

CONTROLLED	
Processing ref.	100-89672-22 DE 10000
Expiry date	12-Sep-2010
Date	12-Sep-2010
Signature	Security Statement
ICC Sign Off Authority	
SMS/Loss Manager	
Closed	



Cimarex Marquardt Federal #18H XEM + MWD 0ft to 11578 Survey Report



(Def Survey)

Report Date: May 19, 2015 10:53 AM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Marquardt Federal #18H / Marquardt Federal #18H
Well: Marquardt Federal #18H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Marquardt Federal #18H XEM + MWD 0ft to 11578
Survey Date: March 09, 2015
Tort / AHD / DDI / ERD Ratio: 203.482' / 4827.377 ft / 6.197' / 0.669
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 8' 17.43457", W 104° 15' 11.86027"
Location Grid N/E Y/X: N 414013.400 ftUS, E 566111.300 ftUS
CRS Grid Convergence Angle: 0.0426°
Grid Scale Factor: 0.99990979
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 0.548° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3305.000 ft above MSL
Seabed / Ground Elevation: 3287.000 ft above MSL
Magnetic Declination: 7.690°
Total Gravity Field Strength: 998.4379mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48218.821 nT
Magnetic Dip Angle: 59.909°
Declination Date: March 19, 2015
Magnetic Declination Model: HDGM 2014
North Reference: Grid North
Grid Convergence Used: 0.0426°
Total Corr Mag North -> Grid North: 7.6476°
Local Coord Referenced To: Structure Reference Point

NM OIL CONSERVATION
ARTESIA DISTRICT
MAY 29 2015
RECEIVED

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Eastings (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL - Cimarex Marquardt Federal #18H - 544' FWL, 336' FSL	0.00	0.00	20.55	0.00	0.00	0.00	0.00	N/A	414013.40	566111.30	N 32° 8' 17.43" W 104° 15' 11.86"	
	144.00	1.19	295.60	143.99	0.63	0.65	-1.35	0.83	414014.05	566109.95	N 32° 8' 17.44" W 104° 15' 11.88"	
	170.00	1.19	290.49	169.98	0.84	0.86	-1.84	0.41	414014.26	566109.46	N 32° 8' 17.44" W 104° 15' 11.88"	
	199.00	1.41	289.39	198.98	1.06	1.08	-2.46	0.76	414014.48	566108.84	N 32° 8' 17.45" W 104° 15' 11.89"	
	256.00	1.33	288.68	255.96	1.49	1.53	-3.75	0.14	414014.93	566107.55	N 32° 8' 17.45" W 104° 15' 11.90"	
	304.00	1.41	295.12	303.95	1.91	1.95	-4.81	0.36	414015.35	566106.49	N 32° 8' 17.45" W 104° 15' 11.92"	
	375.00	1.41	295.82	374.93	2.65	2.71	-6.39	0.02	414016.11	566104.91	N 32° 8' 17.46" W 104° 15' 11.93"	
	469.00	1.59	295.34	468.89	3.69	3.77	-8.61	0.19	414017.17	566102.69	N 32° 8' 17.47" W 104° 15' 11.96"	
	551.00	1.72	310.05	550.86	4.95	5.05	-10.58	0.54	414018.45	566100.72	N 32° 8' 17.48" W 104° 15' 11.98"	
