

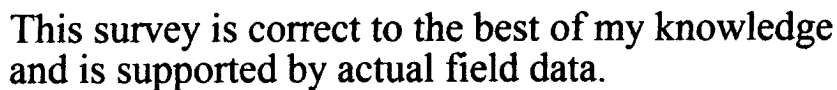


C-19-95-38e

542/W @ 2100/w
30-025-38178

J CLEO THOMPSON

Field: Sawyer
Site: Lea County, NM
Well: JCT 18 Federal #1
Wellpath: VH - Job #32K12061036
Survey: 12/19/06

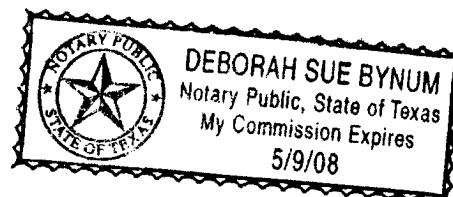


.....*R. Wharf*.....Company Representative

Notorized this date 16th of January, 2007.

Deborah Sue Bynum
Notary Signature

Notary Signature
County of Midland
State of Texas





Scientific Drilling International

Survey Report

Company: J CLEO THOMPSON
Field: Sawyer
Site: Lea County, NM
Well: JCT 18 Federal #1
Wellpath: VH - Job #32K12061036

Date: 01/16/2007 Time: 12:03:41 Page: 1
Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,23.35Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 12/19/06 Start Date: 12/19/2006
KSRG 0'-8865'
Company: Scientific Drilling Internatio Engineer: Gonzales/Sharpe w/GeoGyro
Tool: Keeper;Keeper Gyro Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ChD ft	ChA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.68	176.99	100.00	-0.53	-0.59	0.03	0.68	0.59	176.99
200.00	0.69	170.43	199.99	-1.57	-1.78	0.16	0.08	1.79	174.78
300.00	0.74	179.20	299.98	-2.66	-3.02	0.27	0.12	3.03	174.86
400.00	0.67	194.94	399.98	-3.83	-4.23	0.13	0.21	4.23	178.24
500.00	0.57	210.71	499.97	-4.90	-5.22	-0.27	0.20	5.23	183.01
600.00	0.49	202.22	599.97	-5.82	-6.05	-0.69	0.11	6.08	186.52
700.00	0.43	212.57	699.96	-6.62	-6.76	-1.05	0.10	6.84	188.87
800.00	0.37	240.35	799.96	-7.25	-7.23	-1.54	0.20	7.39	192.00
900.00	0.29	223.44	899.96	-7.75	-7.58	-1.99	0.13	7.83	194.73
1000.00	0.49	215.51	999.96	-8.40	-8.11	-2.41	0.21	8.46	196.58
1100.00	0.55	218.66	1099.95	-9.28	-8.83	-2.96	0.07	9.31	198.54
1200.00	0.69	218.88	1199.95	-10.33	-9.67	-3.64	0.14	10.34	200.62
1300.00	0.74	215.89	1299.94	-11.54	-10.67	-4.40	0.06	11.54	202.40
1400.00	0.76	213.07	1399.93	-12.82	-11.75	-5.14	0.04	12.82	203.62
1500.00	0.72	218.51	1499.92	-14.08	-12.79	-5.89	0.08	14.08	204.72
1600.00	0.71	222.67	1599.91	-15.27	-13.74	-6.70	0.05	15.29	206.00
1700.00	0.84	220.96	1699.90	-16.55	-14.75	-7.60	0.13	16.59	207.27
