

30-015-44434

COG

TANKLESS FED COM # 2 H

SCAN FREEDOM

11/30/2017

This survey is correct to the best of my knowledge and is supported by actual field data.

Kelton Cotton

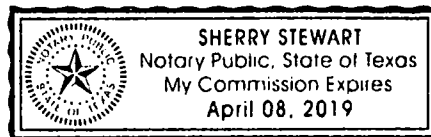
Notarized this date 9 of February, 2018.

Sherry Stewart

Notary Signature

County of Midland

State of Texas



Scientific Drilling

The Ultimate Partner In Wellbore Placement

SURVEY REPORT

TANKLESS FED COM # 2 H

COMPUTED OUTFRAN KEEPER GYRO SURVEY

CUSTOMER
PROJECT
FIELD

COG
TANKLESS FED COM # 2 H
TANKLESS FED COM

SDI JOB NO.
SDI DISTRICT
SDI KIT/UNIT

OP.006289
Midland

SITE INFORMATION

Site Name TANKLESS FED COM
Lat/Long 32.3411256° N, 103.7413819° W
Northing 488,322.5 ft
Easting 682,820.6 ft

Section
Township
Range

MAP INFORMATION

North Reference Grid North
Grid Correction -0.32 deg
System US State Plane 1927
Datum North American Datum 1927 (Clarke 1866)
Map Zone New Mexico East: 3001

**WELL INFORMATION**

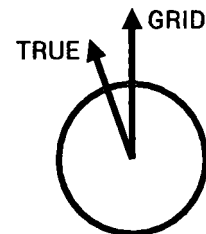
Lat/Long 32.3411256° N, 103.7413819° W
Northing 488,322.5 ft
Easting 682,820.6 ft
UWI 30-015-4443400

DEPTH AND ELEVATION REFERENCE

Ground Level 3446 ft above Mean Sea Level
Reference Datum KB
Reference Height 29 ft above G.L.
Reference Elevation 3475 ft

VERTICAL SECTION REFERENCE

+N/-S 0 ft
+E/-W 0 ft
Proposal Direction 1.03°
Calculation Method Minimum Curvature

**LOCAL GRAVITY REFERENCE INFORMATION**

Local Gravity 998.506 mG [computed]
True to Grid subtract 0.32°

WELL NOTES**OPERATORS**

H.SANGHOTT

SDI Operator Name (Printed)

SIGNATURE

DATE

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.25	66.07	100.00	0.09	0.09	0.20	0.25	0.22	66.07
125.00	0.14	136.98	125.00	0.09	0.09	0.28	0.99	0.29	71.97
150.00	0.14	107.13	150.00	0.06	0.06	0.33	0.29	0.33	80.00
175.00	0.20	135.13	175.00	0.02	0.02	0.39	0.41	0.39	87.43
200.00	0.32	143.14	200.00	-0.06	-0.07	0.46	0.49	0.46	98.58
225.00	0.37	115.23	225.00	-0.15	-0.16	0.57	0.69	0.60	105.51
250.00	0.39	85.48	250.00	-0.17	-0.19	0.73	0.79	0.76	104.31
275.00	0.34	81.04	275.00	-0.15	-0.17	0.89	0.26	0.91	100.72
300.00	0.29	62.77	300.00	-0.11	-0.13	1.02	0.44	1.03	97.16
325.00	0.13	68.06	325.00	-0.07	-0.09	1.10	0.65	1.11	94.57
350.00	0.17	45.09	350.00	-0.03	-0.05	1.16	0.28	1.16	92.57
375.00	0.15	132.80	375.00	-0.03	-0.05	1.21	0.87	1.21	92.27
400.00	0.26	121.29	400.00	-0.08	-0.10	1.28	0.49	1.28	94.44
425.00	0.30	124.82	425.00	-0.14	-0.17	1.38	0.18	1.39	96.89
450.00	0.30	104.67	450.00	-0.19	-0.22	1.50	0.43	1.52	98.40
475.00	0.36	97.45	475.00	-0.22	-0.25	1.64	0.30	1.66	98.61
500.00	0.35	95.91	500.00	-0.23	-0.27	1.80	0.07	1.82	98.44
525.00	0.34	98.10	524.99	-0.25	-0.29	1.95	0.06	1.97	98.33
550.00	0.34	89.47	549.99	-0.26	-0.29	2.09	0.20	2.12	98.01
575.00	0.30	76.34	574.99	-0.24	-0.28	2.23	0.33	2.25	97.11
600.00	0.27	70.78	599.99	-0.20	-0.24	2.35	0.18	2.37	95.91
625.00	0.23	65.83	624.99	-0.16	-0.20	2.45	0.18	2.46	94.75
650.00	0.13	100.55	649.99	-0.14	-0.19	2.53	0.57	2.53	94.27
675.00	0.06	44.67	674.99	-0.14	-0.18	2.57	0.43	2.57	94.10
700.00	0.19	195.38	699.99	-0.17	-0.21	2.56	0.97	2.57	94.76
725.00	0.27	162.97	724.99	-0.26	-0.31	2.57	0.60	2.59	96.85
750.00	0.38	143.40	749.99	-0.38	-0.43	2.64	0.61	2.67	99.27
775.00	0.34	138.34	774.99	-0.50	-0.55	2.73	0.20	2.79	101.40
800.00	0.29	158.88	799.99	-0.61	-0.66	2.81	0.49	2.88	103.32
825.00	0.19	180.04	824.99	-0.71	-0.77	2.83	0.51	2.93	105.14
850.00	0.29	213.10	849.99	-0.81	-0.86	2.79	0.66	2.92	107.12

