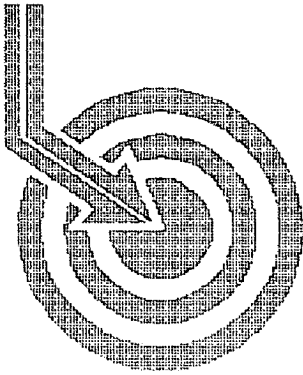




Scientific Drilling

SUR: C-29-21s-37e, 660/N & 1980/W
BHL: E-29-21s-37e, 1407/N & 337/W
API #30-025-06891

CHEVRONTEXACO

Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: DH - Job #32D0605460
Survey: 06/27/05-07/07/05



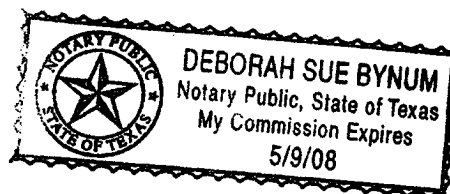
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*Deborah Sue Bynum*.....Company Representative

Notorized this date 3rd of August, 2005.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International Survey Report

Company: CHEVRONTEXACO
Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: VH - Job #32K0705473

Date: 8/3/2005 Time: 17:02:56 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,245.37Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 07/01/05
KSRG 0'-6515'

Start Date: 7/1/2005

Company: Scientific Drilling Internatio
Tool: Keeper;Keeper Gyro

Engineer: Foster/Page/Rowe/Gonzales
Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	359.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.02	18.60	100.00	-0.01	0.02	0.01	0.02	0.02	18.60
200.00	0.16	14.36	200.00	-0.11	0.17	0.05	0.14	0.17	15.21
300.00	0.09	31.06	300.00	-0.26	0.37	0.12	0.08	0.39	18.06
400.00	0.14	74.62	400.00	-0.45	0.47	0.28	0.10	0.55	30.68
500.00	0.27	131.58	500.00	-0.67	0.35	0.57	0.23	0.67	58.84
600.00	0.31	155.73	600.00	-0.76	-0.06	0.86	0.13	0.86	93.75
700.00	0.36	131.47	700.00	-0.88	-0.51	1.21	0.15	1.31	112.94
800.00	0.38	119.06	799.99	-1.21	-0.88	1.73	0.08	1.94	116.93
900.00	0.38	81.18	899.99	-1.72	-0.99	2.35	0.25	2.55	112.85
1000.00	0.15	62.42	999.99	-2.17	-0.88	2.79	0.24	2.93	107.46
1100.00	0.25	145.10	1099.99	-2.34	-1.00	3.03	0.27	3.19	108.19
1200.00	0.12	328.37	1199.99	-2.37	-1.09	3.10	0.37	3.29	109.30
1300.00	0.20	214.32	1299.99	-2.21	-1.14	2.95	0.27	3.16	111.15
1400.00	0.13	334.97	1399.99	-2.06	-1.18	2.80	0.29	3.04	112.87
1500.00	0.24	235.19	1499.99	-1.85	-1.20	2.58	0.29	2.85	114.90
1600.00	0.24	231.41	1599.99	-1.44	-1.45	2.25	0.02	2.68	122.81
1700.00	0.42	313.66	1699.99	-1.10	-1.33	1.82	0.45	2.25	126.11
1800.00	0.60	10.16	1799.98	-1.26	-0.56	1.65	0.51	1.74	108.76
1900.00	0.79	51.25	1899.98	-2.23	0.39	2.28	0.52	2.31	80.35
2000.00	2.05	63.96	1999.94	-4.69	1.60	4.42	1.29	4.70	70.06
2100.00	2.56	63.38	2099.86	-8.71	3.39	8.03	0.51	8.71	67.10
2200.00	3.15	66.13	2199.74	-13.69	5.50	12.54	0.61	13.69	66.30
2300.00	3.16	67.14	2299.59	-19.19	7.69	17.59	0.06	19.19	66.40
2400.00	3.39	68.50	2399.42	-24.90	9.84	22.88	0.24	24.90	66.73
2500.00	3.09	70.80	2499.26	-30.53	11.81	28.17	0.33	30.55	67.26
2600.00	2.65	73.61	2599.14	-35.50	13.35	32.94	0.46	35.54	67.94
2700.00	2.20	79.10	2699.05	-39.66	14.36	37.04	0.51	39.73	68.80
2800.00	1.60	94.01	2798.99	-42.75	14.63	40.32	0.77	42.89	70.06
2900.00	1.43	106.59	2898.96	-44.91	14.17	42.91	0.37	45.19	71.72
3000.00	1.37	108.43	2998.93	-46.72	13.44	45.24	0.07	47.19	73.45
3100.00	1.16	113.01	3098.90	-48.28	12.67	47.30	0.23	48.97	75.01
3200.00	0.95	112.35	3198.89	-49.52	11.96	49.00	0.21	50.44	76.29
3300.00	0.80	110.54	3298.88	-50.58	11.40	50.42	0.15	51.69	77.26
3400.00	0.68	113.29	3398.87	-51.47	10.92	51.62	0.13	52.76	78.06
3500.00	0.58	125.79	3498.86	-52.12	10.39	52.57	0.17	53.59	78.83
3600.00	0.62	166.91	3598.86	-52.26	9.56	53.11	0.42	53.96	79.79
3700.00	0.36	188.97	3698.85	-51.98	8.73	53.18	0.32	53.89	80.68
3800.00	0.29	144.41	3798.85	-51.85	8.21	53.28	0.25	53.91	81.24
3900.00	0.41	154.86	3898.85	-51.90	7.68	53.58	0.14	54.13	81.84
4000.00	0.62	164.10	3998.85	-51.83	6.84	53.88	0.23	54.31	82.77
4100.00	0.13	176.00	4098.84	-51.70	6.20	54.04	0.49	54.39	83.45
4200.00	0.41	173.17	4198.84	-51.55	5.73	54.09	0.28	54.39	83.95
4300.00	0.21	229.14	4298.84	-51.27	5.26	53.99	0.34	54.25	84.44
4400.00	0.17	272.33	4398.84	-50.96	5.14	53.70	0.14	53.95	84.53
4500.00	1.02	279.14	4498.83	-50.09	5.29	52.68	0.85	52.94	84.26
4600.00	3.50	310.44	4598.75	-48.06	7.41	49.47	2.68	50.03	81.48
4700.00	3.69	306.78	4698.55	-45.24	11.32	44.57	0.30	45.99	75.75
4800.00	3.31	305.16	4798.37	-42.24	14.91	39.64	0.39	42.35	69.39



