Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: LC 060904

1a. Type of Well: [X] Oil Well [ ] Gas Well [ ] Dry Other

b. Type of Completion: [ ] New Well [X] Work Over [ ] Deepen [ ] Plug Back [ ] Diff.Resvr,.
Other Add Horizontal Lateral

6. If Indian, Allotee or Tribe Name:

7. Unit or CA Agreement Name and No.:

2. Name of Operator: EOG Resources Inc.

8. Lease Name and Well No.: Duggan 12 Fed Com 1

3. Address: P.O. Box 2267 Midland, Texas 79702

3a. Phone No. *(include area code)*: 432 686 3689

9. API Well No.: 30-015-28995

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface: 2162' FNL & 784' FEL

At top prod. interval reported below

At total depth: 2260' FNL & 1280' FWL

RECEIVED
JUN 20 2005
OCD-ARTESIA

10. Field and Pool, or Exploratory: Sand Tank; Bone Spring

11. Sec., T., R., M., or Block and Survey or Area: Sec 12, T18S, R29E

12. County or Parish: Eddy

13. State: NM

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
WO 4/15/05	5/3/05	[ ] D & A [X] Ready to Prod. 6/5/05	3525 GL

18. Total Depth: MD / TVD	19. Plug Back T.D.: MD / TVD	20. Depth Bridge Plug Set: MD / TVD
10825 / 7706		7342

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run [X] No [ ] Yes (Submit report
Directional Survey? [ ] No [X] Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt.(#ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No.of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
14 3/4	11 3/4	40		664		685 PP		Surface	
11	8 5/8	32		3947		1350 PP		Surface	
7 7/8	5 1/2	17		11743		2025 Prem		Surface	
4 3/4	3 1/2	9.30	6635	10825		120 acid sol		6636 calc	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8	6601							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	Bone Spring			8046-10700		48	producing
B)							
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8046-10700	Acidized w/ 100,000 gals NEFE slick acid.
	Frac w/ 10000 gals 15% HCl, 163212 gals Spectra Star 2500, 86646 gals 10 # slick
	water, 275200 # 20/40 sand, 35280 # PR-6000 20/40, 3000 # 100 mesh sand.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
6/5/05	6/15/05	24		258	192	50	42.0		Pumping
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. →**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas: Oil Ratio**	**Well Status**	
	175						193	POW	

28a. Production-Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. →**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas: Oil Ratio**	**Well Status**	

(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status

28c. Production-Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)* SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas.Depth
				Queen	2284
				Grayburg	2564
				San Andres	3150
				Bone Spring	4195
				1st Bone Spring	6669
				2nd Bone Spring	7402
				3rd Bone Spring	8187
				Wolfcamp	8463
				Strawn	10308
				Atoka	10534
				Morrow Clastics	11048
				Lower Morrow	11261
				Mississippi Chester	11607

32. Additional remarks (include plugging procedure):

33. Indicate which items have bee attached by placing a check in the appropriate boxes:

- [ ] Electrical/Mechanical Logs (1 full set req'd)
- [ ] Geologic Report
- [ ] DST Report
- [x] Directional Survey
- [ ] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Stan Wagner Title Regulatory Analyst

Signature Stan Wagner Date 6/15/05

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P. O. Box 1980
Hobbs, NM 88241-1980

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

State of New Mexico
Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 02-10-94

Instructions on back

Submit to the Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-28995	96832	Sand Tank, Bone Spring

