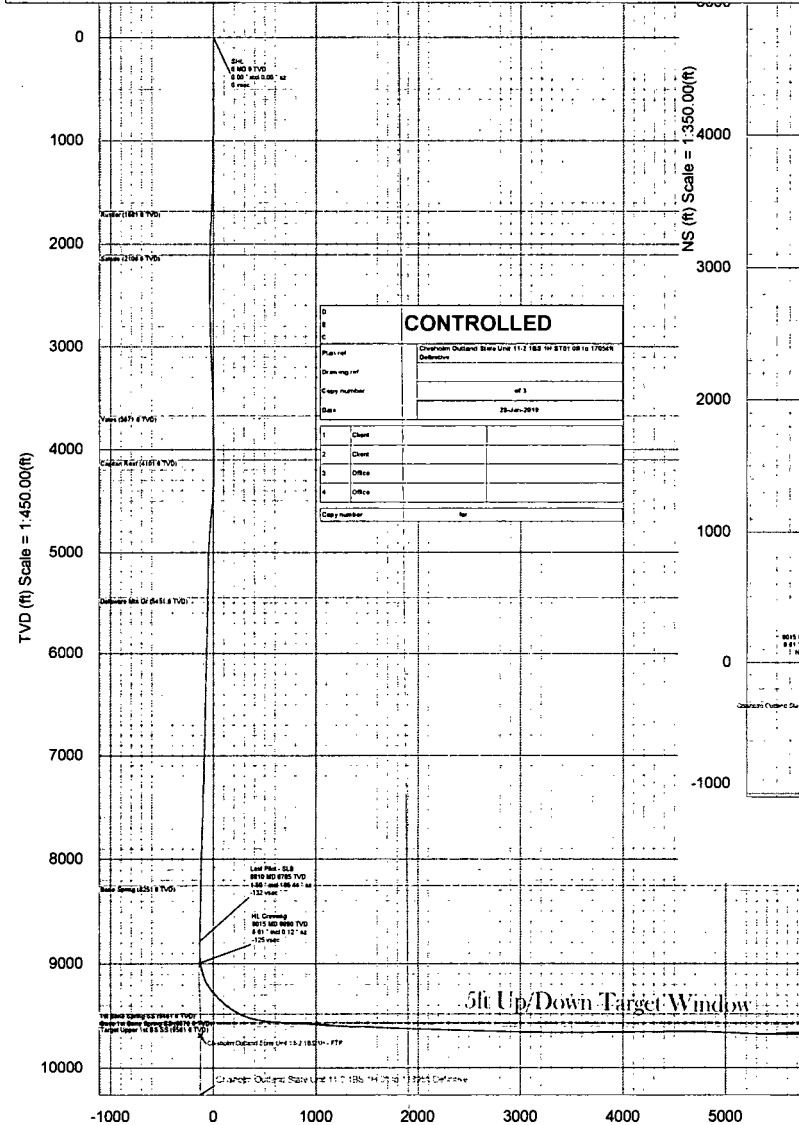
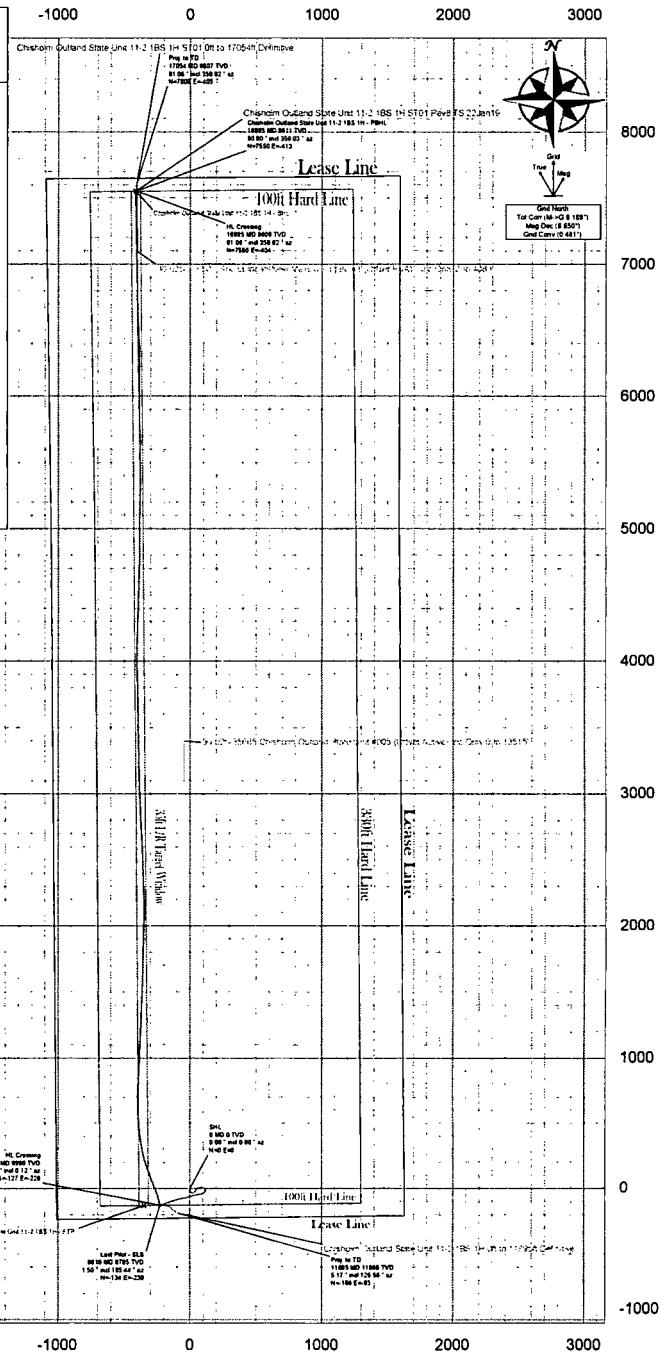


Borehole:	Well:	Field:	Structure:
HOBBS OCD	Outland State Unit 11-2 1BS 1H	NM Lea County (NAD 83)	Chisholm Outland State Unit 11-2 1BS 1H
Model: HDGM 2019 Dip: 80.365° Date: 02-Jan-2019 Surface Location: NAD83 New Mexico State Plane, Eastern Zone, US Feet MagDec: 8.65° FS: Gravity FS: 998.493 mgn (9.80665 Based) Lat: N 32 29 12.83 Northing: 542024.021 US Grid Conv: 0.4813° Miscellaneous: Outland State Unit 11-2 1BS 1H Plan: Chisholm Outland State Unit 11-2 1BS 1H ST01 ON to 17054R Definitive	Scale Fact: 0.999965	Scale Fact: 0.999965	TVD Ref: RKB = 31ft (JDC 7)(3701.6ft above MSL)

APR 02 2019

RECEIVED

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DL5
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Last Plot - SLB	8810.00	1.50	195.44	8785.49	-132.24	-134.17	-229.80	0.46
HL Crossing	9015.00	6.61	0.12	8990.21	-125.46	-127.37	-227.51	7.35
HL Crossing	18995.00	91.06	359.82	9008.56	7553.14	7550.01	-404.39	0.00
Proj. to TD	17054.00	91.06	359.82	9007.47	7612.13	7609.00	-404.57	0.00



Vertical Section (ft) Azim = 359.52° Scale = 1:450.00(ft) Origin = 0N/-S, 0E/-W

Chisholm Outland State Unit 11-2 1BS 1H ST01 Off to 17054ft Definitive



Survey Report

(Def Survey)

Report Date: January 28, 2019 - 08:54 AM
Client: Chisholm Energy Operating, LLC
Field: NM Lea County (NAD 83)
Structure / Slot: Chisholm Outland State Unit 11-2 1BS 1H / Outland State Unit 11-2 1BS 1H
Well: Outland State Unit 11-2 1BS 1H
Borehole: ST01
UWI / API#: Unknown / 30-025-45222-01
Survey Name: Chisholm Outland State Unit 11-2 1BS 1H ST01 Off to 17054ft Definitive
Survey Date: January 03, 2019
Tort / AMD / DDI / ERD Ratio: 245.558 * / 8332.386 ft / 6.557 / 0.862
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 29' 12.82781" W 103° 26' 14.51832"
Location Grid N/E Y/X: N 542024.020 RUS, E 817603.690 RUS
CRS Grid Convergence Angle: 0.4813 *
Grid Scale Factor: 0.9999955
Version / Patch: 2.10.753.0
Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.520 * (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB = 31ft (JDC 7)
TVD Reference Elevation: 3701.600 ft above MSL
Seabed / Ground Elevation: 3670.600 ft above MSL
Magnetic Declination: 6.650 *
Total Gravity Field Strength: 998.4928mgm (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48082.060 nT
Magnetic Dip Angle: 60.365 *
Declination Date: January 02, 2019
Magnetic Declination Model: HDGM 2019
North Reference: Grid North
Grid Convergence Used: 0.4813 *
