

CNX SHR-37Q-HSM Surveys 0ft to 14462ft Survey Geodetic Report

(Def Survey)

Report Date: June 14, 2022 - 03:48 PM
 Client: CNX
 Field: WV Tyler County (NAD 27)
 Structure / Slot: CNX SHR-37 Pad / SHR-37Q-HSM
 Well: SHR-37Q-HSM
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: CNX SHR-37Q-HSM Surveys 0ft to 14462ft
 Survey Date: June 09, 2022
 Tort / AHD / DDI / ERD Ratio: 215.360° / 9379.599 ft / 6.663 / 1.478
 Coordinate Reference System: NAD27 West Virginia State Plane, Northern Zone, US Feet
 Location Lat / Long: N 39° 21' 12.33567", W 80° 50' 45.21291"
 Location Grid N/E Y/X: N 313686.036 ftUS, E 1619421 123 ftUS
 CRS Grid Convergence Angle: -0.8584 °
 Grid Scale Factor: 0.999952
 Version / Patch: 2.10.829.1

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 161.000 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 857.000 ft above MSL
 Seabed / Ground Elevation: 828.000 ft above MSL
 Magnetic Declination: -7.464 °
 Total Gravity Field Strength: 999.3376mgm (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 51573.266 nT
 Magnetic Dip Angle: 66.175 °
 Declination Date: June 09, 2022
 Magnetic Declination Model: HDGM 2022
 North Reference: Grid North
 Grid Convergence Used: -0.8584 °
 Total Corr Mag North->Grid North: -6.6057 °
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-857.00	0.00	0.00	0.00	N/A	N/A	N/A	313686.04	1619421.12	39.35342657	-80.84589247
	100.00	0.62	255.45	100.00	-757.00	-0.04	-0.14	-0.52	0.62	0.62	0.00	313685.90	1619420.60	39.35342618	-80.84589432
	125.00	0.41	238.92	125.00	-732.00	-0.03	-0.22	-0.73	1.02	-0.84	-66.12	313685.82	1619420.39	39.35342595	-80.84589505
	150.00	0.45	262.11	150.00	-707.00	-0.03	-0.28	-0.91	0.71	0.16	92.76	313685.76	1619420.22	39.35342578	-80.84589566
	175.00	0.33	249.15	175.00	-682.00	-0.05	-0.31	-1.07	0.69	-0.48	-51.84	313685.72	1619420.05	39.35342567	-80.84589624
	200.00	0.28	244.57	200.00	-657.00	-0.04	-0.37	-1.19	0.22	-0.20	-18.32	313685.67	1619419.93	39.35342552	-80.84589667
	225.00	0.25	235.01	225.00	-632.00	-0.02	-0.42	-1.29	0.21	-0.12	-38.24	313685.61	1619419.83	39.35342536	-80.84589702
	250.00	0.18	232.75	249.99	-607.01	0.01	-0.48	-1.37	0.28	-0.28	-9.04	313685.56	1619419.76	39.35342520	-80.84589728
	275.00	0.19	235.57	274.99	-582.01	0.03	-0.53	-1.43	0.05	0.04	11.28	313685.51	1619419.69	39.35342507	-80.84589751
	300.00	0.14	271.21	299.99	-557.01	0.03	-0.55	-1.50	0.45	-0.20	142.56	313685.49	1619419.63	39.35342501	-80.84589774
	325.00	0.12	240.16	324.99	-532.01	0.03	-0.56	-1.55	0.29	-0.08	-124.20	313685.47	1619419.57	39.35342497	-80.84589793
	350.00	0.16	234.88	349.99	-507.01	0.04	-0.59	-1.60	0.17	0.16	-21.12	313685.44	1619419.52	39.35342488	-80.84589811
	365.00	0.19	234.65	364.99	-492.01	0.05	-0.62	-1.64	0.20	0.20	-1.53	313685.41	1619419.48	39.35342480	-80.84589824