4 Property Code	5 Property Name	6 Well Number
19010	DUGGAN "12" FEDERAL COM.	1

7 OGRID No.	8 Operator Name	9 Elevation
7377	ENRON OIL & GAS COMPANY	3525'

10 SURFACE LOCATION

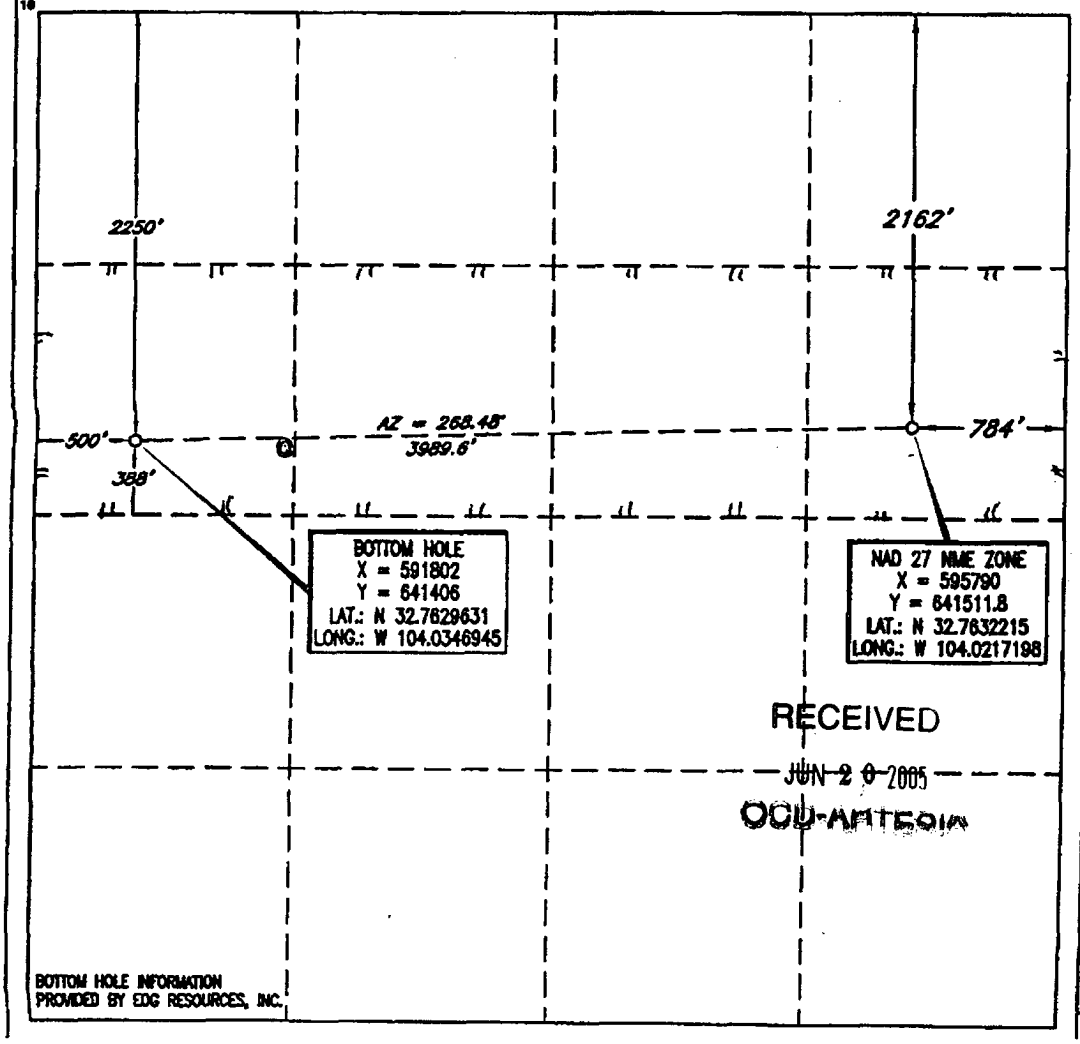
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South Line	784'	East/West Line	County
H	12	18 SOUTH	29 EAST, N.M.P.M.		2162'	NORTH	784'	EAST	EDDY

11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South Line	Feet from the	East/West Line	County
E	12	18 SOUTH	29 EAST, N.M.P.M.		2260	NORTH	1280	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
160			

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Mike Francis

Printed Name: Mike Francis

Title: Agent

Date: 3/15/2005

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: FEBRUARY 8, 1996

Signature and Seal of Professional Surveyor: STATE OF NEW MEXICO V. LYNN BEZNER NO. 7920

Certificate No. V. L. BEZNER R.P.S. #7920

JOB #43905-2 / 99SF / J.C.P.

SCANNED

Scientific Drilling

E.O.G.

Field: Dugan
Site: Eddy County, NM
Well: Dugan 12 Fed #1
Wellpath: VH - Job #32K04-5260
Survey: 04/09/05

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

.....Company Representative

Notorized this date 9th of May, 2005.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas

DEBORAH SUE BYNUM
Notary Public, State of Texas
My Commission Expires
5/9/08

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	E.O.G.	**Date:** 5/9/2005	**Time:** 10:01:32	**Page:**	1
Field:	Dugan	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Dugan 12 Fed #1	**Section (VS) Reference:**	Well (0.00N,0.00E,348.93Azi)		
Wellpath:	VH - Job #32K04-5260	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	04/09/05 KSRG 0'-9554'	**Start Date:**	4/9/2005
Company:	Scientific Drilling Internatio	**Engineer:**	Fsoter w/EM Hobbs
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.28	318.06	100.00	0.21	0.18	-0.16	0.28	0.24	318.06
200.00	0.20	322.36	200.00	0.58	0.50	-0.43	0.08	0.66	319.19
300.00	0.19	21.54	300.00	0.87	0.79	-0.48	0.19	0.93	328.91
400.00	0.35	16.15	400.00	1.28	1.24	-0.33	0.16	1.29	344.98
500.00	0.46	3.95	499.99	1.94	1.94	-0.22	0.14	1.95	353.50
600.00	0.94	58.70	599.99	2.61	2.76	0.51	0.77	2.81	10.42
700.00	0.90	45.26	699.97	3.33	3.74	1.77	0.22	4.14	25.28
800.00	0.97	49.52	799.96	4.18	4.84	2.97	0.10	5.68	31.50
900.00	0.96	49.55	899.95	5.01	5.94	4.25	0.01	7.30	35.60
1000.00	1.48	60.62	999.92	5.83	7.11	6.01	0.57	9.31	40.21
1100.00	1.75	61.47	1099.88	6.69	8.48	8.48	0.27	11.99	45.01
1200.00	1.94	62.53	1199.83	7.63	9.99	11.32	0.19	15.10	48.59
1300.00	1.99	63.22	1299.77	8.58	11.55	14.37	0.06	18.44	51.22
1400.00	1.90	65.29	1399.72	9.44	13.02	17.43	0.11	21.76	53.23
1500.00	1.93	66.13	1499.66	10.20	14.40	20.48	0.04	25.03	54.88
1600.00	1.62	62.92	1599.61	10.96	15.72	23.27	0.33	28.09	55.96
1700.00	1.48	62.20	1699.58	11.73	16.97	25.68	0.14	30.78	56.54
1800.00	1.38	59.63	1799.54	12.50	18.18	27.86	0.12	33.27	56.87
1900.00	1.34	60.39	1899.52	13.27	19.37	29.91	0.04	35.64	57.08
2000.00	1.20	58.18	1999.49	14.01	20.50	31.82	0.15	37.85	57.21
2100.00	0.99	63.18	2099.47	14.61	21.44	33.48	0.23	39.76	57.37
2200.00	1.00	81.89	2199.46	14.80	21.95	35.11	0.32	41.41	57.99
2300.00	0.82	72.49	2299.45	14.84	22.29	36.66	0.23	42.91	58.70
2400.00	0.78	74.57	2399.44	14.97	22.69	38.00	0.05	44.26	59.16
2500.00	0.71	74.17	2499.43	15.07	23.04	39.25	0.07	45.51	59.59
2600.00	0.59	82.21	2599.42	15.10	23.28	40.36	0.15	46.59	60.03
2700.00	0.58	88.86	2699.42	14.98	23.36	41.37	0.07	47.51	60.56
2800.00	0.55	90.00	2799.41	14.80	23.37	42.36	0.03	48.38	61.12
2900.00	0.58	85.70	2899.41	14.65	23.40	43.34	0.05	49.26	61.63
3000.00	0.52	83.03	2999.40	14.56	23.50	44.30	0.07	50.15	62.06
3100.00	0.60	77.08	3099.40	14.54	23.67	45.26	0.10	51.08	62.39
3200.00	0.52	89.21	3199.39	14.48	23.79	46.22	0.14	51.99	62.76
3300.00	0.46	82.60	3299.39	14.37	23.85	47.08	0.08	52.77	63.13
3400.00	0.44	89.05	3399.39	14.28	23.91	47.86	0.05	53.50	63.45
3500.00	0.45	87.80	3499.38	14.15	23.93	48.63	0.01	54.20	63.80
3600.00	0.64	108.62	3599.38	13.81	23.77	49.56	0.27	54.96	64.38
3700.00	0.64	107.83	3699.37	13.26	23.42	50.62	0.01	55.77	65.17
3800.00	1.08	114.19	3799.36	12.45	22.86	52.01	0.45	56.81	66.27
3900.00	0.90	110.85	3899.35	11.49	22.19	53.60	0.19	58.02	67.51
4000.00	0.64	121.07	3999.34	10.70	21.63	54.81	0.29	58.93	68.47
4100.00	0.70	89.89	4099.33	10.21	21.34	55.90	0.36	59.84	69.11
4200.00	0.64	71.99	4199.32	10.16	21.51	57.05	0.22	60.97	69.34
4300.00	0.64	61.00	4299.32	10.40	21.96	58.07	0.12	62.08	69.29
4400.00	0.66	40.71	4399.31	10.93	22.66	58.93	0.23	63.14	68.96
4500.00	0.62	37.96	4499.30	11.64	23.53	59.64	0.05	64.11	68.47
4600.00	0.65	22.16	4599.30	12.47	24.48	60.18	0.18	64.97	67.87
4700.00	0.66	7.36	4699.29	13.49	25.58	60.47	0.17	65.66	67.08
4800.00	0.63	341.42	4799.29	14.58	26.67	60.37	0.29	66.00	66.17

Scientific Drilling

Scientific Drilling International
Survey Report

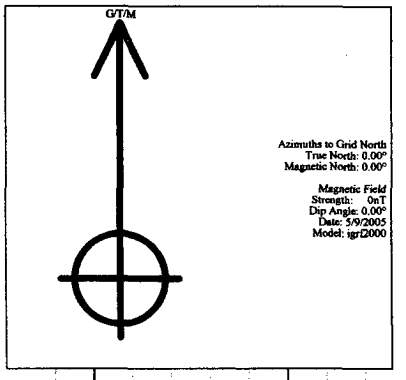
Company:	E.O.G.	**Date:** 5/9/2005	**Time:** 10:01:32	**Page:**	2
Field:	Dugan	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Dugan 12 Fed #1	**Section (VS) Reference:**	Well (0.00N,0.00E,348.93Azi)		
Wellpath:	VH - Job #32K04-5260	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

