

30-025-4142a

HOBBSD

Nexus Directional Solutions

3925 SCR 1285
Odessa, TX 79765

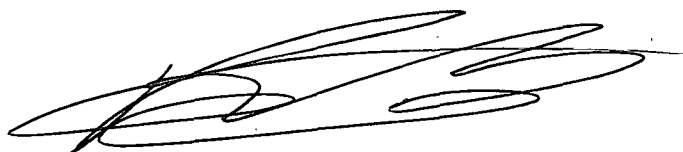
FEB 23 2015

RECEIVED

I, John Patrick Quain, certify that I am employed by Nexus Directional Solutions, and that on the dates of 13-December-15 through 07-January-15. I did conduct or supervise the taking of a MWD directional survey for the well from a depth of 5,112' to a depth of 14158' MD. This date is true, correct, complete and within the limitations of the tools as set forth by Nexus Directional Solutions. I am authorized and qualified to make this report and this survey was conducted at the request of Endurance Resources, for the Jaguar 18 State #3H well, in Lea County, New Mexico. I have reviewed this report and find that it conforms to the principles and procedures as set forth by Nexus Directional Solutions.

X *Patrick Quain*

John Patrick Quain
Vice President



1/27/2015

MAR 02 2015

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Endurance Resources LLC

Lea County, NM

Jaguar 18 State

#3H

OH

Survey: MWD #1

Standard Survey Report

06 January, 2015

Endurance Resources LLC
 Project: Lea County, NM
 Site: Jaguar 18 State
 Well: #3H
 Wellbore: OH
 Plan: Plan #2 (#3H/OH)

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	9237.0	0.00	0.00	9237.0	0.0	0.0	0.00	0.00	0.0
3	10140.6	90.35	0.00	9810.0	576.5	0.1	10.00	0.00	576.5
4	10163.9	90.35	359.54	9809.9	599.8	0.0	2.00	-89.46	599.8
5	14182.3	90.35	359.54	9785.0	4618.0	-32.4	0.00	0.00	4618.1