	423.00	0.13	182.43	422.99	-434.01	0.14	-0.74	-1.72	0.26	-0.10	-90.03	313685.29	1619419.40	39.35342474	-80.84589852
	517.00	0.24	215.28	516.99	-340.01	0.36	-1.01	-1.84	0.16	0.12	34.95	313685.03	1619419.28	39.35342373	-80.84589892
	610.00	0.07	223.67	609.99	-247.01	0.50	-1.21	-1.99	0.18	-0.18	9.02	313684.83	1619419.13	39.35342317	-80.84589945
	704.00	0.47	281.26	703.99	-153.01	0.33	-1.18	-2.41	0.46	0.43	61.27	313684.86	1619418.71	39.35342325	-80.84590093
	797.00	0.44	264.65	796.99	-60.01	0.05	-1.13	-3.14	0.14	-0.03	-17.86	313684.90	1619417.98	39.35342333	-80.84590351
	891.00	0.35	303.06	890.99	-33.99	-0.26	-1.01	-3.74	0.29	-0.10	40.86	313685.02	1619417.38	39.35342364	-80.84590564
	985.00	1.64	55.45	984.97	127.97	-0.85	-0.09	-2.87	1.92	1.37	119.56	313685.94	1619418.25	39.35342620	-80.84590262
	1078.00	2.66	57.56	1077.91	220.91	-1.71	1.82	0.05	1.10	1.10	2.27	313687.86	1619421.17	39.35343157	-80.84589241
	1171.00	5.25	55.91	1170.68	313.68	-3.32	5.36	5.39	2.79	2.78	-1.77	313691.40	1619426.51	39.35344152	-80.84587369
	1264.00	6.60	55.21	1263.18	406.18	-5.88	10.80	13.31	4.45	4.45	-0.75	313696.83	1619434.43	39.35345676	-80.84584600
	1357.00	9.21	50.98	1355.29	498.29	-9.88	18.53	23.48	2.87	2.81	-4.55	313704.57	1619444.60	39.35347842	-80.84581044
	1450.00	10.27	49.44	1446.95	589.95	-15.47	28.61	35.56	1.17	1.14	-1.66	313714.65	1619456.68	39.35350658	-80.84576826
	1543.00	10.86	56.44	1538.37	681.37	-20.72	38.85	49.16	1.52	0.63	7.53	313724.88	1619470.28	39.35353523	-80.84572072
	1637.00	12.77	64.05	1630.38	773.38	-24.21	48.29	65.88	2.62	2.03	8.10	313734.32	1619487.00	39.35356184	-80.84566209
	1731.00	13.91	62.94	1721.85	864.85	-27.05	57.97	85.29	1.24	1.21	-1.18	313744.01	1619506.41	39.35358923	-80.84558399
	1824.00	14.90	60.39	1811.92	954.92	-30.82	68.97	105.64	1.26	1.06	-2.74	313755.00	1619526.75	39.35362025	-80.84552262
	1918.00	14.27	66.19	1902.90	1045.90	-34.02	79.62	126.74	1.69	-0.67	6.17	313765.65	1619547.86	39.35365035	-80.84544856
	2011.00	12.69	71.52	1993.34	1136.34	-34.88	87.48	146.92	2.16	-1.70	5.73	313773.51	1619568.04	39.35367277	-80.84537763
	2103.00	13.00	70.64	2083.03	1226.03	-34.86	94.12	166.27	0.40	0.34	-0.96	313780.15	1619587.38	39.35369177	-80.84530958
	2197.00	11.83	72.35	2174.83	1317.83	-34.70	100.54	185.43	1.80	-1.24	1.82	313786.57	1619606.54	39.35371020	-80.84524218
	2290.00	12.07	69.38	2265.82	1408.82	-34.75	106.86	203.61	0.71	0.26	-3.19	313792.89	1619624.72	39.35372828	-80.84517822
	2383.00	12.68	64.98	2356.66	1499.66	-36.09	114.60	221.96	1.21	0.66	-4.73	313800.63	1619643.07	39.35375029	-80.84511375
	2480.00	12.49	61.22	2451.33	1594.33	-38.99	124.15	240.80	0.87	-0.20	-3.88	313810.18	1619661.91	39.35377729	-80.84504764
