

District I
1625 N. Trench Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505
AS DRILLED PLAT

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30972		² Pool Code 71599/72319		³ Pool Name BASIN DAKOTA/BLANCO MESAVERDE	
⁴ Property Code 31739		⁵ Property Name SAN JUAN 28-7 UNIT			⁶ Well Number 110P
⁷ OGRID No. 217817		⁸ Operator Name CONOCOPHILLIPS COMPANY			⁹ Elevation 6611

¹⁰ **SURFACE LOCATION**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	19	27-N	7-W		1116	SOUTH	1785	WEST	RIO ARRIBA

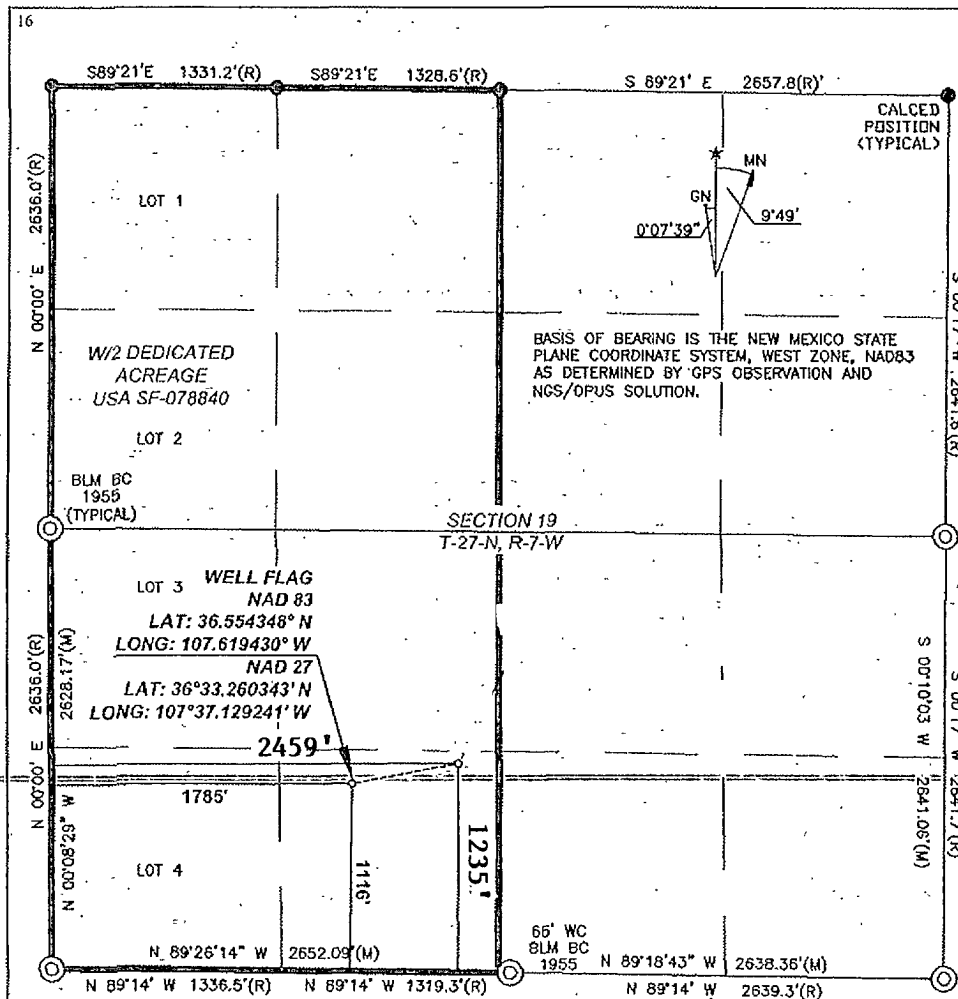
¹¹ **Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	19	27-N	7-W		1235'	SOUTH	2459'	WEST	RIO ARRIBA

¹² Dedicated Acres W/2(321.15)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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RCVD NOV 16 '12
OIL CONS. DIV.
DIST. 3

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



¹⁷ **OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by this division.

Signature: *Marie E. Jaramillo* Date: **11/15/12**

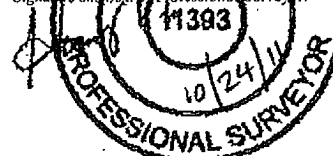
Printed Name: **Marie E. Jaramillo**
Staff Regulatory Tech.

