



COP Deviation Report

SAN JUAN 28-6 UNIT #143P

Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP	Legal WellName SAN JUAN 28-6 UNIT #143P	API / UWI 3003930805	County RIO ARRIBA	State/Province NEW MEXICO
Surface Legal Location 020-028N-006W-K	N/S Dist (ft) 1,473.00	N/S Ref FSL	E/W Dist (ft) 1,570.00	E/W Ref FWL

Survey Data

Date	MD (ftKB)	Incl (°)	Method	Survey Company
4/8/2010	130.00	1.00	Inc-Drop	MO-TE DRILLING INC.
4/8/2010	235.00	0.75	Inc-Drop	MO-TE DRILLING INC.
4/13/2010	268.00	0.30	IncAzi-MWD	Scientific Drilling
4/13/2010	298.00	0.17	IncAzi-MWD	Scientific Drilling
4/13/2010	329.00	0.80	IncAzi-MWD	Scientific Drilling
4/13/2010	360.00	1.84	IncAzi-MWD	Scientific Drilling
4/13/2010	390.00	2.87	IncAzi-MWD	Scientific Drilling
4/13/2010	421.00	3.54	IncAzi-MWD	Scientific Drilling
4/13/2010	451.00	4.15	IncAzi-MWD	Scientific Drilling
4/13/2010	482.00	4.72	IncAzi-MWD	Scientific Drilling
4/13/2010	513.00	5.29	IncAzi-MWD	Scientific Drilling
4/13/2010	544.00	6.06	IncAzi-MWD	Scientific Drilling
4/13/2010	575.00	7.03	IncAzi-MWD	Scientific Drilling
4/14/2010	605.00	7.76	IncAzi-MWD	Scientific Drilling
4/14/2010	636.00	8.49	IncAzi-MWD	Scientific Drilling
4/14/2010	667.00	9.26	IncAzi-MWD	Scientific Drilling
4/14/2010	698.00	9.80	IncAzi-MWD	Scientific Drilling
4/14/2010	760.00	11.29	IncAzi-MWD	Scientific Drilling
4/14/2010	821.00	12.77	IncAzi-MWD	Scientific Drilling
4/14/2010	915.00	14.90	IncAzi-MWD	Scientific Drilling
4/14/2010	1,005.00	16.55	IncAzi-MWD	Scientific Drilling
4/14/2010	1,095.00	18.37	IncAzi-MWD	Scientific Drilling
4/14/2010	1,185.00	19.83	IncAzi-MWD	Scientific Drilling
4/14/2010	1,275.00	19.55	IncAzi-MWD	Scientific Drilling
4/14/2010	1,365.00	19.98	IncAzi-MWD	Scientific Drilling
4/14/2010	1,455.00	19.77	IncAzi-MWD	Scientific Drilling
4/14/2010	1,545.00	20.49	IncAzi-MWD	Scientific Drilling
4/14/2010	1,635.00	22.33	IncAzi-MWD	Scientific Drilling
4/14/2010	1,725.00	23.59	IncAzi-MWD	Scientific Drilling
4/14/2010	1,815.00	22.89	IncAzi-MWD	Scientific Drilling
4/14/2010	1,905.00	23.02	IncAzi-MWD	Scientific Drilling
4/14/2010	1,995.00	24.05	IncAzi-MWD	Scientific Drilling
4/14/2010	2,085.00	23.03	IncAzi-MWD	Scientific Drilling
4/14/2010	2,175.00	23.02	IncAzi-MWD	Scientific Drilling
4/14/2010	2,265.00	23.29	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.