Total Corr Mag North->Grid North: 6.1692 *
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (ft/100m)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	542024.02	817603.69	N 32° 29' 12.83"	W 103° 26' 14.52"
	146.00	0.51	219.24	146.00	-0.50	-0.41	0.65	0.85	219.24	0.35	542023.52	817603.28	N 32° 29' 12.82"	W 103° 26' 14.52"
	206.00	0.57	215.20	206.00	-0.95	-0.95	-0.75	1.21	218.25	0.12	542023.07	817602.94	N 32° 29' 12.82"	W 103° 26' 14.53"
	266.00	0.69	226.94	265.99	-1.43	-1.44	-1.19	1.87	219.43	0.29	542022.58	817602.50	N 32° 29' 12.81"	W 103° 26' 14.53"
	327.00	0.83	231.79	326.99	-2.02	-2.03	-1.74	2.68	220.52	0.28	542021.99	817601.95	N 32° 29' 12.81"	W 103° 26' 14.54"
	386.00	0.79	220.88	385.98	-2.65	-2.67	-2.28	3.51	220.47	0.07	542021.35	817601.41	N 32° 29' 12.80"	W 103° 26' 14.55"
	446.00	0.62	217.52	445.98	-3.22	-3.24	-2.75	4.25	220.29	0.28	542020.78	817600.94	N 32° 29' 12.80"	W 103° 26' 14.55"
	506.00	0.65	215.26	505.97	-3.75	-3.78	-3.14	4.91	219.76	0.07	542020.24	817600.55	N 32° 29' 12.79"	W 103° 26' 14.56"
	565.00	0.41	225.79	564.97	-4.17	-4.20	-3.49	5.46	219.71	0.44	542019.82	817600.20	N 32° 29' 12.79"	W 103° 26' 14.56"
	625.00	0.38	233.59	625.97	-4.44	-4.47	-3.81	5.87	220.41	0.10	542019.55	817599.88	N 32° 29' 12.78"	W 103° 26' 14.56"
	690.00	0.16	285.46	689.97	-4.54	-4.57	-4.06	6.12	221.63	0.48	542019.45	817599.63	N 32° 29' 12.78"	W 103° 26' 14.57"
	721.00	0.16	299.84	720.97	-4.50	-4.54	-4.14	6.14	222.38	0.13	542019.48	817599.55	N 32° 29' 12.78"	W 103° 26' 14.57"
	785.00	0.16	302.98	784.97	-4.55	-4.59	-4.26	6.26	222.86	0.40	542019.43	817599.43	N 32° 29' 12.78"	W 103° 26' 14.57"
	879.00	0.29	187.79	878.97	-4.92	-4.96	-4.35	6.59	221.25	0.13	542019.06	817599.34	N 32° 29' 12.78"	W 103° 26' 14.57"
	974.00	0.44	169.72	973.96	-5.52	-5.55	-4.32	7.03	217.84	0.20	542018.47	817599.37	N 32° 29' 12.77"	W 103° 26' 14.57"
	1068.00	0.55	181.49	1067.96	-6.33	-6.36	-4.26	7.66	213.83	0.16	542017.66	817599.43	N 32° 29' 12.77"	W 103° 26' 14.57"
	1163.00	0.39	166.74	1162.96	-7.10	-7.13	-4.20	8.28	210.50	0.21	542016.89	817599.49	N 32° 29' 12.76"	W 103° 26' 14.57"
	1258.00	0.51	134.11	1257.96	-7.71	-7.74	-3.82	8.63	206.28	0.29	542016.28	817599.67	N 32° 29' 12.75"	W 103° 26' 14.56"
	1353.00	0.84	134.80	1352.95	-8.50	-8.53	-3.03	9.05	199.54	0.35	542015.49	817600.66	N 32° 29' 12.74"	W 103° 26' 14.55"
	1447.00	1.47	145.51	1446.93	-9.99	-10.01	-1.86	10.18	190.50	0.70	542014.01	817601.83	N 32° 29' 12.73"	W 103° 26' 14.54"
	1541.00	1.85	147.04	1540.89	-12.27	-12.27	-0.35	12.28	181.62	0.41	542011.75	817603.34	N 32° 29' 12.71"	W 103° 26' 14.52"
