	10,915.54	-669.91	28.13	670.13	9.38	9.38	-0.20
11,305.00	84.26	178.92	10,921.52	-720.56	28.66	720.77	4.30	3.86	-1.90
11,349.00	89.80	179.80	10,923.79	-764.48	29.14	764.70	12.75	12.59	2.00
11,405.00	90.48	179.36	10,923.66	-820.47	29.56	820.70	1.45	1.21	-0.79
11,485.00	90.89	179.43	10,922.70	-900.46	30.40	900.89	0.52	0.51	0.09
11,581.00	90.95	179.19	10,921.16	-996.44	31.56	996.68	0.26	0.06	-0.25
11,676.00	90.78	179.47	10,919.73	-1,091.43	32.67	1,091.67	0.34	-0.18	0.29
11,771.00	90.84	179.42	10,918.38	-1,186.41	33.59	1,186.66	0.08	0.06	-0.05
11,866.00	90.89	179.51	10,916.95	-1,281.40	34.47	1,281.65	0.11	0.05	0.09
11,961.00	90.82	179.92	10,915.53	-1,376.39	34.95	1,376.63	0.44	-0.07	0.43
12,057.00	90.89	179.83	10,914.10	-1,472.38	35.16	1,472.62	0.12	0.07	-0.09
12,152.00	90.89	180.14	10,912.62	-1,567.36	35.18	1,567.61	0.33	0.00	0.33
12,247.00	90.87	180.15	10,911.16	-1,662.35	34.94	1,662.59	0.02	-0.02	0.01
12,342.00	90.85	179.77	10,909.74	-1,757.34	35.01	1,757.58	0.40	-0.02	-0.40
12,437.00	90.89	179.93	10,908.30	-1,852.33	35.26	1,852.56	0.17	0.04	0.17
12,532.00	90.89	179.51	10,906.82	-1,947.32	35.72	1,947.55	0.44	0.00	-0.44
12,628.00	90.87	179.31	10,905.35	-2,043.30	36.71	2,043.54	0.21	-0.02	-0.21
12,723.00	90.95	179.12	10,903.84	-2,138.28	38.01	2,138.53	0.22	0.08	-0.20
12,818.00	90.90	179.13	10,902.30	-2,233.26	39.46	2,233.51	0.05	-0.05	0.01
12,913.00	90.90	178.97	10,900.81	-2,328.23	41.03	2,328.50	0.17	0.00	-0.17
13,008.00	90.91	179.19	10,899.31	-2,423.21	42.56	2,423.48	0.23	0.01	0.23
13,104.00	90.87	179.83	10,897.82	-2,519.19	43.38	2,519.47	0.67	-0.04	0.67
13,199.00	91.11	181.12	10,896.18	-2,614.17	42.59	2,614.44	1.38	0.25	1.36
13,294.00	92.82	182.64	10,892.92	-2,709.06	39.48	2,709.30	2.41	1.80	1.60
13,389.00	93.86	184.02	10,887.38	-2,803.73	33.97	2,803.92	1.82	1.09	1.45
13,484.00	95.33	185.50	10,879.77	-2,898.10	26.11	2,898.21	2.19	1.55	1.56
13,579.00	95.88	184.56	10,870.50	-2,992.28	17.83	2,992.32	1.14	0.58	-0.99
13,674.00	97.24	179.48	10,859.64	-3,086.56	14.49	3,086.57	5.50	1.43	-5.35
13,769.00	95.83	175.23	10,848.82	-3,180.82	18.85	3,180.87	4.69	-1.48	-4.47
13,864.00	93.72	174.96	10,840.91	-3,275.14	26.95	3,275.25	2.24	-2.22	-0.28
13,960.00	93.53	176.85	10,834.84	-3,370.70	33.79	3,370.86	1.97	-0.20	1.97
14,055.00	92.63	178.89	10,829.74	-3,465.49	37.31	3,465.68	2.34	-0.95	2.15
14,150.00	92.91	179.67	10,825.14	-3,560.37	38.51	3,560.57	0.87	0.29	0.82
14,245.00	92.80	180.14	10,820.41	-3,655.25	38.86	3,655.45	0.51	-0.12	0.49
14,340.00	92.32	180.08	10,816.17	-3,750.16	38.48	3,750.35	0.51	-0.51	-0.06
14,435.00	92.36	180.17	10,812.29	-3,845.08	38.27	3,845.26	0.10	0.04	0.09
14,531.00	92.38	180.68	10,808.32	-3,940.99	37.56	3,941.17	0.53	0.02	0.53
14,626.00	92.16	181.44	10,804.56	-4,035.90	35.81	4,036.06	0.83	-0.23	0.80
14,721.00	91.90	181.45	10,801.19	-4,130.81	33.41	4,130.94	0.27	-0.27	0.01
14,816.00	91.75	181.37	10,798.17	-4,225.73	31.08	4,225.84	0.18	-0.16	-0.08
14,911.00	90.85	180.14	10,796.01	-4,320.70	29.82	4,320.79	1.60	-0.95	-1.29
15,006.00	89.33	179.89	10,795.86	-4,415.69	29.80	4,415.79	1.62	-1.60	-0.26
15,101.00	89.35	179.13	10,796.96	-4,510.68	30.61	4,510.78	0.80	0.02	-0.80
15,197.00	89.37	178.86	10,798.03	-4,606.66	32.30	4,606.77	0.28	0.02	-0.28
LAST SVY									
15,271.00	89.35	178.91	10,798.86	-4,680.64	33.74	4,680.76	0.07	-0.03	0.07
PROJ SVY									
15,341.00	89.35	178.91	10,799.65	-4,750.63	35.07	4,750.75	0.00	0.00	0.00

