



COP Deviation Report
SAN JUAN 30-6 UNIT #40N

Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP	Legal Well Name SAN JUAN 30-6 UNIT #40N	API / UWI 3003930873	County RIO ARRIBA	State/Province NEW MEXICO
Surface Legal Location 011-030N-006W-A	N/S Dist (ft) 140.00	N/S Ref FNL	E/W Dist (ft) 158.00	E/W Ref FEL

Survey Data					
Date	MD (ftKB)	Incl (°)	Method	Survey Company	
4/14/2010	130.00	1.00	Inc-WL	MOTE	
4/14/2010	237.00	0.75	Inc-WL	MOTE	
4/17/2010	267.00	0.48	IncAzi-MWD	Scientific Drilling	
4/17/2010	327.00	0.30	IncAzi-MWD	Scientific Drilling	
4/17/2010	389.00	1.25	IncAzi-MWD	Scientific Drilling	
4/17/2010	451.00	2.34	IncAzi-MWD	Scientific Drilling	
4/18/2010	512.00	3.64	IncAzi-MWD	Scientific Drilling	
4/18/2010	574.00	5.18	IncAzi-MWD	Scientific Drilling	
4/18/2010	634.00	6.53	IncAzi-MWD	Scientific Drilling	
4/18/2010	696.00	7.98	IncAzi-MWD	Scientific Drilling	
4/18/2010	758.00	9.26	IncAzi-MWD	Scientific Drilling	
4/18/2010	820.00	10.82	IncAzi-MWD	Scientific Drilling	
4/18/2010	881.00	11.97	IncAzi-MWD	Scientific Drilling	
4/18/2010	946.00	13.13	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,009.00	14.42	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,072.00	15.42	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,135.00	16.31	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,198.00	17.47	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,261.00	19.22	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,325.00	20.71	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,388.00	21.68	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,451.00	22.81	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,514.00	23.93	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,578.00	25.05	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,640.00	25.24	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,705.00	24.80	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,768.00	25.31	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,831.00	25.11	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,894.00	25.75	IncAzi-MWD	Scientific Drilling	
4/18/2010	1,957.00	26.26	IncAzi-MWD	Scientific Drilling	
4/18/2010	2,021.00	26.08	IncAzi-MWD	Scientific Drilling	
4/18/2010	2,084.00	26.61	IncAzi-MWD	Scientific Drilling	
4/18/2010	2,147.00	26.71	IncAzi-MWD	Scientific Drilling	
4/18/2010	2,211.00	26.66	IncAzi-MWD	Scientific Drilling	
4/18/2010	2,274.00	26.30	IncAzi-MWD	Scientific Drilling	

I, the undersigned, certify that I acting in my capacity as Drilling Engineer for ConocoPhillips Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

Subscribed and sworn to me this 7/7/10

Patricia R. Clayton
Notary Public in and for San Juan County, New Mexico

My Commission expires 10/2/12

**COP Deviation Report
SAN JUAN 30-6 UNIT #40N**

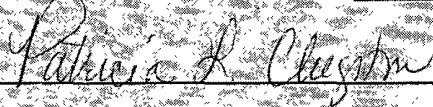
Survey Data

Date	MD (ftKB)	Incl (°)	Method	Survey Company
4/18/2010	2,337.00	25.89	IncAzi-MWD	Scientific Drilling
4/18/2010	2,400.00	26.44	IncAzi-MWD	Scientific Drilling
4/18/2010	2,464.00	26.77	IncAzi-MWD	Scientific Drilling
4/18/2010	2,527.00	26.20	IncAzi-MWD	Scientific Drilling
4/18/2010	2,590.00	26.45	IncAzi-MWD	Scientific Drilling
4/18/2010	2,653.00	26.70	IncAzi-MWD	Scientific Drilling
4/18/2010	2,717.00	27.06	IncAzi-MWD	Scientific Drilling
4/18/2010	2,780.00	26.68	IncAzi-MWD	Scientific Drilling
4/19/2010	2,843.00	25.91	IncAzi-MWD	Scientific Drilling
4/19/2010	2,906.00	24.34	IncAzi-MWD	Scientific Drilling
4/19/2010	2,969.00	22.94	IncAzi-MWD	Scientific Drilling
4/19/2010	3,031.00	20.03	IncAzi-MWD	Scientific Drilling
4/19/2010	3,094.00	17.18	IncAzi-MWD	Scientific Drilling
4/19/2010	3,158.00	15.12	IncAzi-MWD	Scientific Drilling
4/19/2010	3,221.00	12.99	IncAzi-MWD	Scientific Drilling
4/19/2010	3,284.00	11.70	IncAzi-MWD	Scientific Drilling
4/19/2010	3,348.00	10.96	IncAzi-MWD	Scientific Drilling
4/19/2010	3,411.00	10.54	IncAzi-MWD	Scientific Drilling
4/19/2010	3,474.00	10.12	IncAzi-MWD	Scientific Drilling
4/19/2010	3,537.00	8.53	IncAzi-MWD	Scientific Drilling
4/19/2010	3,601.00	7.08	IncAzi-MWD	Scientific Drilling
4/19/2010	3,664.00	6.17	IncAzi-MWD	Scientific Drilling
4/19/2010	3,718.00	5.05	IncAzi-MWD	Scientific Drilling
6/4/2010	8,080.00	1.50	Inc-WL	PHOENIX

