

Survey File: C:\Documents and Settings\PHILIP H\My Documents\SANDIA CFU 31F #1.raw
 Date: Sep 10, 2009
 Time: 8:47
 Description: GYRO MULTISHOT SURVEY
 Location: CRANFIELD FIELD UNIT, WELL CFU 31F # 1
 Customer: SANDIA
 Operator: BRENT LEBLANC
 Comments:
 SCHLUMBERGER WIRELINE TRUCK

 GOODRICH TOOL IDENTIFICATION

Gyroscope Model: DG69-2001-1 #0001
 TX Series: #0002
 EI Series: #0003
 AC Series: #0004
 Accel.Voltage Limits: Xmax= 9.908 ; Xmin=-9.912 ; Ymax= 9.965 ; Ymin=-9.872
 Comments:

 Warm-Up Duration: 0.03 min

-----SURVEY REFERENCE DATA-----

Sight Reference Description:

Survey Reference Point: 0 deg.
 Local Grid Offset: 0 deg.
 Drift Correction Method: Least Squares Drift Linearization
 Computation Method: Minimum Curvature

Target Direction (deg):0

INRUN record set

Measured Depth (feet)	Course Inclin. from Vert.	Course Direction (deg)	Closure Direction (deg)	TrueVert. Depth (feet)	Rectangular Coordinates +N/-S +E/-W	Dogleg Severity °/100 f	Closure Distance (feet)	Vertic Sectio (feet)
100.00	0.74	299.5	243.56	99.99	-0.43 -0.87	1.30	0.97	-0.4
200.00	0.69	332.3	283.67	199.99	0.42 -1.71	0.40	1.76	0.4
300.00	0.34	72.7	301.19	299.98	1.04 -1.71	0.80	2.00	1.0
400.00	0.77	315.6	310.16	399.98	1.61 -1.90	1.00	2.49	1.6
500.00	0.21	163.1	309.47	499.98	1.91 -2.32	1.00	3.01	1.9
600.00	0.46	359.3	313.27	599.98	2.14 -2.27	0.70	3.12	2.1
700.00	0.78	281.2	312.28	699.97	2.68 -2.94	0.80	3.98	2.7
800.00	1.20	224.7	295.39	799.96	2.06 -4.34	1.00	4.81	2.1
900.00	0.32	142.9	282.56	899.95	1.09 -4.91	1.20	5.03	1.1
1000.00	0.21	161.0	278.45	999.95	0.70 -4.68	0.10	4.73	0.7
1100.00	0.98	252.5	272.77	1099.95	0.26 -5.44	1.00	5.45	0.3
1200.00	0.94	248.9	267.63	1199.93	-0.29 -7.03	0.10	7.03	-0.3
1300.00	1.25	203.3	259.09	1299.91	-1.58 -8.22	0.90	8.37	-1.6
1400.00	0.62	249.9	253.19	1399.90	-2.77 -9.16	0.90	9.57	-2.8
1500.00	1.47	217.7	249.21	1499.89	-3.97 -10.45	1.00	11.18	-4.0
1600.00	0.96	211.0	243.95	1599.86	-5.71 -11.67	0.50	12.99	-5.7
1700.00	2.20	240.1	241.80	1699.82	-7.38 -13.77	1.40	15.63	-7.4
1800.00	2.44	221.7	239.49	1799.74	-9.93 -16.85	0.80	19.56	-9.9
1900.00	1.73	242.5	238.07	1899.68	-12.22 -19.61	1.00	23.11	-12.2
2000.00	1.63	248.2	238.88	1999.63	-13.45 -22.27	0.20	26.02	-13.4
2100.00	1.72	220.8	238.41	2099.59	-15.11 -24.57	0.80	28.85	-15.1
2200.00	0.86	246.2	237.76	2199.57	-16.55 -26.24	1.00	31.03	-16.6
2300.00	0.48	268.0	238.34	2299.56	-16.87 -27.35	0.50	32.14	-16.9
2400.00	1.16	244.4	238.88	2399.55	-17.32 -28.68	0.70	33.51	-17.3
2500.00	0.82	201.6	238.33	2499.54	-18.42 -29.86	0.80	35.08	-18.4
2600.00	0.52	275.6	238.09	2599.53	-19.04 -30.57	0.80	36.02	-19.0
2700.00	0.78	256.5	238.85	2699.52	-19.15 -31.69	0.30	37.03	-19.2
2800.00	0.81	200.8	238.50	2799.52	-19.98 -32.60	0.70	38.23	-20.0
2900.00	0.34	302.0	238.26	2899.51	-20.48 -33.11	0.90	38.93	-20.5
3000.00	0.75	217.9	238.32	2999.51	-20.84 -33.77	0.80	39.68	-20.8

