

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

AS DRILLED PLAT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34909	² Pool Code 72319 / 71599	³ Pool Name BLANCO MESAVERDE / BASIN DAKOTA
⁴ Property Code 25005	⁵ Property Name ROSS FEDERAL	⁶ Well Number 1N
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6045'

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
P	23	30N	11W		920	SOUTH	1130	EAST	SAN JUAN

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
I	23	30N	11W		1886'	SOUTH	1305'	EAST	SAN JUAN

¹² Dedicated Acres 318.48 Acres (S/2) - MV 320.0 Acres (E/2) - DK	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. RCVD MAR 14 '11 OIL CONS. DIV.
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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 **DIST. 3**

¹⁶ 5208.72' 2643.30' LOT 1 LOT 2 2669.04' LEASE FEE	23 LOT 7 LEASE USA SF-078138 SURFACE LOCATION LAT: 36°47.5726'N LONG: 107°57.2883'W DATUM: NAD27 LAT: 36.79288°N LONG: 107.95543°W DATUM: NAD83 5265.48'	LOT 3 LEASE USA SF-078138 LOT 4 LOT 6 LEASE USA SF-080113 LOT 8 LOT 9 1490' 1886' 1705' 1305' 1130' 920'	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 the division. <i>Dollie L. Busse</i> 3/9/11 Signature Date Dollie L. Busse Printed Name 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. Survey Date: OCTOBER 23, 2008 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269
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Legal WellName : ROSS FEDERAL #1N	API / UWI: 3004534909
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP	Surf Loc: 023-030N-011W-P
St/Prov: NEW MEXICO	N/S Dist (ft): 920.00 - FSL
County: SAN JUAN	E/W Dist (ft): 1,130.00 - FEL

Wellbore Name : Original Hole				
Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
INCLINATION SURVEY	01/21/2011	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
01/21/2011	248.00	1.00	.00	Inc-Drop	Aztec Well Servicing Co Inc

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
MWD SURVEY	01/23/2011	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
01/25/2011	.00	.00	.00	IncAzi-MWD	Scientific Drilling
01/23/2011	267.00	.21	22.02	IncAzi-MWD	Scientific Drilling
01/23/2011	329.00	.05	67.97	IncAzi-MWD	Scientific Drilling
01/23/2011	360.00	.08	3.35	IncAzi-MWD	Scientific Drilling
01/23/2011	390.00	.64	335.50	IncAzi-MWD	Scientific Drilling
01/23/2011	421.00	1.38	346.92	IncAzi-MWD	Scientific Drilling
01/23/2011	452.00	2.03	349.09	IncAzi-MWD	Scientific Drilling
01/23/2011	483.00	2.63	346.84	IncAzi-MWD	Scientific Drilling
01/23/2011	514.00	2.97	351.49	IncAzi-MWD	Scientific Drilling
01/23/2011	544.00	3.84	352.87	IncAzi-MWD	Scientific Drilling
01/23/2011	575.00	4.65	352.62	IncAzi-MWD	Scientific Drilling
01/23/2011	606.00	5.19	350.78	IncAzi-MWD	Scientific Drilling
01/23/2011	637.00	5.70	351.50	IncAzi-MWD	Scientific Drilling
01/23/2011	667.00	6.46	352.62	IncAzi-MWD	Scientific Drilling
01/23/2011	697.00	6.75	350.94	IncAzi-MWD	Scientific Drilling
01/23/2011	728.00	7.34	351.18	IncAzi-MWD	Scientific Drilling
01/23/2011	758.00	7.95	349.97	IncAzi-MWD	Scientific Drilling
01/23/2011	788.00	8.62	349.45	IncAzi-MWD	Scientific Drilling
01/23/2011	817.00	9.02	347.82	IncAzi-MWD	Scientific Drilling
01/23/2011	848.00	9.62	348.26	IncAzi-MWD	Scientific Drilling
01/23/2011	878.00	10.33	348.60	IncAzi-MWD	Scientific Drilling
01/23/2011	908.00	10.96	347.09	IncAzi-MWD	Scientific Drilling
01/23/2011	939.00	11.40	347.06	IncAzi-MWD	Scientific Drilling
01/23/2011	973.00	11.86	348.58	IncAzi-MWD	Scientific Drilling
01/23/2011	1,005.00	12.48	350.93	IncAzi-MWD	Scientific Drilling
01/23/2011	1,037.00	12.52	352.71	IncAzi-MWD	Scientific Drilling
01/23/2011	1,070.00	13.13	353.35	IncAzi-MWD	Scientific Drilling
01/23/2011	1,102.00	13.86	352.33	IncAzi-MWD	Scientific Drilling