	2575.00	11.90	55.76	2544.19	1687.19	-43.31	134.61	257.90	1.36	-0.62	-5.75	313820.64	1619679.21	39.35380670	-80.84498727
	2668.00	11.51	52.22	2635.26	1778.26	-48.82	145.69	273.16	0.86	-0.42	-3.81	313831.72	1619694.27	39.35383774	-80.84493435
	2762.00	12.98	52.31	2727.12	1870.12	-55.22	157.89	288.93	1.56	0.10	0.10	313843.92	1619710.04	39.35387188	-80.84487925
	2857.00	12.95	59.40	2819.70	1962.70	-60.78	169.83	306.54	1.67	-0.03	7.46	313855.86	1619727.64	39.35390539	-80.84481763
	2951.00	12.85	66.19	2911.33	2054.33	-63.77	179.41	325.17	1.62	-0.11	7.22	313865.44	1619746.27	39.35393246	-80.84475227
	3045.00	12.54	66.90	3003.04	2146.04	-65.38	187.64	344.12	0.37	-0.33	0.76	313873.66	1619765.22	39.35395581	-80.84468570



Comments	MD (ft)	Incl (°)	Azim (°)	Grid (ft)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (%/100ft)	BR (%/100ft)	TR (%/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	3138.00	12.70	66.17	3093.79	2236.79	-66.96	195.73	362.75	0.24	0.17	-0.78	313881.75	1619783.86	39.35397879	-80.84462023	
	3231.00	13.06	65.63	3184.45	2327.45	-68.81	204.19	381.68	0.41	0.39	-0.58	313890.22	1619802.78	39.35400281	-80.84455377	
	3325.00	12.78	61.92	3276.07	2419.07	-71.44	213.47	400.53	0.93	-0.30	-3.95	313899.50	1619821.63	39.35402905	-80.84448762	
	3419.00	12.65	62.23	3367.77	2510.77	-74.65	223.16	418.81	0.16	-0.14	0.33	313909.18	1619839.91	39.35405640	-80.84442350	
	3512.00	12.33	58.70	3458.57	2601.57	-78.32	233.06	436.30	0.89	-0.34	-3.80	313919.09	1619857.40	39.35408430	-80.84436216	
	3607.00	11.98	56.71	3551.44	2694.44	-82.91	243.74	453.21	0.57	-0.37	-2.09	313929.77	1619874.31	39.35411432	-80.84430294	
	3700.00	11.10	57.30	3642.56	2785.56	-87.42	253.88	468.81	0.95	-0.95	0.63	313939.90	1619889.91	39.35414278	-80.84424832	
	3793.00	10.26	57.92	3733.94	2876.94	-91.41	263.11	483.36	0.91	-0.90	0.67	313949.14	1619904.46	39.35416873	-80.84419735	
	3887.00	11.18	64.39	3826.31	2969.31	-94.36	271.50	498.67	1.61	0.98	6.88	313957.52	1619919.77	39.35419238	-80.84414366	
	3984.00	12.15	64.86	3921.30	3064.30	-96.53	279.90	516.40	1.00	1.00	0.48	313965.92	1619937.49	39.35421617	-80.84408145	
	4077.00	12.14	61.75	4012.22	3155.22	-99.15	288.69	533.87	0.70	-0.01	-3.34	313974.71	1619954.97	39.35424101	-80.84402013	
	4170.00	12.63	59.52	4103.06	3246.06	-102.74	298.47	551.25	0.74	0.53	-2.40	313984.50	1619972.34	39.35426858	-80.84395920	
	4263.00	12.61	59.88	4193.81	3336.81	-106.73	308.73	568.79	0.09	-0.02	0.39	313994.75	1619989.88	39.35429745	-80.84389772	
	4356.00	12.16	64.28	4284.65	3427.65	-109.83	318.07	586.40	1.12	-0.48	4.73	314004.09	1620007.49	39.35432382	-80.84383596	
	4449.00	14.21	67.06	4375.19	3518.19	-111.76	326.77	605.73	2.31	2.20	2.99	314012.79	1620026.83	39.35434850	-80.84376804	
	4542.00	12.54	61.91	4465.67	3608.67	-114.14	335.98	625.16	2.20	-1.80	-5.54	314021.99	1620046.25	39.35437457	-80.84369986	
