

Grande 4-65 20-19 2AH Plan #0 Proposal Geodetic Report

(Def Plan)

Report Date: May 21, 2020 - 02:48 PM
Client: Crestone Peak Resources
Field: CO, Arapahoe County (NAD 83 CZ)
Structure / Slot: Crestone Peak 21-04S-65W (Grande North Pad) / Grande 4-65 20-19 2AH
Well: Grande 4-65 20-19 2AH
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Grande 4-65 20-19 2AH Plan #0
Survey Date: March 19, 2020
Tort / AHD / DDI / ERD Ratio: 98.845 ° / 11204.521 ft / 6.405 / 1.423
Coordinate Reference System: NAD83 Colorado State Plane, Central Zone, US Feet
Location Lat / Long: N 39° 41' 38.45760", W 104° 40' 31.81440"
Location Grid N/E Y/X: N 1678727.218 ftUS, E 3232015.365 ftUS
CRS Grid Convergence Angle: 0.5200 °
Grid Scale Factor: 0.9999894
Version / Patch: 2.10.810.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 266.714 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 28ft
TVD Reference Elevation: 5689.500 ft above MSL
Seabed / Ground Elevation: 5661.500 ft above MSL
Magnetic Declination: 8.573 °
Total Gravity Field Strength: 998.9114mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51549.870 nT
Magnetic Dip Angle: 66.336 °
Declination Date: May 18, 2020
Magnetic Declination Model: HDGM 2020
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North→True North: 8.5733 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1678727.22	3232015.36	39.694016	-104.675504	
Build 1 DLS	100.00	0.00	253.30	100.00	0.00	0.00	0.00	0.00	1678727.22	3232015.36	39.694016	-104.675504	
	200.00	0.00	253.30	200.00	0.00	0.00	0.00	0.00	1678727.22	3232015.36	39.694016	-104.675504	
	250.00	0.00	253.30	250.00	0.00	0.00	0.00	0.00	1678727.22	3232015.36	39.694016	-104.675504	
	300.00	0.50	253.30	300.00	0.21	-0.06	-0.21	1.00	1678727.15	3232015.16	39.694016	-104.675505	
Hold	400.00	1.50	253.30	399.98	1.91	-0.56	-1.88	1.00	1678726.64	3232013.49	39.694014	-104.675511	
	450.49	2.00	253.30	450.44	3.41	-1.01	-3.36	1.00	1678726.18	3232012.01	39.694013	-104.675516	
	500.00	2.00	253.30	499.93	5.10	-1.51	-5.02	0.00	1678725.67	3232010.36	39.694012	-104.675522	
	600.00	2.00	253.30	599.87	8.50	-2.51	-8.37	0.00	1678724.63	3232007.02	39.694009	-104.675534	
Drop 1 DLS	700.00	2.00	253.30	699.81	11.90	-3.52	-11.72	0.00	1678723.60	3232003.68	39.694006	-104.675546	
	800.00	2.00	253.30	799.75	15.31	-4.52	-15.07	0.00	1678722.56	3232000.34	39.694004	-104.675558	
	846.84	2.00	253.30	846.56	16.90	-4.99	-16.64	0.00	1678722.08	3231998.77	39.694002	-104.675563	
	900.00	1.47	253.30	899.69	18.47	-5.46	-18.19	1.00	1678721.60	3231997.23	39.694001	-104.675569	
Hold Vertical	1000.00	0.47	253.30	999.68	20.12	-5.94	-19.81	1.00	1678721.10	3231995.61	39.694000	-104.675574	
	1047.32	0.00	253.30	1047.00	20.31	-6.00	-20.00	1.00	1678721.04	3231995.42	39.694000	-104.675575	
	1100.00	0.00	253.30	1099.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1200.00	0.00	253.30	1199.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1300.00	0.00	253.30	1299.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1400.00	0.00	253.30	1399.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1500.00	0.00	253.30	1499.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1600.00	0.00	253.30	1599.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1700.00	0.00	253.30	1699.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1800.00	0.00	253.30	1799.