Scientific
Drilling

Scientific Drilling International Survey Report

Company: CHEVRONTEXACO
Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: VH - Job #32K0705473

Date: 8/3/2005 Time: 17:02:56 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,245.37Azi)
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	2.03	305.34	4898.26	-39.90	17.60	35.83	1.28	39.92	63.84
5000.00	1.86	308.38	4998.20	-38.28	19.63	33.11	0.20	38.49	59.34
5100.00	1.36	318.52	5098.16	-37.20	21.53	31.05	0.57	37.79	55.27
5200.00	1.13	311.18	5198.14	-36.45	23.07	29.53	0.28	37.47	52.00
5300.00	1.04	313.33	5298.12	-35.71	24.34	28.12	0.10	37.19	49.13
5400.00	0.78	300.82	5398.11	-34.98	25.31	26.88	0.33	36.92	46.72
5500.00	0.41	286.87	5498.10	-34.33	25.76	25.95	0.39	36.57	45.21
5600.00	0.15	337.64	5598.10	-34.06	25.99	25.56	0.34	36.45	44.52
5700.00	0.13	14.61	5698.10	-34.14	26.22	25.54	0.09	36.60	44.24
5800.00	0.49	88.61	5798.10	-34.60	26.34	25.99	0.47	37.00	44.62
5900.00	0.69	109.93	5898.09	-35.42	26.14	26.98	0.29	37.57	45.90
6000.00	0.85	123.36	5998.08	-36.25	25.53	28.17	0.24	38.02	47.81
6100.00	1.07	120.14	6098.07	-37.18	24.66	29.59	0.23	38.52	50.20
6200.00	1.33	117.62	6198.05	-38.43	23.65	31.43	0.27	39.33	53.04
6300.00	1.37	126.04	6298.02	-39.72	22.41	33.42	0.20	40.24	56.16
6400.00	1.39	129.91	6397.99	-40.83	20.93	35.32	0.10	41.05	59.36
6500.00	1.57	141.44	6497.96	-41.68	19.08	37.10	0.35	41.72	62.79
6515.00	1.58	142.59	6512.95	-41.77	18.75	37.36	0.22	41.80	63.35





