

Scientific Drilling

API # 30-C15-34484

EOG

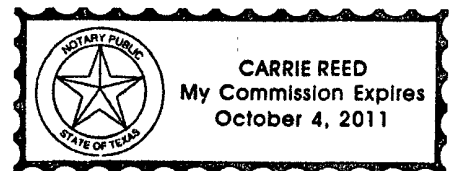
Field: Cottonwood Creek
Site: Eddy County, NM
Well: Brazos A 11 Fee #2H
Wellpath: VH - Job #32K1108872
Survey: 11/04/08

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

.....Stewart..... Company Representative

Notorized this date 22nd of December, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





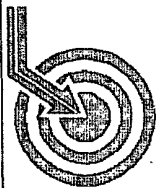
Scientific Drilling International Survey Report

Company: EOG	Date: 12/17/2008	Time: 13:16:27	Page: 1
Field: Cottonwood Creek	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Brazos A 11 Fee #2H	Section (VS) Reference:	Well (0.00N,0.00E,269.07Azi)	
Wellpath: VH - Job #32K1108872	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 11/04/08	Start Date: 11/04/2008
Company: Scientific Drilling Internatio	Engineer: Pena w/GeoGyro
Tool: Keeper, Keeper Surface Readout Gyro	Tied-to: From Surface

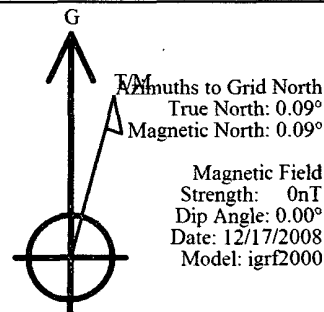
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.82	229.67	100.00	0.55	-0.46	-0.55	0.82	0.72	229.67
200.00	0.13	294.47	199.99	1.21	-0.88	-1.19	0.77	1.48	233.64
300.00	0.25	28.92	299.99	1.20	-0.64	-1.19	0.29	1.35	241.72
400.00	0.33	313.96	399.99	1.30	-0.25	-1.29	0.36	1.32	259.05
500.00	0.90	276.84	499.99	2.28	0.04	-2.28	0.67	2.28	271.08
600.00	0.62	256.07	599.98	3.59	0.01	-3.59	0.39	3.59	270.10
700.00	0.28	134.13	699.98	3.94	-0.29	-3.94	0.80	3.95	265.73
800.00	0.57	340.65	799.97	3.92	0.01	-3.92	0.83	3.92	270.07
900.00	0.53	294.69	899.97	4.50	0.67	-4.51	0.43	4.56	278.42
1000.00	0.48	235.60	999.97	5.27	0.62	-5.28	0.50	5.31	276.75
1100.00	0.33	45.11	1099.97	5.41	0.59	-5.42	0.81	5.45	276.22
1200.00	0.58	7.12	1199.96	5.13	1.30	-5.15	0.38	5.31	284.13
1300.00	0.91	2.68	1299.95	5.01	2.59	-5.05	0.33	5.68	297.16
1400.00	0.77	336.36	1399.94	5.22	4.00	-5.28	0.41	6.63	307.13
1500.00	0.69	322.90	1499.94	5.83	5.10	-5.92	0.19	7.81	310.74
1600.00	0.53	321.67	1599.93	6.47	5.94	-6.57	0.16	8.85	312.13
1700.00	0.67	48.19	1699.93	6.31	6.69	-6.42	0.83	9.27	316.20
1800.00	0.76	54.01	1799.92	5.32	7.47	-5.44	0.12	9.24	323.92
1900.00	1.21	52.58	1899.90	3.93	8.50	-4.07	0.45	9.43	334.42
2000.00	1.15	65.96	1999.88	2.16	9.55	-2.31	0.28	9.83	346.38
2100.00	1.12	67.78	2099.86	0.33	10.33	-0.49	0.05	10.34	357.27
2200.00	0.30	10.57	2199.85	-0.64	10.96	0.46	0.99	10.97	2.40
2300.00	0.91	18.07	2299.85	-0.95	11.97	0.75	0.61	11.99	3.60
2400.00	0.94	39.74	2399.84	-1.74	13.36	1.52	0.35	13.44	6.51
2500.00	0.94	359.07	2499.82	-2.28	14.81	2.04	0.65	14.95	7.83
2600.00	0.45	30.12	2599.82	-2.48	15.97	2.22	0.60	16.12	7.91
2700.00	0.59	332.97	2699.81	-2.45	16.77	2.18	0.51	16.91	7.42
2800.00	0.79	16.32	2799.81	-2.43	17.89	2.14	0.54	18.01	6.83
2900.00	0.63	314.81	2899.80	-2.25	18.93	1.95	0.74	19.03	5.87
3000.00	0.50	67.86	2999.80	-2.28	19.49	1.96	0.95	19.59	5.74
3100.00	0.15	24.80	3099.80	-2.74	19.77	2.42	0.40	19.92	6.98
3200.00	0.12	47.31	3199.79	-2.87	19.96	2.55	0.06	20.12	7.28
3300.00	0.13	147.03	3299.79	-3.01	19.94	2.69	0.19	20.12	7.68
3400.00	0.45	22.92	3399.79	-3.23	20.20	2.90	0.53	20.41	8.18
3500.00	1.43	84.99	3499.78	-4.64	20.67	4.30	1.28	21.12	11.75
3600.00	1.68	74.92	3599.74	-7.30	21.16	6.96	0.37	22.28	18.20
3605.00	2.06	73.91	3604.74	-7.46	21.21	7.12	7.63	22.37	18.55