Tom Dalmonte

Subscribed and sworn to me this

7th July 2010

Patricia L. Clugston

Notary Public in and for San Juan County, New Mexico

My Commission expires

10/2/2012

Survey Data					
Date	MD (ftKB)	Incl (°)	Method	Survey Company	
4/14/2010	2,355.00	24.20	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,445.00	24.82	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,535.00	24.26	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,625.00	24.57	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,715.00	25.40	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,804.00	24.74	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,894.00	22.22	IncAzi-MWD	Scientific Drilling	
4/14/2010	2,984.00	20.37	IncAzi-MWD	Scientific Drilling	
4/14/2010	3,074.00	18.40	IncAzi-MWD	Scientific Drilling	
4/14/2010	3,164.00	15.60	IncAzi-MWD	Scientific Drilling	
4/14/2010	3,254.00	13.40	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,344.00	11.29	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,434.00	8.22	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,524.00	6.83	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,614.00	5.38	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,704.00	3.94	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,794.00	2.04	IncAzi-MWD	Scientific Drilling	
4/15/2010	3,849.00	0.88	Projection	Scientific Drilling	
4/21/2010	7,965.00	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.

Tom D. Deland

Subscribed and sworn to me this

7/1/10

Patricia L. Clayton

Notary Public in and for San Juan County, New Mexico

My Commission expires

10/2/12

RCVD JUL 10 10
OIL CHAS. DIV.
DIST. 3

ConocoPhillips

SJB (NM Central)
SEC 20-T28N-R6W
SJ 28-6 #143P

Original Hole

Survey: Actual

Standard Survey Report

29 April, 2010

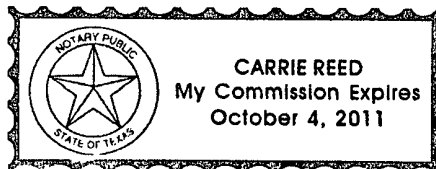
This survey is correct to the best of my knowledge and is supported by actual field data.

K. W. Hart

Notorized this date 29th of April, 2010.