Scientific Drilling International Survey Report

Company: CHEVRONTEXACO
Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: DH - Job #32D0605460

Date: 8/3/2005 Time: 17:07:29 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,245.37Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 06/27/05-07/07/05
MWD 6531'-8445'

Start Date: 6/27/2005

Company: Scientific Drilling Internatio
Tool: MWD;MWD

Engineer: Lamb/Melendez/Hernandez
Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
6515.00	1.58	142.59	6512.95	-41.77	18.75	37.36	0.00	41.80	63.35
6531.00	1.58	142.59	6528.95	-41.87	18.40	37.63	0.00	41.89	63.94
6577.00	26.74	238.88	6573.30	-31.54	12.44	28.99	58.60	31.55	66.78
6587.00	32.77	239.48	6581.98	-26.61	9.90	24.73	60.37	26.64	68.19
6618.00	50.21	242.37	6605.11	-6.21	0.04	6.81	56.58	6.81	89.68
6649.00	60.94	244.10	6622.61	19.31	-11.44	-16.00	34.92	19.66	234.43
6680.00	69.55	244.71	6635.58	47.43	-23.58	-41.36	27.83	47.61	240.31
6711.00	79.61	244.00	6643.81	77.27	-36.50	-68.27	32.53	77.41	241.87
6741.00	90.50	245.06	6646.39	107.11	-49.34	-95.21	36.47	107.23	242.61
6772.00	93.97	247.08	6645.18	138.08	-61.90	-123.52	12.95	138.16	243.38
6803.00	94.08	248.73	6643.01	168.97	-73.53	-152.17	5.32	169.00	244.21
6835.00	92.39	247.35	6641.20	200.88	-85.48	-181.80	6.81	200.89	244.82
6866.00	92.05	248.18	6640.00	231.83	-97.20	-210.47	2.89	231.83	245.21
6896.00	91.99	248.62	6638.94	261.77	-108.24	-238.35	1.48	261.77	245.58
6928.00	90.61	245.78	6638.22	293.74	-120.63	-267.84	9.87	293.75	245.75
6959.00	89.93	245.84	6638.07	324.74	-133.33	-296.11	2.20	324.75	245.76
6990.00	92.86	243.76	6637.32	355.72	-146.53	-324.15	11.59	355.73	245.68
7022.00	93.54	243.98	6635.53	387.66	-160.60	-352.83	2.23	387.66	245.53
7053.00	95.33	244.42	6633.13	418.56	-174.05	-380.66	5.95	418.56	245.43
7084.00	95.83	244.76	6630.12	449.41	-187.29	-408.53	1.95	449.41	245.37
7116.00	92.36	241.82	6627.83	481.30	-201.63	-437.03	14.20	481.30	245.23
7147.00	91.72	240.80	6626.73	512.20	-216.50	-464.21	3.88	512.21	245.00
7179.00	90.81	244.25	6626.02	544.15	-231.26	-492.59	11.15	544.17	244.85
7209.00	90.81	244.07	6625.60	574.14	-244.34	-519.58	0.60	574.17	244.81
7240.00	91.18	244.20	6625.06	605.13	-257.86	-547.48	1.27	605.16	244.78
7272.00	92.93	246.80	6623.91	637.10	-271.12	-576.57	9.79	637.13	244.82
7303.00	92.90	246.77	6622.34	668.05	-283.32	-605.02	0.14	668.08	244.91
7335.00	93.17	247.08	6620.64	700.00	-295.85	-634.42	1.28	700.01	245.00
7366.00	92.69	246.83	6619.06	730.95	-307.97	-662.91	1.75	730.95	245.08
7398.00	92.29	247.20	6617.67	762.90	-320.45	-692.34	1.70	762.91	245.16
7430.00	91.99	247.51	6616.47	794.86	-332.76	-721.86	1.35	794.86	245.25
7462.00	91.62	248.71	6615.47	826.81	-344.69	-751.53	3.92	826.81	245.36
7493.00	92.70	247.25	6614.30	857.75	-356.30	-780.25	5.86	857.75	245.46
7525.00	93.00	247.84	6612.71	889.69	-368.51	-809.79	2.07	889.69	245.53
7557.00	93.44	245.37	6610.91	921.63	-381.19	-839.11	7.83	921.63	245.57
7588.00	93.07	245.35	6609.15	952.58	-394.10	-867.24	1.20	952.58	245.56
7620.00	92.32	246.03	6607.64	984.54	-407.25	-896.37	3.16	984.55	245.57
7652.00	92.16	243.77	6606.39	1016.51	-420.82	-925.32	7.07	1016.52	245.54
7684.00	92.33	242.90	6605.14	1048.47	-435.17	-953.90	2.77	1048.47	245.48
7715.00	94.68	242.20	6603.24	1079.37	-449.43	-981.35	7.91	1079.37	245.39
7747.00	95.16	242.23	6600.50	1111.21	-464.29	-1009.56	1.50	1111.21	245.30
7779.00	94.72	244.31	6597.74	1143.06	-478.63	-1038.03	6.62	1143.07	245.25
7809.00	94.58	243.31	6595.31	1172.95	-491.83	-1064.86	3.35	1172.96	245.21
7841.00	95.36	243.25	6592.54	1204.81	-506.16	-1093.34	2.44	1204.82	245.16
7872.00	90.30	247.90	6591.01	1235.75	-518.95	-1121.51	22.15	1235.76	245.17
7902.00	88.15	248.06	6591.41	1265.72	-530.20	-1149.32	7.19	1265.72	245.24
7934.00	89.02	247.30	6592.20	1297.68	-542.35	-1178.92	3.61	1297.68	245.30
7966.00	84.74	245.51	6593.95	1329.62	-555.13	-1208.19	14.49	1329.62	245.32
7997.00	84.05	244.76	6596.97	1360.47	-568.11	-1236.18	3.28	1360.47	245.32



