

Results of Directional Survey

API number:	30-025-40833		
OGRID:		Operator:	COG OPERATING LLC
		Property:	HAUMEA STATE # 2H

surface	ULSTR:	B	36	T	19S	R	35E
				330	FNL	1980	FEL

BH Loc	ULSTR:	O	36	T	19S	R	35E
14305	MD	10043.3	TVD	357	FSL	1937	FEL
				4923	FNL		

Top Perf/OH	ULSTR:	B	36	T	19S	R	35E
10126	MD	9922.8	TVD	802	FNL	1879	FEL

Bot Perf/OH	ULSTR:	O	36	T	19S	R	35E
14210	MD	10031.4	TVD	405	FSL	1943	FEL
				4875	FNL		

	MD	N/S	E/W	VD
	10094	-441.49	99.61	9912
TOP PERFS/OH	10126	-471.58	100.84	9922.78
	10126	-471.58	100.84	9922.78
	14131	-4466.23	32.33	10012.04
BOT PERFS/OH	14210	-4545.06	37.38	10031.37
	14258	-4592.96	40.45	10043.12

NEXT TO LAST	14258	-4592.96	40.45	10043.12
LAST READING	14305	-4592.96	43.49	10043.30
TD	14305	-4592.96	43.49	10043.30

Surface Location	330	FN	1980	FE
Projected BHL	4923	FN	1937	FE
Location of				
Top Perfs/OH	802	FN	1879	FE
Bottom Perfs/OH	4875	FN	1943	FE

SUMMARY of Subsurface Locations

Surface Location	B-36-19S-35E	330	FN	1980	FE	Vert. Depth
Top Perfs/OH	B-36-19S-35E	802	FN	1879	FE	9922.78
Bottom Perfs/OH	O-36-19S-35E	4875	FN	1943	FE	10031.37
Projected TD	O-36-19S-35E	4923	FN	1937	FE	10043.30

MAY 23 2013



McVAY DRILLING COMPANY
P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

HOBBS OCD

MAY 13 2013

COG OPERATING, L
RECEIVED

FEB 21 2013

ARTESIA WEST

Well Name and Num: Haumea 36 State 2H
Location: Sec. 36, T19S, R35E
Operator: COG
Drilling Contractor: McVay Drilling Company

RECEIVED

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

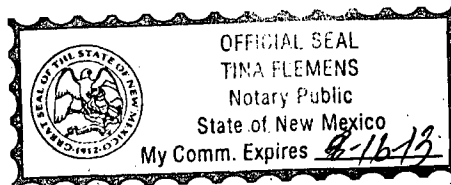
Degrees @	Depth	Degrees @	Depth	Degrees @	Depth	Degrees @	Depth
0.03	273	1.40	6042	16.50	9490	88.55	13862
0.20	617	0.79	6613	32.00	9616	88.50	14038
0.50	937	0.97	5995	42.30	9711	89.80	14285
0.40	1223	1.32	7449	48.20	9839		
0.80	1560	0.70	8004	48.80	9866		
0.90	1932	2.20	8512	51.00	9962		
2.30	2340	2.20	8829	64.96	9998		
1.80	2942	1.41	9053	73.25	10126		
3.10	3195	2.29	9438	83.80	10189		
2.10	3419	1.85	9694	89.78	10665		
2.30	3771	2.10	9949	89.69	11139		
3.10	4026	3.87	10171	55.37	11525		
3.50	4153	2.64	10330	85.82	11906		
3.43	4205	3.43	10425	88.20	12370		
1.06	4553	2.46	10621	93.30	12740		
0.70	4711	2.73	11186	89.96	12927		
0.70	5071	6.30	9395	87.67	13297		

SUR: B - 36-19s-35e, 330/N & 1980/E
BHL: O - 36-19s-35e, 4923/N & 1937/E
API # 30-025-40833

By: Hubert Crowl

Subscribed and sworn to before me this 15th day of February, 2013

Tina FLEMENS
Notary Public, Lea County, New Mexico





A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

HOBBS OCD

MAY 13 2013

February 11, 2013

RECEIVED

COG Operating LLC (Concho)
One Concho Center
600 W. Illinois Avenue
Midland, TX 79701

Attn: Kanicia Castillo

SUR: B - 36-19s-35e, 330/N & 1980/E
BHL: O - 36-19s-35e, 4923/N & 1937/E
API # 30-025-40833

Re: **Haumea 36 State No 002H**

Please find enclosed a copy of the survey from 0' to 9,585' ran on the above referenced well.