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	"/100ft	ft	deg
875.00	0.30	205.94	874.99	-0.92	-0.97	2.73	0.15	2.90	109.59
900.00	0.39	203.85	899.99	-1.06	-1.11	2.67	0.38	2.89	112.57
925.00	0.43	208.94	924.99	-1.22	-1.27	2.59	0.20	2.88	116.11
950.00	0.42	207.52	949.99	-1.39	-1.43	2.50	0.05	2.88	119.79
975.00	0.44	202.15	974.99	-1.56	-1.60	2.42	0.19	2.90	123.49
1000.00	0.55	202.69	999.99	-1.76	-1.80	2.34	0.42	2.95	127.62
1025.00	0.61	198.84	1024.99	-2.00	-2.04	2.25	0.28	3.04	132.18
1050.00	0.44	190.96	1049.99	-2.22	-2.26	2.19	0.73	3.14	135.88
1075.00	0.50	180.32	1074.98	-2.42	-2.46	2.17	0.42	3.28	138.58
1100.00	0.43	179.15	1099.98	-2.62	-2.66	2.17	0.26	3.44	140.82
1125.00	0.33	180.64	1124.98	-2.79	-2.83	2.17	0.41	3.57	142.51
1150.00	0.29	201.68	1149.98	-2.92	-2.96	2.15	0.49	3.66	144.06
1175.00	0.39	204.40	1174.98	-3.06	-3.10	2.09	0.41	3.74	146.00
1200.00	0.32	222.89	1199.98	-3.19	-3.23	2.01	0.53	3.80	148.12
1225.00	0.52	214.07	1224.98	-3.34	-3.37	1.90	0.84	3.87	150.66
1250.00	0.61	218.50	1249.98	-3.54	-3.57	1.75	0.39	3.98	153.90
1275.00	0.47	213.85	1274.98	-3.73	-3.76	1.61	0.58	4.09	156.83
1300.00	0.41	219.62	1299.98	-3.89	-3.91	1.49	0.30	4.19	159.09
1325.00	0.36	214.37	1324.98	-4.02	-4.05	1.39	0.23	4.28	161.00
1350.00	0.47	217.91	1349.98	-4.17	-4.19	1.29	0.45	4.39	162.96
1375.00	0.46	228.53	1374.98	-4.32	-4.34	1.15	0.35	4.49	165.22
1400.00	0.60	219.93	1399.97	-4.49	-4.51	0.99	0.62	4.62	167.66
1425.00	0.64	216.54	1424.97	-4.71	-4.72	0.82	0.22	4.79	170.15
1450.00	0.63	210.53	1449.97	-4.94	-4.95	0.67	0.27	5.00	172.33
1475.00	0.65	204.20	1474.97	-5.19	-5.20	0.54	0.29	5.23	174.08
1500.00	0.54	192.61	1499.97	-5.43	-5.44	0.46	0.63	5.46	175.21
1525.00	0.40	206.73	1524.97	-5.63	-5.64	0.39	0.73	5.65	176.04
1550.00	0.50	224.30	1549.97	-5.79	-5.79	0.28	0.67	5.80	177.28
1575.00	0.61	218.71	1574.97	-5.97	-5.97	0.12	0.49	5.97	178.88
1600.00	0.62	218.83	1599.96	-6.18	-6.18	-0.05	0.06	6.18	180.47
1625.00	0.68	215.11	1624.96	-6.41	-6.41	-0.22	0.28	6.41	181.97
1650.00	0.76	206.54	1649.96	-6.68	-6.68	-0.38	0.54	6.69	183.25

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
1675.00	0.65	195.76	1674.96	-6.97	-6.96	-0.49	0.69	6.98	184.04
1700.00	0.46	209.24	1699.96	-7.20	-7.19	-0.58	0.91	7.21	184.61
1725.00	0.54	216.91	1724.96	-7.38	-7.37	-0.70	0.41	7.40	185.42
1750.00	0.68	218.04	1749.96	-7.59	-7.58	-0.86	0.58	7.63	186.48
1775.00	0.90	216.22	1774.95	-7.87	-7.85	-1.07	0.89	7.93	187.75
1800.00	0.86	211.93	1799.95	-8.19	-8.17	-1.28	0.31	8.27	188.93
1825.00	0.84	205.68	1824.95	-8.52	-8.50	-1.46	0.38	8.62	189.77
1850.00	0.62	197.93	1849.95	-8.82	-8.79	-1.58	0.99	8.93	190.22
1875.00	0.68	209.28	1874.94	-9.08	-9.05	-1.70	0.57	9.21	190.63
1900.00	0.68	212.52	1899.94	-9.34	-9.30	-1.85	0.15	9.49	191.26
1925.00	0.81	210.42	1924.94	-9.62	-9.58	-2.02	0.51	9.79	191.91
1950.00	0.78	215.22	1949.94	-9.91	-9.87	-2.21	0.29	10.12	192.61
1975.00	0.89	214.80	1974.94	-10.21	-10.17	-2.42	0.45	10.45	193.37
2000.00	0.91	213.25	1999.93	-10.54	-10.50	-2.64	0.12	10.82	194.10
2025.00	0.98	211.31	2024.93	-10.89	-10.84	-2.86	0.32	11.21	194.76
2050.00	1.03	211.09	2049.92	-11.27	-11.22	-3.08	0.21	11.64	195.37
2075.00	1.09	205.66	2074.92	-11.69	-11.63	-3.30	0.46	12.09	195.86
2100.00	1.16	203.37	2099.92	-12.14	-12.07	-3.51	0.35	12.57	196.19
2125.00	1.16	202.23	2124.91	-12.61	-12.54	-3.70	0.09	13.08	196.45
2150.00	1.17	201.80	2149.91	-13.08	-13.01	-3.89	0.06	13.58	196.66
2175.00	1.00	196.64	2174.90	-13.53	-13.46	-4.05	0.77	14.06	196.75
2200.00	0.94	199.67	2199.90	-13.93	-13.86	-4.18	0.34	14.48	196.79
2225.00	0.79	188.68	2224.89	-14.30	-14.22	-4.28	0.88	14.85	196.74
2250.00	0.67	170.67	2249.89	-14.61	-14.54	-4.28	1.02	15.15	196.40
2275.00	0.69	165.42	2274.89	-14.90	-14.83	-4.22	0.26	15.41	195.88
2300.00	0.70	165.59	2299.89	-15.19	-15.12	-4.14	0.06	15.68	195.32
2325.00	0.70	161.86	2324.89	-15.48	-15.41	-4.06	0.18	15.94	194.75
2350.00	0.68	157.27	2349.89	-15.76	-15.69	-3.95	0.24	16.18	194.14
2375.00	0.73	152.07	2374.88	-16.04	-15.97	-3.82	0.34	16.42	193.45
2400.00	0.73	153.10	2399.88	-16.32	-16.25	-3.67	0.05	16.66	192.74
2425.00	0.67	150.34	2424.88	-16.58	-16.52	-3.53	0.25	16.89	192.06
2450.00	0.72	151.42	2449.88	-16.85	-16.79	-3.38	0.21	17.13	191.39