	609.00	1.81	311.46	608.83	6.10	6.21	-11.93	0.17	414019.61	566099.37	N 32° 8' 17.50" W 104° 15' 12.00"	
	730.00	2.03	307.45	729.76	8.64	8.78	-15.07	0.21	414022.18	566096.23	N 32° 8' 17.52" W 104° 15' 12.04"	
	821.00	2.21	312.17	820.70	10.77	10.94	-17.65	0.28	414024.34	566093.65	N 32° 8' 17.54" W 104° 15' 12.07"	
	1001.00	2.52	312.35	1000.55	15.71	15.94	-23.14	0.17	414029.33	566088.16	N 32° 8' 17.59" W 104° 15' 12.13"	
	1092.00	2.70	315.87	1091.45	18.57	18.82	-26.12	0.26	414032.22	566085.19	N 32° 8' 17.62" W 104° 15' 12.16"	
	1181.00	2.52	321.69	1180.36	21.59	21.86	-28.79	0.36	414035.26	566082.52	N 32° 8' 17.65" W 104° 15' 12.19"	
	1271.00	2.21	337.33	1270.29	24.72	25.02	-30.68	0.79	414038.41	566080.62	N 32° 8' 17.68" W 104° 15' 12.22"	
	1466.00	2.21	354.30	1465.14	31.91	32.23	-32.51	0.33	414045.62	566078.80	N 32° 8' 17.75" W 104° 15' 12.24"	
	1655.00	2.70	41.51	1653.99	38.90	39.19	-29.92	1.07	414052.58	566081.39	N 32° 8' 17.82" W 104° 15' 12.21"	
	1844.00	2.70	50.23	1842.78	45.14	45.37	-23.55	0.22	414058.76	566087.76	N 32° 8' 17.88" W 104° 15' 12.13"	
	2036.00	2.43	43.14	2034.59	51.06	51.23	-17.29	0.22	414064.63	566094.02	N 32° 8' 17.94" W 104° 15' 12.06"	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2130.00	2.43	44.64	2128.50	53.96	54.10	-14.52	0.07	414067.50	566096.78	N 32 8 17.97	W 104 15 12.03
	2224.00	2.52	46.84	2222.41	56.82	56.93	-11.62	0.14	414070.33	566099.69	N 32 8 18.00	W 104 15 11.99
	2415.00	2.52	46.62	2413.23	62.63	62.69	-5.50	0.01	414076.08	566105.80	N 32 8 18.05	W 104 15 11.92
	2509.00	1.72	71.91	2507.17	64.52	64.55	-2.66	1.29	414077.94	566108.64	N 32 8 18.07	W 104 15 11.89
	2606.00	1.81	121.14	2604.12	64.20	64.21	0.04	1.52	414077.60	566111.34	N 32 8 18.07	W 104 15 11.86
	2700.00	1.81	129.86	2698.08	62.51	62.49	2.45	0.29	414075.88	566113.75	N 32 8 18.05	W 104 15 11.83
	2793.00	1.72	129.95	2791.03	60.69	60.65	4.64	0.10	414074.05	566115.94	N 32 8 18.03	W 104 15 11.81
	2889.00	1.72	128.45	2886.99	58.89	58.83	6.88	0.05	414072.22	566118.18	N 32 8 18.02	W 104 15 11.78
	2983.00	1.72	134.18	2980.95	57.05	56.97	8.99	0.18	414070.36	566120.29	N 32 8 18.00	W 104 15 11.76
	3076.00	1.59	134.75	3073.91	55.19	55.09	10.91	0.14	414068.48	566122.21	N 32 8 17.98	W 104 15 11.73
	3170.00	1.81	133.87	3167.87	53.26	53.14	12.91	0.24	414066.54	566124.21	N 32 8 17.96	W 104 15 11.71
	3266.00	1.72	136.08	3263.82	51.19	51.05	15.00	0.12	414064.45	566126.30	N 32 8 17.94	W 104 15 11.69
	3361.00	1.72	132.46	3358.78	49.22	49.06	17.04	0.11	414062.46	566128.34	N 32 8 17.82	W 104 15 11.68
	3452.00	1.59	136.47	3449.74	47.40	47.23	18.92	0.19	414060.62	566130.22	N 32 8 17.90	W 104 15 11.64