I, the undersigned, certify that I acting in my capacity as Drilling Engineer for ConocoPhillips Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.



Subscribed and sworn to me this 9/7/10



Notary Public in and for San Juan County, New Mexico

My Commission expires 10/2/12

RCVD JUL 8 '10
DIL CONS. DIV.
DIST. 3

ConocoPhillips

SJB (NM Central)
SEC 11-T30N-R6W
SJ 30-6 #40N

Original Hole

Survey: Actual

Standard Survey Report

29 April, 2010

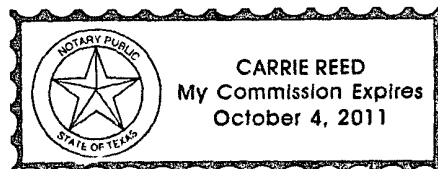
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notorized this date 29th of April, 2010.

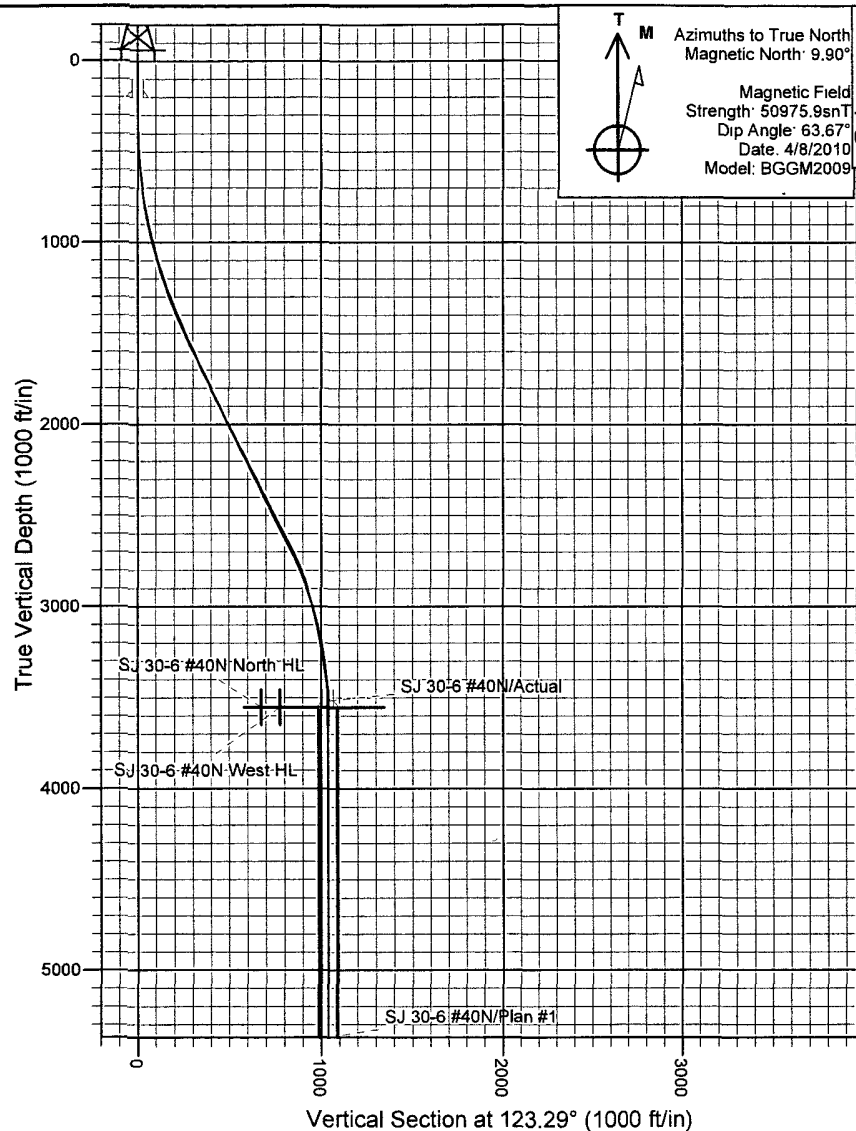
[Signature]