	4636.00	12.57	59.37	4557.42	3700.42	-117.81	345.99	642.96	0.59	0.03	-2.70	314032.01	1620064.05	39.35440279	-80.84363744	
	4728.00	13.57	57.54	4647.04	3790.04	-122.35	356.89	660.68	1.18	1.09	-1.99	314042.90	1620081.77	39.35443343	-80.84357536	
	4821.00	15.82	55.14	4736.99	3879.99	-128.35	369.99	680.29	2.51	2.42	-2.58	314056.01	1620101.38	39.35447020	-80.84350671	
	4915.00	16.14	56.37	4827.36	3970.36	-135.15	384.55	701.68	0.50	0.34	1.31	314070.56	1620122.77	39.35451105	-80.84343184	
	5008.00	15.47	52.92	4916.84	4059.84	-142.27	399.19	722.34	1.24	-0.72	-3.71	314085.20	1620143.43	39.35455208	-80.84335957	
	5103.00	16.35	52.44	5008.20	4151.20	-150.45	414.98	743.05	0.94	0.93	-0.51	314100.99	1620164.14	39.35459627	-80.84328719	
	5196.00	15.49	54.02	5097.64	4240.64	-158.25	430.25	763.48	1.04	-0.92	1.70	314116.27	1620184.56	39.35463905	-80.84321577	
	5290.00	14.44	56.05	5188.45	4331.45	-164.94	444.17	783.36	1.25	-1.12	2.16	314130.19	1620204.44	39.35467808	-80.84314621	
Last 3rd party	5345.00	13.52	54.67	5241.82	4384.82	-168.51	451.72	794.29	1.78	-1.67	-2.51	314137.73	1620215.38	39.35469925	-80.84310795	
MWD	5426.00	12.11	48.95	5320.80	4463.80	-174.37	462.78	808.43	2.34	-1.74	-7.06	314148.79	1620229.51	39.35473018	-80.84305856	
1st SLB_MWD	5519.00	11.78	54.06	5411.79	4554.79	-180.79	474.76	823.47	1.19	-0.35	5.49	314160.77	1620244.55	39.35476368	-80.84300601	
	5613.00	13.25	75.24	5503.60	4646.60	-182.80	483.14	841.66	5.09	1.56	22.53	314169.15	1620262.75	39.35478743	-80.84294211	
	5706.00	14.64	94.02	5593.91	4736.91	-177.41	485.03	863.71	5.07	1.49	20.19	314171.04	1620284.79	39.35479353	-80.84286428	
	5800.00	16.79	110.15	5684.43	4827.43	-164.18	479.52	888.32	5.16	2.29	17.16	314165.53	1620309.40	39.35477941	-80.84277697	
	5894.00	17.90	116.97	5774.17	4917.17	-145.22	468.29	913.94	2.46	1.18	7.26	314154.30	1620335.02	39.35474963	-80.84268577	
	5987.00	23.20	133.32	5861.29	5004.29	-118.68	449.21	940.05	8.35	5.70	17.58	314135.22	1620361.12	39.35469833	-80.84259246	
	6081.00	29.72	140.48	5945.42	5088.42	-80.42	418.49	968.38	7.71	6.94	7.62	314104.50	1620389.46	39.35461516	-80.84249065	
	6175.00	38.41	146.10	6023.23	5166.23	-30.27	376.19	999.56	9.82	9.24	5.98	314062.20	1620420.64	39.35450032	-80.84237816	
	6269.00	45.43	149.06	6093.14	5236.14	30.79	323.16	1033.11	7.76	7.47	3.15	314009.18	1620454.18	39.35435613	-80.84225675	
	6363.00	52.01	150.29	6155.12	5298.12	100.03	262.20	1068.72	7.07	7.00	1.31	313948.22	1620489.79	39.35419025	-80.84212761	
	6457.00	58.57	151.79	6208.62	5351.62	176.09	194.61	1106.08	7.10	6.98	1.60	313880.64	1620527.15	39.35400624	-80.84199195	
	6551.00	65.91	153.59	6252.37	5395.37	258.35	120.74	1144.18	7.99	7.81	1.91	313806.77	1620565.24	39.35380500	-80.84185335	
