



# **SWEPI**

**Winkler County, Texas (NAD27)  
University 20 PW Unit  
2706H**

**OH / 63596/63597/63608**

**Survey: Phoenix MWD Surveys**

## **Standard Survey Report**

**14 February, 2019**



<b>Company:</b>	SWEPI	<b>Local Co-ordinate Reference:</b>	Well 2706H
<b>Project:</b>	Winkler County, Texas (NAD27)	<b>TVD Reference:</b>	RKB @ 2801.30usft (Precision 559)
<b>Site:</b>	University 20 PW Unit	<b>MD Reference:</b>	RKB @ 2801.30usft (Precision 559)
<b>Well:</b>	2706H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 63596/63597/63608	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Precision 559)	<b>Database:</b>	USA Compass

<b>Project</b>	Winkler County, Texas (NAD27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Texas Central 4203		

<b>Site</b>	University 20 PW Unit		
<b>Site Position:</b>		<b>Northing:</b>	762,967.47 usft
<b>From:</b>	Map	<b>Easting:</b>	1,073,353.65 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	31° 43' 49.23758 N
		<b>Longitude:</b>	103° 18' 50.66766 W
		<b>Grid Convergence:</b>	-1.54 °

<b>Well</b>	2706H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 747,814.84 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 1,078,075.17 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	31° 41' 20.57838 N
		<b>Longitude:</b>	103° 17' 51.34325 W
		<b>Ground Level:</b>	2,775.30 usft

<b>Wellbore</b>	OH / 63596/63597/63608				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	MVHD	10/31/2018	7.06	59.54	47,459.69151228

<b>Design</b>	Surveys (Precision 559)				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	343.71	

<b>Survey Program</b>	<b>Date</b>	2/14/2019			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
240.00	20,780.00	Phoenix MWD Surveys (OH / 63596/63597/63608)	MWD+HDGM+AX	OWSG Rev.2 MWD + HDGM + Axial Correction	

<b>Survey</b>									
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240.00	0.53	291.34	240.00	0.40	-1.03	0.68	0.22	0.22	0.00
<b>First Phoenix MWD Survey</b>									
427.00	1.90	250.96	426.95	-0.29	-4.77	1.06	0.82	0.73	-21.59
612.00	9.81	235.70	610.85	-10.19	-20.71	-3.97	4.32	4.28	-8.25
795.00	9.32	235.45	791.30	-27.38	-45.80	-13.43	0.27	-0.27	-0.14
981.00	9.54	223.37	974.81	-47.13	-68.79	-25.94	1.07	0.12	-6.49
1,169.00	9.00	224.93	1,160.35	-68.86	-89.87	-40.89	0.32	-0.29	0.83
1,355.00	10.68	216.08	1,343.62	-93.10	-110.30	-58.42	1.21	0.90	-4.76
1,542.00	10.58	216.13	1,527.41	-120.97	-130.63	-79.47	0.05	-0.05	0.03
1,729.00	10.49	218.11	1,711.26	-148.23	-151.26	-99.85	0.20	-0.05	1.06