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
2475.00	0.78	150.28	2474.88	-17.13	-17.08	-3.22	0.24	17.38	190.68
2500.00	0.78	145.55	2499.87	-17.42	-17.36	-3.04	0.26	17.63	189.93
2525.00	0.76	141.67	2524.87	-17.68	-17.63	-2.84	0.22	17.86	189.16
2550.00	0.80	142.35	2549.87	-17.94	-17.90	-2.63	0.17	18.09	188.37
2575.00	0.93	142.63	2574.87	-18.24	-18.20	-2.40	0.53	18.36	187.52
2600.00	1.02	137.93	2599.86	-18.56	-18.53	-2.13	0.48	18.65	186.56
2625.00	1.08	136.27	2624.86	-18.89	-18.86	-1.82	0.26	18.95	185.51
2650.00	1.14	133.68	2649.85	-19.23	-19.20	-1.48	0.31	19.26	184.40
2675.00	1.19	136.73	2674.85	-19.58	-19.56	-1.12	0.31	19.59	183.28
2700.00	1.18	134.87	2699.84	-19.94	-19.93	-0.76	0.16	19.95	182.19
2725.00	1.26	135.31	2724.84	-20.31	-20.31	-0.39	0.34	20.31	181.09
2750.00	1.28	132.98	2749.83	-20.69	-20.69	0.01	0.22	20.69	179.97
2775.00	1.37	131.01	2774.82	-21.07	-21.08	0.44	0.40	21.08	178.81
2800.00	1.41	130.38	2799.82	-21.45	-21.47	0.90	0.19	21.49	177.60
2825.00	1.56	124.60	2824.81	-21.84	-21.87	1.41	0.84	21.91	176.30
2850.00	1.62	121.29	2849.80	-22.20	-22.24	2.00	0.43	22.33	174.87
2875.00	1.62	119.04	2874.79	-22.55	-22.60	2.60	0.25	22.75	173.42
2900.00	1.57	123.48	2899.78	-22.90	-22.96	3.20	0.53	23.18	172.07
2925.00	1.59	123.03	2924.77	-23.26	-23.34	3.77	0.09	23.64	170.81
2950.00	1.63	119.82	2949.76	-23.62	-23.70	4.37	0.39	24.10	169.55
2975.00	1.42	119.01	2974.75	-23.93	-24.03	4.95	0.82	24.53	168.35
3000.00	0.98	119.97	2999.75	-24.18	-24.29	5.41	1.76	24.88	167.44
3025.00	0.59	123.23	3024.74	-24.36	-24.46	5.70	1.57	25.12	166.88
3050.00	0.42	117.38	3049.74	-24.47	-24.58	5.89	0.71	25.27	166.51
3075.00	0.31	141.70	3074.74	-24.56	-24.67	6.02	0.76	25.40	166.29
3100.00	0.06	211.54	3099.74	-24.62	-24.74	6.05	1.18	25.47	166.25
3125.00	0.14	289.67	3124.74	-24.63	-24.74	6.02	0.55	25.46	166.33
3150.00	0.24	272.25	3149.74	-24.62	-24.73	5.94	0.47	25.43	166.50
3175.00	0.26	306.32	3174.74	-24.58	-24.69	5.84	0.59	25.37	166.69
3200.00	0.32	293.78	3199.74	-24.52	-24.63	5.73	0.36	25.29	166.90
3225.00	0.53	283.10	3224.74	-24.47	-24.58	5.55	0.90	25.20	167.27
3250.00	0.58	282.54	3249.74	-24.42	-24.52	5.32	0.19	25.09	167.77