1800.00	0.83	220.07	1799.89	-17.95	-15.86	-8.55	0.02	18.01	208.33
1900.00	0.64	220.08	1899.89	-19.18	-16.84	-9.37	0.19	19.27	209.10
2000.00	0.46	221.62	1999.88	-20.09	-17.57	-10.00	0.18	20.21	209.65
2100.00	0.23	216.42	2099.88	-20.67	-18.03	-10.39	0.23	20.81	209.95
2200.00	0.15	88.42	2199.88	-20.81	-18.19	-10.37	0.34	20.94	209.70
2300.00	0.30	70.51	2299.88	-20.58	-18.09	-10.00	0.16	20.67	208.92
2400.00	0.29	66.16	2399.88	-20.21	-17.90	-9.52	0.02	20.28	208.00
2500.00	0.29	62.57	2499.87	-19.83	-17.69	-9.06	0.02	19.87	207.13
2600.00	0.33	57.63	2599.87	-19.40	-17.42	-8.59	0.05	19.42	206.27
2700.00	0.37	40.99	2699.87	-18.85	-17.02	-8.14	0.11	18.86	205.56
2800.00	0.29	81.50	2799.87	-18.41	-16.74	-7.68	0.24	18.41	204.64
2900.00	0.32	98.98	2899.87	-18.21	-16.74	-7.15	0.10	18.21	203.13
3000.00	0.33	88.43	2999.87	-18.02	-16.78	-6.59	0.06	18.03	201.44
3100.00	0.31	73.35	3099.87	-17.72	-16.69	-6.04	0.09	17.75	199.89
3200.00	0.35	80.22	3199.86	-17.38	-16.56	-5.48	0.06	17.45	198.31
3300.00	0.40	70.99	3299.86	-16.98	-16.40	-4.85	0.08	17.10	196.47
3400.00	0.35	67.00	3399.86	-16.52	-16.16	-4.24	0.06	16.71	194.69
3500.00	0.41	76.32	3499.86	-16.08	-15.96	-3.61	0.09	16.36	192.74
3600.00	0.46	53.25	3599.85	-15.52	-15.64	-2.94	0.18	15.91	190.65
3700.00	0.50	69.33	3699.85	-14.87	-15.24	-2.21	0.14	15.40	188.25
3800.00	0.51	67.67	3799.85	-14.25	-14.92	-1.39	0.02	14.98	185.32
3900.00	0.47	73.44	3899.84	-13.67	-14.63	-0.59	0.06	14.64	182.29
4000.00	0.45	87.08	3999.84	-13.23	-14.50	0.20	0.11	14.50	179.21
4100.00	0.45	85.87	4099.84	-12.87	-14.45	0.98	0.01	14.48	176.11
4200.00	0.36	77.76	4199.83	-12.51	-14.35	1.68	0.11	14.45	173.31
4300.00	0.16	149.72	4299.83	-12.41	-14.41	2.06	0.35	14.55	171.86
4400.00	0.21	158.88	4399.83	-12.62	-14.70	2.20	0.06	14.86	171.50
4500.00	0.20	160.84	4499.83	-12.88	-15.03	2.32	0.01	15.21	171.23
4600.00	0.16	165.28	4599.83	-13.12	-15.33	2.41	0.04	15.52	171.06
4700.00	0.21	176.51	4699.83	-13.39	-15.65	2.46	0.06	15.84	171.07
4800.00	0.18	188.07	4799.83	-13.71	-15.99	2.45	0.05	16.18	171.30



