

Results of Directional Survey

API number:	30-025-41352		
OGRID:		Operator:	GMT EXPLORATION COMPANY LLC
		Property:	MERCHANT GAP 36 STATE COM # 1H

surface	ULSTR:	D	36	T	22S	R	34E
				40	FNL	350	FWL

BH Loc	ULSTR:	M	36	T	22S	R	34E
15974	MD	11352.2	TVD	335	FSL	369	FWL
				4945	FNL		

Top Perf/OH	ULSTR:	D	36	T	22S	R	34E
11718	MD	11307.2	TVD	699	FNL	351	FWL

Bot Perf/OH	ULSTR:	M	36	T	22S	R	34E
15783	MD	11360.6	TVD	525	FSL	381	FWL
				4755	FNL		

	MD	N/S	E/W	VD
	11703	-643.95	-0.36	11306.75
TOP PERFS/OH	11718	-658.91	0.63	11307.15
	11735	-675.87	1.75	11307.60
	15745	-4676.78	34.98	11361.00
BOT PERFS/OH	15783	-4714.56	31.11	11360.56
	15839	-4770.24	25.41	11359.92

NEXT TO LAST	15941	-4871.94	20.14	11354.30
LAST READING	15974	-4904.85	18.76	11352.17
TD	15974	-4904.85	18.76	11352.17

Surface Location	40	FN	350	FW
Projected BHL	4945	FN	369	FW
Location of				
Top Perfs/OH	699	FN	351	FW
Bottom Perfs/OH	4755	FN	381	FW

SUMMARY of Subsurface Locations

Surface Location	D-36-22S-34E	40	FN	350	FW	Vert. Depth
Top Perfs/OH	D-36-22S-34E	699	FN	351	FW	11307.15
Bottom Perfs/OH	M-36-22S-34E	4755	FN	381	FW	11360.56
Projected TD	M-36-22S-34E	4945	FN	369	FW	11352.17

APR 23 2014



\GMT Merchant Gap State Com 36 1H 0ft - 15974ft MD Survey Geodetic Report
(Non-Def Survey)



Report Date: February 04, 2014 - 07:59 AM
Client: GMT Exploration
Field: NM Lea County (NAD 83)
Structure / Slot: GMT Merchant Gap State Com 36 1H / GMT Merchant Gap State Com 36 1H
Well: GMT Merchant Gap State Com 36 1H
Borehole: Original Borehole
UWI / API#: McVay 4 / 30-025-41352
Survey Name: \GMT Merchant Gap State Com 36 1H 0ft - 15974ft MD
Survey Date: January 29, 2014
Tort / AHD / DDI / ERD Ratio: 206.883 ° / 5095.185 ft / 6.171 / 0.448
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 21' 19.13818", W 103° 25' 52.13120"
Location Grid N/E Y/X: N 494169.700 ftUS, E 819925.400 ftUS
CRS Grid Convergence Angle: 0.4828 °
Grid Scale Factor: 0.99999798