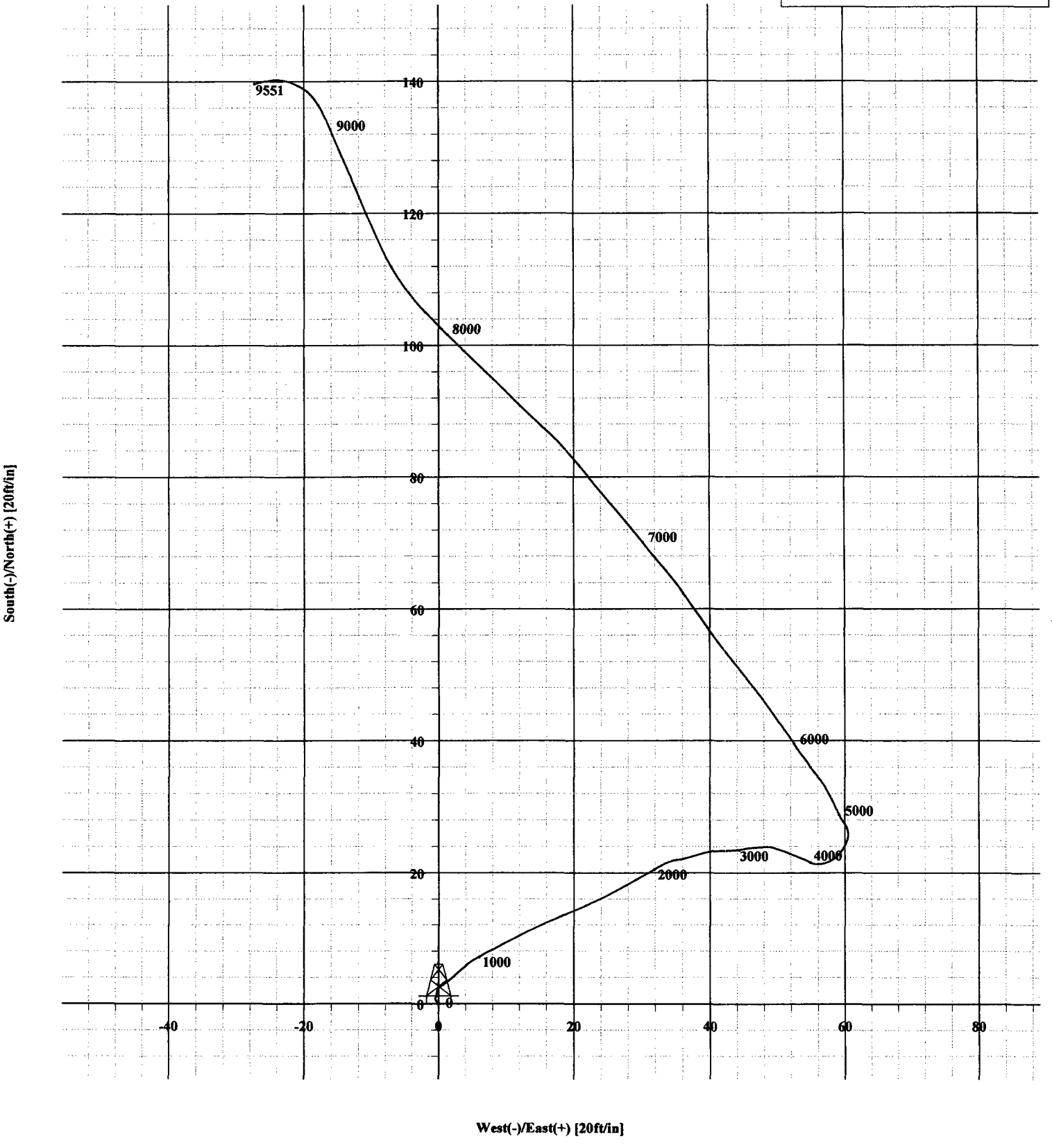
Survey

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	0.75	324.34	4899.28	15.72	27.72	59.81	0.24	65.93	65.13
5000.00	0.75	332.49	4999.27	16.95	28.83	59.13	0.11	65.79	64.01
5100.00	0.76	337.59	5099.26	18.22	30.03	58.58	0.07	65.82	62.86
5200.00	0.97	332.30	5199.25	19.68	31.39	57.93	0.22	65.89	61.55
5300.00	0.84	332.21	5299.24	21.20	32.79	57.19	0.13	65.93	60.18
5400.00	0.43	320.93	5399.23	22.23	33.73	56.62	0.43	65.90	59.22
5500.00	0.73	321.98	5499.23	23.13	34.52	55.99	0.30	65.77	58.34
5600.00	0.71	322.13	5599.22	24.25	35.51	55.21	0.02	65.65	57.25
5700.00	0.62	330.19	5699.21	25.32	36.47	54.56	0.13	65.63	56.24
5800.00	0.65	320.37	5799.21	26.33	37.38	53.93	0.11	65.62	55.28
5900.00	0.75	325.67	5899.20	27.43	38.35	53.20	0.12	65.59	54.21
6000.00	0.89	329.69	5999.19	28.76	39.56	52.44	0.15	65.69	52.97
6100.00	1.24	325.28	6099.17	30.49	41.12	51.43	0.36	65.85	51.36
6200.00	1.71	324.53	6199.14	32.84	43.23	49.95	0.47	66.06	49.13
6300.00	2.03	325.32	6299.08	35.82	45.90	48.08	0.32	66.47	46.33
6400.00	2.48	321.86	6399.01	39.37	49.06	45.73	0.47	67.07	42.99
6500.00	2.47	323.22	6498.91	43.23	52.49	43.11	0.06	67.92	39.40
6600.00	2.41	323.27	6598.82	47.07	55.90	40.56	0.06	69.06	35.97
6700.00	2.70	327.31	6698.72	51.16	59.56	38.03	0.34	70.67	32.56
6800.00	2.43	324.93	6798.62	55.28	63.28	35.54	0.29	72.58	29.32
6900.00	2.51	320.30	6898.53	59.14	66.70	32.92	0.21	74.38	26.27
7000.00	2.43	323.01	6998.44	62.97	70.08	30.25	0.14	76.33	23.35
7100.00	2.46	320.14	7098.35	66.76	73.42	27.60	0.13	78.44	20.60
7200.00	2.66	320.50	7198.25	70.68	76.86	24.75	0.20	80.74	17.85
7300.00	2.67	321.44	7298.14	74.78	80.47	21.82	0.04	83.38	15.17