01/23/2011	1,134.00	14.24	352.55	IncAzi-MWD	Scientific Drilling
01/23/2011	1,166.00	14.96	352.03	IncAzi-MWD	Scientific Drilling
01/24/2011	1,198.00	15.86	351.14	IncAzi-MWD	Scientific Drilling
01/24/2011	1,231.00	16.77	350.62	IncAzi-MWD	Scientific Drilling
01/24/2011	1,263.00	17.22	350.10	IncAzi-MWD	Scientific Drilling
01/24/2011	1,295.00	17.34	349.81	IncAzi-MWD	Scientific Drilling
01/24/2011	1,328.00	18.08	349.10	IncAzi-MWD	Scientific Drilling
01/24/2011	1,360.00	18.47	348.93	IncAzi-MWD	Scientific Drilling
01/24/2011	1,392.00	18.27	348.23	IncAzi-MWD	Scientific Drilling
01/24/2011	1,425.00	17.92	348.43	IncAzi-MWD	Scientific Drilling
01/24/2011	1,457.00	18.14	348.17	IncAzi-MWD	Scientific Drilling
01/24/2011	1,521.00	17.97	347.06	IncAzi-MWD	Scientific Drilling
01/24/2011	1,586.00	17.94	347.79	IncAzi-MWD	Scientific Drilling
01/24/2011	1,650.00	18.31	350.61	IncAzi-MWD	Scientific Drilling
01/24/2011	1,715.00	18.70	350.93	IncAzi-MWD	Scientific Drilling
01/24/2011	1,778.00	18.70	350.75	IncAzi-MWD	Scientific Drilling
01/24/2011	1,842.00	18.71	350.20	IncAzi-MWD	Scientific Drilling
01/24/2011	1,907.00	18.52	349.80	IncAzi-MWD	Scientific Drilling
01/24/2011	1,971.00	18.23	349.69	IncAzi-MWD	Scientific Drilling
01/24/2011	2,036.00	17.69	349.92	IncAzi-MWD	Scientific Drilling
01/24/2011	2,100.00	17.14	349.49	IncAzi-MWD	Scientific Drilling
01/24/2011	2,165.00	16.61	348.99	IncAzi-MWD	Scientific Drilling
01/24/2011	2,229.00	15.86	349.90	IncAzi-MWD	Scientific Drilling
01/24/2011	2,294.00	15.21	349.92	IncAzi-MWD	Scientific Drilling
01/24/2011	2,358.00	14.67	351.93	IncAzi-MWD	Scientific Drilling
01/24/2011	2,423.00	14.98	351.85	IncAzi-MWD	Scientific Drilling
01/24/2011	2,487.00	16.17	352.00	IncAzi-MWD	Scientific Drilling
01/24/2011	2,552.00	15.72	352.49	IncAzi-MWD	Scientific Drilling
01/24/2011	2,616.00	16.43	351.11	IncAzi-MWD	Scientific Drilling
01/24/2011	2,681.00	16.62	350.95	IncAzi-MWD	Scientific Drilling
01/24/2011	2,745.00	15.80	350.27	IncAzi-MWD	Scientific Drilling
01/24/2011	2,809.00	14.08	348.92	IncAzi-MWD	Scientific Drilling
01/24/2011	2,874.00	13.61	348.57	IncAzi-MWD	Scientific Drilling
01/24/2011	2,938.00	13.24	348.84	IncAzi-MWD	Scientific Drilling
01/24/2011	3,003.00	13.66	348.75	IncAzi-MWD	Scientific Drilling
01/24/2011	3,067.00	14.16	348.95	IncAzi-MWD	Scientific Drilling
01/24/2011	3,132.00	14.78	352.62	IncAzi-MWD	Scientific Drilling
01/25/2011	3,196.00	14.46	352.45	IncAzi-MWD	Scientific Drilling
01/25/2011	3,261.00	15.29	346.51	IncAzi-MWD	Scientific Drilling
01/25/2011	3,325.00	15.95	347.56	IncAzi-MWD	Scientific Drilling
01/25/2011	3,390.00	14.48	345.96	IncAzi-MWD	Scientific Drilling
01/25/2011	3,454.00	13.82	348.83	IncAzi-MWD	Scientific Drilling
01/25/2011	3,519.00	14.06	353.91	IncAzi-MWD	Scientific Drilling
01/25/2011	3,583.00	16.00	353.50	IncAzi-MWD	Scientific Drilling
01/25/2011	3,647.00	16.65	349.41	IncAzi-MWD	Scientific Drilling
01/25/2011	3,712.00	15.62	347.30	IncAzi-MWD	Scientific Drilling
01/25/2011	3,776.00	16.91	349.10	IncAzi-MWD	Scientific Drilling
01/25/2011	3,841.00	16.84	349.95	IncAzi-MWD	Scientific Drilling