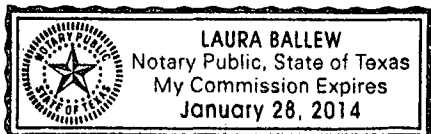
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 11th day of February
A.D., 2013, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas

Company: COG Operating LLC (Concho)
Lease/Well: Haumea 36 State/No 002H



Rig Name: McVay #7
State/County: New Mexico/Lea
Latitude: 32.62, Longitude: -103.41
GRID North is 0.50 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB=18.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ... state com #2h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 2/11/2013 / 14:13

Vaughn Energy Services
Midland, Texas
432-563-5444

Surveyor: Logan Henry
Haumea 36 State No 002H / API 30-025-40833

HOBBS OCD

MAY 13 2013

RECEIVED

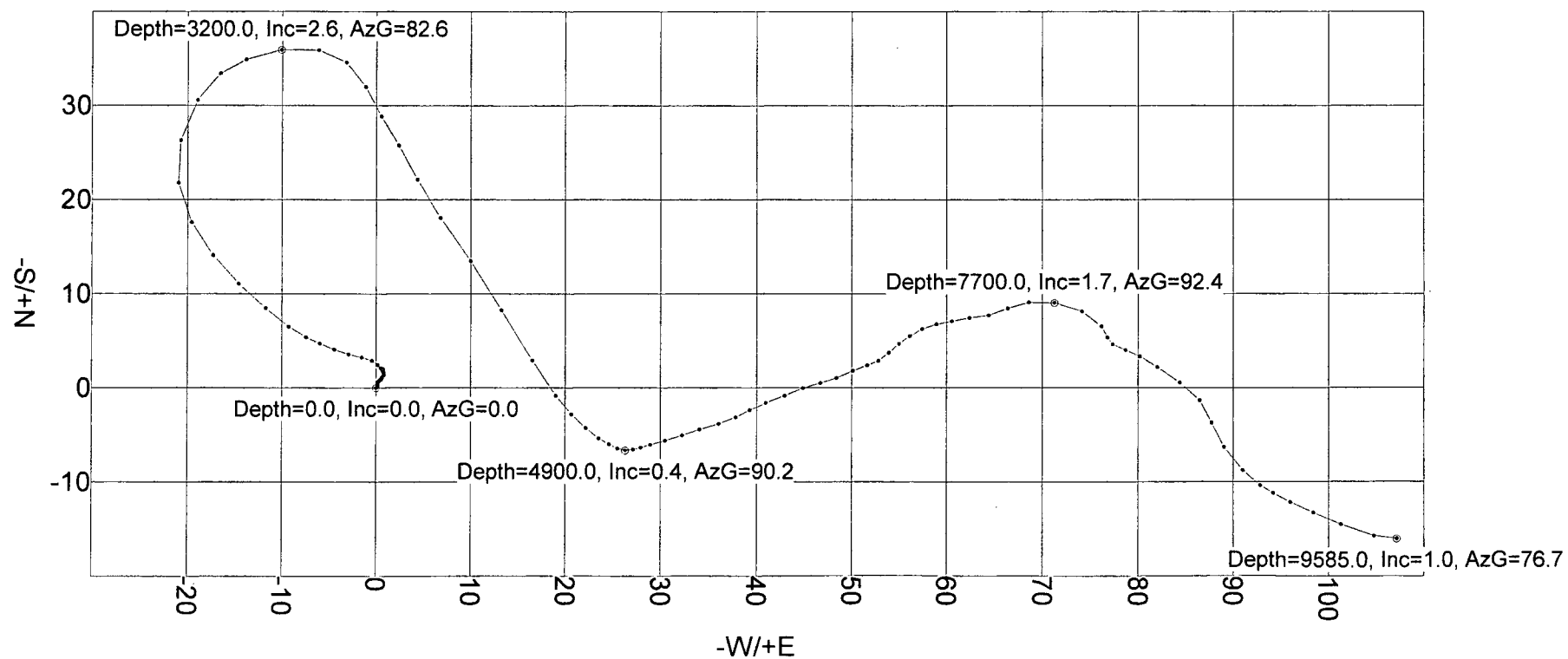
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.15	49.65	100.00	0.08	0.10	0.08	0.13	49.65	0.15
200.00	0.13	6.56	200.00	0.28	0.21	0.28	0.35	36.86	0.10