7400.00	2.70	319.08	7398.03	78.89	84.07	18.82	0.11	86.15	12.62
7500.00	2.63	313.44	7497.92	82.80	87.43	15.62	0.27	88.81	10.13
7600.00	2.57	315.00	7597.82	86.53	90.59	12.36	0.09	91.43	7.77
7700.00	2.39	315.88	7697.72	90.14	93.67	9.33	0.18	94.14	5.69
7800.00	2.17	314.18	7797.64	93.44	96.49	6.52	0.23	96.71	3.86
7900.00	2.01	315.53	7897.58	96.46	99.06	3.93	0.17	99.14	2.27
8000.00	2.09	314.79	7997.51	99.44	101.60	1.41	0.08	101.61	0.79
8100.00	2.27	315.73	8097.44	102.60	104.30	-1.27	0.18	104.31	359.30
8200.00	2.27	321.20	8197.36	106.01	107.26	-3.89	0.22	107.33	357.92
8300.00	1.98	326.86	8297.29	109.37	110.25	-6.08	0.36	110.42	356.85
8400.00	1.95	333.18	8397.24	112.60	113.22	-7.79	0.22	113.48	356.07
8500.00	2.04	336.79	8497.17	115.98	116.37	-9.26	0.15	116.74	355.45
8600.00	2.14	335.97	8597.11	119.54	119.71	-10.72	0.10	120.19	354.88
8700.00	2.16	338.43	8697.04	123.21	123.17	-12.17	0.09	123.77	354.36
8800.00	1.97	335.99	8796.97	126.74	126.49	-13.56	0.21	127.22	353.88
8900.00	1.94	337.78	8896.91	130.08	129.63	-14.90	0.07	130.48	353.44
9000.00	1.89	339.03	8996.86	133.36	132.73	-16.13	0.07	133.71	353.07
9100.00	1.63	332.88	9096.81	136.35	135.54	-17.37	0.32	136.65	352.70
9200.00	1.43	320.46	9196.78	138.82	137.77	-18.81	0.39	139.05	352.22
9300.00	1.35	298.12	9296.75	140.66	139.29	-20.65	0.54	140.81	351.57
9400.00	1.35	284.21	9396.72	141.91	140.13	-22.83	0.33	141.98	350.75
9500.00	1.85	256.64	9496.68	142.35	140.05	-25.54	0.90	142.36	349.66
9554.00	2.01	258.84	9550.65	142.31	139.66	-27.32	0.33	142.31	348.93

Scientific Drilling

Field: Dugan
Site: Eddy County, NM
Well: Dugan 12 Fed #1
Wellpath: VH - Job #32K04-5260
Survey: 04/09/05





BAKER HUGHES

INTEQ

Survey Report

MIN. CURVATURE CALCULATIONS (SPE-3362)

