

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF-078766	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Williams Production Company, LLC		7. If Unit or CA Agreement, Name and No. Rosa Unit NM NM-78407A	
3a. Address P.O. Box 640 Aztec, NM 87410		8. Lease Name and Well No. 18C	
3b. Phone No. (include area code) (505) 634-4208		9. API Well No. 30-039-30131	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1490' FNL & 990' FEL At proposed prod. zone 2310'N 1950'E		10. Field and Pool, or Exploratory Blanco Mesaverde	
14. Distance in miles and direction from nearest town or post office* approximately 25 miles northeast of Blanco, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area H Section 22, 31N, 6W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2295'		12. County or Parish Rio Arriba	
16. No. of Acres in lease 2,552.71		13. State NM	
17. Spacing Unit dedicated to this well 320.00 - (E/2)		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1300'	
19. Proposed Depth 6,046'		20. BLM/BIA Bond No. on file UT0847 WTD899	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,307' GR		22. Approximate date work will start* April 1, 2007	
23. Estimated duration 1 month		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Larry Higgins</i>	Name (Printed/Typed) Larry Higgins	Date 12-6-06
Title Drilling COM		
Approved by (Signature) <i>Wayne Townsend</i>	Name (Printed/Typed) Wayne Townsend	Date 5/5/09
Title Acting AFM	Office FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

*(Instructions on reverse)

Williams Exploration and Production Company, LLC, proposes to develop the Blanco Mesaverde formation at the above described location in accordance with the attached drilling and surface use plans.

The well pad surface is under jurisdiction of the Bureau of Land Management, Farmington Field Office (BLM/FFO).

This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

This APD is also serving as an application to obtain a pipeline right-of-way. An associated pipeline tie of 1224.70 feet would be required for this location. The first 195.1 feet of the pipeline would be located on Bureau of Reclamation lands, and the remaining 1029.60 feet would be located on BLM lands.

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD. PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

MAY 06 2009

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

Hold C104
for Directional Survey
and "As Drilled" plat

NMOC

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

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

RECEIVED

FEB 25 2009

AMENDED REPORT

Bureau of Land Management
Farmington Field Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 39-30131 Property Code 17033	*Pool Code 97232 / 72319 / 71599	*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA
*OGRID No. 120782	*Property Name ROSA UNIT	*Well Number 18C
	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6258'

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
H	22	31N	6W		1490	NORTH	990	EAST	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
G	22	31N	6W		2310	NORTH	1950	EAST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

¹⁶ TRACT 40 LOT 1 5280.00' 5257.56'			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. Signature: <i>Larry Higgins</i> Date: 2-25-09 Printed Name: LARRY HIGGINS
	LEASE SF-078766		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 Revised: JANUARY 20, 2009 Date of Survey: AUGUST 6, 2008 Signature and Seal of Professional Surveyor JASON C. EDWARDS Certificate Number 15269

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 26 2009

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. Use APPLICATION TO DRILL for permit for such proposals

Bureau of Land Management
Farmington Field Office

5. Lease Designation and Serial No.
NMSF-078766

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
Rosa Unit

8. Well Name and No
Rosa Unit #18C

9. API Well No

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

1. Type of Well
Oil Well ☒ Gas Well ☐ Other ☐
2. Name of Operator
WILLIAMS PRODUCTION COMPANY
3. Address and Telephone No.
PO Box 640 Aztec, NM 87410-0640
4. Location of Well (Footage, Sec , T , R , M , or Survey Description)
Sur: 1490' FNL & 990' FEL - BHL: 2310' FNL & 1950' FEL, Sec 22, T31N, R10W NMPM

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
<input checked="" type="checkbox"/> Notice of Intent	Abandonment
<input type="checkbox"/> Subsequent Report	Recompletion
<input type="checkbox"/> Final Abandonment	Plugging Back
	Casing Repair
	Altering Casing
	<input checked="" type="checkbox"/> Other <u>Move location & add formation</u>
	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)*

Due to wildlife issues and change of plans Williams Production, LLC wishes to change surface location, bottom hole location and add the Basin Mancos formation as per attached plats, plans and attachments. The location and pipeline have been archaeologically surveyed by La Plata Archaeological Consultants and a report submitted to the FFO/BLM.

