

LEAM Drilling Systems LLC

Survey Report

Company:	PIONEER NATURAL RESOURCES	Local Co-ordinate Reference:	Well #4H
Project:	Reagan County, Tx	TVD Reference:	GE 2760' + KB 26' @ 2786.00usft (Patterson 241)
Site:	University 12-9	MD Reference:	GE 2760' + KB 26' @ 2786.00usft (Patterson 241)
Well:	#4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project Reagan County, Tx			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas Central 4203		

Site University 12-9			
Site Position:		Northing:	520,058.62 usft
From:	Map	Easting:	1,624,440.82 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	31° 5' 27.854 N
		Longitude:	101° 31' 59.542 W
		Grid Convergence:	-0.62 °

Well #4H			
Well Position	+N/-S	0.00 usft	Northing: 520,059.23 usft
	+E/-W	0.00 usft	Easting: 1,624,410.83 usft
Position Uncertainty		0.00 usft	Wellhead Elevation: usft
			Latitude: 31° 5' 27.856 N
			Longitude: 101° 31' 59.886 W
			Ground Level: 2,760.00 usft

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/19/13	6.32	59.41	47,954

Design OH					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		1.18

Survey Program		Date	05/05/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	920.00	Survey #1 (OH)	Gyroscope	Gyroscope	
990.00	14,523.00	Survey #2 (OH)	LEAM MWD	MWD - Standard	
14,575.00	14,575.00	Survey #3 (OH)	Project	Projection	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.69	116.95	100.00	-0.27	0.54	-0.26	0.69	0.69	0.00	
200.00	0.54	135.49	199.99	-0.88	1.40	-0.85	0.25	-0.15	18.54	
300.00	0.53	109.14	299.99	-1.37	2.17	-1.32	0.24	-0.01	-26.35	
400.00	0.38	111.84	399.98	-1.64	2.92	-1.58	0.15	-0.15	2.70	
500.00	0.51	171.59	499.98	-2.21	3.29	-2.14	0.46	0.13	59.75	
600.00	0.49	210.55	599.98	-3.02	3.14	-2.95	0.33	-0.02	38.96	

