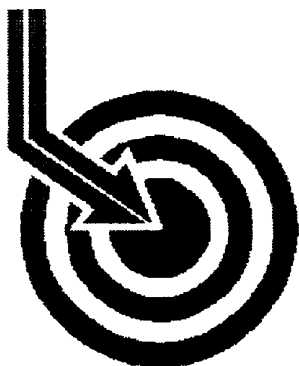


30-015-34754



Scientific Drilling



E.O.G.

Field: Cottonwood Creek Wolfcamp West
Site: Eddy County, NM
Well: Po C 1 Fee #2H
Wellpath: VH - Job #32K0207096
Survey: 02/01/07

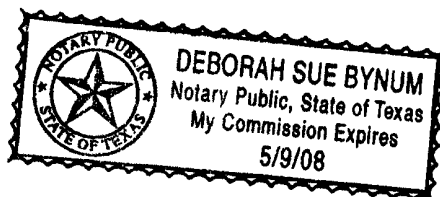
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*R. Wharton*.....Company Representative

Notorized this date 21st of February, 2007.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific Drilling International

Survey Report

Company: E.O.G.	Date: 02/21/2007	Time: 14:15:47	Page: 1
Field: Cottonwood Creek Wolfcamp West	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Po C 1 Fee #2H	Section (VS) Reference:	Well (0.00N,0.00E,268.87Azi)	
Wellpath: VH - Job #32K0207086	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 02/01/07	Start Date: 02/01/2007
KSRG 0'-4075'	
Company: Scientific Drilling Internatio	Engineer: Gonzales w/Geo Gyro
Tool: Keeper;Keeper Surface Readout Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	Chd ft	ChA deg
0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.55	45.99	100.00	-0.35	0.33	0.35	0.55	0.48	45.99
200.00	1.50	72.83	199.98	-1.96	1.05	1.94	1.04	2.21	61.51
300.00	1.29	67.31	299.95	-4.27	1.87	4.23	0.25	4.63	66.11
400.00	1.26	61.53	399.93	-6.29	2.83	6.24	0.13	6.85	65.57
500.00	0.84	58.02	499.91	-7.90	3.74	7.82	0.42	8.67	64.42
600.00	0.75	114.63	599.90	-9.11	3.86	9.04	0.76	9.83	66.88
700.00	0.37	142.63	699.90	-9.89	3.33	9.83	0.46	10.38	71.28
800.00	0.33	152.89	799.90	-10.21	2.82	10.16	0.07	10.54	74.50
900.00	0.36	28.30	899.89	-10.49	2.84	10.44	0.61	10.82	74.79
1000.00	0.49	20.36	999.89	-10.80	3.52	10.74	0.14	11.30	71.87
1100.00	0.62	9.87	1099.89	-11.06	4.45	10.98	0.16	11.84	67.94
1200.00	0.69	16.13	1199.88	-11.35	5.56	11.24	0.10	12.54	63.67
1300.00	0.88	9.91	1299.87	-11.67	6.90	11.54	0.21	13.44	59.13
1400.00	0.94	10.74	1399.86	-11.99	8.46	11.82	0.06	14.54	54.42
1500.00	0.92	18.00	1499.85	-12.42	10.03	12.22	0.12	15.81	50.64
1600.00	0.97	8.65	1599.83	-12.83	11.63	12.60	0.16	17.14	47.29
1700.00	0.90	353.76	1699.82	-12.90	13.25	12.64	0.25	18.31	43.66
1800.00	0.86	352.64	1799.81	-12.75	14.77	12.46	0.04	19.32	40.15
1900.00	0.90	346.55	1899.80	-12.50	16.28	12.18	0.10	20.33	36.80
2000.00	0.94	345.16	1999.78	-12.14	17.84	11.79	0.05	21.38	33.46
2100.00	0.89	336.71	2099.77	-11.65	19.34	11.27	0.14	22.39	30.23
2200.00	0.83	328.64	2199.76	-10.99	20.67	10.59	0.14	23.23	27.12
2300.00	1.03	313.03	2299.75	-9.98	21.91	9.55	0.32	23.90	23.56
2400.00	1.01	315.14	2399.73	-8.73	23.14	8.27	0.04	24.58	19.67
2500.00	1.11	315.17	2499.71	-7.45	24.45	6.97	0.10	25.43	15.91
2600.00	0.89	307.32	2599.70	-6.17	25.61	5.67	0.26	26.23	12.48
2700.00	0.56	305.23	2699.69	-5.17	26.37	4.65	0.33	26.77	10.01
2800.00	0.26	46.72	2799.69	-4.95	26.80	4.42	0.66	27.16	9.36
2900.00	0.37	22.45	2899.69	-5.24	27.26	4.71	0.17	27.66	9.80
3000.00	0.41	32.19	2999.68	-5.57	27.86	5.02	0.08	28.31	10.21
3100.00	0.31	84.14	3099.68	-6.03	28.19	5.48	0.33	28.72	11.00
3200.00	0.32	76.99	3199.68	-6.58	28.28	6.02	0.04	28.91	12.02
3300.00	0.61	104.05	3299.68	-7.36	28.21	6.81	0.36	29.02	13.57
3400.00	0.86	97.67	3399.67	-8.62	27.98	8.07	0.26	29.12	16.09
3500.00	1.42	97.36	3499.65	-10.59	27.72	10.04	0.56	29.49	19.91
3600.00	1.73	89.30	3599.61	-13.32	27.58	12.78	0.38	30.40	24.86
3700.00	2.03	88.10	3699.56	-16.60	27.66	16.06	0.30	31.99	30.14
3800.00	1.96	85.98	3799.50	-20.08	27.84	19.54	0.10	34.01	35.06
3900.00	1.28	101.13	3899.46	-22.88	27.74	22.34	0.80	35.62	38.84
4000.00	1.06	100.39	3999.44	-24.88	27.36	24.34	0.22	36.62	41.66
4075.00	1.60	92.17	4074.41	-26.60	27.20	26.07	0.76	37.68	43.79