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
3275.00	0.61	283.12	3274.74	-24.37	-24.46	5.06	0.13	24.98	168.31
3300.00	0.57	278.38	3299.74	-24.33	-24.42	4.81	0.27	24.89	168.86
3325.00	0.69	278.30	3324.73	-24.29	-24.38	4.54	0.49	24.80	169.45
3350.00	0.79	271.04	3349.73	-24.27	-24.35	4.22	0.54	24.71	170.17
3375.00	0.90	267.41	3374.73	-24.28	-24.36	3.85	0.50	24.66	171.01
3400.00	0.91	267.51	3399.73	-24.31	-24.37	3.46	0.03	24.62	171.93
3425.00	0.93	269.80	3424.72	-24.32	-24.38	3.06	0.16	24.57	172.85
3450.00	1.00	268.64	3449.72	-24.34	-24.39	2.64	0.32	24.53	173.83
3475.00	1.07	262.81	3474.72	-24.38	-24.42	2.19	0.50	24.52	174.88
3500.00	1.13	261.75	3499.71	-24.45	-24.49	1.71	0.27	24.55	176.00
3525.00	1.10	259.70	3524.71	-24.54	-24.57	1.23	0.20	24.60	177.13
3550.00	1.12	253.21	3549.70	-24.66	-24.68	0.76	0.51	24.69	178.24
3575.00	1.08	237.18	3574.70	-24.87	-24.88	0.33	1.23	24.88	179.24
3600.00	1.03	227.46	3599.69	-25.15	-25.16	-0.03	0.74	25.16	180.08
3625.00	1.04	218.05	3624.69	-25.49	-25.49	-0.34	0.68	25.49	180.76
3650.00	1.03	209.89	3649.69	-25.87	-25.86	-0.59	0.59	25.87	181.30
3675.00	1.07	196.02	3674.68	-26.29	-26.28	-0.77	1.03	26.29	181.67
3700.00	1.11	182.23	3699.68	-26.76	-26.75	-0.84	1.06	26.76	181.80
3725.00	0.99	169.62	3724.67	-27.21	-27.20	-0.81	1.04	27.21	181.71
3750.00	0.49	150.67	3749.67	-27.51	-27.51	-0.72	2.22	27.52	181.50
3775.00	0.26	66.14	3774.67	-27.58	-27.58	-0.62	2.11	27.58	181.28
3800.00	0.41	27.64	3799.67	-27.48	-27.47	-0.52	1.06	27.48	181.09
3825.00	0.39	21.76	3824.67	-27.32	-27.31	-0.45	0.18	27.32	180.95
3850.00	0.41	22.73	3849.67	-27.15	-27.15	-0.38	0.10	27.15	180.81
3875.00	0.38	21.47	3874.67	-26.99	-26.99	-0.32	0.13	26.99	180.68
3900.00	0.47	35.08	3899.67	-26.83	-26.83	-0.23	0.52	26.83	180.49
3925.00	0.46	39.17	3924.67	-26.67	-26.67	-0.11	0.13	26.67	180.23
3950.00	0.50	61.23	3949.67	-26.53	-26.54	0.05	0.76	26.54	179.89
3975.00	0.72	88.57	3974.66	-26.47	-26.48	0.31	1.42	26.48	179.34
4000.00	0.88	103.74	3999.66	-26.51	-26.52	0.65	1.06	26.53	178.60
4025.00	0.94	107.80	4024.66	-26.61	-26.63	1.03	0.37	26.65	177.79
4050.00	1.03	108.86	4049.65	-26.74	-26.77	1.44	0.34	26.80	176.93

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
4075.00	1.12	104.98	4074.65	-26.86	-26.90	1.89	0.48	26.97	175.99
4100.00	1.31	107.47	4099.64	-27.00	-27.05	2.39	0.78	27.16	174.94
4125.00	1.40	110.74	4124.64	-27.19	-27.24	2.95	0.47	27.40	173.82
4150.00	1.50	110.28	4149.63	-27.40	-27.47	3.54	0.43	27.69	172.65
4175.00	1.40	108.55	4174.62	-27.60	-27.68	4.14	0.45	27.98	171.49
4200.00	1.26	107.87	4199.61	-27.77	-27.86	4.69	0.55	28.25	170.44
4225.00	0.92	83.38	4224.61	-27.82	-27.92	5.16	2.29	28.39	169.54
4250.00	0.69	50.36	4249.61	-27.70	-27.80	5.47	2.03	28.33	168.87
4275.00	0.83	19.57	4274.61	-27.43	-27.54	5.65	1.69	28.11	168.41
4300.00	0.92	16.52	4299.60	-27.07	-27.17	5.76	0.42	27.78	168.03
4325.00	0.92	13.77	4324.60	-26.68	-26.79	5.87	0.18	27.42	167.64
4350.00	0.93	11.12	4349.60	-26.28	-26.39	5.96	0.18	27.05	167.28
4375.00	0.93	4.49	4374.59	-25.87	-25.99	6.01	0.43	26.67	166.98
4400.00	1.06	2.80	4399.59	-25.44	-25.55	6.04	0.51	26.26	166.71
4425.00	1.03	353.51	4424.59	-24.99	-25.10	6.02	0.68	25.81	166.50
4450.00	0.98	357.86	4449.58	-24.55	-24.66	5.99	0.38	25.38	166.35
4475.00	1.01	356.36	4474.58	-24.12	-24.23	5.97	0.17	24.95	166.16
4500.00	0.98	353.00	4499.57	-23.69	-23.80	5.93	0.27	24.52	166.01
4525.00	0.93	349.12	4524.57	-23.28	-23.39	5.86	0.33	24.11	165.92
4550.00	1.10	349.89	4549.57	-22.85	-22.95	5.78	0.69	23.67	165.86
4575.00	1.03	347.18	4574.56	-22.39	-22.50	5.69	0.34	23.21	165.80
4600.00	1.17	352.70	4599.56	-21.92	-22.03	5.61	0.69	22.73	165.71
4625.00	1.03	348.64	4624.55	-21.45	-21.55	5.53	0.63	22.25	165.60
4650.00	1.18	357.15	4649.55	-20.97	-21.07	5.48	0.90	21.77	165.43
4675.00	1.19	358.20	4674.54	-20.46	-20.56	5.46	0.10	21.27	165.14
4700.00	1.24	359.95	4699.54	-19.92	-20.03	5.45	0.24	20.75	164.78
4725.00	1.11	352.28	4724.53	-19.41	-19.51	5.41	0.83	20.25	164.49
4750.00	1.18	353.68	4749.53	-18.92	-19.02	5.35	0.33	19.76	164.28
4775.00	1.22	352.84	4774.52	-18.40	-18.50	5.29	0.14	19.24	164.04
4800.00	1.25	356.49	4799.52	-17.87	-17.96	5.24	0.34	18.71	163.73
4825.00	1.26	354.35	4824.51	-17.32	-17.42	5.20	0.19	18.18	163.38
4850.00	1.24	352.55	4849.50	-16.78	-16.88	5.14	0.17	17.64	163.07