3100.00	0.20	145.6	237.75	3099.51	-21.50	-34.07	0.70	40.29	-21.5
3200.00	0.78	248.8	237.69	3199.50	-21.89	-34.61	0.80	40.95	-21.9
3300.00	0.59	186.4	237.32	3299.50	-22.64	-35.30	0.70	41.94	-22.6
3400.00	0.25	48.0	236.83	3399.50	-23.00	-35.19	0.80	42.04	-23.0
3500.00	0.48	318.4	237.45	3499.49	-22.54	-35.31	0.50	41.89	-22.5
3600.00	0.75	264.8	238.41	3599.49	-22.29	-36.24	0.60	42.54	-22.3
3700.00	0.62	210.8	238.46	3699.48	-22.81	-37.17	0.60	43.61	-22.8
3800.00	0.33	339.5	238.50	3799.48	-23.01	-37.54	0.90	44.04	-23.0
3900.00	0.64	256.2	239.07	3899.48	-22.88	-38.19	0.70	44.52	-22.9
4000.00	0.35	98.8	239.04	3999.48	-23.06	-38.43	1.00	44.82	-23.1
4100.00	0.52	27.0	239.10	4099.47	-22.70	-37.92	0.50	44.20	-22.7
4200.00	0.39	127.5	239.00	4199.47	-22.50	-37.45	0.70	43.69	-22.5
4300.00	0.77	49.8	238.72	4299.47	-22.27	-36.66	0.80	42.90	-22.3
4400.00	0.22	147.3	238.60	4399.47	-22.00	-36.04	0.80	42.22	-22.0
4500.00	0.59	118.7	237.74	4499.46	-22.40	-35.49	0.40	41.97	-22.4
4600.00	0.39	6.8	237.48	4599.46	-22.31	-35.00	0.80	41.50	-22.3
4700.00	0.60	127.8	237.16	4699.46	-22.29	-34.55	0.90	41.11	-22.3
4800.00	0.50	7.2	236.94	4799.46	-22.18	-34.08	1.00	40.66	-22.2
4900.00	0.22	203.4	237.26	4899.46	-21.92	-34.10	0.70	40.54	-21.9
5000.00	0.72	129.3	236.27	4999.45	-22.50	-33.69	0.70	40.51	-22.5
5100.00	0.50	70.2	235.26	5099.45	-22.74	-32.80	0.60	39.91	-22.7
5200.00	0.74	181.7	234.36	5199.44	-23.24	-32.40	1.00	39.87	-23.2
5300.00	0.30	50.7	233.65	5299.44	-23.71	-32.22	1.00	40.01	-23.7
5400.00	0.67	224.5	233.54	5399.44	-23.97	-32.43	1.00	40.32	-24.0
5500.00	0.14	16.1	233.51	5499.44	-24.26	-32.81	0.80	40.81	-24.3
5600.00	0.68	246.0	233.80	5599.44	-24.38	-33.31	0.80	41.29	-24.4
5700.00	0.58	177.4	233.39	5699.43	-25.13	-33.83	0.70	42.15	-25.1
5800.00	0.16	100.9	232.68	5799.43	-25.66	-33.67	0.60	42.34	-25.7
5900.00	0.51	265.7	232.87	5899.43	-25.72	-33.97	0.70	42.61	-25.7
6000.00	0.37	26.9	233.38	5999.43	-25.47	-34.27	0.80	42.70	-25.5
6100.00	0.21	17.6	233.72	6099.43	-25.02	-34.07	0.20	42.27	-25.0
6200.00	0.62	260.9	234.19	6199.42	-24.93	-34.55	0.70	42.60	-24.9
6300.00	0.54	185.7	234.04	6299.42	-25.48	-35.13	0.70	43.40	-25.5
6400.00	0.20	18.4	233.70	6399.42	-25.80	-35.12	0.70	43.58	-25.8
6500.00	0.64	243.7	233.96	6499.42	-25.88	-35.56	0.80	43.98	-25.9
6600.00	0.39	32.8	234.24	6599.41	-25.84	-35.88	1.00	44.22	-25.8
6700.00	0.40	191.7	234.09	6699.41	-25.90	-35.77	0.80	44.16	-25.9
6800.00	0.76	9.0	234.40	6799.41	-25.58	-35.73	1.20	43.95	-25.6
6900.00	0.28	76.3	234.91	6899.41	-24.87	-35.39	0.70	43.26	-24.9
7000.00	1.22	25.1	235.50	6999.40	-23.85	-34.70	1.10	42.11	-23.9
7100.00	0.93	60.4	236.16	7099.38	-22.49	-33.55	0.70	40.39	-22.5
7200.00	0.41	314.8	236.59	7199.38	-21.84	-33.11	1.10	39.66	-21.8
7300.00	1.26	344.1	238.63	7299.37	-20.52	-33.66	0.90	39.43	-20.5
7400.00	0.77	315.5	241.14	7399.35	-18.98	-34.44	0.70	39.32	-19.0
7500.00	1.68	284.3	243.47	7499.33	-18.14	-36.33	1.10	40.61	-18.1
7600.00	1.51	304.9	246.32	7599.29	-17.03	-38.83	0.60	42.40	-17.0
7700.00	0.67	341.3	248.59	7699.27	-15.72	-40.09	1.00	43.07	-15.7
7800.00	0.60	324.4	250.04	7799.27	-14.74	-40.59	0.20	43.18	-14.7
7900.00	1.90	319.3	252.72	7899.24	-13.06	-41.98	1.30	43.96	-13.1
8000.00	2.55	320.6	257.24	7999.16	-10.08	-44.47	0.70	45.60	-10.1
8100.00	2.10	307.4	261.30	8099.08	-7.24	-47.34	0.70	47.89	-7.2
8200.00	2.15	288.0	263.74	8199.01	-5.55	-50.57	0.70	50.88	-5.5
8300.00	2.47	283.2	265.30	8299.93	-4.48	-54.46	0.40	54.64	-4.5
8400.00	2.38	279.3	266.44	8399.84	-3.65	-58.61	0.20	58.72	-3.6
8500.00	2.28	266.5	266.86	8499.76	-3.44	-62.65	0.50	62.74	-3.4
8600.00	1.83	256.2	266.59	8599.70	-3.94	-66.18	0.60	66.30	-3.9
8700.00	1.76	248.6	265.96	8699.65	-4.88	-69.16	0.20	69.33	-4.9
8800.00	1.62	272.1	265.72	8799.61	-5.39	-72.00	0.70	72.21	-5.4
8900.00	1.52	274.2	265.99	8899.57	-5.24	-74.74	0.10	74.92	-5.2
9000.00	1.43	272.3	266.23	8999.54	-5.09	-77.31	0.10	77.48	-5.1
9100.00	1.39	276.4	266.48	9099.51	-4.91	-79.76	0.10	79.91	-4.9
9200.00	1.14	255.5	266.49	9199.48	-5.02	-81.93	0.50	82.08	-5.0
9300.00	1.04	244.5	266.13	9299.46	-5.66	-83.71	0.20	83.90	-5.7