**Scientific
Drilling**

Field: Cottonwood Creek Wolfcamp West
Site: Eddy County, NM
Well: Po C 1 Fee #2H
Wellpath: VH - Job #32K0207096
Survey: 02/01/07

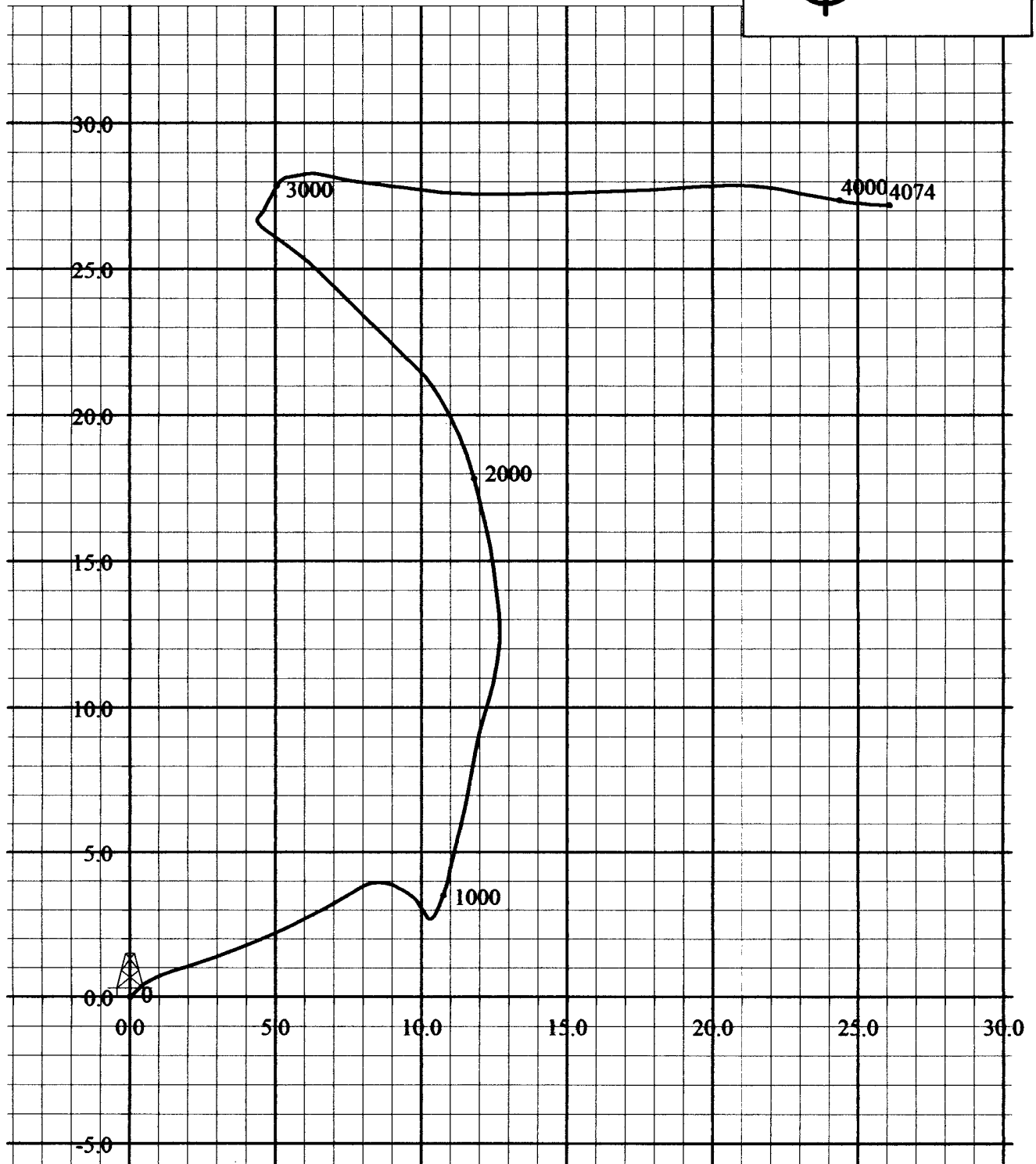
G/T/M

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

Magnetic Field

Strength: 0nT
Dip Angle: 0.00°
Date: 02/21/2007
Model: igrf2000

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



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

~Version Information

2.00: PATHFINDER ENERGY SERVICES LAS - Version 2.00
NO: one line per depth step

~Well Information

STRT.FT 4075.0000:
STOP.FT 8369.0000:
STEP.FT 0.0000:
NULL. -999.25:

EOG RESOURCES: COMPANY

PO C 1 FEE #2H: WELL

COTTONWOOD CREEK, WOLF CAMP: FLD

Pathfinder Energy Services: SERVICE COMPANY

LOCATION

09-Feb-07: LOG DATE

30-015-34754: API NUMBER

14.00: ELEVATION ABOVE PERMANENT DATUM

EDDY: COUNTY

U.S.A.: COUNTRY

KELLY BUSHINGS: DRILLING-LOG MEASURED FROM

3562.00: ELEVATION OF PERMANENT DATUM

760' FSL 660' FEL: WELL LOCATION 1

X:438,096' Y:708,301': WELL LOCATION 2

GROUND LEVEL - MEAN SEA LEVEL: ELEVATION OF PERMANENT DATUM REF

GROUND LEVEL: PERMANENT DATUM

24E: RANGE

001: SECTION

NM: STATE

16S: TOWNSHIP

~Parameter Information

12 1/4: BOREHOLE REC; BIT 1

0: BOREHOLE REC; FROM 1

964: BOREHOLE REC; TO 1

7 7/8: BOREHOLE REC; BIT 2

964: BOREHOLE REC; FROM 2

8 5/8: CASING & TUBING REC; SIZE 1

0: CASING & TUBING REC; FROM 1

964: CASING & TUBING REC; TO 1

EOG RESOURCES: DRILLING COMPANY

JW #3: DRILLING RIG

TRAILER: LOGGING UNIT NUMBER

WEST_Texas: DISTRICT

28-JAN-07: SPUD DATE

01-FEB-07: START DATE

4155: DEPTH IN

EOG RESOURCES AFE #: 103493.: Remarks - Line 001

PATHFINDER ENERGY TRACKING #: 101006165 WT-WT.: Remarks - Line 002

ALL REFERENCES IN DEPTH TRACK ARE AT BIT DEPTH.: Remarks - Line 004

ALL LOGGING DATA IS TRANSMITTED ONLY UNLESS STATED OTHERWISE.: Remarks - Line 005

RUNS 1 - 4: 6 3/4" HD51-R/GAMMA-RAY LOGGING RUNS.: Remarks - Line 007

DEPART ORIGINAL WELLBORE @ 4155' MD (4145.4' TVD) IN OPEN HOLE.: Remarks - Line 009

1: RUN NUMBER 01

01-FEB-07: START DATE - RUN 01

23:30: START TIME - RUN 01

03-FEB-07: END DATE - RUN 01

05:00: END TIME - RUN 01

Po C 1 Fee #2H Final Surveys.txt

RF01.FT	4155: DEPTH IN - RUN 01
RG01.FT	4613: DEPTH OUT - RUN 01
RH01.FT	4107: LOG TOP - RUN 01
RI01.FT	4566: LOG BOTTOM - RUN 01
RJ01.IN	7 7/8: HOLE SIZE - RUN 01
RU01.	W.TEETER: ENGINEER #1 - RUN 01
RV01.	C.PARSONS: ENGINEER #2 - RUN 01
MB01.FT	4273: MUD DEPTH - RUN 01
MD01.	WATER BASED: MUD TYPE - RUN 01
ME01.LB/GAL	9.10: DENSITY - RUN 01
MF01.S/QT	29: VISCOSITY - RUN 01
MG01.	10.0: PH - RUN 01
MM01.CM3/30	100.0: FLUID LOSS - RUN 01
MH01.PPM	55500: SALINITY - RUN 01
MK01.DEGF	83: MAX REC TEMP - RUN 01
RA02.	2: RUN NUMBER 02