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700.00	0.20	198.02	699.98	-3.55	2.87	-3.49	0.30	-0.29	-12.53	
800.00	0.46	213.10	799.97	-4.05	2.59	-4.00	0.27	0.26	15.08	
900.00	0.40	259.38	899.97	-4.45	2.03	-4.41	0.34	-0.06	46.28	
920.00	0.47	243.54	919.97	-4.50	1.89	-4.46	0.69	0.35	-79.20	
990.00	0.79	250.51	989.97	-4.79	1.18	-4.77	0.47	0.46	9.96	
1,085.00	0.48	256.62	1,084.96	-5.10	0.17	-5.10	0.33	-0.33	6.43	
1,180.00	0.22	231.61	1,179.96	-5.31	-0.36	-5.31	0.31	-0.27	-26.33	
1,275.00	0.31	9.43	1,274.96	-5.17	-0.46	-5.18	0.52	0.09	145.07	
1,370.00	0.40	346.62	1,369.96	-4.59	-0.49	-4.60	0.17	0.09	-24.01	
1,465.00	0.40	315.81	1,464.96	-4.03	-0.80	-4.05	0.22	0.00	-32.43	
1,560.00	0.48	283.91	1,559.95	-3.70	-1.42	-3.73	0.27	0.08	-33.58	
1,655.00	0.62	241.90	1,654.95	-3.84	-2.26	-3.89	0.44	0.15	-44.22	
1,751.00	0.79	204.50	1,750.94	-4.69	-2.99	-4.75	0.50	0.18	-38.96	
1,846.00	1.41	180.90	1,845.92	-6.46	-3.28	-6.52	0.80	0.65	-24.84	
1,941.00	1.58	173.43	1,940.89	-8.93	-3.15	-8.99	0.27	0.18	-7.86	
2,036.00	1.80	170.62	2,035.85	-11.70	-2.76	-11.75	0.25	0.23	-2.96	
2,131.00	1.71	166.09	2,130.81	-14.55	-2.17	-14.59	0.17	-0.09	-4.77	
2,227.00	1.89	166.09	2,226.76	-17.47	-1.45	-17.50	0.19	0.19	0.00	
2,321.00	2.11	170.93	2,320.70	-20.69	-0.80	-20.70	0.29	0.23	5.15	
2,416.00	2.11	169.70	2,415.64	-24.13	-0.21	-24.13	0.05	0.00	-1.29	
2,512.00	1.89	167.01	2,511.58	-27.42	0.46	-27.40	0.25	-0.23	-2.80	
2,607.00	1.89	156.42	2,606.53	-30.38	1.44	-30.34	0.37	0.00	-11.15	
2,702.00	2.02	146.01	2,701.47	-33.20	3.00	-33.13	0.40	0.14	-10.96	
2,798.00	2.59	139.02	2,797.39	-36.24	5.37	-36.12	0.66	0.59	-7.28	
2,893.00	3.21	132.91	2,892.27	-39.67	8.72	-39.49	0.73	0.65	-6.43	
2,989.00	3.38	126.89	2,988.11	-43.20	12.95	-42.93	0.40	0.18	-6.27	
3,084.00	3.52	128.43	3,082.94	-46.70	17.48	-46.33	0.18	0.15	1.62	
3,179.00	3.21	132.52	3,177.78	-50.31	21.72	-49.85	0.41	-0.33	4.31	
3,275.00	2.90	138.63	3,273.64	-53.95	25.31	-53.41	0.47	-0.32	6.36	
3,370.00	2.68	165.21	3,368.53	-57.90	27.47	-57.32	1.37	-0.23	27.98	
3,465.00	2.99	174.40	3,463.42	-62.51	28.27	-61.91	0.58	0.33	9.67	
3,560.00	3.30	172.20	3,558.27	-67.69	28.89	-67.08	0.35	0.33	-2.32	
3,656.00	3.38	166.00	3,654.11	-73.17	29.95	-72.54	0.39	0.08	-6.46	
3,751.00	2.90	161.70	3,748.97	-78.17	31.38	-77.50	0.56	-0.51	-4.53	
3,846.00	2.29	157.30	3,843.87	-82.20	32.87	-81.51	0.68	-0.64	-4.63	
3,942.00	2.20	152.69	3,939.80	-85.61	34.45	-84.88	0.21	-0.09	-4.80	
4,037.00	2.20	144.30	4,034.73	-88.71	36.35	-87.94	0.34	0.00	-8.83	
4,133.00	1.80	153.13	4,130.67	-91.55	38.11	-90.75	0.52	-0.42	9.20	
4,228.00	1.58	152.21	4,225.63	-94.04	39.39	-93.21	0.23	-0.23	-0.97	
4,323.00	1.89	135.20	4,320.58	-96.31	41.11	-95.44	0.63	0.33	-17.91	
4,419.00	1.49	117.49	4,416.54	-98.01	43.33	-97.10	0.68	-0.42	-18.45	
4,514.00	1.19	111.03	4,511.52	-98.93	45.35	-97.98	0.35	-0.32	-6.80	

