

RCVD APR 6 '10

OIL CONS. DIV.

DIST. 3

ConocoPhillips

SJB (NM Central)
SEC 20-T28N-R6W
SJ 28-6 #127N

Original Hole

Survey: Actual

Standard Survey Report

17 February, 2010

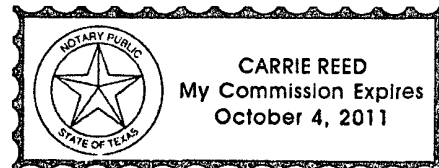
This survey is correct to the best of my knowledge and is supported by actual field data.

L. Wharton

Notorized this date 19th of February, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas

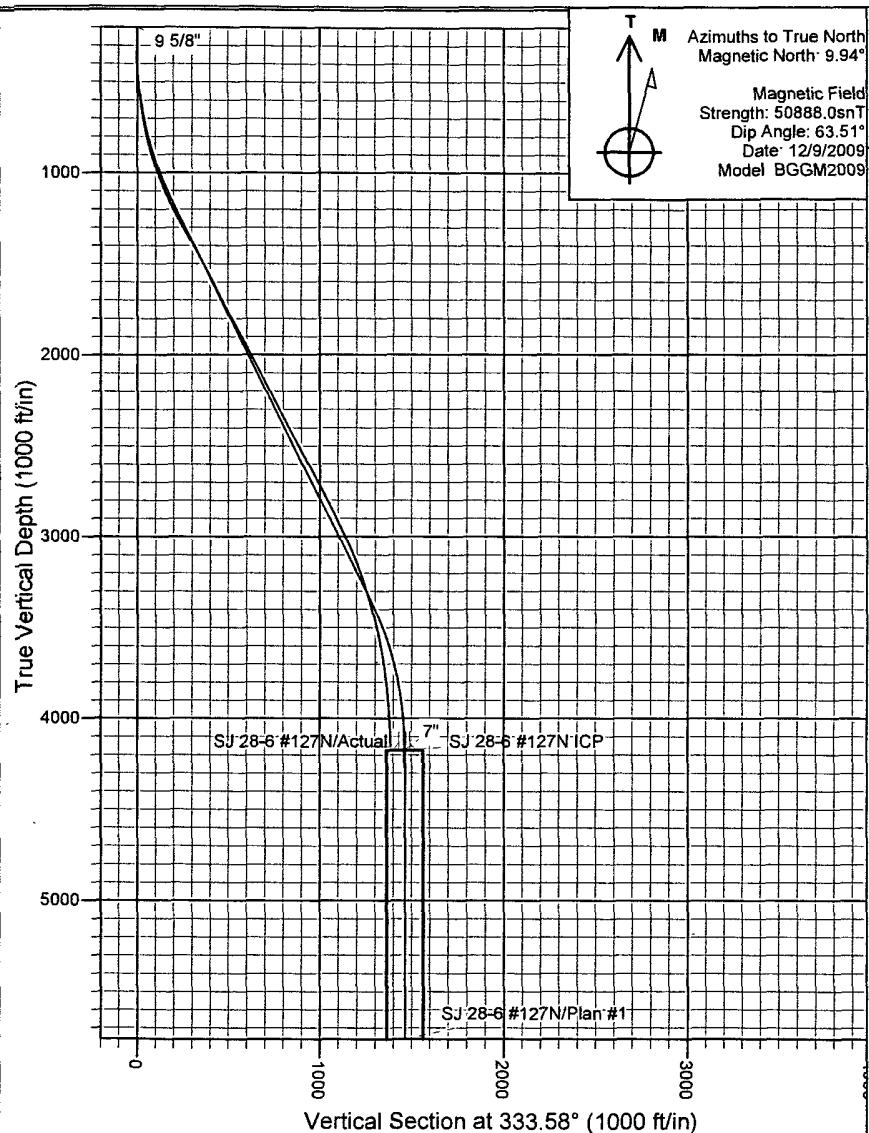




Scientific Drilling
Directional Drilling Operations

Project: SJB (NM Central)
Site: SEC 20-T28N-R6W
Well: SJ 28-6 #127N
Wellbore: Original Hole
Design: Plan #1