E-mail Address:

¹⁸ **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: **10/24/11**
Signature and Seal of Professional Surveyor: *Henry P. Broadhurst, Jr.*



Certificate Number: NM 11393

COP Deviation Report
SAN JUAN 28-7 UNIT #110P

RCUD NOV 16 '12
OIL CONS. DIV.
DIST. 3

Operator CONOCOPHILLIPS COMPANY	Legal WellName SAN JUAN 28-7 UNIT #110P	API / UWI 3003930972	County RIO ARRIBA	State/Province NEW MEXICO
Surface Legal Location 019-027N-007W-N	N/S Dist (ft) 1,116.00	N/S Ref FSL	E/W Dist (ft) 1,785.00	E/W Ref FWL

Survey Data					
Date	MD (ftKB)	Incl (°)	Azm (°)	Method	Survey Company
8/28/2012	128.00	1.00		Inc-Drop	Mo Te Drilling Inc
8/28/2012	248.00	0.50		Inc-Drop	Mo Te Drilling Inc
8/28/2012	353.00	0.25		Inc-Drop	Mo Te Drilling Inc
9/10/2012	418.00	0.67	283.71	IncAzi-MWD	Scientific Drilling
9/10/2012	448.00	0.27	329.56	IncAzi-MWD	Scientific Drilling
9/10/2012	479.00	0.41	124.26	IncAzi-MWD	Scientific Drilling
9/10/2012	509.00	0.99	93.43	IncAzi-MWD	Scientific Drilling
9/10/2012	540.00	1.79	102.28	IncAzi-MWD	Scientific Drilling
9/10/2012	570.00	2.40	90.00	IncAzi-MWD	Scientific Drilling
9/10/2012	601.00	2.98	95.72	IncAzi-MWD	Scientific Drilling
9/10/2012	632.00	3.77	89.81	IncAzi-MWD	Scientific Drilling
9/10/2012	662.00	4.41	92.12	IncAzi-MWD	Scientific Drilling
9/10/2012	692.00	5.23	90.54	IncAzi-MWD	Scientific Drilling
9/10/2012	723.00	5.76	86.11	IncAzi-MWD	Scientific Drilling
9/10/2012	753.00	6.15	92.79	IncAzi-MWD	Scientific Drilling
9/10/2012	784.00	6.47	96.78	IncAzi-MWD	Scientific Drilling
9/10/2012	814.00	7.13	96.15	IncAzi-MWD	Scientific Drilling
9/10/2012	880.00	9.43	91.34	IncAzi-MWD	Scientific Drilling
9/11/2012	945.00	11.06	87.57	IncAzi-MWD	Scientific Drilling
9/11/2012	1,010.00	11.82	89.24	IncAzi-MWD	Scientific Drilling
9/11/2012	1,074.00	13.28	86.87	IncAzi-MWD	Scientific Drilling
9/11/2012	1,139.00	14.95	86.18	IncAzi-MWD	Scientific Drilling
9/11/2012	1,203.00	16.46	85.60	IncAzi-MWD	Scientific Drilling
9/11/2012	1,268.00	17.68	84.37	IncAzi-MWD	Scientific Drilling
9/11/2012	1,332.00	18.18	83.35	IncAzi-MWD	Scientific Drilling
9/11/2012	1,397.00	18.25	81.54	IncAzi-MWD	Scientific Drilling
9/11/2012	1,461.00	18.70	81.92	IncAzi-MWD	Scientific Drilling
9/11/2012	1,526.00	19.34	80.88	IncAzi-MWD	Scientific Drilling
9/11/2012	1,590.00	19.73	80.39	IncAzi-MWD	Scientific Drilling
9/11/2012	1,655.00	19.77	80.57	IncAzi-MWD	Scientific Drilling
9/11/2012	1,719.00	19.95	79.15	IncAzi-MWD	Scientific Drilling
9/11/2012	1,784.00	20.20	78.04	IncAzi-MWD	Scientific Drilling
9/11/2012	1,848.00	20.66	77.48	IncAzi-MWD	Scientific Drilling
9/11/2012	1,913.00	19.88	77.64	IncAzi-MWD	Scientific Drilling
9/11/2012	1,977.00	19.23	77.97	IncAzi-MWD	Scientific Drilling
9/11/2012	2,042.00	19.64	76.60	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as _____ 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 _____

