



Weatherford®

SURVEY REPORT

Report Date: 7/20/2015

Customer: Devon Energy

Job Name: 11113459

Well Name: Van Doo Dah 33 Fed #3H

Field: Delaware Basin

Rig: ICD 207

Rig Loc: Lea County, NM

HOBBS OCD

AUG 22 2016

RECEIVED

Survey Calculation Method: Minimum Curvature

Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
Grid North	2.26 deg	48140 nT	59.99 deg	7.31 deg	0.35 deg	6.96 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	0.00 ft	0.00 deg	0.00 deg	0.00 ft	0.00 ft	0.00 ft

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		Vsect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
140.00	0.09	323.90	140.00	0.09	-0.06	0.09	0.06
236.00	0.22	341.57	236.00	0.32	-0.17	0.32	0.14
328.00	0.22	341.57	328.00	0.66	-0.28	0.65	0.00
451.00	0.70	270.12	451.00	0.89	-1.11	0.84	0.54
610.00	0.79	286.91	609.98	1.21	-3.13	1.08	0.15
798.00	0.79	289.91	797.96	2.02	-5.58	1.80	0.02
986.00	2.99	182.01	985.88	-2.44	-6.97	-2.71	1.77
1080.00	3.52	175.90	1079.73	-7.76	-6.85	-8.03	0.67
1151.00	3.78	181.31	1150.58	-12.28	-6.75	-12.53	0.61
1264.00	3.38	181.92	1263.36	-19.33	-6.95	-19.59	0.36
1359.00	1.71	167.11	1358.27	-23.51	-6.73	-23.76	1.87
1453.00	0.62	144.92	1452.25	-25.30	-6.12	-25.52	1.23
1548.00	0.09	182.54	1547.24	-25.79	-5.83	-26.00	0.58
1643.00	0.09	109.10	1642.24	-25.89	-5.76	-26.10	0.11
1739.00	0.09	231.32	1738.24	-25.96	-5.75	-26.17	0.16
1831.00	0.09	122.11	1830.24	-26.04	-5.74	-26.25	0.16
1926.00	0.09	136.70	1925.24	-26.14	-5.63	-26.34	0.02
2021.00	0.09	108.62	2020.24	-26.22	-5.51	-26.41	0.05
2116.00	0.09	263.53	2115.24	-26.25	-5.51	-26.45	0.18
2211.00	0.09	36.73	2210.24	-26.20	-5.54	-26.40	0.17
2306.00	0.09	180.82	2305.24	-26.21	-5.50	-26.41	0.18
2398.00	0.09	27.50	2397.24	-26.22	-5.47	-26.42	0.19
2496.00	0.09	150.63	2495.24	-26.22	-5.39	-26.41	0.16
2594.00	0.09	331.60	2593.24	-26.22	-5.39	-26.41	0.18
2689.00	0.00	156.61	2688.24	-26.15	-5.43	-26.35	0.09
2784.00	0.09	333.31	2783.24	-26.09	-5.46	-26.28	0.09
2879.00	0.40	87.31	2878.24	-26.00	-5.16	-26.19	0.47
2970.00	0.09	157.23	2969.24	-26.06	-4.82	-26.22	0.42
3069.00	0.09	60.50	3068.24	-26.09	-4.72	-26.25	0.14
3164.00	0.09	2.32	3163.24	-25.98	-4.65	-26.14	0.09
3260.00	0.09	352.03	3259.24	-25.83	-4.66	-25.99	0.02
3352.00	0.09	6.01	3351.24	-25.68	-4.66	-25.85	0.02
3447.00	0.09	290.60	3446.24	-25.58	-4.72	-25.75	0.12
3542.00	0.09	24.82	3541.24	-25.49	-4.76	-25.66	0.14
3639.00	0.09	224.90	3638.24	-25.47	-4.78	-25.64	0.18