OPERATOR: EOG RESOURCES
WELL: DUGGAN 12 FED COM 1H (RE)
LOCATION: EDDY CO., NM
TIE-IN PROVIDED BY: SDI GYRO SURVEY

START: 4/16/2005
FINISH:
JOB #: 886958

PROPOSED AZ.: 268.48
MAG TO GRID: 8.64

STATION NUMBER	SURVEY DEPTH	INC	AZ	TVD	N-S	E-W	VS	DLS/ 100	BUILD RATE	TURN RATE
Tie In	7300	2.67	321.44	7298.14	80.47	21.82	-23.93			
1	7358	7.0	271.3	7355.94	81.61	17.44	-19.60	9.8	7.47	-86.4
2	7390	10.5	277.6	7387.56	82.04	12.60	-14.77	11.3	10.94	19.7
3	7422	14.0	275.8	7418.83	82.61	5.86	-8.05	11.0	10.94	-5.6
4	7453	18.2	272.3	7448.61	83.39	-2.72	0.50	13.9	13.55	-11.3
5	7485	22.3	269.1	7478.62	83.49	-13.78	11.56	13.3	12.81	-10.0
6	7514	25.2	267.0	7505.17	83.08	-25.45	23.24	10.4	10.00	-7.2
7	7545	26.9	266.0	7533.02	82.25	-39.04	36.85	5.7	5.48	-3.2
8	7575	29.2	264.6	7559.49	81.09	-53.10	50.93	8.0	7.67	-4.7
9	7607	32.4	261.8	7586.98	79.13	-69.36	67.24	11.0	10.00	-8.8
10	7637	34.9	260.7	7611.95	76.60	-85.79	83.73	8.6	8.33	-3.7
11	7668	38.9	260.0	7636.73	73.47	-104.13	102.15	13.0	12.90	-2.3
12	7698	45.3	261.1	7658.98	70.18	-123.96	122.06	21.5	21.33	3.7
13	7729	53.4	262.8	7679.16	66.91	-147.23	145.41	26.5	26.13	5.5
14	7761	59.1	263.2	7696.93	63.67	-173.63	171.88	17.8	17.81	1.2
15	7791	62.9	262.8	7711.47	60.48	-199.67	197.99	12.7	12.67	-1.3
16	7823	66.3	262.5	7725.19	56.78	-228.33	226.75	10.7	10.63	-0.9
17	7855	72.1	262.8	7736.55	52.95	-257.99	256.49	18.1	18.13	0.9
18	7886	76.7	263.2	7744.89	49.32	-287.62	286.21	14.9	14.84	1.3
19	7917	81.5	263.5	7750.75	45.79	-317.84	316.52	15.5	15.48	1.0
20	7947	85.9	263.9	7754.04	42.52	-347.48	346.23	14.7	14.67	1.3
21	7983	87.6	263.5	7756.08	38.58	-383.20	382.04	4.9	4.72	-1.1
22	8014	87.7	263.2	7757.35	34.99	-413.97	412.89	1.0	0.32	-1.0
23	8046	87.9	262.8	7758.58	31.09	-445.70	444.72	1.4	0.63	-1.2
24	8077	87.7	262.5	7759.77	27.13	-476.43	475.54	1.2	-0.65	-1.0
25	8109	87.6	262.8	7761.08	23.04	-508.14	507.35	1.0	-0.31	0.9
26	8140	88.2	262.1	7762.22	18.97	-538.85	538.15	3.0	1.94	-2.3
27	8172	89.3	262.1	7762.92	14.57	-570.53	569.95	3.4	3.44	0.0
28	8202	90.2	263.2	7763.05	10.74	-600.29	599.79	4.7	3.00	3.7
29	8233	90.9	263.5	7762.75	7.15	-631.08	630.67	2.5	2.26	1.0
30	8264	92.4	263.5	7761.86	3.64	-661.86	661.53	4.8	4.84	0.0
31	8295	94.4	264.2	7760.02	0.32	-692.63	692.38	6.8	6.45	2.3
32	8326	93.2	264.2	7757.96	-2.80	-723.40	723.22	3.9	-3.87	0.0
33	8358	91.2	263.9	7756.74	-6.12	-755.21	755.10	6.3	-6.25	-0.9
34	8388	90.5	263.5	7756.29	-9.41	-785.02	784.99	2.7	-2.33	-1.3
35	8420	90.4	263.5	7756.04	-13.03	-816.81	816.87	0.3	-0.31	0.0
36	8451	91.1	263.2	7755.63	-16.62	-847.60	847.75	2.5	2.26	-1.0
37	8482	92.2	263.5	7754.74	-20.21	-878.38	878.61	3.7	3.55	1.0
38	8513	92.5	263.5	7753.47	-23.72	-909.16	909.46	1.0	0.97	0.0
39	8544	92.6	263.5	7752.09	-27.22	-939.93	940.32	0.3	0.32	0.0
40	8576	93.6	263.5	7750.36	-30.84	-971.67	972.15	3.1	3.13	0.0