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.854 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3434.500 ft above MSL
Seabed / Ground Elevation: 3416.000 ft above MSL
Magnetic Declination: 7.206 °
Total Gravity Field Strength: 998.4965mgn (9.80665 Based)
Total Magnetic Field Strength: 48448.267 nT
Magnetic Dip Angle: 60.266 °
Declination Date: January 29, 2014
Magnetic Declination Model: IGRF2010/IGRF-11
North Reference: Grid North
Grid Convergence Used: 0.4828 °
Total Corr Mag North->Grid North: 6.7232 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
SHL	0.00	0.00	179.85	0.00	-3434.50	0.00	0.00	0.00	0.00	0.00	N/A	494169.70	819925.40	N 32 21 19.14	W 103 25 52.13	199M
	132.00	0.50	199.00	132.00	-3302.50	0.54	-0.54	-0.19	0.58	199.00	0.38	494169.16	819925.21	N 32 21 19.13	W 103 25 52.13	276M
	226.00	0.30	276.00	226.00	-3208.50	0.91	-0.91	-0.57	1.07	211.97	0.56	494168.79	819924.83	N 32 21 19.13	W 103 25 52.14	344M
	1107.00	0.40	344.00	1106.98	-2327.52	-2.30	2.29	-3.71	4.36	301.71	0.05	494171.99	819921.69	N 32 21 19.16	W 103 25 52.17	343M
	1234.00	0.40	343.00	1233.98	-2200.52	-3.15	3.14	-3.96	5.05	308.42	0.01	494172.84	819921.44	N 32 21 19.17	W 103 25 52.18	339M
	1326.00	0.60	339.00	1325.98	-2108.52	-3.91	3.90	-4.23	5.75	312.69	0.22	494173.60	819921.17	N 32 21 19.18	W 103 25 52.18	307M
	1425.00	0.80	307.00	1424.97	-2009.53	-4.81	4.80	-4.96	6.90	314.03	0.44	494174.50	819920.44	N 32 21 19.19	W 103 25 52.19	307.44M
	1851.00	0.67	307.44	1850.93	-1583.57	-8.12	8.10	-9.32	12.35	311.01	0.03	494177.80	819916.08	N 32 21 19.22	W 103 25 52.24	306.5M
	1950.00	0.61	306.50	1949.93	-1484.57	-8.79	8.77	-10.20	13.45	310.68	0.06	494178.47	819915.20	N 32 21 19.23	W 103 25 52.25	326.87M
	2042.00	0.92	326.87	2041.92	-1392.58	-9.70	9.68	-11.00	14.65	311.35	0.44	494179.38	819914.40	N 32 21 19.23	W 103 25 52.26	317.8M
	2138.00	0.91	317.80	2137.91	-1296.59	-10.92	10.89	-11.93	16.15	312.38	0.15	494180.59	819913.47	N 32 21 19.25	W 103 25 52.27	323.17M
	2232.00	0.94	323.17	2231.90	-1202.60	-12.09	12.06	-12.89	17.65	313.08	0.10	494181.76	819912.51	N 32 21 19.26	W 103 25 52.28	311.34M
	2327.00	1.11	311.34	2326.88	-1107.62	-13.32	13.29	-14.05	19.34	313.40	0.28	494182.99	819911.35	N 32 21 19.27	W 103 25 52.29	305.63M
	2422.00	1.32	305.63	2421.86	-1012.64	-14.57	14.53	-15.63	21.34	312.91	0.25	494184.23	819909.77	N 32 21 19.28	W 103 25 52.31	312.02M
	2517.00	1.28	312.02	2516.83	-917.67	-15.93	15.88	-17.31	23.49	312.54	0.16	494185.58	819908.09	N 32 21 19.30	W 103 25 52.33	317.01M
	2612.00	1.61	317.01	2611.80	-822.70	-17.62	17.57	-19.01	25.88	312.75	0.37	494187.27	819906.39	N 32 21 19.31	W 103 25 52.35	311.04M
	2707.00	1.84	311.04	2706.76	-727.74	-19.60	19.55	-21.07	28.74	312.85	0.31	494189.25	819904.33	N 32 21 19.33	W 103 25 52.37	310.94M
	2803.00	1.65	310.94	2802.72	-631.78	-21.52	21.46	-23.27	31.66	312.68	0.20	494191.16	819902.13	N 32 21 19.35	W 103 25 52.40	312.06M
	2840.00	1.44	312.06	2839.70	-594.80	-22.18	22.12	-24.02	32.66	312.64	0.57	494191.82	819901.38	N 32 21 19.36	W 103 25 52.41	308.31M
	2866.00	1.09	308.31	2865.70	-568.80	-22.56	22.50	-24.46	33.23	312.61	1.38	494192.20	819900.94	N 32 21 19.36	W 103 25 52.41	302.3M
	2898.00	0.79	302.30	2897.69	-536.81	-22.87	22.80	-24.88	33.75	312.50	0.99	494192.50	819900.52	N 32 21 19.37	W 103 25 52.42	296.93M
	2927.00	0.69	296.93	2926.69	-507.81	-23.05	22.99	-25.21	34.12	312.36	0.42	494192.69	819900.19	N 32 21 19.37	W 103 25 52.42	287.41M
	2962.00	0.68	287.41	2961.69	-472.81	-23.21	23.15	-25.59	34.51	312.12	0.33	494192.85	819899.81	N 32 21 19.37	W 103 25 52.43	273.32M