Scientific Drilling International Survey Report

Company: CHEVRONTEXACO
Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: DH - Job #32D0605460

Date: 8/3/2005 Time: 17:07:29 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,245.37Azi)
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
8029.00	83.45	244.31	6600.46	1392.28	-581.78	-1264.90	2.34	1392.28	245.30
8061.00	83.42	243.39	6604.12	1424.06	-595.79	-1293.44	2.86	1424.06	245.27
8092.00	83.83	243.23	6607.56	1454.85	-609.63	-1320.96	1.42	1454.85	245.23
8124.00	84.94	246.25	6610.69	1486.69	-623.22	-1349.76	10.01	1486.69	245.22
8155.00	84.74	245.14	6613.48	1517.56	-635.93	-1377.90	3.62	1517.56	245.23
8187.00	82.09	244.91	6617.15	1549.34	-649.35	-1406.71	8.31	1549.35	245.22
8219.00	82.61	244.80	6621.41	1581.06	-662.82	-1435.42	1.66	1581.06	245.21
8250.00	86.23	246.79	6624.42	1611.90	-675.47	-1463.56	13.31	1611.91	245.23
8282.00	84.03	248.10	6627.14	1643.77	-687.70	-1493.00	7.99	1643.77	245.27
8314.00	83.58	248.56	6630.59	1675.54	-699.45	-1522.56	2.00	1675.54	245.33
8345.00	79.84	247.90	6635.06	1706.17	-710.82	-1551.05	12.25	1706.17	245.38
8377.00	80.32	248.38	6640.57	1737.65	-722.56	-1580.30	2.11	1737.65	245.43
8409.00	79.43	249.21	6646.20	1769.10	-733.95	-1609.67	3.78	1769.10	245.49
8445.00	79.43	249.21	6652.80	1804.41	-746.51	-1642.75	0.00	1804.42	245.56



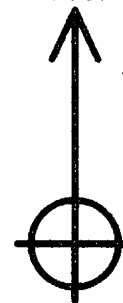
06/27/05-07/07/05



**Scientific
Drilling**

Field: Drinkard
Site: Lea County, NM
Well: Central Drinkard #158H
Wellpath: DH - Job #32D0605460
Survey: 06/27/05-07/07/05