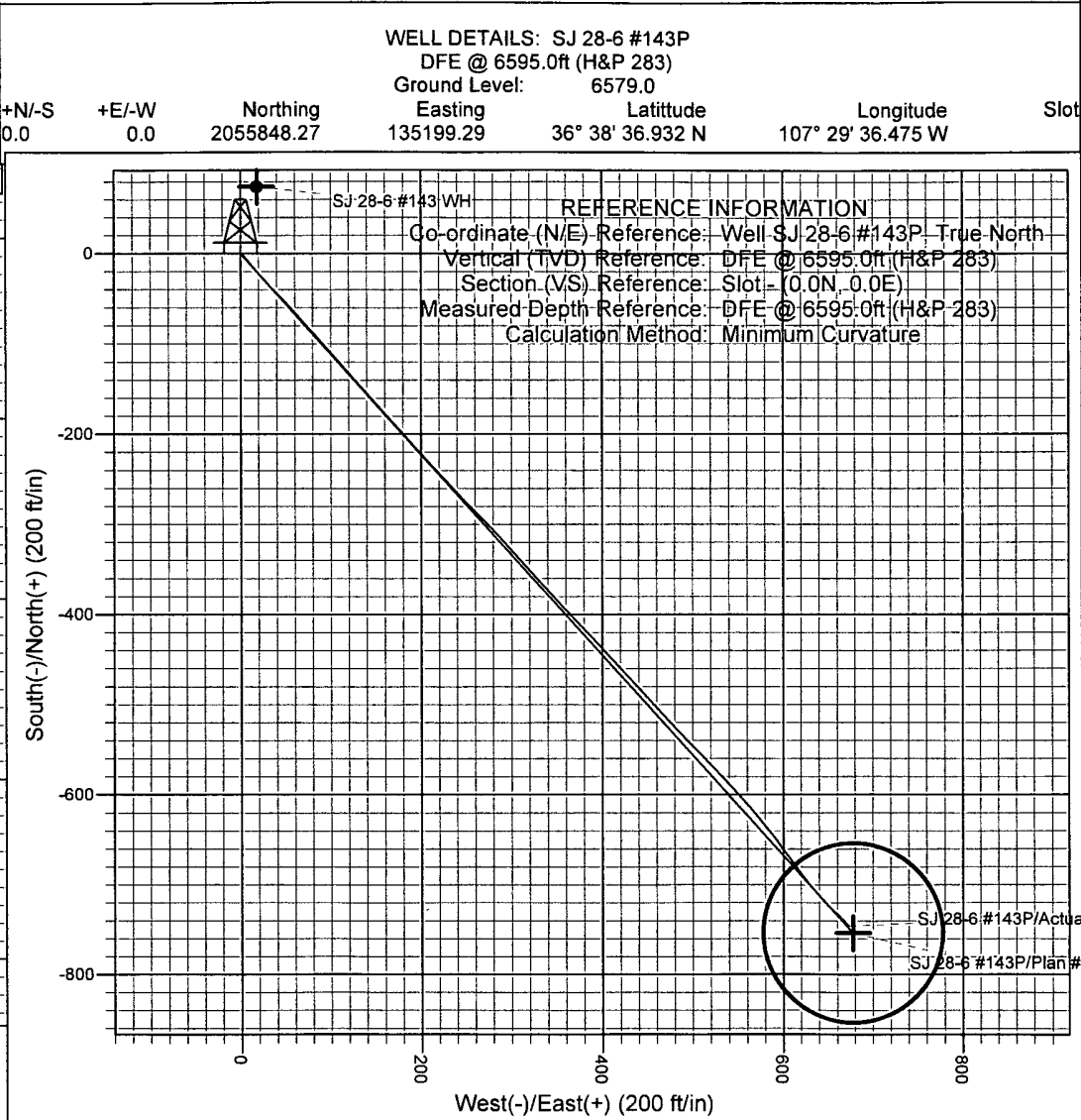
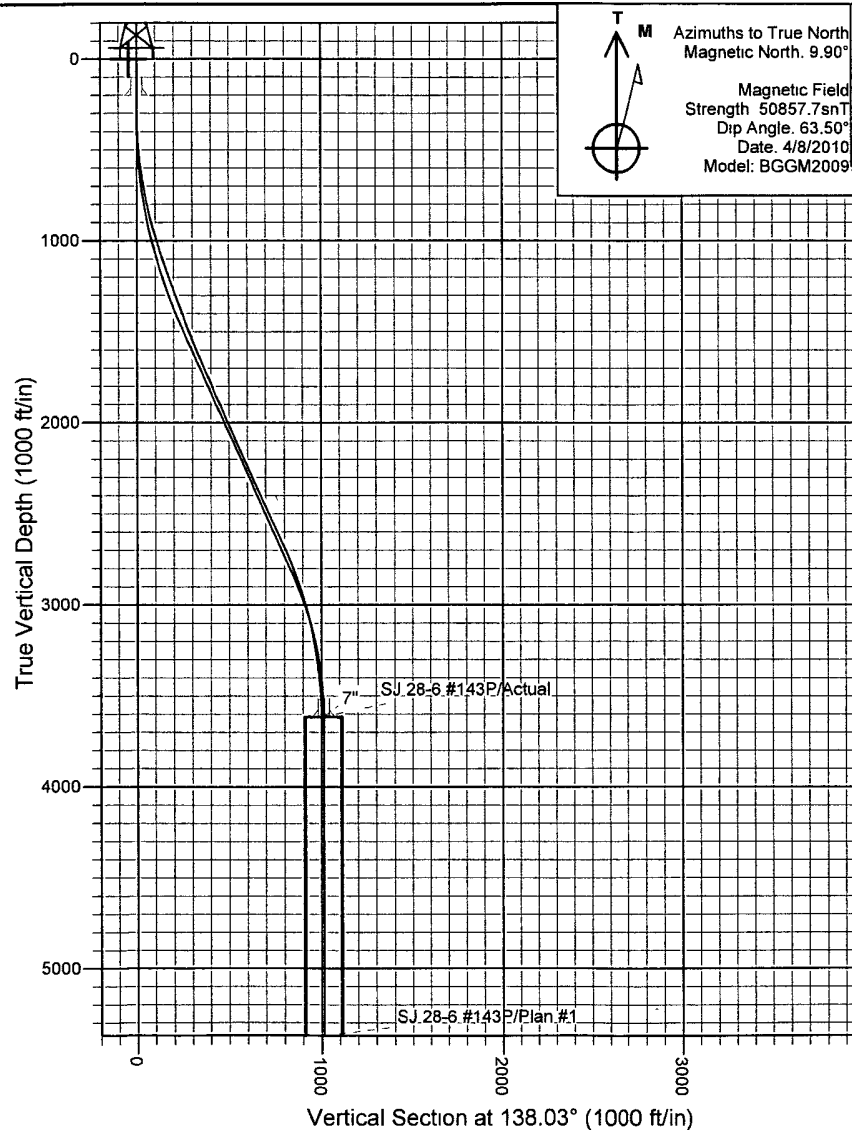
Carrie Reed

