

Results of Directional Survey

API number:	30-025-41449		
OGRID:		Operator:	ENDURANCE RESOURCES LLC
		Property:	NOCASTER 19 FEDERAL # 4H

surface	ULSTR:	P	19	T	23S	R	34E
				330	FSL	660	FEL

BH Loc	ULSTR:	A	19	T	23S	R	34E
14882	MD	10545.7	TVD	340	FNL	1024	FEL
				4940	FSL		

Top Perf/OH	ULSTR:	P	19	T	23S	R	34E
10870	MD	10522.7	TVD	947	FSL	676	FEL

Bot Perf/OH	ULSTR:	A	19	T	23S	R	34E
14748	MD	10545.5	TVD	473	FNL	1006	FEL
				4807	FSL		

	MD	N/S	E/W	VD
	10779	526.57	-14.79	10515.48
TOP PERFS/OH	10870	617.24	-15.54	10522.68
	10874	621.23	-15.57	10523.00
	14711	4440.71	-341.25	10545.45
BOT PERFS/OH	14748	4477.38	-346.17	10545.51
	14830	4558.66	-357.08	10545.64

NEXT TO LAST	14830	4558.66	-357.08	10545.64
LAST READING	14882	4610.24	-363.68	10545.72
TD	14882	4610.24	-363.68	10545.72

Surface Location	330	FS	660	FE
Projected BHL	4940	FS	1024	FE
Location of				
Top Perfs/OH	947	FS	676	FE
Bottom Perfs/OH	4807	FS	1006	FE

SUMMARY of Subsurface Locations

Surface Location	P-19-23S-34E	330	FS	660	FE	Vert. Depth
Top Perfs/OH	P-19-23S-34E	947	FS	676	FE	10522.68
Bottom Perfs/OH	A-19-23S-34E	4807	FS	1006	FE	10545.51
Projected TD	A-19-23S-34E	4940	FS	1024	FE	10545.72

AUG 19 2014

HALLIBURTON

14103 Interwood S. Parkway • Houston, TX 77032
PHONE 281.986.4400 • FAX 281.986.4499

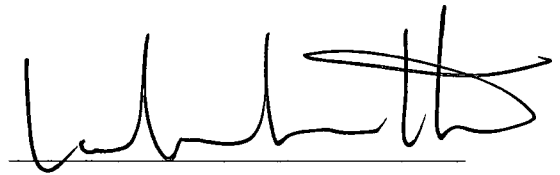
HOBBS OCD

AUG 11 2014

RECEIVED

State of New Mexico, Lea County

I, Landon Lovette, certify that I am employed by Halliburton Energy Services, Inc. (AKA Sperry Drilling) and that on the dates of June 10th 2014 through June 23rd 2014, I did conduct or supervise the taking of MWD directional surveys for the well Nocaster 19 Federal 4H from a depth of 9349' MD to a depth of 14830' MD. This data is true, correct, complete and within the limitations of the tools as set forth by Halliburton Energy Services, Inc. (AKA Sperry Drilling). I am authorized and qualified to make this report and this survey which was conducted at the request of Endurance Resources LLC for the well Nocaster 19 Federal 4H, API No. 30-025-41449-0000, in Lea County, New Mexico. I have reviewed this report and find that it confirms to the principles and procedures as set forth by Halliburton Energy Services, Inc. (AKA Sperry Drilling).

A handwritten signature in black ink, appearing to read 'L Lovette', written over a horizontal line.