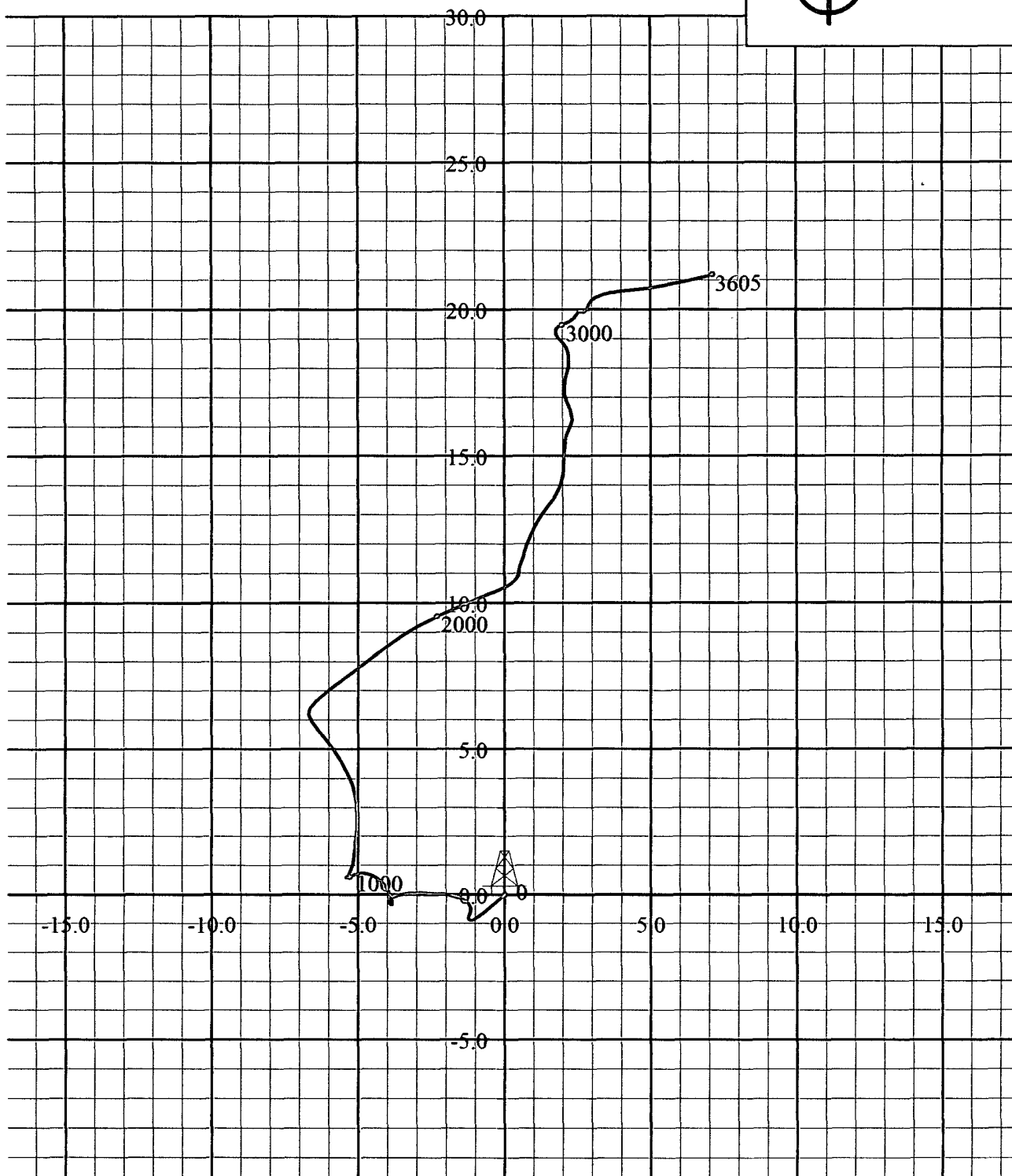


Scientific
Drilling

Field: Cottonwood Creek
Site: Eddy County, NM
Well: Brazos A 11 Fee #2H
Wellpath: VH - Job #32K1108872
Survey: 11/04/08