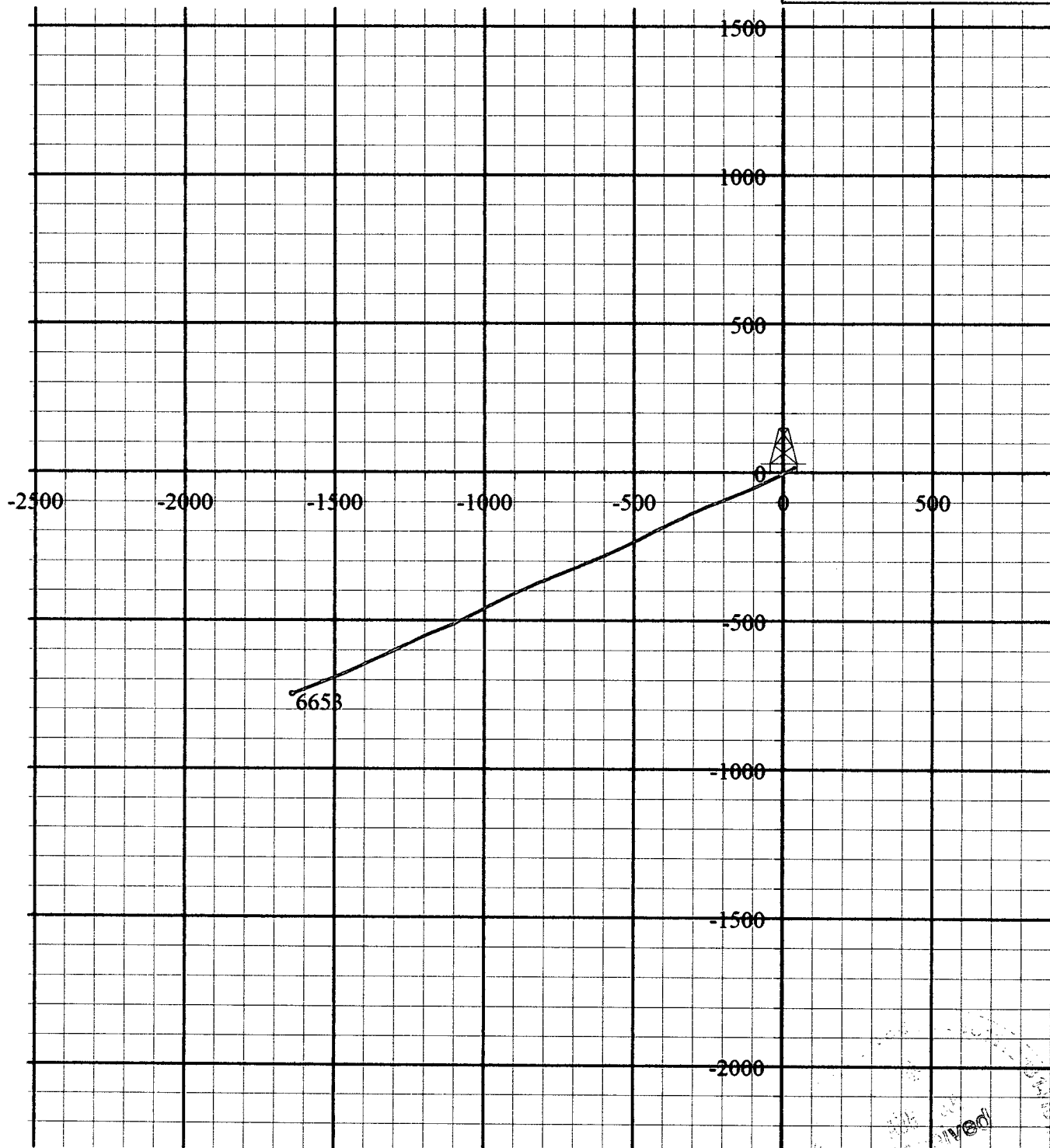
G/T/M



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 8/3/2005
Model: Wmm_95

South(-)/North(+) [500ft/in]



West(-)/East(+) [500ft/in]