Landon Lovette
Field Engineer

**Endurance Resources LLC
Nocaster 19 Federal 4H
Lea County, New Mexico
Patriot 4
API# 30-025-41449-0000**

**June 10, 2014 – June 23, 2014
HD-MJ-0901381883**

**Sperry Drilling
Survey Report**

Submitted by Landon Lovette
3950 Interwood South Parkway
Houston, TX 77032
Ph: 281.986.4400

HALLIBURTON

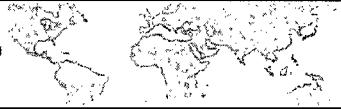
**Drilling and Formation
Evaluation**

[REDACTED]



Survey Report for Endurance Resources LLC

Rig : Patriot 4
Well Name : Nocaster 19 Federal 4H
Field Name : Delaware Basin
Country : USA
Job Number : HD-XX-0901381883
Job Start Date : 31-May-14
API Number : 30-025-41449-0000



DIRECTIONAL SURVEY DATA

Tie-in

0.00 0.00 0.00 0.00 0.00 N 0.00 E

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100')
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
182.55	0.44	346.43	182.55	0.68 N	0.16 W	0.68	0.24
278.66	0.71	286.69	278.65	1.21 N	0.82 W	1.22	0.64
374.77	0.87	287.05	374.75	1.60 N	2.09 W	1.62	0.17
470.88	0.77	311.15	470.86	2.23 N	3.27 W	2.27	0.37
566.99	0.44	332.28	566.96	2.99 N	3.93 W	3.02	0.41
663.10	0.66	312.16	663.07	3.68 N	4.51 W	3.73	0.30
759.21	0.62	323.74	759.17	4.48 N	5.23 W	4.52	0.14
855.32	0.29	47.97	855.28	5.06 N	5.36 W	5.11	0.68
951.43	0.34	115.88	951.39	5.10 N	4.92 W	5.14	0.37
1047.54	0.35	120.28	1,047.49	4.82 N	4.41 W	4.87	0.03
1143.65	0.31	86.75	1,143.60	4.69 N	3.90 W	4.73	0.20
1239.76	0.50	32.63	1,239.71	5.06 N	3.41 W	5.09	0.42
1335.87	0.32	45.52	1,335.82	5.60 N	2.99 W	5.63	0.21
1431.98	0.46	62.35	1,431.93	5.97 N	2.46 W	5.99	0.19
1528.09	1.15	60.39	1,528.03	6.62 N	1.28 W	6.63	0.72
1624.20	1.17	59.57	1,624.12	7.60 N	0.40 E	7.59	0.03
1720.31	1.01	60.51	1,720.21	8.51 N	1.99 E	8.49	0.17
1816.42	0.95	78.36	1,816.31	9.09 N	3.50 E	9.05	0.32
1912.53	1.19	84.12	1,912.40	9.35 N	5.28 E	9.30	0.27
2008.64	1.24	104.03	2,008.49	9.20 N	7.28 E	9.13	0.44
2104.75	1.25	123.13	2,104.58	8.38 N	9.17 E	8.29	0.43
2200.86	1.26	116.26	2,200.66	7.34 N	10.99 E	7.23	0.16
2296.97	1.34	145.73	2,296.75	5.94 N	12.57 E	5.82	0.69
2393.08	1.36	174.11	2,392.83	3.88 N	13.32 E	3.75	0.69
2489.19	1.40	210.86	2,488.92	1.73 N	12.84 E	1.61	0.91
2585.30	1.63	243.60	2,584.99	0.12 N	11.01 E	0.01	0.92
2681.41	1.84	271.11	2,681.06	0.46 S	8.24 E	-0.54	0.88
2777.52	1.97	298.30	2,777.12	0.35 N	5.25 E	0.30	0.94
2873.63	1.61	321.99	2,873.19	2.20 N	2.96 E	2.17	0.85
2969.74	1.23	354.36	2,969.27	4.29 N	2.03 E	4.27	0.91
3065.85	1.48	19.67	3,065.35	6.49 N	2.34 E	6.46	0.67
3161.96	1.79	17.82	3,161.42	9.08 N	3.22 E	9.05	0.33
3258.07	1.76	26.08	3,257.49	11.84 N	4.33 E	11.80	0.27
3354.18	1.42	28.86	3,353.56	14.21 N	5.55 E	14.15	0.36
3450.29	1.52	28.34	3,449.64	16.37 N	6.73 E	16.31	0.10
3546.40	1.76	10.53	3,545.71	18.94 N	7.61 E	18.87	0.58
3642.51	2.02	355.04	3,641.77	22.08 N	7.73 E	22.01	0.59
3738.62	2.26	15.20	3,737.81	25.60 N	8.08 E	25.52	0.82
3834.73	2.77	22.00	3,833.83	29.58 N	9.45 E	29.49	0.61
3930.84	2.34	32.92	3,929.84	33.38 N	11.38 E	33.27	0.67