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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)
1,916.00	10.66	218.43	1,895.08	-175.17	-172.51	-119.75	0.10	0.09	0.17
2,103.00	10.68	220.24	2,078.85	-201.95	-194.46	-139.29	0.18	0.01	0.97
2,289.00	10.64	221.31	2,261.64	-228.00	-216.93	-158.00	0.11	-0.02	0.58
2,475.00	10.26	221.55	2,444.55	-253.29	-239.25	-176.02	0.21	-0.20	0.13
2,663.00	9.91	220.49	2,629.65	-278.13	-260.86	-193.79	0.21	-0.19	-0.56
2,850.00	9.51	220.08	2,813.97	-302.19	-281.25	-211.16	0.22	-0.21	-0.22
3,036.00	9.16	220.26	2,997.51	-325.24	-300.71	-227.83	0.19	-0.19	0.10
3,225.00	8.55	218.79	3,184.25	-347.67	-319.24	-244.17	0.34	-0.32	-0.78
3,412.00	9.21	219.05	3,369.01	-370.13	-337.37	-260.64	0.35	0.35	0.14
3,598.00	9.99	220.50	3,552.41	-393.96	-357.23	-277.94	0.44	0.42	0.78
3,784.00	10.21	223.90	3,735.52	-418.10	-379.14	-294.97	0.34	0.12	1.83
3,971.00	9.07	220.22	3,919.88	-441.30	-400.15	-311.34	0.69	-0.61	-1.97
4,158.00	7.88	217.41	4,104.84	-462.74	-417.45	-327.07	0.67	-0.64	-1.50
4,347.00	11.81	219.71	4,291.02	-487.92	-437.69	-345.56	2.09	2.08	1.22
4,535.00	10.14	219.33	4,475.57	-515.52	-460.47	-365.66	0.89	-0.89	-0.20
4,723.00	9.27	216.06	4,660.88	-540.56	-479.87	-384.26	0.55	-0.46	-1.74
4,910.00	10.65	210.98	4,845.06	-567.56	-497.64	-405.18	0.87	0.74	-2.72
4,969.00	11.72	212.46	4,902.94	-577.29	-503.66	-412.83	1.88	1.81	2.51
5,089.00	10.92	216.73	5,020.61	-596.68	-517.00	-427.71	0.97	-0.67	3.56
5,277.00	9.61	216.56	5,205.60	-623.56	-537.00	-447.90	0.70	-0.70	-0.09
5,465.00	10.10	215.44	5,390.82	-649.59	-555.90	-467.58	0.28	0.26	-0.60
5,651.00	10.28	215.28	5,573.89	-676.43	-574.94	-488.00	0.10	0.10	-0.09
5,837.00	6.14	215.68	5,757.94	-698.07	-590.34	-504.45	2.23	-2.23	0.22
6,024.00	6.14	213.41	5,943.87	-714.54	-601.68	-517.08	0.13	0.00	-1.21
6,211.00	3.19	226.72	6,130.23	-726.46	-610.97	-525.91	1.67	-1.58	7.12
6,398.00	3.15	224.17	6,316.95	-733.71	-618.34	-530.81	0.08	-0.02	-1.36
6,585.00	3.25	222.37	6,503.66	-741.31	-625.49	-536.10	0.08	0.05	-0.96
6,772.00	1.75	227.25	6,690.47	-747.16	-631.16	-540.13	0.81	-0.80	2.61
6,957.00	1.50	217.13	6,875.40	-751.01	-634.70	-542.83	0.21	-0.14	-5.47
7,144.00	1.49	222.13	7,062.34	-754.77	-637.81	-545.56	0.07	-0.01	2.67
7,330.00	1.35	218.92	7,248.28	-758.27	-640.81	-548.08	0.09	-0.08	-1.73
7,517.00	1.09	186.72	7,435.24	-761.75	-642.40	-550.97	0.39	-0.14	-17.22
7,703.00	0.17	4.41	7,621.23	-763.23	-642.59	-552.34	0.68	-0.49	95.53
7,892.00	0.96	100.72	7,810.22	-763.24	-641.01	-552.80	0.53	0.42	50.96
8,078.00	0.67	303.59	7,996.21	-762.93	-640.38	-552.68	0.86	-0.16	-84.48
8,265.00	1.05	332.14	8,183.19	-760.81	-642.09	-550.16	0.30	0.20	15.27
8,453.00	1.08	339.34	8,371.16	-757.63	-643.52	-546.71	0.07	0.02	3.83
8,641.00	1.16	0.07	8,559.12	-754.07	-644.15	-543.11	0.22	0.04	11.03
8,827.00	2.00	30.27	8,745.05	-749.38	-642.51	-539.08	0.62	0.45	16.24
9,014.00	1.89	145.95	8,932.00	-749.12	-639.14	-539.77	1.76	-0.06	61.86
9,201.00	1.38	140.84	9,118.92	-753.42	-635.99	-544.78	0.28	-0.27	-2.73
9,387.00	2.95	229.43	9,304.82	-758.27	-638.21	-548.81	1.73	0.84	47.63
9,574.00	3.20	237.35	9,491.55	-764.22	-646.26	-552.26	0.26	0.13	4.24