WELL DETAILS: #3H

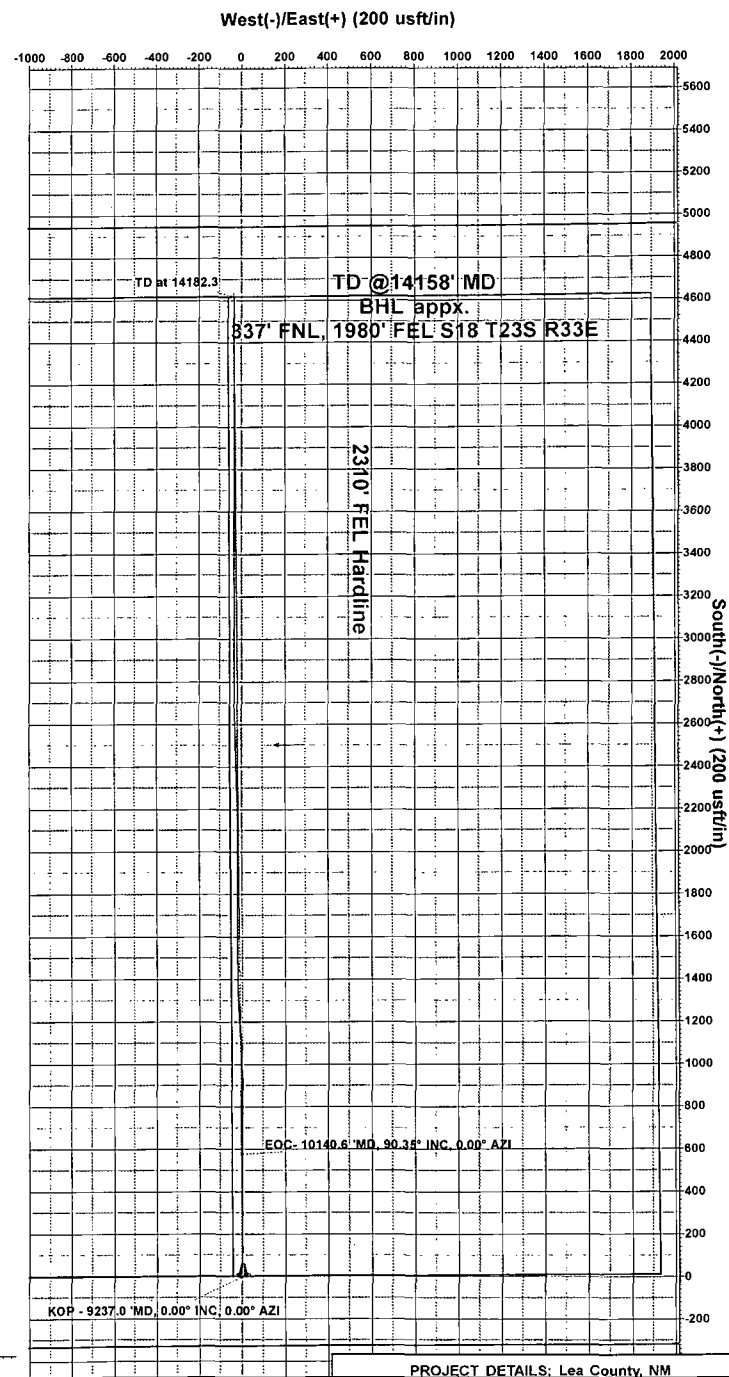
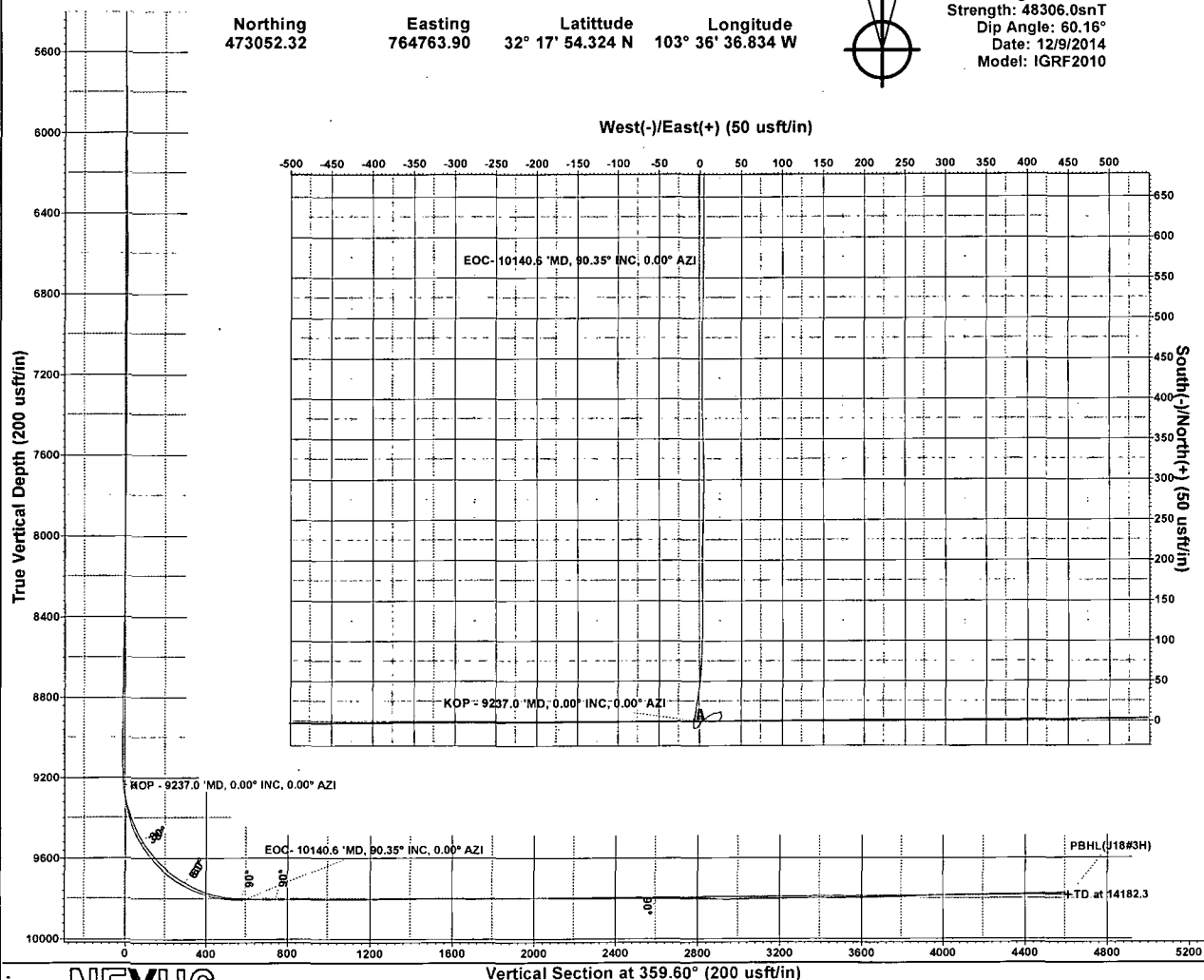
Ground Elevation:: 3717.5
 RKB Elevation: WELL @ 3738.5usft (Original Well Elev)
 Rig Name: Original Well Elev

Northing 473052.32 Easting 764763.90 Latitude 32° 17' 54.324 N Longitude 103° 36' 36.834 W



Azimuths to Grid North
 True North: -0.39°
 Magnetic North: 6.79°

Magnetic Field
 Strength: 48306.0snT
 Dip Angle: 60.16°
 Date: 12/9/2014
 Model: IGRF2010



Wellplanning Survey Report

Company:	Endurance Resources LLC	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM	TVD Reference:	WELL @ 3738.5usft (Original Well Elev)
Site:	Jaguar 18 State	MD Reference:	WELL @ 3738.5usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

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

Site	Jaguar 18 State				
Site Position:		Northing:	473,052.32 usft	Latitude:	32° 17' 54.324 N
From:	Map	Easting:	764,763.90 usft	Longitude:	103° 36' 36.834 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 °

Well	#3H					
Well Position	+N/-S	0.0 usft	Northing:	473,052.32 usft	Latitude:	32° 17' 54.324 N
	+E/-W	0.0 usft	Easting:	764,763.90 usft	Longitude:	103° 36' 36.834 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,717.5 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/9/2014	7.18	60.16	48,306