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	1900.00	0.00	253.30	1899.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2000.00	0.00	253.30	1999.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2100.00	0.00	253.30	2099.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2200.00	0.00	253.30	2199.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2300.00	0.00	253.30	2299.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2400.00	0.00	253.30	2399.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2500.00	0.00	253.30	2499.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2600.00	0.00	253.30	2599.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2700.00	0.00	253.30	2699.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2800.00	0.00	253.30	2799.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	2900.00	0.00	253.30	2899.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575	
	Build 2 DLS	3000.00	0.00	253.30	2999.68	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575
		3000.32	0.00	253.30	3000.00	20.31	-6.00	-20.00	0.00	1678721.04	3231995.42	39.694000	-104.675575
		3100.00	1.99	226.31	3099.66	21.63	-7.20	-21.25	2.00	1678719.83	3231994.18	39.693996	-104.675580
		3200.00	3.99	226.31	3199.51	25.61	-10.81	-25.03	2.00	1678716.19	3231990.43	39.693986	-104.675593
		3300.00	5.99	226.31	3299.13	32.24	-16.82	-31.32	2.00	1678710.12	3231984.20	39.693970	-104.675615
		3400.00	7.99	226.31	3398.38	41.51	-25.23	-40.13	2.00	1678701.63	3231975.47	39.693947	-104.675647
		3500.00	9.99	226.31	3497.15	53.41	-36.03	-51.43	2.00	1678690.73	3231964.27	39.693917	-104.675687
		3544.11	10.88	226.31	3540.52	59.49	-41.55	-57.20	2.00	1678685.16	3231958.54	39.693902	-104.675707
		3600.00	10.88	226.31	3595.41	67.52	-48.83	-64.83	0.00	1678677.80	3231950.98	39.693882	-104.675734
		3700.00	10.88	226.31	3693.62	81.89	-61.86	-78.47	0.00	1678664.65	3231937.46	39.693846	-104.675783
		3800.00	10.88	226.31	3791.82	96.25	-74.90	-92.11	0.00	1678651.49	3231923.94	39.693810	-104.675831
		3900.00	10.88	226.31	3890.02	110.62	-87.93	-105.75	0.00	1678638.33	3231910.41	39.693775	-104.675880
		4000.00	10.88	226.31	3988.23	124.99	-100.97	-119.40	0.00	1678625.17	3231896.89	39.693739	-104.675928
		4100.00	10.88	226.31	4086.43	139.36	-114.00	-133.04	0.00	1678612.02	3231883.37	39.693703	-104.675977
		4200.00	10.88	226.31	4184.64	153.72	-127.04	-146.68	0.00	1678598.86	3231869.84	39.693667	-104.676025
		4300.00	10.88	226.31	4282.84	168.09	-140.07	-160.32	0.00	1678585.70	3231856.32	39.693631	-104.676074
		4400.00	10.88	226.31	4381.04	182.46	-153.10	-173.97	0.00	1678572.54	3231842.80	39.693596	-104.676122
		4500.00	10.88	226.31	4479.25	196.82	-166.14	-187.61	0.00	1678559.39	3231829.27	39.693560	-104.676171
		4600.00	10.88	226.31	4577.45	211.19	-179.17	-201.25	0.00	1678546.23	3231815.75	39.693524	-104.676219
		4700.00	10.88	226.31	4675.65	225.56	-192.21	-214.89	0.00	1678533.07	3231802.23	39.693488	-104.676268
		4800.00	10.88	226.31	4773.86	239.92	-205.24	-228.53	0.00	1678519.92	3231788.71	39.693453	-104.676316
		4900.00	10.88	226.31	4872.06	254.29	-218.27	-242.18	0.00	1678506.76	3231775.18	39.693417	-104.676365
		5000.00	10.88	226.31	4970.27	268.66	-231.31	-255.82	0.00	1678493.60	3231761.66	39.693381	-104.676413
5100.00		10.88	226.31	5068.47	283.02	-244.34	-269.46	0.00	1678480.44	3231748.14	39.693345	-104.676462	