Notary Public in and for San Juan County, New Mexico

My Commission expires _____

COP Deviation Report

SAN JUAN 28-7 UNIT #110P

Survey Data

Date	MD (RKB)	Incl (°)	Azm (°)	Method	Survey Company
9/11/2012	2,106.00	19.55	75.82	IncAzi-MWD	Scientific Drilling
9/11/2012	2,170.00	19.62	76.70	IncAzi-MWD	Scientific Drilling
9/11/2012	2,235.00	19.91	75.94	IncAzi-MWD	Scientific Drilling
9/11/2012	2,299.00	19.72	76.77	IncAzi-MWD	Scientific Drilling
9/11/2012	2,364.00	19.42	76.43	IncAzi-MWD	Scientific Drilling
9/11/2012	2,428.00	19.32	75.11	IncAzi-MWD	Scientific Drilling
9/11/2012	2,492.00	18.84	74.58	IncAzi-MWD	Scientific Drilling
9/11/2012	2,557.00	19.14	74.47	IncAzi-MWD	Scientific Drilling
9/11/2012	2,621.00	19.01	73.97	IncAzi-MWD	Scientific Drilling
9/11/2012	2,686.00	18.42	71.87	IncAzi-MWD	Scientific Drilling
9/11/2012	2,750.00	16.35	69.22	IncAzi-MWD	Scientific Drilling
9/11/2012	2,783.00	15.61	68.90	IncAzi-MWD	Scientific Drilling
9/11/2012	2,815.00	15.18	69.00	IncAzi-MWD	Scientific Drilling
9/11/2012	2,879.00	12.99	67.10	IncAzi-MWD	Scientific Drilling
9/11/2012	2,944.00	11.27	70.98	IncAzi-MWD	Scientific Drilling
9/12/2012	3,009.00	9.91	69.62	IncAzi-MWD	Scientific Drilling
9/12/2012	3,074.00	8.26	71.23	IncAzi-MWD	Scientific Drilling
9/12/2012	3,138.00	6.39	73.83	IncAzi-MWD	Scientific Drilling
9/12/2012	3,203.00	4.48	78.36	IncAzi-MWD	Scientific Drilling
9/12/2012	3,267.00	3.10	79.67	IncAzi-MWD	Scientific Drilling
9/12/2012	3,332.00	2.06	44.69	IncAzi-MWD	Scientific Drilling
9/12/2012	3,396.00	0.96	45.69	IncAzi-MWD	Scientific Drilling
9/12/2012	3,461.00	0.44	120.61	IncAzi-MWD	Scientific Drilling
9/12/2012	3,525.00	0.17	172.01	IncAzi-MWD	Scientific Drilling
9/12/2012	3,590.00	0.41	167.47	IncAzi-MWD	Scientific Drilling
9/12/2012	3,654.00	0.86	193.10	IncAzi-MWD	Scientific Drilling
9/12/2012	3,718.00	0.88	188.86	IncAzi-MWD	Scientific Drilling
9/12/2012	3,783.00	0.62	186.47	IncAzi-MWD	Scientific Drilling
9/12/2012	3,847.00	0.69	194.29	IncAzi-MWD	Scientific Drilling
9/12/2012	3,912.00	0.68	198.59	IncAzi-MWD	Scientific Drilling
9/12/2012	3,977.00	0.77	222.66	IncAzi-MWD	Scientific Drilling
9/12/2012	4,041.00	1.06	199.51	IncAzi-MWD	Scientific Drilling
9/12/2012	4,106.00	1.15	203.41	IncAzi-MWD	Scientific Drilling
9/12/2012	4,169.00	0.98	226.32	IncAzi-MWD	Scientific Drilling
9/12/2012	4,233.00	1.13	220.34	IncAzi-MWD	Scientific Drilling
9/12/2012	4,298.00	1.25	222.44	IncAzi-MWD	Scientific Drilling
9/12/2012	4,363.00	0.98	204.66	IncAzi-MWD	Scientific Drilling
9/12/2012	4,427.00	1.16	194.29	IncAzi-MWD	Scientific Drilling
9/12/2012	4,491.00	1.57	189.35	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as _____ 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 _____

