

COG

SURVEY REPORT

DAISY 24 STATE COM #502H

PIONEER #84

6/25/2019

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

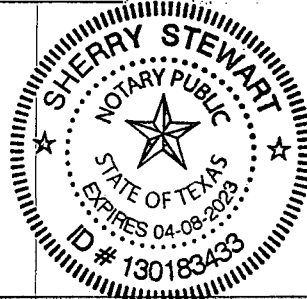
2019

Sherry Stewart

Notary Signature

County of Midland

State of Texas



The Ultimate Partner In Wellbore Placement

SURVEY REPORT

DAISY 24 STATE COM #502H

KEEPER GYRO SURVEY

CUSTOMER
PROJECT
FIELD

COG
Daisy 24 State Com #502
N/A

SDI JOB NO.
SDI DISTRICT
SDI KIT/UNIT

OP.019462
Midland

SITE INFORMATION

Site Name
Lat/Long
Northing
Easting

Daisy 24 State Com #502H
32.12178° N, 104.15057° W

Section
Township
Range

MAP INFORMATION

North Reference
Grid Correction
System
Datum
Map Zone

Grid North
-0.10 deg
US State Plane 1927
North American Datum 1927 (Clarke 1866)
New Mexico East: 3001



WELL INFORMATION

Lat/Long
Northing
Easting
UWI

32.12178° N, 104.15057° W

30-015-45746

DEPTH AND ELEVATION REFERENCE

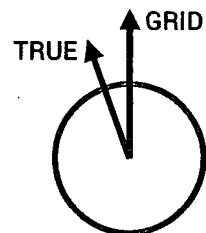
Ground Level
Reference Datum
Reference Height
Reference Elevation

3051 ft above Mean Sea Level
RKB
25 ft above G.L.
3076 ft

VERTICAL SECTION REFERENCE

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

0 ft
0 ft
176.11°
Minimum Curvature



LOCAL GRAVITY REFERENCE INFORMATION

Local Gravity
True to Grid

998.526 mG [computed]
subtract 0.1°

WELL NOTES

Keeper Gyro Survey

OPERATORS

Troy Morgan

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	0.39	183.54	100.00	0.34	-0.34	-0.02	0.39	0.34	183.54
125.00	0.19	121.25	125.00	0.45	-0.45	0.01	1.39	0.45	178.72
150.00	0.09	40.37	150.00	0.46	-0.45	0.06	0.81	0.46	172.51
175.00	0.10	27.68	175.00	0.42	-0.42	0.08	0.09	0.43	168.74
200.00	0.20	51.96	200.00	0.38	-0.37	0.13	0.46	0.39	160.97
225.00	0.38	45.33	225.00	0.30	-0.29	0.22	0.71	0.36	142.42
250.00	0.53	43.03	250.00	0.17	-0.15	0.36	0.60	0.39	112.18
275.00	0.55	47.95	275.00	0.02	-0.02	0.52	0.20	0.52	88.07
300.00	0.49	47.33	300.00	0.12	-0.17	0.69	0.22	0.71	76.19
325.00	0.51	57.21	324.99	-0.24	0.30	0.86	0.35	0.92	70.68
350.00	0.55	65.14	349.99	-0.34	0.41	1.07	0.33	1.14	68.80
375.00	0.73	58.81	374.99	-0.46	0.55	1.31	0.79	1.42	67.37
400.00	0.63	60.29	399.99	-0.59	0.70	1.57	0.43	1.72	66.01
425.00	0.60	57.60	424.99	-0.71	0.84	1.80	0.15	1.98	65.06
450.00	0.75	50.35	449.99	-0.87	1.01	2.04	0.69	2.27	63.58
475.00	0.82	49.72	474.98	-1.07	1.23	2.30	0.26	2.61	61.81
500.00	0.88	53.64	499.98	-1.28	1.46	2.59	0.35	2.97	60.56
525.00	0.99	53.63	524.98	-1.50	1.70	2.92	0.41	3.38	59.73
550.00	1.11	54.75	549.97	-1.74	1.97	3.29	0.49	3.83	59.08
575.00	1.17	55.84	574.97	-2.00	2.25	3.70	0.26	4.33	58.64
600.00	1.26	51.20	599.96	-2.28	2.57	4.12	0.55	4.86	58.08
625.00	1.54	48.93	624.96	-2.64	2.96	4.59	1.12	5.46	57.17
650.00	1.61	47.03	649.95	-3.07	3.42	5.10	0.37	6.14	56.14
675.00	1.63	46.12	674.94	-3.52	3.91	5.61	0.13	6.84	55.16
700.00	1.63	46.38	699.93	-3.98	4.40	6.13	0.03	7.55	54.32
725.00	1.72	47.38	724.92	-4.44	4.90	6.66	0.38	8.27	53.66
750.00	1.83	50.45	749.90	-4.91	5.41	7.25	0.57	9.05	53.26
775.00	1.92	50.49	774.89	-5.38	5.93	7.88	0.36	9.86	53.03
800.00	2.03	50.97	799.88	-5.88	6.48	8.55	0.42	10.72	52.85
825.00	2.24	47.11	824.86	-6.44	7.09	9.25	1.04	11.65	52.53
850.00	2.06	49.74	849.84	-7.02	7.71	9.95	0.83	12.59	52.22