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
4875.00	1.14	352.25	4874.50	-16.27	-16.36	5.07	0.41	17.13	162.79
4900.00	1.33	359.21	4899.49	-15.73	-15.82	5.03	0.98	16.60	162.37
4925.00	1.18	355.72	4924.49	-15.18	-15.27	5.01	0.67	16.07	161.85
4950.00	1.25	4.32	4949.48	-14.65	-14.75	5.01	0.77	15.57	161.24
4975.00	1.30	3.49	4974.47	-14.10	-14.19	5.05	0.22	15.06	160.43
5000.00	1.32	0.96	4999.47	-13.53	-13.62	5.07	0.24	14.53	159.60
5025.00	1.35	358.69	5024.46	-12.95	-13.04	5.07	0.24	13.99	158.77
5050.00	1.33	1.09	5049.45	-12.36	-12.46	5.06	0.24	13.45	157.88
5075.00	1.31	1.05	5074.45	-11.79	-11.88	5.07	0.06	12.92	156.87
5100.00	1.30	3.90	5099.44	-11.22	-11.31	5.10	0.26	12.41	155.74
5125.00	1.29	2.91	5124.44	-10.66	-10.75	5.13	0.10	11.91	154.48
5150.00	1.33	0.59	5149.43	-10.09	-10.18	5.15	0.28	11.41	153.17
5175.00	1.34	359.70	5174.42	-9.50	-9.60	5.15	0.09	10.89	151.78
5200.00	1.30	1.19	5199.42	-8.93	-9.02	5.16	0.21	10.39	150.25
5225.00	1.38	359.89	5224.41	-8.34	-8.44	5.16	0.33	9.89	148.54
5250.00	1.36	1.27	5249.40	-7.75	-7.84	5.17	0.16	9.39	146.61
5275.00	1.39	2.25	5274.39	-7.15	-7.24	5.19	0.17	8.91	144.39
5300.00	1.38	2.44	5299.39	-6.54	-6.64	5.21	0.04	8.44	141.86
5325.00	1.30	5.46	5324.38	-5.96	-6.05	5.25	0.43	8.01	139.06
5350.00	1.31	3.52	5349.37	-5.39	-5.49	5.29	0.18	7.62	136.01
5375.00	1.31	4.70	5374.37	-4.82	-4.92	5.34	0.11	7.26	132.66
5400.00	1.34	4.55	5399.36	-4.24	-4.34	5.38	0.13	6.91	128.89
5425.00	1.36	2.83	5424.35	-3.66	-3.76	5.42	0.18	6.59	124.72
5450.00	1.29	3.78	5449.35	-3.08	-3.18	5.45	0.29	6.31	120.25
5475.00	1.40	4.17	5474.34	-2.50	-2.59	5.49	0.46	6.08	115.28
5500.00	1.29	2.81	5499.33	-1.91	-2.01	5.53	0.47	5.88	109.96
5525.00	1.38	2.80	5524.33	-1.33	-1.43	5.56	0.36	5.74	104.40
5550.00	1.31	2.62	5549.32	-0.74	-0.84	5.59	0.27	5.65	98.56
5575.00	1.38	3.91	5574.31	-0.15	-0.25	5.62	0.29	5.63	92.59
5600.00	1.26	3.79	5599.31	0.42	0.32	5.66	0.49	5.67	86.77
5625.00	1.38	0.73	5624.30	0.99	0.89	5.68	0.55	5.75	81.07
5650.00	1.38	1.96	5649.29	1.60	1.49	5.69	0.12	5.89	75.30