Notary Signature
County of Midland
State of Texas





Project: SJB (NM Central)
SEC 20-T28N-R6W
Well: SJ 28-6 #143P
Wellbore: Original Hole
Design: Plan #1
Site:



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 20-T28N-R6W
Site Centre Latitude: 36° 38' 37.472 N
Longitude: 107° 29' 13.112 W
Positional Uncertainty: 0.0
Convergence: -0.74
Local North: True

Scientific Drilling International, Inc.
Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 28-6 #143P
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6595.0ft (H&P 283)
Site:	SEC 20-T28N-R6W	MD Reference:	DFE @ 6595 0ft (H&P 283)
Well:	SJ 28-6 #143P	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 20-T28N-R6W		
Site Position:		Northing:	2,055,878.28 ft
From:	Lat/Long	Easting:	137,104.03 ft
Position Uncertainty:	0.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 38' 37.472 N
		Longitude:	107° 29' 13.112 W
		Grid Convergence:	-0.74 °

Well	SJ 28-6 #143P, S-Type MV/DK Well		
Well Position	+N/-S	0.0 ft	Northing: 2,055,848.27 ft
	+E/-W	0.0 ft	Easting: 135,199.29 ft
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Latitude:	36° 38' 36.932 N
		Longitude:	107° 29' 36.475 W
		Ground Level:	6,579.0 ft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination
	BGGM2009	4/8/2010	(°)
			9.90
			Dip Angle (°)
			63.50
			Field Strength (nT)
			50,858

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			137.94

Survey Program	Date 4/29/2010		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
268.0	3,794.0	Actual (Original Hole)	MWD SDI
			Description
			MWD - Standard ver 1.0.1

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
268.0	0.30	26.28	268.0	0.6	0.3	-0.3	0.11	0.11	0.00
298.0	0.17	77.40	298.0	0.7	0.4	-0.3	0.78	-0.43	170.40
329.0	0.80	129.50	329.0	0.6	0.6	0.0	2.29	2.03	168.06
360.0	1.84	140.30	360.0	0.1	1.1	0.7	3.43	3.35	34.84
390.0	2.87	139.19	390.0	-0.9	1.9	1.9	3.44	3.43	-3.70
421.0	3.54	140.39	420.9	-2.2	3.0	3.6	2.17	2.16	3.87
451.0	4.15	139.58	450.8	-3.7	4.3	5.7	2.04	2.03	-2.70
482.0	4.72	139.95	481.8	-5.6	5.8	8.1	1.84	1.84	1.19
513.0	5.29	140.27	512.6	-7.6	7.6	10.8	1.84	1.84	1.03
544.0	6.06	139.95	543.5	-10.0	9.5	13.8	2.49	2.48	-1.03
575.0	7.03	139.60	574.3	-12.7	11.8	17.3	3.13	3.13	-1.13
605.0	7.76	139.84	604.0	-15.6	14.3	21.2	2.44	2.43	0.80