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	2.16	48.95	874.82	-7.57	8.31	10.65	0.41	13.51	52.03
900.00	2.06	52.02	899.81	-8.11	8.90	11.36	0.59	14.43	51.93
925.00	2.18	58.87	924.79	-8.58	9.42	12.12	1.11	15.35	52.14
950.00	2.27	61.95	949.77	-9.00	9.90	12.96	0.62	16.31	52.64
975.00	2.36	56.65	974.75	-9.45	10.41	13.83	0.93	17.31	53.02
1000.00	2.38	57.60	999.73	-9.95	10.98	14.70	0.18	18.35	53.25
1025.00	2.49	56.79	1024.71	-10.47	11.55	15.59	0.45	19.41	53.47
1050.00	2.54	56.97	1049.68	-11.00	12.15	16.51	0.22	20.50	53.65
1075.00	2.72	58.77	1074.66	-11.55	12.76	17.49	0.77	21.65	53.88
1100.00	2.99	59.32	1099.62	-12.11	13.40	18.55	1.09	22.89	54.16
1125.00	3.10	61.31	1124.59	-12.69	14.06	19.71	0.60	24.21	54.50
1150.00	3.20	60.61	1149.55	-13.27	14.73	20.91	0.45	25.57	54.84
1175.00	3.15	61.19	1174.51	-13.86	15.40	22.12	0.25	26.95	55.15
1200.00	3.06	63.51	1199.48	-14.41	16.03	23.32	0.60	28.29	55.49
1225.00	2.76	70.57	1224.44	-14.83	16.53	24.48	1.88	29.54	55.98
1250.00	2.10	87.87	1249.42	-14.97	16.74	25.51	3.92	30.51	56.72
1275.00	1.90	95.67	1274.41	-14.89	16.72	26.38	1.35	31.23	57.63
1300.00	1.74	100.11	1299.39	-14.73	16.61	27.16	0.84	31.84	58.55
1325.00	1.83	95.40	1324.38	-14.57	16.51	27.93	0.70	32.45	59.42
1350.00	1.80	97.17	1349.37	-14.43	16.42	28.72	0.27	33.08	60.24
1375.00	1.77	96.97	1374.36	-14.29	16.32	29.49	0.12	33.71	61.03
1400.00	1.89	94.70	1399.34	-14.15	16.24	30.29	0.58	34.37	61.79
1425.00	2.03	94.69	1424.33	-14.02	16.17	31.14	0.57	35.09	62.55
1450.00	2.24	90.92	1449.31	-13.92	16.13	32.07	0.98	35.90	63.30
1475.00	2.16	91.32	1474.29	-13.83	16.11	33.03	0.32	36.75	64.00
1500.00	2.26	84.53	1499.28	-13.80	16.15	33.99	1.12	37.63	64.59
1525.00	2.40	84.98	1524.26	-13.83	16.24	35.00	0.58	38.59	65.11
1550.00	2.56	81.65	1549.23	-13.88	16.37	36.08	0.85	39.61	65.60
1575.00	2.77	83.01	1574.20	-13.96	16.52	37.23	0.90	40.73	66.07
1600.00	3.06	82.04	1599.17	-14.04	16.69	38.49	1.16	41.95	66.56
1625.00	3.61	84.27	1624.13	-14.11	16.86	39.93	2.26	43.34	67.11
1650.00	3.78	82.37	1649.08	-14.19	17.05	41.53	0.86	44.89	67.68