14. I hereby certify that the foregoing is true and correct

Signed

Larry Higgins

Title Drilling C O M

Date 2-26-09

(This space for Federal or State office use)

Approved by

Title

Acting AFM

Date

5/5/09

Conditions of approval, if any

GENERAL ROSA DRILLING PLAN

Rosa Unit boundries:

T31N, R4W: all except sections 32-36
T31N, R5W: all except sections 1 & 2
T31N, R6W: all except sections 6,7,18,20, & 27-36
T32N, R6W: sections 32-36

FORMATION	LITHOLOGY	WATER	GAS	OIL/COND	OVER-PRES	LOST CIRC
Nacimient	Interbedded shales, siltstones and sandstones	Possible	Possible	No	No	No
Ojo Alamo	Sandstone and conglomerates with lenses of shale	Fresh	No	No	No	No
Kirtland	Shale W/interbedded sandstones	No	Possible	No	No	No
Fruitland	Inter, SS, SiltSt, SH & Coals w/carb, SS, SiltSt, SH	Yes	Yes	No	Possible	Possible
Pictured Cliffs	Massive Sandstone w/thin interbedded shales	Possible	Yes	Possible	No	Possible
Lewis	Shale w/thin interbedded sandstones and siltstones	No	Possible	No	No	No
Cliff House	Transgressive sandstones	Possible	Yes	No	No	No
Menefee	Sandstones, carb shales and coal	Possible	Yes	No	No	No
Point Lookout	Regressive coastal barrier sandstone	Possible	Yes	Possible	No	Yes
Mancos	Marine shale and interbedded sandstone	No	Possible	Possible	No	Possible
Upr Dakota	Marine sand and shales	No	Yes	Possible	No	Possible
Lwr Dakota	Fluvial sands, shales, & coal	Possible	Yes	Possible	No	Possible

DRILLING

Potential Hazards:

1. There are no overpressured zones expected in this well.
2. No H₂S zones will be penetrated while drilling this well.

Mud System:

1. Surface - The surface hole will be drilled with a low-solids, non-dispersed system with starch and lost circulation material as needed. Expected mud weights will be in the 8.4 to 9.0 lb per gal range. Viscosities will be in the 30 to 60 sec/qrt range as needed to remove drill cuttings.
2. Intermediate - The intermediate hole will be drilled with clear water and Benex to TD where the well will be mudded up to log and run casing. The mud system will be low-solids, non-dispersed with mud weights in the 9 to 10 lb per gal range as needed to control the well. Viscosities will be in the 45 to 55 range as needed to support any weight material. The weight material will consist of Barite.
3. Production - The well will be drilled using air from the intermediate casing point to TD. For Fruitland Coal wells, the coal section will be drilled with air/mist.



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 2/18/2009 **FIELD:** Basin DK/ Basin MN/BlancoMV
WELL NAME: Rosa #18C **SURFACE:** BLM
BH LOCATION: SWNE Sec 22-31N-6W **MINERALS:** BLM
Rio Arriba, NM
ELEVATION: 6,258' GR **LEASE #** SF-078766
MEASURED DEPTH: 8,216'

I. **I. GEOLOGY:** Surface formation - San Jose

A. **FORMATION TOPS:** (KB)

Name	TVD	MD	Name	TVD	MD
Ojo Alamo	2,307	2,578	Menefee	5,312	5,626
Kirtland	2,407	2,688	Point Lookout	5,547	5,861
Fruitland	2,832	3,138	Mancos	5,842	6,156
Pictured Cliffs	3,082	3,394	Gallup	6,867	7,181
Lewis	3,372	3,686	Greenhorn	7,582	7,896
Cliff House Trans	4,947	5,261	Graneros	7,642	7,956
Cliff House Trans	5,257	5,571	Dakota	7,772	8,086
			TD	7,902	8,216

