

Chisholm Minis 1 Fed Com WCA 10H MWD 0' to 18850' - Definitive Survey

Geodetic Report

(Def Survey)



HOBBS OCD
OCT 25 2019
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Report Date: July 29, 2019 - 02:40 PM
 Client: Chisholm
 Field: NM Lea County (NAD 83)
 Structure / Slot: Chisholm Minis 1 Fed Com WCA 10H / New Slot
 Well: Chisholm Minis 1 Fed Com WCA 10H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Chisholm Minis 1 Fed Com WCA 10H MWD 0' to 18850' - Definitive
 Survey Date: July 02, 2019
 Tort / AHD / DDI / ERD Ratio: 342.778' / 7083.012' / 6.647' / 0.887
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 31' 17.6551" N, W 103° 37' 28.2854" W
 Location Grid N/E, Y/K: N 54208.500 RUS, E 759980.700 RUS
 CRS Grid Convergence Angle: 0.3814"
 Grid Scale Factor: 0.99998384
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 179.580° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3753.000 ft above MSL
 Seabed / Ground Elevation: 3722.000 ft above MSL
 Magnetic Declination: 6.668°
 Total Gravity Field Strength: 988.481 mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48124.038 nT
 Magnetic Dip Angle: 60.398°
 Declination Date: July 22, 2019
 Magnetic Declination Model: HDGM 2019
 North Reference: Grid North
 Grid Convergence Used: 0.3814"
 Total Corr Mag North-Grid North: 0.2948°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth (°)
SHL	0.00	0.00	181.22	0.00	0.00	0.00	0.00	N/A	554208.70	759980.70	32.521579	-103.823968	0.00	0.00
First SLB MWD Survey	11.00	0.23	145.85	117.00	0.20	-0.19	0.13	0.20	554208.71	759980.83	32.521578	-103.823968	0.23	145.85
	21.00	0.22	190.36	211.00	0.53	0.53	0.24	0.14	554208.37	759980.94	32.521578	-103.823967	0.53	155.98
	301.00	0.68	183.23	301.00	1.22	-1.22	0.39	0.53	554207.68	759981.09	32.521578	-103.823967	1.22	162.22
	360.00	0.98	176.35	359.99	2.06	-2.05	0.52	0.60	554206.85	759981.22	32.521574	-103.823967	2.12	165.72
	420.00	0.99	189.82	419.88	3.08	-3.08	0.47	0.38	554205.82	759981.17	32.521571	-103.823967	3.11	171.37
	479.00	0.91	195.83	478.97	4.03	-4.03	0.25	0.22	554204.87	759980.95	32.521568	-103.823967	4.04	176.42
	535.00	0.84	198.45	534.96	5.31	-5.31	0.00	0.18	554203.59	759980.70	32.521558	-103.823968	5.31	180.05
	627.00	0.84	193.67	626.96	6.20	-6.21	-0.17	0.18	554202.89	759980.53	32.521562	-103.823969	6.21	181.53
	722.00	0.83	182.10	721.95	7.57	-7.57	-0.36	0.18	554201.33	759980.34	32.521558	-103.823970	7.58	182.71
	817.00	0.84	183.20	816.93	9.03	-9.03	-0.43	0.12	554199.87	759980.27	32.521554	-103.823970	9.04	182.71
	911.00	0.83	182.78	910.73	10.23	-10.24	-0.49	0.44	554198.86	759980.21	32.521551	-103.823970	10.25	182.75
	1006.00	0.38	181.84	1005.92	10.97	-10.98	-0.41	0.23	554197.92	759980.29	32.521549	-103.823970	10.98	182.18
	1100.00	0.45	168.82	1099.82	11.83	-11.83	-0.24	0.09	554197.27	759980.48	32.521547	-103.823969	11.84	181.20
