

RECEIVED

30-015-45531

NOV 19 2019

COG

DISTRICT ARTSIAO.CD

SURVEY REPORT

SRO 5 STATE COM #504H

ENSGN 777

6/7/2019

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

JAKE ELGER

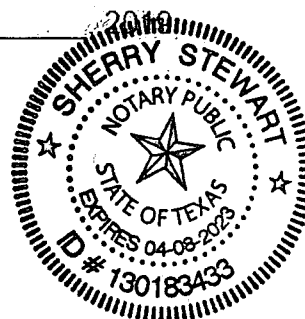
Notarized this date 03 of JULY

Sherry Stewart

Notary Signature

County of Midland

State of Texas



The Ultimate Partner In Wellbore Placement

SURVEY REPORT

SRO 5 STATE COM #504H

KEEPER GYRO SURVEY

CUSTOMER
PROJECT
FIELD

COG
SRO 5 State com #504H
NA

SDI JOB NO.
SDI DISTRICT
SDI KIT/UNIT

OP.019144
Midland

SITE INFORMATION

Site Name
Lat/Long
Northing
Easting

SRO 5 State Com #504H
32.078655° N, 104.101885° W

Section
Township
Range

MAP INFORMATION

North Reference
Grid Correction
System
Datum
Map Zone

Grid North
0.12 deg
US State Plane 1927
North American Datum 1927 (Clarke 1866)
New Mexico East: 3001

**WELL INFORMATION**

Lat/Long
Northing
Easting
UWI

32.078655° N, 104.101885° W

DEPTH AND ELEVATION REFERENCE

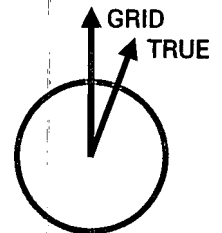
Ground Level
Reference Datum
Reference Height
Reference Elevation

3007 ft above Mean Sea Level
KB
31 ft above G.L.
3038 ft

VERTICAL SECTION REFERENCE

+N/-S
+E/-W
Proposal Direction
Calculation Method

0 ft
0 ft
177.16°
Minimum Curvature

**LOCAL GRAVITY REFERENCE INFORMATION**

Local Gravity
True to Grid

998.526 mG [computed]
add 0.12°

WELL NOTES

Keeper Gyro Survey

OPERATORS

J Mendoza

SDI Operator Name (Printed)

SIGNATURE

DATE

MD	INC	AZIM	TVD	VS	IN/S	HE/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	0.11	29.37	100.00	-0.08	0.09	0.05	0.11	0.10	29.37
125.00	0.19	74.11	125.00	-0.12	0.12	0.10	0.53	0.16	39.83
150.00	0.14	90.89	150.00	-0.12	0.13	0.17	0.27	0.21	52.29
175.00	0.31	104.30	175.00	-0.10	0.11	0.27	0.73	0.29	66.90
200.00	0.47	97.67	200.00	0.06	0.08	0.43	0.64	0.44	79.18
225.00	0.49	107.69	225.00	0.01	0.04	0.64	0.34	0.64	86.69
250.00	0.62	113.51	250.00	0.09	0.05	0.86	0.57	0.86	93.29
275.00	0.69	121.94	275.00	0.24	0.18	1.11	0.47	1.13	99.33
300.00	0.86	118.11	299.99	0.42	0.35	1.41	0.72	1.45	104.00
325.00	0.70	119.72	324.99	0.60	-0.51	1.70	0.65	1.78	106.80
350.00	0.78	124.25	349.99	0.78	-0.69	1.98	0.40	2.09	109.13
375.00	0.81	130.15	374.99	1.01	-0.89	2.25	0.34	2.42	111.67
400.00	0.83	133.94	399.98	1.26	-1.13	2.52	0.23	2.76	114.25
425.00	0.73	143.26	424.98	1.52	-1.39	2.74	0.63	3.07	116.83
450.00	0.86	134.17	449.98	1.79	-1.65	2.97	0.72	3.40	118.97
475.00	0.79	135.99	474.98	2.06	-1.90	3.23	0.30	3.74	120.50
500.00	1.02	151.63	499.97	2.39	-2.22	3.45	1.34	4.10	122.74
525.00	1.13	155.59	524.97	2.82	-2.64	3.66	0.54	4.51	125.81
550.00	1.34	155.08	549.96	3.32	-3.13	3.89	0.85	4.99	128.86
575.00	1.46	153.41	574.96	3.88	-3.68	4.15	0.51	5.55	131.57
600.00	1.59	155.15	599.95	4.50	-4.28	4.44	0.54	6.17	133.96
625.00	1.62	152.81	624.94	5.14	-4.91	4.75	0.29	6.83	135.97
650.00	1.59	153.48	649.93	5.78	-5.54	5.06	0.15	7.50	137.55
675.00	1.49	155.86	674.92	6.40	-6.14	5.35	0.47	8.15	138.94
700.00	1.64	154.91	699.91	7.04	-6.76	5.64	0.58	8.80	140.20
725.00	1.51	149.01	724.90	7.65	-7.37	5.96	0.83	9.48	141.05
750.00	1.61	148.07	749.89	8.25	-7.95	6.31	0.43	10.15	141.55
775.00	1.57	146.94	774.88	8.85	-8.53	6.68	0.20	10.84	141.93
800.00	1.74	139.39	799.87	9.45	-9.11	7.12	1.09	11.56	141.99
825.00	1.76	140.83	824.86	10.06	-9.69	7.61	0.20	12.32	141.88
850.00	1.72	138.60	849.85	10.66	-10.27	8.10	0.30	13.08	141.75