01/25/2011	3,905.00	16.55	350.03	IncAzi-MWD	Scientific Drilling
01/25/2011	3,970.00	14.85	350.12	IncAzi-MWD	Scientific Drilling
01/25/2011	4,034.00	13.55	347.35	IncAzi-MWD	Scientific Drilling
01/25/2011	4,099.00	12.66	346.68	IncAzi-MWD	Scientific Drilling
01/25/2011	4,164.00	11.23	347.75	IncAzi-MWD	Scientific Drilling
01/25/2011	4,228.00	10.10	347.72	IncAzi-MWD	Scientific Drilling
01/25/2011	4,293.00	8.91	346.16	IncAzi-MWD	Scientific Drilling
01/25/2011	4,357.00	6.65	347.51	IncAzi-MWD	Scientific Drilling
01/25/2011	4,422.00	5.06	347.97	IncAzi-MWD	Scientific Drilling
01/25/2011	4,486.00	3.89	345.11	IncAzi-MWD	Scientific Drilling
01/25/2011	4,518.00	3.34	343.88	IncAzi-MWD	Scientific Drilling
01/25/2011	4,529.00	3.19	342.67	IncAzi-MWD	Scientific Drilling

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
FINAL BH SURVEY	02/18/2011	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
02/18/2011	7,140.00	1.00	.00	Inc-WL	Phoenix Services LLC

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.

Carol Clay

Subscribed and sworn to me this March 10, 2011

Daniel J. Busse

Notary Public in and for San Juan County, New Mexico

My Commission expires AUGUST 4, 2014

ConocoPhillips

RCVD MAR 14 '11
OIL CONS. DIV.

DIST. 3

ConocoPhillips

SJB (NM West)

SEC 23-T30N-R11W

Ross Federal #1N

API # 30-045-34909

Original Hole

Survey: Actual

Standard Survey Report

09 February, 2011

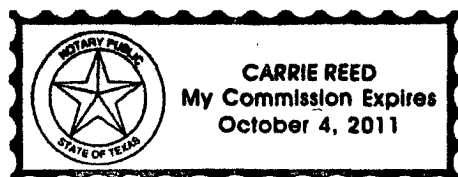
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 9th of February, 2011.