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
5675.00	1.41	1.26	5674.28	2.20	2.10	5.71	0.14	6.09	69.79
5700.00	1.38	1.05	5699.28	2.81	2.71	5.72	0.14	6.33	64.66
5725.00	1.38	2.39	5724.27	3.41	3.31	5.74	0.13	6.63	60.03
5750.00	1.38	6.83	5749.26	4.01	3.91	5.79	0.43	6.99	55.96
5775.00	1.33	4.44	5774.26	4.60	4.50	5.85	0.29	7.38	52.43
5800.00	1.39	3.78	5799.25	5.20	5.09	5.89	0.23	7.79	49.17
5825.00	1.36	4.10	5824.24	5.80	5.69	5.93	0.10	8.22	46.20
5850.00	1.44	3.21	5849.23	6.41	6.30	5.97	0.32	8.68	43.46
5875.00	1.43	3.05	5874.23	7.03	6.92	6.00	0.05	9.17	40.93
5900.00	1.44	2.14	5899.22	7.66	7.55	6.03	0.11	9.66	38.63
5925.00	1.29	359.52	5924.21	8.25	8.15	6.04	0.65	10.14	36.56
5950.00	1.18	357.80	5949.21	8.79	8.69	6.03	0.48	10.57	34.77
5975.00	1.13	344.30	5974.20	9.29	9.18	5.95	1.10	10.94	32.96
6000.00	1.20	321.78	5999.20	9.73	9.62	5.72	1.84	11.20	30.74
6025.00	1.30	305.26	6024.19	10.09	9.99	5.33	1.49	11.33	28.07
6050.00	1.30	301.05	6049.18	10.39	10.30	4.86	0.38	11.39	25.24
6075.00	1.38	297.08	6074.18	10.66	10.59	4.35	0.52	11.44	22.32
6100.00	1.34	300.36	6099.17	10.94	10.87	3.82	0.36	11.53	19.38
6125.00	1.34	299.21	6124.16	11.22	11.16	3.32	0.11	11.65	16.55
6150.00	1.35	300.79	6149.16	11.50	11.46	2.81	0.15	11.80	13.78
6175.00	1.37	301.34	6174.15	11.80	11.76	2.30	0.10	11.99	11.07
6200.00	1.30	299.25	6199.14	12.09	12.06	1.80	0.33	12.19	8.48
6225.00	1.24	299.89	6224.14	12.35	12.33	1.31	0.24	12.40	6.08
6250.00	1.21	300.90	6249.13	12.61	12.60	0.85	0.17	12.63	3.87
6275.00	1.12	294.61	6274.12	12.84	12.84	0.40	0.61	12.85	1.80
6300.00	1.03	286.27	6299.12	13.00	13.00	-0.03	0.74	13.00	359.85
6325.00	1.02	283.53	6324.12	13.11	13.12	-0.47	0.20	13.13	357.97
6350.00	0.83	250.31	6349.11	13.09	13.11	-0.85	2.24	13.14	356.28
6375.00	0.89	219.49	6374.11	12.88	12.90	-1.15	1.84	12.95	354.92
6400.00	0.92	202.50	6399.11	12.54	12.57	-1.35	1.07	12.64	353.89
6425.00	0.99	191.58	6424.10	12.14	12.17	-1.47	0.78	12.26	353.13
6450.00	1.00	188.53	6449.10	11.71	11.74	-1.54	0.22	11.84	352.52

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
6475.00	1.07	190.78	6474.10	11.26	11.30	-1.62	0.30	11.41	351.85
6500.00	1.05	187.40	6499.09	10.81	10.84	-1.69	0.25	10.97	351.14
6525.00	1.10	190.01	6524.09	10.34	10.37	-1.76	0.28	10.52	350.36
6550.00	1.04	187.95	6549.08	9.88	9.91	-1.84	0.29	10.08	349.51
6575.00	1.05	187.36	6574.08	9.42	9.46	-1.90	0.06	9.65	348.66
6600.00	1.08	184.22	6599.07	8.96	8.99	-1.94	0.25	9.20	347.81
6625.00	1.12	184.09	6624.07	8.48	8.52	-1.98	0.19	8.74	346.92
6650.00	1.12	180.03	6649.06	7.99	8.03	-2.00	0.32	8.27	346.04
6675.00	1.14	181.64	6674.06	7.50	7.53	-2.00	0.14	7.79	345.11
6700.00	1.32	185.93	6699.05	6.96	7.00	-2.04	0.83	7.29	343.75
6725.00	1.32	180.55	6724.05	6.38	6.42	-2.07	0.50	6.75	342.12
6750.00	1.36	178.45	6749.04	5.80	5.84	-2.07	0.26	6.19	340.51
6775.00	1.32	179.90	6774.03	5.22	5.25	-2.06	0.22	5.64	338.61
6800.00	1.27	178.24	6799.03	4.65	4.69	-2.05	0.24	5.12	336.40
6825.00	1.31	179.02	6824.02	4.09	4.13	-2.04	0.16	4.60	333.75
6850.00	1.34	181.52	6849.01	3.51	3.55	-2.04	0.26	4.09	330.13
6875.00	1.31	176.31	6874.01	2.94	2.97	-2.03	0.50	3.60	325.70
6900.00	1.35	177.87	6899.00	2.36	2.39	-2.00	0.23	3.12	320.14
6925.00	1.32	178.37	6923.99	1.77	1.81	-1.98	0.13	2.68	312.45
6950.00	1.32	176.72	6948.99	1.20	1.24	-1.96	0.16	2.31	302.29
6975.00	1.33	177.70	6973.98	0.62	0.66	-1.93	0.12	2.04	288.86
7000.00	1.32	180.63	6998.97	0.04	0.08	-1.92	0.28	1.92	272.35
7025.00	1.22	178.14	7023.97	-0.51	-0.48	-1.91	0.48	1.97	256.06
7050.00	1.26	179.35	7048.96	-1.05	-1.02	-1.90	0.21	2.16	241.89
7075.00	1.27	179.52	7073.96	-1.60	-1.57	-1.90	0.05	2.46	230.39
7100.00	1.22	178.72	7098.95	-2.15	-2.11	-1.89	0.24	2.83	221.78
7125.00	1.20	180.66	7123.94	-2.67	-2.64	-1.88	0.18	3.24	215.52
7150.00	1.22	180.04	7148.94	-3.20	-3.17	-1.89	0.10	3.69	210.78
7175.00	1.30	182.20	7173.93	-3.75	-3.72	-1.90	0.37	4.18	207.05
7200.00	1.29	180.53	7198.93	-4.32	-4.29	-1.91	0.16	4.69	204.05
7225.00	1.29	182.07	7223.92	-4.88	-4.85	-1.93	0.14	5.22	201.66
7250.00	1.31	181.75	7248.91	-5.45	-5.42	-1.94	0.08	5.76	199.74