	1635.00	2.54	161.93	1634.82	-15.54	-15.53	1.12	15.57	175.86	0.95	542008.49	817604.81	N 32° 29' 12.67"	W 103° 26' 14.51"
	1769.00	3.57	155.48	1768.63	-22.18	-22.15	3.78	22.47	170.32	0.81	542001.87	817607.47	N 32° 29' 12.61"	W 103° 26' 14.48"
	1864.00	3.34	153.61	1863.46	-27.37	-27.32	6.23	28.02	167.14	0.27	541996.70	817609.92	N 32° 29' 12.56"	W 103° 26' 14.42"
	1958.00	2.66	112.87	1957.34	-30.69	-30.61	9.47	32.04	162.82	2.33	541993.41	817613.15	N 32° 29' 12.52"	W 103° 26' 14.41"
	2053.00	2.35	110.34	2052.25	-32.25	-32.14	13.33	34.79	157.48	0.34	541991.88	817617.02	N 32° 29' 12.51"	W 103° 26' 14.37"
	2147.00	1.93	114.80	2146.18	-33.61	-33.47	16.47	37.35	153.66	0.48	541990.55	817620.26	N 32° 29' 12.50"	W 103° 26' 14.33"
	2242.00	1.64	107.49	2241.13	-34.71	-34.55	19.32	39.58	150.79	0.39	541989.47	817623.01	N 32° 29' 12.48"	W 103° 26' 14.30"
	2336.00	1.14	99.27	2335.11	-35.28	-35.10	21.52	41.18	148.49	0.57	541988.92	817625.21	N 32° 29' 12.48"	W 103° 26' 14.27"
	2431.00	1.29	76.42	2430.09	-35.20	-35.01	23.50	42.16	146.13	0.53	541989.01	817627.19	N 32° 29' 12.48"	W 103° 26' 14.25"
	2525.00	1.38	63.02	2524.06	-34.46	-34.24	25.53	42.71	143.29	0.34	541989.78	817629.22	N 32° 29' 12.49"	W 103° 26' 14.22"
	2620.00	1.44	45.08	2619.03	-33.11	-32.88	27.40	42.80	140.20	0.47	541991.14	817631.09	N 32° 29' 12.50"	W 103° 26' 14.20"
	2714.00	1.75	46.98	2713.00	-31.31	-31.07	29.28	42.69	136.69	0.33	541992.95	817632.97	N 32° 29' 12.52"	W 103° 26' 14.18"
	2809.00	2.08	47.31	2807.94	-29.17	-28.91	31.61	42.84	132.44	0.35	541995.11	817635.30	N 32° 29' 12.54"	W 103° 26' 14.15"
	2903.00	2.67	53.09	2901.86	-26.73	-26.44	34.62	43.56	127.37	0.68	541997.58	817638.31	N 32° 29' 12.56"	W 103° 26' 14.12"
	2998.00	3.40	51.24	2996.73	-23.67	-23.35	38.58	45.10	121.18	0.78	542000.67	817642.27	N 32° 29' 12.59"	W 103° 26' 14.07"
	3092.00	3.25	46.43	3090.57	-20.12	-19.76	42.69	47.04	114.84	0.34	542004.26	817646.38	N 32° 29' 12.63"	W 103° 26' 14.02"
	3187.00	2.85	33.52	3185.44	-16.32	-15.94	45.94	48.83	109.13	0.83	542008.08	817649.63	N 32° 29' 12.67"	W 103° 26' 13.98"
	3281.00	2.93	9.08	3279.32	-12.02	-11.62	47.61	49.01	103.71	1.30	542012.40	817651.30	N 32° 29' 12.71"	W 103° 26' 13.96"
	3376.00	2.90	0.13	3374.20	-7.22	-6.82	48.00	48.48	98.08	0.48	542017.20	817651.69	N 32° 29' 12.76"	W 103° 26' 13.96"
	3470.00	1.64	21.19	3468.12	-3.59	-3.19	48.49	48.80	93.78	1.59	542020.83	817652.18	N 32° 29' 12.79"	W 103° 26' 13.95"
	3557.00	1.43	33.82	3555.99	-1.54	-1.12	49.56	49.56	91.30	0.48	542022.96	817653.24	N 32° 29' 12.81"	W 103° 26' 13.94"
