

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir TO DRILL" for permit for such proposals Use "APPLICATION

5 Lease Designation and Serial No
8 PM 3-57 NM57-078767

6 If Indian, Allottee or Tribe Name

7 If Unit or CA, Agreement Designation
Rosa Unit

SUBMIT IN TRIPLICATE

1. Type of Well
Oil Well Gas Well X Other

8. Well Name and No
Rosa Unit #80B

2. Name of Operator
WILLIAMS PRODUCTION COMPANY

9. API Well No
30-039-30184

3 Address and Telephone No.
PO Box 640 Aztec, NM 87410-0640

10 Field and Pool, or Exploratory Area
BLANCO MV/BASIN DK

4 Location of Well (Footage, Sec., T., R., M., or Survey Description)
BHL 660' FNL & 750' FWL Sec. 8, T31, R5 NMPM SHL: 1565' FNL + 835' FWL

11 County or Parish, State
Rio Arriba, New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent

X Subsequent Report

Final Abandonment

Abandonment

Recompletion

Plugging Back

Casing Repair

Altering Casing

X Other Multiple zone completion

Change of Plans

New Construction

Non-Routine Fracturing

Water Shut-Off

Conversion to Injection

Dispose Water

(Note Report results of multiple completion on Well Completion or Recompletion Report and Log form)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

14 Williams Production Company, LLC. hereby requests authority to drill this as a Mesa Verde/Dakota dual and change the bottom hole location from 1565 FNL & 330 FWL, sec 8, T31N, R5W to 660 FNL & 750 FWL, sec 8, T31N, R5W as per attached plat, directional plan and operations plan. The surface location will remain the same.

RCVD AUG 16 '07
OIL CONS. DIV.
DIST. 3

HOLD 0104 FOR directional survey

14 I hereby certify that the foregoing is true and correct

Signed Larry Higgins
Larry Higgins

Title Drilling C.O.M.

Date 8-8-07

(This space for Federal or State office use)

Approved by [Signature]

Title Petr. Eng.

Date 8/14/07

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTIFY AZTEC OCD 24 HRS.
NMOCDB PRIOR TO CASING & CEMENT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30039-30184		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 80B
*OGRID No 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6298'

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
E	8	31N	5W		1565	NORTH	835	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
D	8	31N	5W		660	NORTH	750	WEST	RIO ARriba

¹² Dedicated Acres	320.0 Acres (W/2) - MV	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No
	320.0 Acres (N/2) - DK			

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

¹⁶ BOTTOM HOLE LOCATION 750' 1565' 835' SURFACE LOCATION LAT: 36.91696°N LONG: 107.39189°W DATUM: NAD83 LEASE SF-078767 LEASE SF-078767 LEASE SF-078763 5276.04' 5280.00'	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>Larry Higgins</i> 8-8-07 Signature Date <i>LARRY HIGGINS</i> 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 Date of Survey: APRIL 26, 2006 Signature and Seal of Professional Surveyor JASON C. EDWARDS Certificate Number 15269
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Weatherford[®]

Drilling Services

Proposal



WILLIAMS PRODUCTION COMPANY

ROSA UNIT #80B

RIO ARRIBA COUNTY, NEW MEXICO

WELL FILE: PLAN 1

JULY 25, 2007

Weatherford International, Ltd.
15710 John F. Kennedy Blvd., Suite 700
Houston, Texas 77032 USA
+1.281.260.1300 Main
+1.281.260.4730 Fax
www.weatherford.com



ROSA UNIT #80B
SEC8 T31N R5W
1565' FNL, 835' FWL
RIO ARriba COUNTY, NM

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	354 63	0 00	0 00	0 00	0 00	0 00	0 00	
2	400 00	0 00	354 63	400 00	0 00	0 00	0 00	0 00	0 00	KOP
3	1576 27	29 99	354 63	1523 27	299 61	-28 14	2 55	354 63	300 93	HOLD
4	1769 28	29 99	354 63	1690 44	395 68	-37 16	0 00	0 00	397 42	DROP
5	3768 94	0 00	354 63	3600 00	905 01	-85 00	1 50	180 00	908 99	VERTICAL PT
6	8165 94	0 00	354 63	7997 00	905 01	-85 00	0 00	354 63	908 99	PBHL