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



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

Brazos A 11 Fee #2H Final Surveys.txt

~Version Information

VERS. 2.00: PATHFINDER ENERGY SERVICES LAS - Version 2.00
 WRAP. NO: One line per depth step

~Well Information

STRT.FT 0.0000:
 STOP.FT 8360.0000:
 STEP.FT 0.0000:
 NULL. -999.25:
 COMP. EOG RESOURCES: COMPANY
 WELL. BRAZOS A 11 FEE #2H: WELL
 FLD. COTTONWOOD CREEK; WOLFCAMP (G): FLD
 SRVC. Pathfinder Energy Services: SERVICE COMPANY
 LOC. : LOCATION
 DATE. 07-Nov-08: LOG DATE
 UWI. 30-015-34484: API NUMBER
 APD.FT 18.00: ELEVATION ABOVE PERMANENT DATUM
 CNTY. EDDY: COUNTY
 CTRY. USA: COUNTRY
 DMF. ROTARY TABLE: DRILLING-LOG MEASURED FROM
 EPD.FT 3550.00: ELEVATION OF PERMANENT DATUM
 FL1. 1880' FNL 467' FEL: WELL LOCATION 1
 PDAM. GROUND LEVEL - MEAN SEA LEVEL: ELEVATION OF PERMANENT DATUM REF
 PDAT. GROUND LEVEL: PERMANENT DATUM
 RANG. 24 EAST: RANGE
 SECT. 11: SECTION
 STAT. NM: STATE
 TOWN. 16 SOUTH: TOWNSHIP

~Parameter Information

BHB1.IN 12 1/4: BOREHOLE REC; BIT 1
 BHF1.FT 0: BOREHOLE REC; FROM 1
 BHO1.FT 925: BOREHOLE REC; TO 1
 BHB2.IN 7 7/8: BOREHOLE REC; BIT 2
 BHF2.FT 925: BOREHOLE REC; FROM 2
 BHO2.FT 8346: BOREHOLE REC; TO 2
 CTS1.IN 8 5/8: CASING & TUBING REC; SIZE 1
 CTF1.FT 0: CASING & TUBING REC; FROM 1
 CTO1.FT 925: CASING & TUBING REC; TO 1
 DCOM. PES: DRILLING COMPANY
 RIG. MCVAY 4: DRILLING RIG
 LUN. TRAILER: LOGGING UNIT NUMBER
 DIST. WEST TEXAS: DISTRICT
 SPUD. 31-OCT-08: SPUD DATE
 STDT. 04-NOV-08: START DATE
 SDEP.FT 4052: DEPTH IN
 ENDT. 07-NOV-08: LWD END DATE
 EDEP.FT 8346: DEPTH OUT
 TDEP.FT 8346: TOTAL DEPTH
 R001. EOG RESOURCES.: Remarks - Line 001