Notary Public in and for San Juan County, New Mexico

My Commission expires _____

COP Deviation Report
SAN JUAN 28-7 UNIT #110P

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	Method	Survey Company
9/12/2012	4,556.00	1.87	193.97	IncAzi-MWD	Scientific Drilling
9/12/2012	4,620.00	1.68	214.46	IncAzi-MWD	Scientific Drilling
9/12/2012	4,685.00	1.95	213.85	IncAzi-MWD	Scientific Drilling
9/12/2012	4,749.00	1.39	234.16	IncAzi-MWD	Scientific Drilling
9/12/2012	4,839.00	0.54	191.76	IncAzi-MWD	Scientific Drilling
9/12/2012	4,897.00	0.54	191.76	Projection	Scientific Drilling
9/14/2012	4,938.00	0.40	187.00	IncAzi-MWD	Aztec Well Servicing Co Inc
9/14/2012	5,188.00	1.00	184.60	IncAzi-MWD	Aztec Well Servicing Co Inc
9/15/2012	5,478.00	0.90	182.00	IncAzi-MWD	Aztec Well Servicing Co Inc
9/15/2012	5,958.00	0.40	184.00	IncAzi-MWD	Aztec Well Servicing Co Inc
9/17/2012	6,458.00	0.70	235.00	IncAzi-MWD	Aztec Well Servicing Co Inc
9/17/2012	6,638.00	0.50	178.00	IncAzi-MWD	Aztec Well Servicing Co Inc
9/18/2012	7,131.00	0.40	116.60	IncAzi-MWD	Aztec Well Servicing Co Inc
9/19/2012	7,631.00	1.00		Inc-Drop	Aztec Well Servicing Co Inc
9/19/2012	7,640.00	2.80	263.60	IncAzi-MWD	Aztec Well Servicing Co Inc

I, the undersigned, certify that I acting in my capacity as Dr. [Signature] 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.

Corra [Signature] 11/15/12

Subscribed and sworn to me this 11/15/12

[Signature]

Notary Public in and for San Juan County, New Mexico

My Commission expires 11/21/11



RCVD NOV 16 '12
OIL CONS. DIV.
DIST. 3

ConocoPhillips

SJB (NM Central)

SEC 19-T27N-R7W

San Juan 28-7 Unit 110P

OH

Design: OH

API # 3003930972

Standard Survey Report

19 September, 2012

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

Carm B Kay

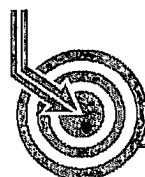
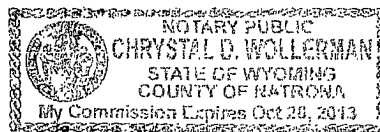
Notarized this date 19th of September 2012.

Chrystal D Wollerman

Notary Signature

County of Natrona

State of Wyoming



Scientific Drilling

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

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well San Juan 28-7 Unit 110P
Project:	SJB (NM Central)	TVD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Site:	SEC 19-T27N-R7W	MD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Well:	San Juan 28-7 Unit 110P	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 2003.21 Single User Db

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 19-T27N-R7W		
Site Position:		Northing:	2,023,855.34 ft
From:	Lat/Long	Easting:	97,958.44 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	36° 33' 15.621 N
		Longitude:	107° 37' 7.754 W
		Grid Convergence:	-0.82 °

Well:	San Juan 28-7 Unit 110P, 1116' FSL 1785' FWL		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	36° 33' 15.621 N
		Longitude:	107° 37' 7.754 W
		Ground Level:	6,611.0 ft

Wellbore:	OH		
Magnetics:	Model Name	Sample Date	Declination
	BGGM2012	2012/09/07	9.70
			Dip Angle
			63.28
			Field Strength
			50,475

Design:	OH		
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
			79.35

Survey Program:	Date 2012/09/19		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
418.0	4,839.0	Survey #1 (OH)	MWD SDI
			Description
			MWD - Standard ver 1.0.1

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
418.0	0.67	283.71	418.0	0.6	-2.4	-2.2	0.16	0.16	0.00
First SDI MWD Survey									
448.0	0.27	329.56	448.0	0.7	-2.6	-2.4	1.73	-1.33	152.83
479.0	0.41	124.26	479.0	0.7	-2.5	-2.4	2.14	0.45	499.03
509.0	0.99	93.43	509.0	0.6	-2.2	-2.0	2.24	1.93	-102.77
540.0	1.79	102.28	540.0	0.5	-1.4	-1.3	2.66	2.58	28.55
570.0	2.40	90.00	570.0	0.4	-0.4	-0.3	2.51	2.03	-40.93
601.0	2.98	95.72	600.9	0.3	1.1	1.1	2.06	1.87	18.45
632.0	3.77	89.81	631.9	0.2	2.9	2.9	2.78	2.55	-19.06
662.0	4.41	92.12	661.8	0.2	5.1	5.0	2.20	2.13	7.70
692.0	5.23	90.54	691.7	0.1	7.6	7.5	2.77	2.73	-5.27
723.0	5.76	86.11	722.5	0.2	10.5	10.4	2.19	1.71	-14.29