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Survey										
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4,610.00	1.32	120.21	4,607.49	-99.85	47.23	-98.85	0.25	0.14	9.56	
4,705.00	1.32	137.79	4,702.47	-101.21	48.91	-100.18	0.42	0.00	18.51	
4,800.00	1.32	156.82	4,797.44	-103.02	50.08	-101.97	0.46	0.00	20.03	
4,895.00	1.49	164.29	4,892.42	-105.22	50.85	-104.15	0.26	0.18	7.86	
4,991.00	0.79	162.22	4,988.40	-107.05	51.39	-105.97	0.73	-0.73	-2.16	
5,086.00	0.31	147.42	5,083.39	-107.89	51.72	-106.80	0.52	-0.51	-15.58	
5,182.00	0.31	91.30	5,179.39	-108.12	52.12	-107.02	0.30	0.00	-58.46	
5,277.00	0.48	80.62	5,274.39	-108.06	52.77	-106.95	0.19	0.18	-11.24	
5,373.00	0.79	76.93	5,370.38	-107.84	53.81	-106.71	0.33	0.32	-3.84	
5,468.00	0.88	69.41	5,465.37	-107.44	55.13	-106.28	0.15	0.09	-7.92	
5,563.00	1.10	69.50	5,560.36	-106.86	56.67	-105.67	0.23	0.23	0.09	
5,659.00	1.32	74.42	5,656.34	-106.24	58.60	-105.01	0.25	0.23	5.13	
5,754.00	1.49	74.02	5,751.31	-105.61	60.84	-104.33	0.18	0.18	-0.42	
5,848.00	1.71	76.53	5,845.27	-104.94	63.38	-103.62	0.25	0.23	2.67	
5,943.00	2.02	73.81	5,940.22	-104.15	66.37	-102.76	0.34	0.33	-2.86	
6,038.00	2.29	67.00	6,035.15	-102.94	69.72	-101.48	0.39	0.28	-7.17	
6,134.00	2.59	62.92	6,131.07	-101.20	73.42	-99.67	0.36	0.31	-4.25	
6,239.00	2.68	57.20	6,235.96	-98.79	77.59	-97.17	0.26	0.09	-5.45	
6,330.00	2.99	58.43	6,326.84	-96.40	81.40	-94.70	0.35	0.34	1.35	
6,425.00	0.35	132.97	6,421.80	-95.30	83.73	-93.55	3.07	-2.78	78.46	
6,457.00	1.06	354.80	6,453.80	-95.07	83.77	-93.32	4.19	2.22	-431.78	
6,488.00	4.84	357.44	6,484.75	-93.48	83.69	-91.73	12.20	12.19	8.52	
6,520.00	8.53	1.66	6,516.53	-89.75	83.70	-88.01	11.63	11.53	13.19	
6,552.00	12.66	5.35	6,547.98	-83.89	84.09	-82.14	13.07	12.91	11.53	
6,584.00	16.36	4.12	6,578.95	-75.90	84.74	-74.14	11.60	11.56	-3.84	
6,616.00	19.70	3.77	6,609.37	-66.02	85.42	-64.25	10.44	10.44	-1.09	
6,647.00	22.77	1.83	6,638.27	-54.81	85.96	-53.03	10.16	9.90	-6.26	
6,679.00	25.41	359.90	6,667.48	-41.75	86.14	-39.97	8.61	8.25	-6.03	
6,711.00	27.96	356.56	6,696.07	-27.39	85.68	-25.62	9.24	7.97	-10.44	
6,743.00	31.48	356.91	6,723.85	-11.56	84.78	-9.81	11.01	11.00	1.09	
6,775.00	35.09	357.44	6,750.60	5.98	83.92	7.71	11.32	11.28	1.66	
6,806.00	37.81	359.37	6,775.53	24.39	83.42	26.10	9.52	8.77	6.23	
6,838.00	40.63	0.43	6,800.32	44.62	83.39	46.33	9.06	8.81	3.31	
6,870.00	42.74	1.83	6,824.22	65.89	83.81	67.61	7.21	6.59	4.38	
6,902.00	44.85	1.48	6,847.32	88.03	84.45	89.75	6.64	6.59	-1.09	
6,934.00	48.19	0.43	6,869.33	111.24	84.83	112.97	10.71	10.44	-3.28	
6,965.00	51.79	0.07	6,889.26	134.98	84.93	136.70	11.65	11.61	-1.16	
6,997.00	53.99	358.84	6,908.57	160.50	84.69	162.21	7.53	6.88	-3.84	
7,029.00	57.33	358.14	6,926.62	186.91	83.99	188.60	10.59	10.44	-2.19	
7,061.00	59.62	358.32	6,943.35	214.17	83.14	215.84	7.17	7.16	0.56	
7,093.00	62.17	358.67	6,958.91	242.12	82.41	243.76	8.03	7.97	1.09	
7,125.00	64.28	359.72	6,973.33	270.68	82.01	272.31	7.22	6.59	3.28	