RB02.	03-FEB-07: START DATE - RUN 02
RC02.	06:00: START TIME - RUN 02
RD02.	03-FEB-07: END DATE - RUN 02
RE02.	22:30: END TIME - RUN 02
RF02.FT	4613: DEPTH IN - RUN 02
RG02.FT	4772: DEPTH OUT - RUN 02
RH02.FT	4566: LOG TOP - RUN 02
RI02.FT	4725: LOG BOTTOM - RUN 02
RJ02.IN	7 7/8: HOLE SIZE - RUN 02
RU02.	W.TEETER: ENGINEER #1 - RUN 02
RV02.	C.PARSONS: ENGINEER #2 - RUN 02
MB02.FT	4664: MUD DEPTH - RUN 02
MD02.	WATER BASED: MUD TYPE - RUN 02
ME02.LB/GAL	9.00: DENSITY - RUN 02
MF02.S/QT	38: VISCOSITY - RUN 02
MG02.	9.5: PH - RUN 02
MM02.CM3/30	15.0: FLUID LOSS - RUN 02
MH02.PPM	55500: SALINITY - RUN 02
MK02.DEGF	86: MAX REC TEMP - RUN 02
RA03.	3: RUN NUMBER 03
RB03.	04-FEB-07: START DATE - RUN 03
RC03.	03:00: START TIME - RUN 03
RD03.	04-FEB-07: END DATE - RUN 03
RE03.	14:00: END TIME - RUN 03
RF03.FT	4772: DEPTH IN - RUN 03
RG03.FT	4867: DEPTH OUT - RUN 03
RH03.FT	4725: LOG TOP - RUN 03
RI03.FT	4820: LOG BOTTOM - RUN 03
RJ03.IN	7 7/8: HOLE SIZE - RUN 03
RU03.	W.TEETER: ENGINEER #1 - RUN 03
RV03.	C.PARSONS: ENGINEER #2 - RUN 03
MB03.FT	4847: MUD DEPTH - RUN 03
MD03.	WATER BASED: MUD TYPE - RUN 03
ME03.LB/GAL	9.50: DENSITY - RUN 03
MF03.S/QT	47: VISCOSITY - RUN 03
MG03.	10.0: PH - RUN 03
MM03.CM3/30	6.5: FLUID LOSS - RUN 03
MH03.PPM	68000: SALINITY - RUN 03
MK03.DEGF	86: MAX REC TEMP - RUN 03

```

4: RUN NUMBER 04
04-FEB-07: START DATE - RUN 04
15:00: START TIME - RUN 04
04-FEB-07: END DATE - RUN 04
4867: DEPTH IN - RUN 04
4820: LOG TOP - RUN 04
7 7/8: HOLE SIZE - RUN 04
W.TEETER: ENGINEER #1 - RUN 04
C.PARSONS: ENGINEER #2 - RUN 04
5777: MUD DEPTH - RUN 04
WATER BASED: MUD TYPE - RUN 04
9.30: DENSITY - RUN 04
35: VISCOSITY - RUN 04
10.0: PH - RUN 04
6.5: FLUID LOSS - RUN 04
68000: SALINITY - RUN 04
86: MAX REC TEMP - RUN 04
GAMMA-RAY: HEADER TITLE LINE 1
: HEADER TITLE LINE 2
: HEADER TITLE LINE 3
LOG SCALE 1
LOG SCALE 2
1" = 100'
DIRECTIONAL: OTHER SERVICES LINE 1
ROP: OTHER SERVICES LINE 2

```

~Curve Information

```

DEPT.FT
MTVD.FT
INC.DEG
AZI.DEG
SECT.FT
RCN.FT
RCE.FT
DLSEV.DG/HFT
# DEPT MTVD INC AZI SECT RCN RCE DLSEV
# FT FT DEG DEG FT FT FT DG/HFT
# Relog Number 0 0 0 0 0 0 0