300.00	0.05	300.83	300.00	0.42	0.19	0.42	0.46	23.98	0.12
400.00	0.10	6.04	400.00	0.53	0.16	0.53	0.55	16.58	0.09
500.00	0.13	48.05	500.00	0.69	0.25	0.69	0.73	20.05	0.09
600.00	0.04	50.74	600.00	0.79	0.37	0.79	0.87	24.89	0.09
700.00	0.12	53.85	700.00	0.87	0.48	0.87	1.00	28.78	0.08
800.00	0.20	23.31	800.00	1.10	0.63	1.10	1.27	30.05	0.11
900.00	0.18	37.19	900.00	1.38	0.80	1.38	1.59	30.02	0.05
1000.00	0.17	327.82	1000.00	1.63	0.81	1.63	1.82	26.56	0.20
1100.00	0.14	335.07	1100.00	1.87	0.68	1.87	1.99	20.09	0.03
1200.00	0.09	58.26	1200.00	2.02	0.70	2.02	2.14	18.98	0.16
1300.00	0.07	233.85	1300.00	2.03	0.71	2.03	2.15	19.39	0.16
1400.00	0.22	306.75	1400.00	2.11	0.51	2.11	2.17	13.59	0.21
1500.00	0.32	323.95	1500.00	2.45	0.19	2.45	2.46	4.45	0.12
1600.00	0.58	295.31	1599.99	2.89	-0.43	2.89	2.92	351.59	0.33
1700.00	0.74	282.63	1699.99	3.25	-1.51	3.25	3.58	335.02	0.22
1800.00	0.90	283.92	1799.98	3.58	-2.90	3.58	4.60	320.94	0.16