	3549.00	1.59	136.47	3546.70	45.47	45.27	20.77	0.00	414058.67	566132.07	N 32 8 17.88	W 104 15 11.62
	3644.00	1.50	137.18	3641.67	43.62	43.41	22.52	0.10	414056.80	566133.82	N 32 8 17.86	W 104 15 11.60
	3738.00	1.59	138.76	3735.64	41.75	41.52	24.22	0.11	414054.92	566135.52	N 32 8 17.85	W 104 15 11.58
	3834.00	1.41	140.88	3831.60	39.85	39.61	25.84	0.20	414053.00	566137.14	N 32 8 17.83	W 104 15 11.56
	3929.00	1.59	140.79	3926.57	37.94	37.68	27.41	0.19	414051.07	566138.71	N 32 8 17.81	W 104 15 11.54
	4022.00	1.50	135.59	4019.54	36.09	35.81	29.08	0.18	414049.21	566140.38	N 32 8 17.79	W 104 15 11.52
	4117.00	1.50	131.67	4114.50	34.39	34.09	30.88	0.11	414047.49	566142.18	N 32 8 17.77	W 104 15 11.50
	4213.00	1.41	133.78	4210.47	32.75	32.44	32.67	0.11	414045.84	566143.97	N 32 8 17.78	W 104 15 11.48
	4307.00	1.33	135.06	4304.45	31.20	30.87	34.28	0.09	414044.27	566145.57	N 32 8 17.74	W 104 15 11.46
	4404.00	1.33	138.98	4401.42	29.56	29.22	35.81	0.09	414042.62	566147.11	N 32 8 17.72	W 104 15 11.44
	4496.00	1.33	137.09	4493.40	27.99	27.64	37.24	0.05	414041.03	566148.54	N 32 8 17.71	W 104 15 11.43
	4591.00	1.33	136.87	4588.37	26.39	26.02	38.74	0.01	414039.42	566150.04	N 32 8 17.69	W 104 15 11.41
	4684.00	1.33	137.18	4681.34	24.83	24.44	40.22	0.01	414037.84	566151.51	N 32 8 17.68	W 104 15 11.39
	4781.00	1.33	139.07	4778.32	23.17	22.77	41.72	0.05	414036.17	566153.01	N 32 8 17.66	W 104 15 11.37
	4875.00	1.19	143.48	4872.30	21.57	21.16	43.01	0.18	414034.56	566154.31	N 32 8 17.64	W 104 15 11.36
	4969.00	1.41	144.41	4966.27	19.86	19.43	44.27	0.24	414032.83	566155.56	N 32 8 17.63	W 104 15 11.35
	5063.00	1.41	144.18	5060.24	17.99	17.56	45.62	0.01	414030.95	566156.91	N 32 8 17.61	W 104 15 11.33
	5157.00	1.50	137.27	5154.21	16.16	15.71	47.13	0.21	414029.11	566158.42	N 32 8 17.59	W 104 15 11.31
	5251.00	1.33	140.97	5248.18	14.43	13.96	48.65	0.21	414027.36	566159.95	N 32 8 17.57	W 104 15 11.29
	5344.00	1.41	136.96	5341.16	12.77	12.29	50.11	0.13	414025.69	566161.41	N 32 8 17.56	W 104 15 11.28
	5438.00	1.19	140.97	5435.13	11.18	10.69	51.52	0.25	414024.08	566162.81	N 32 8 17.54	W 104 15 11.26
	5533.00	1.19	155.11	5530.11	9.53	9.02	52.55	0.31	414022.42	566163.85	N 32 8 17.52	W 104 15 11.25
	5629.00	1.33	165.65	5626.09	7.55	7.04	53.25	0.28	414020.44	566164.54	N 32 8 17.50	W 104 15 11.24
	5723.00	0.88	171.46	5720.07	5.78	5.27	53.62	0.49	414018.67	566164.92	N 32 8 17.49	W 104 15 11.24
	5818.00	0.80	171.59	5815.06	4.41	3.89	53.83	0.08	414017.29	566165.13	N 32 8 17.47	W 104 15 11.23