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Rosa Unit #80B	0 00	0 00	2155067 36	1306615 22	36°55'01 056N	107°23'30 804W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	7997 00	905 01	-85 00	2155973 32	1306541 06	Circle (Radius 50)

KB ELEVATION 6312'
GR ELEVATION 6298'

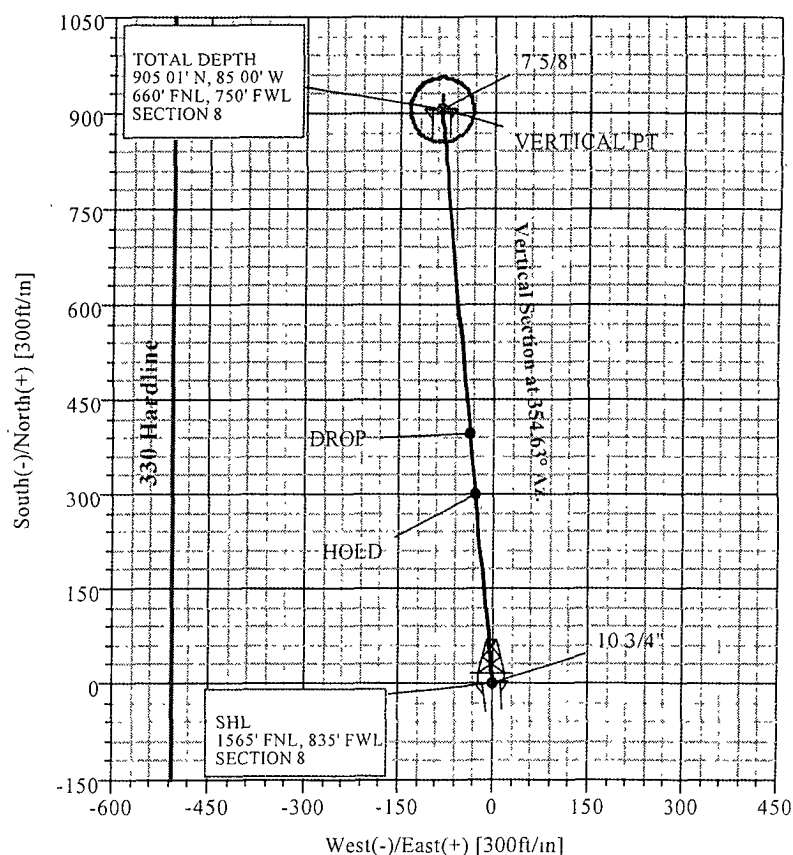
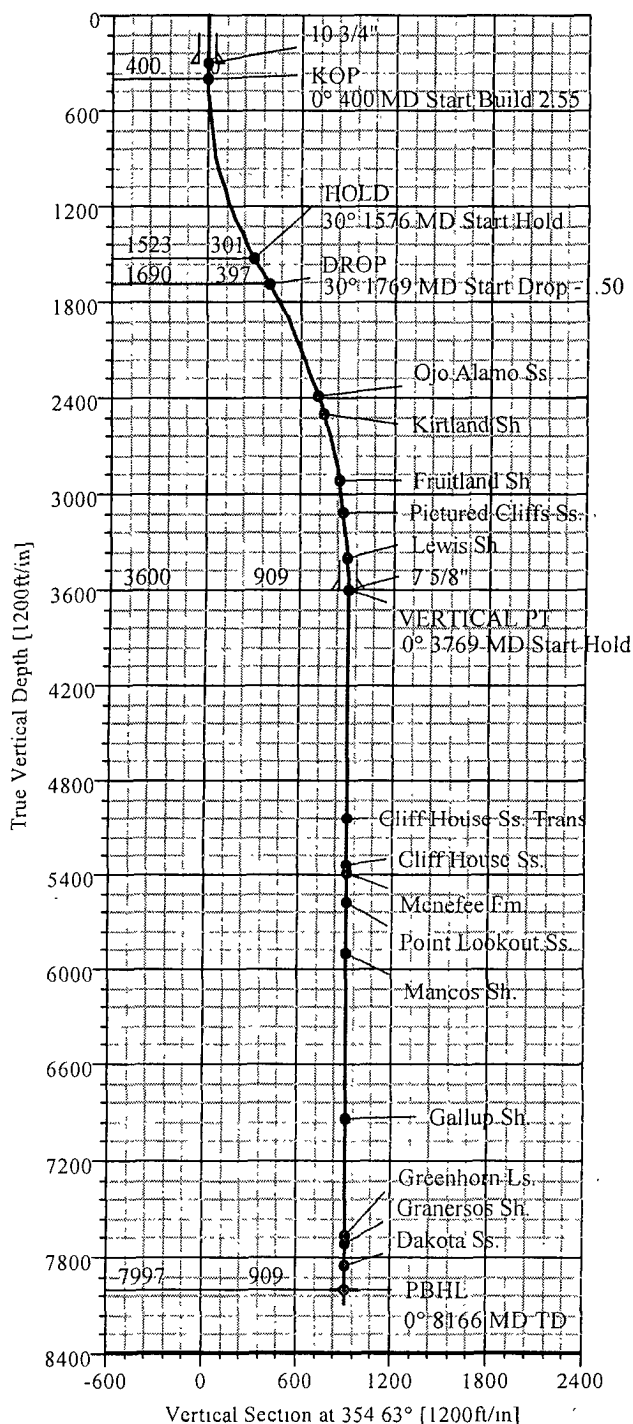
FORMATION TOP DETAILS