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.97	292.77	1899.96	4.09	-4.44	4.09	6.04	312.64	0.16
2000.00	0.92	291.13	1999.95	4.71	-5.98	4.71	7.61	308.24	0.06
2100.00	0.93	297.83	2099.94	5.38	-7.45	5.38	9.19	305.85	0.11
2200.00	1.54	304.67	2199.91	6.52	-9.27	6.52	11.33	305.14	0.62
2300.00	2.06	311.58	2299.86	8.48	-11.72	8.48	14.46	305.89	0.57
2400.00	2.39	312.46	2399.79	11.08	-14.60	11.08	18.33	307.20	0.33
2500.00	2.27	324.23	2499.70	14.10	-17.30	14.10	22.32	309.17	0.49
2600.00	2.52	329.24	2599.62	17.59	-19.58	17.59	26.32	311.93	0.33
2700.00	2.66	353.11	2699.52	21.78	-20.98	21.78	30.25	316.08	1.08
2800.00	2.61	13.10	2799.41	26.31	-20.74	26.31	33.51	321.75	0.92
2900.00	2.75	30.78	2899.31	30.59	-19.00	30.59	36.01	328.16	0.84
3000.00	1.63	58.04	2999.23	33.41	-16.56	33.41	37.29	333.63	1.50
3100.00	1.92	64.45	3099.19	34.89	-13.84	34.89	37.53	338.36	0.36
3200.00	2.59	82.56	3199.11	35.91	-10.09	35.91	37.30	344.31	0.97
3300.00	1.98	100.09	3299.03	35.89	-6.15	35.89	36.42	350.28	0.92
3400.00	1.84	128.34	3398.98	34.59	-3.18	34.59	34.74	354.74	0.94
3500.00	2.07	153.61	3498.92	31.98	-1.12	31.98	32.00	357.99	0.88
3600.00	1.96	150.22	3598.86	28.88	0.53	28.88	28.89	1.05	0.16
3700.00	2.18	148.74	3698.79	25.76	2.37	25.76	25.87	5.26	0.23
3800.00	2.54	153.60	3798.71	22.15	4.35	22.15	22.57	11.10	0.41
3900.00	2.96	144.35	3898.59	18.07	6.84	18.07	19.32	20.72	0.60
4000.00	3.39	146.77	3998.44	13.50	9.96	13.50	16.77	36.43	0.46
4100.00	3.69	148.75	4098.25	8.27	13.25	8.27	15.62	58.03	0.32
4200.00	3.50	148.41	4198.05	2.92	16.52	2.92	16.77	79.97	0.20
4300.00	1.69	142.97	4297.95	-0.85	19.00	-0.85	19.02	92.57	1.82
4400.00	1.25	135.85	4397.91	-2.81	20.65	-2.81	20.84	97.75	0.47
4500.00	1.15	132.94	4497.89	-4.27	22.14	-4.27	22.55	100.92	0.12
4600.00	0.87	121.83	4597.88	-5.36	23.52	-5.36	24.12	102.83	0.34
4700.00	0.56	117.51	4697.87	-5.98	24.60	-5.98	25.32	103.67	0.32
4800.00	0.55	116.27	4797.86	-6.42	25.47	-6.42	26.27	104.16	0.01
4900.00	0.44	90.19	4897.86	-6.64	26.29	-6.64	27.11	104.18	0.25
5000.00	0.53	77.96	4997.86	-6.54	27.12	-6.54	27.90	103.57	0.14
5100.00	0.41	70.21	5097.85	-6.33	27.91	-6.33	28.62	102.77	0.13
5200.00	0.79	75.89	5197.85	-6.04	28.92	-6.04	29.54	101.79	0.38
5300.00	1.05	72.74	5297.83	-5.60	30.46	-5.60	30.97	100.41	0.26
5400.00	1.09	71.84	5397.82	-5.03	32.23	-5.03	32.62	98.87	0.04
5500.00	1.11	71.46	5497.80	-4.43	34.06	-4.43	34.34	97.40	0.03
5600.00	1.25	74.01	5597.78	-3.82	36.03	-3.82	36.23	96.04	0.15
5700.00	0.94	62.25	5697.76	-3.13	37.81	-3.13	37.94	94.73	0.38