	6644.00	73.05	155.62	6284.96	5427.96	344.85	42.09	1181.47	7.94	7.68	2.18	313728.13	1620602.53	39.35359065	-80.84171734	
	6738.00	78.06	156.91	6308.40	5451.40	435.54	-41.21	1218.09	5.49	5.33	1.37	313644.83	1620639.15	39.35336347	-80.84158347	
	6831.00	82.98	157.68	6323.71	5466.71	527.04	-125.81	1253.48	5.35	5.29	0.83	313560.24	1620674.54	39.35313269	-80.84145387	
Landing Point	6926.00	86.66	160.16	6332.29	5475.29	621.57	-214.07	1287.49	4.67	3.87	2.61	313471.98	1620708.55	39.35289179	-80.84132894	
	7019.00	88.87	160.54	6335.91	5478.91	714.49	-301.58	1318.74	2.41	2.38	0.41	313384.47	1620739.80	39.35265284	-80.84121384	
	7114.00	90.08	160.05	6336.78	5479.78	809.47	-391.01	1350.77	1.37	1.27	-0.52	313295.05	1620771.83	39.35240865	-80.84109587	
	7208.00	89.81	159.53	6336.87	5479.87	903.45	-479.22	1383.24	0.62	-0.29	-0.55	313206.84	1620804.30	39.35216783	-80.84097640	
	7301.00	90.05	159.80	6336.99	5479.99	996.43	-566.43	1415.56	0.39	0.26	0.29	313119.64	1620836.61	39.35192977	-80.84085753	
	7394.00	89.55	160.15	6337.31	5480.31	1089.41	-653.80	1447.41	0.66	-0.54	0.38	313032.27	1620868.46	39.35169121	-80.84074033	
	7488.00	89.15	160.82	6338.38	5481.38	1183.40	-742.40	1478.81	0.83	-0.43	0.71	312943.68	1620899.86	39.35144929	-80.84062464	
	7581.00	89.63	160.15	6339.37	5482.37	1276.39	-830.05	1509.87	0.89	0.52	-0.72	312856.03	1620930.92	39.35120995	-80.84051018	
	7675.00	89.91	160.07	6339.75	5482.75	1370.38	-918.44	1541.85	0.31	0.30	-0.09	312767.64	1620962.90	39.35096861	-80.84039245	
	7768.00	90.42	160.00	6339.48	5482.48	1463.37	-1005.85	1573.61	0.55	0.55	-0.08	312680.24	1620994.65	39.35072996	-80.84027556	
	7862.00	90.00	160.72	6339.13	5482.13	1557.36	-1094.38	1605.20	0.89	-0.45	0.77	312591.71	1621026.24	39.35048823	-80.84015919	
	7955.00	89.90	160.29	6339.22	5482.22	1650.35	-1182.05	1636.24	0.47	-0.11	-0.46	312504.05	1621057.28	39.35024884	-80.84004484	
	8048.00	90.52	159.59	6338.87	5481.87	1743.34	-1269.40	1668.13	1.01	0.67	-0.75	312416.69	1621089.17	39.35001034	-80.83992745	
	8141.00	89.85	159.84	6338.57	5481.57	1836.31	-1356.64	1700.38	0.77	-0.72	0.27	312329.47	1621121.41	39.34977219	-80.83980886	
	8235.00	90.64	159.57	6338.17	5481.17	1930.29	-1444.80	1732.98	0.77	0.84	-0.29	312241.31	1621154.02	39.34953151	-80.83968894	
	8329.00	89.78	160.45	6337.83	5480.83	2024.27	-1533.13	1765.11	1.31	-0.91	0.94	312152.98	1621186.15	39.34929033	-80.83957067	
	8424.00	90.02	160.20	6337.99	5480.99	2119.26	-1622.59	1797.10	0.36	0.25	-0.26	312063.53	1621218.13	39.34904608	-80.83945287	
	8517.00	89.93	160.46	6338.03	5481.03	2212.26	-1710.16	1828.40	0.30	-0.10	0.28	311975.96	1621249.43	39.34880696	-80.83933758	
	8611.00	89.67	162.76	6338.36	5481.36	2306.24	-1799.35	1858.06	2.46	-0.28	2.45	311886.77	1621279.09	39.34856333	-80.83922804	