No	TVDPath	MDPath	Formation
1	2392 00	2539 84	Ojo Alamo Ss
2	2497 00	2650 01	Kirtland Sh
3	2907 00	3072 08	Fruitland Sh
4	3112 00	3279 60	Pictured Cliffs Ss
5	3402 00	3570 85	Lewis Sh
6	5037 00	5205 94	Cliff House Ss Trans
7	5342 00	5510 94	Cliff House Ss
8	5387 00	5555 94	Menefee Fm
9	5577 00	5745 94	Point Lookout Ss
10	5897 00	6065 94	Mancos Sh
11	6937 00	7105 94	Gallup Sh
12	7657 00	7825 94	Greenhorn Ls
13	7717 00	7885 94	Graneros Sh
14	7847 00	8015 94	Dakota Ss



Azimuths to True North
Magnetic North 10 2°
Magnetic Field
Strength 51344nT
Dip Angle 63 82°
Date 7/25/2007
Model bggm2006

Total Correction to True North 10 2°



Weatherford®

Plan Plan #1 (Rosa Unit #80B/1)

Created By Mario Lamez

Date 7/25/2007



Weatherford International, Ltd.

DIRECTIONAL PLAN REPORT



Weatherford

Company: WILLIAMS PRODUCTION
Field: Rio Arriba, NM (NAD 83)
Site: Rosa Unit # 80B
Well: Rosa Unit #80B
Wellpath: 1

Date: 7/25/2007 Time: 14:45:25 Page: 1
Co-ordinate(NE) Reference: Site: Rosa Unit # 80B, True North
Vertical (TVD) Reference: SITE 6312.0
Section (VS) Reference: Well (0.00N,0.00E,354.63Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Start Date:

Company: Engineer:
Tool: Tied-to:

Field: Rio Arriba, NM (NAD 83)

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Central Zone
Coordinate System: Site Centre
Geomagnetic Model: bggm2006

Site: Rosa Unit # 80B

Site Position: Northing: 2155067.36 ft Latitude: 36 55 1.056 N
From: Geographic Easting: 1306615.22 ft Longitude: 107 23 30.804 W
Position Uncertainty: 0.00 ft North Reference: True
Ground Level: 6298.00 ft Grid Convergence: -0.69 deg