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.60	

Survey Program		Date	1/6/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
5,112.0	14,158.0	MWD #1 (OH)	MWD	MWD - Standard	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,090.0	0.30	37.14	5,089.6	1.6	25.2	1.4	0.00	0.00	0.00
5,112.0	0.40	35.40	5,111.6	1.7	25.3	1.5	0.46	0.45	-7.91
5,207.0	0.70	45.20	5,206.6	2.4	25.9	2.2	0.33	0.32	10.32
5,303.0	0.50	39.00	5,302.6	3.1	26.5	2.9	0.22	-0.21	-6.46
5,398.0	0.50	11.40	5,397.6	3.9	26.9	3.7	0.25	0.00	-29.05
5,492.0	0.50	9.30	5,491.6	4.7	27.0	4.5	0.02	0.00	-2.23
5,587.0	0.40	34.70	5,586.5	5.3	27.3	5.2	0.23	-0.11	26.74
5,681.0	0.50	27.90	5,680.5	6.0	27.7	5.8	0.12	0.11	-7.23
5,775.0	0.60	351.30	5,774.5	6.8	27.8	6.6	0.38	0.11	-38.94
5,870.0	0.30	351.70	5,869.5	7.6	27.7	7.4	0.32	-0.32	0.42

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Site:	Jaguar 18 State	MD Reference:	WELL @ 3738.5usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,964.0	0.40	318.00	5,963.5	8.1	27.4	7.9	0.24	0.11	-35.85	
6,058.0	0.60	339.10	6,057.5	8.8	27.0	8.6	0.29	0.21	22.45	
6,153.0	0.30	345.30	6,152.5	9.5	26.8	9.3	0.32	-0.32	6.53	
6,247.0	0.30	9.60	6,246.5	9.9	26.8	9.8	0.13	0.00	25.85	
6,342.0	0.40	20.10	6,341.5	10.5	26.9	10.3	0.12	0.11	11.05	
6,436.0	0.40	18.40	6,435.5	11.1	27.1	10.9	0.01	0.00	-1.81	
6,531.0	0.40	262.60	6,530.5	11.4	26.9	11.2	0.71	0.00	-121.89	
6,625.0	0.60	270.30	6,624.5	11.4	26.1	11.2	0.22	0.21	8.19	
6,720.0	0.70	236.40	6,719.5	11.0	25.1	10.9	0.41	0.11	-35.68	
6,814.0	0.80	245.30	6,813.5	10.4	24.0	10.3	0.16	0.11	9.47	
6,909.0	0.90	264.00	6,908.5	10.1	22.7	9.9	0.31	0.11	19.68	
7,003.0	0.80	271.20	7,002.5	10.0	21.3	9.9	0.16	-0.11	7.66	
7,097.0	0.90	267.80	7,096.5	10.0	19.9	9.9	0.12	0.11	-3.62	
7,192.0	1.00	254.10	7,191.5	9.8	18.4	9.6	0.26	0.11	-14.42	
7,286.0	0.80	236.20	7,285.5	9.2	17.0	9.0	0.36	-0.21	-19.04	
7,381.0	0.70	240.80	7,380.4	8.5	16.0	8.4	0.12	-0.11	4.84	
7,475.0	1.10	243.50	7,474.4	7.8	14.7	7.7	0.43	0.43	2.87	
7,570.0	1.10	245.10	7,569.4	7.0	13.0	6.9	0.03	0.00	1.68	
7,664.0	1.00	227.70	7,663.4	6.1	11.6	6.0	0.35	-0.11	-18.51	
7,759.0	1.00	244.00	7,758.4	5.2	10.2	5.1	0.30	0.00	17.16	
7,853.0	1.00	226.20	7,852.4	4.3	8.9	4.2	0.33	0.00	-18.94	
7,948.0	1.00	236.30	7,947.4	3.2	7.6	3.2	0.19	0.00	10.63	
8,042.0	1.00	236.40	8,041.3	2.3	6.3	2.3	0.00	0.00	0.11	
8,314.0	0.90	209.50	8,313.3	-0.9	3.2	-0.9	0.17	-0.04	-9.89	
8,597.0	1.00	217.60	8,596.3	-4.8	0.6	-4.8	0.06	0.04	2.86	
8,786.0	1.00	219.20	8,785.2	-7.3	-1.4	-7.3	0.01	0.00	0.85	
8,880.0	1.00	247.80	8,879.2	-8.3	-2.7	-8.3	0.53	0.00	30.43	
8,974.0	1.00	265.00	8,973.2	-8.7	-4.3	-8.6	0.32	0.00	18.30	
9,069.0	0.80	306.50	9,068.2	-8.3	-5.6	-8.3	0.70	-0.21	43.68	
9,162.0	1.00	339.70	9,161.2	-7.2	-6.4	-7.1	0.59	0.22	35.70	
9,193.0	1.10	351.20	9,192.2	-6.6	-6.6	-6.6	0.75	0.32	37.10	
9,225.0	2.90	7.70	9,224.2	-5.5	-6.5	-5.5	5.85	5.63	51.56	
9,256.0	6.20	9.30	9,255.1	-3.1	-6.1	-3.1	10.65	10.65	5.16	
9,288.0	9.90	9.40	9,286.7	1.3	-5.4	1.3	11.56	11.56	0.31	
9,319.0	13.40	10.00	9,317.1	7.5	-4.4	7.5	11.30	11.29	1.94	
9,350.0	16.60	9.30	9,347.0	15.4	-3.0	15.4	10.34	10.32	-2.26	
9,382.0	19.30	8.10	9,377.5	25.1	-1.5	25.1	8.52	8.44	-3.75	
9,413.0	21.40	6.90	9,406.5	35.8	-0.1	35.8	6.91	6.77	-3.87	
9,445.0	23.60	5.50	9,436.1	48.0	1.2	48.0	7.08	6.88	-4.38	
9,476.0	25.80	3.80	9,464.3	60.9	2.2	60.9	7.46	7.10	-5.48	
9,508.0	28.10	2.60	9,492.8	75.4	3.0	75.4	7.39	7.19	-3.75	
9,539.0	31.60	2.00	9,519.7	90.8	3.6	90.8	11.33	11.29	-1.94	
9,571.0	35.20	1.30	9,546.4	108.4	4.1	108.4	11.31	11.25	-2.19	
9,602.0	38.40	359.80	9,571.2	127.0	4.3	126.9	10.72	10.32	-4.84	