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100')
4026.95	1.66	51.53	4,025.90	35.89 N	13.54 E	35.77	0.97
4123.06	1.96	49.60	4,121.96	37.83 N	15.88 E	37.67	0.32
4219.17	2.08	61.07	4,218.01	39.73 N	18.66 E	39.56	0.44
4315.28	1.42	75.95	4,314.07	40.87 N	21.34 E	40.66	0.83
4411.39	2.07	69.89	4,410.14	41.75 N	24.13 E	41.52	0.70
4507.50	2.39	68.71	4,506.17	43.08 N	27.62 E	42.82	0.34
4603.61	2.53	72.81	4,602.20	44.43 N	31.52 E	44.13	0.23
4699.72	2.23	86.27	4,698.22	45.18 N	35.41 E	44.85	0.66
4795.83	1.48	97.13	4,794.28	45.15 N	38.51 E	44.78	0.86
4891.94	1.47	113.99	4,890.36	44.49 N	40.87 E	44.11	0.45
4988.05	1.31	126.22	4,986.44	43.34 N	42.88 E	42.94	0.35
5084.16	0.73	126.84	5,082.54	42.33 N	44.25 E	41.91	0.60
5180.27	0.50	109.64	5,178.64	41.82 N	45.14 E	41.39	0.30
5276.38	0.54	120.40	5,274.75	41.45 N	45.93 E	41.01	0.11
5372.49	0.35	87.48	5,370.86	41.23 N	46.61 E	40.79	0.32
5468.60	0.35	122.98	5,466.96	41.09 N	47.15 E	40.64	0.22
5564.71	0.51	123.04	5,563.07	40.69 N	47.75 E	40.24	0.17
5660.82	0.41	112.29	5,659.18	40.33 N	48.43 E	39.87	0.14
5756.93	0.15	168.59	5,755.29	40.07 N	48.77 E	39.61	0.36
5853.04	0.24	21.32	5,851.40	40.14 N	48.87 E	39.68	0.39
5949.15	0.18	136.59	5,947.51	40.22 N	49.05 E	39.75	0.37
6045.26	0.29	75.93	6,043.62	40.17 N	49.39 E	39.70	0.27
6141.37	0.20	317.79	6,139.73	40.35 N	49.51 E	39.88	0.44
6237.48	0.09	287.65	6,235.84	40.50 N	49.33 E	40.03	0.14
6333.59	0.19	124.38	6,331.95	40.43 N	49.39 E	39.96	0.29
6429.70	0.36	108.41	6,428.05	40.24 N	49.80 E	39.77	0.19
6525.81	0.23	274.46	6,524.16	40.16 N	49.90 E	39.69	0.61
6621.92	0.42	278.45	6,620.27	40.23 N	49.36 E	39.76	0.20
6718.03	0.02	320.05	6,716.38	40.30 N	49.00 E	39.83	0.42
6814.14	0.16	240.02	6,812.49	40.24 N	48.87 E	39.78	0.16
6910.25	0.36	240.16	6,908.60	40.02 N	48.49 E	39.57	0.21
7006.36	0.51	236.26	7,004.71	39.64 N	47.88 E	39.18	0.16
7102.47	0.36	194.58	7,100.81	39.11 N	47.44 E	38.66	0.35
7198.58	0.35	178.87	7,196.92	38.52 N	47.37 E	38.07	0.10
7294.69	0.72	229.84	7,293.03	37.84 N	46.92 E	37.39	0.59
7390.80	0.84	204.54	7,389.13	36.81 N	46.16 E	36.37	0.38
7486.91	0.54	171.79	7,485.23	35.72 N	45.94 E	35.28	0.50
7583.02	0.57	167.47	7,581.34	34.80 N	46.10 E	34.37	0.05
7679.13	1.03	177.26	7,677.44	33.47 N	46.25 E	33.04	0.50
7775.24	0.77	152.82	7,773.54	32.04 N	46.59 E	31.60	0.48
7871.35	1.11	147.06	7,869.63	30.68 N	47.39 E	30.23	0.37
7967.46	1.00	169.03	7,965.73	29.08 N	48.05 E	28.62	0.43
8063.57	1.22	167.99	8,061.82	27.25 N	48.43 E	26.79	0.23
8159.68	1.18	152.24	8,157.91	25.38 N	49.10 E	24.91	0.34
8255.79	0.95	167.92	8,254.00	23.72 N	49.73 E	23.25	0.38