	5914.00	1.10	159.83	5911.05	2.88	2.36	54.25	0.37	414015.76	566165.54	N 32 8 17.46	W 104 15 11.23
	6007.00	1.10	169.26	6004.03	1.17	0.65	54.72	0.19	414014.05	566166.02	N 32 8 17.44	W 104 15 11.22
	6197.00	1.72	185.30	6193.97	-3.46	-3.98	54.80	0.38	414009.42	566166.09	N 32 8 17.39	W 104 15 11.22
	6291.00	1.81	188.91	6287.93	-6.33	-6.85	54.44	0.15	414006.55	566165.73	N 32 8 17.37	W 104 15 11.23
	6385.00	2.12	187.90	6381.87	-9.53	-10.04	53.97	0.33	414003.36	566165.26	N 32 8 17.33	W 104 15 11.23
Final Extreme Survey	6514.00	2.12	177.68	6510.79	-14.28	-14.79	53.74	0.29	413998.61	566165.03	N 32 8 17.29	W 104 15 11.24
	6555.00	2.00	178.48	6551.76	-15.75	-16.26	53.79	0.30	413997.14	566165.08	N 32 8 17.27	W 104 15 11.23

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6650.00	8.03	22.06	6646.50	-11.22	-11.76	-56.33	10.42	414001.64	566167.62	N 32° 8' 17.32"	W 104° 15' 11.21"
Cross Hard Line	6685.50	11.67	13.66	6681.47	-5.41	-5.97	58.11	11.00	414007.43	566169.40	N 32° 8' 17.38"	W 104° 15' 11.18"
	6744.00	17.91	7.39	6738.01	9.29	8.72	60.66	11.00	414022.11	566171.96	N 32° 8' 17.52"	W 104° 15' 11.15"
	6838.00	25.34	352.89	6825.39	43.65	43.08	60.03	9.68	414056.48	566171.33	N 32° 8' 17.86"	W 104° 15' 11.16"
	6933.00	30.96	356.12	6909.13	88.20	87.67	55.86	6.13	414101.07	566167.15	N 32° 8' 18.30"	W 104° 15' 11.21"
	7027.00	38.38	356.00	6986.38	141.47	140.88	52.18	7.89	414154.37	566163.48	N 32° 8' 18.83"	W 104° 15' 11.25"
	7121.00	43.21	2.03	7057.55	202.79	202.31	51.29	6.63	414215.69	566162.58	N 32° 8' 19.44"	W 104° 15' 11.26"
	7215.00	53.36	2.86	7120.02	272.83	272.32	54.32	10.82	414285.69	566165.61	N 32° 8' 20.13"	W 104° 15' 11.23"
FTP	7275.00	60.21	3.48	7152.87	322.94	322.41	57.10	11.45	414335.78	566168.39	N 32° 8' 20.62"	W 104° 15' 11.19"
	7311.00	64.32	3.81	7169.62	354.75	354.20	59.13	11.45	414367.57	566170.42	N 32° 8' 20.94"	W 104° 15' 11.17"
	7405.00	75.29	5.93	7202.03	442.58	441.96	66.66	11.86	414455.32	566177.96	N 32° 8' 21.81"	W 104° 15' 11.08"
	7500.00	87.32	8.68	7216.36	535.65	534.92	78.61	12.98	414548.27	566189.91	N 32° 8' 22.73"	W 104° 15' 10.94"
	7594.00	93.41	8.98	7215.77	628.62	627.76	93.04	6.49	414641.10	566204.33	N 32° 8' 23.65"	W 104° 15' 10.77"
	7689.00	93.17	3.20	7210.31	722.98	722.03	103.09	6.08	414735.36	566214.38	N 32° 8' 24.58"	W 104° 15' 10.66"
	7784.00	93.92	357.39	7204.43	817.76	816.80	103.58	6.15	414830.13	566214.87	N 32° 8' 25.52"	W 104° 15' 10.65"
	7879.00	93.13	358.46	7198.59	912.48	911.56	100.15	1.40	414924.88	566211.44	N 32° 8' 26.45"	W 104° 15' 10.69"
	7973.00	93.30	358.50	7193.32	1006.27	1005.38	97.66	0.19	415018.69	566208.95	N 32° 8' 27.38"	W 104° 15' 10.72"