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9,760.00	1.96	252.35	9,677.36	-767.98	-653.66	-553.80	0.75	-0.67	8.06
9,947.00	1.30	284.40	9,864.29	-768.42	-658.76	-552.79	0.59	-0.35	17.14
10,134.00	1.17	354.15	10,051.25	-766.00	-661.01	-549.83	0.76	-0.07	37.30
10,320.00	0.94	271.84	10,237.23	-764.06	-662.73	-547.49	0.75	-0.12	-44.25
10,506.00	0.22	200.58	10,423.22	-764.35	-664.38	-547.30	0.48	-0.39	-38.31
10,693.00	0.30	186.93	10,610.22	-765.17	-664.57	-548.04	0.05	0.04	-7.30
10,878.00	0.38	176.36	10,795.22	-766.26	-664.59	-549.08	0.05	0.04	-5.71
11,066.00	1.22	207.97	10,983.20	-768.65	-665.49	-551.12	0.49	0.45	16.81
11,253.00	1.74	214.26	11,170.14	-772.75	-668.02	-554.35	0.29	0.28	3.36
11,387.00	1.80	227.47	11,304.07	-775.86	-670.71	-556.58	0.31	0.04	9.86
11,533.00	2.30	216.43	11,449.98	-779.77	-674.14	-559.36	0.43	0.34	-7.56
11,628.00	5.18	337.36	11,544.85	-777.34	-676.93	-556.25	7.01	3.03	127.29
11,722.00	21.40	343.25	11,636.03	-756.86	-683.55	-534.74	17.29	17.26	6.27
11,816.00	31.36	344.10	11,720.14	-716.82	-695.22	-493.03	10.60	10.60	0.90
11,910.00	43.56	343.24	11,794.61	-662.07	-711.32	-435.97	12.99	12.98	-0.91
12,004.00	50.85	342.81	11,858.43	-596.15	-731.46	-367.04	7.76	7.76	-0.46
12,098.00	62.08	341.87	11,910.28	-521.62	-755.23	-288.84	11.98	11.95	-1.00
12,192.00	72.82	342.09	11,946.28	-439.19	-782.04	-202.19	11.43	11.43	0.23
12,286.00	81.60	342.86	11,967.06	-351.86	-809.61	-110.64	9.37	9.34	0.82
12,346.00	87.20	344.55	11,972.92	-294.57	-826.35	-50.95	9.74	9.33	2.82
12,440.00	90.52	346.75	11,974.79	-203.54	-849.64	42.96	4.24	3.53	2.34
12,535.00	87.78	343.99	11,976.20	-111.64	-873.63	137.89	4.09	-2.88	-2.91
12,629.00	89.68	346.14	11,978.28	-20.85	-897.84	231.83	3.05	2.02	2.29
12,723.00	90.69	352.28	11,977.98	71.44	-915.43	325.35	6.62	1.07	6.53
12,817.00	89.71	351.65	11,977.65	164.52	-928.57	418.38	1.24	-1.04	-0.67
12,911.00	87.71	346.78	11,979.77	256.80	-946.15	511.89	5.60	-2.13	-5.18
13,005.00	91.75	349.21	11,980.21	348.72	-965.70	605.60	5.02	4.30	2.59
13,099.00	89.01	345.87	11,979.59	440.48	-985.97	699.36	4.60	-2.91	-3.55
13,193.00	92.76	348.15	11,978.13	532.04	-1,007.09	793.17	4.67	3.99	2.43
13,287.00	89.76	344.35	11,976.07	623.30	-1,029.43	887.03	5.15	-3.19	-4.04
13,382.00	89.22	345.41	11,976.91	715.00	-1,054.20	982.00	1.25	-0.57	1.12
13,476.00	86.79	344.16	11,980.18	805.65	-1,078.86	1,075.92	2.91	-2.59	-1.33
13,570.00	85.74	343.01	11,986.31	895.62	-1,105.36	1,169.72	1.65	-1.12	-1.22
13,664.00	86.37	343.48	11,992.77	985.42	-1,132.40	1,263.49	0.84	0.67	0.50
13,758.00	88.08	344.79	11,997.33	1,075.72	-1,158.06	1,357.37	2.29	1.82	1.39
13,852.00	91.27	347.04	11,997.86	1,166.88	-1,180.93	1,451.28	4.15	3.39	2.39
13,946.00	92.49	347.38	11,994.78	1,258.49	-1,201.73	1,545.06	1.35	1.30	0.36
14,040.00	92.24	347.54	11,990.90	1,350.17	-1,222.12	1,638.77	0.32	-0.27	0.17
14,134.00	90.29	346.21	11,988.82	1,441.69	-1,243.46	1,732.60	2.51	-2.07	-1.41
14,229.00	88.62	345.20	11,989.72	1,533.74	-1,266.91	1,827.54	2.05	-1.76	-1.06
14,323.00	90.41	343.78	11,990.52	1,624.31	-1,292.05	1,921.52	2.43	1.90	-1.51
14,417.00	88.84	342.53	11,991.14	1,714.27	-1,319.29	2,015.51	2.13	-1.67	-1.33
14,511.00	90.38	343.82	11,991.78	1,804.24	-1,346.49	2,109.49	2.14	1.64	1.37