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100')
8351.90	0.98	162.38	8,350.10	22.16 N	50.14 E	21.68	0.10
8448.01	1.34	168.06	8,446.19	20.28 N	50.62 E	19.80	0.39
8544.12	0.88	166.13	8,542.28	18.46 N	51.03 E	17.98	0.48
8640.23	0.89	170.21	8,638.38	17.01 N	51.34 E	16.52	0.07
8736.34	1.17	192.56	8,734.48	15.31 N	51.25 E	14.83	0.50
8832.45	1.07	222.23	8,830.57	13.69 N	50.43 E	13.22	0.61
8928.56	1.83	240.50	8,926.65	12.27 N	48.50 E	11.81	0.92
9024.67	2.02	248.45	9,022.70	10.89 N	45.58 E	10.46	0.34
9120.78	2.55	242.58	9,118.74	9.29 N	42.11 E	8.89	0.60
9216.89	2.79	246.21	9,214.74	7.36 N	38.07 E	7.00	0.31
9313.00	2.99	261.35	9,310.73	6.04 N	33.45 E	5.72	0.82
9336.30	2.93	264.45	9,334.00	5.89 N	32.26 E	5.58	0.73
9349.00	2.48	268.11	9,346.69	5.85 N	31.66 E	5.55	3.80
9444.00	1.71	238.43	9,441.62	5.04 N	28.40 E	4.77	1.38
9539.00	1.36	267.90	9,536.59	4.26 N	26.07 E	4.01	0.90
9635.00	0.81	254.18	9,632.57	4.03 N	24.29 E	3.80	0.63
9730.00	0.99	257.77	9,727.56	3.67 N	22.84 E	3.46	0.20
9825.00	1.18	265.58	9,822.54	3.42 N	21.06 E	3.23	0.25
9857.00	0.70	281.96	9,854.54	3.44 N	20.54 E	3.25	1.70
9889.00	0.98	315.69	9,886.54	3.68 N	20.16 E	3.49	1.74
9920.00	2.16	355.12	9,917.53	4.45 N	19.92 E	4.26	4.95
9952.00	4.52	359.78	9,949.47	6.31 N	19.86 E	6.12	7.41
9984.00	8.74	356.67	9,981.25	10.00 N	19.72 E	9.81	13.23
10016.00	11.50	352.91	10,012.75	15.59 N	19.18 E	15.41	8.87
10047.00	14.92	351.31	10,042.92	22.60 N	18.20 E	22.43	11.09
10079.00	19.22	352.42	10,073.51	31.90 N	16.88 E	31.74	13.49
10111.00	22.87	352.48	10,103.37	43.29 N	15.37 E	43.14	11.41
10142.00	25.58	353.59	10,131.63	55.92 N	13.84 E	55.78	8.87
10174.00	28.25	354.18	10,160.17	70.32 N	12.30 E	70.20	8.36
10206.00	31.65	354.43	10,187.89	86.21 N	10.71 E	86.11	10.66
10237.00	34.41	352.06	10,213.88	102.99 N	8.71 E	102.90	9.82
10269.00	34.99	351.48	10,240.18	121.02 N	6.10 E	120.96	2.09
10301.00	35.19	350.45	10,266.37	139.19 N	3.21 E	139.15	1.95
10335.00	35.99	350.87	10,294.01	158.71 N	0.00 E	158.71	2.46
10367.00	38.14	351.75	10,319.55	177.78 N	2.91 W	177.80	6.92
10399.00	40.27	353.49	10,344.34	197.84 N	5.50 W	197.88	7.49
10430.00	43.86	355.09	10,367.35	218.50 N	7.55 W	218.56	12.07
10463.00	47.81	356.85	10,390.34	242.11 N	9.21 W	242.18	12.58
10494.00	51.68	357.90	10,410.37	265.74 N	10.29 W	265.82	12.74
10525.00	55.46	358.78	10,428.78	290.66 N	11.00 W	290.75	12.40
10557.00	58.80	358.60	10,446.14	317.53 N	11.62 W	317.62	10.45
10589.00	62.60	358.57	10,461.80	345.42 N	12.31 W	345.52	11.87
10620.00	66.01	358.25	10,475.24	373.34 N	13.08 W	373.45	11.04
10652.00	70.05	358.78	10,487.21	403.00 N	13.85 W	403.11	12.73
10684.00	74.78	359.28	10,496.88	433.49 N	14.36 W	433.61	14.86