B. **MUD LOGGING PROGRAM:** Mudlogger on location from intermediate csg to TD. Mud logger to pick TD.

C. **LOGGING PROGRAM:** HRI/Temp from intermediate casing to TD. SDLDSN/SDSEN over zones of interest.

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	3,871	7 5/8	26.4	K-55
Longstring	6 3/4	8,216	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: 290sx (341 cu.ft.) of "Type III" + 2% Cal-Seal 60 + 1/4 # of poly-e-flake/sk + 0.3% Versaset + 2% Econolite + 6% Salt (Yield = 1.796 cu.ft./sk, Weight = 13.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. INTERMEDIATE: Lead - 525sx (1430 cu.ft.) of "EXTENDACEM" + 5 #/sk pheno-seal + 5% Cal-Seal 60 (Yield = 2.723 cu.ft./sk, Weight = 11.5 #/gal.). Tail - 100sx (117.8cu.ft.) of Premium cement + 0.125 #/sk Poly-E-Flake, (Yield = 1.178 cu.ft./sk, Weight = 15.6#/gal.). **NO EXCESS PUMP AS WRITTEN SHOULD CIRCULATE TO SURFACE** Total volume = 1198 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface
3. PRODUCTION CASING: 10 bbl Gelled Water spacer. Cement: 325sx (454 ft³) of "FRACCEM" + 0.8% Halad-9 + 0.1% CFR-3 + 5 #/sk Gilsonite + 0.125 #/sk Poly-E-Flake + 0.15% HR-800. (Yield = 1.398 ft³/sk, Weight = 13.1 #/gal.). Displace cement at a minimum of 8 BPM. **NO EXCESS SHOULD COVER 150 FEET INTO 7" CASING** Total volume (342) ft³. 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. Perforate Mancos as determined from the open hole logs
4. Stimulate Mancos with 3 stages of approximately 117,000# 40/70 white sand and 7500# 100 mesh white sand
5. Stimulate Point Lookout with approximately 9300# of 14/30 LiteProp™ in slick water.
6. Isolate Point Lookout with a RBP.
7. Perforate the Menefee/Cliff House as determined from the open hole logs.
8. Stimulate with approximately 9300# of 14/30 LiteProp™ in slick water.
9. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. Production Tubing: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation



 Gary Sizemore
Sr. Drilling Engineer



ROSA UNIT #18C
RIO ARriba CO., NEW MEXICO

SECTION DET.

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	229.40	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	229.40	400.00	0.00	0.00	0.00	0.00	0.00	
3	1277.48	35.10	229.40	1223.61	-169.49	-197.78	4.00	229.40	260.47	
4	2116.13	35.10	229.40	1909.77	-483.28	-563.94	0.00	0.00	742.69	
5	3871.09	0.00	229.40	3557.00	-822.26	-959.50	2.00	180.00	1263.62	Int. Csg. Pt.
6	8216.09	0.00	229.40	7902.00	-822.26	-959.50	0.00	229.40	1263.62	TD