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.94	62.21	5797.74	-2.37	39.26	-2.37	39.33	93.45	0.00
5900.00	1.21	70.81	5897.73	-1.64	40.99	-1.64	41.02	92.28	0.31
6000.00	1.22	65.43	5997.70	-0.84	42.96	-0.84	42.96	91.13	0.11
6100.00	1.17	68.99	6097.68	-0.03	44.88	-0.03	44.88	90.04	0.09
6200.00	1.00	79.17	6197.66	0.50	46.70	0.50	46.70	89.39	0.26
6300.00	1.08	65.05	6297.65	1.06	48.41	1.06	48.42	88.75	0.27
6400.00	1.06	66.62	6397.63	1.82	50.11	1.82	50.15	87.92	0.03
6500.00	0.81	73.73	6497.62	2.39	51.64	2.39	51.70	87.35	0.28
6600.00	0.66	59.65	6597.61	2.88	52.82	2.88	52.89	86.88	0.23
6700.00	0.92	45.52	6697.60	3.74	53.89	3.74	54.02	86.03	0.33
6800.00	0.74	52.33	6797.59	4.69	54.97	4.69	55.17	85.12	0.21
6900.00	0.88	57.29	6897.58	5.50	56.13	5.50	56.40	84.40	0.16
7000.00	0.87	62.30	6997.57	6.27	57.45	6.27	57.79	83.77	0.08
7100.00	0.93	79.56	7097.56	6.77	58.92	6.77	59.31	83.44	0.28
7200.00	1.00	80.35	7197.54	7.06	60.58	7.06	60.99	83.35	0.08
7300.00	1.14	78.00	7297.52	7.42	62.41	7.42	62.85	83.22	0.15
7400.00	1.18	85.96	7397.50	7.70	64.41	7.70	64.87	83.19	0.16
7500.00	1.32	54.92	7497.48	8.43	66.38	8.43	66.91	82.76	0.68
7600.00	1.44	90.07	7597.45	9.09	68.58	9.09	69.18	82.45	0.84
7700.00	1.65	92.42	7697.42	9.03	71.28	9.03	71.84	82.78	0.22
7800.00	1.88	120.51	7797.37	8.13	74.13	8.13	74.58	83.74	0.89
7900.00	1.15	140.79	7897.34	6.52	76.18	6.52	76.46	85.11	0.89
8000.00	0.46	183.75	7997.33	5.34	76.79	5.34	76.98	86.02	0.88
8100.00	0.76	120.91	8097.32	4.60	77.34	4.60	77.47	86.60	0.69
8200.00	0.93	108.93	8197.31	4.00	78.68	4.00	78.78	87.09	0.24
8300.00	0.96	118.88	8297.30	3.33	80.18	3.33	80.25	87.62	0.17
8400.00	1.51	123.82	8397.27	2.19	82.01	2.19	82.03	88.47	0.56
8500.00	1.81	124.01	8497.23	0.57	84.41	0.57	84.41	89.61	0.30
8600.00	1.46	143.00	8597.19	-1.33	86.49	-1.33	86.50	90.88	0.64
8700.00	1.64	159.71	8697.15	-3.70	87.76	-3.70	87.83	92.41	0.48
8800.00	1.69	147.50	8797.11	-6.29	89.04	-6.29	89.27	94.04	0.36
8900.00	1.98	136.22	8897.06	-8.78	91.03	-8.78	91.45	95.51	0.46
9000.00	0.82	120.58	8997.03	-10.39	92.84	-10.39	93.42	96.38	1.22
9100.00	1.02	121.26	9097.02	-11.21	94.22	-11.21	94.88	96.79	0.21
9200.00	1.31	115.91	9197.00	-12.17	96.01	-12.17	96.78	97.23	0.31
9300.00	1.73	114.09	9296.96	-13.29	98.41	-13.29	99.31	97.69	0.42
9400.00	1.87	112.07	9396.91	-14.52	101.30	-14.52	102.34	98.16	0.16
9500.00	2.32	107.00	9496.85	-15.72	104.75	-15.72	105.93	98.54	0.48
9585.00	1.03	76.73	9581.81	-16.05	107.14	-16.05	108.34	98.52	1.79