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100')
10779.00	82.62	0.19	10,515.48	526.57 N	14.79 W	526.69	8.30
10874.00	88.31	358.88	10,523.00	621.23 N	15.57 W	621.35	6.14
10938.00	88.89	358.84	10,524.56	685.20 N	16.84 W	685.33	0.92
10969.00	89.11	358.70	10,525.10	716.19 N	17.51 W	716.32	0.84
11065.00	87.37	357.52	10,528.05	812.08 N	20.67 W	812.24	2.19
11160.00	87.60	357.41	10,532.22	906.90 N	24.87 W	907.09	0.26
11255.00	89.66	357.90	10,534.49	1,001.79 N	28.76 W	1002.01	2.23
11350.00	90.55	357.82	10,534.31	1,096.72 N	32.31 W	1096.98	0.94
11446.00	90.55	355.36	10,533.38	1,192.54 N	38.02 W	1192.84	2.57
11541.00	90.06	354.06	10,532.87	1,287.13 N	46.78 W	1287.51	1.46
11636.00	90.83	353.60	10,532.13	1,381.57 N	56.99 W	1382.05	0.95
11732.00	91.48	353.68	10,530.20	1,476.96 N	67.63 W	1477.54	0.68
11827.00	91.63	352.80	10,527.61	1,571.27 N	78.81 W	1571.94	0.94
11893.00	88.94	352.63	10,527.28	1,636.73 N	87.18 W	1637.48	4.08
11922.00	89.21	352.80	10,527.75	1,665.49 N	90.86 W	1666.27	1.09
12017.00	87.44	354.15	10,530.53	1,759.83 N	101.65 W	1760.71	2.34
12112.00	88.51	353.86	10,533.89	1,854.25 N	111.57 W	1855.22	1.16
12208.00	89.32	353.72	10,535.71	1,949.66 N	121.96 W	1950.73	0.86
12303.00	87.66	354.43	10,538.21	2,044.12 N	131.76 W	2045.27	1.90
12398.00	88.34	355.10	10,541.52	2,138.66 N	140.43 W	2139.89	1.00
12493.00	89.97	355.36	10,542.92	2,233.32 N	148.33 W	2234.62	1.74
12588.00	90.88	354.91	10,542.22	2,327.98 N	156.39 W	2329.35	1.06
12684.00	88.86	355.52	10,542.44	2,423.64 N	164.40 W	2425.08	2.20
12779.00	86.91	354.00	10,545.94	2,518.17 N	173.06 W	2519.69	2.60
12901.00	87.62	354.27	10,551.76	2,639.39 N	185.52 W	2641.02	0.62
12996.00	89.72	353.75	10,553.96	2,733.84 N	195.43 W	2735.56	2.27
13091.00	92.68	354.53	10,551.96	2,828.31 N	205.12 W	2830.12	3.22
13186.00	93.61	358.32	10,546.74	2,922.97 N	211.04 W	2924.83	4.09
13283.00	91.58	0.01	10,542.35	3,019.85 N	212.45 W	3021.72	2.73
13378.00	90.52	359.37	10,540.60	3,114.83 N	212.96 W	3116.70	1.30
13473.00	89.63	357.77	10,540.47	3,209.79 N	215.34 W	3211.68	1.93
13568.00	89.35	357.28	10,541.32	3,304.70 N	219.44 W	3306.62	0.59
13663.00	89.42	356.29	10,542.34	3,399.54 N	224.77 W	3401.51	1.04
13758.00	90.95	355.52	10,542.03	3,494.30 N	231.55 W	3496.33	1.81
13853.00	90.80	355.19	10,540.58	3,588.97 N	239.25 W	3591.07	0.38
13948.00	89.63	354.68	10,540.22	3,683.60 N	247.63 W	3685.77	1.34
14044.00	89.26	353.97	10,541.15	3,779.13 N	257.12 W	3781.38	0.84
14139.00	88.98	354.12	10,542.60	3,873.60 N	266.98 W	3875.95	0.33
14234.00	90.00	353.27	10,543.45	3,968.02 N	277.41 W	3970.46	1.39
14329.00	90.12	352.48	10,543.35	4,062.29 N	289.19 W	4064.83	0.84
14425.00	89.60	352.23	10,543.58	4,157.43 N	301.96 W	4160.10	0.60
14520.00	89.45	352.13	10,544.37	4,251.55 N	314.89 W	4254.33	0.19
14711.00	89.91	352.00	10,545.45	4,440.71 N	341.25 W	4443.73	0.25
14830.00	89.91	352.71	10,545.64	4,558.66 N	357.08 W	4561.82	0.60
14882.00	89.91	352.71	10,545.72	4,610.24 N	363.68 W	4613.46	0.00

