COP Deviation Report

ConocoPhillips

SAN JUAN 28-6 UNIT #130P

Operator	Legal WellName	API / UWI	County	State/Province
BURLINGTON RESOURCES OIL & GAS COMPANY LP	SAN JUAN 28-6 UNIT #130P	3003930583	RIO ARRIBA	NEW MEXICO

Surface Legal Location	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
032-028N-006W-P	1,315.00	FSL	628.00	FEL

Survey Data

Date	MD (ftKB)	Incl (°)	Method	Survey Company
1/31/2010	0.00	0.00	IncAzi-MWD	Scientific Drilling
1/27/2010	130.00	0.75	Inc-WL	MOTE
1/27/2010	236.00	0.50	Inc-WL	MOTE
1/31/2010	263.00	0.38	IncAzi-MWD	Scientific Drilling
1/31/2010	324.00	0.58	IncAzi-MWD	Scientific Drilling
1/31/2010	386.00	1.85	IncAzi-MWD	Scientific Drilling
1/31/2010	447.00	3.52	IncAzi-MWD	Scientific Drilling
1/31/2010	508.00	4.62	IncAzi-MWD	Scientific Drilling
1/31/2010	568.00	5.56	IncAzi-MWD	Scientific Drilling
1/31/2010	630.00	7.17	IncAzi-MWD	Scientific Drilling
1/31/2010	690.00	8.32	IncAzi-MWD	Scientific Drilling
2/1/2010	752.00	9.50	IncAzi-MWD	Scientific Drilling
2/1/2010	812.00	10.44	IncAzi-MWD	Scientific Drilling
2/1/2010	906.00	12.75	IncAzi-MWD	Scientific Drilling
2/1/2010	996.00	14.77	IncAzi-MWD	Scientific Drilling
2/1/2010	1,086.00	16.77	IncAzi-MWD	Scientific Drilling
2/1/2010	1,176.00	18.25	IncAzi-MWD	Scientific Drilling
2/1/2010	1,266.00	19.19	IncAzi-MWD	Scientific Drilling JUL 8'10
2/2/2010	1,356.00	21.06	IncAzi-MWD	Scientific Drilling
2/2/2010	1,446.00	22.32	IncAzi-MWD	Scientific Drilling DIST. DIV.
2/2/2010	1,536.00	23.70	IncAzi-MWD	Scientific Drilling
2/2/2010	1,626.00	25.78	IncAzi-MWD	Scientific Drilling OIL CONS. DIV.
2/2/2010	1,716.00	26.35	IncAzi-MWD	Scientific Drilling DIST. 3
2/2/2010	1,806.00	26.17	IncAzi-MWD	Scientific Drilling
2/2/2010	1,896.00	26.82	IncAzi-MWD	Scientific Drilling
2/2/2010	1,986.00	26.82	IncAzi-MWD	Scientific Drilling
2/2/2010	2,076.00	25.97	IncAzi-MWD	Scientific Drilling
2/2/2010	2,166.00	25.37	IncAzi-MWD	Scientific Drilling
2/2/2010	2,256.00	26.46	IncAzi-MWD	Scientific Drilling
2/2/2010	2,346.00	25.97	IncAzi-MWD	Scientific Drilling
2/2/2010	2,436.00	25.93	IncAzi-MWD	Scientific Drilling
2/2/2010	2,526.00	25.72	IncAzi-MWD	Scientific Drilling
2/2/2010	2,616.00	25.52	IncAzi-MWD	Scientific Drilling
2/2/2010	2,706.00	25.09	IncAzi-MWD	Scientific Drilling
2/2/2010	2,796.00	24.90	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as Driller 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.**