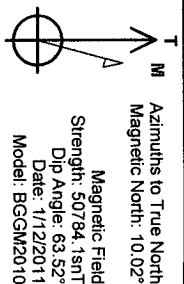
Carrie Reed

Notary Signature
County of Midland
State of Texas



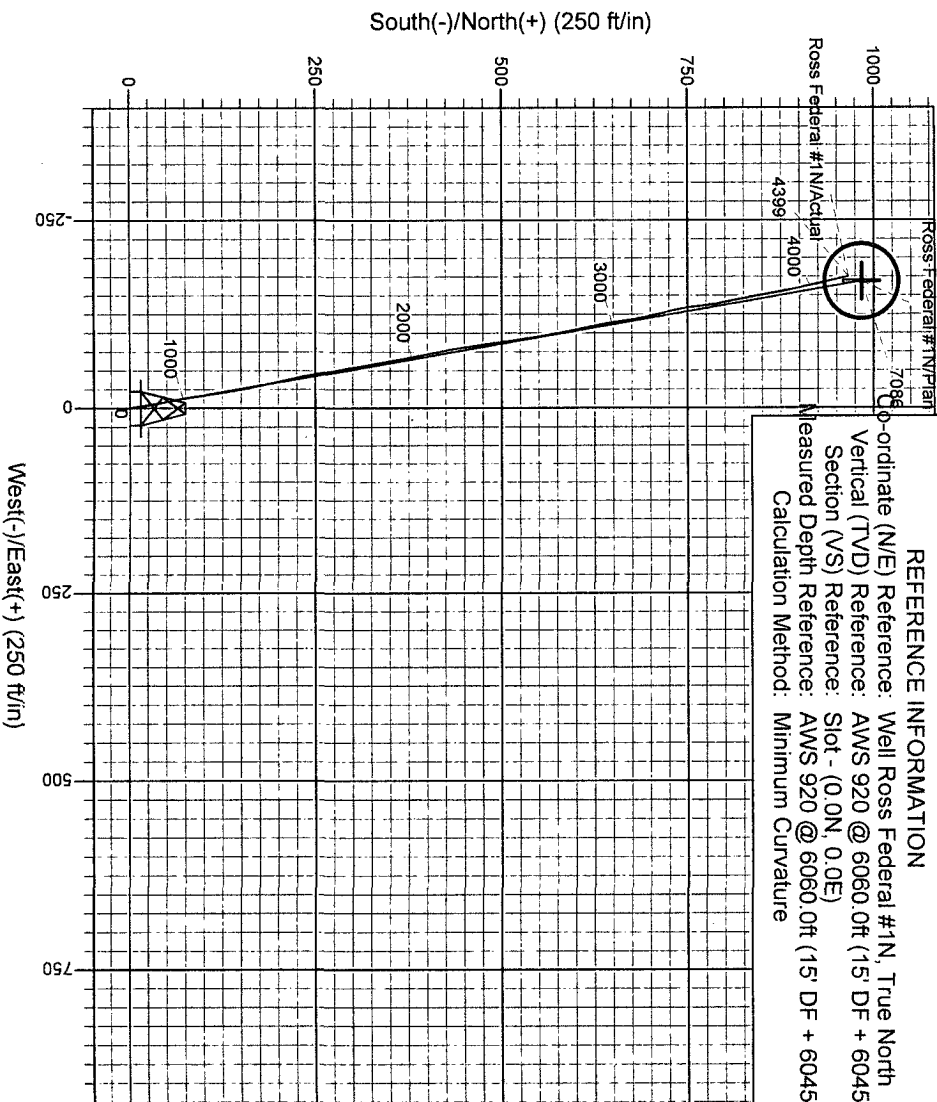
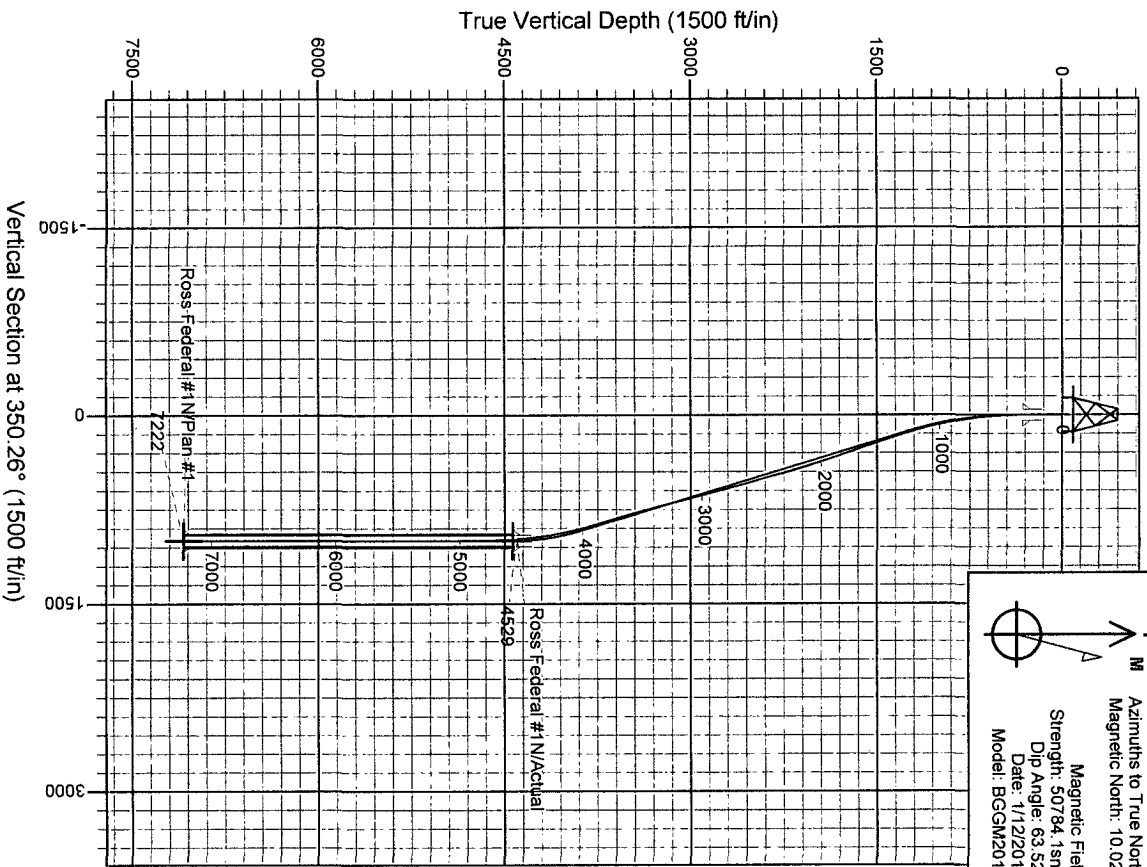
Scientific Drilling
Directional Drilling Operations