Notary Signature
County of Midland
State of Texas





Project: SJB (NM Central)
SEC 11-T30N-R6W
Well: SJ 30-6 #40N
Wellbore: Original Hole
Design: Plan #1
Site:



Azimuths to True North
Magnetic North: 9.90°
Magnetic Field
Strength: 50975.9nT
Dip Angle: 63.67°
Date: 4/8/2010
Model: BGGM2009

+N/-S
0.0

+E/-W
0.0

Northing
2124900.84

WELL DETAILS: SJ 30-6 #40N

DFE @ 6433.0ft (AWS 730)

Ground Level: 6418.0

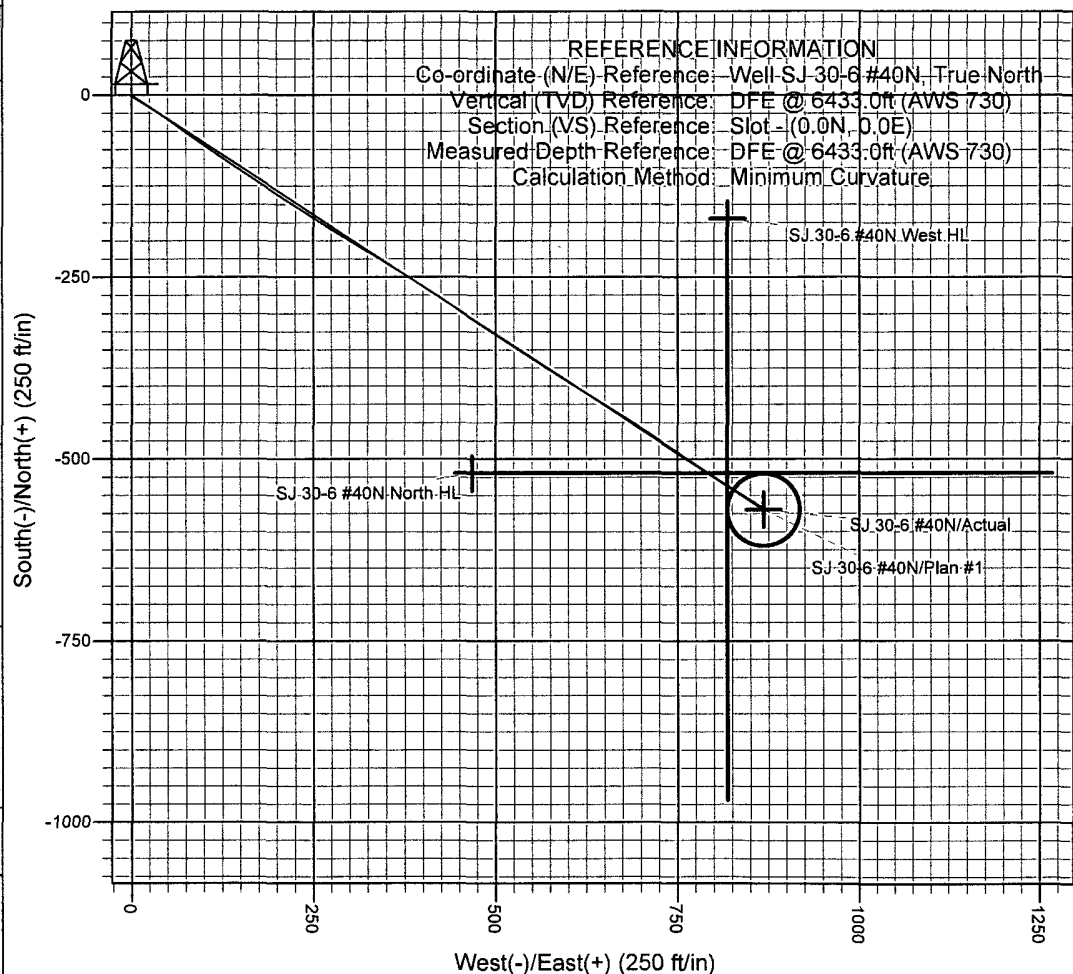
Easting Latitude

156675.44 36° 50' 2.325 N

Longitude

107° 25' 23.370 W

Slot



COMPANY DETAILS: ConocoPhillips
Calculation Method: Minimum Curvature
Error System: ISCWSA
Scan Method: Closest Approach 3D
Error Surface: Combined Covariances
Warning Method: Risk Ratio