Todd Dalmont

Subcribed and sworn to me this 7/7/10

Patricia L. Clugston

Notary Public in and for San Juan County, New Mexico

My Commission expires 10/2/12

Report Printed: 7/6/2010

ConocoPhillips

COP Deviation Report

SAN JUAN 28-6 UNIT #130P

Survey Data

Date	MD (ftKB)	Incl (°)	Method	Survey Company
2/2/2010	2,886.00	25.71	IncAzi-MWD	Scientific Drilling
2/2/2010	2,975.00	25.17	IncAzi-MWD	Scientific Drilling
2/2/2010	3,065.00	25.39	IncAzi-MWD	Scientific Drilling
2/2/2010	3,155.00	24.09	IncAzi-MWD	Scientific Drilling
2/2/2010	3,245.00	22.43	IncAzi-MWD	Scientific Drilling
2/2/2010	3,335.00	20.09	IncAzi-MWD	Scientific Drilling
2/2/2010	3,425.00	18.40	IncAzi-MWD	Scientific Drilling
2/2/2010	3,515.00	16.97	IncAzi-MWD	Scientific Drilling
2/2/2010	3,605.00	19.61	IncAzi-MWD	Scientific Drilling
2/2/2010	3,695.00	17.52	IncAzi-MWD	Scientific Drilling
2/2/2010	3,785.00	14.97	IncAzi-MWD	Scientific Drilling
2/2/2010	3,875.00	14.00	IncAzi-MWD	Scientific Drilling
2/2/2010	3,965.00	12.20	IncAzi-MWD	Scientific Drilling
2/2/2010	4,055.00	9.43	IncAzi-MWD	Scientific Drilling
2/2/2010	4,145.00	7.88	IncAzi-MWD	Scientific Drilling
2/2/2010	4,235.00	5.46	IncAzi-MWD	Scientific Drilling
2/2/2010	4,320.00	2.42	IncAzi-MWD	Scientific Drilling
2/2/2010	4,377.00	1.00	Projection	Scientific Drilling
3/17/2010	8,005.00	1.75	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.

Tasha Dahnke

Subcribed and sworn to me this 7/7/10

Patricia D. Clugston

Notary Public in and for San Juan County, New Mexico

My Commission expires 12/2/12

San Juan 28-6 Unit #130P

1315' FSL , 628' FEL
Unit P, Section 32, T28N, R06W
Rio Arriba County, NM

LAT: 36 deg. 36 min. 50 sec. N LONG: 107 deg. 28 min. 58.3 sec. W

GL = 6,563' KB= 6,579'

Surface Casing:

9-5/8"	32.3#	H-40
Set @	231'	
TOC @	Surface	

Intermediate Casing:

7"	23.0#	J-55
Set @	4,362'	
TOC @	Surface	
DVT @	2,931'	

Proposed Stimulation Perfs
Top (Lewis): 4510'
Bottom (Pt. Lookout): 5870'

Production Casing/Liner:

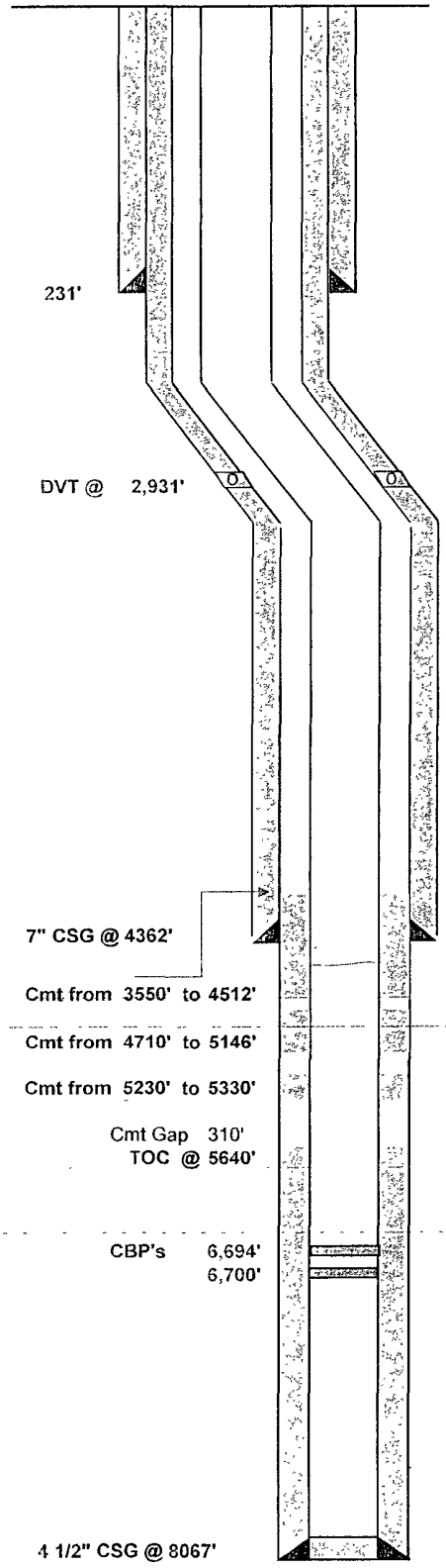
4-1/2"	11 6#	J-55/L-80
Set @	8,067'	
TOC @	6,350'	