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Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,634.0	41.00	359.30	9,595.8	147.4	4.2	147.4	8.19	8.13	-1.56	
9,665.0	43.70	359.60	9,618.7	168.3	4.0	168.3	8.73	8.71	0.97	
9,697.0	47.00	0.50	9,641.2	191.1	4.0	191.0	10.50	10.31	2.81	
9,728.0	49.10	1.40	9,661.9	214.1	4.4	214.1	7.11	6.77	2.90	
9,759.0	52.10	1.40	9,681.6	238.0	4.9	238.0	9.68	9.68	0.00	
9,791.0	55.60	1.30	9,700.5	263.9	5.6	263.8	10.94	10.94	-0.31	
9,822.0	59.60	0.20	9,717.1	290.0	5.9	290.0	13.25	12.90	-3.55	
9,854.0	62.20	359.30	9,732.7	318.0	5.8	318.0	8.49	8.13	-2.81	
9,885.0	63.80	358.80	9,746.7	345.6	5.3	345.6	5.36	5.16	-1.61	
9,917.0	66.40	358.60	9,760.2	374.6	4.6	374.6	8.14	8.13	-0.63	
9,948.0	70.40	359.20	9,771.6	403.4	4.1	403.4	13.03	12.90	1.94	
9,980.0	74.50	0.10	9,781.3	433.9	3.9	433.9	13.09	12.81	2.81	
10,012.0	77.30	0.70	9,789.1	465.0	4.1	464.9	8.94	8.75	1.88	
10,044.0	80.70	0.80	9,795.2	496.4	4.5	496.3	10.63	10.63	0.31	
10,075.0	84.60	0.50	9,799.1	527.1	4.9	527.1	12.62	12.58	-0.97	
10,107.0	85.90	0.60	9,801.8	559.0	5.2	559.0	4.07	4.06	0.31	
10,138.0	86.40	0.50	9,803.9	589.9	5.5	589.9	1.64	1.61	-0.32	
10,170.0	87.90	0.40	9,805.4	621.9	5.7	621.8	4.70	4.69	-0.31	
10,201.0	88.60	0.70	9,806.4	652.9	6.0	652.8	2.46	2.26	0.97	
10,233.0	89.10	1.00	9,807.0	684.9	6.5	684.8	1.82	1.56	0.94	
10,264.0	89.60	0.90	9,807.4	715.9	7.0	715.8	1.64	1.61	-0.32	
10,295.0	90.10	0.90	9,807.5	746.9	7.5	746.8	1.61	1.61	0.00	
10,327.0	89.90	359.80	9,807.5	778.9	7.7	778.8	3.49	-0.63	-3.44	
10,358.0	89.80	359.20	9,807.5	809.9	7.4	809.8	1.96	-0.32	-1.94	
10,390.0	90.20	358.90	9,807.5	841.9	6.9	841.8	1.56	1.25	-0.94	
10,421.0	90.80	358.90	9,807.3	872.8	6.3	872.8	1.94	1.94	0.00	
10,453.0	91.50	358.90	9,806.6	904.8	5.7	904.8	2.19	2.19	0.00	
10,484.0	90.80	357.60	9,806.0	935.8	4.8	935.8	4.76	-2.26	-4.19	
10,516.0	89.90	357.40	9,805.8	967.8	3.4	967.7	2.88	-2.81	-0.63	
10,547.0	89.70	357.10	9,805.9	998.7	1.9	998.7	1.16	-0.65	-0.97	
10,610.0	90.40	356.90	9,805.9	1,061.7	-1.4	1,061.6	1.16	1.11	-0.32	
10,704.0	89.50	357.50	9,806.0	1,155.5	-6.0	1,155.6	1.15	-0.96	0.64	
10,799.0	90.80	357.40	9,805.7	1,250.4	-10.2	1,250.5	1.37	1.37	-0.11	
10,893.0	90.50	358.60	9,804.6	1,344.4	-13.5	1,344.4	1.32	-0.32	1.28	
10,987.0	89.80	359.80	9,804.4	1,438.4	-14.8	1,438.4	1.48	-0.74	1.28	
11,082.0	90.70	359.30	9,804.0	1,533.4	-15.6	1,533.4	1.08	0.95	-0.53	
11,176.0	88.70	0.00	9,804.5	1,627.4	-16.2	1,627.4	2.25	-2.13	0.74	
11,270.0	90.30	359.80	9,805.3	1,721.3	-16.3	1,721.4	1.72	1.70	-0.21	
11,365.0	92.00	359.60	9,803.4	1,816.3	-16.8	1,816.4	1.80	1.79	-0.21	
11,459.0	90.80	0.40	9,801.1	1,910.3	-16.8	1,910.4	1.53	-1.28	0.85	
11,554.0	90.10	359.80	9,800.3	2,005.3	-16.6	2,005.4	0.97	-0.74	-0.63	
11,648.0	88.60	0.00	9,801.4	2,099.3	-16.8	2,099.3	1.61	-1.60	0.21	
11,741.0	89.70	359.90	9,802.8	2,192.3	-16.9	2,192.3	1.19	1.18	-0.11	