PROJECT DETAILS: SJB (NM Central)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002
System Datum: Mean Sea Level

SITE DETAILS: SEC 11-T30N-R6W
Rio Arriba County NM
Site Centre Latitude: 36° 50' 2.325 N
Longitude: 107° 25' 23.370 W
Positional Uncertainty: 0.0
Convergence: -0.70
Local North: True

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 30-6 #40N
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6433.0ft (AWS 730)
Site:	SEC 11-T30N-R6W	MD Reference:	DFE @ 6433.0ft (AWS 730)
Well:	SJ 30-6 #40N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

Project	SJB (NM Central), New Mexico, S-Type MV/DK Wells		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		Using Well Reference Point
Map Zone:	New Mexico Central 3002		Using geodetic scale factor

Site	SEC 11-T30N-R6W		
Site Position:		Northing:	2,124,900.84 ft
From:	Lat/Long	Easting:	156,675.44 ft
Position Uncertainty:	0.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 50' 2.325 N
		Longitude:	107° 25' 23.370 W
		Grid Convergence:	-0.70 °

Well	SJ 30-6 #40N, S-Type MV/DK Well		
Well Position	+N/-S	0.0 ft	Northing: 2,124,900.84 ft
	+E/-W	0.0 ft	Easting: 156,675.44 ft
Position Uncertainty		3.5 ft	Wellhead Elevation: ft
			Latitude: 36° 50' 2.325 N
			Longitude: 107° 25' 23.370 W
			Ground Level: 6,418.0 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	4/8/2010	9.90	63.67	50,976

Design	Original Hole			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	123.17

Survey Program	Date	4/29/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
267.0	3,718.0	Actual (Original Hole)	MWD SDI	MWD - Standard ver 1.0.1

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
267.0	0.48	206.08	267.0	-1.0	-0.5	0.1	0.18	0.18	0.00	
327.0	0.30	133.55	327.0	-1.3	-0.5	0.3	0.81	-0.30	-120.88	
389.0	1.25	120.45	389.0	-1.8	0.2	1.2	1.55	1.53	-21.13	
451.0	2.34	123.99	451.0	-2.8	1.8	3.1	1.77	1.76	5.71	
512.0	3.64	122.81	511.9	-4.6	4.5	6.3	2.13	2.13	-1.93	
574.0	5.18	121.48	573.7	-7.1	8.5	11.0	2.49	2.48	-2.15	
634.0	6.53	120.52	633.4	-10.3	13.8	17.2	2.26	2.25	-1.60	
696.0	7.98	121.00	694.9	-14.3	20.5	25.0	2.34	2.34	0.77	
758.0	9.26	122.93	756.2	-19.2	28.4	34.3	2.12	2.06	3.11	
820.0	10.82	123.68	817.2	-25.1	37.4	45.1	2.52	2.52	1.21	
881.0	11.97	125.57	877.0	-32.0	47.3	57.1	1.98	1.89	3.10	
946.0	13.13	125.52	940.5	-40.2	58.8	71.2	1.78	1.78	-0.08	