Main Deviation Angles

TMD (ft)	Angle ^{0}	TVD (ft)
See attached Deviation Survey		

Max deviation:
26.82° inclination

Current Wellbore



Formation Tops:

Ojo Alamo	2,685'	From GR
Kirtland	2,847'	From GR
Fruitland	3,070'	From GR
Pictured Cliffs	3,549'	From GR
Lewis	3,644'	From GR
Huer. Bent *	4,377'	From GR
Chacra	4,505'	From GR
Upper Cliff House	5,092'	From GR
Cliff House	5,201'	From GR
Menefee	5,343'	From GR
Point Lookout	5,735'	From GR
Mancos	6,138'	From GR
Gallup	6,831'	From GR
Greenhorn	7,695'	From GR
Graneros	7,760'	From GR
DK Two Wells	7,790'	From GR
Paguate	7,872'	From GR
Cubero	7,903'	From GR
Lower Cubero	7,937'	From GR

LOGS RUN
3/18/10
3/25/10
4/1/10
4/14/10
4/21/10
4/27/10
5/3/10
5/11/10
5/13/10

12.) 2 Sqz holes @ 4510' 5/14/10
With cmt ret @ 4460' (or packer @ 4310), pump 80 sx Premium Light cmt

11.) 2 Sqz holes @ 4875' 5/12/10
With cmt ret @ 4820', pumped 80 sx Premium Light cmt

10.) 2 Sqz holes @ 5110' 5/6/10
With cmt ret @ 5070', pumped 67 sx Premium Light cmt

9.) Open sqz holes @ 5300' 5/4/10
With cmt retainer @ 5250', pumped 31 sx Premium Light cmt

8.) 2 Sqz holes @ 5300' & 5700' 4/28/10
With cmt retainer @ 5340', Suicide sqz with 50 sx Premium Light cmt

7.) 2 Sqz holes @ 5300' & 6000' 4/22/10
With cmt retainer @ 5330', Suicide sqz with 63 sx Premium Light cmt

6.) 2 Sqz holes @ 6300' 4/20/10
With cmt retainer @ 6250', pumped 190 sx Type III neat cmt

5.) Leaking Holes @ 6900' 4/9/10
pumped 50 sx Type III neat cmt

4.) 2 Sqz holes @ 6900' 4/6/10
With cmt retainer @ 6850', pumped 75 sx Premium Light cmt

3.) 2 Sqz holes @ 7500' 3/31/10
With cmt retainer @ 7450', pumped 50 sx Premium Light cmt

2.) 2 Sqz holes @ 7770' 3/24/10
With cmt retainer @ 7720', pumped 270 sx Premium Light cmt