**SURVEY FOOTER**

SURVEYS CALCULATED USING SHORT COLLAR METHOD
TIE-ON SURVEY ASSUMED VERTICAL AT SURFACE
SURVEYS FROM 182.55' MD TO 9336.30' MD ARE PROVIDED BY VAUGHN ENERGY SERVICES
SURVEYS FROM 9349' MD TO 14830' MD ARE PROVIDED BY SPERRY DRILLING SERVICES
SURVEY AT 14830' MD IS PROJECTED TO TD AT 14882' MD
SPERRY ENGINEERS: LONDON LOVETTE, JERMAINE HUNT

DIRECTIONAL SURVEY DATA NOTES

- Calculation based on minimum curvature method.
- Survey coordinates relative to well system reference point.
- TVD values given relative to drilling measurement point.
- Vertical section relative to well head.
- Vertical section is computed along a direction of 359.46 degrees (Grid)
- A total correction of 6.86 deg from Magnetic north to Grid north has been applied
- Horizontal displacement is relative to the well head.
- Horizontal displacement (closure) at 14,882.00 feet is 4,624.56 feet along 355.49 degrees (Grid)

WARRANTY

HALLIBURTON ENERGY SERVICES, INC. WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HALLIBURTON ENERGY SERVICES, INC. CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION, AND PRODUCTION OPERATION. HALLIBURTON ENERGY SERVICES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HALLIBURTON ENERGY SERVICES, INC. SERVICES BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HALLIBURTON ENERGY SERVICES, INC.



HALLIBURTON / SPERRY DRILLING
3950 INTERWOOD SOUTH PARKWAY
HOUSTON, TEXAS 77032
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Endurance Resources LLC

HALLIBURTON
Sperry Drilling Services

Project: Lea County, NM (NAD 83)
Site: Nocaster 19 Federal
Well: Nocaster 19 Federal 4H
Wellbore: Wellbore #1
Survey: Sperry MWD (Nocaster 19 Federal 4H/Wellbore #1)

Surface Location:

US State Plane 1983
New Mexico Eastern Zone
Elevation: GL 3569.9 + KB 21' @ 3590.90usft