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11,835.0	89.70	358.40	9,803.3	2,286.3	-18.3	2,286.3	1.60	0.00	-1.60	
11,930.0	90.60	358.50	9,803.0	2,381.2	-20.9	2,381.3	0.95	0.95	0.11	
12,024.0	90.60	358.50	9,802.0	2,475.2	-23.3	2,475.3	0.00	0.00	0.00	
12,118.0	90.00	358.50	9,801.6	2,569.1	-25.8	2,569.3	0.64	-0.64	0.00	
12,213.0	90.20	358.40	9,801.4	2,664.1	-28.3	2,664.2	0.24	0.21	-0.11	
12,307.0	88.90	358.90	9,802.1	2,758.1	-30.6	2,758.2	1.48	-1.38	0.53	
12,417.0	87.50	0.10	9,805.6	2,868.0	-31.5	2,868.2	1.68	-1.27	1.09	
12,512.0	90.30	0.50	9,807.4	2,963.0	-31.0	2,963.1	2.98	2.95	0.42	
12,606.0	91.70	0.20	9,805.8	3,057.0	-30.5	3,057.1	1.52	1.49	-0.32	
12,701.0	90.80	0.20	9,803.7	3,151.9	-30.1	3,152.1	0.95	-0.95	0.00	
12,796.0	91.30	359.70	9,801.9	3,246.9	-30.2	3,247.1	0.74	0.53	-0.53	
12,890.0	91.30	359.80	9,799.8	3,340.9	-30.6	3,341.0	0.11	0.00	0.11	
12,984.0	90.00	0.10	9,798.7	3,434.9	-30.7	3,435.0	1.42	-1.38	0.32	
13,078.0	90.20	0.10	9,798.6	3,528.9	-30.5	3,529.0	0.21	0.21	0.00	
13,173.0	91.90	0.00	9,796.8	3,623.9	-30.4	3,624.0	1.79	1.79	-0.11	
13,267.0	90.70	0.10	9,794.7	3,717.9	-30.4	3,718.0	1.28	-1.28	0.11	
13,347.0	91.30	359.80	9,793.3	3,797.8	-30.4	3,798.0	0.84	0.75	-0.38	
13,379.0	91.60	359.70	9,792.5	3,829.8	-30.6	3,829.9	0.99	0.94	-0.31	
13,473.0	91.50	0.30	9,790.0	3,923.8	-30.6	3,923.9	0.65	-0.11	0.64	
13,567.0	91.90	0.40	9,787.2	4,017.7	-30.0	4,017.9	0.44	0.43	0.11	
13,662.0	91.00	359.90	9,784.8	4,112.7	-29.8	4,112.8	1.08	-0.95	-0.53	
13,757.0	91.70	359.70	9,782.5	4,207.7	-30.1	4,207.8	0.77	0.74	-0.21	
13,851.0	90.10	0.20	9,781.1	4,301.7	-30.2	4,301.8	1.78	-1.70	0.53	
13,945.0	90.90	0.10	9,780.2	4,395.7	-29.9	4,395.8	0.86	0.85	-0.11	
14,040.0	91.20	359.80	9,778.5	4,490.7	-30.0	4,490.8	0.45	0.32	-0.32	
14,112.0	91.90	359.40	9,776.5	4,562.6	-30.5	4,562.7	1.12	0.97	-0.56	
14,158.0	91.90	359.40	9,775.0	4,608.6	-31.0	4,608.7	0.00	0.00	0.00	
PBHL(J18#3H)										

Checked By: _____	Approved By: _____	Date: _____
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Endurance Resources LLC
Project: Lea County, NM
Site: Jaguar 18 State
Well: #3H
Wellbore: OH
Plan: Plan #2 (#3H/OH)

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	9237.0	0.00	0.00	9237.0	0.0	0.0	0.00	0.00	0.0
3	10140.6	90.35	0.00	9810.0	576.5	0.1	10.00	0.00	576.5
4	10163.9	90.35	359.54	9809.9	599.8	0.0	2.00	-89.46	599.8
5	14182.3	90.35	359.54	9785.0	4618.0	-32.4	0.00	0.00	4618.1 PBHL(J18#3H)