1.) 2 Sqz holes @ 7860' & 8025' 3/23/10
With cmt retainer @ 7890', Suicide sqz with 17 sx Premium Light cmt

TMD	TVD
LTD= 8,044'	
PBTD= 8,044'	PBTD= 7,801'
TD= 8,068'	TD= 7,824'

DM 05/24/10

ConocoPhillips

SJB (NM Central)
SEC 32-T28N-R6W
SJ 28-6 #130P
WAN.CDR.7476
Original Hole

Survey: Actual

7/8/10

Standard Survey Report

31 March, 2010

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

Kirkwood

Notorized this date 1st of April ,2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	**Local Co-ordinate Reference:**	Well SJ 28-6 #130P
Project:	SJB (NM Central)	**TVD Reference:**	DFE @ 6579.0ft (H&P 283)
Site:	SEC 32-T28N-R6W	**MD Reference:**	DFE @ 6579.0ft (H&P 283)
Well:	SJ 28-6 #130P	**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 32-T28N-R6W

Site Position:		**Northing:**	2,044,994 46 ft	**Latitude:**	36° 36' 49.999 N
From:	Lat/Long	**Easting:**	138,165 70 ft	**Longitude:**	107° 28' 58.372 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	6-1/8"	**Grid Convergence:**	-0 74 °

Well SJ 28-6 #130P, MV/DK Well

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,044,994.46 ft	**Latitude:**	36° 36' 49.999 N
	+E/-W	0 0 ft	**Easting:**	138,165 70 ft	**Longitude:**	107° 28' 58.372 W
Position Uncertainty		3.5 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,563 0 ft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	1/13/2010	9.93	63 48	50,863

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	288 80

Survey Program **Date** 3/31/2010

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
263.0	4,320.0	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
263 0	0 38	118.91	263 0	-0 4	0.8	-0.9	0 14	0.14	0.00
324 0	0 58	301.11	324.0	-0.4	0 7	-0 8	1 57	0 33	-291.48
386.0	1 85	292 19	386 0	0 2	-0.5	0.5	2 06	2.05	-14 39
447.0	3.52	296 64	446.9	1.4	-3 1	3.4	2 76	2 74	7 30
508 0	4.62	296 38	507 8	3.3	-7 0	7 7	1.80	1.80	-0.43
568 0	5 56	293.81	567.5	5 6	-11 8	13.0	1.61	1 57	-4.28
630 0	7 17	294 54	629 1	8 4	-18.1	19 8	2.60	2.60	1.18
690 0	8 32	291 09	688 6	11.5	-25.5	27.9	2.07	1.92	-5 75
752 0	9.50	289.20	749.8	14 8	-34 5	37.5	1.96	1 90	-3.05
812.0	10 44	289 49	808 9	18 2	-44.3	47 9	1 57	1 57	0 48
906.0	12 75	290.45	901 0	24 7	-62.1	66 7	2.47	2.46	1.02
996 0	14 77	289.72	988 4	32 1	-82.2	88 1	2 25	2 24	-0 81

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	**Local Co-ordinate Reference:**	Well SJ 28-6 #130P
Project:	SJB (NM Central)	**TVD Reference:**	DFE @ 6579 0ft (H&P 283)
Site:	SEC 32-T28N-R6W	**MD Reference:**	DFE @ 6579 0ft (H&P 283)
Well:	SJ 28-6 #130P	**North Reference:**	True
Wellbore:	Original Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Hole	**Database:**	edmCOP