Brazos A 11 Fee #2H Final Surveys.txt

R002. PATHFINDER ENERGY SERVICES TRACKING #; 101007998 WT-WT.: Remarks - Line 002
R004. ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.: Remarks - Line 004
R005. ALL LOGGING DATA ARE TRANSMITTED ONLY UNLESS STATED OTHERWISE.: Remarks - Line 005
"R007. RUN #1; 6 1/4" HDS-1R / GAMMA LOGGING RUN.: Remarks - Line 007 "
"R008. RUN #2; 6 1/4" HDS-1R / GAMMA LOGGING RUN.: Remarks - Line 008 "
RA01. RUN #1: RUN NUMBER 01
RB01. 04-NOV-08: START DATE - RUN 01
RC01. 08:00: START TIME - RUN 01
RD01. 05-NOV-08: END DATE - RUN 01
RE01. 10:30: END TIME - RUN 01
RF01.FT 4052: DEPTH IN - RUN 01
RG01.FT 4608: DEPTH OUT - RUN 01
RH01.FT 4002: LOG TOP - RUN 01
RI01.FT 4508: LOG BOTTOM - RUN 01
RJ01.IN 7 7/8: HOLE SIZE - RUN 01
RU01. N. TVRDY: ENGINEER #1 - RUN 01
RV01. J. EIMERS: ENGINEER #2 - RUN 01
MB01.FT 4172: MUD DEPTH - RUN 01
MD01. WATER BASED: MUD TYPE - RUN 01
ME01.LB/GAL 8.80: DENSITY - RUN 01
MF01.S/QT 29: VISCOSITY - RUN 01
MG01. 7.0: PH - RUN 01
MM01.CM3/30 12.8: FLUID LOSS - RUN 01
MH01.PPM 60000: SALINITY - RUN 01
MK01.DEGF 97: MAX REC TEMP - RUN 01
RA02. RUN #2: RUN NUMBER 02
RB02. 05-NOV-08: START DATE - RUN 02
RC02. 11:30: START TIME - RUN 02
RD02. 08-NOV-08: END DATE - RUN 02
RE02. 05:00: END TIME - RUN 02
RF02.FT 4608: DEPTH IN - RUN 02
RG02.FT 8346: DEPTH OUT - RUN 02
RH02.FT 4508: LOG TOP - RUN 02
RI02.FT 8290: LOG BOTTOM - RUN 02
RJ02.IN 7 7/8: HOLE SIZE - RUN 02
RU02. N. TVRDY: ENGINEER #1 - RUN 02
RV02. J. EIMERS: ENGINEER #2 - RUN 02
MB02.FT 4172: MUD DEPTH - RUN 02
MD02. WATER BASED: MUD TYPE - RUN 02
ME02.LB/GAL 8.80: DENSITY - RUN 02
MF02.S/QT 29: VISCOSITY - RUN 02
MG02. 7.0: PH - RUN 02
MM02.CM3/30 12.8: FLUID LOSS - RUN 02
MH02.PPM 60000: SALINITY - RUN 02
MK02.DEGF 116: MAX REC TEMP - RUN 02
TTL1. GAMMA-RAY: HEADER TITLE LINE 1
TTL2. : HEADER TITLE LINE 2
TTL3. : HEADER TITLE LINE 3

Brazos A 11 Fee #2H Final Surveys.txt

SC1 . : LOG SCALE 1
 "SC2 . 5'" = 100' : LOG SCALE 2"
 OS2 . DIRECTIONAL: OTHER SERVICES LINE 2
 OS3 . ROP: OTHER SERVICES LINE 3

~Curve Information

DEPT.FT : MWD Tool Measurement Depth
 MTVD.FT : MWD Tool Measurement TVD
 INC .DEG : Inclination
 AZI .DEG : Azimuth
 SECT.FT : Section
 RCN .FT : Rectangular Co-ordinates North
 RCE .FT : Rectangular Co-ordinates East
 DLSEV.DG/HFT : Dog-leg Severity

#	DEPT FT	MTVD FT	INC DEG	AZI DEG	SECT FT	RCN FT	RCE FT	DLSEV DG/HFT
#								
#								
#								
#	Re-log Number	0	0	0	0	0	0	0
#								
~ASCII Data								
3605.00	3604.73		2.06	73.91	-7.46	21.21	7.12	-999.25
4000.00	3999.56		1.32	72.12	-18.67	24.57	18.27	0.19
4042.00	4041.55		1.06	68.11	-19.49	24.87	19.09	0.65
4073.00	4072.54		2.37	287.16	-19.15	25.16	18.75	10.52
4104.00	4103.44		6.60	276.81	-16.78	25.56	16.36	13.84
4135.00	4134.06		11.17	272.88	-12.01	25.93	11.59	14.86
4166.00	4164.22		15.48	271.18	-4.88	26.16	4.45	13.96
4197.00	4193.76		19.70	271.83	4.48	26.42	-4.91	13.63
4228.00	4222.51		24.18	273.37	16.03	26.96	-16.47	14.57
4258.00	4249.40		28.40	273.01	29.28	27.69	-29.74	14.08
4289.00	4276.15		32.27	271.94	44.91	28.36	-45.38	12.61
4320.00	4301.88		35.53	270.48	62.19	28.71	-62.66	10.84
4351.00	4326.68		38.16	269.54	80.77	28.71	-81.25	8.68
4382.00	4350.58		40.98	269.36	100.52	28.52	-100.99	9.10
4414.00	4374.19		43.88	269.34	122.10	28.28	-122.58	9.06
4444.00	4395.18		47.31	269.56	143.53	28.07	-144.01	11.45
4475.00	4415.36		51.44	270.67	167.05	28.13	-167.53	13.60
4506.00	4433.80		55.57	270.47	191.96	28.37	-192.44	13.33
4537.00	4450.51		59.18	270.11	218.06	28.50	-218.55	11.69
4569.00	4466.44		61.11	269.53	245.81	28.42	-246.30	6.23
4600.00	4480.84		63.49	269.28	273.25	28.13	-273.74	7.71
4631.00	4493.84		66.92	269.12	301.39	27.74	-301.88	11.07
4662.00	4505.05		70.70	268.57	330.29	27.15	-330.77	12.30
4692.00	4514.02		74.48	268.36	358.91	26.39	-359.38	12.62
4724.00	4521.92		76.94	268.93	389.91	25.65	-390.38	7.88
4754.00	4528.31		78.44	269.15	419.22	25.16	-419.69	5.05
4786.00	4534.49		79.32	269.51	450.62	24.80	-451.08	2.96
4816.00	4539.44		81.69	269.44	480.21	24.52	-480.67	7.90
4847.00	4543.54		83.10	268.92	510.93	24.08	-511.39	4.84