	2993.00	0.52	273.32	2992.69	-441.81	-23.27	23.21	-25.91	34.79	311.85	0.70	494192.91	819899.49	N 32 21 19.37	W 103 25 52.43	286.11M
	3026.00	0.58	286.11	3025.68	-408.82	-23.33	23.26	-26.22	35.05	311.58	0.41	494192.96	819899.18	N 32 21 19.37	W 103 25 52.43	358.15M
	3088.00	0.21	358.15	3087.68	-346.82	-23.53	23.46	-26.53	35.41	311.50	0.89	494193.16	819898.87	N 32 21 19.37	W 103 25 52.44	64.42M
	3183.00	0.55	64.42	3182.68	-251.82	-23.90	23.84	-26.12	35.36	312.38	0.53	494193.54	819898.28	N 32 21 19.38	W 103 25 52.43	72.41M
	3277.00	0.88	72.41	3276.67	-157.83	-24.31	24.25	-25.03	34.85	314.10	0.37	494193.95	819900.38	N 32 21 19.38	W 103 25 52.42	94.23M
	3342.00	1.52	94.28	3341.66	-92.84	-24.39	24.33	-23.69	33.96	315.77	1.19	494194.03	819901.71	N 32 21 19.38	W 103 25 52.40	92.91M
	3375.00	1.89	92.91	3374.65	-59.85	-24.33	24.27	-22.71	33.24	316.91	1.13	494193.97	819902.69	N 32 21 19.38	W 103 25 52.39	101.12M
	3404.00	2.11	101.12	3403.63	-30.87	-24.20	24.15	-21.71	32.47	318.04	1.24	494193.85	819903.69	N 32 21 19.38	W 103 25 52.38	106.59M
	3436.00	2.00	106.59	3435.61	1.11	-23.93	23.87	-20.59	31.53	319.22	0.70	494193.57	819904.81	N 32 21 19.38	W 103 25 52.37	117.15M
	3467.00	1.93	117.15	3466.59	32.09	-23.53	23.48	-19.61	30.59	320.13	1.19	494193.18	819905.79	N 32 21 19.37	W 103 25 52.36	119.48M
	3530.00	1.72	119.48	3529.56	95.06	-22.58	22.53	-17.85	28.74	321.62	0.35	494192.23	819907.56	N 32 21 19.36	W 103 25 52.34	122M
	3662.00	1.56	122.00	3661.54	127.04	-22.11	22.06	-17.06	27.89	322.29	0.55	494191.76	819908.34	N 32 21 19.36	W 103 25 52.33	113.86M
	3657.00	1.77	113.86	3656.50	222.00	-20.82	20.79	-14.62	25.41	324.88	0.33	494190.49	819910.78	N 32 21 19.35	W 103 25 52.30	108.09M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	3752.00	1.12	108.09	3751.47	316.97	-19.94	19.90	-12.39	23.45	328.09	0.70	494189.60	819913.01	N 32 21 19.34	W 103 25 52.27	105.36M
	3847.00	1.45	105.36	3846.45	411.95	-19.32	19.30	-10.35	21.90	331.79	0.35	494189.00	819915.05	N 32 21 19.33	W 103 25 52.25	142.15M
	3942.00	1.16	142.15	3941.43	506.93	-18.24	18.22	-8.60	20.15	334.72	0.91	494187.92	819916.80	N 32 21 19.32	W 103 25 52.23	169.87M
	4037.00	1.17	169.87	4036.41	601.91	-16.53	16.51	-7.84	18.27	334.58	0.59	494186.21	819917.56	N 32 21 19.30	W 103 25 52.22	185.25M
	4131.00	1.09	185.25	4130.39	695.89	-14.69	14.67	-7.76	16.60	332.13	0.33	494184.37	819917.64	N 32 21 19.28	W 103 25 52.22	198.38M
	4226.00	1.05	198.38	4225.37	790.87	-12.97	12.95	-8.11	15.28	327.92	0.26	494182.65	819917.29	N 32 21 19.27	W 103 25 52.22	212.21M
	4321.00	1.13	212.21	4320.36	885.86	-11.35	11.33	-8.89	14.40	321.88	0.29	494181.03	819916.51	N 32 21 19.25	W 103 25 52.23	219.06M
	4415.00	1.12	219.06	4414.34	979.84	-9.85	9.83	-9.96	13.99	314.62	0.14	494179.53	819915.44	N 32 21 19.24	W 103 25 52.25	220.98M
	4510.00	1.38	220.98	4509.31	1074.81	-8.27	8.24	-11.30	13.98	306.12	0.28	494177.94	819914.10	N 32 21 19.22	W 103 25 52.26	223.62M
	4605.00	1.13	223.62	4604.29	1169.79	-6.73	6.70	-12.69	14.35	297.84	0.27	494176.40	819912.71	N 32 21 19.21	W 103 25 52.28	228.79M
	4700.00	1.21	228.79	4699.27	1264.77	-5.40	5.36	-14.09	15.08	290.84	0.14	494175.06	819911.31	N 32 21 19.19	W 103 25 52.29	243.03M
	4795.00	1.28	243.03	4794.25	1359.75	-4.26	4.22	-15.79	16.35	284.97	0.33	494173.92	819909.61	N 32 21 19.18	W 103 25 52.31	284.77M
	4890.00	0.80	284.70	4889.24	1454.74	-3.95	3.91	-17.38	17.81	282.67	0.91	494173.61	819908.02	N 32 21 19.18	W 103 25 52.33	311.34M
	4984.00	0.62	311.34	4983.23	1548.73	-4.46	4.41	-18.40	18.92	283.48	0.39	494174.11	819907.00	N 32 21 19.18	W 103 25 52.35	312.2M