Well: Rosa Unit #80B Slot Name:

Well Position: +N/-S 0.00 ft Northing: 2155067.36 ft Latitude: 36 55 1.056 N
+E/-W 0.00 ft Easting: 1306615.22 ft Longitude: 107 23 30.804 W
Position Uncertainty: 0.00 ft

Wellpath: 1
Current Datum: SITE Height 6312.00 ft
Magnetic Data: 7/25/2007
Field Strength: 51344 nT
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 354.63

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	354.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	354.63	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1576.27	29.99	354.63	1523.27	299.61	-28.14	2.55	2.55	0.00	354.63	
1769.28	29.99	354.63	1690.44	395.68	-37.16	0.00	0.00	0.00	0.00	
3768.94	0.00	354.63	3600.00	905.01	-85.00	1.50	-1.50	0.00	180.00	
8165.94	0.00	354.63	7997.00	905.01	-85.00	0.00	0.00	0.00	354.63	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
400.00	0.00	354.63	400.00	0.00	0.00	0.00	0.00	2155067.36	1306615.22	KOP
500.00	2.55	354.63	499.97	2.22	-0.21	2.22	2.55	2155069.57	1306615.04	
600.00	5.10	354.63	599.74	8.86	-0.83	8.90	2.55	2155076.22	1306614.49	
700.00	7.65	354.63	699.11	19.91	-1.87	20.00	2.55	2155087.29	1306613.59	
800.00	10.20	354.63	797.89	35.36	-3.32	35.51	2.55	2155102.75	1306612.32	
900.00	12.75	354.63	895.88	55.16	-5.18	55.40	2.55	2155122.58	1306610.70	
1000.00	15.30	354.63	992.89	79.29	-7.45	79.64	2.55	2155146.73	1306608.72	
1100.00	17.85	354.63	1088.73	107.69	-10.11	108.16	2.55	2155175.16	1306606.40	
1200.00	20.40	354.63	1183.20	140.30	-13.18	140.92	2.55	2155207.81	1306603.72	
1300.00	22.95	354.63	1276.13	177.07	-16.63	177.85	2.55	2155244.62	1306600.71	
1400.00	25.50	354.63	1367.31	217.92	-20.47	218.88	2.55	2155285.51	1306597.36	
1500.00	28.05	354.63	1456.58	262.77	-24.68	263.93	2.55	2155330.40	1306593.69	
1576.27	29.99	354.63	1523.27	299.61	-28.14	300.93	2.55	2155367.28	1306590.67	HOLD
1600.00	29.99	354.63	1543.82	311.42	-29.25	312.79	0.00	2155379.10	1306589.70	
1700.00	29.99	354.63	1630.43	361.19	-33.92	362.78	0.00	2155428.93	1306585.62	



Weatherford International, Ltd.

DIRECTIONAL PLAN REPORT

**Weatherford**

Company: WILLIAMS PRODUCTION
Field: Rio Arriba, NM (NAD 83)
Site: Rosa Unit #80B
Well: Rosa Unit #80B
Wellpath: 1