Brazos A 11 Fee #2H Final Surveys.txt

4940.00	4549.16	89.96	269.42	603.71	22.74	-604.16	7.40
5033.00	4547.23	92.42	270.04	696.67	22.30	-697.13	2.73
5126.00	4543.59	92.07	270.29	789.58	22.57	-790.05	0.46
5219.00	4541.37	90.66	270.50	882.53	23.21	-883.02	1.53
5312.00	4540.09	90.92	272.16	975.45	25.37	-975.99	1.81
5405.00	4538.74	90.75	272.82	1068.27	29.41	-1068.89	0.73
5498.00	4536.03	92.59	273.33	1161.00	34.40	-1161.71	2.05
5591.00	4532.46	91.80	273.32	1253.67	39.79	-1254.48	0.85
5684.00	4530.97	90.04	271.13	1346.51	43.40	-1347.39	3.02
5777.00	4530.40	90.66	271.30	1439.44	45.37	-1440.37	0.69
5869.00	4530.33	89.43	271.57	1531.36	47.67	-1532.34	1.37
5963.00	4529.17	91.98	271.70	1625.25	50.35	-1626.29	2.72
6056.00	4526.60	91.19	270.53	1718.16	52.16	-1719.23	1.52
6150.00	4524.80	91.01	271.55	1812.08	53.87	-1813.20	1.10
6244.00	4521.98	92.42	271.34	1905.96	56.24	-1907.12	1.52
6338.00	4518.66	91.63	270.19	1999.86	57.49	-2001.05	1.48
6432.00	4514.98	92.86	270.65	2093.76	58.18	-2094.98	1.40
6526.00	4510.08	93.12	271.59	2187.57	60.01	-2188.83	1.04
6620.00	4505.97	91.89	270.72	2281.41	61.91	-2282.72	1.60
6714.00	4502.72	92.07	271.11	2375.31	63.41	-2376.65	0.46
6808.00	4500.55	90.57	270.49	2469.24	64.72	-2470.61	1.73
6902.00	4499.26	91.01	270.14	2563.20	65.24	-2564.60	0.60
6995.00	4497.62	91.01	269.92	2656.18	65.28	-2657.59	0.24
7088.00	4496.34	90.57	269.81	2749.16	65.07	-2750.58	0.49
7182.00	4495.18	90.84	270.34	2843.14	65.19	-2844.57	0.63
7275.00	4491.33	93.91	272.28	2935.97	67.31	-2937.45	3.90
7367.00	4485.05	93.91	271.35	3027.65	70.22	-3029.19	1.01
7460.00	4479.07	93.47	271.11	3120.39	72.21	-3121.97	0.54
7553.00	4475.15	91.36	269.06	3213.28	72.35	-3214.88	3.16
7647.00	4472.98	91.28	270.65	3307.25	72.11	-3308.85	1.69
7740.00	4471.20	90.92	271.83	3400.16	74.12	-3401.81	1.33
7834.00	4468.61	92.24	274.72	3493.86	79.49	-3495.61	3.38
7927.00	4465.25	91.89	274.82	3586.34	87.22	-3588.23	0.39
8020.00	4461.83	92.33	276.35	3678.67	96.26	-3680.72	1.71
8144.00	4457.84	91.36	276.78	3801.55	110.43	-3803.84	0.86
8270.00	4455.72	90.57	278.80	3926.07	127.50	-3928.66	1.72
8346.00	4454.96	90.57	278.80	4000.97	139.13	-4003.76	0.00