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7,156.00	67.88	359.72	6,985.89	299.01	81.87	300.64	11.61	11.61	0.00	
7,188.00	71.75	359.20	6,996.93	329.04	81.59	330.65	12.19	12.09	-1.63	
7,220.00	76.68	358.67	7,005.64	359.82	81.02	361.41	15.49	15.41	-1.66	
7,252.00	79.84	357.97	7,012.15	391.13	80.10	392.70	10.10	9.88	-2.19	
7,284.00	80.20	359.37	7,017.69	422.64	79.36	424.18	4.45	1.13	4.38	
7,316.00	82.31	358.32	7,022.56	454.26	78.73	455.78	7.35	6.59	-3.28	
7,347.00	85.91	357.26	7,025.74	485.07	77.54	486.56	12.10	11.61	-3.42	
7,379.00	88.46	356.56	7,027.31	516.98	75.81	518.43	8.26	7.97	-2.19	
7,474.00	89.16	356.21	7,029.28	611.77	69.83	613.08	0.82	0.74	-0.37	
7,569.00	89.16	355.15	7,030.68	706.49	62.67	707.63	1.12	0.00	-1.12	
7,665.00	89.43	357.97	7,031.86	802.30	56.91	803.30	2.95	0.28	2.94	
7,760.00	89.87	357.79	7,032.44	897.23	53.40	898.14	0.50	0.46	-0.19	
7,856.00	89.43	0.07	7,033.02	993.20	51.60	994.06	2.42	-0.46	2.38	
7,951.00	91.36	0.95	7,032.37	1,088.19	52.45	1,089.04	2.23	2.03	0.93	
8,047.00	91.10	359.37	7,030.31	1,184.17	52.72	1,185.00	1.67	-0.27	-1.65	
8,143.00	89.60	358.14	7,029.72	1,280.14	50.63	1,280.91	2.02	-1.56	-1.28	
8,238.00	90.04	357.79	7,030.02	1,375.08	47.26	1,375.76	0.59	0.46	-0.37	
8,333.00	90.66	357.79	7,029.44	1,470.00	43.59	1,470.59	0.65	0.65	0.00	
8,428.00	88.37	358.67	7,030.24	1,564.95	40.66	1,565.45	2.58	-2.41	0.93	
8,524.00	88.29	359.20	7,033.04	1,660.89	38.88	1,661.34	0.56	-0.08	0.55	
8,619.00	89.78	1.83	7,034.64	1,755.86	39.73	1,756.31	3.18	1.57	2.77	
8,715.00	91.98	1.83	7,033.17	1,851.80	42.80	1,852.28	2.29	2.29	0.00	
8,810.00	91.01	0.43	7,030.69	1,946.74	44.67	1,947.25	1.79	-1.02	-1.47	
8,905.00	88.37	1.30	7,031.20	2,041.72	46.10	2,042.24	2.93	-2.78	0.92	
9,001.00	88.64	1.66	7,033.71	2,137.66	48.58	2,138.20	0.47	0.28	0.38	
9,096.00	90.31	2.36	7,034.58	2,232.59	51.91	2,233.18	1.91	1.76	0.74	
9,192.00	92.15	2.36	7,032.52	2,328.48	55.87	2,329.14	1.92	1.92	0.00	
9,287.00	88.72	0.78	7,031.80	2,423.43	58.47	2,424.12	3.98	-3.61	-1.66	
9,382.00	86.70	2.36	7,035.59	2,518.31	61.07	2,519.03	2.70	-2.13	1.66	
9,478.00	86.88	1.83	7,040.97	2,614.09	64.57	2,614.87	0.58	0.19	-0.55	
9,573.00	86.26	1.13	7,046.65	2,708.89	67.02	2,709.69	0.98	-0.65	-0.74	
9,668.00	87.41	3.24	7,051.90	2,803.67	70.64	2,804.53	2.53	1.21	2.22	
9,764.00	87.58	3.41	7,056.09	2,899.41	76.20	2,900.37	0.25	0.18	0.18	
9,859.00	87.67	3.59	7,060.03	2,994.16	81.99	2,995.21	0.21	0.09	0.19	
9,954.00	87.23	3.59	7,064.26	3,088.87	87.94	3,090.03	0.46	-0.46	0.00	
10,050.00	89.69	2.71	7,066.84	3,184.69	93.21	3,185.93	2.72	2.56	-0.92	
10,145.00	90.57	5.00	7,066.62	3,279.46	99.60	3,280.82	2.58	0.93	2.41	
10,240.00	90.92	5.52	7,065.39	3,374.06	108.30	3,375.57	0.66	0.37	0.55	
10,336.00	91.45	1.13	7,063.40	3,469.85	113.87	3,471.46	4.61	0.55	-4.57	
10,431.00	90.31	0.95	7,061.94	3,564.82	115.59	3,566.45	1.21	-1.20	-0.19	
10,527.00	89.78	359.02	7,061.86	3,660.82	115.57	3,662.42	2.08	-0.55	-2.01	
10,622.00	89.69	357.79	7,062.30	3,755.78	112.93	3,757.31	1.30	-0.09	-1.29	