WELL DETAILS

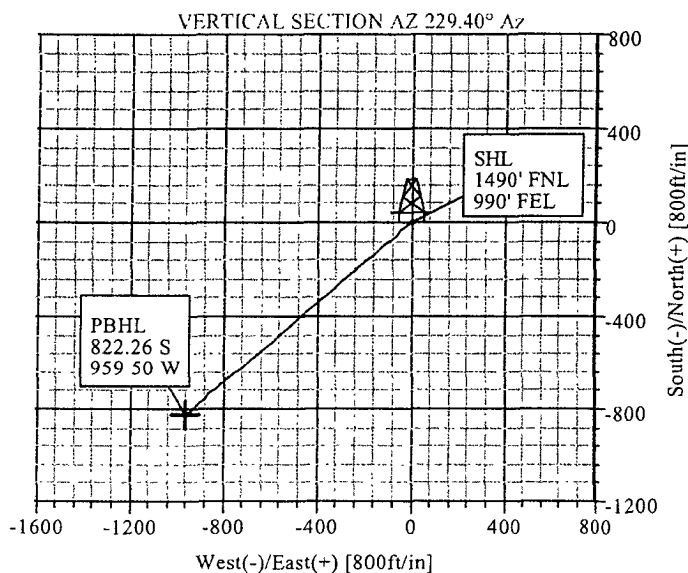
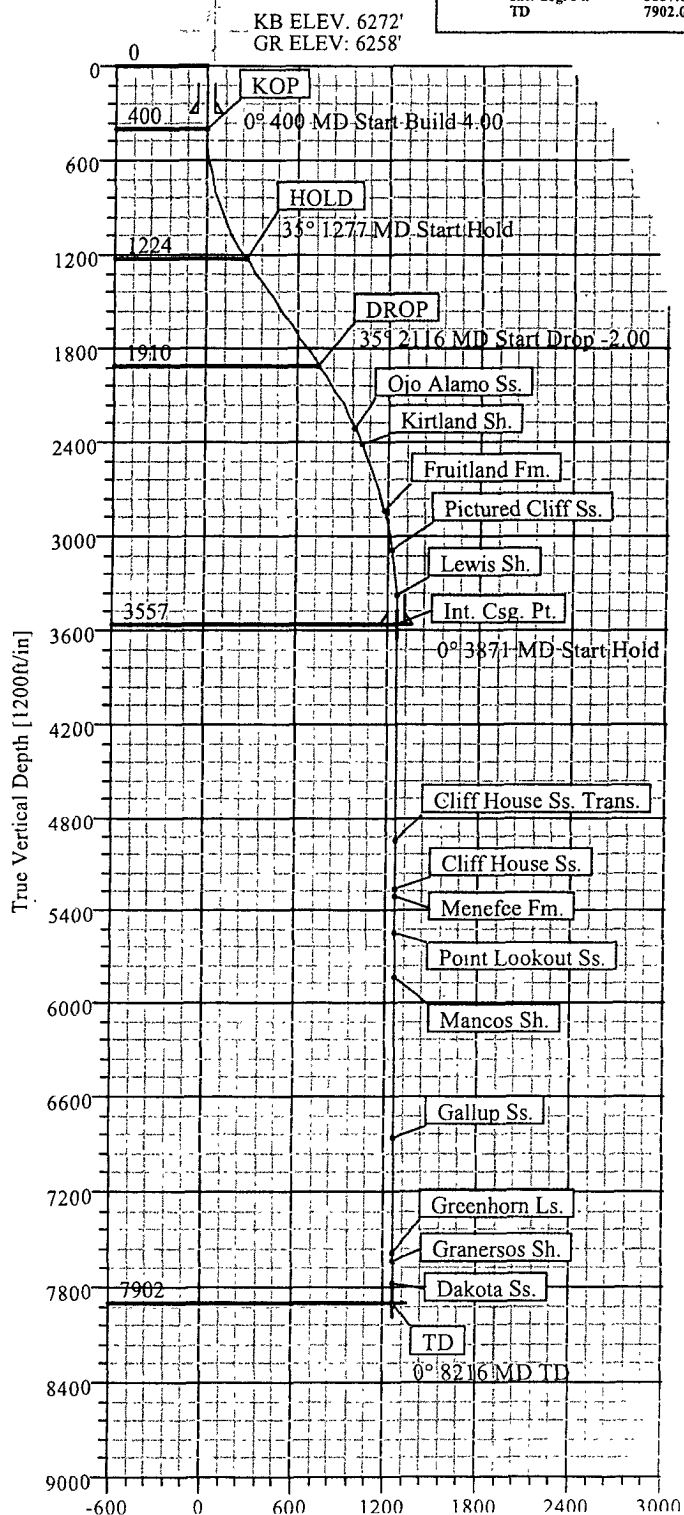
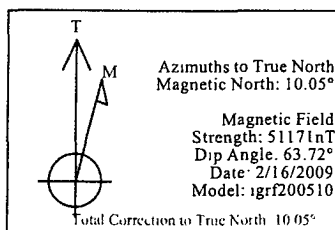
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#18C	0.00	0.00	2144810.34	1291084.22	36°53'17.770N	107°26'40.450W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Int. Csg. Pt.	3557.00	-822.26	-959.50	2144000.15	1290114.51	36°53'09.640N	107°26'52.260W	Point
TD	7902.00	-822.26	-959.50	2144000.15	1290114.51	36°53'09.640N	107°26'52.260W	Point