Date: 7/25/2007 Time: 14:45:25 Page: 2
Co-ordinate(NE) Reference: Site: Rosa Unit #80B, True North
Vertical (TVD) Reference: SITE 6312.0
Section (VS) Reference: Well (0.00N 0.00E 354.63Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
1769.28	29.99	354.63	1690.44	395.68	-37.16	397.42	0.00	2155463.45	1306582.80	DROP
1800.00	29.53	354.63	1717.10	410.86	-38.59	412.67	1.50	2155478.65	1306581.55	
1900.00	28.03	354.63	1804.74	458.80	-43.09	460.82	1.50	2155526.64	1306577.63	
2000.00	26.53	354.63	1893.61	504.44	-47.38	506.66	1.50	2155572.32	1306573.89	
2100.00	25.03	354.63	1983.65	547.74	-51.44	550.15	1.50	2155615.68	1306570.34	
2200.00	23.53	354.63	2074.80	588.69	-55.29	591.28	1.50	2155656.66	1306566.98	
2300.00	22.03	354.63	2167.00	627.24	-58.91	630.00	1.50	2155695.26	1306563.82	
2400.00	20.53	354.63	2260.18	663.38	-62.31	666.30	1.50	2155731.44	1306560.86	
2500.00	19.03	354.63	2354.27	697.08	-65.47	700.15	1.50	2155765.17	1306558.10	
2539.84	18.44	354.63	2392.00	709.82	-66.67	712.94	1.50	2155777.92	1306557.06	Ojo Alamo Ss
2600.00	17.53	354.63	2449.22	728.31	-68.40	731.52	1.50	2155796.44	1306555.54	
2650.01	16.78	354.63	2497.00	743.00	-69.78	746.27	1.50	2155811.14	1306554.34	Kirtland Sh
2700.00	16.03	354.63	2544.96	757.06	-71.10	760.40	1.50	2155825.22	1306553.18	
2800.00	14.53	354.63	2641.42	783.31	-73.57	786.76	1.50	2155851.49	1306551.03	
2900.00	13.03	354.63	2738.53	807.03	-75.80	810.58	1.50	2155875.24	1306549.09	
3000.00	11.53	354.63	2836.24	828.21	-77.79	831.86	1.50	2155896.44	1306547.35	
3072.08	10.45	354.63	2907.00	841.90	-79.07	845.60	1.50	2155910.14	1306546.23	Fruitland Sh
3100.00	10.03	354.63	2934.47	846.84	-79.54	850.57	1.50	2155915.09	1306545.83	
3200.00	8.53	354.63	3033.16	862.90	-81.05	866.70	1.50	2155931.17	1306544.51	
3279.60	7.34	354.63	3112.00	873.85	-82.07	877.69	1.50	2155942.12	1306543.62	Pictured Cliffs Ss.
3300.00	7.03	354.63	3132.23	876.39	-82.31	880.24	1.50	2155944.67	1306543.41	
3400.00	5.53	354.63	3231.63	887.28	-83.34	891.19	1.50	2155955.57	1306542.51	
3500.00	4.03	354.63	3331.28	895.59	-84.12	899.53	1.50	2155963.89	1306541.83	
3570.85	2.97	354.63	3402.00	899.90	-84.52	903.86	1.50	2155968.20	1306541.48	Lewis Sh
3600.00	2.53	354.63	3431.11	901.29	-84.65	905.26	1.50	2155969.60	1306541.37	
3700.00	1.03	354.63	3531.06	904.39	-84.94	908.37	1.50	2155972.70	1306541.11	
3768.94	0.00	354.63	3600.00	905.01	-85.00	908.99	1.50	2155973.32	1306541.06	7 5/8"
3800.00	0.00	354.63	3631.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
3900.00	0.00	354.63	3731.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4000.00	0.00	354.63	3831.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4100.00	0.00	354.63	3931.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4200.00	0.00	354.63	4031.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4300.00	0.00	354.63	4131.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4400.00	0.00	354.63	4231.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4500.00	0.00	354.63	4331.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4600.00	0.00	354.63	4431.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4700.00	0.00	354.63	4531.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4800.00	0.00	354.63	4631.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
4900.00	0.00	354.63	4731.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5000.00	0.00	354.63	4831.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5100.00	0.00	354.63	4931.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5200.00	0.00	354.63	5031.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5205.94	0.00	354.63	5037.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Cliff House Ss. Tran
5300.00	0.00	354.63	5131.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5400.00	0.00	354.63	5231.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5500.00	0.00	354.63	5331.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5510.94	0.00	354.63	5342.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Cliff House Ss
5555.94	0.00	354.63	5387.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Menefee Fm
5600.00	0.00	354.63	5431.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5700.00	0.00	354.63	5531.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
5745.94	0.00	354.63	5577.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Point Lookout Ss
5800.00	0.00	354.63	5631.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	



Weatherford International, Ltd.