Company:	GMT Exploration	Local Co-ordinate Reference:	Well Vitalizer State #1H
Project:	Lea County, NM (NAD 83)	TVD Reference:	WELL @ 3702.00ft (Original Well Elev)
Site:	Vitalizer State #1H	MD Reference:	WELL @ 3702.00ft (Original Well Elev)
Well:	Vitalizer State #1H	North Reference:	Grid
Wellbore:	Vitalizer State #1H	Survey Calculation Method:	Minimum Curvature
Design:	Vitalizer State #1H	Database:	EDM 5000.1 Single User Db

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
PBHL Vitalizer State #1I	0.00	0.00	10,680.00	-4,750.75	40.42	520,847.14	803,918.66	32° 25' 44.400 N	103° 28' 56.250 W
- survey misses target center by 119.76ft at 15339.86ft MD (10799.64 TVD, -4749.49 N, 35.05 E)									
- Point									

Survey Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
		(ft)	(ft)	
15,271.00	10,798.86	-4,880.64	33.74	LAST SVY
15,341.00	10,799.65	-4,750.63	35.07	PROJ SVY

Checked By: _____ Approved By: _____ Date: _____



Project: Lea County, NM (NAD 83)
Site: Vitalizer State #1H
Well: Vitalizer State #1H
Wellbore: Vitalizer State #1H
Design: Vitalizer State #1H
Latitude: 32° 29' 31.410 N
Longitude: 103° 28' 56.280 W
GL: 3682.00
KB: WELL @ 3702.00ft (Original Well Elev)



WELLBORE TARGET DETAILS (LAT/LONG)

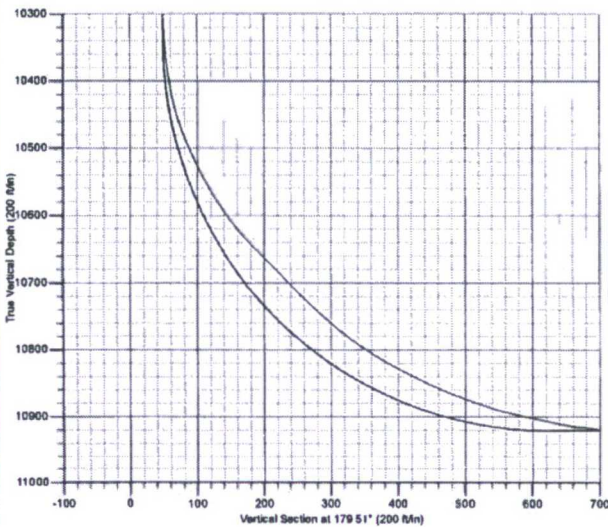
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
PSWL Vitalizer State #1H p3	19880.00	-4750.75	49.42	525547.14	863919.98	32° 29' 31.410 N	103° 28' 56.280 W

WELL DETAILS: Vitalizer State #1H

	+N-S	+E-W	Northing	Ground Level: Easting	Latitude	Longitude	Start
	0.00	0.00	525587.57	863478.24	32° 29' 31.410 N	103° 28' 56.280 W	

SECTION DETAILS

MD	Inc	Asl	TVD	+N-S	+E-W	Dlog	TFace	VSect	Annotation
10280.00	1.71	108.44	10280.00	-48.87	20.87	0.00	0.00	48.72	Start 62.00 hold at 10280.00 MD
10351.00	1.71	108.44	10351.00	-48.87	21.42	0.00	0.00	49.32	Start DLS 10.00 TFO 82.30
10648.27	30.00	187.80	10648.27	-125.81	25.41	10.80	82.30	129.83	Start DLS 10.00 TFO 82.30
11250.50	80.00	179.51	11250.50	-636.00	5.27	10.00	-8.48	638.71	Start 1358.00 hold at 11250.50 MD
12013.50	80.00	179.51	12013.50	-1985.55	16.88	0.00	0.00	1985.52	Start Build 5.00
12894.87	84.71	179.51	12894.87	-2068.01	17.58	5.00	0.00	2068.06	Start 2892.82 hold at 12894.87 MD
15368.00	84.71	179.51	15368.00	-4750.75	49.42	0.00	0.00	4750.52	TD at 15368.00