BAKER HUGHES

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Survey Report

MIN. CURVATURE CALCULATIONS (SPE-3362)

OPERATOR: EOG RESOURCES
WELL: DUGGAN 12 FED COM 1H (RE)
LOCATION: EDDY CO., NM
TIE-IN PROVIDED BY: SDI GYRO SURVEY

START: 4/16/2008
FINISH:
JOB #: 886958

PROPOSED AZ.: 268.48
MAG TO GRID: 8.64

STATION NUMBER	SURVEY DEPTH	INC	AZ	TVD	N-S	E-W	VS	DLS/ 100	BUILD RATE	TURN RATE
41	8607	92.6	262.1	7748.68	-34.72	-1002.38	1002.95	5.5	-3.23	-4.5
42	8638	92.7	262.8	7747.25	-38.79	-1033.08	1033.75	2.3	0.32	2.3
43	8669	93.0	262.8	7745.71	-42.67	-1063.80	1064.56	1.0	0.97	0.0
44	8700	93.3	263.9	7744.01	-46.25	-1094.54	1095.38	3.7	0.97	3.5
45	8732	94.2	264.2	7741.91	-49.56	-1126.30	1127.22	3.0	2.81	0.9
46	8763	94.6	264.6	7739.53	-52.58	-1157.06	1158.05	1.8	1.29	1.3
47	8794	94.7	264.6	7737.02	-55.49	-1187.82	1188.88	0.3	0.32	0.0
48	8826	93.7	265.3	7734.68	-58.30	-1219.61	1220.73	3.8	-3.13	2.2
49	8857	91.9	266.0	7733.16	-60.64	-1250.49	1251.65	6.2	-5.81	2.3
50	8889	92.0	267.0	7732.07	-62.60	-1282.41	1283.62	3.1	0.31	3.1
51	8921	91.8	267.0	7731.01	-64.27	-1314.35	1315.59	0.6	-0.63	0.0
52	8952	92.0	267.0	7729.99	-65.89	-1345.29	1346.56	0.6	0.65	0.0
53	8983	90.8	266.3	7729.23	-67.70	-1376.22	1377.53	4.5	-3.87	-2.3
54	9015	89.6	267.7	7729.12	-69.38	-1408.18	1409.52	5.8	-3.75	4.4
55	9047	89.3	268.1	7729.42	-70.55	-1440.15	1441.52	1.6	-0.94	1.3
56	9075	89.6	268.4	7729.69	-71.40	-1468.14	1469.52	1.5	1.07	1.1
57	9107	91.9	267.7	7729.27	-72.49	-1500.12	1501.51	7.5	7.19	-2.2
58	9138	93.8	267.4	7727.73	-73.82	-1531.05	1532.47	6.2	6.13	-1.0
59	9170	94.4	267.7	7725.44	-75.18	-1562.94	1564.38	2.1	1.88	0.9
60	9201	92.9	268.1	7723.47	-76.31	-1593.85	1595.32	5.0	-4.84	1.3
61	9232	92.0	268.4	7722.15	-77.26	-1624.81	1626.29	3.1	-2.90	1.0
62	9264	91.8	268.1	7721.08	-78.24	-1656.78	1658.27	1.1	-0.63	-0.9
63	9295	92.4	268.4	7719.95	-79.18	-1687.74	1689.25	2.2	1.94	1.0
64	9326	91.1	267.4	7719.00	-80.32	-1718.70	1720.23	5.3	-4.19	-3.2
65	9357	89.0	267.7	7718.97	-81.64	-1749.67	1751.22	6.8	-6.77	1.0
66	9387	87.4	268.4	7719.92	-82.66	-1779.64	1781.21	5.8	-5.33	2.3
67	9419	88.1	268.4	7721.17	-83.56	-1811.60	1813.18	2.2	2.19	0.0
68	9450	89.4	269.1	7721.86	-84.23	-1842.59	1844.17	4.8	4.19	2.3
69	9481	91.3	269.9	7721.66	-84.50	-1873.58	1875.17	6.7	6.13	2.6
70	9512	91.1	269.9	7721.01	-84.56	-1904.58	1906.15	0.6	-0.65	0.0
71	9543	90.1	269.5	7720.69	-84.72	-1935.58	1937.14	3.5	-3.23	-1.3
72	9575	89.5	269.9	7720.80	-84.89	-1967.57	1969.13	2.3	-1.87	1.2
73	9604	89.5	269.5	7721.05	-85.04	-1996.57	1998.13	1.4	0.00	-1.4
74	9636	89.0	268.8	7721.47	-85.51	-2028.57	2030.12	2.7	-1.56	-2.2
75	9666	90.4	268.0	7721.63	-86.35	-2058.55	2060.12	5.4	4.67	-2.7
76	9698	91.1	269.9	7721.21	-86.94	-2090.54	2092.11	6.3	2.19	5.9
77	9729	90.9	269.5	7720.67	-87.10	-2121.54	2123.10	1.4	-0.65	-1.3
78	9761	91.4	269.1	7720.03	-87.49	-2153.53	2155.09	2.0	1.56	-1.2
79	9792	91.8	269.1	7719.16	-87.98	-2184.51	2186.08	1.3	1.29	0.0
80	9823	90.8	268.8	7718.46	-88.55	-2215.50	2217.07	3.4	-3.23	-1.0