	8066.00	93.34	357.41	7187.93	1099.01	1098.16	94.35	1.17	415111.46	566205.64	N 32° 8' 28.30"	W 104° 15' 10.75"
	8160.00	92.30	0.39	7183.30	1192.85	1192.02	92.55	3.35	415205.31	566203.84	N 32° 8' 29.23"	W 104° 15' 10.77"
	8255.00	93.65	0.18	7178.37	1287.72	1286.89	93.02	1.44	415300.17	566204.31	N 32° 8' 30.17"	W 104° 15' 10.77"
	8350.00	92.65	1.57	7173.15	1382.57	1381.73	94.47	1.80	415395.00	566205.76	N 32° 8' 31.11"	W 104° 15' 10.75"
	8445.00	93.30	0.87	7168.22	1477.43	1476.58	96.49	1.00	415489.84	566207.78	N 32° 8' 32.05"	W 104° 15' 10.73"
	8539.00	93.64	0.62	7162.62	1571.27	1570.40	97.71	0.37	415583.66	566209.00	N 32° 8' 32.97"	W 104° 15' 10.71"
	8634.00	93.34	358.96	7156.92	1666.08	1665.23	97.36	1.76	415678.47	566208.65	N 32° 8' 33.91"	W 104° 15' 10.71"
	8728.00	92.58	357.20	7152.06	1759.87	1759.05	94.22	2.04	415772.28	566205.51	N 32° 8' 34.84"	W 104° 15' 10.75"
	8823.00	92.51	0.25	7147.84	1854.71	1853.92	92.10	3.21	415867.15	566203.40	N 32° 8' 35.78"	W 104° 15' 10.77"
	8917.00	92.99	358.40	7143.33	1948.58	1947.80	91.00	2.03	415961.02	566202.29	N 32° 8' 36.71"	W 104° 15' 10.79"
	9011.00	92.17	359.12	7139.10	2042.44	2041.68	88.97	1.16	416054.89	566200.26	N 32° 8' 37.64"	W 104° 15' 10.81"
	9106.00	92.17	1.45	7135.50	2137.36	2136.60	89.44	2.45	416149.81	566200.73	N 32° 8' 38.58"	W 104° 15' 10.80"
	9200.00	93.27	359.62	7131.04	2231.25	2230.49	90.32	2.27	416243.68	566201.61	N 32° 8' 39.51"	W 104° 15' 10.79"
	9295.00	92.20	0.34	7126.51	2326.13	2325.38	90.28	1.36	416338.56	566201.57	N 32° 8' 40.44"	W 104° 15' 10.79"
	9389.00	92.82	359.22	7122.39	2420.03	2419.28	89.92	1.36	416432.46	566201.21	N 32° 8' 41.37"	W 104° 15' 10.79"
	9484.00	91.72	355.61	7118.63	2514.80	2514.10	85.64	3.97	416527.26	566196.93	N 32° 8' 42.31"	W 104° 15' 10.84"
	9579.00	90.69	359.49	7116.63	2609.63	2608.97	81.58	4.22	416622.13	566192.88	N 32° 8' 43.25"	W 104° 15' 10.89"
	9674.00	92.06	357.70	7114.35	2704.54	2703.91	79.25	2.37	416717.06	566190.55	N 32° 8' 44.19"	W 104° 15' 10.92"
	9768.00	91.79	356.59	7111.19	2798.32	2797.74	74.58	1.21	416810.88	566185.87	N 32° 8' 45.12"	W 104° 15' 10.97"
	9862.00	91.51	356.99	7108.48	2892.08	2891.55	69.31	0.52	416904.68	566180.61	N 32° 8' 46.05"	W 104° 15' 11.03"
	9957.00	92.03	356.01	7105.55	2986.80	2986.33	63.52	1.17	416999.45	566174.81	N 32° 8' 46.98"	W 104° 15' 11.10"
	10052.00	90.45	357.64	7103.49	3081.58	3081.16	58.42	2.54	417094.28	566169.72	N 32° 8' 47.92"	W 104° 15' 11.15"
	10147.00	92.06	358.26	7101.41	3176.46	3176.08	55.19	1.75	417189.19	566166.49	N 32° 8' 48.86"	W 104° 15' 11.19"