	3622.00	1.52	47.86	3620.07	-0.29	0.13	50.63	50.63	89.85	0.56	542024.15	817654.32	N 32° 29' 12.82"	W 103° 26' 13.93"
	3675.00	1.58	57.18	3673.05	0.57	1.00	51.77	51.78	88.89	0.50	542025.02	817655.46	N 32° 29' 12.83"	W 103° 26' 13.91"
	3717.00	1.71	65.42	3715.03	1.13	1.58	52.82	52.85	88.29	0.64	542025.60	817656.51	N 32° 29' 12.84"	W 103° 26' 13.90"
	3811.00	3.34	70.55	3808.94	2.60	3.07	56.68	56.77	86.90	1.75	542027.09	817660.37	N 32° 29' 12.85"	W 103° 26' 13.86"
	3905.00	5.43	75.29	3902.66	4.58	5.11	63.57	63.77	85.40	2.25	542029.13	817667.26	N 32° 29' 12.87"	W 103° 26' 13.78"
	4000.00	6.58	78.51	3997.14	6.72	7.34	73.25	73.62	84.28	1.26	542031.36	817676.94	N 32° 29' 12.89"	W 103° 26' 13.66"
	4095.00	7.33	79.23	4091.44	8.85	9.56	84.54	85.07	83.55	0.75	542033.58	817688.23	N 32° 29' 12.92"	W 103° 26' 13.53"
	4189.00	6.46	91.25	4184.76	9.76	10.56	95.71	96.30	83.70	1.79	542034.58	817699.40	N 32° 29' 12.92"	W 103° 26' 13.40"
	4284.00	5.20	110.93	4279.28	8.02	8.91	105.08	105.46	85.16	2.47	542032.93	817708.77	N 32° 29' 12.91"	W 103° 26' 13.29"
	4379.00	4.44	137.84	4373.95	3.71	4.64	111.57	111.67	87.62	2.48	542028.66	817715.26	N 32° 29' 12.86"	W 103° 26' 13.22"
	4475.00	4.33	149.78	4469.67	-2.22	-1.24	115.89	115.89	90.82	0.96	542022.78	817719.58	N 32° 29' 12.81"	W 103° 26' 13.17"
	4570.00	5.95	169.13	4564.30	-10.17	-9.18	118.62	118.98	94.43	2.47	542014.84	817722.31	N 32° 29' 12.73"	W 103° 26' 13.13"
	4664.00	6.43	200.27	4657.77	-18.89	-18.91	117.72	119.23	99.12	3.56	542005.11	817721.41	N 32° 29' 12.63"	W 103° 26' 13.15"
	4759.00	7.40	230.08	4752.11	-28.75	-27.82	111.16	114.81	104.05	3.86	541996.20	817714.87	N 32° 29' 12.54"	W 103° 26' 13.22"
	4853.00	7.66	238.24	4845.30	-35.65	-35.01	101.21	107.09	109.08	1.17	541989.01	817704.90	N 32° 29' 12.47"	W 103° 26' 13.34"
	4947.00	9.12	248.43	4938.30	-41.79	-41.04	88.95	97.97	114.77	2.21	541982.98	817692.64	N 32° 29' 12.41"	W 103° 26' 13.48"
	5042.00	7.62	260.28	5032.29	-45.51	-44.88	75.74	88.04	120.65	2.40	541979.14	817679.43	N 32° 29' 12.38"	W 103° 26' 13.64"
	5136.00	6.21	259.43	5125.61	-47.40	-46.86	64.60	79.81	125.96	1.50	541977.16	817668.29	N 32° 29' 12.36"	W 103° 26' 13.77"
	5230.00	5.13	257.63	5219.15	-49.16	-48.69	55.50	73.83	131.26	1.16	541975.33	817659.19	N 32° 29' 12.34"	W 103° 26' 13.88"
	5325.00	3.93	256.70	5313.85	-50.76	-50.36	48.17	69.68	136.27	1.24	541973.66	817651.85	N 32° 29' 12.33"	W 103° 26' 13.98"
	5419.00	3.84	259.77	5407.63	-52.01	-51.66	41.92	66.53	140.94	0.25	541972.36	817645.61	N 32° 29' 12.31"	W 103° 26' 14.03"