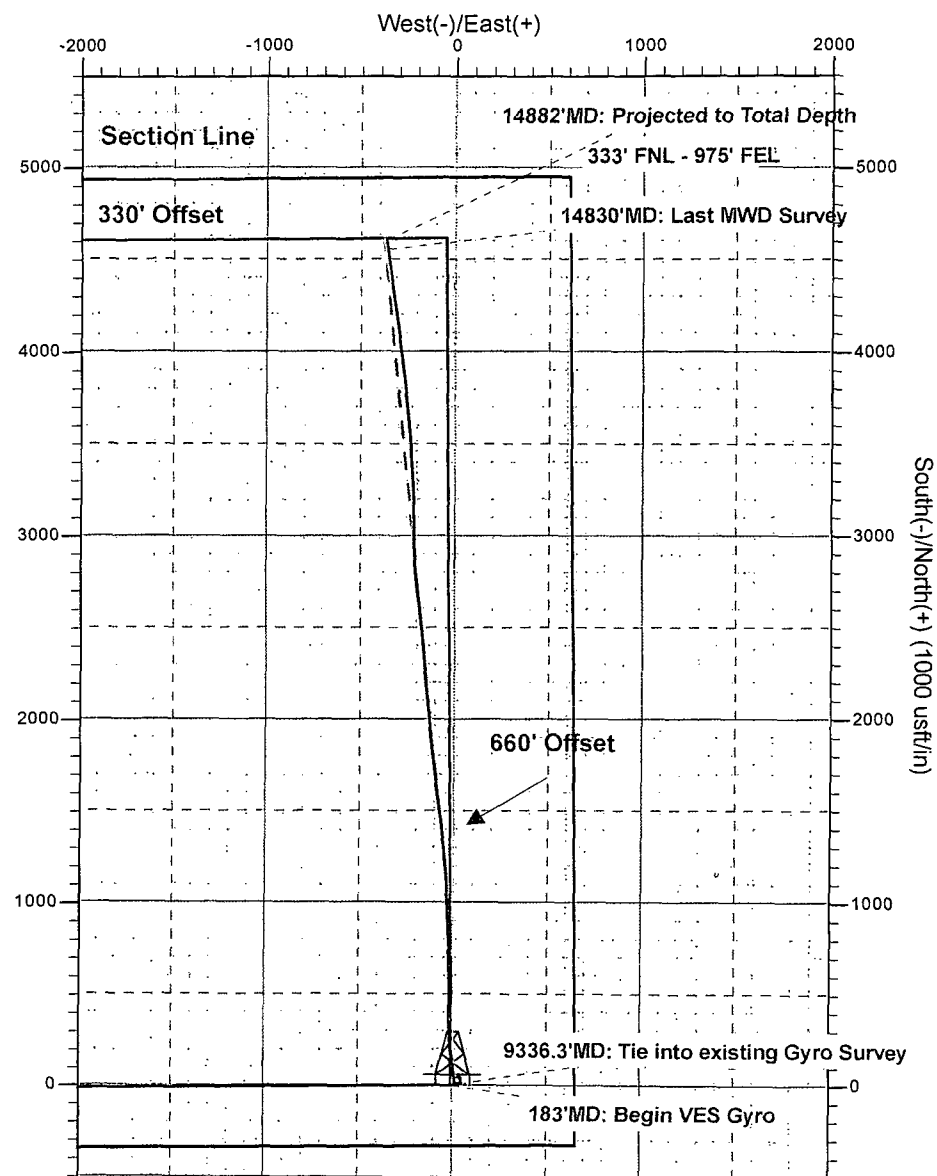
Northing	Easting	Latitude	Longitude
467958.51	798013.49	32° 17' 1.537 N	103° 30' 9.932 W



HOBBS OCD
AUG 11 2014
RECEIVED

To convert a Magnetic Direction to a Grid Direction, Add 6.86°

Magnetic Model: BGGM2013 Date: 28-May-14
Azimuths to Grid North



Created By: Mike Moreno