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well San Juan 28-7 Unit 110P
Project:	SJB (NM Central)	TVD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Site:	SEC 19-T27N-R7W	MD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Well:	San Juan 28-7 Unit 110P	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 2003.21 Single User Db

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)
753.0	6.15	92.79	752.4	0.3	13.7	13.5	2.65	1.30	22.27
784.0	6.47	96.78	783.2	0.0	17.0	16.7	1.75	1.03	12.87
814.0	7.13	96.15	813.0	-0.4	20.6	20.1	2.21	2.20	-2.10
880.0	9.43	91.34	878.3	-1.0	30.1	29.3	3.64	3.48	-7.29
945.0	11.06	87.57	942.3	-0.9	41.6	40.7	2.71	2.51	-5.80
1,010.0	11.82	89.24	1,006.0	-0.5	54.5	53.5	1.28	1.17	2.57
1,074.0	13.28	86.87	1,068.4	0.0	68.4	67.2	2.42	2.28	-3.70
1,139.0	14.95	86.18	1,131.5	0.9	84.2	82.9	2.58	2.57	-1.06
1,203.0	16.46	85.60	1,193.1	2.2	101.5	100.1	2.37	2.36	-0.91
1,268.0	17.68	84.37	1,255.2	3.9	120.5	119.1	1.96	1.88	-1.89
1,332.0	18.18	83.35	1,316.1	6.0	140.1	138.8	0.92	0.78	-1.59
1,397.0	18.25	81.54	1,377.8	8.6	160.2	159.1	0.88	0.11	-2.78
1,461.0	18.70	81.92	1,438.5	11.6	180.3	179.3	0.73	0.70	0.59
1,526.0	19.34	80.88	1,500.0	14.7	201.2	200.5	1.11	0.98	-1.60
1,590.0	19.73	80.39	1,560.3	18.2	222.3	221.9	0.66	0.61	-0.77
1,655.0	19.77	80.57	1,621.5	21.9	244.0	243.8	0.11	0.06	0.28
1,719.0	19.95	79.15	1,681.7	25.7	265.4	265.6	0.80	0.28	-2.22
1,784.0	20.20	78.04	1,742.7	30.1	287.3	287.9	0.70	0.38	-1.71
1,848.0	20.66	77.48	1,802.7	34.8	309.1	310.2	0.78	0.72	-0.88
1,913.0	19.88	77.64	1,863.7	39.7	331.1	332.7	1.20	-1.20	0.25
1,977.0	19.23	77.97	1,924.0	44.2	352.0	354.1	1.03	-1.02	0.52
2,042.0	19.64	76.60	1,985.3	49.0	373.1	375.8	0.94	0.63	-2.11
2,106.0	19.55	75.82	2,045.6	54.1	394.0	397.2	0.43	-0.14	-1.22
2,170.0	19.62	76.70	2,105.9	59.2	414.8	418.6	0.47	0.11	1.38
2,235.0	19.91	75.94	2,167.1	64.4	436.2	440.6	0.60	0.45	-1.17
2,299.0	19.72	76.77	2,227.3	69.5	457.3	462.2	0.53	-0.30	1.30
2,364.0	19.42	76.43	2,288.5	74.5	478.4	484.0	0.49	-0.46	-0.52
2,428.0	19.32	75.11	2,348.9	79.8	499.0	505.2	0.70	-0.16	-2.06
2,492.0	18.84	74.58	2,409.4	85.2	519.2	526.0	0.80	-0.75	-0.83
2,557.0	19.14	74.47	2,470.8	90.9	539.6	547.1	0.46	0.46	-0.17
2,621.0	19.01	73.97	2,531.3	96.6	559.7	567.9	0.33	-0.20	-0.78
2,686.0	18.42	71.87	2,592.9	102.7	579.6	588.6	1.38	-0.91	-3.23
2,750.0	16.35	69.22	2,654.0	109.0	597.7	607.5	3.46	-3.23	-4.14
2,783.0	15.61	68.90	2,685.7	112.3	606.2	616.5	2.26	-2.24	-0.97
2,815.0	15.18	69.00	2,716.5	115.3	614.1	624.8	1.35	-1.34	0.31
2,879.0	12.99	67.10	2,778.6	121.1	628.5	640.1	3.50	-3.42	-2.97
2,944.0	11.27	70.98	2,842.2	126.0	641.3	653.5	2.93	-2.65	5.97
3,009.0	9.91	69.62	2,906.0	130.1	652.5	665.3	2.13	-2.09	-2.09
3,074.0	8.26	71.23	2,970.2	133.5	662.2	675.5	2.57	-2.54	2.48
3,138.0	6.39	73.83	3,033.7	136.0	670.0	683.6	2.97	-2.92	4.06
3,203.0	4.48	78.36	3,098.4	137.5	675.9	689.7	3.01	-2.94	6.97
3,267.0	3.10	79.67	3,162.3	138.3	680.1	693.9	2.16	-2.16	2.05
3,332.0	2.06	44.69	3,227.2	139.5	682.6	696.6	2.83	-1.60	-53.82
3,396.0	0.96	45.69	3,291.2	140.6	683.8	698.0	1.72	-1.72	1.56
3,461.0	0.44	120.61	3,356.2	140.9	684.4	698.7	1.46	-0.80	115.26
3,525.0	0.17	172.01	3,420.2	140.7	684.7	698.9	0.56	-0.42	80.31
3,590.0	0.41	167.47	3,485.2	140.4	684.7	698.9	0.37	0.37	-6.98
3,654.0	0.86	193.10	3,549.2	139.7	684.7	698.7	0.81	0.70	40.05
3,718.0	0.88	188.86	3,613.2	138.7	684.5	698.3	0.11	0.03	-6.63
3,783.0	0.62	186.47	3,678.2	137.9	684.4	698.1	0.40	-0.40	-3.68
3,847.0	0.69	194.29	3,742.2	137.2	684.2	697.8	0.18	0.11	12.22
3,912.0	0.68	198.59	3,807.1	136.4	684.0	697.4	0.08	-0.02	6.62
3,977.0	0.77	222.66	3,872.1	135.7	683.6	696.9	0.48	0.14	37.03
4,041.0	1.06	199.51	3,936.1	134.8	683.1	696.3	0.73	0.45	-36.17