	5086.00	0.69	312.20	5085.22	1650.72	-5.24	5.19	-19.27	19.95	285.07	0.07	494174.89	819906.13	N 32 21 19.19	W 103 25 52.36	311.1M
	5118.00	0.73	311.10	5117.22	1682.72	-5.50	5.45	-19.56	20.31	285.57	0.13	494175.15	819905.84	N 32 21 19.19	W 103 25 52.36	77.55M
	5181.00	0.65	77.55	5180.22	1745.72	-5.84	5.79	-19.52	20.36	286.53	1.96	494175.49	819905.88	N 32 21 19.20	W 103 25 52.36	84.47M
	5275.00	0.91	84.47	5274.21	1839.71	-6.03	5.98	-18.25	19.21	288.14	0.29	494175.68	819907.15	N 32 21 19.20	W 103 25 52.34	86.21M
	5370.00	0.89	86.21	5369.20	1934.70	-6.14	6.10	-16.77	17.84	290.00	0.04	494175.80	819908.63	N 32 21 19.20	W 103 25 52.33	69.5M
	5465.00	0.99	69.50	5464.18	2029.68	-6.48	6.44	-15.26	16.56	292.87	0.31	494176.14	819910.14	N 32 21 19.20	W 103 25 52.31	113.01M
	5560.00	1.18	113.01	5559.17	2124.67	-6.38	6.34	-13.59	15.00	295.01	0.87	494176.04	819911.81	N 32 21 19.20	W 103 25 52.29	109.54M
	5655.00	1.19	109.54	5654.15	2219.65	-5.66	5.63	-11.76	13.04	295.58	0.08	494175.33	819913.64	N 32 21 19.19	W 103 25 52.27	103.58M
	5750.00	1.11	103.58	5749.13	2314.63	-5.11	5.08	-9.94	11.16	297.09	0.15	494174.78	819915.46	N 32 21 19.19	W 103 25 52.25	103.85M
	5845.00	1.11	103.85	5844.11	2409.61	-4.67	4.65	-8.15	9.38	299.70	0.01	494174.35	819917.25	N 32 21 19.18	W 103 25 52.23	104.94M
	5940.00	1.02	104.94	5939.09	2504.59	-4.23	4.21	-6.44	7.69	303.17	0.10	494173.91	819918.96	N 32 21 19.18	W 103 25 52.21	109.45M
	6035.00	1.15	109.45	6034.08	2599.58	-3.69	3.67	-4.72	5.98	307.88	0.16	494173.37	819920.68	N 32 21 19.17	W 103 25 52.19	103.82M
	6130.00	1.12	103.82	6129.06	2694.56	-3.14	3.13	-2.92	4.29	317.00	0.12	494172.83	819922.48	N 32 21 19.17	W 103 25 52.16	100.1M
	6225.00	1.08	100.10	6224.04	2789.54	-2.76	2.76	-1.14	2.98	337.53	0.09	494172.46	819924.26	N 32 21 19.17	W 103 25 52.14	92.15M
	6320.00	1.11	92.15	6319.02	2884.52	-2.56	2.56	0.66	2.65	14.46	0.16	494172.26	819926.06	N 32 21 19.16	W 103 25 52.12	84.04M
	6415.00	1.05	84.04	6414.01	2979.51	-2.61	2.62	2.45	3.58	43.04	0.17	494172.32	819927.85	N 32 21 19.16	W 103 25 52.10	86.94M
	6511.00	1.10	86.94	6509.99	3075.49	-2.75	2.76	4.24	5.06	56.94	0.08	494172.46	819929.64	N 32 21 19.17	W 103 25 52.08	93.6M
	6604.00	1.09	93.60	6602.97	3168.47	-2.74	2.75	6.02	6.82	65.41	0.14	494172.45	819931.42	N 32 21 19.16	W 103 25 52.05	93.39M
	6698.00	0.98	93.39	6696.96	3262.46	-2.63	2.65	7.71	8.15	71.04	0.12	494172.35	819933.11	N 32 21 19.16	W 103 25 52.04	106.04M
	6793.00	0.98	106.04	6791.94	3357.44	-2.35	2.38	9.30	9.60	75.67	0.23	494172.08	819934.70	N 32 21 19.16	W 103 25 52.02	119.6M
	6888.00	1.16	119.60	6886.93	3452.43	-1.65	1.68	10.92	11.05	81.27	0.33	494171.38	819936.32	N 32 21 19.15	W 103 25 52.00	126.96M
	6984.00	1.08	126.96	6982.91	3548.41	-0.82	0.85	12.49	12.50	87.01	0.17	494170.35	819937.89	N 32 21 19.14	W 103 25 51.99	132M
	7080.00	1.24	132.00	7078.89	3644.39	0.62	-0.59	13.98	13.99	92.40	0.20	494169.11	819939.38	N 32 21 19.13	W 103 25 51.97	180.97M
	7176.00	1.98	180.97	7174.86	3740.36	2.98	-2.94	14.73	15.02	101.29	1.56	494166.76	819940.13	N 32 21 19.11	W 103 25 51.96	203.61M
	7271.00	1.62	203.61	7269.81	3835.31	5.85	-5.81	14.16	15.31	112.31	0.83	494163.89	819939.56	N 32 21 19.08	W 103 25 51.97	220.05M
	7368.00	1.18	220.05	7366.78	3932.28	7.86	-7.83	12.97	15.15	121.13	0.61	494161.87	819938.37	N 32 21 19.06	W 103 25 51.98	220.57M
	7464.00	0.96	220.57	7462.76	4028.26	9.23	-9.20	11.81	14.97	127.92	0.23	494160.50	819937.21	N 32 21 19.05	W 103 25 51.99	216.77M
	7560.00	1.00	216.70	7558.75	4124.25	10.51	-10.48	10.79	15.04	134.18	0.08	494159.22	819936.19	N 32 21 19.03	W 103 25 52.01	216.25M