SURVEY REPORT

SRO 5 STATE COM #504H

KEEPER GYRO SURVEY

MD	INC	AZIM	TVD	VS	N/S	E/W	DLS	CLOSURE	CLOSURE
ft	deg	deg	ft	ft	ft	ft	%100ft	DIST	DIR
875.00	1.74	140.36	874.84	11.26	-10.85	8.59	0.22	13.84	141.63
900.00	1.92	137.71	899.82	11.89	-11.45	9.11	0.79	14.63	141.48
925.00	1.91	141.33	924.81	12.55	-12.09	9.66	0.49	15.47	141.38
950.00	1.89	142.19	949.79	13.23	-12.74	10.17	0.14	16.30	141.40
975.00	1.87	140.68	974.78	13.89	-13.38	10.68	0.22	17.12	141.40
1000.00	1.74	142.56	999.77	14.53	-13.99	11.17	0.54	17.90	141.41
1025.00	1.03	139.97	1024.76	15.02	-14.47	11.54	2.87	18.51	141.41
1050.00	0.56	132.15	1049.76	15.29	-14.72	11.78	1.93	18.85	141.34
1075.00	0.15	98.89	1074.76	15.38	-14.81	11.90	1.75	19.00	141.21
1100.00	0.06	27.43	1099.76	15.38	-14.80	11.94	0.59	19.02	141.10
1125.00	0.04	22.97	1124.76	15.36	-14.78	11.95	0.09	19.01	141.04
1150.00	0.07	29.05	1149.76	15.34	-14.76	11.96	0.13	19.00	140.98
1175.00	0.15	30.51	1174.76	15.30	-14.72	11.99	0.31	18.98	140.84
1200.00	0.14	7.47	1199.76	15.24	-14.66	12.01	0.23	18.95	140.68
1225.00	0.15	310.60	1224.76	15.19	-14.61	11.99	0.55	18.90	140.63
1250.00	0.18	311.65	1249.76	15.14	-14.56	11.93	0.12	18.83	140.66
1275.00	0.11	9.17	1274.76	15.09	-14.51	11.91	0.60	18.77	140.63
1300.00	0.12	31.00	1299.76	15.04	-14.47	11.93	0.18	18.75	140.50
1325.00	0.19	346.33	1324.76	14.98	-14.41	11.93	0.54	18.70	140.37
1350.00	0.19	57.36	1349.76	14.92	-14.34	11.96	0.89	18.67	140.19
1375.00	0.15	354.29	1374.76	14.86	-14.29	11.99	0.73	18.65	140.00
1400.00	0.17	24.65	1399.76	14.80	-14.22	12.00	0.34	18.61	139.85
1425.00	0.21	28.12	1424.76	14.73	-14.15	12.04	0.18	18.58	139.61
1450.00	0.17	58.55	1449.76	14.67	-14.09	12.09	0.43	18.57	139.36
1475.00	0.21	42.60	1474.76	14.62	-14.04	12.15	0.25	18.57	139.11
1500.00	0.24	60.20	1499.76	14.57	-13.98	12.23	0.30	18.57	138.81
1525.00	0.20	29.80	1524.76	14.51	-13.91	12.30	0.48	18.57	138.53
1550.00	0.21	54.05	1549.76	14.44	-13.85	12.36	0.35	18.56	138.26
1575.00	0.26	83.17	1574.76	14.41	-13.81	12.45	0.52	18.60	137.97
1600.00	0.23	89.32	1599.76	14.41	-13.81	12.56	0.18	18.66	137.71
1625.00	0.27	78.91	1624.76	14.41	-13.80	12.66	0.24	18.73	137.45
1650.00	0.31	91.00	1649.76	14.40	-13.79	12.79	0.29	18.80	137.15