5200.00		10.88	226.31	5166.67	297.39	-257.38	-283.10	0.00	1678467.29	3231734.61	39.693309	-104.676510	
5300.00		10.88	226.31	5264.88	311.76	-270.41	-296.74	0.00	1678454.13	3231721.09	39.693274	-104.676558	
5400.00		10.88	226.31	5363.08	326.12	-283.44	-310.39	0.00	1678440.97	3231707.57	39.693238	-104.676607	
5500.00		10.88	226.31	5461.29	340.49	-296.48	-324.03	0.00	1678427.82	3231694.04	39.693202	-104.676655	
5600.00		10.88	226.31	5559.49	354.86	-309.51	-337.67	0.00	1678414.66	3231680.52	39.693166	-104.676704	
5700.00		10.88	226.31	5657.69	369.22	-322.55	-351.31	0.00	1678401.50	3231667.00	39.693131	-104.676752	
5800.00		10.88	226.31	5755.90	383.59	-335.58	-364.96	0.00	1678388.34	3231653.47	39.693095	-104.676801	
5900.00		10.88	226.31	5854.10	397.96	-348.62	-378.60	0.00	1678375.19	3231639.95	39.693059	-104.676849	
6000.00		10.88	226.31	5952.31	412.33	-361.65	-392.24	0.00	1678362.03	3231626.43	39.693023	-104.676898	
6100.00		10.88	226.31	6050.51	426.69	-374.68	-405.88	0.00	1678348.87	3231612.91	39.692987	-104.676946	
6200.00		10.88	226.31	6148.71	441.06	-387.72	-419.52	0.00	1678335.71	3231599.38	39.692952	-104.676995	
6300.00		10.88	226.31	6246.92	455.43	-400.75	-433.17	0.00	1678322.56	3231585.86	39.692916	-104.677043	
6400.00		10.88	226.31	6345.12	469.79	-413.79	-446.81	0.00	1678309.40	3231572.34	39.692880	-104.677092	
6500.00		10.88	226.31	6443.32	484.16	-426.82	-460.45	0.00	1678296.24	3231558.81	39.692844	-104.677140	
6600.00		10.88	226.31	6541.53	498.53	-439.85	-474.09	0.00	1678283.09	3231545.29	39.692808	-104.677189	
6700.00		10.88	226.31	6639.73	512.89	-452.89	-487.73	0.00	1678269.93	3231531.77	39.692773	-104.677237	
6800.00		10.88	226.31	6737.94	527.26	-465.92	-501.38	0.00	1678256.77	3231518.24	39.692737	-104.677286	
6900.00		10.88	226.31	6836.14	541.63	-478.96	-515.02	0.00	1678243.61	3231504.72	39.692701	-104.677334	
7000.00		10.88	226.31	6934.34	555.99	-491.99	-52						

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
KOP, Build/Turn 8 DLS	7200.00	10.88	226.31	7130.75	584.73	-518.06	-555.94	0.00	1678204.14	3231464.15	39.692584	-104.677480
	7300.00	10.88	226.31	7228.96	599.09	-531.09	-569.59	0.00	1678190.98	3231450.63	39.692558	-104.677528
	7336.37	10.88	226.31	7264.67	604.32	-535.83	-574.55	0.00	1678186.20	3231445.71	39.692545	-104.677546
	7400.00	15.04	239.59	7326.68	616.24	-544.16	-586.01	8.00	1678177.77	3231434.32	39.692522	-104.677586
	7500.00	22.35	249.89	7421.37	646.04	-557.29	-615.10	8.00	1678164.38	3231405.35	39.692486	-104.677690
	7600.00	30.01	255.22	7511.06	688.81	-570.23	-657.21	8.00	1678151.06	3231363.37	39.692451	-104.677839
	7700.00	37.79	258.52	7594.00	743.73	-582.73	-711.50	8.00	1678138.06	3231309.19	39.692416	-104.678032
	7800.00	45.65	260.82	7668.58	809.73	-594.55	-776.93	8.00	1678125.65	3231243.87	39.692384	-104.678265
	7900.00	53.53	262.58	7733.36	885.53	-605.46	-852.22	8.00	1678114.05	3231168.68	39.692354	-104.678532
	8000.00	61.44	264.01	7787.07	969.64	-615.25	-935.91	8.00	1678103.51	3231085.09	39.692327	-104.678830
TPZ Point, Turn 2 DLS	8100.00	69.37	265.24	7828.65	1060.43	-623.73	-1026.36	8.00	1678094.21	3230994.72	39.692304	-104.679151
	8200.00	77.29	266.35	7857.32	1156.14	-630.73	-1121.83	8.00	1678086.34	3230899.32	39.692284	-104.679490
	8300.00	85.23	267.39	7872.50	1254.90	-636.11	-1220.44	8.00	1678080.06	3230800.76	39.692270	-104.679841