WELL DETAILS: #3H

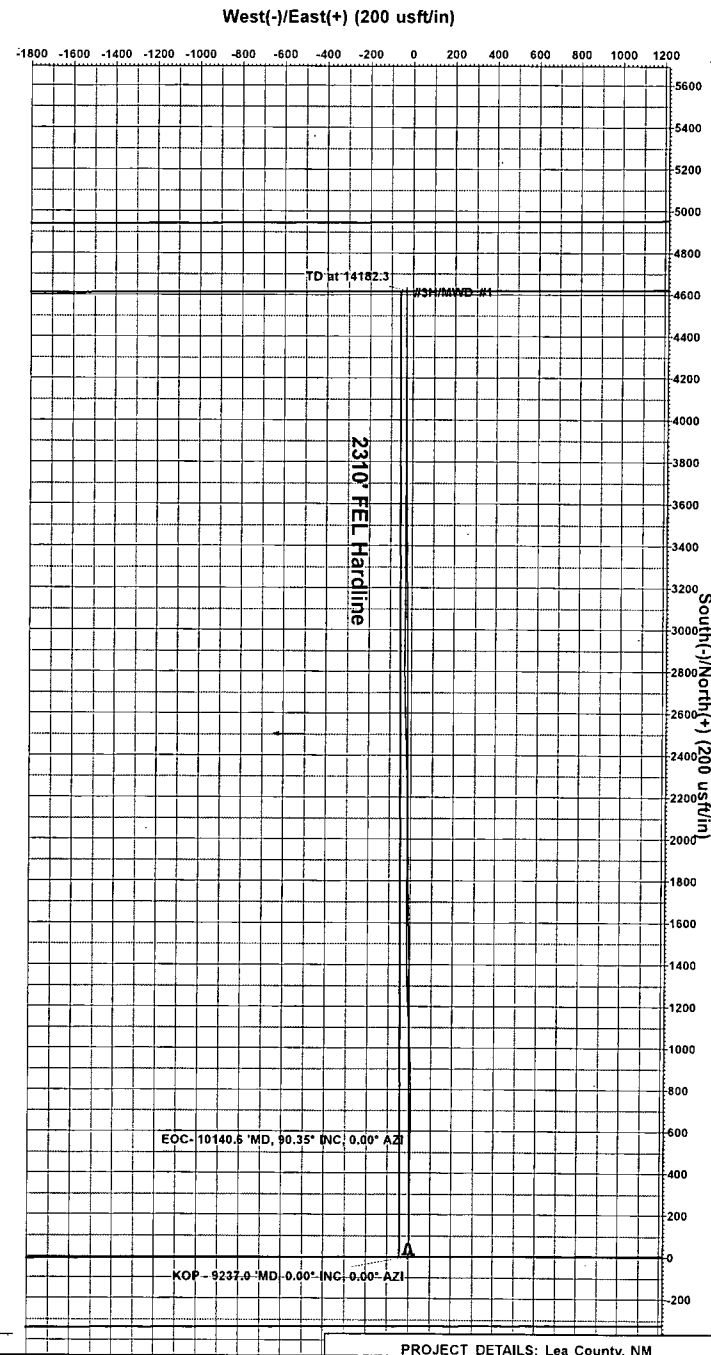
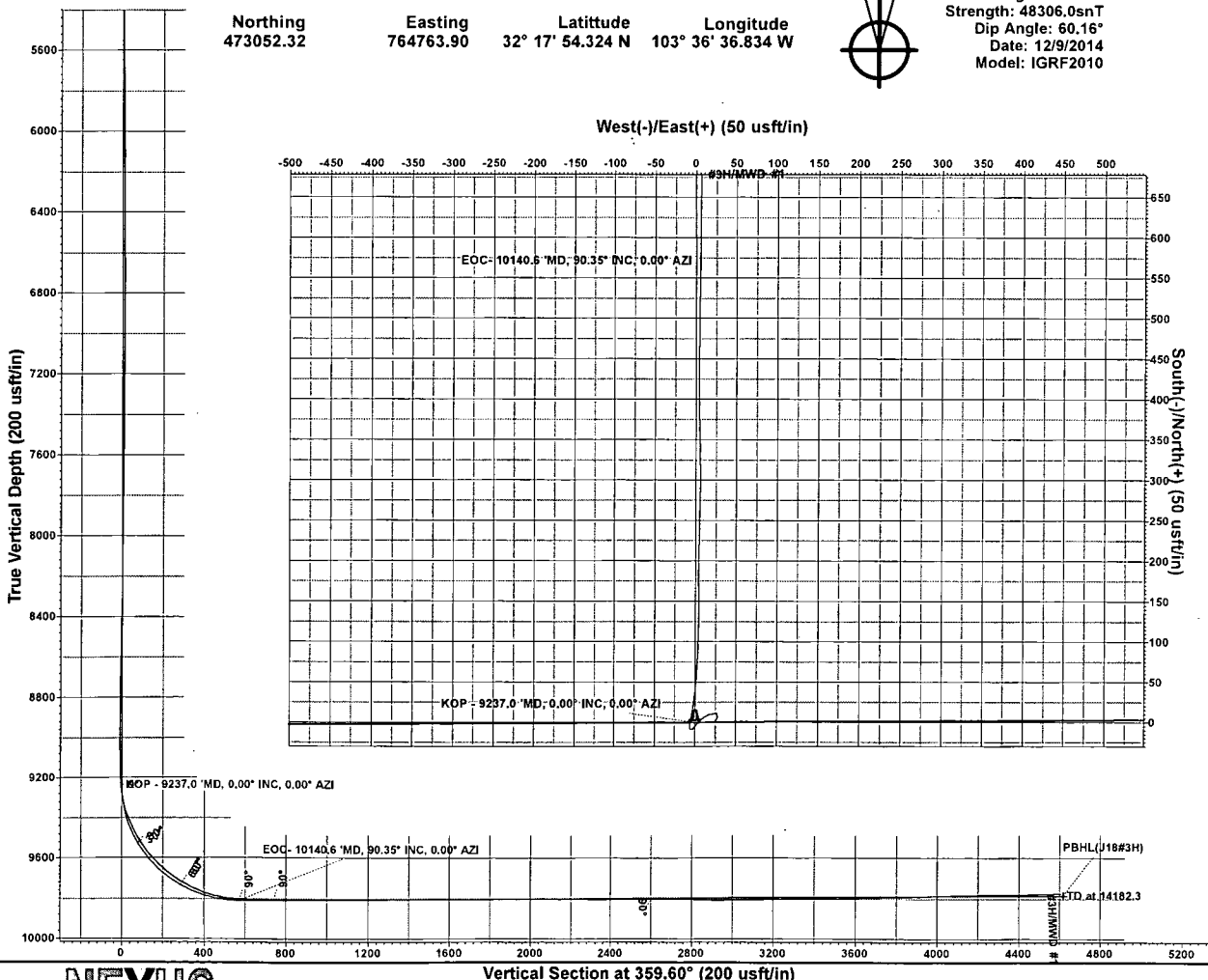
Ground Elevation:: 3717.5
RKB Elevation: WELL @ 3738.5usft (Original Well Elev)
Rig Name: Original Well Elev