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	0.26	89.87	1674.76	14.41	-13.79	12.91	0.21	18.89	136.88
1700.00	0.25	80.76	1699.76	14.41	-13.78	13.02	0.17	18.96	136.62
1725.00	0.51	86.08	1724.75	14.40	-13.76	13.18	1.06	19.06	136.23
1750.00	0.65	82.46	1749.75	14.38	-13.74	13.43	0.56	19.21	135.64
1775.00	0.73	75.84	1774.75	14.34	-13.68	13.73	0.46	19.38	134.90
1800.00	0.80	80.39	1799.75	14.29	-13.61	14.05	0.38	19.56	134.08
1825.00	0.88	87.04	1824.75	14.27	-13.57	14.42	0.51	19.80	133.27
1850.00	0.90	96.65	1849.74	14.30	-13.58	14.81	0.60	20.09	132.54
1875.00	0.99	94.48	1874.74	14.36	-13.62	15.21	0.40	20.42	131.84
1900.00	0.97	94.14	1899.74	14.41	-13.66	15.64	0.06	20.76	131.12
1925.00	0.99	97.46	1924.73	14.48	-13.70	16.07	0.24	21.11	130.45
1950.00	1.07	99.90	1949.73	14.57	-13.77	16.51	0.34	21.50	129.82
1975.00	1.31	103.45	1974.72	14.70	-13.87	17.02	1.00	21.96	129.19
2000.00	1.51	104.77	1999.72	14.88	-14.02	17.61	0.81	22.52	128.52
2025.00	1.67	101.64	2024.71	15.07	-14.18	18.29	0.74	23.14	127.79
2050.00	1.79	99.51	2049.69	15.24	-14.32	19.03	0.54	23.82	126.96
2075.00	1.72	100.59	2074.68	15.42	-14.45	19.79	0.33	24.50	126.15
2100.00	1.55	92.87	2099.67	15.54	-14.54	20.49	1.10	25.13	125.35
2125.00	1.35	85.34	2124.67	15.56	-14.53	21.12	1.11	25.64	124.52
2150.00	1.17	73.86	2149.66	15.49	-14.44	21.66	1.22	26.03	123.68
2175.00	1.19	61.99	2174.65	15.32	-14.24	22.14	0.98	26.32	122.75
2200.00	1.25	56.40	2199.65	15.07	-13.97	22.60	0.53	26.57	121.73
2225.00	1.23	59.10	2224.64	14.81	-13.68	23.05	0.25	26.81	120.69
2250.00	1.31	57.41	2249.64	14.54	-13.39	23.52	0.34	27.07	119.65
2275.00	1.28	60.38	2274.63	14.27	-13.10	24.01	0.30	27.35	118.62
2300.00	1.28	54.65	2299.62	14.00	-12.80	24.48	0.51	27.62	117.61
2325.00	1.27	57.96	2324.62	13.71	-12.49	24.94	0.30	27.89	116.60
2350.00	1.26	54.84	2349.61	13.43	-12.18	25.40	0.28	28.17	115.63
2375.00	1.29	59.44	2374.61	13.15	-11.88	25.87	0.43	28.47	114.67
2400.00	1.25	57.32	2399.60	12.88	-11.59	26.34	0.25	28.78	113.75
2425.00	1.22	53.32	2424.59	12.60	-11.28	26.78	0.37	29.06	112.85
2450.00	1.18	52.95	2449.59	12.31	-10.97	27.20	0.17	29.33	111.97