	5514.00	5.68	259.51	5502.30	-53.37	-53.08	34.16	63.12	147.23	0.84	54			

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (ft/1000)	Northing (NUS)	Easting (EUS)	Latitude (N° S' W')	Longitude (E° W')
	8083.00	5.07	258.95	8039.28	-117.17	-118.68	-203.43	235.82	239.70	0.39	541905.14	817400.26	N 32° 29' 11.67" W	103° 26' 16.90" E
	8157.00	3.45	252.50	8133.01	-118.90	-120.65	-210.17	242.35	240.14	1.76	541903.36	817393.52	N 32° 29' 11.65" W	103° 26' 16.98" E
	8252.00	2.98	244.72	8227.86	-122.58	-120.77	-215.13	247.80	240.33	0.67	541901.44	817388.56	N 32° 29' 11.63" W	103° 26' 17.04" E
	8347.00	2.46	251.39	8322.76	-122.44	-124.28	-219.30	252.07	240.46	0.64	541899.74	817384.39	N 32° 29' 11.62" W	103° 26' 17.09" E
	8423.00	2.06	250.65	8398.70	-123.39	-125.26	-222.13	255.01	240.58	0.53	541898.76	817381.56	N 32° 29' 11.61" W	103° 26' 17.12" E
	8525.00	2.00	240.09	8500.63	-124.86	-126.75	-225.40	258.60	240.65	0.37	541897.27	817378.29	N 32° 29' 11.59" W	103° 26' 17.16" E
	8620.00	1.86	222.36	8595.58	-126.80	-128.72	-227.88	261.72	240.54	0.84	541895.30	817375.81	N 32° 29' 11.57" W	103° 26' 17.19" E
	8715.00	1.91	190.09	8690.53	-129.49	-131.42	-229.20	264.20	240.17	1.10	541892.60	817374.50	N 32° 29' 11.55" W	103° 26' 17.21" E
	8810.00	1.50	195.44	8785.49	-132.24	-134.17	-230.80	266.11	239.72	0.46	541889.85	817373.89	N 32° 29' 11.52" W	103° 26' 17.21" E
	8931.00	2.71	33.41	8906.45	-131.39	-133.31	-228.65	264.88	239.78	3.44	541880.71	817375.04	N 32° 29' 11.53" W	103° 26' 17.20" E
	8976.00	3.91	11.09	8951.38	-129.01	-130.92	-227.77	262.71	240.11	3.87	541883.10	817375.92	N 32° 29' 11.55" W	103° 26' 17.19" E
	9015.00	6.61	0.12	8990.21	-125.48	-127.37	-227.51	260.74	240.76	7.35	541896.65	817376.18	N 32° 29' 11.59" W	103° 26' 17.19" E
	9026.00	7.39	358.49	9001.13	-124.12	-126.03	-227.53	260.10	241.02	7.35	541897.99	817376.17	N 32° 29' 11.60" W	103° 26' 17.19" E
	9058.00	11.04	352.23	9032.71	-119.02	-120.93	-227.99	258.08	242.06	11.81	541903.09	817375.70	N 32° 29' 11.65" W	103° 26' 17.19" E
	9089.00	14.42	350.04	9062.95	-112.27	-114.19	-228.06	255.95	243.50	11.01	541909.63	817374.53	N 32° 29' 11.72" W	103° 26' 17.20" E
	9121.00	17.63	346.39	9093.70	-103.61	-105.55	-230.89	253.88	245.43	10.51	541918.47	817372.80	N 32° 29' 11.80" W	103° 26' 17.22" E
	9152.00	20.79	343.33	9122.97	-93.76	-95.72	-233.58	252.43	247.72	10.70	541928.30	817370.11	N 32° 29' 11.90" W	103° 26' 17.25" E
	9184.00	24.16	344.21	9152.54	-81.98	-83.97	-236.99	251.43	250.49	10.58	541940.05	817366.70	N 32° 29' 12.02" W	103° 26' 17.29" E