LEAM Drilling Systems LLC

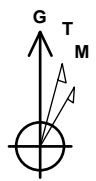
Survey Report

Company:	PIONEER NATURAL RESOURCES	Local Co-ordinate Reference:	Well #4H
Project:	Reagan County, Tx	TVD Reference:	GE 2760' + KB 26' @ 2786.00usft (Patterson 241)
Site:	University 12-9	MD Reference:	GE 2760' + KB 26' @ 2786.00usft (Patterson 241)
Well:	#4H	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)	
10,718.00	90.13	356.21	7,062.45	3,851.64	107.90	3,853.05	1.71	0.46	-1.65	
10,813.00	88.99	357.44	7,063.18	3,946.49	102.64	3,947.77	1.77	-1.20	1.29	
10,908.00	88.90	359.55	7,064.93	4,041.44	100.15	4,042.64	2.22	-0.09	2.22	
11,003.00	88.46	358.84	7,067.12	4,136.40	98.81	4,137.56	0.88	-0.46	-0.75	
11,099.00	89.96	2.01	7,068.45	4,232.37	99.52	4,233.53	3.65	1.56	3.30	
11,194.00	89.25	2.36	7,069.10	4,327.30	103.15	4,328.51	0.83	-0.75	0.37	
11,289.00	89.16	3.59	7,070.42	4,422.16	108.08	4,423.45	1.30	-0.09	1.29	
11,385.00	89.34	5.17	7,071.68	4,517.87	115.41	4,519.29	1.66	0.19	1.65	
11,480.00	89.69	7.11	7,072.48	4,612.32	125.57	4,613.93	2.07	0.37	2.04	
11,575.00	90.84	4.82	7,072.04	4,706.79	135.44	4,708.59	2.70	1.21	-2.41	
11,671.00	90.84	2.36	7,070.63	4,802.59	141.45	4,804.48	2.56	0.00	-2.56	
11,766.00	90.22	1.83	7,069.75	4,897.52	144.92	4,899.47	0.86	-0.65	-0.56	
11,861.00	90.92	1.66	7,068.81	4,992.47	147.81	4,994.46	0.76	0.74	-0.18	
11,957.00	90.31	0.78	7,067.78	5,088.44	149.86	5,090.45	1.12	-0.64	-0.92	
12,052.00	91.28	0.60	7,066.46	5,183.42	151.00	5,185.44	1.04	1.02	-0.19	
12,147.00	91.01	359.55	7,064.56	5,278.40	151.13	5,280.40	1.14	-0.28	-1.11	
12,243.00	88.90	359.55	7,064.64	5,374.40	150.37	5,376.35	2.20	-2.20	0.00	
12,338.00	88.99	1.13	7,066.39	5,469.38	150.93	5,471.32	1.67	0.09	1.66	
12,433.00	90.13	2.54	7,067.12	5,564.32	153.98	5,566.31	1.91	1.20	1.48	
12,529.00	89.52	2.18	7,067.41	5,660.24	157.93	5,662.29	0.74	-0.64	-0.38	
12,624.00	89.60	3.41	7,068.14	5,755.12	162.56	5,757.25	1.30	0.08	1.29	
12,719.00	89.96	5.70	7,068.50	5,849.81	170.11	5,852.08	2.44	0.38	2.41	