Project: SJB (NM West)
Site: SEC 23-T30N-R11W
Well: Ross Federal #1N
Wellbore: Original Hole
Design: Plan #1



+N/-S
+E/-W
Northing
2107888.21

WELL DETAILS: Ross Federal #1N
AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Ground Level: 6045.0
Easting
464432.44
Latitude
36° 47' 34.356 N
Longitude
107° 57' 17.298 W
Spot



REFERENCE INFORMATION
Easting: Well Ross Federal #1N, True North
Vertical (TVD) Reference: AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: AWS 920 @ 6060.0ft (15' DF + 6045' GL)
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 West)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

SITE DETAILS: SEC 23-T30N-R11W
San Juan County NM
Site Centre Latitude: 36° 47' 34.356 N
Longitude: 107° 57' 17.298 W
Positional Uncertainty: 7.5
Convergence: -0.07
Local North: True

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well Ross Federal #1N
Project:	SJB (NM West)	TVD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Site:	SEC 23-T30N-R11W	MD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Well:	Ross Federal #1N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

Project	SJB (NM West), 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 West 3003		Using geodetic scale factor

Site	SEC 23-T30N-R11W		
Site Position:		Northing:	2,107,888.21 ft
From:	Lat/Long	Easting:	464,432.44 ft
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 47' 34.356 N
		Longitude:	107° 57' 17.298 W
		Grid Convergence:	-0.07 °

Well	Ross Federal #1N, S-Type MV/DK Well		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Latitude:	36° 47' 34.356 N
		Longitude:	107° 57' 17.298 W
		Ground Level:	6,045.0 ft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2010	1/12/2011	10.02
			Dip Angle (°)
			63.52
			Field Strength (nT)
			50,784

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 (°)
			349.72

Survey Program	Date 2/9/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
267.0	4,529.0	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
267.0	0.21	22.02	267.0	0.5	0.2	0.4	0.08	0.08	0.00
329.0	0.05	67.97	329.0	0.6	0.3	0.5	0.29	-0.26	74.11
360.0	0.08	3.35	360.0	0.6	0.3	0.5	0.24	0.10	-208.45
390.0	0.64	335.50	390.0	0.8	0.2	0.7	1.90	1.87	-92.83
421.0	1.38	346.92	421.0	1.3	0.0	1.3	2.46	2.39	36.84
452.0	2.03	349.09	452.0	2.2	-0.1	2.2	2.11	2.10	7.00
483.0	2.63	346.84	483.0	3.4	-0.4	3.4	1.96	1.94	-7.26
514.0	2.97	351.49	513.9	4.9	-0.7	5.0	1.32	1.10	15.00
544.0	3.84	352.87	543.9	6.7	-0.9	6.7	2.91	2.90	4.60
575.0	4.65	352.62	574.8	9.0	-1.2	9.0	2.61	2.61	-0.81
606.0	5.19	350.78	605.7	11.6	-1.6	11.7	1.81	1.74	-5.94
637.0	5.70	351.50	636.5	14.5	-2.1	14.6	1.66	1.65	2.32