MD	INC	AZIM	TVD	VS	N/S	E/W	DLS	CLOSURE	CLOSURE
ft	deg	deg	ft	ft	ft	ft	%100ft	DIST	DIR
2475.00	1.36	56.20	2474.58	12.01	10.65	27.65	0.78	29.63	111.07
2500.00	1.31	52.69	2499.57	11.69	10.31	28.13	0.37	29.96	110.14
2525.00	1.32	54.10	2524.57	11.38	9.97	28.59	0.13	30.28	109.23
2550.00	1.29	61.10	2549.56	11.10	9.67	29.07	0.65	30.63	108.40

2575.00	1.20	55.15	2574.56	10.83	-9.38	29.53	0.62	30.98	107.63
2600.00	1.26	55.78	2599.55	10.55	-9.08	29.97	0.22	31.31	106.85
2625.00	1.21	49.85	2624.54	10.25	-8.75	30.40	0.54	31.63	106.07
2650.00	1.32	58.42	2649.54	9.95	-8.43	30.84	0.86	31.98	105.29
2675.00	1.33	57.16	2674.53	9.67	-8.13	31.33	0.12	32.37	104.54

2700.00	1.29	56.44	2699.53	9.38	-7.81	31.81	0.15	32.76	103.80
2725.00	1.39	55.98	2724.52	9.08	-7.49	32.30	0.40	33.15	103.05
2750.00	1.25	54.04	2749.51	8.77	-7.16	32.77	0.61	33.54	102.32
2775.00	1.25	56.37	2774.51	8.48	-6.85	33.21	0.20	33.91	101.65
2800.00	1.37	53.51	2799.50	8.18	-6.52	33.68	0.54	34.31	100.95

2825.00	1.34	55.62	2824.49	7.86	-6.18	34.16	0.22	34.72	100.25
2850.00	1.32	52.68	2849.49	7.54	-5.84	34.63	0.29	35.12	99.56
2875.00	1.32	54.98	2874.48	7.23	-5.50	35.10	0.21	35.53	98.90
2900.00	1.30	55.96	2899.47	6.93	-5.17	35.57	0.10	35.94	98.27
2925.00	1.26	57.81	2924.47	6.65	-4.87	36.04	0.24	36.37	97.69

2950.00	1.21	61.63	2949.46	6.40	-4.59	36.50	0.39	36.79	97.17
2975.00	1.25	56.17	2974.45	6.14	-4.32	36.96	0.50	37.21	96.66
3000.00	1.23	55.69	2999.45	5.86	-4.01	37.41	0.09	37.62	96.12
3025.00	1.22	53.83	3024.44	5.58	-3.71	37.85	0.16	38.03	95.59
3050.00	1.26	58.89	3049.44	5.30	-3.41	38.30	0.47	38.45	95.08

3075.00	1.36	53.87	3074.43	5.01	-3.09	38.77	0.60	38.89	94.56
3100.00	1.27	55.43	3099.42	4.70	-2.76	39.24	0.39	39.33	94.02
3125.00	1.31	55.26	3124.42	4.40	-2.44	39.70	0.18	39.77	93.52
3150.00	1.30	53.05	3149.41	4.09	-2.11	40.16	0.20	40.21	93.00
3175.00	1.36	54.79	3174.40	3.78	-1.77	40.63	0.27	40.67	92.49

3200.00	1.33	56.03	3199.40	3.47	-1.43	41.11	0.15	41.14	92.00
3225.00	1.37	57.73	3224.39	3.17	-1.11	41.61	0.22	41.62	91.53
3250.00	1.42	57.48	3249.38	2.87	-0.78	42.12	0.22	42.13	91.07