	8360.13	90.00	268.00	7875.00	1314.94	-638.53	-1280.45	8.00	1678077.10	3230740.78	39.692263	-104.680054
	8400.00	90.00	268.80	7875.00	1354.80	-639.64	-1320.31	2.00	1678075.63	3230700.94	39.692260	-104.680196
	8463.08	90.00	270.06	7875.00	1417.81	-640.27	-1383.38	2.00	1678074.43	3230637.87	39.692258	-104.680420
	8500.00	90.00	270.06	7875.00	1454.67	-640.23	-1420.30	0.00	1678074.13	3230600.95	39.692258	-104.680551
	8600.00	90.00	270.06	7875.00	1554.49	-640.13	-1520.30	0.00	1678073.32	3230500.96	39.692259	-104.680906
	8700.00	90.00	270.06	7875.00	1654.32	-640.03	-1620.30	0.00	1678072.52	3230400.96	39.692259	-104.681262
	8800.00	90.00	270.06	7875.00	1754.15	-639.92	-1720.30	0.00	1678071.72	3230300.96	39.692259	-104.681617
Hold to TD	8900.00	90.00	270.06	7875.00	1853.98	-639.82	-1820.30	0.00	1678070.91	3230200.97	39.692259	-104.681972
	9000.00	90.00	270.06	7875.00	1953.81	-639.72	-1920.30	0.00	1678070.11	3230100.97	39.692260	-104.682328
	9100.00	90.00	270.06	7875.00	2053.64	-639.62	-2020.30	0.00	1678069.30	3230000.98	39.692260	-104.682683
	9200.00	90.00	270.06	7875.00	2153.47	-639.51	-2120.30	0.00	1678068.50	3229900.98	39.692260	-104.683038
	9300.00	90.00	270.06	7875.00	2253.30	-639.41	-2220.30	0.00	1678067.69	3229800.99	39.692260	-104.683394
	9400.00	90.00	270.06	7875.00	2353.13	-639.31	-2320.30	0.00	1678066.89	3229700.99	39.692261	-104.683749
	9500.00	90.00	270.06	7875.00	2452.96	-639.20	-2420.30	0.00	1678066.08	3229601.00	39.692261	-104.684104
	9600.00	90.00	270.06	7875.00	2552.79	-639.10	-2520.30	0.00	1678065.28	3229501.00	39.692261	-104.684460
	9700.00	90.00	270.06	7875.00	2652.62	-639.00	-2620.30	0.00	1678064.48	3229401.00	39.692261	-104.684815
	9800.00	90.00	270.06	7875.00	2752.45	-638.89	-2720.30	0.00	1678063.67	3229301.01	39.692262	-104.685170
	9900.00	90.00	270.06	7875.00	2852.28	-638.79	-2820.30	0.00	1678062.87	3229201.01	39.692262	-104.685526
	10000.00	90.00	270.06	7875.00	2952.11	-638.69	-2920.30	0.00	1678062.06	3229101.02	39.692262	-104.685881
	10100.00	90.00	270.06	7875.00	3051.94	-638.58	-3020.30	0.00	1678061.26	3229001.02	39.692262	-104.686236
	10200.00	90.00	270.06	7875.00	3151.77	-638.48	-3120.30	0.00	1678060.45	3228901.03	39.692263	-104.686592
	10300.00	90.00	270.06	7875.00	3251.60	-638.38	-3220.30	0.00	1678059.65	3228801.03	39.692263	-104.686947
	10400.00	90.00	270.06	7875.00	3351.43	-638.27	-3320.30	0.00	1678058.84	3228701.04	39.692263	-104.687303
	10500.00	90.00	270.06	7875.00	3451.26	-638.17	-3420.30	0.00	1678058.04	3228601.04	39.692263	-104.687658
	10600.00	90.00	270.06	7875.00	3551.09	-638.07	-3520.30	0.00	1678057.24	3228501.05	39.692264	-104.688013
	10700.00	90.00	270.06	7875.00	3650.92	-637.97	-3620.30	0.00	1678056.43	3228401.05	39.692264	-104.688369
	10800.00	90.00	270.06	7875.00	3750.75	-637.86	-3720.30	0.00	1678055.63	3228301.05	39.692264	-104.688724
	10900.00	90.00	270.06	7875.00	3850.58	-637.76	-3820.30	0.00	1678054.82	3228201.06	39.692264	-104.689079
	11000.00	90.00	270.06	7875.00	3950.41	-637.66	-3920.30	0.00	1678054.02	3228101.06	39.692265	-104.689435
	11100.00	90.00	270.06	7875.00	4050.23	-637.55	-4020.30	0.00	1678053.21	3228001.07	39.692265	-104.689790
	11200.00	90.00	270.06	7875.00	4150.06	-637.45	-4120.30	0.00	1678052.41	3227901.07	39.692265	-104.690145
	11300.00	90.00	270.06	7875.00	4249.89	-637.35	-4220.30	0.00	1678051.61	3227801.08	39.692265	-104.690501