```

~ASCII Data

```

4075.00 4074.41 1.60 92.17 -26.60 27.20 26.07 -999.25
4110.00 4109.39 1.93 91.48 -27.68 27.17 27.15 0.94
4142.00 4141.37 2.11 87.09 -28.81 27.18 28.27 0.74
4174.00 4173.37 0.62 174.89 -29.41 27.04 28.88 6.80
4206.00 4205.34 4.04 242.74 -28.41 26.35 27.89 12.03
4238.00 4237.16 7.83 248.10 -25.35 25.02 24.87 11.96
4270.00 4268.71 11.26 254.70 -20.38 23.07 19.93 10.72
4302.00 4299.90 14.60 258.48 -13.54 20.87 13.13 11.23
4333.00 4329.65 18.03 259.71 -5.03 18.88 4.65 11.58
4365.00 4359.73 21.72 261.11 5.69 16.84 -6.03 11.60
4397.00 4389.09 25.15 263.13 18.28 14.73 -18.58 10.86
4429.00 4417.61 28.75 263.92 32.68 12.76 -32.94 11.61
4461.00 4445.16 32.36 264.10 48.88 10.93 -49.10 11.35
4493.00 4471.64 35.96 264.28 66.78 9.05 -66.97 11.25
4524.00 4496.16 39.48 264.63 85.68 7.14 -85.83 11.36
4556.00 4520.20 43.09 264.63 106.72 5.10 -106.85 11.30

```

4588.00	4542.85	46.78	264.89	PO C 1 Fee #2H Final Surveys.txt	11.55
4620.00	4563.92	50.83	265.24	129.26	12.68
4651.00	4582.62	54.96	264.63	153.28	12.68
4683.00	4600.07	58.92	263.40	177.94	13.41
4715.00	4615.59	63.05	262.96	204.66	12.79
4746.00	4628.65	67.09	262.78	232.50	12.96
4778.00	4639.67	72.63	263.05	260.45	13.04
4810.00	4647.30	79.76	263.49	290.32	17.33
4842.00	4651.31	85.82	265.07	321.23	22.32
4874.00	4653.84	85.12	268.23	352.86	19.56
4905.00	4656.62	84.59	268.23	384.73	10.08
4969.00	4660.50	88.46	269.29	415.60	1.71
5032.00	4659.68	93.03	269.46	479.47	6.27
5123.00	4656.75	90.66	268.58	542.45	7.26
5216.00	4655.32	91.10	268.50	633.39	2.78
5309.00	4653.32	91.36	268.32	726.38	0.48
5402.00	4648.90	94.09	269.90	819.36	0.34
5494.00	4643.25	92.95	270.34	912.24	3.39
5587.00	4639.25	91.98	270.96	1004.03	1.69
5679.00	4637.99	89.60	269.46	1096.90	1.24
5771.00	4637.57	90.92	270.87	1188.86	2.76
5864.00	4636.50	90.40	268.93	1280.83	2.10
5958.00	4634.05	92.59	269.46	1373.81	2.16
6053.00	4631.28	90.75	267.26	1467.77	3.02
6149.00	4629.43	91.45	267.35	1562.72	0.74
6244.00	4626.88	91.63	266.83	1658.66	0.58
6339.00	4623.45	92.51	268.41	1753.58	0.58
6435.00	4621.68	89.60	265.77	1848.49	1.90
6530.00	4617.82	95.06	268.08	1944.41	4.09
6623.00	4609.41	95.32	267.44	2039.24	6.24
6717.00	4600.84	95.14	267.35	2131.84	0.74
6811.00	4592.70	94.79	268.23	2225.41	0.21
6905.00	4585.43	94.09	267.79	2319.04	1.00
6999.00	4579.08	93.65	269.64	2412.75	0.88
7092.00	4574.16	92.42	269.20	2506.53	2.02
7186.00	4568.82	94.09	270.60	2599.39	1.40
7280.00	4562.84	93.21	270.17	2693.22	2.32
7374.00	4559.30	91.10	268.93	277.08	1.04
7468.00	4557.28	91.36	271.13	2880.92	2.60
7562.00	4555.19	91.19	270.52	2974.87	2.36
7656.00	4552.02	92.68	272.45	3068.79	0.67
7749.00	4548.03	92.24	272.36	3162.63	2.59
7843.00	4545.14	91.28	272.71	3255.37	0.48
7936.00	4543.71	90.48	273.50	3349.13	1.09
8030.00	4543.35	89.96	273.59	3441.87	1.21
8124.00	4544.21	88.99	274.03	3535.55	0.56
8218.00	4546.09	88.72	273.50	3629.20	1.13
8303.00	4548.25	88.37	273.50	3722.84	0.63
8369.00	4550.12	88.37	273.50	3807.53	0.41
			273.50	3873.29	0.00