MD	INC	AZIM	TVD	VS	N/S	HE/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%100ft	ft	deg
3275.00	1.27	56.99	3274.38	2.58	0.47	42.61	0.61	42.62	90.63
3300.00	1.23	57.24	3299.37	2.30	0.17	43.07	0.16	43.07	90.23
3325.00	1.13	58.38	3324.36	2.05	0.10	43.51	0.43	43.51	89.86
3350.00	1.19	58.55	3349.36	1.81	0.37	43.94	0.25	43.94	89.52
3375.00	1.19	56.32	3374.35	1.55	0.65	44.37	0.19	44.38	89.16
3400.00	1.16	55.61	3399.35	1.29	0.93	44.80	0.12	44.81	88.81
3425.00	1.38	58.55	3424.34	1.01	1.23	45.27	0.90	45.28	88.44
3450.00	2.07	45.94	3449.33	0.57	1.71	45.85	3.15	45.88	87.87
3475.00	2.98	46.95	3474.31	0.15	2.46	46.65	3.62	46.71	86.98
3500.00	3.44	46.20	3499.27	1.06	3.43	47.66	1.86	47.79	85.89
3525.00	3.52	45.73	3524.22	2.06	4.48	48.75	0.35	48.96	84.75
3550.00	3.51	46.15	3549.17	3.07	5.55	49.86	0.11	50.16	83.65
3575.00	3.58	45.69	3574.13	-4.09	6.62	50.97	0.30	51.40	82.60
3600.00	3.55	47.06	3599.08	-5.11	7.70	52.09	0.36	52.66	81.60
3625.00	3.62	46.63	3624.03	-6.12	8.77	53.23	0.31	53.95	80.65
3650.00	3.56	46.19	3648.98	-7.14	9.85	54.37	0.29	55.25	79.74
3675.00	3.58	46.15	3673.93	-8.16	10.92	55.49	0.11	56.55	78.86
3700.00	3.67	44.62	3698.88	-9.21	12.03	56.61	0.52	57.88	78.00
3725.00	3.59	46.39	3723.83	-10.27	13.14	57.74	0.54	59.22	77.18
3750.00	3.69	44.98	3748.78	-11.32	14.25	58.88	0.54	60.58	76.39
3775.00	3.63	45.88	3773.73	-12.38	15.37	60.02	0.36	61.96	75.63
3800.00	4.10	45.73	3798.67	-13.49	16.55	61.23	1.90	63.42	74.88
3825.00	4.63	41.36	3823.60	-14.81	17.93	62.53	2.51	65.05	74.00
3850.00	4.81	40.95	3848.52	-16.29	19.48	63.89	0.73	66.79	73.04
3875.00	4.77	40.11	3873.43	-17.81	21.07	65.24	0.32	68.56	72.10
3900.00	4.83	40.96	3898.34	-19.33	22.66	66.61	0.37	70.35	71.21
3925.00	4.78	40.63	3923.25	-20.85	24.24	67.97	0.25	72.17	70.37
3950.00	4.72	42.31	3948.17	-22.33	25.79	69.34	0.60	73.98	69.60
3975.00	4.66	41.51	3973.08	-23.78	27.31	70.71	0.34	75.80	68.88
4000.00	4.54	42.27	3998.00	-25.20	28.81	72.05	0.53	77.59	68.21
4025.00	4.60	41.04	4022.92	-26.62	30.30	73.37	0.45	79.38	67.56
4050.00	4.62	41.46	4047.84	-28.07	31.81	74.70	0.15	81.19	66.93