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	3.82	83.69	1674.02	-14.28	17.25	43.18	0.38	46.49	68.22
1700.00	3.72	84.82	1698.97	-14.33	17.41	44.81	0.49	48.07	68.77
1725.00	3.17	87.85	1723.92	-14.33	17.51	46.31	2.33	49.51	69.29
1750.00	2.68	93.33	1748.89	-14.23	17.50	47.58	2.25	50.70	69.80
1775.00	2.45	93.30	1773.87	-14.09	17.44	48.70	0.90	51.73	70.30
1800.00	2.15	101.46	1798.85	-13.90	17.31	49.69	1.79	52.62	70.79
1825.00	1.86	104.55	1823.83	-13.65	17.12	50.54	1.22	53.36	71.29
1850.00	1.80	110.70	1848.82	-13.36	16.88	51.30	0.82	54.01	71.79
1875.00	1.94	111.07	1873.80	-13.02	16.59	52.07	0.57	54.65	72.33
1900.00	2.14	108.67	1898.79	-12.66	16.28	52.91	0.86	55.36	72.89
1925.00	2.28	102.20	1923.77	-12.34	16.03	53.83	1.15	56.17	73.42
1950.00	2.25	105.63	1948.75	-12.04	15.79	54.79	0.56	57.02	73.92
1975.00	2.17	108.06	1973.73	-11.70	15.51	55.72	0.48	57.84	74.44
2000.00	1.93	108.61	1998.72	-11.36	15.23	56.57	0.97	58.58	74.93
2025.00	1.87	102.73	2023.70	-11.08	15.01	57.37	0.82	59.30	75.34
2050.00	1.91	98.75	2048.69	-10.87	14.85	58.18	0.55	60.04	75.68
2075.00	1.82	102.32	2073.68	-10.67	14.71	58.98	0.60	60.78	76.00
2100.00	1.76	101.55	2098.66	-10.46	14.54	59.74	0.26	61.48	76.32
2125.00	1.76	104.62	2123.65	-10.23	14.37	60.49	0.38	62.17	76.63
2150.00	1.71	103.31	2148.64	-10.00	14.19	61.22	0.27	62.84	76.95
2175.00	1.70	105.50	2173.63	-9.77	14.00	61.94	0.26	63.50	77.26
2200.00	1.69	106.42	2198.62	-9.52	13.80	62.65	0.12	64.15	77.58
2225.00	1.65	107.52	2223.61	-9.26	13.59	63.34	0.18	64.79	77.89
2250.00	1.63	107.59	2248.60	-9.00	13.37	64.03	0.10	65.41	78.20
2275.00	1.73	102.45	2273.59	-8.76	13.18	64.73	0.73	66.06	78.49
2300.00	1.52	101.04	2298.58	-8.57	13.04	65.43	0.85	66.72	78.73
2325.00	1.50	99.79	2323.57	-8.41	12.92	66.08	0.15	67.33	78.94
2350.00	1.55	106.27	2348.56	-8.21	12.77	66.73	0.72	67.94	79.17
2375.00	1.62	105.13	2373.55	-7.98	12.58	67.39	0.28	68.56	79.42
2400.00	1.57	100.02	2398.54	-7.78	12.43	68.07	0.60	69.19	79.65
2425.00	1.50	102.18	2423.53	-7.61	12.30	68.72	0.36	69.82	79.85
2450.00	1.47	106.74	2448.52	-7.41	12.14	69.35	0.48	70.41	80.07