	7654.00	1.17	216.25	7652.73	4218.23	11.94	-11.91	9.73	15.38	140.77	0.18	494157.79	819935.13	N 32 21 19.02	W 103 25 52.02	225.77M
	7751.00	1.17	225.70	7749.71	4315.21	13.43	-13.40	8.43	15.84	147.82	0.20	494156.30	819933.83	N 32 21 19.00	W 103 25 52.03	236.98M
	7846.00	1.07	236.98	7844.69	4410.19	14.58	-14.56	7.00	16.16	154.34	0.25	494155.14	819932.40	N 32 21 18.99	W 103 25 52.05	252.74M
	7941.00	1.12	252.74	7939.68	4505.18	15.34	-15.32	5.37	16.24	160.70	0.32	494154.38	819930.77	N 32 21 18.99	W 103 25 52.07	265.21M
	8037.00	0.93	265.21	8035.66	4601.16	15.68	-15.67	3.69	16.10	166.74	0.30	494154.03	819929.09	N 32 21 18.98	W 103 25 52.09	272.65M
	8132.00	1.11	272.65	8130.65	4696.15	15.69	-15.69	2.01	15.82	172.71	0.23	494154.01	819927.41	N 32 21 18.98	W 103 25 52.11	276.78M
	8227.00	1.26	276.78	8225.63	4791.13	15.52	-15.52	0.05	15.52	179.82	0.18	494154.18	819925.45	N 32 21 18.98	W 103 25 52.13	276.94M
	8322.00	1.42	276.94	8320.60	4886.10	15.25	-15.26	-2.16	15.41	188.04	0.17	494154.44	819923.24	N 32 21 18.99	W 103 25 52.16	282.04M
	8417.00	1.41	282.04	8415.57	4981.07	14.86	-14.87	-4.47	15.53	196.72	0.13	494154.83	819920.93	N 32 21 18.99	W 103 25 52.18	281.09M
	8511.00	1.39	281.09	8509.54	5075.04	14.39	-14.41	-6.72	15.90	204.99	0.03	494155.29	819918.68	N 32 21 19.00	W 103 25 52.21	282.14M
	8605.00	1.16	282.14	8603.52	5169.02	13.97	-13.99	-8.77	16.51	212.07	0.25	494155.71	819916.63	N 32 21 19.00	W 103 25 52.23	280.24M
	8700.00	1.33	280.24	8698.50	5264.00	13.57	-13.59	-10.79	17.36	218.45	0.18	494156.11	819914.61	N 32 21 19.00	W 103 25 52.26	281.16M
	8794.00	1.54	281.16	8792.47	5357.97	13.12	-13.15	-13.10	18.57	224.89	0.22	494156.55	819912.30	N 32 21 19.01	W 103 25 52.29	328.73M
	8890.00	1.05	328.73	8888.45	5453.95	12.12	-12.15	-14.83	19.17	230.66	1.18	494157.55	819910.57	N 32 21 19.02	W 103 25 52.31	320.47M
	8985.00	1.41	320.47	8983.42	5548.92	10.47	-10.51	-16.02	19.16	236.74	0.42	494159.19	819909.38	N 32 21 19.04	W 103 25 52.32	357.66M
	9080.00	2.08	357.66	9078.38	5643.88	7.84	-7.88	-16.84	18.59	244.91	1.35	494161.82	819908.56	N 32 21 19.06	W 103 25 52.33	9.55M
	9174.00	2.30	9.55	9172.31	5737.81	4.28	-4.32	-16.59	17.15	255.41	0.54	494165.38	819908.81	N 32 21 19.10	W 103 25 52.33	62.15M
	9269.00	0.12	62.15	9267.29	5832.79	2.35	-2.39	-16.19	16.37	261.59	2.35	494167.31	819909.21	N 32 21 19.12	W 103 25 52.32	146.65M
	9362.00	0.32	146.65	9360.29	5925.79	2.52	-2.56	-15.96	16.17	260.87	0.36	494167.14	819909.44	N 32 21 19.11	W 103 25 52.32	185.05M
	9455.00	0.29	185.05	9453.29	6018.79	2.97										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	9550.00	0.50	346.78	9548.29	6113.79	2.81	-2.85	-15.95	16.21	259.87	0.82	494166.85	819909.45	N 32 21 19.11	W 103 25 52.32	45.13M
	9641.00	0.21	45.13	9639.28	6204.78	2.31	-2.35	-15.93	16.10	261.62	0.47	494167.35	819909.47	N 32 21 19.12	W 103 25 52.32	258.76M
	9736.00	0.10	258.76	9734.28	6299.78	2.20	-2.24	-15.89	16.04	261.97	0.31	494167.46	819909.51	N 32 21 19.12	W 103 25 52.32	254.59M
	9830.00	0.23	254.59	9828.28	6393.78	2.27	-2.31	-16.15	16.31	261.87	0.14	494167.39	819909.25	N 32 21 19.12	W 103 25 52.32	286.32M
	9925.00	0.25	286.32	9923.28	6488.78	2.26	-2.30	-16.53	16.69	262.08	0.14	494167.40	819908.87	N 32 21 19.12	W 103 25 52.32	264.44M
	10016.00	0.49	264.44	10014.28	6579.78	2.24	-2.28	-17.11	17.26	262.41	0.30	494167.42	819908.29	N 32 21 19.12	W 103 25 52.33	85.78M
	10110.00	1.07	85.78	10108.28	6673.78	2.21	-2.26	-16.63	16.78	262.28	1.66	494167.44	819908.77	N 32 21 19.12	W 103 25 52.33	83.15M