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	4.70	37.11	4072.76	-29.57	33.38	75.98	1.45	82.99	66.28
4100.00	5.09	32.77	4097.67	-31.26	35.13	77.20	2.15	84.82	65.53
4125.00	5.16	30.06	4122.57	-33.11	37.03	78.36	1.02	86.67	64.70
4150.00	5.29	31.92	4147.46	-35.00	38.99	79.54	0.83	88.58	63.89
4175.00	5.21	30.52	4172.36	-36.89	40.94	80.72	0.60	90.51	63.11
4200.00	5.23	30.82	4197.26	-38.79	42.90	81.88	0.14	92.44	62.35
4225.00	5.28	30.66	4222.15	-40.69	44.86	83.05	0.20	94.39	61.62
4250.00	5.31	32.44	4247.04	-42.60	46.83	84.26	0.67	96.40	60.94
4275.00	5.38	30.98	4271.94	-44.52	48.81	85.48	0.60	98.44	60.27
4300.00	5.33	31.95	4296.83	-46.44	50.80	86.70	0.41	100.49	59.63
4325.00	5.32	31.20	4321.72	-48.36	52.78	87.91	0.28	102.54	59.02
4350.00	5.28	33.36	4346.61	-50.24	54.73	89.15	0.81	104.61	58.45
4375.00	5.35	32.18	4371.50	-52.13	56.68	90.40	0.51	106.70	57.91
4400.00	5.17	33.70	4396.40	-53.99	58.60	91.65	0.91	108.78	57.40
4425.00	5.23	32.34	4421.30	-55.82	60.50	92.88	0.55	110.85	56.92
4450.00	5.11	34.51	4446.19	-57.64	62.38	94.12	0.92	112.92	56.47
4475.00	5.14	34.02	4471.09	-59.42	64.23	95.38	0.22	114.99	56.04
4500.00	5.04	32.73	4496.00	-61.21	66.08	96.60	0.62	117.04	55.63
4525.00	4.97	34.33	4520.90	-62.97	67.89	97.80	0.62	119.06	55.23
4550.00	4.89	34.20	4545.81	-64.68	69.67	99.01	0.31	121.07	54.87
4575.00	4.73	36.65	4570.72	-66.33	71.38	100.23	1.04	123.05	54.54
4600.00	4.67	36.19	4595.64	-67.91	73.03	101.44	0.30	125.00	54.25
4625.00	4.49	37.85	4620.56	-69.45	74.63	102.65	0.88	126.91	53.98
4650.00	4.40	39.10	4645.48	-70.90	76.14	103.85	0.54	128.77	53.75
4675.00	4.32	39.63	4670.41	-72.31	77.61	105.06	0.35	130.62	53.54
4700.00	4.07	39.56	4695.34	-73.66	79.02	106.22	1.01	132.39	53.35
4725.00	3.95	38.72	4720.28	-74.96	80.37	107.33	0.53	134.09	53.17
4750.00	3.90	41.47	4745.22	-76.21	81.68	108.43	0.78	135.75	53.01
4775.00	3.95	38.37	4770.16	-77.47	83.00	109.52	0.87	137.42	52.85
4800.00	4.09	29.03	4795.10	-78.87	84.45	110.49	2.68	139.07	52.61
4825.00	4.27	23.44	4820.04	-80.46	86.08	111.29	1.78	140.70	52.28
4850.00	4.24	20.65	4844.97	-82.15	87.80	111.99	0.84	142.31	51.90

MD	INC	AZIM	TVD	VS	IN/S	HEAV	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
4875.00	4.25	17.80	4869.90	-83.86	89.55	112.60	0.84	143.87	51.51
4900.00	4.11	19.22	4894.83	-85.56	91.28	113.18	0.69	145.40	51.11
4925.00	4.12	20.15	4919.77	-87.21	92.97	113.78	0.27	146.93	50.75
4950.00	4.05	20.58	4944.70	-88.85	94.63	114.40	0.31	148.47	50.40
4975.00	3.93	19.19	4969.64	-90.45	96.27	114.99	0.60	149.97	50.06
5000.00	3.91	18.29	4994.58	-92.04	97.89	115.54	0.27	151.43	49.73
5025.00	3.82	20.42	5019.53	-93.60	99.48	116.10	0.68	152.89	49.41
5050.00	3.72	18.99	5044.47	-95.12	101.02	116.65	0.52	154.32	49.11
5075.00	3.71	17.23	5069.42	-96.63	102.56	117.16	0.46	155.71	48.80
5100.00	3.72	20.03	5094.37	-98.14	104.10	117.68	0.73	157.11	48.50
5125.00	3.50	19.98	5119.32	-99.59	105.58	118.21	0.89	158.50	48.23
5150.00	3.55	19.06	5144.27	-101.01	107.03	118.73	0.29	159.85	47.97
5175.00	3.57	19.01	5169.22	-102.46	108.50	119.23	0.09	161.21	47.70
5200.00	3.32	19.92	5194.18	-103.85	109.91	119.73	1.01	162.53	47.45
5225.00	3.35	20.96	5219.14	-105.18	111.28	120.24	0.26	163.83	47.22
5250.00	3.21	19.48	5244.09	-106.50	112.62	120.74	0.66	165.11	46.99
5275.00	3.21	21.60	5269.06	-107.78	113.93	121.23	0.48	166.36	46.78
5300.00	3.04	22.20	5294.02	-109.02	115.19	121.74	0.69	167.60	46.58
5325.00	3.06	23.10	5318.98	-110.22	116.42	122.25	0.20	168.81	46.40
5350.00	2.96	23.13	5343.95	-111.40	117.63	122.76	0.40	170.02	46.22
5375.00	2.89	24.05	5368.92	-112.54	118.80	123.27	0.33	171.20	46.06
5400.00	2.88	24.92	5393.88	-113.66	119.94	123.79	0.18	172.37	45.91
5425.00	2.79	25.15	5418.85	-114.75	121.06	124.32	0.39	173.52	45.76
5450.00	2.77	22.17	5443.82	-115.83	122.17	124.80	0.58	174.65	45.61
5475.00	2.81	28.56	5468.80	-116.90	123.27	125.32	1.26	175.79	45.47
5500.00	2.72	26.23	5493.77	-117.95	124.34	125.88	0.59	176.93	45.35
5525.00	2.69	26.81	5518.74	-118.97	125.39	126.41	0.16	178.05	45.23
5550.00	2.64	29.46	5543.71	-119.97	126.42	126.95	0.54	179.16	45.12
5575.00	2.60	28.90	5568.69	-120.94	127.41	127.51	0.19	180.26	45.02
5600.00	2.63	29.79	5593.66	-121.90	128.41	128.07	0.21	181.36	44.92
5625.00	2.62	28.07	5618.63	-122.88	129.41	128.62	0.31	182.46	44.83
5650.00	2.53	30.96	5643.61	-123.83	130.39	129.18	0.64	183.54	44.73