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
3732.00	0.09	299.21	3731.24	-25.49	-4.90	-25.66	0.12
3872.00	0.00	6.98	3871.24	-25.44	-5.00	-25.61	0.06
4020.00	0.22	3.11	4019.24	-25.15	-4.98	-25.33	0.15
4115.00	0.09	76.72	4114.24	-24.95	-4.90	-25.13	0.22
4210.00	0.22	79.50	4209.24	-24.90	-4.65	-25.07	0.14
4305.00	0.31	48.94	4304.24	-24.70	-4.27	-24.85	0.17
4400.00	0.22	50.50	4399.24	-24.42	-3.94	-24.55	0.10
4423.00	0.09	345.71	4422.24	-24.37	-3.91	-24.51	0.87
4557.00	0.22	191.63	4556.24	-24.52	-3.99	-24.66	0.23
4743.00	0.31	187.02	4742.23	-25.37	-4.12	-25.51	0.05
4883.00	0.09	276.93	4882.23	-25.73	-4.27	-25.88	0.23
5074.00	0.09	290.36	5073.23	-25.66	-4.56	-25.82	0.01
5219.00	0.00	295.43	5218.23	-25.62	-4.67	-25.79	0.06
5408.00	0.48	288.53	5407.23	-25.37	-5.42	-25.57	0.25
5598.00	0.70	275.70	5597.22	-25.00	-7.33	-25.27	0.13
5788.00	0.79	278.43	5787.21	-24.70	-9.78	-25.06	0.05
5889.00	0.79	282.12	5888.20	-24.45	-11.15	-24.87	0.05
6078.00	1.01	178.91	6077.18	-25.84	-12.39	-26.31	0.75
6269.00	1.01	275.83	6268.16	-27.35	-14.04	-27.88	0.79
6460.00	1.19	280.54	6459.13	-26.82	-17.66	-27.49	0.11
6651.00	1.19	270.12	6650.09	-26.45	-21.59	-27.28	0.11
6842.00	1.19	271.00	6841.05	-26.41	-25.56	-27.40	0.01
7034.00	1.19	260.54	7033.00	-26.70	-29.52	-27.85	0.11
7225.00	0.88	257.02	7223.97	-27.36	-32.91	-28.64	0.17
7316.00	0.88	253.11	7314.96	-27.72	-34.26	-29.05	0.07
7501.00	1.01	243.23	7499.94	-28.87	-37.07	-30.31	0.11
7696.00	1.19	229.60	7694.90	-30.95	-40.15	-32.51	0.16
7886.00	1.41	217.83	7884.85	-34.08	-43.08	-35.75	0.18
8076.00	1.49	209.74	8074.79	-38.07	-45.74	-39.84	0.12
8266.00	1.58	208.90	8264.72	-42.51	-48.23	-44.38	0.05
8455.00	1.58	216.81	8453.65	-46.88	-51.05	-48.85	0.12
8645.00	1.19	225.21	8643.60	-50.36	-54.02	-52.45	0.23
8825.00	1.39	229.00	8823.55	-53.11	-57.00	-55.32	0.12
8857.00	1.38	266.16	8855.54	-53.39	-57.68	-55.63	2.76
8888.00	2.87	329.88	8886.52	-52.75	-58.44	-55.01	8.31
8920.00	5.89	348.27	8918.43	-50.44	-59.17	-52.74	10.29
8952.00	8.82	356.11	8950.16	-46.39	-59.67	-48.71	9.66
8983.00	11.52	359.55	8980.67	-40.92	-59.86	-43.25	8.92
9015.00	13.98	0.74	9011.88	-33.86	-59.83	-36.19	7.73
9047.00	16.73	0.09	9042.73	-25.39	-59.78	-27.72	8.61
9078.00	19.32	0.70	9072.21	-15.80	-59.71	-18.14	8.38
9110.00	21.53	1.47	9102.20	-4.63	-59.49	-6.97	6.96
9142.00	24.00	2.45	9131.70	7.74	-59.06	5.41	7.81
9174.00	27.37	4.13	9160.54	21.58	-58.26	19.27	10.77
9206.00	30.64	5.40	9188.52	37.04	-56.96	34.77	10.40
9237.00	34.05	6.04	9214.70	53.54	-55.30	51.32	11.06
9269.00	37.77	5.92	9240.62	72.21	-53.35	70.05	11.63
9301.00	41.59	6.30	9265.24	92.52	-51.17	90.43	11.96
9332.00	45.14	6.96	9287.78	113.66	-48.71	111.65	11.54
9364.00	49.16	7.29	9309.53	136.93	-45.80	135.02	12.59