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
7275.00	1.31	181.38	7273.91	-6.02	-5.99	-1.96	0.03	6.30	198.12
7300.00	1.26	183.54	7298.90	-6.58	-6.55	-1.98	0.27	6.84	196.85
7325.00	1.20	181.28	7323.90	-7.12	-7.09	-2.01	0.32	7.36	195.81
7350.00	1.25	182.31	7348.89	-7.65	-7.62	-2.02	0.20	7.88	194.87
7375.00	1.28	187.48	7373.88	-8.20	-8.17	-2.07	0.48	8.43	194.23
7400.00	1.39	187.70	7398.88	-8.78	-8.75	-2.15	0.44	9.01	193.80
7425.00	1.35	179.75	7423.87	-9.38	-9.34	-2.19	0.78	9.59	193.18
7450.00	1.12	176.83	7448.86	-9.92	-9.88	-2.17	0.96	10.12	192.40
7475.00	1.12	181.23	7473.86	-10.40	-10.37	-2.16	0.34	10.59	191.79
7500.00	1.22	183.03	7498.85	-10.91	-10.88	-2.18	0.45	11.09	191.35
7525.00	1.24	183.71	7523.85	-11.45	-11.41	-2.22	0.09	11.62	190.99
7550.00	1.27	187.10	7548.84	-11.99	-11.96	-2.27	0.32	12.17	190.74
7575.00	1.25	185.56	7573.84	-12.54	-12.50	-2.33	0.15	12.72	190.55
7600.00	1.31	187.74	7598.83	-13.10	-13.06	-2.39	0.31	13.28	190.38
7625.00	1.35	182.58	7623.82	-13.68	-13.64	-2.44	0.50	13.85	190.16
7650.00	1.15	179.04	7648.82	-14.22	-14.18	-2.45	0.84	14.39	189.82
7675.00	1.15	186.52	7673.81	-14.72	-14.68	-2.48	0.60	14.89	189.58
7700.00	1.22	187.22	7698.81	-15.24	-15.19	-2.54	0.30	15.40	189.49
7725.00	1.25	187.53	7723.80	-15.77	-15.73	-2.61	0.14	15.94	189.42
7750.00	1.39	186.23	7748.79	-16.35	-16.30	-2.68	0.55	16.52	189.33
7775.00	1.19	182.46	7773.79	-16.91	-16.86	-2.72	0.87	17.08	189.17
7800.00	1.38	186.69	7798.78	-17.46	-17.42	-2.77	0.87	17.64	189.03
7825.00	1.27	180.41	7823.77	-18.04	-17.99	-2.80	0.73	18.21	188.86
7850.00	1.32	188.02	7848.77	-18.61	-18.56	-2.85	0.72	18.78	188.72
7875.00	1.35	188.00	7873.76	-19.19	-19.14	-2.93	0.11	19.36	188.70
7900.00	1.29	185.31	7898.76	-19.76	-19.71	-3.00	0.34	19.94	188.64
7925.00	1.34	188.10	7923.75	-20.33	-20.28	-3.06	0.33	20.51	188.59
7950.00	1.43	189.76	7948.74	-20.93	-20.88	-3.16	0.37	21.12	188.60
7975.00	1.52	187.50	7973.73	-21.57	-21.51	-3.25	0.42	21.76	188.60
8000.00	1.59	183.84	7998.72	-22.25	-22.19	-3.32	0.51	22.44	188.51
8025.00	1.41	178.60	8023.72	-22.90	-22.84	-3.34	0.93	23.08	188.31
8050.00	1.27	179.81	8048.71	-23.48	-23.43	-3.33	0.55	23.66	188.08