					+N/-S	+E/-W			
9400.00	1.28	247.0	265.67	9398.44	-6.49	-85.55	0.20	85.80	-6.5
9500.00	1.16	249.0	265.24	9498.42	-7.28	-87.52	0.10	87.83	-7.3
9600.00	1.07	241.6	264.82	9598.40	-8.09	-89.29	0.20	89.66	-8.1
9700.00	0.42	232.7	264.46	9698.39	-8.76	-90.40	0.70	90.83	-8.8
9800.00	0.30	292.6	264.42	9798.39	-8.88	-90.94	0.40	91.37	-8.9
9900.00	0.82	308.2	264.81	9898.39	-8.34	-91.74	0.50	92.12	-8.3
10000.00	1.03	260.8	265.07	9998.38	-8.04	-93.20	0.80	93.54	-8.0
10100.00	1.02	238.5	264.79	10098.36	-8.65	-94.85	0.40	95.24	-8.7
10200.00	0.55	239.1	264.43	10198.35	-9.36	-96.02	0.50	96.47	-9.4
10300.00	0.71	276.2	264.38	10298.34	-9.54	-97.05	0.40	97.51	-9.5
10400.00	1.70	273.1	264.59	10398.32	-9.40	-99.14	1.00	99.59	-9.4
10500.00	1.78	244.7	264.41	10498.28	-9.98	-102.03	0.90	102.52	-10.0
10600.00	1.20	242.1	263.91	10598.24	-11.14	-104.36	0.60	104.95	-11.1
10677.00	1.14	250.1	263.65	10675.23	-11.78	-105.79	0.20	106.45	-11.8

Bottom:

True Vertical Depth 10675.23feet

Closure Distance 106.4 feet

Closure Direction 263.6 deg.

Course Direction 250.1 deg.