	8704.00	89.37	163.12	6339.14	5482.14	2399.19	-1888.26	1885.34	0.50	-0.32	0.39	311797.87	1621306.37	39.34832039	-80.83912690	
	8797.00	90.22	162.54	6339.47	5482.47	2492.14	-1977.11	1912.79	1.11	0.91	-0.62	311709.02	1621333.82	39.34807760	-80.83902515	
	8892.00	89.32	162.73	6339.86	5482.86	2587.10	-2067.78	1941.14	0.97	-0.95	0.20	311618.36	1621362.17	39.34782986	-80.83892013	
	8985.00	89.35	163.47	6340.94	5483.94	2680.03	-2156.76	1968.18	0.80	0.80	0.80	311529.39	1621389.20	39.34758671	-80.83881987	
	9078.00	89.88	163.26	6341.56	5484.56	2772.95	-2245.86	1994.80	0.61	0.57	-0.23					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	BR (*/100ft)	TR (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	9731.00	90.93	161.36	6341.84	5484.84	3425.84	-2866.44	2197.90	1.49	0.83	-1.24	310819.74	1621618.91	39.34564793	-80.83797033
	9824.00	89.85	161.13	6341.20	5484.20	3518.83	-2954.50	2227.80	1.19	-1.16	-0.25	310731.69	1621648.81	39.34540742	-80.83785998
	9918.00	89.90	161.17	6341.41	5484.41	3612.83	-3043.45	2258.17	0.07	0.05	0.04	310642.73	1621679.18	39.34516446	-80.83774793
	10011.00	90.02	161.67	6341.47	5484.47	3705.83	-3131.61	2287.80	0.55	0.13	0.54	310554.59	1621708.81	39.34492368	-80.83763853
	10104.00	90.34	162.03	6341.18	5484.18	3798.82	-3219.98	2316.77	0.52	0.34	0.39	310466.22	1621737.78	39.34468227	-80.83753146
	10197.00	89.78	162.17	6341.09	5484.09	3891.80	-3308.48	2345.36	0.62	-0.60	0.15	310377.73	1621766.36	39.34444049	-80.83742575
	10290.00	90.32	162.11	6341.00	5484.00	3984.78	-3396.99	2373.88	0.58	0.58	-0.06	310289.21	1621794.88	39.34419867	-80.83732026
	10383.00	89.98	163.10	6340.76	5483.76	4077.74	-3485.74	2401.68	1.13	-0.37	1.06	310200.47	1621822.69	39.34395618	-80.83721730
	10475.00	90.50	162.00	6340.38	5483.38	4169.71	-3573.50	2429.27	1.32	0.57	-1.20	310112.71	1621850.27	39.34371639	-80.83711515
	10569.00	90.11	161.34	6339.87	5482.87	4263.70	-3662.73	2458.83	0.82	-0.41	-0.70	310023.49	1621879.83	39.34347265	-80.83700595
	10663.00	89.19	162.30	6340.45	5483.45	4357.68	-3752.04	2488.16	1.41	-0.98	1.02	309934.19	1621909.16	39.34322869	-80.83689757
	10757.00	89.55	162.48	6341.48	5484.48	4451.65	-3841.62	2516.60	0.43	0.38	0.19	309844.60	1621937.59	39.34298392	-80.83679233
	10850.00	89.30	162.57	6342.42	5485.42	4544.61	-3930.33	2544.52	0.29	-0.27	0.10	309755.90	1621965.52	39.34274156	-80.83668894
	10944.00	89.55	162.88	6343.36	5486.36	4638.57	-4020.08	2572.43	0.42	0.27	0.33	309666.15	1621993.43	39.34249631	-80.83658554
	11038.00	90.28	162.05	6343.50	5486.50	4732.53	-4109.71	2600.75	1.18	0.78	-0.88	309576.53	1622021.75	39.34225141	-80.83648071
	11131.00	89.78	161.40	6343.45	5486.45	4825.52	-4198.02	2629.92	0.88	-0.54	-0.88	309488.22	1622050.91	39.34201018	-80.83637297
	11225.00	89.08	160.98	6344.39	5487.39	4919.52	-4287.00	2660.22	0.87	-0.74	-0.45	309399.25	1622081.21	39.34176717	-80.83626115