	11400.00	90.00	270.06	7875.00	4349.72	-637.24	-4320.30	0.00	1678050.80	3227701.08	39.692266	-104.690856
	11500.00	90.00	270.06	7875.00	4449.55	-637.14	-4420.30	0.00	1678050.00	3227601.09	39.692266	-104.691211
	11600.00	90.00	270.06	7875.00	4549.38	-637.04	-4520.30	0.00	1678049.19	3227501.09	39.692266	-104.691567
	11700.00	90.00	270.06	7875.00	4649.21	-636.93	-4620.30	0.00	1678048.39	3227401.09	39.692266	-104.691922
	11800.00	90.00	270.06	7875.00	4749.04	-636.83	-4720.30	0.00	1678047.58	3227301.10	39.692267	-104.692277
	11900.00	90.00	270.06	7875.00	4848.87	-636.73	-4820.30	0.00	1678046.78	3227201.10	39.692267	-104.692633
	12000.00	90.00	270.06	7875.00	4948.70	-636.62	-4920.30	0.00	1678045.97	3227101.11	39.692267	-104.692988
	12100.00	90.00	270.06	7875.00	5048.53	-636.52	-5020.30	0.00	1678045.17	3227001.11	39.692267	-104.693343
	12200.00	90.00	270.06	7875.00	5148.36	-636.42	-5120.30	0.00	1678044.37	3226901.12	39.692267	-104.693699
	12300.00	90.00	270.06	7875.00	5248.19	-636.31	-5220.30	0.00	1678043.56	3226801.12	39.692268	-104.694054
	12400.00	90.00	270.06	7875.00	5348.02	-636.21	-5320.30	0.00	1678042.76	3226701.13	39.692268	-104.694409
	12500.00	90.00	270.06	7875.00	5447.85	-636.11	-5420.30	0.00	1678041.95	3226601.13	39.692268	-104.694765
	12600.00	90.00	270.06	7875.00	5547.68	-636.01	-5520.30	0.00	1678041.15	3226501.14	39.692268	-104.695120
	12700.00	90.00	270.06	7875.00	5647.51	-635.90	-5620.30	0.00	1678040.34	3226401.14	39.692269	-104.695475
	12800.00	90.00	270.06	7875.00	5747.34	-635.80	-5720.30	0.00	1678039.54	3226301.14	39.692269	-104.695831
	12900.00	90.00	270.06	7875.00	5847.17	-635.70	-5820.30	0.00	1678038.73	3226201.15	39.692269	-104.696186
	13000.00	90.00	270.06	7875.00	5947.00	-635.59	-5920.30	0.00	1678037.93	3226101.15	39.692269	-104.696541
	13100.00	90.00	270.06	7875.00	6046.83	-635.49	-6020.30	0.00	1678037.13	3226001.16	39.692269	-104.696897
	13200.00	90.00	270.06	7875.00	6146.66	-635.39	-6120.30	0.00	1678036.32	3225901.16	39.692270	-104.697252
	13300.00	90.00	270.06	7875.00	6246.49	-635.28	-6220.30	0.00	1678035.52	3225801.17	39.692270	-104.697607
	13400.00	90.00	270.06	7875.00	6346.32	-635.18	-6320.30					

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	17500.00	90.00	270.06	7875.00	10439.33	-630.95	-10420.30	0.00	1678001.73	3221601.36	39.692278	-104.712532
	17600.00	90.00	270.06	7875.00	10539.16	-630.85	-10520.30	0.00	1678000.93	3221501.36	39.692278	-104.712887
	17700.00	90.00	270.06	7875.00	10638.99	-630.75	-10620.30	0.00	1678000.12	3221401.36	39.692278	-104.713243
	17800.00	90.00	270.06	7875.00	10738.82	-630.64	-10720.30	0.00	1677999.32	3221301.37	39.692279	-104.713598
	17900.00	90.00	270.06	7875.00	10838.65	-630.54	-10820.30	0.00	1677998.51	3221201.37	39.692279	-104.713953
	18000.00	90.00	270.06	7875.00	10938.48	-630.44	-10920.30	0.00	1677997.71	3221101.38	39.692279	-104.714309
Grande 4-65 20-19 2AH BHL	18058.63	90.00	270.06	7875.00	10997.00	-630.38	-10978.92	0.00	1677997.24	3221042.75	39.692279	-104.714517

Survey Type: Def Plan

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	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB-Depth Only	Original Hole / Grande 4-65 20-19 2AH Plan #0
	1	28.000	2200.000	1/100.000	13.500	9.625		NAL_MWD-NON_SLB	Original Hole / Grande 4-65 20-19 2AH Plan #0
	1	2200.000	18058.627	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / Grande 4-65 20-19 2AH Plan #0