12,814.00	89.78	3.41	7,068.72	5,944.51	177.65	5,946.90	2.42	-0.19	-2.41	
12,910.00	88.81	1.66	7,069.90	6,040.40	181.90	6,042.86	2.08	-1.01	-1.82	
13,005.00	88.99	3.06	7,071.72	6,135.30	185.81	6,137.82	1.49	0.19	1.47	
13,100.00	89.96	2.89	7,072.60	6,230.17	190.74	6,232.77	1.04	1.02	-0.18	
13,196.00	89.87	4.12	7,072.74	6,325.98	196.61	6,328.69	1.28	-0.09	1.28	
13,291.00	90.31	3.59	7,072.59	6,420.77	202.99	6,423.59	0.73	0.46	-0.56	
13,386.00	88.46	359.90	7,073.61	6,515.70	205.89	6,518.56	4.34	-1.95	-3.88	
13,481.00	90.04	1.48	7,074.85	6,610.68	207.03	6,613.54	2.35	1.66	1.66	
13,576.00	91.45	0.60	7,073.62	6,705.65	208.75	6,708.53	1.75	1.48	-0.93	
13,671.00	92.07	358.32	7,070.70	6,800.60	207.86	6,803.43	2.49	0.65	-2.40	
13,767.00	89.25	356.38	7,069.59	6,896.47	203.42	6,899.20	3.57	-2.94	-2.02	
13,862.00	88.20	356.03	7,071.71	6,991.24	197.14	6,993.82	1.17	-1.11	-0.37	
13,958.00	87.41	356.03	7,075.38	7,086.94	190.49	7,089.36	0.82	-0.82	0.00	
14,053.00	86.88	356.03	7,080.12	7,181.59	183.92	7,183.86	0.56	-0.56	0.00	
14,148.00	86.70	355.68	7,085.43	7,276.19	177.07	7,278.30	0.41	-0.19	-0.37	
14,244.00	86.35	356.38	7,091.25	7,371.79	170.43	7,373.73	0.81	-0.36	0.73	
14,339.00	86.17	356.38	7,097.45	7,466.40	164.45	7,468.20	0.19	-0.19	0.00	
14,434.00	85.74	356.38	7,104.15	7,560.97	158.47	7,562.63	0.45	-0.45	0.00	
14,523.00	86.00	356.73	7,110.56	7,649.58	153.13	7,651.11	0.49	0.29	0.39	
14,575.00	86.00	356.73	7,114.19	7,701.37	150.17	7,702.83	0.00	0.00	0.00	

PIONEER NATURAL RESOURCES

Project: Reagan County, Tx
 Site: University 12-9
 Well: #4H
 Wellbore: OH
 Design: Plan #2



Azimuths to Grid North
 True North: 0.62°
 Magnetic North: 6.93°

Magnetic Field
 Strength: 47953.5snT
 Dip Angle: 59.41°
 Date: 04/19/2013
 Model: IGRF2010



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL (12-9 #4H)	0.00	0.00	0.00	520059.23	1624410.83
T1 (12-9 #4H)	7027.00	-38.97	34.20	520020.26	1624445.03
PBHL (12-9 #4H)	7086.00	7674.82	192.75	527734.05	1624603.58