	10241.00	90.96	358.57	7098.94	3270.36	3270.01	52.59	1.22	417283.11	566163.89	N 32° 8' 49.79"	W 104° 15' 11.22"
	10336.00	91.75	357.98	7096.69	3365.26	3364.94	49.73	1.04	417378.03	566161.03	N 32° 8' 50.73"	W 104° 15' 11.25"
	10431.00	90.93	2.17	7094.47	3460.21	3459.89	49.86	4.49	417472.97	566161.15	N 32° 8' 51.67"	W 104° 15' 11.25"
	10525.00	91.62	359.31	7092.38	3554.17	3553.85	51.07	3.13	417566.92	566162.37	N 32° 8' 52.60"	W 104° 15' 11.24"
	10620.00	90.69	1.40	7090.46	3649.15	3648.82	51.66	2.41	417661.88	566162.96	N 32° 8' 53.54"	W 104° 15' 11.23"
	10714.00	90.52	2.62	7089.47	3743.11	3742.76	54.96	1.31	417755.81	566166.25	N 32° 8' 54.47"	W 104° 15' 11.19"
	10808.00	90.79	359.42	7088.39	3837.09	3836.72	56.63	3.42	417849.77	566167.93	N 32° 8' 55.40"	W 104° 15' 11.17"

Comments	MD (ft)	Incl. (°)	Azin Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	10902.00	90.89	358.87	7087.01	3931.05	3930.70	-55.23	0.59	417943.74	566166.52	N 32 8 56.33	W 104 15 11.18
	10997.00	89.93	0.78	7086.33	4026.03	4025.69	-54.94	2.25	418038.72	566166.23	N 32 8 57.27	W 104 15 11.19
	11092.00	90.31	359.17	7086.14	4121.03	4120.69	-54.90	1.74	418133.71	566166.19	N 32 8 58.21	W 104 15 11.19
	11186.00	89.42	359.24	7086.36	4215.00	4214.68	-53.59	0.95	418227.69	566164.89	N 32 8 59.14	W 104 15 11.20
	11281.00	88.66	356.57	7087.95	4309.88	4309.59	-50.12	2.92	418322.60	566161.42	N 32 9 0 08	W 104 15 11.24
	11376.00	89.28	0.35	7089.66	4404.78	4404.53	-47.57	4.03	418417.52	566158.86	N 32 9 1 02	W 104 15 11.27
	11470.00	89.11	358.51	7090.98	4498.75	4498.51	-46.63	1.97	418511.49	566157.93	N 32 9 1 95	W 104 15 11.28
Final Survey	11534.00	88.21	358.42	7092.48	4562.69	4562.47	-44.92	1.41	418575.45	566156.22	N 32 9 2 58	W 104 15 11.30
LTP	11560.00	88.21	358.42	7093.29	4588.66	4588.44	-44.20	0.00	418601.42	566155.50	N 32 9 2 84	W 104 15 11.31
TD - Projection to Bit	11578.00	88.21	358.42	7093.85	4606.64	4606.43	-43.71	0.00	418619.40	566155.00	N 32 9 3 02	W 104 15 11.31

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	18.000	1/98.425	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex Marquardt Federal #18H XEM +
	1	18.000	18.000	Act Sins	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex Marquardt Federal #18H XEM +
	1	18.000	6514.000	Act Sins	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Marquardt Federal #18H XEM +
	1	6514.000	11534.000	Act Sins	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Marquardt Federal #18H XEM +
	1	11534.000	11578.000	Act Sins	30.000	30.000	SLB_BLIND-TREND	Original Borehole / Cimarex Marquardt Federal #18H XEM +