ConocoPhillips



Azimuths to True North
Magnetic North: 9.94°

Magnetic Field
Strength: 50888.0snT
Dip Angle: 63.51°
Date: 12/9/2009
Model: BGM2009

+N/-S
0.0

+E/-W
0.0

Northing
2055878.28

WELL DETAILS: SJ 28-6 #127N

DFE @ 6535.0ft (H&P 283)

Ground Level: 6519.0

Easting

137104.03

Latitude

36° 38' 37.472 N

Longitude

107° 29' 13.112 W

Slot

REFERENCE INFORMATION

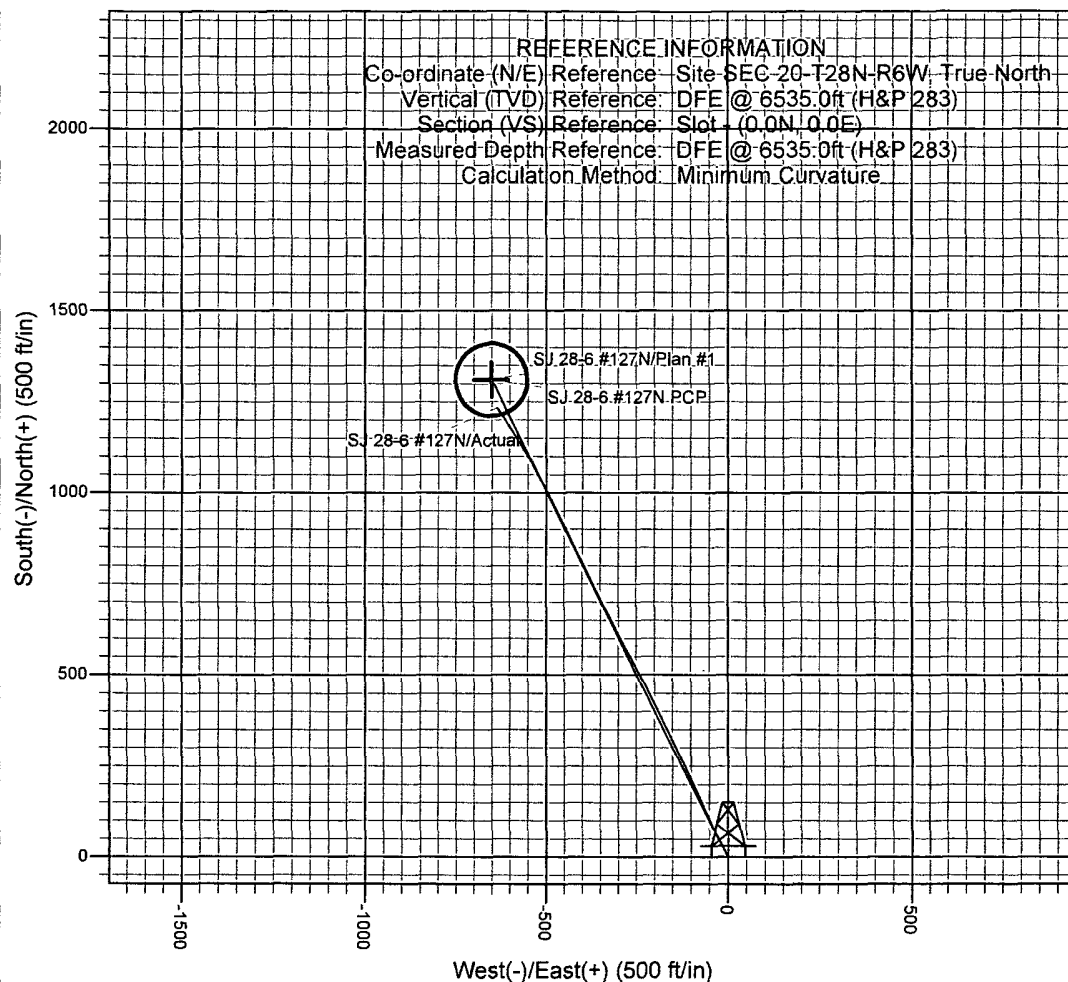
Co-ordinate (N/E) Reference: Site SEC 20-T28N-R6W, True North