MD	INC	AZIM	TVD	VS	N/S	E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	/100ft	ft	deg
2475.00	1.60	103.36	2473.51	-7.19	11.97	70.00	0.64	71.01	80.30
2500.00	1.52	102.70	2498.50	-6.99	11.81	70.66	0.36	71.64	80.51
2525.00	1.57	101.23	2523.50	-6.81	11.67	71.32	0.27	72.27	80.70
2550.00	1.55	103.74	2548.49	-6.62	11.53	71.98	0.29	72.90	80.90
2575.00	1.47	99.83	2573.48	-6.44	11.39	72.63	0.51	73.52	81.09
2600.00	0.67	94.39	2598.47	-6.34	11.33	73.09	3.24	73.96	81.19
2625.00	0.26	104.61	2623.47	-6.30	11.30	73.29	1.66	74.16	81.23
2650.00	0.03	198.45	2648.47	-6.28	11.28	73.34	1.06	74.20	81.26
2675.00	0.16	224.89	2673.47	-6.25	11.25	73.31	0.55	74.17	81.28
2700.00	0.05	285.94	2698.47	-6.23	11.23	73.28	0.59	74.13	81.29
2725.00	0.09	228.57	2723.47	-6.22	11.22	73.25	0.32	74.11	81.29
2750.00	0.17	282.37	2748.47	-6.22	11.21	73.20	0.54	74.05	81.29
2775.00	0.33	293.00	2773.47	-6.26	11.25	73.10	0.69	73.96	81.25
2800.00	0.29	308.51	2798.47	-6.34	11.31	72.98	0.38	73.85	81.19
2825.00	0.30	286.64	2823.47	-6.40	11.37	72.87	0.45	73.75	81.13
2850.00	0.51	273.39	2848.47	-6.44	11.40	72.69	0.90	73.58	81.09
2875.00	0.84	270.82	2873.47	-6.47	11.41	72.40	1.31	73.29	81.05
2900.00	0.99	284.40	2898.47	-6.55	11.46	72.01	1.05	72.92	80.96
2925.00	1.01	274.40	2923.46	-6.65	11.53	71.58	0.70	72.50	80.85
2950.00	1.02	281.94	2948.46	-6.74	11.60	71.14	0.53	72.08	80.74
2975.00	1.06	287.19	2973.45	-6.89	11.71	70.71	0.42	71.67	80.60
3000.00	1.02	286.61	2998.45	-7.05	11.84	70.27	0.18	71.26	80.43
3025.00	1.15	290.52	3023.44	-7.23	11.99	69.82	0.61	70.85	80.25
3050.00	1.36	283.57	3048.44	-7.42	12.15	69.30	1.02	70.36	80.05
3075.00	1.36	283.63	3073.43	-7.60	12.29	68.72	0.01	69.81	79.86
3100.00	1.32	283.27	3098.42	-7.78	12.43	68.16	0.17	69.28	79.67
3125.00	1.22	281.53	3123.42	-7.93	12.55	67.62	0.41	68.77	79.49
3150.00	1.34	286.22	3148.41	-8.10	12.68	67.07	0.64	68.26	79.29
3175.00	1.38	283.29	3173.41	-8.29	12.83	66.50	0.32	67.73	79.08
3200.00	1.43	287.38	3198.40	-8.49	13.00	65.91	0.45	67.18	78.85
3225.00	1.35	280.93	3223.39	-8.68	13.14	65.32	0.72	66.63	78.62
3250.00	1.31	286.27	3248.38	-8.86	13.28	64.76	0.52	66.11	78.41