MD	INC	AZIM	TVD	VS	+N/S	+E/W	DIS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
5675.00	2.58	28.69	5668.58	-124.76	131.35	129.73	0.45	184.62	44.64
5700.00	2.47	29.11	5693.56	-125.70	132.32	130.26	0.41	185.68	44.55
5725.00	2.56	29.03	5718.53	-126.63	133.28	130.80	0.33	186.74	44.46
5750.00	2.43	27.74	5743.51	-127.56	134.23	131.31	0.56	187.78	44.37
5775.00	2.73	26.71	5768.49	-128.54	135.23	131.83	1.20	188.86	44.27
5800.00	3.06	17.80	5793.45	-129.68	136.40	132.30	2.24	190.02	44.13
5825.00	3.27	17.26	5818.42	-130.97	137.72	132.71	0.83	191.26	43.94
5850.00	3.28	16.37	5843.37	-132.32	139.08	133.13	0.21	192.53	43.75
5875.00	3.18	17.37	5868.33	-133.64	140.43	133.53	0.48	193.78	43.56
5900.00	3.20	15.45	5893.30	-134.95	141.76	133.93	0.43	195.02	43.37
5925.00	3.12	16.77	5918.26	-136.26	143.09	134.31	0.43	196.25	43.19
5950.00	2.82	13.96	5943.22	-137.48	144.33	134.65	1.33	197.39	43.01
5975.00	2.85	12.57	5968.19	-138.67	145.54	134.94	0.30	198.47	42.84
6000.00	2.49	11.96	5993.17	-139.80	146.67	135.18	1.44	199.47	42.67
6025.00	2.38	11.40	6018.14	-140.82	147.71	135.40	0.45	200.38	42.51
6050.00	2.40	4.84	6043.12	-141.85	148.74	135.55	1.10	201.24	42.34
6075.00	2.25	7.42	6068.10	-142.85	149.75	135.65	0.74	202.06	42.17
6100.00	2.03	5.44	6093.08	-143.77	150.68	135.76	0.91	202.82	42.02
6125.00	1.88	1.97	6118.07	-144.62	151.53	135.81	0.79	203.49	41.87
6150.00	1.72	359.99	6143.06	-145.40	152.31	135.83	0.67	204.08	41.73
6175.00	1.55	355.51	6168.05	-146.11	153.03	135.80	0.84	204.60	41.59
6200.00	1.37	356.01	6193.04	-146.75	153.66	135.76	0.73	205.04	41.46
6225.00	1.22	2.71	6218.03	-147.31	154.23	135.75	0.84	205.46	41.35
6250.00	1.64	12.52	6243.03	-147.92	154.84	135.84	1.91	205.98	41.26
6275.00	1.80	21.19	6268.01	-148.62	155.56	136.06	1.23	206.66	41.17
6300.00	1.91	18.74	6293.00	-149.37	156.32	136.33	0.54	207.42	41.09
6325.00	2.40	18.03	6317.98	-150.25	157.21	136.63	1.98	208.29	40.99
6350.00	3.00	15.13	6342.96	-151.36	158.34	136.96	2.44	209.36	40.86
6375.00	3.02	15.76	6367.92	-152.61	159.61	137.31	0.16	210.54	40.71
6400.00	3.01	14.12	6392.89	-153.86	160.88	137.65	0.35	211.73	40.55
6425.00	3.05	13.05	6417.85	-155.13	162.16	137.96	0.28	212.91	40.39
6450.00	2.91	8.73	6442.82	-156.39	163.44	138.21	1.06	214.04	40.22