	10204.00	1.07	83.15	10202.26	6767.76	2.05	-2.09	-14.89	15.03	262.02	0.05	494167.61	819910.51	N 32 21 19.12	W 103 25 52.30	49.76M
	10300.00	0.85	49.76	10298.25	6863.75	1.48	-1.52	-13.45	13.54	263.56	0.62	494168.18	819911.95	N 32 21 19.12	W 103 25 52.29	34.72M
	10395.00	0.77	34.72	10393.24	6958.74	0.51	-0.54	-12.55	12.56	267.54	0.24	494169.16	819912.85	N 32 21 19.13	W 103 25 52.28	350.81M
	10490.00	0.52	350.81	10488.23	7053.73	-0.44	0.41	-12.26	12.26	271.92	0.56	494170.11	819913.14	N 32 21 19.14	W 103 25 52.27	327.88M
	10583.00	0.79	327.88	10581.23	7146.73	-1.40	1.37	-12.66	12.74	276.18	0.40	494171.07	819912.74	N 32 21 19.15	W 103 25 52.28	321.47M
	10677.00	0.81	321.47	10675.22	7240.72	-2.47	2.44	-13.42	13.64	280.30	0.10	494172.14	819911.98	N 32 21 19.16	W 103 25 52.29	320.64M
	10707.00	1.11	320.64	10705.21	7270.71	-2.86	2.83	-13.74	14.03	281.64	1.00	494172.53	819911.66	N 32 21 19.17	W 103 25 52.29	250.36M
	10739.00	1.58	250.36	10737.21	7302.71	-2.96	2.92	-14.35	14.65	281.51	4.99	494172.62	819911.05	N 32 21 19.17	W 103 25 52.30	198.01M
	10771.00	4.41	198.01	10769.16	7334.66	-1.64	1.60	-15.15	15.23	276.04	11.45	494171.30	819910.25	N 32 21 19.16	W 103 25 52.31	184.12M
	10802.00	8.64	184.12	10799.96	7365.46	1.82	-1.86	-15.68	15.79	263.25	14.47	494167.84	819909.72	N 32 21 19.12	W 103 25 52.31	6.75L
	10834.00	12.62	181.97	10831.40	7396.90	7.71	-7.75	-15.98	17.76	244.13	12.50	494161.95	819909.42	N 32 21 19.06	W 103 25 52.32	17.23L
	10865.00	16.04	178.17	10861.43	7426.93	15.38	-15.42	-15.96	22.19	225.99	11.44	494154.28	819909.44	N 32 21 18.99	W 103 25 52.32	1.87L
	10897.00	19.27	177.85	10891.92	7457.42	25.07	-25.11	-15.62	29.57	211.88	10.10	494144.59	819909.78	N 32 21 18.89	W 103 25 52.32	1.36L
	10928.00	22.31	177.66	10920.90	7486.40	36.07	-36.11	-15.18	39.17	202.81	9.81	494133.59	819910.22	N 32 21 18.78	W 103 25 52.31	6.13R
	10960.00	24.90	178.32	10950.22	7515.72	48.87	-48.91	-14.74	51.08	196.77	8.14	494120.79	819910.66	N 32 21 18.66	W 103 25 52.31	19.59L
	10992.00	26.85	176.79	10979.01	7544.51	62.83	-62.86	-14.14	64.43	192.67	6.44	494106.84	819911.26	N 32 21 18.52	W 103 25 52.30	17.89L
	11023.00	28.48	175.69	11006.47	7571.97	77.19	-77.22	-13.19	78.34	189.69	5.51	494092.48	819912.21	N 32 21 18.38	W 103 25 52.29	8.98L
	11055.00	30.54	175.05	11034.31	7599.81	92.90	-92.93	-11.91	93.69	187.31	6.51	494076.77	819913.49	N 32 21 18.22	W 103 25 52.28	2.03L
	11087.00	34.19	174.82	11061.34	7626.84	109.97	-109.99	-10.40	110.48	185.40	11.41	494059.71	819915.00	N 32 21 18.05	W 103 25 52.26	3.89R
	11119.00	38.50	175.29	11087.11	7652.61	128.86	-128.88	-8.77	129.18	183.89	13.50	494040.82	819916.63	N 32 21 17.86	W 103 25 52.25	15.06R
	11150.00	42.10	176.73	11110.75	7676.25	148.86	-148.88	-7.38	149.06	182.84	11.99	494020.82	819918.02	N 32 21 17.67	W 103 25 52.23	22.11R
	11182.00	44.69	178.22	11134.00	7699.50	170.82	-170.84	-6.42	170.96	182.15	8.70	493998.86	819918.98	N 32 21 17.45	W 103 25 52.22	20.59R
	11214.00	46.73	179.27	11156.34	7721.84	193.72	-193.74	-5.93	193.83	181.75	6.79	493975.96	819919.47	N 32 21 17.22	W 103 25 52.22	6.12R
	11246.00	48.91	179.58	11177.83	7743.33	217.44	-217.45	-5.69	217.53	181.50	6.85	493952.25	819919.71	N 32 21 16.99	W 103 25 52.22	8.34R
	11277.00	53.12	180.35	11197.33	7762.83	241.53	-241.54	-5.68	241.61	181.35	13.72	493928.16	819919.72	N 32 21 16.75	W 103 25 52.22	2.93R
	11309.00	57.75	180.63	11215.48	7780.98	267.87	-267.89	-5.91	267.95	181.26	14.49	493901.82	819919.49	N 32 21 16.49	W 103 25 52.23	7.98R