DIRECTIONAL PLAN REPORT



Weatherford

Company: WILLIAMS PRODUCTION Date: 7/25/2007 Time: 14:45:25 Page: 3
 Field: Rio Arriba, NM (NAD 83) Co-ordinate(NE) Reference: Site: Rosa Unit # 80B, True North
 Site: Rosa Unit # 80B Vertical (TVD) Reference: SITE 6312.0
 Well: Rosa Unit #80B Section (VS) Reference: Well (0.00N,0.00E,354.63Azi)
 Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
5900.00	0.00	354.63	5731.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6000.00	0.00	354.63	5831.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6065.94	0.00	354.63	5897.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Mancos Sh.
6100.00	0.00	354.63	5931.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6200.00	0.00	354.63	6031.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6300.00	0.00	354.63	6131.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6400.00	0.00	354.63	6231.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6500.00	0.00	354.63	6331.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6600.00	0.00	354.63	6431.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6700.00	0.00	354.63	6531.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6800.00	0.00	354.63	6631.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
6900.00	0.00	354.63	6731.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7000.00	0.00	354.63	6831.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7100.00	0.00	354.63	6931.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7105.94	0.00	354.63	6937.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Gallup Sh.
7200.00	0.00	354.63	7031.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7300.00	0.00	354.63	7131.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7400.00	0.00	354.63	7231.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7500.00	0.00	354.63	7331.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7600.00	0.00	354.63	7431.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7700.00	0.00	354.63	7531.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7800.00	0.00	354.63	7631.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7825.94	0.00	354.63	7657.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Greenhorn Ls.
7885.94	0.00	354.63	7717.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
7900.00	0.00	354.63	7731.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Graneros Sh
8000.00	0.00	354.63	7831.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
8015.94	0.00	354.63	7847.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	Dakota Ss.
8100.00	0.00	354.63	7931.06	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	
8165.94	0.00	354.63	7997.00	905.01	-85.00	908.99	0.00	2155973.32	1306541.06	PBHL

Targets

Name	Description Dip.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
PBHL		7997.00	905.01	-85.00	2155973.32	1306541.06	36 55 10.004 N	107 23 31.851 W
-Circle (Radius: 50)								
-Plan hit target								

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
300.00	300.00	10.750	12.250	10 3/4"
3768.94	3600.00	0.000	0.000	7 5/8"

Annotation

MD ft	TVD ft	
400.00	400.00	KOP
1576.27	1523.27	HOLD
1769.28	1690.43	DROP
3768.94	3600.00	VERTICAL PT
8165.94	7997.00	PBHL



Weatherford International, Ltd.

DIRECTIONAL PLAN REPORT

**Weatherford**

Company: WILLIAMS PRODUCTION
Field: Rio Arriba, NM (NAD 83)
Site: Rosa Unit # 80B
Well: Rosa Unit #80B
Wellpath: 1

Date: 7/25/2007 Time: 14:45:25 Page: 4
Co-ordinate(NE) Reference: Site: Rosa Unit # 80B, True North
Vertical (TVD) Reference: SITE 6312.0
Section (VS) Reference: Well (0.00N,0.00E,354.63Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
2539.84	2392.00	Ojo Alamo Ss		0.00	0.00
2650.01	2497.00	Kirtland Sh		0.00	0.00
3072.08	2907.00	Fruitland Sh		0.00	0.00
3279.60	3112.00	Pictured Cliffs Ss.		0.00	0.00
3570.85	3402.00	Lewis Sh		0.00	0.00
5205.94	5037.00	Cliff House Ss. Trans.		0.00	0.00
5510.94	5342.00	Cliff House Ss.		0.00	0.00
5555.94	5387.00	Menefee Fm.		0.00	0.00
5745.94	5577.00	Point Lookout Ss.		0.00	0.00
6065.94	5897.00	Mancos Sh		0.00	0.00
7105.94	6937.00	Gallup Sh.		0.00	0.00
7825.94	7657.00	Greenhorn Ls.		0.00	0.00
7885.94	7717.00	Graneros Sh.		0.00	0.00
8015.94	7847.00	Dakota Ss.		0.00	0.00
	0.00	Morrison Fm		0.00	0.00