BAKER HUGHES

Survey Report

INTEQ

MIN. CURVATURE CALCULATIONS (SPE-3362)

OPERATOR: EOG RESOURCES
WELL: DUGGAN 12 FED COM 1H (RE)
LOCATION: EDDY CO., NM
TIE-IN PROVIDED BY: SDI GYRO SURVEY

START: 4/16/2005
FINISH:
JOB #: 886958

PROPOSED AZ.: 268.48
MAG TO GRID: 8.64

STATION NUMBER	SURVEY DEPTH	INC	AZ	TVD	N-S	E-W	VS	DLS/ 100	BUILD RATE	TURN RATE
81	9855	89.6	268.4	7718.34	-89.33	-2247.49	2249.07	4.0	-3.75	-1.3
82	9887	90.0	268.1	7718.46	-90.30	-2279.47	2281.07	1.6	1.25	-0.9
83	9918	91.1	268.8	7718.16	-91.14	-2310.46	2312.07	4.2	3.55	2.3
84	9950	91.1	268.4	7717.54	-91.93	-2342.45	2344.06	1.2	0.00	-1.3
85	9980	90.8	268.4	7717.05	-92.76	-2372.43	2374.06	1.0	-1.00	0.0
86	10012	90.4	268.4	7716.71	-93.66	-2404.42	2406.05	1.3	-1.25	0.0
87	10043	90.1	268.1	7716.58	-94.60	-2435.40	2437.05	1.4	-0.97	-1.0
88	10074	90.2	267.7	7716.50	-95.74	-2466.38	2468.05	1.3	0.32	-1.3
89	10106	90.1	267.7	7716.41	-97.02	-2498.35	2500.05	0.3	-0.31	0.0
90	10137	90.1	267.4	7716.36	-98.35	-2529.33	2531.04	1.0	0.00	-1.0
91	10169	90.4	267.0	7716.22	-99.91	-2561.29	2563.04	1.6	0.94	-1.2
92	10200	90.8	267.0	7715.89	-101.53	-2592.24	2594.02	1.3	1.29	0.0
93	10231	90.5	266.7	7715.54	-103.24	-2623.19	2625.01	1.4	-0.97	-1.0
94	10262	89.6	265.3	7715.51	-105.40	-2654.12	2655.98	5.4	-2.90	-4.5
95	10293	90.5	266.0	7715.49	-107.75	-2685.03	2686.94	3.7	2.90	2.3
96	10325	90.9	267.7	7715.10	-109.51	-2716.97	2718.92	5.5	1.25	5.3
97	10357	91.2	270.6	7714.51	-109.98	-2748.96	2750.91	9.1	0.94	9.1
98	10388	90.9	270.6	7713.94	-109.66	-2779.96	2781.89	1.0	-0.97	0.0
99	10420	91.9	271.3	7713.16	-109.13	-2811.94	2813.86	3.8	3.13	2.2
100	10451	92.4	270.9	7712.00	-108.53	-2842.91	2844.79	2.1	1.61	-1.3
101	10482	92.6	271.3	7710.64	-107.94	-2873.88	2875.73	1.4	0.65	1.3
102	10513	92.5	272.0	7709.27	-107.05	-2904.83	2906.65	2.3	-0.32	2.3
103	10544	92.1	272.7	7708.02	-105.78	-2935.78	2937.56	2.6	-1.29	2.3
104	10575	91.3	272.0	7707.10	-104.51	-2966.74	2968.47	3.4	-2.58	-2.3
105	10607	90.0	271.3	7706.74	-103.59	-2998.73	3000.42	4.6	-4.06	-2.2
106	10637	90.3	271.3	7706.66	-102.90	-3028.72	3030.38	1.0	1.00	0.0
107	10668	89.9	271.3	7706.61	-102.20	-3059.71	3061.35	1.3	-1.29	0.0
108	10699	90.3	270.9	7706.55	-101.61	-3090.70	3092.31	1.8	1.29	-1.3
109	10731	90.4	271.6	7706.36	-100.91	-3122.70	3124.27	2.2	0.31	2.2
110	10761	90.1	271.3	7706.23	-100.15	-3152.69	3154.23	1.4	-1.00	-1.0
BIT	10825	90.1	271.3	7706.11	-98.70	-3216.67	3218.16	0.0	0.00	0.0