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well Ross Federal #1N
Project:	SJB (NM West)	TVD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Site:	SEC 23-T30N-R11W	MD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Well:	Ross Federal #1N	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)
667.0	6.46	352.62	666.4	17.6	-2.5	17.8	2.56	2.53	3.73
697.0	6.75	350.94	696.2	21.1	-3.0	21.2	1.16	0.97	-5.60
728.0	7.34	351.18	728.9	24.8	-3.6	25.0	1.91	1.90	0.77
758.0	7.95	349.97	756.7	28.7	-4.2	29.0	2.10	2.03	-4.03
788.0	8.62	349.45	786.3	33.0	-5.0	33.4	2.25	2.23	-1.73
817.0	9.02	347.82	815.0	37.4	-5.9	37.8	1.63	1.38	-5.62
848.0	9.62	348.26	845.6	42.3	-6.9	42.8	1.95	1.94	1.42
878.0	10.33	348.60	875.1	47.4	-8.0	48.0	2.37	2.37	1.13
908.0	10.96	347.09	904.6	52.8	-9.1	53.6	2.30	2.10	-5.03
939.0	11.40	347.06	935.0	58.6	-10.5	59.6	1.42	1.42	-0.10
973.0	11.86	348.58	968.3	65.3	-11.9	66.4	1.63	1.35	4.47
1,005.0	12.48	350.93	999.6	72.0	-13.1	73.2	2.48	1.94	7.34
1,037.0	12.52	352.71	1,030.9	78.8	-14.1	80.1	1.21	0.13	5.56
1,070.0	13.13	353.35	1,063.0	86.1	-15.0	87.4	1.90	1.85	1.94
1,102.0	13.86	352.33	1,094.1	93.5	-15.9	94.8	2.40	2.28	-3.19
1,134.0	14.24	352.55	1,125.2	101.2	-17.0	102.6	1.20	1.19	0.69
1,166.0	14.96	352.03	1,156.2	109.2	-18.0	110.7	2.29	2.25	-1.63
1,198.0	15.86	351.14	1,187.0	117.6	-19.3	119.2	2.91	2.81	-2.78
1,231.0	16.77	350.62	1,218.7	126.8	-20.8	128.4	2.79	2.76	-1.58
1,263.0	17.22	350.10	1,249.3	136.0	-22.3	137.8	1.48	1.41	-1.63
1,295.0	17.34	349.81	1,279.8	145.3	-24.0	147.3	0.46	0.38	-0.91
1,328.0	18.08	349.10	1,311.3	155.2	-25.8	157.3	2.34	2.24	-2.15
1,360.0	18.47	348.93	1,341.7	165.1	-27.7	167.4	1.23	1.22	-0.53
1,392.0	18.27	348.23	1,372.0	174.9	-29.7	177.4	0.93	-0.63	-2.19
1,425.0	17.92	348.43	1,403.4	185.0	-31.8	187.7	1.08	-1.06	0.61
1,457.0	18.14	348.17	1,433.8	194.7	-33.8	197.6	0.73	0.69	-0.81
1,521.0	17.97	347.06	1,494.7	214.1	-38.1	217.4	0.60	-0.27	-1.73
1,586.0	17.94	347.79	1,556.5	233.6	-42.4	237.4	0.35	-0.05	1.12
1,650.0	18.31	350.61	1,617.3	253.2	-46.1	257.3	1.49	0.58	4.41
1,715.0	18.70	350.93	1,679.0	273.5	-49.5	278.0	0.62	0.60	0.49
1,778.0	18.70	350.75	1,738.6	293.5	-52.7	298.2	0.09	0.00	-0.29
1,842.0	18.71	350.20	1,799.3	313.7	-56.1	318.7	0.28	0.02	-0.86
1,907.0	18.52	349.80	1,860.9	334.1	-59.7	339.4	0.35	-0.29	-0.62
1,971.0	18.23	349.69	1,921.6	354.0	-63.3	359.6	0.46	-0.45	-0.17
2,036.0	17.69	349.92	1,983.4	373.7	-66.8	379.6	0.84	-0.83	0.35
2,100.0	17.14	349.49	2,044.5	392.6	-70.2	398.8	0.88	-0.86	-0.67
2,165.0	16.61	348.99	2,106.7	411.1	-73.8	417.7	0.85	-0.82	-0.77
2,229.0	15.86	349.90	2,168.1	428.7	-77.0	435.6	1.24	-1.17	1.42
2,294.0	15.21	349.92	2,230.8	445.8	-80.1	453.0	1.00	-1.00	0.03
2,358.0	14.67	351.93	2,292.6	462.1	-82.7	469.5	1.17	-0.84	3.14
2,423.0	14.98	351.85	2,355.4	478.6	-85.0	486.1	0.48	0.48	-0.12
2,487.0	16.17	352.00	2,417.1	495.6	-87.5	503.3	1.86	1.86	0.23
2,552.0	15.72	352.49	2,479.6	513.3	-89.9	521.1	0.72	-0.69	0.75
2,616.0	16.43	351.11	2,541.1	530.8	-92.4	538.8	1.26	1.11	-2.16
2,681.0	16.62	350.95	2,603.4	549.1	-95.3	557.3	0.30	0.29	-0.25
2,745.0	15.80	350.27	2,664.9	566.7	-98.2	575.1	1.32	-1.28	-1.06
2,809.0	14.08	348.92	2,726.7	583.0	-101.2	591.6	2.74	-2.69	-2.11
2,874.0	13.61	348.57	2,789.8	598.2	-104.2	607.2	0.73	-0.72	-0.54
2,938.0	13.24	348.84	2,852.1	612.8	-107.1	622.1	0.59	-0.58	0.42
3,003.0	13.66	348.75	2,915.3	627.6	-110.0	637.2	0.65	0.65	-0.14
3,067.0	14.16	348.95	2,977.4	642.7	-113.0	652.6	0.78	0.78	0.31
3,132.0	14.78	352.62	3,040.3	658.7	-115.6	668.8	1.70	0.95	5.65
3,196.0	14.46	352.45	3,102.3	674.7	-117.7	684.9	0.50	-0.50	-0.27
3,261.0	15.29	346.51	3,165.1	691.1	-120.8	701.6	2.67	1.28	-9.14