Scientific Drilling International

Survey Report

Company: J CLEO THOMPSON
 Field: Sawyer
 Site: Lea County, NM
 Well: JCT 18 Federal #1
 Wellpath: VH - Job #32K12061036

Date: 01/16/2007 Time: 12:03:41 Page: 2
 Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: Well (0.00N,0.00E,23.35Azi)
 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.18	213.19	4899.83	-14.02	-16.28	2.34	0.08	16.44	171.82
5000.00	0.23	239.84	4999.83	-14.33	-16.51	2.08	0.11	16.64	172.82
5100.00	0.12	254.59	5099.83	-14.56	-16.64	1.81	0.12	16.74	173.81
5200.00	0.08	3.95	5199.83	-14.56	-16.60	1.71	0.16	16.68	174.12
5300.00	0.13	22.30	5299.83	-14.38	-16.42	1.76	0.06	16.52	173.89
5400.00	0.19	5.52	5399.83	-14.11	-16.15	1.82	0.08	16.25	173.58
5500.00	0.44	354.42	5499.83	-13.61	-15.60	1.80	0.26	15.71	173.44
5600.00	0.54	348.46	5599.82	-12.89	-14.76	1.66	0.11	14.85	173.57
5700.00	0.35	359.81	5699.82	-12.23	-13.99	1.57	0.21	14.08	173.61
5800.00	0.48	7.74	5799.82	-11.54	-13.27	1.62	0.14	13.37	173.03
5900.00	0.60	356.87	5899.81	-10.67	-12.34	1.65	0.16	12.45	172.37
6000.00	0.60	354.44	5999.81	-9.74	-11.29	1.57	0.03	11.40	172.07
6100.00	0.66	0.85	6099.80	-8.75	-10.19	1.53	0.09	10.31	171.46
6200.00	0.67	8.46	6199.80	-7.66	-9.04	1.62	0.09	9.18	169.81
6300.00	0.67	24.91	6299.79	-6.51	-7.93	1.96	0.19	8.17	166.14
6400.00	0.72	36.73	6399.78	-5.31	-6.90	2.58	0.15	7.36	159.50
6500.00	0.67	31.65	6499.77	-4.12	-5.90	3.26	0.08	6.74	151.05
6600.00	0.61	21.65	6599.77	-3.01	-4.90	3.76	0.13	6.18	142.49
6700.00	0.66	2.99	6699.76	-1.94	-3.83	3.99	0.21	5.53	133.85
6800.00	0.54	353.01	6799.76	-0.99	-2.79	3.96	0.16	4.85	125.15
6900.00	0.51	344.59	6899.75	-0.24	-1.89	3.79	0.08	4.24	116.57
7000.00	0.54	344.14	6999.75	0.47	-1.01	3.54	0.03	3.68	105.95
7100.00	0.48	16.62	7099.74	1.26	-0.16	3.53	0.29	3.54	92.55
7200.00	0.58	22.70	7199.74	2.18	0.71	3.85	0.11	3.91	79.53
7300.00	0.50	1.26	7299.74	3.09	1.61	4.05	0.22	4.36	68.28
7400.00	0.53	1.50	7399.73	3.92	2.51	4.07	0.03	4.79	58.33
7500.00	0.51	7.11	7499.73	4.78	3.42	4.14	0.05	5.37	50.47
7600.00	0.47	6.97	7599.72	5.60	4.27	4.25	0.04	6.02	44.87
7700.00	0.40	37.94	7699.72	6.33	4.95	4.51	0.24	6.70	42.35
7800.00	0.33	23.20	7799.72	6.96	5.49	4.84	0.12	7.32	41.40
7900.00	0.49	24.76	7899.72	7.67	6.14	5.13	0.16	8.00	39.88
8000.00	0.47	13.00	7999.71	8.50	6.93	5.40	0.10	8.79	37.94
8100.00	0.46	9.86	8099.71	9.30	7.72	5.56	0.03	9.52	35.76
8200.00	0.78	1.34	8199.70	10.32	8.80	5.65	0.33	10.46	32.69
8300.00	0.83	10.66	8299.69	11.66	10.19	5.80	0.14	11.73	29.63
8400.00	0.97	10.84	8399.68	13.19	11.74	6.09	0.14	13.22	27.43
8500.00	0.77	20.29	8499.67	14.69	13.20	6.48	0.25	14.70	26.16
8600.00	0.92	16.46	8599.66	16.15	14.60	6.94	0.16	16.16	25.44
8700.00	0.66	15.72	8699.65	17.52	15.92	7.33	0.26	17.53	24.71
8800.00	0.73	12.34	8799.64	18.72	17.10	7.62	0.08	18.72	24.02
8865.00	0.93	8.19	8864.64	19.63	18.02	7.78	0.32	19.63	23.35

ProShot MWD by TELEDRIFT Inc. 405-631-4882
P.O. Box 94395
Oklahoma City, OK 73143-4395
ProView Version 4.00

Teledrift Canada In
Bay 7 4275 78th Ave
Calgary, Alberta P2

WELL NAME jct fed 18 #1 01 Jan 2007 06:24 Sort By Survey Depth
DECLINATION 8.0°
JOB ID j cleo
COMPANY j cleo
CONTRACTOR patterson 507
START DATE 19 DEC 06
API #
LOCATION jct fed 18 #1

All azimuths are referenced to true north and corrected with the declination above.