	1195.00	0.38	185.03	1194.92	12.31	-12.31	-0.20	0.14	554196.59	759980.50	32.521545	-103.823969	12.32	180.92
	1289.00	0.40	186.29	1288.92	12.85	-12.85	-0.23	0.02	554195.95	759980.44	32.521544	-103.823969	12.85	181.15
	1384.00	0.32	187.95	1383.92	13.54	-13.54	-0.33	0.08	554195.36	759980.37	32.521542	-103.823970	13.55	181.41
	1478.00	0.23	188.92	1477.91	13.99	-13.99	-0.39	0.10	554194.91	759980.31	32.521541	-103.823970	14.00	181.61
	1508.00	0.25	203.10	1507.91	14.11	-14.11	-0.43	0.23	554194.79	759980.27	32.521540	-103.823970	14.12	181.73
	1670.00	0.57	172.07	1669.91	15.23	-15.23	-0.45	0.23	554193.87	759980.25	32.521537	-103.823970	15.24	181.70
	1785.00	1.11	148.04	1784.90	16.47	-16.46	0.13	0.68	554192.44	759980.83	32.521534	-103.823968	16.47	179.56
	1859.00	1.19	139.51	1858.88	17.87	-17.86	0.17	0.17	554191.99	759981.57	32.521530	-103.823968	16.80	178.94
	1954.00	0.22	227.83	1953.87	18.84	-18.82	1.79	1.27	554190.08	759982.49	32.521527	-103.823965	18.81	174.58
	2048.00	2.27	308.89	2047.85	17.78	-17.78	0.20	2.39	554191.12	759980.80	32.521530	-103.823968	17.78	178.34
	2142.00	3.95	312.68	2141.71	14.28	-14.41	-3.83	1.80	554194.49	759977.07	32.521540	-103.823980	14.88	194.12
	2237.00	5.57	302.82	2236.38	9.78	-9.83	-8.99	1.89	554189.07	759970.71	32.521532	-103.824001	14.02	226.48
	2331.00	5.38	309.80	2330.91	4.34	-4.45	-17.86	0.91	554204.42	759993.04	32.521567	-103.824026	15.31	230.95
	2425.00	5.35	312.02	2423.48	-1.98	1.47	-24.87	0.86	554210.37	759958.03	32.521584	-103.824048	24.71	273.42
	2520.00	5.73	312.95	2518.02	-7.91	7.87	-31.43	0.41	554218.57	759949.27	32.521601	-103.824070	32.35	283.71
	2614.00	5.57	310.94	2611.58	-14.15	13.88	-38.31	0.25	554222.75	759942.39	32.521618	-103.824092	40.70	289.88
	2708.00	5.13	297.93	2706.15	-19.22	18.87	-45.55	1.35	554227.77	759935.15	32.521632	-103.824118	49.20	292.50
	2803.00	4.98	296.14	2801.48	-22.81	22.81	-52.98	0.39	554231.49	759927.72	32.521642	-103.824140	57.54	295.07
	2898.00	4.37	293.82	2894.47	-26.10	25.84	-60.08	0.84	554234.54	759920.64	32.521651	-103.824162	65.31	293.12
	2993.00	4.92	281.57	2989.18	-28.42	27.91	-67.37	1.18	554236.81	759913.33	32.521657	-103.824186	72.82	292.50
	3087.00	3.80	286.70	3082.88	-30.13	28.56	-74.32	1.24	554238.46	759906.38	32.521662	-103.824209	79.98	291.69
	3182.00	2.84	281.77	3177.72	-31.87	31.08	-81.28	0.96	554239.96	759901.09	32.521668	-103.824228	85.48	291.31
	3277.00	3.75	284.53	3272.58	-33.14	32.49	-84.88	0.98	554241.39	759895.82	32.521670	-103.824243	92.05	290.95
	3371.00	4.85	283.89	3368.30	-34.91	34.20	-91.72	1.17	554243.10	759888.89	32.521675	-103.824255	97.89	290.45
	3465.00	5.45	281.57	3459.82	-38.81	38.04	-99.95	0.87	554244.94	759880.75	32.521680	-103.824292	106.25	289.83
	3560.00	5.04	278.49	3554.52	-38.39	37.55	-108.50	0.53	554246.45	759872.21	32.521684	-103.824319	114.81	289.09
	3654.00	4.77	284.18	3648.49	-38.49	38.49	-118.47	0.34	554247.49	759864.24	32.521687	-103.824345	122.70	288.33