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well Ross Federal #1N
Project:	SJB (NM West)	TVD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Site:	SEC 23-T30N-R11W	MD Reference:	AWS 920 @ 6060.0ft (15' DF + 6045' GL)
Well:	Ross Federal #1N	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)
3,325.0	15.95	347.56	3,226.7	707.9	-124.6	718.8	1.12	1.03	1.64
3,390.0	14.48	345.96	3,289.4	724.5	-128.5	735.8	2.35	-2.26	-2.46
3,454.0	13.82	348.83	3,351.5	739.8	-131.9	751.5	1.50	-1.03	4.48
3,519.0	14.06	353.91	3,414.6	755.3	-134.3	767.1	1.92	0.37	7.82
3,583.0	16.00	353.50	3,476.4	771.8	-136.1	783.7	3.04	3.03	-0.64
3,647.0	16.65	349.41	3,537.8	789.5	-138.8	801.6	2.06	1.02	-6.39
3,712.0	15.62	347.30	3,600.3	807.2	-142.4	819.7	1.82	-1.58	-3.25
3,776.0	16.91	349.10	3,661.7	824.8	-146.1	837.6	2.16	2.02	2.81
3,841.0	16.84	349.95	3,723.9	843.3	-149.5	856.5	0.39	-0.11	1.31
3,905.0	16.55	350.03	3,785.2	861.4	-152.7	874.8	0.45	-0.45	0.13
3,970.0	14.85	350.12	3,847.8	878.7	-155.7	892.4	2.62	-2.62	0.14
4,034.0	13.55	347.35	3,909.8	894.1	-158.8	908.1	2.29	-2.03	-4.33
4,099.0	12.66	346.68	3,973.1	908.5	-162.1	922.9	1.39	-1.37	-1.03
4,164.0	11.23	347.75	4,036.7	921.6	-165.1	936.3	2.23	-2.20	1.65
4,228.0	10.10	347.72	4,099.6	933.2	-167.6	948.1	1.77	-1.77	-0.05
4,293.0	8.91	346.16	4,163.7	943.7	-170.0	958.8	1.87	-1.83	-2.40
4,357.0	6.65	347.51	4,227.1	952.1	-172.0	967.5	3.54	-3.53	2.11
4,422.0	5.06	347.97	4,291.8	958.6	-173.4	974.1	2.45	-2.45	0.71
4,486.0	3.89	345.11	4,355.6	963.4	-174.6	979.1	1.86	-1.83	-4.47
4,518.0	3.34	343.88	4,387.5	965.4	-175.1	981.1	1.74	-1.72	-3.84
4,529.0	3.19	342.67	4,398.5	966.0	-175.3	981.7	1.50	-1.36	-11.00