SURVEY #	SURVEY DEPTH	DATE	TIME	INCLINATION	AZIM
0001	8869.0	21-Dec-06	11:40	00.8	5.
Tie-in	8889.0	19-Dec-06	22:53	00.0	0.
0004	8940.0	21-Dec-06	20:47	00.4	26.
0007	9062.0	22-Dec-06	07:43	00.6	48.
0011	9161.0	22-Dec-06	16:10	00.6	25.
0020	9383.0	23-Dec-06	10:18	00.7	15.
0023	9477.0	23-Dec-06	17:45	01.0	28.
0027	9573.0	24-Dec-06	00:51	01.0	48.
0040	9901.0	27-Dec-06	05:31	00.7	350.
0043	9988.0	27-Dec-06	12:17	01.3	335.
0047	10082.0	27-Dec-06	19:01	01.0	344.
0052	10217.0	28-Dec-06	04:48	00.9	11.
0055	10301.0	28-Dec-06	13:15	01.5	15.
0059	10441.0	28-Dec-06	20:16	01.5	8.
0064	10586.0	29-Dec-06	08:04	01.4	2.
0066	10686.0	29-Dec-06	14:22	01.3	3.
0070	10778.0	29-Dec-06	21:42	01.5	20.
0074	10886.0	30-Dec-06	04:51	02.0	17.
0077	10972.0	30-Dec-06	12:15	02.0	17.
0080	11064.0	30-Dec-06	20:32	02.8	3.
0083	11108.0	31-Dec-06	00:57	02.9	6.
0085	11139.0	31-Dec-06	04:29	03.2	359.
0086	11165.0	31-Dec-06	10:52	02.7	11.
0088	11193.0	31-Dec-06	16:56	02.3	30.
0091	11235.0	31-Dec-06	23:03	02.2	21.

Survey Report

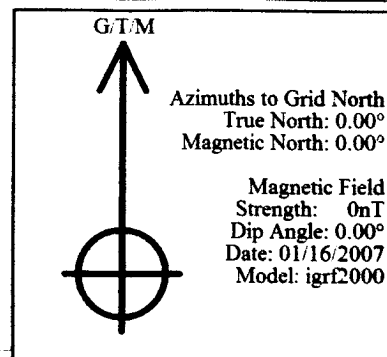
Report Date: December 29, 2006	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: J. Cleo Thompson	Vertical Section Azimuth: 0.000°
Field: Lea County, NM	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: JCT Federal 18 #1 / JCT Federal 18 #1	TVD Reference Datum: RKB
Well: JCT Federal 18 #1	TVD Reference Elevation: 0.0 ft relative to
Borehole: JCT Federal 18 #1	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.988°
Survey Name / Date: JCT Federal 18 #1_surveys / December 25, 2006	Total Field Strength: 48057.938 nT
Tort / AHD / DDI / ERD ratio: 17.379° / 97.48 ft / 3.229 / 0.009	Magnetic Dip: 58.679°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: December 25, 2006
Location Lat/Long: N 33 32 23.685, W 103 5 23.958	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 926221.000 ftUS, E 878862.000 ftUS	North Reference: Grid North
Grid Convergence Angle: +0.68704621°	Total Corr Mag North -> Grid North: +8.301°
Grid Scale Factor: 1.00007344	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)
Tie-In	8865.00	0.93	8.19	8864.64	18.02	18.02	7.78	19.63	23.35	0.32
	8869.00	0.80	5.00	8868.63	18.08	18.08	7.79	19.69	23.30	3.46
	8889.00	0.00	0.00	8888.63	18.22	18.22	7.80	19.82	23.18	4.00
	8940.00	0.40	26.00	8939.63	18.38	18.38	7.88	20.00	23.20	0.78
	9062.00	0.60	48.00	9061.63	19.19	19.19	8.54	21.01	23.99	0.22
	9161.00	0.60	25.00	9160.62	20.01	20.01	9.15	22.00	24.56	0.24
	9383.00	0.70	15.00	9382.61	22.37	22.37	9.99	24.50	24.06	0.07
	9477.00	1.00	28.00	9476.60	23.65	23.65	10.52	25.89	23.98	0.38
	9573.00	1.00	48.00	9572.58	24.95	24.95	11.54	27.49	24.81	0.36
	9901.00	0.70	350.00	9900.55	28.84	28.84	13.32	31.77	24.78	0.26
As of 12/29	9988.00	1.30	335.00	9987.54	30.26	30.26	12.81	32.86	22.94	0.75
	10082.00	1.00	344.00	10081.52	32.01	32.01	12.13	34.24	20.75	0.37
	10217.00	0.90	11.00	10216.50	34.19	34.19	12.01	36.23	19.35	0.34
	10301.00	1.50	15.00	10300.48	35.90	35.90	12.42	37.98	19.08	0.72
	10441.00	1.50	8.00	10440.44	39.48	39.48	13.15	41.61	18.42	0.13