	11341.00	60.61	181.09	11231.87	7797.37	295.34	-295.36	-6.32	295.43	181.23	9.02	493874.34	819919.08	N 32 21 16.22	W 103 25 52.23	1.01R
	11372.00	62.11	181.12	11246.73	7812.23	322.54	-322.56	-6.84	322.63	181.22	4.84	493847.14	819918.56	N 32 21 15.95	W 103 25 52.24	3.3R
	11403.00	64.46	181.27	11260.66	7826.16	350.22	-350.24	-7.42	350.32	181.21	7.59	493819.46	819917.98	N 32 21 15.67	W 103 25 52.25	HS
	11435.00	68.96	181.27	11273.31	7838.81	379.60	-379.62	-8.07	379.71	181.22	14.06	493790.08	819917.33	N 32 21 15.38	W 103 25 52.26	3.98L
	11467.00	74.36	180.88	11283.38	7848.88	409.96	-409.98	-8.64	410.07	181.21	16.91	493759.72	819916.76	N 32 21 15.08	W 103 25 52.27	7.06L
	11499.00	79.45	180.24	11290.62	7856.12	441.11	-441.14	-8.94	441.23	181.16	16.02	493728.57	819916.46	N 32 21 14.77	W 103 25 52.28	57.88L
	11530.00	80.67	178.28	11295.98	7861.48	471.64	-471.67	-8.55	471.74	181.04	7.37	493698.04	819916.85	N 32 21 14.47	W 103 25 52.28	13.44L
	11562.00	82.83	177.76	11300.57	7866.07	503.29	-503.31	-7.45	503.37	180.85	6.94	493666.39	819917.95	N 32 21 14.16	W 103 25 52.27	5.48L
	11594.00	87.21	177.34	11303.34	7868.84	535.14	-535.16	-6.09	535.19	180.65	13.75	493634.55	819919.31	N 32 21 13.84	W 103 25 52.25	7.63R
	11626.00	88.18	177.47	11304.63	7870.13	567.08	-567.10	-4.64	567.12	180.47	3.06	493602.61	819920.76	N 32 21 13.53	W 103 25 52.24	74.06L
	11657.00	88.32	176.98	11305.58	7871.08	598.04	-598.05	-3.14	598.05	180.30	1.64	493571.66	819922.26	N 32 21 13.22	W 103 25 52.23	63.7L
	11703.00	88.76	176.09	11306.75	7872.25	643.94	-643.95	-0.36	643.95	180.03	2.16	493525.76	819925.04	N 32 21 12.77	W 103 25 52.20	155.57R
	11735.00	88.21	176.34	11307.60	7873.10	675.87	-675.87	1.75	675.87	179.85	1.89	493493.84	819927.15	N 32 21 12.45	W 103 25 52.18	116.58L
	11760.00	88.07	176.06	11308.41	7873.91	700.80	-700.80	3.40	700.81	179.72	1.25	493468.91	819928.80	N 32 21 12.20	W 103 25 52.16	60.8R
	11793.00	88.45	176.74	11309.41	7874.91	733.73	-733.72	5.47	733.74	179.57	2.36	493435.99	819930.87	N 32 21 11.88	W 103 25 52.14	97.47L
	11825.00	88.31	175.67	11310.31	7875.81	765.65	-765.63	7.59	765.67	179.43	3.37	493404.07	819932.99	N 32 21 11.56	W 103 25 52.12	79.33L
	11856.00	88.38	175.28	11311.21	7876.71	796.55	-796.52	10.04	796.59	179.28	1.28	493373.18	819935.44	N 32 21 11.26	W 103 25 52.09	93.31L
	11950.00	88.35	174.76	11313.89	7879.39	890.17	-890.13	18.19	890.32	178.83	0.55	493279.57	819943.59	N 32 21 10.33	W 103 25 52.01	72.58R
	12045.00	88.73	175.97	11316.31	7881.81	984.85	-984.79	25.87	985.13	178.50	1.33	493184.92	819951.27	N 32 21 9.39	W 103 25 51.93	73.12R
	12140.00	88.90	176.53	11318.28	7883.78	1079.64	-1079.56	32.08	1080.04	178.30	0.62	493090.14	819957.48	N 32 21 8.45	W 103 25 51.86	90R
	12235.00	88.90	178.10	11320.10	7885.60	1174.53	-1174.44	36.53	1175.01	178.22	1.65	492995.27	819961.93	N 32 21 7.51	W 103 25 51.82	76.9R
	12330.00	89.24	179.56	11321.64	7887.14	1269.50	-1269.40	38.47	1269.99	178.26	1.58	492900.30	819963.87	N 32 21 6.57	W 103 25 51.81	98.73R
	12425.00	89.03	180.93	11323.08	7888.58	1364.48	-1364.39	38.06	1364.92	178.40	1.46	492805.32	819963.46	N 32 21 5.63	W 103 25 51.82	82.3R
	12521.00	89.21	182.26	11324.55	7890.05	1460.42	-1460.34	35.39	1460.77	178.61	1.40	492709.37	819960.79	N 32 21 4.69	W 103 25 51.86	91.15R
	12616.00	89.17	184.27	11325.89	7891.39	1555.24	-1555.17	29.98	1555.46	178.90	2.12	492614.54	819955.38	N 32 21 3.75	W 103 25 51.93	32.01R
	12711.00	89.89	184.72	11326.67	7892.17	1649.93	-1649.87	22.53	1650.03	179.22	0.89	492519.83	819947.93	N 32 21 2.81	W 103 25 52.03	109.41L
	12807.00	89.52	183.67	11327.17	7892.67	1745.65	-1745.61	15.51	17							

