



OPERATOR		FIELD NAME		Well name/No.		Rig Name & No.		QDM Job No.		Calculation Method		Minimum Curvature		
Mewbourne Oil		n/a		Orca 11 Fed Com #1		Patterson 45		01215-433-21		Proposed Azimuth		0.00		
MWD OPERATOR		DIR SUPERVISOR		COUNTY		STATE		Start Date		Depth Reference:		RKB		
Kevin Niemeyer		Randy Scannell		Eddy		New Mexico		Friday May 29, 2014		Tie Into:		MWD		
Dip A: 60.06		Mag Field: #####		Mag Dec: 0		Grid Cor.: n/a				Job Service:		Directional		
Mag Spacing Req.		Mag Spacing Actual		Mag Spacing Req.		Mag Spacing Actual								
Below 5		Below 44		Above 9		Above 18								
Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (° /100')	Build Rate (° /100')	Walk Rate (° /100')	
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth				
Tie-In														
1	9441.00	8.51	281.16	0.00	9375.88	61.29	-8.52	-60.69	61.29	262.0	0.9	0.0	0.0	
2	9473.00	8.80	267.50	32.00	9467.85	-8.02	8.02	74.43 W	74.86	263.9	0.9	0.9	-0.9	
3	9504.00	8.90	268.30	31.00	9498.48	-8.19	8.19	79.20 W	79.62	264.1	0.5	0.3	2.6	
4	9536.00	9.10	267.50	32.00	9530.09	-8.38	8.38	84.20 W	84.62	264.3	0.7	0.6	-2.5	
5	9567.00	9.30	266.20	31.00	9560.69	-8.65	8.65	89.15 W	89.57	264.5	0.9	0.6	-4.2	
6	9599.00	8.90	264.20	32.00	9592.29	-9.07	9.07	94.19 W	94.63	264.5	1.6	-1.3	-6.3	
7	9630.00	8.60	261.70	31.00	9622.93	-9.65	9.65	98.87 W	99.34	264.4	1.6	-1.0	-8.1	
8	9662.00	8.40	260.40	32.00	9654.57	-10.38	10.38	103.54 W	104.06	264.3	0.9	-0.6	-4.1	
9	9694.00	8.30	259.50	32.00	9686.24	-11.19	11.19	108.12 W	108.70	264.1	0.5	-0.3	-2.8	
10	9725.00	8.00	258.30	31.00	9716.92	-12.04	12.04	112.43 W	113.07	263.9	1.1	-1.0	-3.9	
11	9757.00	7.20	256.50	32.00	9748.64	-12.96	12.96	116.56 W	117.28	263.7	2.6	-2.5	-5.6	
12	9788.00	6.90	255.90	31.00	9779.41	-13.86	13.86	120.26 W	121.05	263.4	1.0	-1.0	-1.9	
13	9820.00	6.40	255.90	32.00	9811.19	-14.77	14.77	123.85 W	124.73	263.2	1.6	-1.6	0.0	
14	9852.00	5.90	255.90	32.00	9843.01	-15.60	15.60	127.18 W	128.13	263.0	1.6	-1.6	0.0	
15	9883.00	5.60	256.30	31.00	9873.85	-16.35	16.35	130.19 W	131.21	262.8	1.0	-1.0	1.3	
16	9915.00	5.40	255.70	32.00	9905.70	-17.09	17.09	133.17 W	134.26	262.7	0.7	-0.6	-1.9	
17	9946.00	5.20	255.40	31.00	9936.57	-17.81	17.81	135.94 W	137.10	262.5	0.7	-0.6	-1.0	
18	9978.00	5.20	255.80	32.00	9968.44	-18.53	18.53	138.75 W	139.98	262.4	0.1	0.0	1.3	
19	10010.00	4.60	256.20	32.00	10000.32	-19.19	19.19	141.40 W	142.70	262.3	1.9	-1.9	1.2	
20	10040.00	4.10	253.10	30.00	10030.24	-19.79	19.79	143.60 W	144.95	262.2	1.8	-1.7	-10.3	
21	10073.00	4.00	253.90	33.00	10063.15	-20.45	20.45	145.83 W	147.26	262.0	0.3	-0.3	2.4	
22	10104.00	4.00	254.40	31.00	10094.08	-21.04	21.04	147.91 W	149.40	261.9	0.1	0.0	1.6	

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23	10136.00	3.80	254.50	32.00	10126.00	-21.62	21.62	S	150.01	W	151.56	261.8	0.6	-0.6	0.3
24	10167.00	3.60	256.60	31.00	10156.94	-22.12	22.12	S	151.94	W	153.55	261.7	0.8	-0.6	6.8
25	10199.00	3.30	259.30	32.00	10188.88	-22.53	22.53	S	153.83	W	155.47	261.7	1.1	-0.9	8.4
26	10232.00	3.20	263.30	33.00	10221.83	-22.81	22.81	S	155.67	W	157.34	261.7	0.8	-0.3	12.1
27	10262.00	2.90	260.10	30.00	10251.79	-23.04	23.04	S	157.25	W	158.93	261.7	1.1	-1.0	-10.7
28	10294.00	2.60	268.70	32.00	10283.75	-23.19	23.19	S	158.78	W	160.46	261.7	1.6	-0.9	26.9
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