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14,605.00	89.10	342.74	11,992.20	1,894.26	-1,373.53	2,203.49	1.78	-1.36	-1.15
14,699.00	91.78	344.08	11,991.48	1,984.33	-1,400.37	2,297.47	3.19	2.85	1.43
14,793.00	89.64	342.80	11,990.32	2,074.42	-1,427.16	2,391.46	2.65	-2.28	-1.36
14,887.00	92.74	344.40	11,988.36	2,164.56	-1,453.69	2,485.42	3.71	3.30	1.70
14,981.00	95.40	344.08	11,981.69	2,254.79	-1,479.15	2,579.17	2.85	2.83	-0.34
15,076.00	91.59	343.09	11,975.90	2,345.73	-1,505.95	2,673.98	4.14	-4.01	-1.04
15,170.00	90.18	343.00	11,974.45	2,435.63	-1,533.35	2,767.96	1.50	-1.50	-0.10
15,264.00	89.51	342.33	11,974.70	2,525.36	-1,561.36	2,861.94	1.01	-0.71	-0.71
15,358.00	90.69	343.59	11,974.54	2,615.23	-1,588.91	2,955.93	1.84	1.26	1.34
15,452.00	88.45	342.75	11,975.25	2,705.20	-1,616.12	3,049.91	2.54	-2.38	-0.89
15,546.00	88.16	342.26	11,978.03	2,794.81	-1,644.37	3,143.85	0.61	-0.31	-0.52
15,641.00	87.96	343.05	11,981.24	2,885.44	-1,672.67	3,238.78	0.86	-0.21	0.83
15,735.00	88.73	342.99	11,983.96	2,975.30	-1,700.11	3,332.73	0.82	0.82	-0.06
15,829.00	89.02	344.10	11,985.80	3,065.43	-1,726.73	3,426.71	1.22	0.31	1.18
15,923.00	89.62	344.62	11,986.92	3,155.94	-1,752.07	3,520.70	0.84	0.64	0.55
16,016.00	89.13	345.49	11,987.93	3,245.79	-1,776.05	3,613.67	1.07	-0.53	0.94
16,110.00	88.95	346.56	11,989.51	3,336.99	-1,798.75	3,707.58	1.15	-0.19	1.14
16,204.00	89.66	343.08	11,990.65	3,427.69	-1,823.36	3,801.54	3.78	0.76	-3.70
16,298.00	89.27	342.55	11,991.53	3,517.49	-1,851.13	3,895.52	0.70	-0.41	-0.56
16,392.00	88.16	342.47	11,993.63	3,607.12	-1,879.37	3,989.48	1.18	-1.18	-0.09
16,487.00	88.43	343.02	11,996.46	3,697.81	-1,907.54	4,084.42	0.64	0.28	0.58
16,581.00	91.21	344.96	11,996.76	3,788.15	-1,933.46	4,178.40	3.61	2.96	2.06
16,675.00	91.72	345.22	11,994.35	3,878.95	-1,957.64	4,272.35	0.61	0.54	0.28
16,769.00	93.85	347.31	11,989.78	3,970.15	-1,979.93	4,366.13	3.17	2.27	2.22
16,863.00	91.69	343.62	11,985.24	4,061.01	-2,003.49	4,459.96	4.54	-2.30	-3.93
16,958.00	90.69	343.30	11,983.27	4,152.06	-2,030.53	4,554.93	1.11	-1.05	-0.34
17,052.00	91.92	343.81	11,981.13	4,242.19	-2,057.14	4,648.91	1.42	1.31	0.54
17,146.00	90.49	343.11	11,979.15	4,332.27	-2,083.89	4,742.88	1.69	-1.52	-0.74
17,240.00	89.90	342.40	11,978.83	4,422.05	-2,111.76	4,836.87	0.98	-0.63	-0.76
17,334.00	89.33	340.97	11,979.46	4,511.28	-2,141.29	4,930.80	1.64	-0.61	-1.52
17,429.00	90.02	341.70	11,980.00	4,601.28	-2,171.70	5,025.72	1.06	0.73	0.77
17,523.00	90.73	342.74	11,979.39	4,690.79	-2,200.40	5,119.68	1.34	0.76	1.11
17,617.00	91.01	343.76	11,977.96	4,780.79	-2,227.49	5,213.67	1.13	0.30	1.09
17,711.00	92.24	343.93	11,975.29	4,871.04	-2,253.63	5,307.63	1.32	1.31	0.18
17,805.00	89.05	342.71	11,974.23	4,961.06	-2,280.60	5,401.61	3.63	-3.39	-1.30
17,899.00	90.75	344.52	11,974.40	5,051.24	-2,307.12	5,495.60	2.64	1.81	1.93
17,993.00	89.50	344.98	11,974.19	5,141.93	-2,331.84	5,589.58	1.42	-1.33	0.49
18,088.00	89.01	345.18	11,975.43	5,233.72	-2,356.30	5,684.54	0.56	-0.52	0.21
18,182.00	89.56	346.57	11,976.60	5,324.86	-2,379.24	5,778.47	1.59	0.59	1.48
18,276.00	83.94	344.27	11,981.93	5,415.65	-2,402.85	5,872.23	6.46	-5.98	-2.45
18,370.00	84.28	345.74	11,991.58	5,505.97	-2,427.04	5,965.71	1.60	0.36	1.56
18,464.00	83.92	344.85	12,001.24	5,596.41	-2,450.77	6,059.17	1.02	-0.38	-0.95
18,559.00	87.58	342.92	12,008.28	5,687.40	-2,477.07	6,153.89	4.35	3.85	-2.03
18,653.00	88.88	344.18	12,011.18	5,777.51	-2,503.67	6,247.84	1.93	1.38	1.34