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	13094.00	89.45	181.10	11330.22	7895.72	2032.23	-2032.23	1.55	2032.23	179.96	1.51	492137.48	819926.95	N 32 20 59.03	W 103 25 52.31	90L
	13189.00	89.45	179.56	11331.13	7896.63	2127.22	-2127.22	1.00	2127.22	179.97	1.62	492042.49	819926.40	N 32 20 58.09	W 103 25 52.33	94.13L
	13285.00	89.38	178.59	11332.11	7897.61	2223.20	-2223.20	2.55	2223.20	179.93	1.01	491946.51	819927.95	N 32 20 57.14	W 103 25 52.32	95.34L
	13381.00	89.24	177.09	11333.27	7898.77	2319.13	-2319.12	6.17	2319.13	179.85	1.57	491850.58	819931.57	N 32 20 56.19	W 103 25 52.29	96.89L
	13477.00	89.10	175.93	11334.66	7900.16	2414.96	-2414.93	12.01	2414.96	179.71	1.22	491754.78	819937.41	N 32 20 55.24	W 103 25 52.23	87.37R
	13572.00	89.17	177.45	11336.09	7901.59	2509.80	-2509.76	17.50	2509.82	179.60	1.60	491659.95	819942.90	N 32 20 54.30	W 103 25 52.17	90R
	13668.00	89.17	179.14	11337.48	7902.98	2605.75	-2605.71	20.35	2605.79	179.55	1.76	491564.00	819945.75	N 32 20 53.35	W 103 25 52.15	73.42R
	13764.00	89.45	180.08	11338.64	7904.14	2701.74	-2701.70	21.01	2701.78	179.55	1.02	491468.01	819946.41	N 32 20 52.40	W 103 25 52.15	123.7R
	13858.00	88.97	180.80	11339.93	7905.43	2795.73	-2795.68	20.29	2795.76	179.58	0.92	491374.03	819945.69	N 32 20 51.47	W 103 25 52.17	59.69R
	13952.00	89.35	181.45	11341.31	7906.81	2889.69	-2889.65	18.44	2889.71	179.63	0.80	491280.06	819943.84	N 32 20 50.54	W 103 25 52.20	55.57R
	14047.00	90.20	182.69	11341.69	7907.19	2984.62	-2984.59	15.01	2984.63	179.71	1.58	491185.12	819940.41	N 32 20 49.61	W 103 25 52.25	163.81R
	14142.00	89.27	182.96	11342.12	7907.62	3079.49	-3079.47	10.33	3079.49	179.81	1.02	491090.24	819935.73	N 32 20 48.67	W 103 25 52.31	30.21R
	14237.00	90.06	183.42	11342.68	7908.18	3174.32	-3174.32	5.04	3174.33	179.91	0.96	490995.39	819930.44	N 32 20 47.73	W 103 25 52.38	78.69L
	14331.00	90.51	181.17	11342.21	7907.71	3268.23	-3268.24	1.28	3268.24	179.98	2.44	490901.47	819928.68	N 32 20 46.80	W 103 25 52.44	82.72L
	14427.00	91.10	176.53	11340.86	7906.36	3364.18	-3364.18	3.20	3364.18	179.95	4.87	490805.53	819928.60	N 32 20 45.85	W 103 25 52.42	113.95L
	14521.00	89.10	172.03	11340.70	7906.20	3457.71	-3457.69	12.57	3457.71	179.79	5.24	490712.03	819937.97	N 32 20 44.92	W 103 25 52.32	57.22L
	14616.00	89.48	171.44	11341.88	7907.38	3551.75	-3551.69	26.22	3551.79	179.58	0.74	490618.02	819951.62	N 32 20 43.99	W 103 25 52.17	103.21R
	14710.00	89.10	173.06	11343.04	7908.54	3644.91	-3644.82	38.90	3645.03	179.39	1.77	490524.89	819964.30	N 32 20 43.07	W 103 25 52.04	92.38R
	14805.00	89.04	174.51	11344.58	7910.08	3739.36	-3739.25	49.18	3739.57	179.25	1.53	490430.47	819974.58	N 32 20 42.14	W 103 25 51.93	82.92R
	14899.00	89.38	177.24	11345.88	7911.38	3833.12	-3832.99	55.94	3833.40	179.16	2.93	490336.73	819981.34	N 32 20 41.21	W 103 25 51.86	91.19R
	14993.00	89.35	178.70	11346.92	7912.42	3927.06	-3926.92	59.27	3927.37	179.14	1.55	490242.79	819984.67	N 32 20 40.28	W 103 25 51.83	80.54L
	15066.00	89.61	177.14	11347.77	7913.27	4020.00	-4019.85	62.65	4020.34	179.11	1.70	490149.86	819988.05	N 32 20 39.36	W 103 25 51.80	101.6R
	15180.00	89.37	178.31	11348.60	7914.10	4113.93	-4113.77	66.38	4114.31	179.08	1.27	490055.94	819991.78	N 32 20 38.43	W 103 25 51.76	88.73R
	15274.00	89.41	180.10	11349.80	7915.10	4207.91	-4207.76	67.68	4208.30	179.08	1.90	489961.96	819993.08	N 32 20 37.50	W 103 25 51.76	91.55R
	15370.00	89.38	181.21	11350.62	7916.12	4303.90	-4303.74	66.58	4304.26	179.11	1.16	489865.98	819991.98	N 32 20 36.55	W 103 25 51.78	90R
	15464.00	89.38	181.98	11351.63	7917.13	4397.85	-4397.70	63.97	4398.16	179.17	0.82	489772.02	819989.37	N 32 20 35.62	W 103 25 51.82	108.38R
	15559.00	88.65	184.18	11353.27	7918.77	4492.68	-4492.54	58.86	4492.93	179.25	2.44	489677.18	819984.26	N 32 20 34.68	W 103 25 51.89	115.61R
	15651.00	86.55	186.58	11357.12	7922.62	4583.97	-4583.86	48.66	4584.12	179.39	5.30	489585.85	819974.06	N 32 20 33.78	W 103 25 52.01	10.7L
	15745.00	88.72	188.17	11361.00	7926.50	4676.85	-4676.78	34.98	4676.91	179.57	2.35	489492.94	819960.38	N 32 20 32.86	W 103 25 52.18	50.15L
	15839.00	92.60	183.52	11359.92	7925.42	4770.29	-4770.24	25.41	4770.31	179.69	6.44	489399.48	819950.81	N 32 20 31.94	W 103 25 52.30	44.93L
Final Survey	15941.00	93.71	182.41	11354.30	7919.80	4871.98	-4871.94	20.14	4871.99	179.76	1.54	489297.78	819945.54	N 32 20 30.93	W 103 25 52.37	HS
Proj to TD	15974.00	93.71	182.41	11352.17	7917.67	4904.88	-4904.85	18.76	4904.88	179.78	0.00	489264.87	819944.16	N 32 20 30.61	W 103 25 52.39	

Survey Type: Non-Def Survey

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

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	18.500		Act Stns	30.000	30.000	SLB_MWD-STD-Depth Only
	18.500	226.000		Act Stns	30.000	30.000	SLB_MWD-STD
	226.000	1107.000	1/98.425		30.000	30.000	SLB_MWD-STD
	1107.000	1425.000		Act Stns	30.000	30.000	SLB_MWD-STD
	1425.000	1851.000	1/98.425		30.000	30.000	SLB_MWD-STD
	1851.000	15941.000		Act Stns	30.000	30.000	SLB_MWD-STD
	15941.000	15974.000		Act Stns	30.000	30.000	SLB_BLIND+TREND