	9215.00	26.71	345.94	9180.53	-69.09	-71.11	-240.41	250.70	253.52	8.57	541952.91	817363.28	N 32° 29' 12.14" W	103° 26' 17.33" E
	9247.00	31.95	344.27	9208.42	-53.92	-55.97	-244.45	250.78	257.10	16.57	541968.05	817359.24	N 32° 29' 12.29" W	103° 26' 17.38" E
	9278.00	37.38	340.03	9233.91	-37.12	-39.22	-249.90	252.96	261.08	19.16	541984.80	817353.79	N 32° 29' 12.46" W	103° 26' 17.44" E
	9310.00	41.60	338.48	9258.60	-18.18	-20.33	-257.48	258.26	265.48	14.95	542003.69	817346.23	N 32° 29' 12.85" W	103° 26' 17.53" E
	9341.00	45.57	336.07	9281.34	-1.23	-1.00	-265.83	265.83	269.78	7.88	542023.02	817337.86	N 32° 29' 12.84" W	103° 26' 17.62" E
	9373.00	45.57	340.03	9304.05	-27.44	-29.05	-274.87	274.87	277.88	8.81	542039.55	817329.55	N 32° 29' 13.05" W	103° 26' 17.92" E
	9405.00	46.98	337.89	9326.17	43.90	41.53	-282.45	285.49	278.37	6.54	542065.55	817321.24	N 32° 29' 13.26" W	103° 26' 17.81" E
	9436.00	49.30	338.98	9346.85	65.44	63.00	-280.93	297.67	282.22	7.93	542087.02	817312.76	N 32° 29' 13.48" W	103° 26' 17.91" E
	9468.00	51.08	339.48	9367.34	88.50	85.99	-289.64	311.74	286.01	5.69	542110.01	817304.05	N 32° 29' 13.70" W	103° 26' 18.01" E
	9500.00	52.47	339.64	9387.14	112.12	109.54	-308.42	327.30	289.55	4.36	542133.56	817295.27	N 32° 29' 13.94" W	103° 26' 18.11" E
	9531.00	54.00	340.21	9405.69	135.52	132.87	-316.95	343.67	292.74	5.15	542156.99	817286.75	N 32° 29' 14.17" W	103° 26' 18.21" E
	9563.00	55.98	340.68	9424.05	160.29	157.57	-325.72	361.83	295.82	6.30	542181.58	817277.97	N 32° 29' 14.41" W	103° 26' 18.31" E
	9594.00	58.21	342.08	9440.88	185.03	182.24	-334.02	380.50	298.62	8.27	542206.25	817269.67	N 32° 29' 14.65" W	103° 26' 18.40" E
	9626.00	60.87	344.14	9457.14	211.46	206.61	-342.03	400.62	301.38	9.35	542232.63	817261.67	N 32° 29' 14.92" W	103° 26' 18.49" E
	9657.00	63.30	345.88	9471.70	237.96	235.04	-349.10	420.85	303.95	9.82	542259.06	817254.59	N 32° 29' 15.18" W	103° 26' 18.57" E
	9689.00	65.44	347.14	9485.54	266.07	263.09	-355.83	442.53	306.48	7.57	542287.11	817247.87	N 32° 29' 15.46" W	103° 26' 18.65" E
	9720.00	67.60	348.11	9497.89	293.89	290.86	-361.92	464.31	308.79	7.54	542314.88	817241.78	N 32° 29' 15.74" W	103° 26' 18.71" E
	9752.00	69.81	349.49	9509.51	323.18	320.11	-367.70	487.52	311.04	7.99	542344.13	817235.99	N 32° 29' 16.03" W	103° 26' 18.78" E
	9783.00	72.43	350.99	9519.54	352.12	349.01	-372.67	510.58	313.12	9.61	542373.03	817231.02	N 32° 29' 16.31" W	103° 26' 18.83" E
	9815.00	75.53	353.08	9528.37	382.61	378.47	-376.93	534.86	315.18	11.56	542403.49	817226.76	N 32° 29' 16.61" W	103° 26' 18.91" E