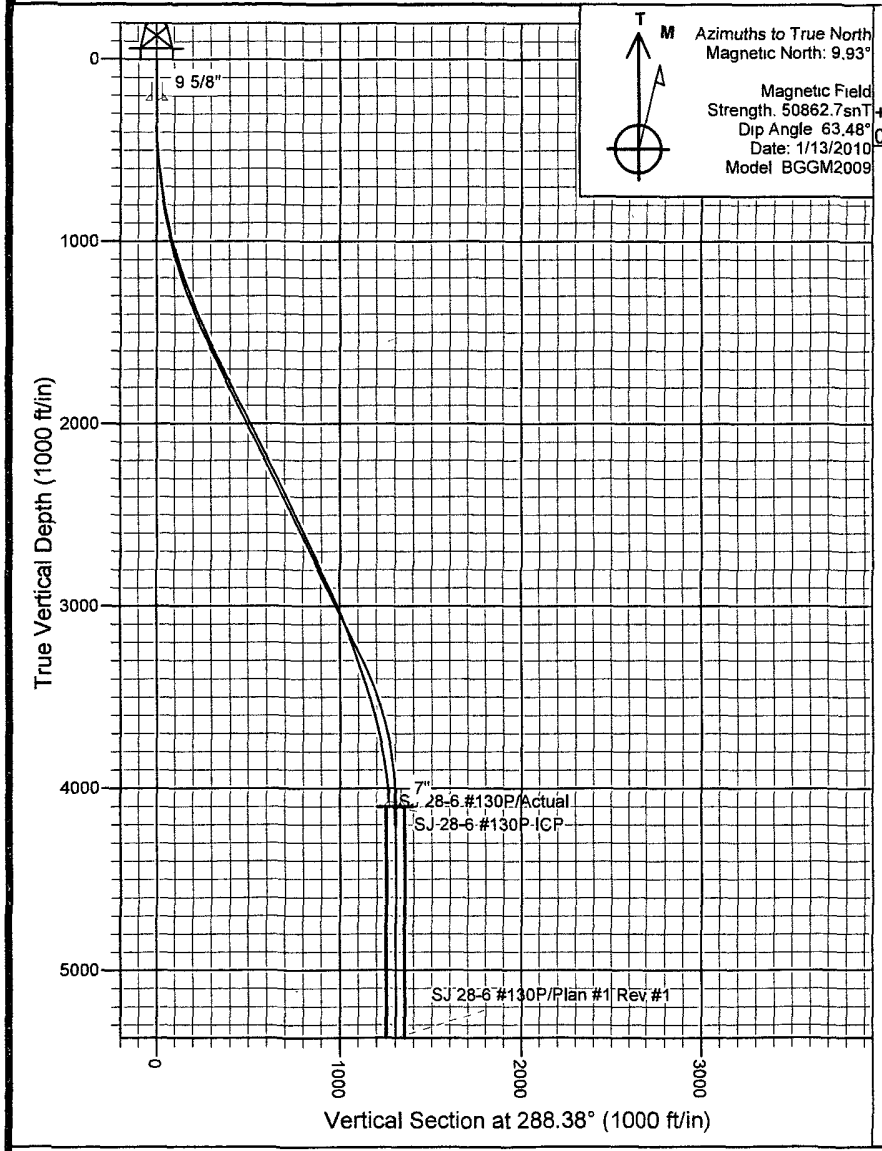
Survey

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)
1,086.0	16.77	289.50	1,075 0	40.3	-105 2	112 6	2.22	2 22	-0 24
1,176.0	18.25	289.41	1,160 9	49 3	-130.8	139.7	1.64	1.64	-0.10
1,266.0	19 19	288 87	1,246.1	58.7	-158.1	168 6	1 06	1.04	-0 60
1,356 0	21.06	289 09	1,330.6	68 8	-187 3	199 5	2.08	2 08	0.24
1,446.0	22.32	290 02	1,414 2	80 0	-218 7	232.8	1.45	1.40	1.03
1,536 0	23 70	288 81	1,497 1	91.6	-251 9	268.0	1.62	1 53	-1 34
1,626.0	25 78	290 19	1,578 8	104.2	-287 4	305.6	2.40	2 31	1.53
1,716 0	26.35	289 10	1,659 6	117.5	-324 6	345 2	0 83	0.63	-1.21
1,806.0	26 17	288.45	1,740 4	130.3	-362.3	385 0	0 38	-0.20	-0.72
1,896 0	26 82	288.59	1,820 9	143 1	-400.4	425.1	0 73	0.72	0 16
1,986 0	26.82	288 59	1,901.2	156 0	-438.9	465 7	0 00	0.00	0 00
2,076.0	25 97	288 11	1,981.8	168 6	-476 8	505 7	0 97	-0 94	-0 53
2,166.0	25 37	287.15	2,063.0	180.4	-514 0	544.7	0.81	-0.67	-1 07
2,256.0	26.46	286 57	2,143 9	191.9	-551.6	584 0	1.24	1.21	-0 64
2,346.0	25 97	284 91	2,224 6	202 6	-589 9	623.7	0.98	-0 54	-1 84
2,436 0	25 93	285.51	2,305 6	213 0	-627.9	663 0	0 30	-0 04	0 67
2,526.0	25.72	286 09	2,386.6	223 6	-665.6	702 2	0.37	-0.23	0.64
2,616 0	25 52	285.16	2,467.7	234 1	-703.1	741 0	0.50	-0.22	-1.03