Vertical (TVD) Reference: DFE @ 6535.0ft (H&P 283)

Section (VS) Reference: Slot - (0.0N, 0.0E)

Measured Depth Reference: DFE @ 6535.0ft (H&P 283)

Calculation Method: Minimum Curvature



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 #127N
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6535.0ft (H&P 283)
Site:	SEC 20-T28N-R6W	MD Reference:	DFE @ 6535.0ft (H&P 283)
Well:	SJ 28-6 #127N	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 #127N, S-Type MV/DK Well		
Well Position	+N/-S	0.0 ft	Northing: 2,055,878.28 ft
	+E/-W	0.0 ft	Easting: 137,104.03 ft
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Latitude:	36° 38' 37.472 N
		Longitude:	107° 29' 13.112 W
		Ground Level:	6,519.0 ft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2009	12/9/2009	9.94
			Dip Angle (°)
			63.51
			Field Strength (nT)
			50,888

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 (°)
			332.71

Survey Program	Date 2/17/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
268.0	4,454.0	Actual (Original Hole)	MWD SDI
			Description
			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
268.0	0.59	125.48	268.0	-0.8	1.1	-1.2	0.22	0.22	0.00
299.0	0.07	268.07	299.0	-0.9	1.2	-1.4	2.09	-1.68	459.97
329.0	0.60	303.48	329.0	-0.8	1.1	-1.2	1.81	1.77	118.03
359.0	1.08	339.14	359.0	-0.5	0.9	-0.8	2.29	1.60	118.87
390.0	2.02	336.53	390.0	0.3	0.5	0.0	3.04	3.03	-8.42
421.0	2.77	331.30	421.0	1.5	0.0	1.3	2.52	2.42	-16.87
452.0	3.56	336.70	451.9	3.0	-0.8	3.0	2.72	2.55	17.42
482.0	4.36	335.68	481.8	4.9	-1.6	5.1	2.68	2.67	-3.40
513.0	4.76	335.90	512.7	7.2	-2.6	7.6	1.29	1.29	0.71
544.0	6.02	331.45	543.6	9.8	-3.9	10.5	4.28	4.06	-14.35
575.0	6.85	332.41	574.4	12.8	-5.6	14.0	2.70	2.68	3.10
605.0	7.44	330.73	604.2	16.1	-7.3	17.7	2.09	1.97	-5.60

Scientific Drilling International, Inc.

Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 28-6 #127N
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6535.0ft (H&P 283)
Site:	SEC 20-T28N-R6W	MD Reference:	DFE @ 6535.0ft (H&P 283)
Well:	SJ 28-6 #127N	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	8.62	329.63	634.9	19.9	-9.5	22.0	3.84	3.81	-3.55	
667.0	9.68	330.38	665.5	24.1	-12.0	26.9	3.44	3.42	2.42	
698.0	10.64	330.99	696.0	28.9	-14.6	32.4	3.12	3.10	1.97	
728.0	11.32	331.80	725.4	33.9	-17.4	38.1	2.32	2.27	2.70	
758.0	11.93	333.01	754.8	39.3	-20.2	44.2	2.19	2.03	4.03	
788.0	12.92	332.17	784.1	45.0	-23.1	50.6	3.35	3.30	-2.80	
881.0	15.23	334.10	874.3	65.2	-33.3	73.2	2.53	2.48	2.08	
926.0	17.00	336.97	917.5	76.6	-38.5	85.7	4.31	3.93	6.38	
971.0	18.35	337.18	960.4	89.1	-43.8	99.3	3.00	3.00	0.47	
1,015.0	19.95	336.80	1,002.0	102.4	-49.5	113.7	3.65	3.64	-0.86	
1,061.0	21.30	336.99	1,045.0	117.3	-55.8	129.9	2.94	2.93	0.41	
1,106.0	22.77	336.27	1,086.7	132.8	-62.5	146.7	3.32	3.27	-1.60	
1,151.0	23.92	335.90	1,128.1	149.1	-69.7	164.5	2.58	2.56	-0.82	
1,196.0	25.19	336.27	1,169.0	166.2	-77.3	183.2	2.84	2.82	0.82	
1,241.0	27.04	335.20	1,209.4	184.3	-85.5	203.0	4.24	4.11	-2.38	
1,286.0	28.26	335.16	1,249.3	203.2	-94.2	223.8	2.71	2.71	-0.09	
1,330.0	28.61	335.27	1,288.0	222.3	-103.0	244.8	0.80	0.80	0.25	
1,376.0	29.27	335.10	1,328.2	242.5	-112.4	267.0	1.45	1.43	-0.37	
1,421.0	29.26	334.63	1,367.5	262.4	-121.7	289.0	0.51	-0.02	-1.04	
1,466.0	29.12	333.91	1,406.7	282.1	-131.2	310.9	0.84	-0.31	-1.60	
1,510.0	29.49	334.57	1,445.1	301.5	-140.6	332.4	1.12	0.84	1.50	
1,555.0	29.79	334.18	1,484.2	321.6	-150.2	354.7	0.79	0.67	-0.87	
1,600.0	28.06	334.38	1,523.6	341.2	-159.7	376.4	3.85	-3.84	0.44	
1,645.0	27.31	333.53	1,563.5	360.0	-168.8	397.3	1.88	-1.67	-1.89	
1,690.0	27.02	334.09	1,603.5	378.4	-177.9	417.9	0.86	-0.64	1.24	
1,735.0	26.90	333.85	1,643.6	396.8	-186.9	438.3	0.36	-0.27	-0.53	
1,781.0	27.18	333.11	1,684.6	415.5	-196.2	459.2	0.95	0.61	-1.61	
1,826.0	27.43	332.36	1,724.6	433.8	-205.7	479.8	0.95	0.56	-1.67	
1,871.0	27.94	332.72	1,764.4	452.4	-215.3	500.7	1.19	1.13	0.80	
1,915.0	27.82	332.88	1,803.3	470.7	-224.7	521.3	0.32	-0.27	0.36	
1,961.0	27.57	332.79	1,844.0	489.7	-234.5	542.7	0.55	-0.54	-0.20	
2,005.0	27.49	332.49	1,883.1	507.8	-243.8	563.0	0.36	-0.18	-0.68	
2,050.0	27.36	331.76	1,923.0	526.1	-253.5	583.8	0.80	-0.29	-1.62	
2,095.0	27.76	331.15	1,962.9	544.4	-263.4	604.6	1.09	0.89	-1.36	
2,140.0	28.40	330.52	2,002.6	562.9	-273.8	625.7	1.57	1.42	-1.40	
2,185.0	28.17	330.94	2,042.2	581.5	-284.2	647.1	0.68	-0.51	0.93	
2,230.0	27.25	331.97	2,082.1	599.8	-294.2	668.0	2.30	-2.04	2.29	
2,275.0	27.34	332.23	2,122.0	618.1	-303.9	688.6	0.33	0.20	0.58	
2,320.0	26.40	332.14	2,162.2	636.1	-313.3	708.9	2.09	-2.09	-0.20	
2,365.0	27.37	332.08	2,202.3	654.1	-322.9	729.3	2.16	2.16	-0.13	
2,410.0	27.37	333.96	2,242.3	672.5	-332.2	750.0	1.92	0.00	4.18	
2,455.0	27.55	334.19	2,282.2	691.2	-341.3	770.7	0.46	0.40	0.51	
2,500.0	27.74	333.46	2,322.1	709.9	-350.5	791.6	0.86	0.42	-1.62	
2,545.0	27.35	333.87	2,362.0	728.5	-359.8	812.4	0.96	-0.87	0.91	
2,590.0	27.58	333.02	2,401.9	747.1	-369.0	833.2	1.01	0.51	-1.89	
2,635.0	27.54	333.42	2,441.8	765.7	-378.4	854.0	0.42	-0.09	0.89	
2,725.0	28.53	333.31	2,521.2	803.5	-397.4	896.3	1.10	1.10	-0.12	
2,815.0	28.64	333.43	2,600.3	842.0	-416.7	939.3	0.14	0.12	0.13	
2,905.0	26.64	335.06	2,680.0	879.6	-434.8	981.1	2.38	-2.22	1.81	
2,995.0	27.02	333.50	2,760.3	916.2	-452.5	1,021.7	0.89	0.42	-1.73	
3,085.0	26.69	332.62	2,840.6	952.4	-470.9	1,062.3	0.57	-0.37	-0.98	
3,175.0	25.33	334.15	2,921.5	987.7	-488.6	1,101.8	1.68	-1.51	1.70	
3,220.0	24.88	332.52	2,962.2	1,004.8	-497.2	1,120.9	1.83	-1.00	-3.62	
3,310.0	23.80	330.00	3,044.2	1,037.3	-515.0	1,157.9	1.66	-1.20	-2.80	