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	1.33	286.12	3273.38	-9.05	13.44	64.20	0.09	65.60	78.18
3300.00	1.36	283.37	3298.37	-9.24	13.59	63.64	0.28	65.07	77.95
3325.00	1.38	278.04	3323.36	-9.39	13.70	63.05	0.52	64.52	77.74
3350.00	1.30	280.93	3348.36	-9.53	13.80	62.47	0.41	63.98	77.55
3375.00	1.27	286.67	3373.35	-9.70	13.93	61.93	0.53	63.48	77.32
3400.00	1.34	284.00	3398.34	-9.88	14.08	61.38	0.36	62.98	77.08
3425.00	1.41	281.62	3423.34	-10.05	14.21	60.80	0.37	62.44	76.84
3450.00	1.36	278.00	3448.33	-10.20	14.32	60.20	0.40	61.88	76.62
3475.00	1.29	278.62	3473.32	-10.32	14.40	59.63	0.28	61.35	76.43
3500.00	1.35	281.50	3498.32	-10.46	14.50	59.07	0.36	60.82	76.21
3525.00	1.43	275.05	3523.31	-10.59	14.59	58.47	0.70	60.26	75.99
3550.00	1.37	270.49	3548.30	-10.66	14.62	57.86	0.50	59.67	75.82
3575.00	1.16	273.92	3573.29	-10.71	14.64	57.30	0.93	59.14	75.67
3600.00	1.38	281.19	3598.29	-10.83	14.71	56.76	1.09	58.63	75.47
3625.00	1.37	275.35	3623.28	-10.95	14.80	56.17	0.56	58.08	75.24
3650.00	1.40	268.02	3648.27	-11.01	14.81	55.56	0.72	57.50	75.07
3675.00	1.30	265.28	3673.27	-11.02	14.78	54.98	0.47	56.93	74.95
3700.00	1.21	268.94	3698.26	-11.03	14.75	54.43	0.47	56.39	74.83
3725.00	1.18	270.12	3723.26	-11.06	14.75	53.91	0.17	55.89	74.70
3750.00	1.20	269.69	3748.25	-11.09	14.75	53.39	0.10	55.39	74.56
3775.00	1.14	264.06	3773.25	-11.10	14.72	52.88	0.52	54.89	74.44
3800.00	1.17	261.40	3798.24	-11.07	14.66	52.38	0.24	54.39	74.37
3825.00	1.24	262.64	3823.23	-11.03	14.58	51.86	0.32	53.87	74.29
3850.00	1.18	259.25	3848.23	-10.98	14.50	51.34	0.38	53.34	74.23
3875.00	1.09	264.47	3873.22	-10.95	14.43	50.85	0.56	52.85	74.16
3900.00	1.07	267.50	3898.22	-10.95	14.40	50.38	0.24	52.39	74.05
3925.00	1.20	266.75	3923.21	-10.95	14.37	49.88	0.51	51.91	73.93
3950.00	1.17	263.37	3948.21	-10.95	14.33	49.37	0.30	51.40	73.82
3975.00	1.12	256.96	3973.20	-10.89	14.24	48.87	0.56	50.91	73.75
4000.00	0.98	261.86	3998.20	-10.84	14.16	48.43	0.66	50.45	73.70
4025.00	1.16	253.58	4023.20	-10.77	14.06	47.97	0.94	49.99	73.67
4050.00	0.65	315.51	4048.19	-10.82	14.09	47.63	4.11	49.67	73.52