MD	INC	AZIM	TVD	VS	N/S	E/W	DLS	CLOSURE	CLOSURE
ft	deg	deg	ft	ft	ft	ft	%/100ft	DIST	DIR
6475.00	2.73	9.24	6467.79	-157.59	164.65	138.40	0.72	215.09	40.05
6500.00	2.65	5.99	6492.76	-158.75	165.81	138.55	0.69	216.08	39.88
6525.00	2.65	6.90	6517.73	-159.89	166.96	138.68	0.67	217.05	39.71
6550.00	2.63	3.82	6542.71	-161.03	168.11	138.79	0.58	218.00	39.54

6575.00	2.51	4.02	6567.68	-162.14	169.23	138.87	0.47	218.91	39.37
6600.00	2.38	6.23	6592.66	-163.19	170.29	138.96	0.62	219.79	39.22
6625.00	2.21	1.65	6617.64	-164.19	171.29	139.03	1.01	220.61	39.07
6650.00	1.99	356.18	6642.62	-165.10	172.20	139.02	1.20	221.31	38.91
6675.00	1.83	358.06	6667.61	-165.94	173.04	138.98	0.68	221.94	38.77

6700.00	1.99	356.25	6692.59	-166.77	173.87	138.93	0.66	222.56	38.63
6725.00	1.90	351.41	6717.58	-167.62	174.70	138.84	0.74	223.16	38.47
6750.00	1.85	351.19	6742.57	-168.43	175.52	138.72	0.23	223.72	38.32
6775.00	2.18	349.01	6767.55	-169.30	176.38	138.57	1.38	224.30	38.15
6800.00	1.91	349.35	6792.53	-170.18	177.26	138.40	1.10	224.89	37.98

6825.00	1.98	350.65	6817.52	-171.03	178.09	138.25	0.33	225.46	37.82
6850.00	1.87	349.50	6842.51	-171.86	178.92	138.11	0.48	226.02	37.66
6875.00	1.81	353.89	6867.49	-172.66	179.71	137.99	0.60	226.58	37.52
6900.00	1.86	348.02	6892.48	-173.45	180.50	137.87	0.78	227.13	37.37
6925.00	2.12	348.78	6917.47	-174.31	181.35	137.69	1.03	227.70	37.21

6950.00	2.20	351.67	6942.45	-175.24	182.28	137.53	0.53	228.35	37.03
6975.00	2.38	349.60	6967.43	-176.24	183.27	137.37	0.80	229.04	36.85
7000.00	2.55	351.94	6992.40	-177.30	184.33	137.20	0.81	229.78	36.66
7025.00	2.54	355.57	7017.38	-178.41	185.43	137.08	0.65	230.60	36.47
7050.00	2.51	0.94	7042.36	-179.51	186.53	137.04	0.95	231.46	36.30

7075.00	2.57	5.24	7067.33	-180.62	187.64	137.10	0.80	232.39	36.15
7100.00	2.52	8.26	7092.31	-181.71	188.74	137.23	0.58	233.36	36.02
7125.00	2.60	10.96	7117.28	-182.80	189.84	137.42	0.57	234.36	35.90
7150.00	2.61	13.01	7142.26	-183.89	190.95	137.66	0.38	235.39	35.79
7175.00	2.74	15.71	7167.23	-185.01	192.08	137.95	0.73	236.48	35.68

7200.00	2.72	19.32	7192.20	-186.12	193.21	138.30	0.69	237.61	35.60
7209.00	2.82	16.07	7201.19	-186.53	193.63	138.44	2.05	238.03	35.56