Northing 473052.32 Easting 764763.90 Latitude 32° 17' 54.324 N Longitude 103° 36' 36.834 W



Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.79°

Magnetic Field
Strength: 48306.0snT
Dip Angle: 60.16°
Date: 12/9/2014
Model: IGRF2010



Wellplanning

Endurance Resources LLC

#3H - MWD #1

Lea County, NM

Jaguar 18 State

Your Ref:

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0	0	0	0	0	0	0	0
5090	0.3	37.14	5089.57	1.6	25.18	1.43	0.01
5112	0.4	35.4	5111.57	1.71	25.26	1.53	0.46
5207	0.7	45.2	5206.56	2.39	25.86	2.21	0.33
5303	0.5	39	5302.56	3.13	26.54	2.94	0.22
5398	0.5	11.4	5397.56	3.86	26.88	3.67	0.25
5492	0.5	9.3	5491.55	4.66	27.03	4.48	0.02
5587	0.4	34.7	5586.55	5.35	27.28	5.16	0.23
5681	0.5	27.9	5680.55	5.98	27.66	5.78	0.12
5775	0.6	351.3	5774.54	6.83	27.78	6.63	0.38
5870	0.3	351.7	5869.54	7.57	27.67	7.37	0.32
5964	0.4	318	5963.54	8.05	27.41	7.86	0.24
6058	0.6	339.1	6057.53	8.76	27.02	8.57	0.29
6153	0.3	345.3	6152.53	9.46	26.78	9.27	0.32
6247	0.3	9.6	6246.53	9.94	26.76	9.75	0.13
6342	0.4	20.1	6341.53	10.5	26.91	10.31	0.12
6436	0.4	18.4	6435.53	11.12	27.13	10.93	0.01
6531	0.4	262.6	6530.52	11.39	26.91	11.2	0.71
6625	0.6	270.3	6624.52	11.35	26.09	11.17	0.22
6720	0.7	236.4	6719.51	11.03	25.11	10.86	0.41
6814	0.8	245.3	6813.51	10.44	24.03	10.27	0.16
6909	0.9	264	6908.5	10.08	22.69	9.93	0.31
7003	0.8	271.2	7002.49	10.02	21.3	9.87	0.16
7097	0.9	267.8	7096.48	10.01	19.9	9.87	0.12
7192	1	254.1	7191.46	9.75	18.36	9.62	0.26
7286	0.8	236.2	7285.45	9.16	17.03	9.04	0.36
7381	0.7	240.8	7380.44	8.51	15.97	8.4	0.12
7475	1.1	243.5	7474.43	7.83	14.66	7.72	0.43
7570	1.1	245.1	7569.41	7.04	13.02	6.94	0.03
7664	1	227.7	7663.4	6.1	11.59	6.02	0.35
7759	1	244	7758.38	5.18	10.23	5.11	0.3
7853	1	226.2	7852.37	4.26	8.9	4.19	0.33

7948	1	236.3	7947.36	3.22	7.62	3.17	0.19
8042	1	236.4	8041.34	2.31	6.25	2.27	0
8314	0.9	209.5	8313.31	-0.86	3.22	-0.88	0.17
8597	1	217.6	8596.27	-4.75	0.62	-4.76	0.06
8786	1	219.2	8785.24	-7.34	-1.43	-7.33	0.01
8880	1	247.8	8879.22	-8.28	-2.71	-8.26	0.53
8974	1	265	8973.21	-8.66	-4.28	-8.63	0.32
9069	0.8	306.5	9068.2	-8.34	-5.64	-8.3	0.7
9162	1	339.7	9161.19	-7.19	-6.44	-7.15	0.59
9193	1.1	351.2	9192.18	-6.65	-6.58	-6.6	0.75
9225	2.9	7.7	9224.16	-5.54	-6.52	-5.49	5.85
9256	6.2	9.3	9255.06	-3.11	-6.15	-3.07	10.65
9288	9.9	9.4	9286.74	1.31	-5.42	1.35	11.56
9319	13.4	10	9317.1	7.48	-4.36	7.51	11.3
9350	16.6	9.3	9347.04	15.39	-3.02	15.41	10.34
9382	19.3	8.1	9377.48	25.14	-1.54	25.15	8.52
9413	21.4	6.9	9406.54	35.82	-0.13	35.82	6.91
9445	23.6	5.5	9436.1	48	1.18	47.99	7.08
9476	25.8	3.8	9464.26	60.91	2.22	60.89	7.46
9508	28.1	2.6	9492.79	75.39	3.03	75.36	7.39
9539	31.6	2	9519.67	90.8	3.64	90.77	11.33
9571	35.2	1.3	9546.38	108.41	4.14	108.37	11.31
9602	38.4	359.8	9571.2	126.97	4.31	126.94	10.72
9634	41	359.3	9595.82	147.41	4.15	147.38	8.19
9665	43.7	359.6	9618.73	168.29	3.95	168.26	8.73
9697	47	0.5	9641.21	191.05	3.98	191.02	10.5
9728	49.1	1.4	9661.94	214.1	4.36	214.07	7.11
9759	52.1	1.4	9681.61	238.05	4.95	238.01	9.68
9791	55.6	1.3	9700.48	263.88	5.55	263.83	10.94
9822	59.6	0.2	9717.09	290.04	5.89	289.99	13.25
9854	62.2	359.3	9732.65	318	5.77	317.95	8.49
9885	63.8	358.8	9746.73	345.62	5.31	345.57	5.36
9917	66.4	358.6	9760.2	374.63	4.65	374.59	8.14
9948	70.4	359.2	9771.61	403.44	4.1	403.4	13.03
9980	74.5	0.1	9781.26	433.95	3.91	433.91	13.09
10012	77.3	0.7	9789.05	464.98	4.13	464.94	8.94
10044	80.7	0.8	9795.16	496.38	4.54	496.34	10.63
10075	84.6	0.5	9799.12	527.12	4.89	527.07	12.62
10107	85.9	0.6	9801.77	559.01	5.2	558.96	4.07
10138	86.4	0.5	9803.85	589.94	5.49	589.88	1.64
10170	87.9	0.4	9805.44	621.89	5.75	621.84	4.7
10201	88.6	0.7	9806.39	652.88	6.04	652.82	2.46
10233	89.1	1	9807.03	684.87	6.52	684.81	1.82
10264	89.6	0.9	9807.38	715.86	7.03	715.8	1.64
10295	90.1	0.9	9807.47	746.86	7.52	746.79	1.61
10327	89.9	359.8	9807.47	778.86	7.71	778.78	3.49
10358	89.8	359.2	9807.55	809.86	7.44	809.78	1.96