<b>Company:</b>	SWEPI	<b>Local Co-ordinate Reference:</b>	Well 2706H
<b>Project:</b>	Winkler County, Texas (NAD27)	<b>TVD Reference:</b>	RKB @ 2801.30usft (Precision 559)
<b>Site:</b>	University 20 PW Unit	<b>MD Reference:</b>	RKB @ 2801.30usft (Precision 559)
<b>Well:</b>	2706H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 63596/63597/63608	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Precision 559)	<b>Database:</b>	USA Compass

**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)
18,747.00	92.67	345.87	12,009.91	5,868.29	-2,527.95	6,341.79	4.41	4.03	1.80
18,841.00	91.93	344.41	12,006.14	5,959.07	-2,552.04	6,435.68	1.74	-0.79	-1.55
18,935.00	90.64	344.51	12,004.03	6,049.60	-2,577.22	6,529.65	1.38	-1.37	0.11
19,030.00	88.94	342.18	12,004.38	6,140.61	-2,604.44	6,624.63	3.04	-1.79	-2.45
19,124.00	90.81	343.04	12,004.58	6,230.31	-2,632.53	6,718.61	2.19	1.99	0.91
19,218.00	88.88	343.53	12,004.84	6,320.33	-2,659.57	6,812.60	2.12	-2.05	0.52
19,407.00	89.87	344.13	12,006.90	6,501.84	-2,712.20	7,001.59	0.61	0.52	0.32
19,501.00	89.90	344.72	12,007.09	6,592.39	-2,737.44	7,095.58	0.63	0.03	0.63
19,595.00	89.04	343.96	12,007.96	6,682.89	-2,762.81	7,189.57	1.22	-0.91	-0.81
19,689.00	88.84	344.47	12,009.70	6,773.33	-2,788.37	7,283.55	0.58	-0.21	0.54
19,783.00	87.25	338.56	12,012.91	6,862.39	-2,818.14	7,377.38	6.51	-1.69	-6.29
19,877.00	90.22	342.93	12,014.98	6,951.08	-2,849.12	7,471.20	5.62	3.16	4.65
19,972.00	90.01	340.15	12,014.79	7,041.18	-2,879.20	7,566.12	2.93	-0.22	-2.93
20,066.00	89.72	338.82	12,015.01	7,129.22	-2,912.14	7,659.86	1.45	-0.31	-1.41
20,160.00	90.01	341.32	12,015.23	7,217.58	-2,944.18	7,753.67	2.68	0.31	2.66
20,254.00	90.98	346.22	12,014.42	7,307.80	-2,970.44	7,847.63	5.31	1.03	5.21
20,348.00	89.24	343.25	12,014.24	7,398.47	-2,995.19	7,941.60	3.66	-1.85	-3.16
20,442.00	89.82	344.00	12,015.01	7,488.65	-3,021.69	8,035.60	1.01	0.62	0.80
20,536.00	90.13	345.62	12,015.05	7,579.37	-3,046.32	8,129.58	1.75	0.33	1.72
20,630.00	89.85	344.16	12,015.07	7,670.12	-3,070.82	8,223.56	1.58	-0.30	-1.55
20,723.00	88.42	344.49	12,016.47	7,759.64	-3,095.95	8,316.54	1.58	-1.54	0.35
<b>Final Phoenix MWD Survey</b>									
20,780.00	88.42	344.49	12,018.05	7,814.55	-3,111.19	8,373.51	0.00	0.00	0.00
<b>Projection to TD</b>									

**Survey Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
240.00	240.00	0.40	-1.03	First Phoenix MWD Survey
20,723.00	12,016.47	7,759.64	-3,095.94	Final Phoenix MWD Survey
20,780.00	12,018.05	7,814.55	-3,111.19	Projection to TD