WILLIAMS PRODUCTION COMPANY

Operations Plan

(Note: This procedure will be adjusted on site based upon actual conditions)

DATE: 8/6/2007 **FIELD:** Basin DK/ BlancoMV
WELL NAME: Rosa #80B **SURFACE:** BLM
BH LOCATION: NWNW Sec 8-31N-5W **MINERALS:** BLM
Rio Arriba, NM
SURF LOCATION: SWNW Sec 8-31N-5W
Rio Arriba, NM
ELEVATION: 6,298' GR **LEASE #** SF-078767
MEASURED DEPTH: 8,166'

I. I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	2,539	2,392	Menefee	5,555	5,387
Kirtland	2,650	2,497	Point Lookout	5,745	5,577
Fruitland	3,072	2,907	Mancos	6,065	5,897
Pictured Cliffs	3,279	3,112	Gallup	7,105	6,937
Lewis	3,570	3,402	Greenhorn	7,825	7,657
Cliff House	5,510	5,342	Graneros	7,885	7,717
			Dakota	8,015	7,847
			TD	8,166	7,997

- B. MUD LOGGING PROGRAM:** Mudlogger on location at 100' above Gallup SS to TD. Mud logger to pick TD.
- C. LOGGING PROGRAM:** Cased Hole Logs only.
- D. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

- A. MUD PROGRAM:** Clear water with benex to 7-5/8" casing point. Convert to a LSND mud to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer from 7-5/8in. csg. to TD.
- B. BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

III. MATERIALS**A. CASING PROGRAM:**

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	14 3/4	300	10 3/4	40.5	K-55
Intermediate	9 7/8	3,768	7 5/8	26.4	K-55
Longstring	6 3/4	8,166	5 1/2	17	N-80

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 10 3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
2. INTERMEDIATE CASING: 7 5/8" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) Turbulent centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. (NTL-FRA 90-1).
3. PRODUCTION LINER / CASING: 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place marker joint above 5,400'. Place centralizers as needed across selected production intervals.

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: Slurry: 255sx (356 cu.ft.) of "Type III" + 2% CaCl₂ + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. INTERMEDIATE: Lead - 645 sx (1,340) cu.ft.) of "Premium Light with 8% gel and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 100 sx (139cu.ft.) of "Type III" with 1/4# cello-flake/sk, (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use **100% excess in Lead Slurry** to circulate to surface. **No excess in Tail Slurry**. Total volume = 1,479 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION CASING: 10 bbl Gelled Water space. Cement: 210 sx (450 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft³/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in slurry should cover 100 ft into intermediate casing. Total volume 438ft³. WOC 12 hours

IV. IV COMPLETION**A. CBL**

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement not circulated to surface..

B. PRESSURE TEST

1. Pressure test 5-1/2" casing to 6000 psi max, hold at 1500 psi for 30 minutes.

C. STIMULATION

1. Stimulate Dakota with approximately 10,000# of LiteProp 108™ sand in slick water..
2. Isolate Dakota with a RBP.
3. Stimulate Point Lookout with approximately 9300# of 14/30 LiteProp™ in slick water.
4. Isolate Point Lookout with a RBP.
5. Perforate the Menefee/Cliff House as determined from the open hole logs.
6. Stimulate with approximately 9300# of 14/30 LiteProp™ in slick water.
7. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. Dakota: Run 2-1/16", 3.25#, J-55, IJ tubing with 1/2 mule shoe on bottom , SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.
2. Mesa Verde: Run 2-1/16", 2.9#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforations.

for Larry Aggins
Gary Sizemore
Sr. Drilling Engineer