MD	INC	AZIM	TVD	VS	N/S	E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	/100ft	ft	deg
4075.00	0.68	353.52	4073.19	-11.08	14.34	47.51	1.74	49.63	73.21
4100.00	1.12	5.87	4098.19	-11.47	14.73	47.52	1.91	49.75	72.78
4125.00	1.23	6.50	4123.18	-11.97	15.24	47.58	0.47	49.96	72.24
4150.00	1.82	14.48	4148.17	-12.61	15.89	47.71	2.48	50.28	71.58
4175.00	2.32	16.95	4173.16	-13.46	16.76	47.95	2.05	50.80	70.74
4200.00	2.83	17.71	4198.13	-14.51	17.83	48.29	2.01	51.48	69.74
4225.00	2.83	19.50	4223.10	-15.65	19.00	48.68	0.35	52.26	68.68
4250.00	3.54	22.96	4248.06	-16.91	20.29	49.19	2.94	53.21	67.58
4275.00	4.20	27.61	4273.01	-18.38	21.81	49.92	2.90	54.47	66.39
4300.00	4.41	27.66	4297.94	-19.98	23.48	50.79	0.84	55.95	65.19
4325.00	4.77	28.40	4322.86	-21.67	25.24	51.73	1.48	57.56	63.99
4350.00	5.41	32.61	4347.76	-23.50	27.15	52.86	2.94	59.42	62.81
4375.00	6.11	34.82	4372.63	-25.48	29.23	54.25	2.94	61.62	61.68
4400.00	6.26	35.19	4397.49	-27.58	31.44	55.79	0.64	64.04	60.60
4425.00	6.39	35.21	4422.33	-29.72	33.69	57.38	0.52	66.54	59.58
4450.00	6.96	34.19	4447.16	-31.99	36.08	59.04	2.31	69.19	58.57
4475.00	7.19	35.03	4471.97	-34.40	38.61	60.79	1.04	72.01	57.58
4500.00	7.28	35.25	4496.77	-36.85	41.19	62.60	0.37	74.93	56.66
4525.00	7.67	37.93	4521.56	-39.32	43.80	64.54	2.08	78.00	55.84
4550.00	8.13	41.74	4546.32	-41.80	46.43	66.74	2.79	81.30	55.17
4575.00	8.26	44.84	4571.07	-44.22	49.03	69.18	1.84	84.79	54.68
4600.00	8.49	44.78	4595.80	-46.62	51.61	71.75	0.95	88.38	54.27
4625.00	8.46	45.82	4620.53	-49.03	54.20	74.37	0.64	92.02	53.92
4650.00	8.56	51.35	4645.25	-51.28	56.64	77.14	3.30	95.70	53.71
4675.00	8.66	56.15	4669.97	-53.28	58.85	80.16	2.90	99.44	53.71
4700.00	8.56	58.09	4694.69	-55.09	60.89	83.30	1.23	103.18	53.84
4725.00	8.54	62.28	4719.41	-56.72	62.73	86.52	2.50	106.87	54.06
4750.00	8.41	66.19	4744.14	-58.09	64.33	89.84	2.36	110.50	54.39
4775.00	8.42	66.70	4768.87	-59.32	65.80	93.19	0.30	114.08	54.78
4800.00	8.34	66.97	4793.61	-60.53	67.23	96.54	0.35	117.64	55.15
4825.00	8.25	67.83	4818.34	-61.68	68.62	99.87	0.62	121.17	55.51
4850.00	8.19	68.32	4843.09	-62.79	69.95	103.19	0.38	124.66	55.87