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Logan Henry
Haumea 36 State No 002H / API 30-025-40833



Job Number: ☐State/Country: ☐Company: ☐Declination: ☐Lease/Well: ☐Grid: ☐Location: ☐

File name: C:\WINSERVE\NEWFOL~1\HAUMEA.SVY

Rig Name: ☐

Date/Time: 12-Feb-13 / 17:51

RKB: ☐

Curve Name: As Drilled

G.L. or M.S.L.: ☐

SUR: B - 36-19s-35e, 330/N & 1980/E
 BHL: O - 36-19s-35e, 4923/N & 1937/E
 API # 30-025-40833

PATHFINDER

HOBBY

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 179.55
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

MAY 13 2013

RECEIVED

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
Tie in From GYRO									
9300.00	1.73	114.09	9296.96	-13.29	98.41	14.06	99.30	97.69	.00
9332.00	1.76	116.35	9328.95	-13.71	99.29	14.48	100.23	97.86	.23
9364.00	3.08	131.03	9360.92	-14.49	100.38	15.28	101.42	98.21	4.52
9395.00	6.33	158.57	9391.81	-16.63	101.63	17.42	102.98	99.29	12.48
9426.00	10.38	165.01	9422.48	-20.92	102.98	21.72	105.08	101.48	13.39
9458.00	12.40	165.40	9453.84	-27.03	104.59	27.85	108.03	104.49	6.32
9490.00	16.53	169.09	9484.82	-34.82	106.32	35.66	111.88	108.14	13.22
9521.00	20.49	173.13	9514.22	-44.55	107.81	45.39	116.65	112.45	13.42
9552.00	25.15	177.44	9542.78	-56.52	108.75	57.37	122.56	117.46	15.96
9584.00	29.19	180.69	9571.25	-71.12	108.96	71.98	130.12	123.13	13.45
9616.00	32.10	184.29	9598.78	-87.41	108.23	88.26	139.12	128.93	10.75
9647.00	34.91	184.91	9624.62	-104.47	106.85	105.30	149.43	134.35	9.13
9679.00	38.34	184.73	9650.30	-123.49	105.25	124.31	162.25	139.56	10.72
9711.00	42.30	183.85	9674.70	-144.13	103.71	144.94	177.56	144.26	12.50
9743.00	44.67	184.03	9697.91	-166.10	102.19	166.89	195.02	148.40	7.42
9775.00	46.43	187.02	9720.32	-188.83	99.99	189.61	213.67	152.10	8.64
9807.00	47.31	186.23	9742.20	-212.02	97.29	212.78	233.28	155.35	3.29
9839.00	48.28	183.24	9763.70	-235.64	95.34	236.38	254.20	157.97	7.56
9866.00	48.98	181.57	9781.55	-255.89	94.49	256.62	272.78	159.73	5.32
9898.00	49.95	179.46	9802.34	-280.20	94.28	280.93	295.64	161.40	5.86
9930.00	49.77	177.96	9822.97	-304.66	94.83	305.39	319.07	162.71	3.63
9962.00	51.09	177.52	9843.36	-329.30	95.80	330.05	342.96	163.78	4.26
9998.00	54.96	177.35	9865.01	-358.03	97.09	358.78	370.96	164.83	10.76
10030.00	58.30	179.11	9882.61	-384.74	97.91	385.49	397.00	165.72	11.40