	11319.00	89.08	159.67	6345.89	5488.89	5013.50	-4375.50	2691.87	1.39	0.00	-0.39	309310.76	1622112.86	39.34152552	-80.83614464
Deepest TVD	11412.00	89.76	159.83	6346.84	5489.84	5106.47	-4462.74	2724.05	0.75	0.73	0.17	309223.52	1622145.04	39.34128733	-80.83602626
	11506.00	90.40	159.57	6346.70	5489.70	5200.45	-4550.90	2756.67	0.73	0.68	-0.28	309135.36	1622177.65	39.34104665	-80.83590634
	11599.00	90.03	159.91	6346.36	5489.36	5293.42	-4638.15	2788.87	0.54	-0.40	0.37	309048.12	1622209.85	39.34080846	-80.83578791
	11692.00	90.25	159.32	6346.13	5489.13	5386.39	-4725.32	2821.26	0.68	0.24	-0.63	308960.95	1622242.25	39.34057048	-80.83566881
	11786.00	90.55	158.90	6345.47	5488.47	5480.34	-4813.14	2854.78	0.55	0.32	-0.45	308873.13	1622275.76	39.34033077	-80.83554571
	11879.00	90.42	159.34	6344.69	5487.69	5573.29	-4900.03	2887.93	0.49	-0.14	-0.01	308786.25	1622308.90	39.34009360	-80.83542398
	11972.00	90.41	159.40	6344.01	5487.01	5666.25	-4987.07	2920.69	0.07	0.06	0.06	308699.22	1622341.67	39.33985601	-80.83530357
	12067.00	89.94	160.41	6343.72	5486.72	5761.23	-5076.28	2953.33	1.17	-0.49	1.06	308610.01	1622374.31	39.33961244	-80.83518350
	12160.00	90.13	159.46	6343.66	5486.66	5854.21	-5163.63	2985.24	1.04	0.20	-1.02	308522.66	1622406.21	39.33937394	-80.83506612
	12254.00	89.70	159.42	6343.80	5486.80	5948.18	-5251.65	3018.25	0.46	-0.46	-0.04	308434.65	1622439.22	39.33913368	-80.83494480
	12348.00	90.18	159.15	6343.90	5486.90	6042.13	-5339.57	3051.50	0.59	0.51	-0.29	308346.73	1622472.47	39.33889367	-80.83482265
	12442.00	90.01	158.38	6343.75	5486.75	6136.06	-5427.19	3085.54	0.84	-0.18	-0.82	308259.12	1622506.51	39.33865454	-80.83469769
	12536.00	90.09	160.24	6343.66	5486.66	6230.02	-5515.12	3118.75	1.98	0.09	1.98	308171.19	1622539.72	39.33841451	-80.83457568
	12629.00	90.22	159.24	6343.41	5486.41	6322.99	-5602.36	3150.96	1.08	0.14	-1.08	308083.95	1622571.92	39.33817632	-80.83445276
	12723.00	90.35	159.83	6342.95	5485.95	6416.96	-5690.43	3183.82	0.64	0.63	0.63	307995.89	1622604.79	39.33793591	-80.83433646
	12817.00	90.78	161.57	6342.02	5485.02	6510.95	-5779.14	3214.89	1.91	0.46	1.85	307907.19	1622635.85	39.33769365	-80.83422198
	12912.00	89.98	161.61	6341.39	5484.39	6605.94	-5869.28	3244.89	0.84	-0.84	0.04	307817.05	1622665.85	39.33744744	-80.83411120
	13005.00	90.70	159.80	6340.84	5483.84	6698.93	-5957.05	3275.62	2.09	0.77	-1.95	307729.29	1622696.58	39.33720775	-80.83399797
	13097.00	90.41	160.51	6339.95	5482.95	6790.92	-6043.58	3306.85	0.83	-0.32	0.77	307642.76	1622727.81	39.33697148	-80.83388303
	13191.00	89.82	160.95	6339.76	5482.76	6884.92	-6132.31	3337.87	0.78	-0.63	0.47	307554.03	1622758.83	39.33672916	-80.83376872
	13285.00	90.23	160.78	6339.72	5482.72	6978.92	-6221.12	3368.68	0.47	0.44	-0.18	307465.23	1622789.64	39.33648663	-80.83365514