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	8.24	68.88	4867.83	-63.86	71.25	106.51	0.40	128.15	56.22
4900.00	8.16	67.96	4892.57	-64.95	72.57	109.83	0.62	131.64	56.55
4925.00	8.03	68.28	4917.33	-66.04	73.88	113.10	0.55	135.09	56.85
4950.00	8.00	68.15	4942.08	-67.11	75.17	116.34	0.14	138.51	57.13
4975.00	7.70	67.12	4966.85	-68.19	76.47	119.49	1.34	141.87	57.38
5000.00	7.59	67.29	4991.62	-69.27	77.76	122.56	0.45	145.15	57.61
5025.00	7.58	67.92	5016.41	-70.31	79.02	125.61	0.33	148.40	57.83
5050.00	7.77	67.76	5041.18	-71.36	80.28	128.70	0.75	151.69	58.05
5075.00	7.73	67.12	5065.95	-72.44	81.57	131.81	0.39	155.01	58.25
5100.00	8.04	69.10	5090.72	-73.50	82.85	135.00	1.66	158.39	58.46
5125.00	8.49	73.87	5115.46	-74.40	83.98	138.40	3.28	161.89	58.75
5150.00	8.79	74.73	5140.17	-75.17	85.00	142.02	1.31	165.51	59.10
5175.00	8.98	74.83	5164.87	-75.93	86.01	145.75	0.77	169.23	59.45
5200.00	8.70	75.30	5189.58	-76.66	87.00	149.46	1.17	172.94	59.80
5225.00	8.93	75.39	5214.28	-77.38	87.97	153.16	0.91	176.63	60.13
5250.00	8.96	74.52	5238.98	-78.13	88.98	156.92	0.55	180.39	60.44
5275.00	8.92	74.91	5263.67	-78.90	90.00	160.66	0.28	184.16	60.74
5300.00	9.35	75.03	5288.36	-79.66	91.03	164.50	1.71	188.01	61.04
5325.00	10.08	73.90	5313.00	-80.52	92.17	168.56	3.03	192.11	61.33
5350.00	10.05	73.85	5337.61	-81.44	93.38	172.76	0.12	196.38	61.61
5375.00	10.16	74.61	5362.22	-82.35	94.57	176.98	0.68	200.67	61.88
5400.00	10.09	74.34	5386.84	-83.23	95.75	181.22	0.34	204.96	62.15
5425.00	9.77	73.20	5411.46	-84.15	96.95	185.36	1.50	209.18	62.39
5450.00	9.62	73.05	5436.10	-85.10	98.17	189.39	0.60	213.32	62.60
5475.00	9.49	73.54	5460.76	-86.02	99.37	193.36	0.63	217.40	62.80
5500.00	9.51	74.08	5485.41	-86.90	100.52	197.32	0.37	221.45	63.01
5525.00	9.37	74.41	5510.08	-87.74	101.63	201.27	0.60	225.47	63.21
5550.00	9.07	75.15	5534.75	-88.53	102.68	205.13	1.27	229.40	63.41
5575.00	8.97	75.78	5559.44	-89.25	103.67	208.93	0.57	233.23	63.61
5600.00	8.93	75.10	5584.14	-89.97	104.64	212.69	0.44	237.04	63.80
5625.00	8.67	75.85	5608.85	-90.68	105.60	216.39	1.16	240.78	63.99
5650.00	8.43	76.24	5633.57	-91.33	106.50	220.00	0.99	244.42	64.17

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	8.28	76.35	5658.30	-91.95	107.36	223.53	0.59	247.97	64.35
5700.00	8.12	76.23	5683.05	-92.56	108.20	226.99	0.63	251.46	64.51
5725.00	7.99	76.53	5707.80	-93.15	109.03	230.39	0.58	254.89	64.68
5750.00	7.87	76.01	5732.56	-93.74	109.85	233.74	0.55	258.27	64.83
5775.00	8.05	72.79	5757.32	-94.44	110.78	237.08	1.93	261.68	64.95
5800.00	8.35	69.92	5782.06	-95.35	111.92	240.46	2.03	265.23	65.04
5825.00	8.38	69.38	5806.80	-96.38	113.19	243.87	0.33	268.85	65.10
5850.00	8.31	68.60	5831.53	-97.45	114.49	247.25	0.53	272.47	65.15
5875.00	8.17	68.87	5856.28	-98.52	115.78	250.59	0.58	276.04	65.20
5900.00	7.82	69.07	5881.03	-99.54	117.03	253.83	1.38	279.51	65.25
5925.00	7.47	68.30	5905.81	-100.54	118.24	256.93	1.46	282.83	65.29
5950.00	7.59	64.82	5930.60	-101.63	119.54	259.94	1.88	286.11	65.30
5975.00	8.02	59.88	5955.36	-103.00	121.12	262.94	3.20	289.50	65.27
6000.00	8.17	57.56	5980.12	-104.62	122.95	265.95	1.43	292.99	65.19
6025.00	7.77	55.91	6004.87	-106.32	124.85	268.85	1.83	296.42	65.09
6050.00	7.24	54.68	6029.66	-107.99	126.71	271.53	2.23	299.64	64.98
6075.00	6.70	52.67	6054.47	-109.62	128.50	273.98	2.36	302.61	64.87
6100.00	6.32	52.49	6079.31	-111.19	130.22	276.23	1.51	305.38	64.76
6125.00	6.10	51.59	6104.17	-112.70	131.89	278.36	0.98	308.02	64.65
6150.00	6.21	48.95	6129.02	-114.27	133.60	280.42	1.22	310.62	64.53
6175.00	6.43	47.28	6153.87	-115.96	135.44	282.47	1.16	313.26	64.38
6200.00	6.70	46.18	6178.71	-117.78	137.40	284.55	1.18	315.99	64.23
6225.00	6.87	47.25	6203.53	-119.65	139.42	286.70	0.83	318.80	64.07
6250.00	6.85	48.42	6228.35	-121.50	141.43	288.91	0.57	321.67	63.92
6275.00	6.69	47.51	6253.18	-123.32	143.40	291.10	0.75	324.51	63.77
6300.00	6.81	45.90	6278.01	-125.19	145.42	293.24	0.88	327.32	63.62
6325.00	7.06	45.08	6302.82	-127.15	147.53	295.39	1.07	330.18	63.46
6350.00	7.72	46.37	6327.61	-129.23	149.78	297.69	2.76	333.25	63.29
6375.00	8.96	48.15	6352.35	-131.51	152.23	300.36	5.05	336.74	63.12
6400.00	9.17	49.15	6377.04	-133.90	154.84	303.32	1.05	340.55	62.96
6425.00	9.14	51.25	6401.72	-136.23	157.38	306.37	1.34	344.43	62.81
6450.00	8.81	55.60	6426.41	-138.34	159.71	309.50	3.03	348.28	62.71