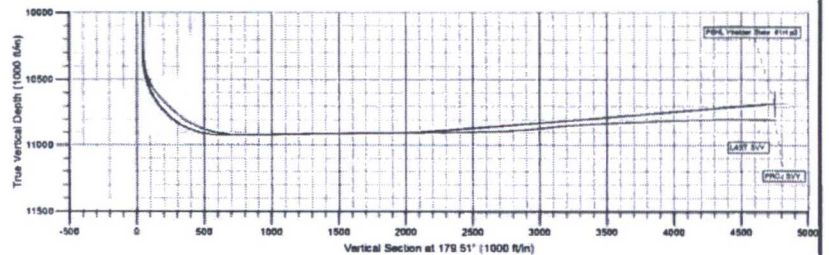


PROJECT DETAILS: Lea County, NM (NAD 83)

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

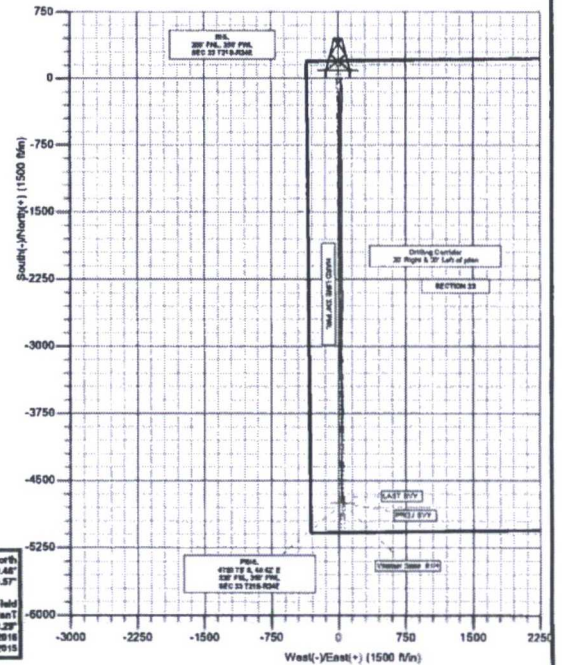


Admission to Grid North
True North: 0.48°
Magnetic North: 0.57°
Magnetic Field
Strength: 48171.1nT
Dip Angle: 60.29°
Date: 07/13/2016
Model: IGRF2015



Survey Survey #1 (Vitalizer State #1H/Vitalizer State #1H)

Created By: TRACY WILLIAMS Date: 7:35, August 11 2016



GMT Exploration Company
Well Bore Schematic - Not to Scale - Horizontal Well

Well Name : Vitalizer State 1H
API No. : 30-025-43234
OGRID No. : 260511
Property Code : 316219
Surface Location : D-33-215-34E
S/T/R : M-33-215-34E
Field : Grama Ridge Bone Spring
Pool Code : 28430
County : Lea
State : New Mexico

Spud Date : 7/20/2016
Completion Date : 10/9/2016
G.L. Elevation : 3682
K.B. Elevation : 3702
Diagram Date : 9/27/2016
Revisions : HC

Casing Design

Type	Hole Size	Csg Size	Weight	Grade	Depth	Jts.	Cementing Details
							Lead: Class "C", 1000 sx, 13.5 ppg, Yield 1.74 cuft/sk. Additi CaCl ₂ , .25 Celloflake. Tail: Class "C", 475 sx, 14.8 ppg, Yield 6.35 cuft/sk. Additive
Surface	17 1/2	13 3/8	54.5	J-55	1827	59	Lead: 35/65 Poz C 230 sx, 12 ppg, Yield 2.43 cuft/sk. Additiv gel, .2% CPT503p, .1% CPT35, .4% CPT19, .1% CPT51, 3 pps K celloflake, .2% CPT-20A. Tail: Class "C", 215 sx, 14.8 ppg, Yield 1.33 cuft/sk. Additive pps Kolite, .125 celloflake.
Intermediate	11	8 5/8	32	HCK-55	5613	123	Lead: 50/50 Poz H, 510 sx, 11.5 ppg, Yield 2.64 cuft/sk. Addi gel, 4CPT-503P, 3HKOSeal, .15 CPT-20A Tail" 50/50 Poz H / Class "H", 928/100 sx, 14.4/15 ppg, Yiel Additives: 5% salt, 2% gel, .3 CPT-19, .4CPT-35, .1CPT-35, .1 Calcarb, .5 CPT47B, .2 CPT57A, .3 CPT-35, .3 CPT-20A
Production	7 7/8	5 1/2	20	P110	15320	346	

Tubing String Design

Size	Weight	Grade	No. of Jts	Length	Depth	Type
				18.88		Packer Assy On/Off
				1.74		On / Off
			308	10200.72		2.875 L-80 Tubing
				2.12		2.875 L-80 PUP
				10.02		2.875 L-80 PUP
			1	33.13		Slick Joint
				0.50		Tubing Hanger
				20.00		KB

Rods String Design

Rods	Length	Item

Kick off Point 10,356 MD 10,399 TVD
Lateral TD 15,550 MD 10,799 TVD
Float Collar 15,296 MD

See Frac Details Tab for Stimulation