	9846.00	79.38	354.08	9535.11	412.11	407.11	-381.22	558.65	317.12	12.92	542433.56	817223.44	N 32° 29' 16.91" W	103° 26' 18.92" E
	9878.00	79.95	354.50	9540.11	444.07	440.87	-383.32	584.21	318.99	1.88	542464.89	817220.37	N 32° 29' 17.22" W	103° 26' 18.95" E
	9909.00	81.82	355.26	9545.76	474.57	471.36	-386.05	609.27	320.68	6.50	542495.37	817217.64	N 32° 29' 17.52" W	103° 26' 18.98" E
	9941.00	82.76	355.58	9550.05	502.97	500.27	-388.58	635.59	322.31	3.10	542526.98	817215.11	N 32° 29' 17.84" W	103° 26' 19.01" E
	9972.00	84.28	356.42	9553.55	536.95	533.69	-390.73	661.44	323.79	5.59	542557.71	817212.98	N 32° 29' 18.14" W	103° 26' 19.03" E
	10004.00	85.25	357.53	9556.47	568.78	565.51	-392.41	688.33	325.24	4.60	542589.53	817211.28	N 32° 29' 18.46" W	103° 26' 19.04" E
	10035.00	86.15	358.23	9559.69	599.68	596.40	-393.56	714.55	326.58	3.67	542620.42	817210.14	N 32° 29' 18.76" W	103° 26' 19.05" E
	10067.00	86.49	358.40	9560.85	631.61	628.32	-394.45	741.80	327.88	1.19	542652.34	817209.20	N 32° 29' 19.08" W	103° 26' 19.06" E
	10098.00	86.87	359.75	9562.64	662.55	659.27	-394.99	768.54	329.07	4.52	542683.28	817208.70	N 32° 29' 19.38" W	103° 26' 19.06" E
	10130.00	87.21	0.74	9564.30	694.51	691.22	-394.86	798.05	330.26	3.27	542715.24	817208.84	N 32° 29' 19.70" W	103° 26' 19.08" E
	10161.00	88.00	1.01	9565.59	725.47	722.19	-394.38	822.86	331.36	2.69	542746.21	817209.31	N 32° 29' 20.01" W	103° 26' 19.05" E
	10193.00	88.14	1.92	9566.67	757.43	754.16	-393.57	850.68	332.44	2.88	542778.18	817210.13	N 32° 29' 20.32" W	103° 26' 19.04" E
	10224.00	87.73	2.25	9567.79	788.38	785.12	-392.44	877.74	333.44	1.70	542809.14	817211.25	N 32° 29' 20.63" W	103° 26' 19.02" E
	10256.00	87.56	2.29	9569.10	820.32	817.07	-391.17	905.88	334.42	0.55	542841.09	817212.52	N 32° 29' 20.94" W	103° 26' 19.00" E
	10287.00	87.56	2.12	9570.35	847.98	844.73	-389.96	933.38	335.30	0.98	542872.02	817213.71	N 32° 29' 21.25" W	103° 26' 18.97" E
	10319.00	85.28	2.18	9573.71	883.08	878.85	-388.79	961.92	336.16	0.29	542903.87	817214.91	N 32° 29' 21.57" W	103° 26' 18.97" E
	10350.00	85.49	2.24	9576.20	913.94	910.73	-387.59	989.78	336.95	0.70	542934.74	817216.10	N 32° 29' 21.87" W	103° 26' 18.95" E
	10382.00	85.90	2.11	9578.60	945.82	942.61	-386.38	1018.73	337.71	1.34	542966.63	817217.31	N 32° 29' 22.19" W	103° 26' 18.94" E
	10413.00	86.42	2.35	9580.68	976.71	973.52	-385.18	1048.95	338.41	1.85	542997.54	817218.51	N 32° 29' 22.49" W	103° 26' 18.92" E
	10445.00	87.42	2.59	9582.40	1008.62	1005.44	-383.80	1076.21	339.11	3.21	543029.48	817219.89	N 32° 29' 22.81" W	103° 26' 18.90" E