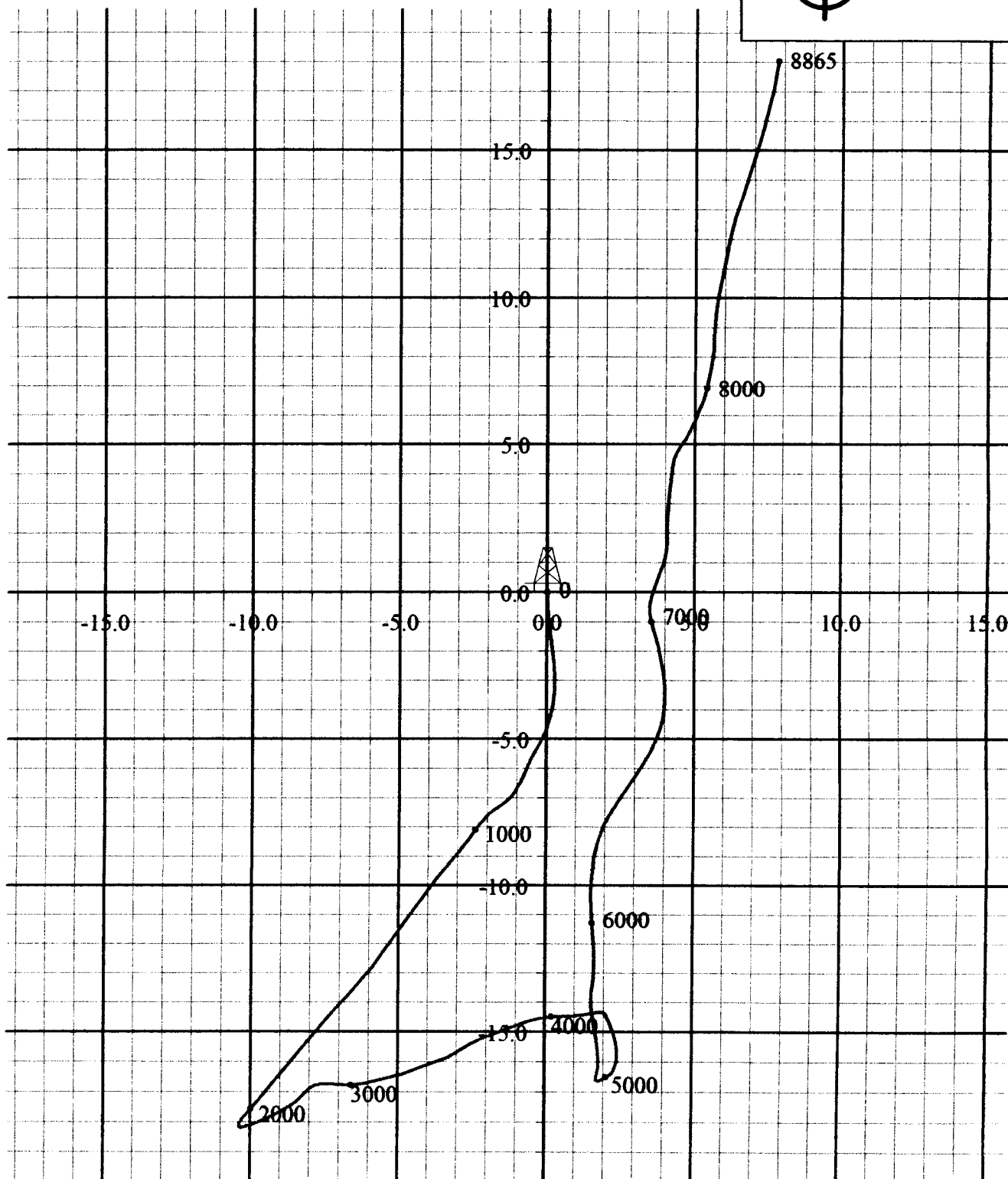


Scientific
Drilling

Field: Sawyer
Site: Lea County, NM
Well: JCT 18 Federal #1
Wellpath: VH - Job #32K12061036
Survey: 12/19/06



South(-)/North(+) [5ft/in]



West(-)/East(+) [5ft/in]