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		Vsect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
9396.00	53.11	7.82	9329.61	161.63	-42.52	159.82	12.41
9427.00	56.62	8.43	9347.45	186.72	-38.93	185.04	11.44
9459.00	60.88	9.74	9364.04	213.73	-34.61	212.19	13.76
9491.00	64.77	11.04	9378.66	241.72	-29.47	240.37	12.68
9522.00	68.67	11.58	9390.91	269.64	-23.88	268.48	12.68
9531.00	69.42	11.68	9394.13	277.87	-22.19	276.78	8.40
9563.00	72.43	11.76	9404.58	307.48	-16.05	306.61	9.41
9594.00	74.34	11.22	9413.45	336.59	-10.13	335.92	6.38
9626.00	76.73	9.97	9421.44	367.04	-4.44	366.58	8.37
9658.00	79.94	8.81	9427.91	397.96	0.67	397.67	10.64
9690.00	82.35	7.97	9432.83	429.23	5.29	429.11	7.97
9721.00	83.34	7.77	9436.69	459.70	9.50	459.72	3.26
9753.00	83.77	7.43	9440.29	491.22	13.70	491.38	1.71
9785.00	84.40	7.01	9443.58	522.80	17.70	523.09	2.36
9816.00	84.96	6.82	9446.46	553.44	21.42	553.85	1.91
9848.00	86.08	6.04	9448.96	585.14	24.99	585.67	4.26
9880.00	87.06	5.57	9450.87	616.92	28.22	617.55	3.40
9912.00	86.43	5.89	9452.69	648.71	31.41	649.44	2.21
10007.00	88.88	2.16	9456.58	743.37	38.07	744.29	4.69
10102.00	88.53	1.40	9458.72	838.30	41.02	839.26	0.88
10197.00	88.11	1.37	9461.51	933.23	43.32	934.21	0.44
10292.00	83.06	1.02	9468.82	1027.90	45.29	1028.88	5.33
10387.00	82.85	359.07	9480.47	1122.17	45.37	1123.09	2.05
10482.00	83.12	358.53	9492.08	1216.44	43.39	1217.21	0.63
10577.00	83.84	359.72	9502.86	1310.81	41.95	1311.45	1.46
10672.00	87.76	359.89	9509.82	1405.54	41.63	1406.09	4.13
10767.00	92.73	2.03	9509.41	1500.49	43.22	1501.03	5.70
10862.00	92.17	4.18	9505.35	1595.26	48.36	1595.92	2.34
10957.00	90.70	1.46	9502.97	1690.10	53.03	1690.88	3.25
11052.00	90.42	0.27	9502.04	1785.09	54.47	1785.84	1.29
11147.00	89.79	1.62	9501.87	1880.07	56.03	1880.82	1.57
11242.00	89.58	1.56	9502.39	1975.03	58.67	1975.81	0.23
11337.00	90.07	2.75	9502.68	2069.96	62.24	2070.81	1.35
11432.00	90.28	2.86	9502.39	2164.85	66.89	2165.80	0.25
11527.00	90.77	3.09	9501.52	2259.71	71.82	2260.79	0.57
11622.00	91.26	2.86	9499.84	2354.57	76.75	2355.77	0.57
11717.00	89.93	2.90	9498.85	2449.44	81.52	2450.75	1.40
11812.00	89.58	3.20	9499.26	2544.31	86.58	2545.74	0.49
11908.00	89.86	3.34	9499.73	2640.15	92.05	2641.73	0.33
12003.00	89.09	3.19	9500.60	2734.99	97.46	2736.71	0.83
12098.00	89.09	2.52	9502.11	2829.86	102.20	2831.69	0.71
12192.00	90.28	2.36	9502.62	2923.77	106.20	2925.69	1.28
12287.00	90.98	2.30	9501.58	3018.69	110.06	3020.68	0.74
12383.00	91.89	2.71	9499.18	3114.57	114.25	3116.65	1.04
12478.00	90.42	2.97	9497.26	3209.43	118.96	3211.62	1.57
12573.00	90.91	2.76	9496.16	3304.30	123.71	3306.61	0.56
12668.00	90.77	2.68	9494.77	3399.18	128.22	3401.60	0.17
12763.00	89.23	2.05	9494.77	3494.10	132.14	3496.59	1.75
12858.00	88.67	1.40	9496.51	3589.04	134.99	3591.57	0.90
12953.00	89.37	0.91	9498.13	3684.01	136.91	3686.54	0.90

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head®		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
13048.00	89.37	0.94	9499.18	3778.99	138.44	3781.51	0.03
13143.00	89.16	0.90	9500.39	3873.97	139.97	3876.47	0.23
13238.00	88.81	1.05	9502.08	3968.94	141.58	3971.43	0.40
13333.00	90.21	2.96	9502.89	4063.87	144.91	4066.42	2.49
13428.00	92.03	3.46	9501.03	4158.70	150.23	4161.39	1.99
13524.00	93.15	3.35	9496.69	4254.43	155.92	4257.27	1.17
13619.00	92.52	3.12	9492.00	4349.16	161.28	4352.14	0.71
13714.00	90.84	2.84	9489.21	4443.99	166.21	4447.09	1.79
13809.00	88.60	2.15	9489.67	4538.89	170.35	4542.08	2.47
13904.00	89.09	1.78	9491.59	4633.82	173.60	4637.06	0.65
13942.00	88.25	1.83	9492.47	4671.79	174.80	4675.05	2.21

Vertical Section is 4754.05 ft along the target direction of 2.26 deg at a measured depth of 14021.04 ft.
Horizontal Displacement is 4754.06 ft along the well bore azimuth of 2.14 deg.
The total correction is 6.96 deg relative to Grid North.