	10476.00	87.01	2.19	9583.91	1036.55	1033.38	-382.51	1104.72	339.74	1.85	543060.40	817221.18	N 32° 29' 23.11" W	103° 26' 18.88" E
	10508.00	85.67	2.72	9585.95	1071.44	1068.29	-381.14	1134.24	340.36	4.50	543092.30	817222.55	N 32° 29' 23.43" W	103° 26' 18.86" E
	10539.00	85.68	3.12	9588.17	1098.17	1095.03	-379.78	1164.23	341.68	0.98	543123.18	817223.92	N 32° 29' 23.75" W	103° 26' 18.84" E
	10570.00	87.01	3.06	9593.90	1126.95	1123.81	-378.46	1194.20	342.99	0.98	543154.87	817225.29	N 32° 29' 24.07" W	103° 26' 18.82" E
	10602.00	87.18	2.13	9598.67	1200.69	1197.54	-377.01	1224.20	344.96	1.00	543186.55	817226.66	N 32° 29' 24.39" W	103° 26' 18.81" E
	10634.00	87.18	2.13	9598.67	1200.69	1197.54	-377.01	1224.20	344.96	1.00	543186.55	817226.66	N 32° 29' 24.39" W	103° 26' 18.81" E
	10666.00	87.18	2.13	9598.67	1200.69	1197.54	-377.01	1224.20	344.96	1.00	543186.55	817226.66	N 32° 29' 24.39" W	103° 2

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	16498.00	90.95	0.12	9616.19	7056.21	7053.08	-402.78	7064.57	356.73	0.36	549077.06	817200.91	N 32 30 22.65	W 103 26 18.53
	16592.00	90.95	359.97	9614.64	7150.19	7147.07	-402.70	7158.40	356.78	0.16	549171.05	817200.99	N 32 30 23.58	W 103 26 18.52
	16687.00	90.80	359.16	9613.18	7245.18	7242.05	-403.43	7253.28	356.81	0.87	549268.03	817200.27	N 32 30 24.52	W 103 26 18.52
	16781.00	90.80	359.88	9611.87	7339.17	7336.04	-404.21	7347.17	356.85	0.77	549360.02	817199.48	N 32 30 25.45	W 103 26 18.52
	16875.00	90.80	0.09	9610.56	7433.16	7430.03	-404.24	7441.02	356.89	0.22	549454.01	817199.45	N 32 30 26.38	W 103 26 18.51
	16971.00	91.06	359.82	9609.00	7529.14	7526.02	-404.31	7536.87	356.92	0.39	549550.00	817199.38	N 32 30 27.33	W 103 26 18.50
HL Crossing	16995.00	91.06	359.82	9608.56	7553.14	7550.01	-404.39	7560.84	356.93	0.00	549573.99	817199.30	N 32 30 27.56	W 103 26 18.50
Procl. to TD	17054.00	91.06	359.82	9607.47	7612.13	7609.00	-404.57	7619.75	356.96	0.00	549632.98	817199.12	N 32 30 28.15	W 103 26 18.50

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	31.000	1/98.425	30.000	30.000	NAL_MWD_1.0_DEG-Depth Only	ST01 / Chisholm Outland State Unit 11-2 1BS 1H ST01 0ft to 17054ft Definitive
	1	31.000	31.000	Act Stns	30.000	30.000	NAL_MWD_1.0_DEG-Depth Only	ST01 / Chisholm Outland State Unit 11-2 1BS 1H ST01 0ft to 17054ft Definitive
	1	31.000	17054.000	Act Stns	30.000	30.000	NAL_MWD_1.0_DEG	ST01 / Chisholm Outland State Unit 11-2 1BS 1H ST01 0ft to

...ST01\Chisholm Outland State Unit 11-2 1BS 1H ST01 0ft to 17054ft Definitive