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	8.09	59.39	6451.14	-140.10	161.68	312.60	3.63	351.94	62.65
6500.00	7.94	60.62	6475.90	-141.64	163.43	315.62	0.91	355.42	62.62
6525.00	7.65	61.81	6500.67	-143.07	165.06	318.59	1.34	358.81	62.61
6550.00	8.47	62.07	6525.42	-144.50	166.71	321.68	3.28	362.31	62.60
6575.00	9.48	61.13	6550.11	-146.12	168.56	325.11	4.08	366.21	62.59
6600.00	10.02	61.10	6574.75	-147.91	170.61	328.81	2.16	370.44	62.58
6625.00	10.37	62.26	6599.36	-149.74	172.71	332.71	1.65	374.87	62.57
6650.00	10.31	62.37	6623.95	-151.55	174.79	336.68	0.28	379.35	62.56
6675.00	9.94	62.04	6648.56	-153.33	176.84	340.57	1.48	383.75	62.56
6700.00	9.74	62.05	6673.19	-155.07	178.84	344.34	0.82	388.02	62.55
6725.00	10.08	61.03	6697.82	-156.86	180.90	348.13	1.56	392.32	62.54
6750.00	10.94	61.25	6722.40	-158.79	183.10	352.12	3.42	396.88	62.53
6775.00	11.52	59.99	6746.92	-160.88	185.49	356.36	2.51	401.75	62.50
6800.00	11.89	59.80	6771.40	-163.12	188.03	360.75	1.49	406.81	62.47
6825.00	12.38	60.20	6795.84	-165.44	190.66	365.30	1.97	412.06	62.44
6850.00	12.59	60.29	6820.25	-167.79	193.34	369.99	0.85	417.46	62.41
6875.00	12.28	60.35	6844.67	-170.13	196.00	374.67	1.24	422.84	62.38
6900.00	11.93	59.97	6869.11	-172.43	198.61	379.21	1.41	428.08	62.36
6925.00	11.95	59.42	6893.57	-174.73	201.22	383.68	0.45	433.24	62.33
6950.00	11.97	58.87	6918.03	-177.08	203.88	388.13	0.47	438.41	62.29
6975.00	12.07	60.47	6942.48	-179.39	206.51	392.62	1.39	443.62	62.26
7000.00	12.94	62.43	6966.89	-181.65	209.09	397.38	3.84	449.03	62.25
7025.00	13.91	64.13	6991.20	-183.90	211.70	402.56	4.22	454.83	62.26
7050.00	14.31	64.27	7015.45	-186.17	214.35	408.05	1.60	460.92	62.29
7073.00	13.63	65.09	7037.77	-188.20	216.73	413.07	3.10	466.47	62.32