	3749.00	4.68	274.02	3742.85	-40.28	39.31	-124.26	0.23	554248.21	759856.45	32.521690	-103.824370	130.53	287.58
	3843.00	4.56	270.89	3836.55	-40.85	39.84	-131.82	0.30	554248.54	759848.89	32.521691	-103.824395	137.85	286.74
	3938.00	4.32	271.82	3931.28	-40.88	39.80	-138.17	0.28	554248.70	759841.53	32.521691	-103.824419	144.75	285.96
	4032.00	4.19	276.80	4025.00	-41.42	40.30	-146.12	0.43	554249.20	759834.59	32.521693	-103.824441	151.58	285.42
	4127.00	4.41	278.55	4119.74	-42.43	41.28	-153.18	0.28	554250.15	759827.53	32.521693	-103.824464	158.64	285.07
	4221.00	4.54	278.35	4213.45	-43.44	42.21	-160.45	0.23	554251.11	759820.28	32.521698	-103.824488	165.91	284.74
	4315.00	4.49	277.96	4307.18	-44.42	43.13	-167.79	0.14	554252.03	759812.82	32.521701	-103.824512	173.25	284.41
	4410.00	4.48	277.75	4401.87	-45.49	44.14	-175.15	0.02	554253.04	759805.56	32.521704	-103.824535	180.63	284.15
	4504.00	4.88	273.80	4495.27	-46.28	44.88	-182.62	0.41	554253.78	759798.09	32.521708	-103.824560	188.05	283.81
	4599.00	5.04	272.04	4590.23	-46.77	45.11	-190.65	0.42	554254.29	759790.45	32.521712	-103.824583	195.45	283.57
	4693.00	4.77	271.52	4683.89	-47.11	45.59	-198.59	0.42	554254.49	759782.12	32.521708	-103.824611	202.75	283.83
	4788.00	4.07	279.50	4778.82	-47.83	46.25	-205.78	0.88	554255.15	759774.85	32.521710	-103.824635	210.89	282.67
	4882.00	3.41	288.18	4872.42	-49.30	47.87	-211.71	0.92	554256.57	759769.00	32.521714	-103.824654	217.01	282.69
	4977.00	2.85	295.85	4967.29	-51.13	49.27	-218.29	1.00	554258.37	759764.42	32.521719	-103.824689	221.88	282.68
	5071.00	1.80	302.94	5061.22	-52.85	51.19	-219.41	0.78	554260.09	759761.29	32.521724	-103.824718	225.31	283.13
	5166.00	1.85	301.54	5156.17	-53.51	52.80	-221.97	0.07	554261.70	759758.74	32.521728	-103.824747	228.17	283.38
	5260.00	1.79	306.88	5250.12	-56.20	54.48	-224.44	0.19	554263.37	759756.27	32.521733	-103.824785	230.96	283.84
	5355.00	1.70	311.03	5345.08	-58.03	56.29	-226.89	0.18	554265.19	759754.02	32.521738	-103.824792	233.58	283.95
	5449.00	1.86	309.81	5439.03	-59.94	58.16	-229.81	0.17	554267.19	759751.79	32.521743	-103.824810	236.19	284.28
	5544.00	1.82	307.43	5533.58	-61.91	60.14	-231.36	0.10	554269.04	759749.35	32.521747	-103.824817	238.57	284.57
	5638.00	1.57	309.53	5627.84	-63.71	61.81	-233.81	0.38	554270.81	759747.10	32.521754	-103.824825	241.87	284.84
	5732.00	1.42	310.18	5699.81	-64.92	63.12	-235.05	0.21	554272.02	759745.08	32.521757	-103.824829	243.38	285.03
	5827.00	1.39	308.50	5778.69	-66.14	64.33	-236.50	0.04	554273.23	759744.21	32.521760	-103.824834	245.09	285.22
	5922.00	1.24	313.57	5871.85	-67.21	65.44	-237.47	0.11	554274.74	759742.74	32.521764	-103.824837	247.14	285.41
	5978.00	1.47	307.02	5965.83	-69.18	67.34	-239.99	0.20	554276.24	759740.72	32.521769	-103.824745	249.28	285.

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