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 28-6 #143P
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6595 0ft (H&P 283)
Site:	SEC 20-T28N-R6W	MD Reference:	DFE @ 6595 0ft (H&P 283)
Well:	SJ 28-6 #143P	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)
636.0	8.49	139.51	634.7	-19.0	17.2	25.6	2.36	2.35	-1.06
667.0	9.26	138.64	665.3	-22.6	20.3	30.4	2.52	2.48	-2.81
698.0	9.80	138.28	695.9	-26.4	23.7	35.5	1.75	1.74	-1.16
760.0	11.29	136.85	756.9	-34.8	31.4	46.8	2.44	2.40	-2.31
821.0	12.77	135.58	816.5	-44.0	40.2	59.6	2.46	2.43	-2.08
915.0	14.90	137.50	907.8	-60.3	55.6	82.0	2.32	2.27	2.04
1,005.0	16.55	137.84	994.4	-78.3	72.0	106.4	1.84	1.83	0.38
1,095.0	18.37	137.86	1,080.3	-98.4	90.1	133.4	2.02	2.02	0.02
1,185.0	19.83	139.23	1,165.3	-120.4	109.6	162.9	1.70	1.62	1.52
1,275.0	19.55	138.09	1,250.1	-143.2	129.7	193.2	0.53	-0.31	-1.27
1,365.0	19.98	138.16	1,334.8	-165.9	150.0	223.6	0.48	0.48	0.08
1,455.0	19.77	137.89	1,419.4	-188.6	170.4	254.2	0.25	-0.23	-0.30
1,545.0	20.49	138.15	1,503.9	-211.6	191.1	285.2	0.81	0.80	0.29
1,635.0	22.33	137.76	1,587.7	-236.0	213.2	318.0	2.05	2.04	-0.43
1,725.0	23.59	136.99	1,670.6	-261.9	236.9	353.1	1.44	1.40	-0.86
1,815.0	22.89	134.99	1,753.2	-287.4	261.6	388.6	1.17	-0.78	-2.22
1,905.0	23.02	137.87	1,836.1	-312.8	285.8	423.7	1.26	0.14	3.20
1,995.0	24.05	138.36	1,918.6	-339.6	309.8	459.6	1.16	1.14	0.54
2,085.0	23.03	137.92	2,001.1	-366.4	333.8	495.6	1.15	-1.13	-0.49
2,175.0	23.02	136.82	2,084.0	-392.3	357.6	530.8	0.48	-0.01	-1.22
2,265.0	23.29	136.72	2,166.7	-418.0	381.8	566.2	0.30	0.30	-0.11
2,355.0	24.20	137.25	2,249.1	-444.5	406.6	602.4	1.04	1.01	0.59
2,445.0	24.82	137.71	2,331.0	-472.1	431.8	639.7	0.72	0.69	0.51
2,535.0	24.26	138.08	2,412.9	-499.8	456.9	677.1	0.65	-0.62	0.41
2,625.0	24.57	136.78	2,494.8	-527.2	482.0	714.3	0.69	0.34	-1.44
2,715.0	25.40	135.74	2,576.4	-554.6	508.3	752.3	1.04	0.92	-1.16
2,804.0	24.74	137.23	2,657.0	-582.0	534.3	790.0	1.03	-0.74	1.67
2,894.0	22.22	138.12	2,739.6	-608.5	558.4	825.9	2.83	-2.80	0.99
2,984.0	20.37	141.44	2,823.4	-633.4	579.5	858.5	2.45	-2.06	3.69
3,074.0	18.40	144.01	2,908.3	-657.2	597.7	888.3	2.38	-2.19	2.86
3,164.0	15.60	144.12	2,994.4	-678.5	613.1	914.4	3.11	-3.11	0.12
3,254.0	13.40	140.65	3,081.5	-696.3	626.8	936.9	2.63	-2.44	-3.86
3,344.0	11.29	139.18	3,169.4	-711.1	639.2	956.1	2.37	-2.34	-1.63
3,434.0	8.22	137.16	3,258.1	-722.5	649.3	971.4	3.43	-3.41	-2.24
3,524.0	6.83	130.32	3,347.3	-730.6	657.8	983.1	1.83	-1.54	-7.60
3,614.0	5.38	136.13	3,436.8	-737.1	664.8	992.6	1.75	-1.61	6.46
3,704.0	3.94	137.44	3,526.5	-742.5	669.8	999.9	1.60	-1.60	1.46
3,794.0	2.04	138.66	3,616.4	-745.9	672.9	1,004.6	2.11	-2.11	1.36