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E Distance FT	Direction Deg	Dogleg Severity Deg/100
10062.00	62.43	178.14	9898.43	-412.54	98.58	413.30	424.15	166.56	13.17
10094.00	67.36	177.79	9912.00	-441.49	99.61	442.26	452.58	167.29	15.44
10126.00	73.25	177.52	9922.78	-471.58	100.84	472.35	482.24	167.93	18.42
10157.00	79.32	178.14	9930.13	-501.66	101.98	502.44	511.92	168.51	19.68
10189.00	83.80	179.11	9934.82	-533.29	102.74	534.08	543.10	169.10	14.32
10284.00	86.17	180.51	9943.13	-627.92	103.05	628.71	636.32	170.68	2.89
10379.00	87.93	181.21	9948.01	-722.78	101.63	723.55	729.89	172.00	1.99
10475.00	89.52	182.18	9950.15	-818.71	98.79	819.46	824.65	173.12	1.94
10571.00	89.69	182.01	9950.81	-914.64	95.28	915.36	919.59	174.05	.25
10665.00	89.78	181.92	9951.25	-1008.59	92.05	1009.28	1012.78	174.78	.14
10757.00	89.69	181.92	9951.67	-1100.53	88.97	1101.20	1104.12	175.38	.10
10852.00	90.13	181.65	9951.82	-1195.49	86.01	1196.12	1198.58	175.88	.54
10948.00	90.48	181.48	9951.31	-1291.45	83.39	1292.06	1294.14	176.31	.41
11044.00	89.34	180.78	9951.46	-1387.43	81.50	1388.02	1389.82	176.64	1.39
11139.00	89.69	180.16	9952.27	-1482.42	80.72	1483.01	1484.62	176.88	.75
11236.00	90.13	179.28	9952.42	-1579.42	81.19	1580.01	1581.50	177.06	1.01
11333.00	88.46	178.05	9953.61	-1676.38	83.45	1676.98	1678.45	177.15	2.14
11429.00	88.29	177.61	9956.33	-1772.27	87.09	1772.90	1774.41	177.19	.49
11525.00	88.37	177.08	9959.13	-1868.13	91.53	1868.79	1870.37	177.19	.56
11621.00	88.37	176.38	9961.86	-1963.93	97.00	1964.63	1966.33	177.17	.73
11718.00	87.05	177.52	9965.74	-2060.71	102.16	2061.45	2063.24	177.16	1.80
11812.00	86.17	178.93	9971.30	-2154.50	105.07	2155.26	2157.06	177.21	1.77
11906.00	85.82	181.39	9977.86	-2248.26	104.81	2249.02	2250.70	177.33	2.64
12001.00	85.56	182.88	9985.00	-2342.93	101.28	2343.65	2345.11	177.52	1.59
12093.00	86.00	184.20	9991.77	-2434.50	95.61	2435.17	2436.38	177.75	1.51
12185.00	87.41	185.52	9997.06	-2526.01	87.83	2526.62	2527.54	178.01	2.10
12277.00	87.32	185.43	10001.29	-2617.50	79.06	2618.04	2618.69	178.27	.14
12370.00	88.20	186.58	10004.93	-2709.91	69.34	2710.37	2710.80	178.53	1.56
12464.00	90.40	186.14	10006.07	-2803.32	58.93	2803.70	2803.94	178.80	2.39
12556.00	91.80	186.23	10004.31	-2894.77	49.02	2895.06	2895.18	179.03	1.52
12648.00	92.33	186.05	10000.99	-2986.18	39.19	2986.39	2986.44	179.25	.61
12740.00	93.03	185.61	9996.69	-3077.60	29.85	3077.74	3077.75	179.44	.90
12834.00	91.71	183.50	9992.80	-3171.22	22.39	3171.30	3171.30	179.60	2.65
12927.00	89.96	181.92	9991.45	-3264.10	18.00	3264.14	3264.15	179.68	2.54
13019.00	88.55	181.65	9992.64	-3356.04	15.13	3356.06	3356.08	179.74	1.56
13112.00	89.52	181.13	9994.21	-3449.00	12.88	3448.99	3449.02	179.79	1.18
13205.00	87.05	180.42	9996.99	-3541.94	11.62	3541.92	3541.96	179.81	2.76
13297.00	87.67	179.72	10001.23	-3633.84	11.51	3633.82	3633.86	179.82	1.02
13390.00	85.56	179.72	10006.72	-3726.67	11.96	3726.65	3726.69	179.82	2.27
13482.00	84.77	179.46	10014.48	-3818.34	12.62	3818.33	3818.37	179.81	.90
13574.00	86.70	179.46	10021.32	-3910.08	13.48	3910.07	3910.10	179.80	2.10
13667.00	87.14	179.37	10026.32	-4002.94	14.43	4002.93	4002.97	179.79	.48
13760.00	87.32	178.75	10030.81	-4095.82	15.95	4095.82	4095.85	179.78	.69
13852.00	88.55	178.67	10034.12	-4187.74	18.02	4187.75	4187.77	179.75	1.34
13946.00	87.67	177.08	10037.23	-4281.62	21.51	4281.65	4281.67	179.71	1.93

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
14038.00	88.55	176.56	10040.26	-4373.42	26.61	4373.50	4373.50	179.65	1.11
14131.00	89.25	176.38	10042.04	-4466.23	32.33	4466.34	4466.35	179.59	.78
14258.00	89.78	176.29	10043.12	-4592.96	40.45	4593.14	4593.14	179.50	.42
SLPTB 5.32'L AND 4.28'A									
14305.00	89.78	176.29	10043.30	-4639.86	43.49	4640.06	4640.07	179.46	.00