FORMATION TOP DETAILS

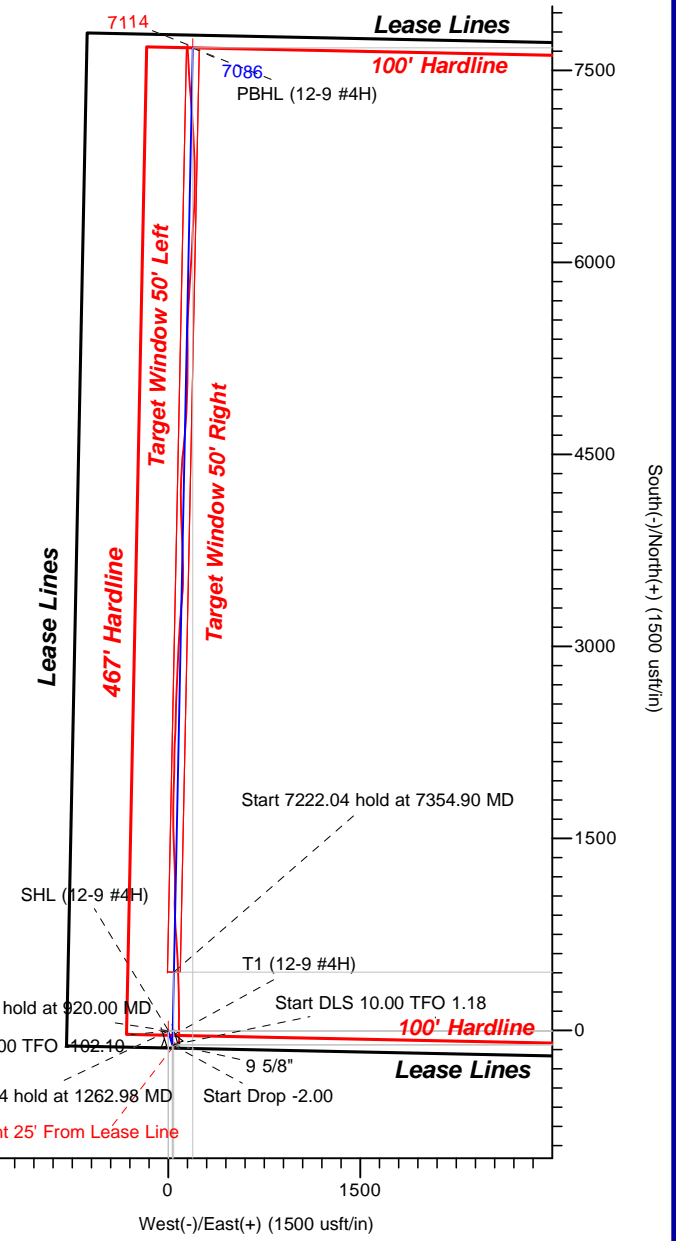
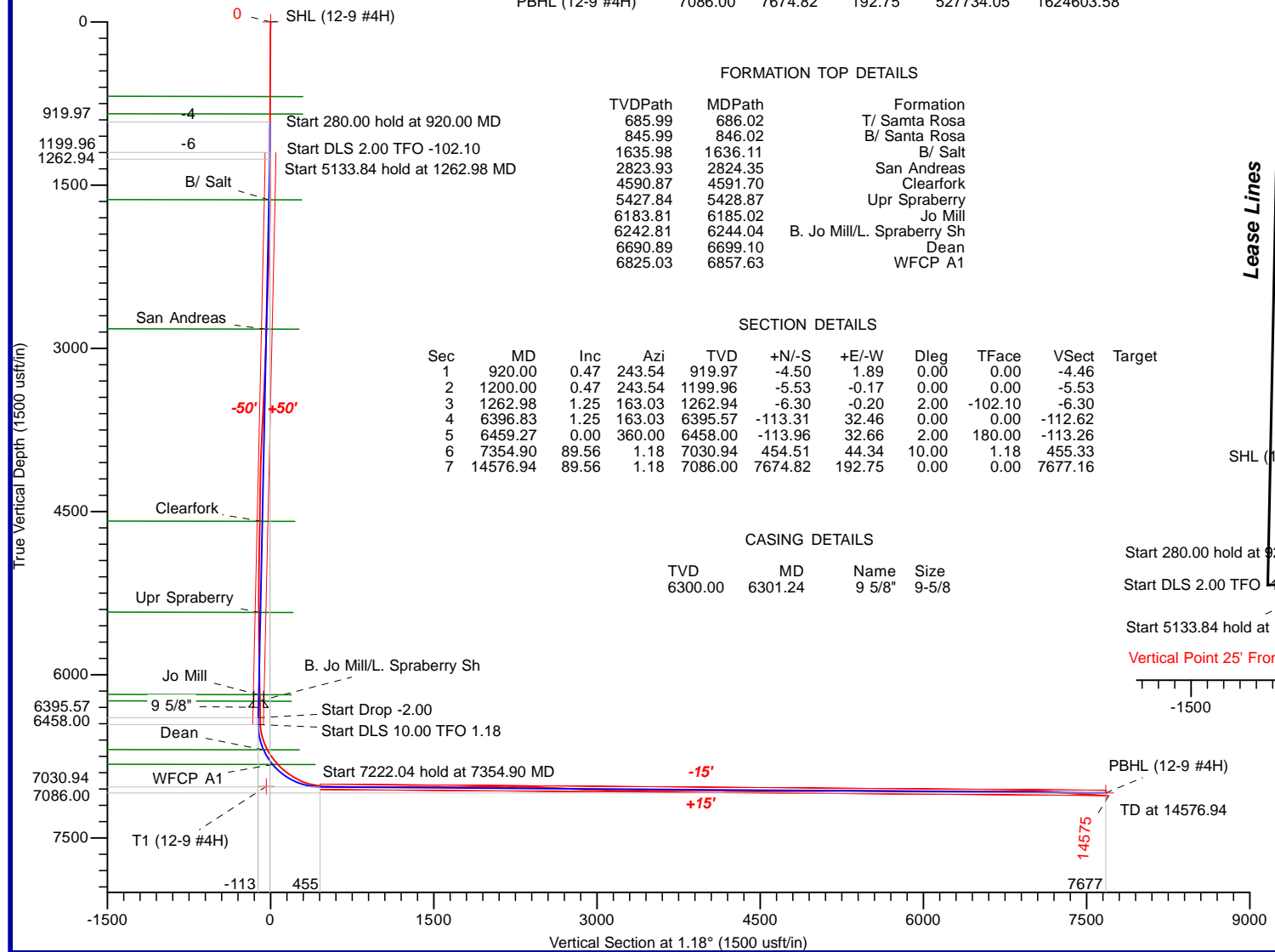
TVDPath	MDPath	Formation
685.99	686.02	T/ Samta Rosa
845.99	846.02	B/ Santa Rosa
1635.98	1636.11	B/ Salt
2823.93	2824.35	San Andreas
4590.87	4591.70	Clearfork
5427.84	5428.87	Upr Spraberry
6183.81	6185.02	Jo Mill
6242.81	6244.04	B. Jo Mill/L. Spraberry Sh
6690.89	6699.10	Dean
6825.03	6857.63	WFCP A1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	920.00	0.47	243.54	919.97	-4.50	1.89	0.00	0.00	-4.46	
2	1200.00	0.47	243.54	1199.96	-5.53	-0.17	0.00	0.00	-5.53	
3	1262.98	1.25	163.03	1262.94	-6.30	-0.20	2.00	-102.10	-6.30	
4	6396.83	1.25	163.03	6395.57	-113.31	32.46	0.00	0.00	-112.62	
5	6459.27	0.00	360.00	6458.00	-113.96	32.66	2.00	180.00	-113.26	
6	7354.90	89.56	1.18	7030.94	454.51	44.34	10.00	1.18	455.33	
7	14576.94	89.56	1.18	7086.00	7674.82	192.75	0.00	0.00	7677.16	

CASING DETAILS

TVD	MD	Name	Size
6300.00	6301.24	9 5/8"	9-5/8"



LEAM DRILLING SYSTEMS LLC
 2010 East Davis, Conroe, Texas 77301
 Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #2 (#4H/OH)
 University 12-9
 Created By: David Vogler
 Date: 7:13, May 05 2013
 Approved: _____
 Date: _____