Scientific Drilling
Survey Report



Company:	ConocoPhillips	Local Co-ordinate Reference:	Well San Juan 28-7 Unit 110P
Project:	SJB (NM Central)	TVD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Site:	SEC 19-T27N-R7W	MD Reference:	GL 6611' & KB 15' @ 6626.0ft (AWS 920)
Well:	San Juan 28-7 Unit 110P	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 2003.21 Single User Db

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)	
4,106.0	1.15	203.41	4,001.1	133.7	682.6	695.6	0.18	0.14	6.00	
4,169.0	0.98	226.32	4,064.1	132.7	682.0	694.8	0.72	-0.27	36.37	
4,233.0	1.13	220.34	4,128.1	131.9	681.2	693.8	0.29	0.23	-9.34	
4,298.0	1.25	222.44	4,193.1	130.9	680.3	692.8	0.20	0.18	3.23	
4,363.0	0.98	204.66	4,258.1	129.8	679.6	691.9	0.67	-0.42	-27.35	
4,427.0	1.16	194.29	4,322.1	128.7	679.2	691.3	0.41	0.28	-16.20	
4,491.0	1.57	189.35	4,386.0	127.2	678.9	690.7	0.67	0.64	-7.72	
4,556.0	1.87	193.97	4,451.0	125.3	678.5	690.0	0.51	0.46	7.11	
4,620.0	1.68	214.46	4,515.0	123.5	677.7	688.9	1.03	-0.30	32.02	
4,685.0	1.95	213.85	4,580.0	121.8	676.6	687.4	0.42	0.42	-0.94	
4,749.0	1.39	234.16	4,643.9	120.5	675.3	686.0	1.26	-0.88	31.73	
4,839.0	0.54	191.76	4,733.9	119.4	674.4	684.8	1.17	-0.94	-47.11	
Last SDI MWD Survey										

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
418.0	418.0	0.6	-2.4	First SDI MWD Survey
4,839.0	4,733.9	119.4	674.4	Last SDI MWD Survey

Checked By: _____ Approved By: _____ Date: _____