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 30-6 #40N
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6433.0ft (AWS 730)
Site:	SEC 11-T30N-R6W	MD Reference:	DFE @ 6433 0ft (AWS 730)
Well:	SJ 30-6 #40N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,009.0	14 42	125 95	1,001 7	-49 0	71 0	86 2	2.05	2.05	0 68
1,072 0	15 42	125 68	1,062 5	-58 5	84.2	102.4	1 59	1.59	-0 43
1,135.0	16 31	125.12	1,123 1	-68 4	98.2	119 6	1 43	1 41	-0.89
1,198.0	17 47	123.92	1,183 4	-78.8	113 3	137 9	1.92	1 84	-1 90
1,261 0	19 22	123 89	1,243 2	-89.9	129.7	157 8	2 78	2.78	-0.05
1,325.0	20 71	124 85	1,303 4	-102 2	147.8	179 6	2.38	2.33	1.50
1,388.0	21.68	124.10	1,362.1	-115 1	166 5	202 4	1.60	1.54	-1.19
1,451.0	22 81	123 35	1,420 4	-128.3	186 4	226 2	1.85	1.79	-1.19
1,514.0	23.93	123.03	1,478.2	-142.0	207 3	251 2	1 79	1 78	-0.51
1,578 0	25 05	122 10	1,536 5	-156.3	229.7	277.7	1.85	1 75	-1.45
1,640 0	25.24	121 40	1,592.6	-170 1	252 1	304.1	0.57	0.31	-1.13
1,705.0	24.80	121.79	1,651 5	-184 5	275.5	331 6	0 72	-0 68	0 60
1,768 0	25.31	121.47	1,708 6	-198 5	298.2	358.2	0 84	0 81	-0 51
1,831.0	25 11	121.63	1,765.6	-212 6	321.1	385 1	0 34	-0 32	0 25
1,894.0	25 75	122 03	1,822.5	-226 8	344 0	412 1	1 05	1 02	0 63
1,957 0	26 26	122 56	1,879.1	-241.6	367 4	439 7	0.89	0.81	0 84
2,021 0	26 08	122.45	1,936 5	-256.8	391 2	467.9	0.29	-0.28	-0.17
2,084.0	26 61	123.95	1,993 0	-272.1	414 6	495.9	1 35	0 84	2.38
2,147.0	26 71	124.09	2,049.3	-287.9	438 0	524.2	0 19	0 16	0 22
2,211.0	26 66	123.86	2,106 5	-304 0	461.9	552 9	0.18	-0 08	-0.36
2,274 0	26 30	123.29	2,162 9	-319 5	485.3	581.0	0.70	-0 57	-0.90
2,337 0	25.89	123 52	2,219 4	-334.8	508.4	608 7	0 67	-0 65	0 37
2,400.0	26.44	123.45	2,276 0	-350 1	531 6	636 5	0 87	0 87	-0 11
2,464 0	26 77	123 39	2,333.2	-365 9	555.5	665.1	0.52	0.52	-0 09
2,527.0	26 20	122 86	2,389.6	-381.2	579 0	693.2	0.98	-0 90	-0.84
2,590.0	26.45	122.59	2,446 1	-396.3	602 5	721.2	0.44	0.40	-0 43
2,653 0	26.70	121 97	2,502 4	-411.4	626 3	749.4	0 59	0 40	-0.98
2,717 0	27.06	121 76	2,559 5	-426.6	650.9	778 3	0 58	0 56	-0 33
2,780 0	26 68	121.63	2,615 7	-441 6	675.1	806 7	0 61	-0.60	-0.21
2,843.0	25 91	122.87	2,672.2	-456.5	698.8	834.7	1 50	-1 22	1 97
2,906 0	24 34	124 05	2,729.2	-471.2	721 1	861.4	2.62	-2 49	1 87
2,969.0	22 94	124 31	2,786.9	-485 4	742 0	886 7	2 23	-2 22	0 41
3,031.0	20 03	123 97	2,844 6	-498.2	760 8	909 4	4 70	-4 69	-0.55
3,094.0	17 18	123 41	2,904.3	-509.3	777 5	929 5	4 53	-4.52	-0 89
3,158 0	15 12	123 65	2,965 8	-519 2	792.3	947 3	3 22	-3 22	0 38
3,221 0	12 99	124.38	3,026 9	-527 7	805.0	962 6	3 39	-3 38	1.16
3,284.0	11 70	122 90	3,088 4	-535 2	816.2	976 0	2.11	-2 05	-2.35
3,348.0	10 96	121 61	3,151 2	-541 9	826.8	988 6	1 22	-1.16	-2 02
3,411 0	10 54	122.54	3,213 1	-548 1	836 8	1,000 3	0.72	-0 67	1.48
3,474 0	10.12	123.51	3,275 1	-554 3	846 3	1,011 6	0.72	-0 67	1.54
3,537 0	8 53	122 65	3,337 2	-559 9	854 8	1,021 8	2.53	-2 52	-1 37
3,601 0	7 08	119 74	3,400 6	-564.4	862 2	1,030 5	2 35	-2 27	-4.55
3,664 0	6.17	120 32	3,463.2	-568 0	868 5	1,037 8	1 45	-1 44	0.92
3,718.0	5.05	121.83	3,516.9	-570.7	873.1	1,043.1	2.09	-2 07	2.80