2,706.0	25.09	285 32	2,549 1	244.2	-740 2	779 4	0 48	-0.48	0.18
2,796.0	24 90	286 76	2,630.7	254.7	-776 8	817 4	0 71	-0.21	1 60
2,886.0	25 71	290.67	2,712.0	267.1	-813.2	855.9	2.06	0.90	4 34
2,975 0	25 17	289.87	2,792 4	280.3	-849.0	894.1	0.72	-0 61	-0 90
3,065.0	25 39	289.34	2,873.8	293 2	-885.2	932 5	0.35	0.24	-0 59
3,155 0	24.09	289 00	2,955.5	305 6	-920.8	970 2	1 45	-1 44	-0.38
3,245 0	22.43	288 97	3,038.2	317 2	-954.4	1,005.7	1 84	-1.84	-0 03
3,335 0	20.09	290.67	3,122 1	328 2	-985 1	1,038 3	2 69	-2 60	1 89
3,425.0	18 40	292.25	3,207 0	339.0	-1,012.7	1,068.0	1 96	-1 88	1 76
3,515.0	16.97	292 81	3,292 8	349 5	-1,038.0	1,095 3	1.60	-1.59	0.62
3,605 0	19 61	293.72	3,378 2	360 7	-1,063 9	1,123.4	2 95	2 93	1 01
3,695.0	17 52	292.79	3,463.6	372.0	-1,090 2	1,152 0	2 35	-2 32	-1.03
3,785 0	14 97	288.15	3,550.0	380 9	-1,113 8	1,177.1	3 18	-2.83	-5 16
3,875 0	14.00	289.22	3,637.1	388.1	-1,135 1	1,199.6	1 12	-1.08	1 19
3,965.0	12.20	286 20	3,724 7	394.3	-1,154.5	1,220.0	2.14	-2.00	-3.36
4,055.0	9 43	286 76	3,813 1	399.1	-1,170.7	1,236 9	3 08	-3 08	0 62
4,145.0	7 88	286.88	3,902 1	403.0	-1,183.7	1,250.4	1 72	-1 72	0 13
4,235.0	5 46	289 52	3,991 5	406 2	-1,193 6	1,260 9	2.71	-2 69	2.93
4,320.0	2 42	289.02	4,076.3	408 2	-1,199 1	1,266 7	3.58	-3 58	-0 59