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
8075.00	1.28	182.22	8073.70	-24.04	-23.98	-3.34	0.21	24.21	187.92
8100.00	1.46	183.78	8098.69	-24.64	-24.58	-3.37	0.77	24.81	187.80
8125.00	1.52	183.90	8123.69	-25.28	-25.23	-3.41	0.21	25.46	187.70
8150.00	1.65	184.73	8148.68	-25.97	-25.92	-3.46	0.54	26.15	187.61
8175.00	1.59	183.69	8173.67	-26.68	-26.62	-3.52	0.25	26.85	187.52
8200.00	1.65	179.97	8198.66	-27.39	-27.33	-3.54	0.48	27.56	187.38
8225.00	1.38	165.34	8223.65	-28.04	-27.98	-3.46	1.89	28.19	187.05
8250.00	1.13	147.03	8248.64	-28.53	-28.48	-3.25	1.86	28.66	186.51
8275.00	1.00	128.62	8273.64	-28.87	-28.82	-2.95	1.47	28.97	185.84
8300.00	1.03	138.68	8298.63	-29.17	-29.12	-2.63	0.72	29.24	185.16
8325.00	1.03	152.19	8323.63	-29.53	-29.49	-2.38	0.97	29.59	184.61
8350.00	1.18	155.06	8348.63	-29.96	-29.92	-2.16	0.65	30.00	184.13
8375.00	1.23	153.92	8373.62	-30.43	-30.40	-1.94	0.23	30.46	183.64
8400.00	1.23	157.43	8398.61	-30.92	-30.89	-1.71	0.30	30.94	183.18
8425.00	1.23	147.95	8423.61	-31.39	-31.36	-1.47	0.81	31.40	182.68
8450.00	0.86	154.01	8448.60	-31.78	-31.76	-1.24	1.51	31.79	182.24
8475.00	0.99	166.47	8473.60	-32.15	-32.14	-1.11	0.94	32.16	181.98
8500.00	1.07	171.41	8498.60	-32.59	-32.58	-1.03	0.48	32.59	181.80
8525.00	1.23	167.55	8523.59	-33.08	-33.07	-0.93	0.72	33.08	181.62
8550.00	1.14	161.66	8548.59	-33.58	-33.57	-0.80	0.61	33.58	181.36
8575.00	1.00	163.18	8573.58	-34.02	-34.01	-0.66	0.56	34.02	181.11
8600.00	0.95	169.93	8598.58	-34.43	-34.42	-0.56	0.50	34.43	180.93
8625.00	0.97	178.45	8623.58	-34.85	-34.84	-0.51	0.58	34.85	180.85
8650.00	1.11	179.13	8648.57	-35.30	-35.30	-0.51	0.55	35.30	180.82
8675.00	1.22	171.11	8673.57	-35.80	-35.80	-0.46	0.77	35.80	180.74
8700.00	0.98	176.40	8698.56	-36.28	-36.28	-0.41	1.02	36.28	180.64
8725.00	1.05	188.17	8723.56	-36.72	-36.72	-0.43	0.88	36.72	180.66
8750.00	1.19	196.68	8748.55	-37.20	-37.19	-0.53	0.86	37.20	180.82
8775.00	1.32	183.55	8773.55	-37.74	-37.73	-0.62	1.27	37.74	180.95
8800.00	1.19	183.05	8798.54	-38.28	-38.28	-0.66	0.54	38.28	180.98
8825.00	1.02	183.21	8823.54	-38.76	-38.76	-0.68	0.66	38.76	181.01
8850.00	1.04	187.94	8848.53	-39.21	-39.20	-0.73	0.35	39.21	181.06

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
8875.00	0.95	175.61	8873.53	-39.64	-39.63	-0.74	0.92	39.64	181.07
8900.00	0.91	124.35	8898.53	-39.95	-39.95	-0.56	3.21	39.96	180.81
8925.00	1.15	95.95	8923.52	-40.08	-40.09	-0.15	2.22	40.09	180.22
8950.00	0.95	89.16	8948.52	-40.10	-40.11	0.30	0.93	40.11	179.56
8975.00	0.66	100.79	8973.51	-40.12	-40.14	0.65	1.33	40.14	179.07
9000.00	0.62	116.70	8998.51	-40.20	-40.22	0.91	0.72	40.23	178.70
9025.00	0.76	128.61	9023.51	-40.36	-40.39	1.16	0.81	40.40	178.35
9050.00	0.76	113.00	9048.51	-40.52	-40.55	1.45	0.82	40.58	177.96
9075.00	0.68	120.90	9073.51	-40.66	-40.70	1.72	0.50	40.73	177.57
9100.00	0.72	145.50	9098.51	-40.86	-40.90	1.94	1.20	40.95	177.28
9125.00	1.09	141.76	9123.50	-41.17	-41.21	2.18	1.50	41.27	176.98
9150.00	1.14	134.71	9148.50	-41.52	-41.58	2.50	0.58	41.65	176.56
9175.00	1.20	148.00	9173.49	-41.92	-41.97	2.81	1.11	42.07	176.17
9200.00	1.38	145.48	9198.49	-42.38	-42.44	3.12	0.76	42.56	175.79
9225.00	1.32	155.02	9223.48	-42.89	-42.95	3.42	0.93	43.09	175.45
9250.00	1.54	154.52	9248.47	-43.45	-43.52	3.68	0.88	43.68	175.16
9275.00	1.65	155.02	9273.46	-44.07	-44.15	3.98	0.44	44.33	174.85
9300.00	1.47	156.37	9298.45	-44.68	-44.77	4.26	0.75	44.97	174.56
9325.00	1.55	164.22	9323.44	-45.30	-45.39	4.48	0.90	45.61	174.36
9350.00	1.23	151.96	9348.44	-45.86	-45.95	4.70	1.75	46.19	174.16
9375.00	1.37	88.13	9373.43	-46.08	-46.18	5.12	5.52	46.46	173.67
9400.00	1.28	78.76	9398.42	-46.00	-46.11	5.70	0.94	46.46	172.96
9425.00	1.48	82.07	9423.42	-45.89	-46.01	6.29	0.85	46.44	172.21
9450.00	1.46	89.61	9448.41	-45.83	-45.97	6.93	0.78	46.49	171.43
9475.00	1.69	86.26	9473.40	-45.80	-45.94	7.61	0.98	46.57	170.59
9500.00	1.61	76.89	9498.39	-45.68	-45.84	8.32	1.12	46.59	169.71
9520.00	1.36	91.20	9518.38	-45.61	-45.78	8.83	2.25	46.62	169.08