	13378.00	90.08	161.17	6339.46	5482.46	7071.92	-6309.04	3399.00	0.45	-0.16	0.42	307377.32	1622819.95	39.33624651	-80.83354336
	13471.00	90.35	160.76	6339.11	5482.11	7164.92	-6396.95	3429.33	0.53	0.29	-0.44	307289.41	1622850.28	39.33600641	-80.83343153
	13565.00	89.64	161.15	6339.12	5482.12	7258.91	-6485.80	3460.00	0.86	-0.76	0.41	307200.56	1622880.95	39.33576375	-80.83331844
	13658.00	89.51	161.44	6339.81	5482.81	7351.91	-6573.89	3489.83	0.34	-0.14	0.31	307112.48	1622910.78	39.33552315	-80.83320840
	13751.00	89.56	161.06	6340.57	5483.57	7444.91	-6661.95	3519.72	0.41	0.05	-0.41	307024.42	1622940.67	39.33528263	-80.83309811
	13844.00	90.29	160.21	6340.69	5483.69	7537.90	-6749.69	3550.56	1.20	0.78	-0.91	306936.69	1622971.50	39.33504303	-80.83298451
	13938.00	90.15	161.41	6340.33	5483.33	7631.90	-6838.46	3581.45	1.29	-0.15	1.28	306847.92	1623002.40	39.33480059	-80.83287064
	14031.00	90.25	161.92	6340.00	5483.00	7724.89	-6926.74	3610.71	0.56	0.11	0.55	306759.64	1623031.65	39.33455945	-80.83276260
	14124.00	90.22	162.14	6339.62	5482.62	7817.88	-7015.20	3639.40	0.24	-0.03	0.24	306671.18	1623060.34	39.33431777	-80.83265654
	14218.00	90.66	162.06	6338.90	5481.90	7911.86	-7104.65	3668.29	0.48	0.47	-0.09	306581.74	1623089.23	39.33407340	-80.83254973
	14311.00	90.50	161.65	6337.96	5480.96	8004.84	-7193.02	3697.25	0.47	-0.17	-0.44	306493.38	1623118.19	39.33383199	-80.83244273
Final Survey	14405.00	90.32	160.78	6337.29	5480.29	8098.84	-7282.01	3727.52	0.95	-0.19	-0.82	306404.39	1623148.46	39.33358894	-80.83233107
PTB	14462.00	90.32	160.78	6336.97	5479.97	8155.84	-7335.83	3746.28	0.00	0.00	0.00	306350.57	1623167.22	39.33344195	-80.83226192

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 *** 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	29.000	1/98.425	17.500	13.375	A020Ga_GYRO-NS-Depth Only	Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft
	1	29.000	29.000	Act Stns	17.500	13.375	A020Ga_GYRO-NS-Depth Only	Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft
	1	29.000	365.000	Act Stns	17.500	13.375	A020Ga_GYRO-NS	Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft

...CNX SHR-37 Pad\SHR-37Q-HSM\Original Borehole\ CNX SHR-37Q-HSM Surveys 0ft to 14462ft

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
		1	365.000	828.000	Act Stns	17.500	13.375	A001Mb_MWD		Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft					
		1	828.000	5345.000	Act Stns	12.250	9.625	A001Mb_MWD		Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft					
		1	5345.000	14462.000	Act Stns	8.500	5.500	B006Mb_MWD+IGRF		Original Borehole / CNX SHR-37Q-HSM Surveys 0ft to 14462ft					

...CNX SHR-37 Pad\SHR-37Q-HSM\Original Borehole\CNX SHR-37Q-HSM Surveys 0ft to 14462ft