Scientific Drilling
Directional Drilling Operations

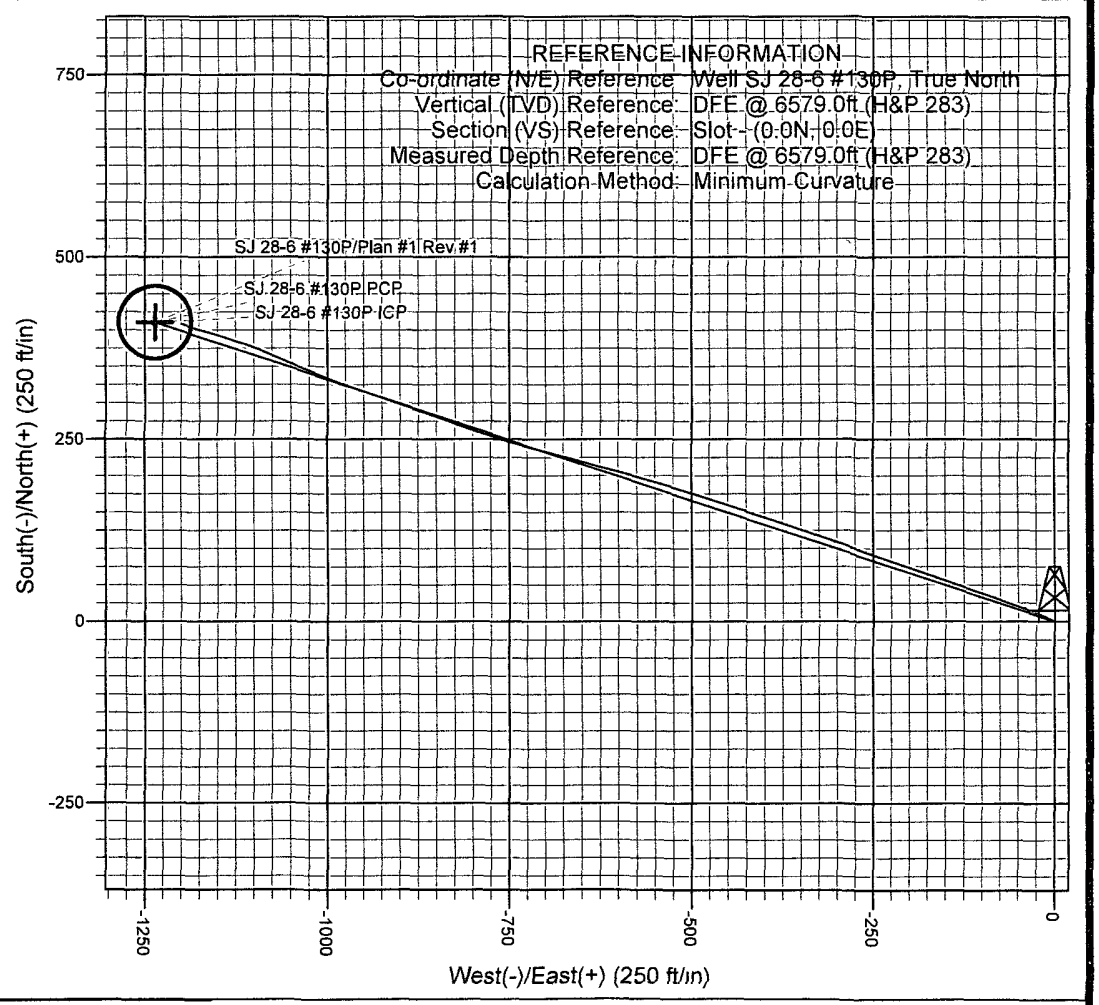
Project: SJB (NM Central)
SEC 32-T28N-R6W
Well: SJ 28-6 #130P
Wellbore: Original Hole
Design: Plan #1 Rev #1
Site:

ConocoPhillips



WELL DETAILS: SJ 28-6 #130P
DFE @ 6579.0ft (H&P 283)
Ground Level: 6563.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	2044994.46	138165.70	36° 36' 49.999 N	107° 28' 58.372 W	



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 32-T28N-R6W
Rio Arriba County NM
Site Centre Latitude: 36° 36' 49.999 N
Longitude: 107° 28' 58.372 W
Positional Uncertainity: 0.0
Convergence: -0.74
Local North: True