Scientific Drilling International, Inc.
Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ 28-6 #127N
Project:	SJB (NM Central)	TVD Reference:	DFE @ 6535.0ft (H&P 283)
Site:	SEC 20-T28N-R6W	MD Reference:	DFE @ 6535.0ft (H&P 283)
Well:	SJ 28-6 #127N	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)
3,355.0	23.01	330.29	3,085.5	1,052.8	-523.9	1,175.8	1.77	-1.76	0.64
3,400.0	22.10	332.14	3,127.1	1,067.9	-532.2	1,193.1	2.56	-2.02	4.11
3,445.0	21.09	330.90	3,168.9	1,082.5	-540.1	1,209.6	2.46	-2.24	-2.76
3,490.0	19.46	330.94	3,211.1	1,096.1	-547.7	1,225.2	3.62	-3.62	0.09
3,535.0	18.26	330.04	3,253.7	1,108.8	-554.8	1,239.7	2.74	-2.67	-2.00
3,580.0	16.63	329.19	3,296.7	1,120.4	-561.6	1,253.2	3.67	-3.62	-1.89
3,625.0	16.18	328.35	3,339.8	1,131.3	-568.2	1,265.9	1.13	-1.00	-1.87
3,670.0	16.46	327.73	3,383.0	1,142.0	-574.9	1,278.5	0.73	0.62	-1.38
3,715.0	15.81	327.48	3,426.2	1,152.6	-581.6	1,290.9	1.45	-1.44	-0.56
3,760.0	13.79	327.67	3,469.7	1,162.3	-587.8	1,302.4	4.49	-4.49	0.42
3,805.0	13.30	326.29	3,513.5	1,171.1	-593.5	1,312.9	1.30	-1.09	-3.07
3,850.0	12.05	326.84	3,557.4	1,179.3	-599.0	1,322.7	2.79	-2.78	1.22
3,895.0	10.69	328.06	3,601.5	1,186.8	-603.7	1,331.5	3.07	-3.02	2.71
3,939.0	9.25	328.55	3,644.8	1,193.3	-607.7	1,339.1	3.28	-3.27	1.11
3,984.0	8.48	327.60	3,689.3	1,199.2	-611.4	1,346.0	1.74	-1.71	-2.11
4,029.0	7.91	327.63	3,733.8	1,204.6	-614.8	1,352.4	1.27	-1.27	0.07
4,074.0	7.04	327.59	3,778.5	1,209.5	-618.0	1,358.2	1.93	-1.93	-0.09
4,119.0	6.57	326.03	3,823.1	1,214.0	-620.9	1,363.6	1.12	-1.04	-3.47
4,164.0	5.32	323.62	3,867.9	1,217.8	-623.6	1,368.2	2.83	-2.78	-5.36
4,209.0	5.06	319.79	3,912.7	1,221.0	-626.1	1,372.2	0.96	-0.58	-8.51
4,254.0	4.53	321.13	3,957.6	1,223.9	-628.5	1,375.8	1.20	-1.18	2.98
4,299.0	4.03	318.91	4,002.4	1,226.5	-630.6	1,379.1	1.17	-1.11	-4.93
4,344.0	3.66	317.04	4,047.3	1,228.7	-632.7	1,382.0	0.87	-0.82	-4.16
4,389.0	3.07	318.15	4,092.3	1,230.7	-634.4	1,384.6	1.32	-1.31	2.47
4,434.0	2.71	328.75	4,137.2	1,232.5	-635.8	1,386.8	1.43	-0.80	23.56
4,454.0	2.86	329.69	4,157.2	1,233.3	-636.3	1,387.8	0.78	0.75	4.70