10390	90.2	358.9	9807.55	841.85	6.91	841.78	1.56
10421	90.8	358.9	9807.28	872.84	6.32	872.78	1.94
10453	91.5	358.9	9806.63	904.83	5.7	904.77	2.19
10484	90.8	357.6	9806.01	935.81	4.76	935.75	4.76
10516	89.9	357.4	9805.82	967.78	3.36	967.73	2.88
10547	89.7	357.1	9805.92	998.74	1.87	998.71	1.16
10610	90.4	356.9	9805.87	1061.66	-1.42	1061.64	1.16
10704	89.5	357.5	9805.95	1155.54	-6.01	1155.56	1.15
10799	90.8	357.4	9805.7	1250.45	-10.24	1250.49	1.37
10893	90.5	358.6	9804.64	1344.38	-13.52	1344.44	1.32
10987	89.8	359.8	9804.39	1438.37	-14.83	1438.44	1.48
11082	90.7	359.3	9803.98	1533.36	-15.58	1533.44	1.08
11176	88.7	0	9804.47	1627.36	-16.15	1627.43	2.25
11270	90.3	359.8	9805.29	1721.35	-16.32	1721.42	1.72
11365	92	359.6	9803.38	1816.32	-16.82	1816.4	1.8
11459	90.8	0.4	9801.08	1910.29	-16.82	1910.36	1.53
11554	90.1	359.8	9800.34	2005.29	-16.65	2005.36	0.97
11648	88.6	0	9801.4	2099.28	-16.81	2099.35	1.61
11741	89.7	359.9	9802.78	2192.27	-16.89	2192.33	1.19
11835	89.7	358.4	9803.28	2286.25	-18.29	2286.33	1.6
11930	90.6	358.5	9803.03	2381.22	-20.86	2381.31	0.95
12024	90.6	358.5	9802.04	2475.18	-23.32	2475.28	0
12118	90	358.5	9801.55	2569.15	-25.78	2569.26	0.64
12213	90.2	358.4	9801.39	2664.11	-28.35	2664.25	0.24
12307	88.9	358.9	9802.12	2758.08	-30.56	2758.23	1.48
12417	87.5	0.1	9805.58	2868.02	-31.52	2868.17	1.68
12512	90.3	0.5	9807.4	2962.99	-31.03	2963.13	2.98
12606	91.7	0.2	9805.76	3056.97	-30.45	3057.11	1.52
12701	90.8	0.2	9803.69	3151.95	-30.12	3152.08	0.95
12796	91.3	359.7	9801.95	3246.93	-30.2	3247.06	0.74
12890	91.3	359.8	9799.82	3340.91	-30.61	3341.04	0.11
12984	90	0.1	9798.75	3434.9	-30.7	3435.03	1.42
13078	90.2	0.1	9798.59	3528.9	-30.53	3529.02	0.21
13173	91.9	0	9796.85	3623.88	-30.45	3624	1.79
13267	90.7	0.1	9794.71	3717.85	-30.37	3717.97	1.28
13347	91.3	359.8	9793.32	3797.84	-30.44	3797.96	0.84
13379	91.6	359.7	9792.51	3829.83	-30.58	3829.95	0.99
13473	91.5	0.3	9789.96	3923.79	-30.58	3923.91	0.65
13567	91.9	0.4	9787.18	4017.75	-30	4017.86	0.44
13662	91	359.9	9784.77	4112.72	-29.75	4112.83	1.08
13757	91.7	359.7	9782.53	4207.69	-30.09	4207.8	0.77
13851	90.1	0.2	9781.06	4301.68	-30.17	4301.78	1.78
13945	90.9	0.1	9780.24	4395.67	-29.92	4395.77	0.86
14040	91.2	359.8	9778.5	4490.65	-30	4490.75	0.45
14112	91.9	359.4	9776.55	4562.63	-30.51	4562.73	1.12
14158	91.9	359.4	9775.02	4608.6	-30.99	4608.7	0

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 359.600° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.386°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 14158.00ft.,
the Bottom Hole Displacement is 4608.70ft., in the Direction of 359.600° (Grid).