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	2307.00	2577.58	Ojo Alamo Ss.
2	2407.00	2687.72	Kirtland Sh.
3	2832.00	3138.12	Fruitland Fm.
4	3082.00	3393.88	Pictured Cliff Ss.
5	3372.00	3685.96	Lewis Sh.
6	4947.00	5261.09	Cliff House Ss. Trans.
7	5257.00	5571.09	Cliff House Ss.
8	5312.00	5626.09	Menefee Fm.
9	5547.00	5861.09	Point Lookout Ss.
10	5842.00	6156.09	Mancos Sh.
11	6867.00	7181.09	Gallup Ss.
12	7582.00	7896.09	Greenhorn Ls.
13	7642.00	7956.09	Graneros Sh.
14	7772.00	8086.09	Dakota Ss.



Weatherford

CASING DETAILS

No.	TVD	MD	Name	Size
1	300.00	300.00	10 3/4"	10.750
2	3557.00	3871.09	7 5/8"	0.000

Plan. Plan #1 (#18C/1)



Weatherford International, Inc.

Proposal Plan Report



Weatherford

Company: WILLIAMS PRODUCTION Date: 2/16/2009 Time: 11:16:15 Page: 3
 Field: Rio Arriba Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: #18C, True North
 Site: Rosa Unit #18C Vertical (TVD) Reference: SITE 6272.0
 Well: #18C Section (VS) Reference: Well (0.00N,0.00E,229.40Azi)
 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	Build deg/100ft	Turn deg/100ft	DLS deg/100ft	TFO deg	Comment
5900.00	0.00	229.40	5585.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6000.00	0.00	229.40	5685.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6100.00	0.00	229.40	5785.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6156.09	0.00	229.40	5842.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	Mancos Sh.
6200.00	0.00	229.40	5885.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6300.00	0.00	229.40	5985.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6400.00	0.00	229.40	6085.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6500.00	0.00	229.40	6185.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6600.00	0.00	229.40	6285.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6700.00	0.00	229.40	6385.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6800.00	0.00	229.40	6485.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
6900.00	0.00	229.40	6585.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7000.00	0.00	229.40	6685.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7100.00	0.00	229.40	6785.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7181.09	0.00	229.40	6867.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	Gallup Ss.
7200.00	0.00	229.40	6885.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7300.00	0.00	229.40	6985.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7400.00	0.00	229.40	7085.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7500.00	0.00	229.40	7185.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7600.00	0.00	229.40	7285.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7700.00	0.00	229.40	7385.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7800.00	0.00	229.40	7485.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7896.09	0.00	229.40	7582.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	Greenhorn Ls.
7900.00	0.00	229.40	7585.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
7956.09	0.00	229.40	7642.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	Graneros Sh.
8000.00	0.00	229.40	7685.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
8086.09	0.00	229.40	7772.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	Dakota Ss.
8100.00	0.00	229.40	7785.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
8200.00	0.00	229.40	7885.91	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	
8216.09	0.00	229.40	7902.00	-822.26	-959.50	1263.62	0.00	0.00	0.00	229.40	TD

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec			Longitude Deg Min Sec		
Int. Csg. Pt.			3557.00	-822.26	-959.50	2144000.15	1290114.51	36	53	9.640 N	107	26	52.260 W
-Plan hit target													
TD			7902.00	-822.26	-959.50	2144000.15	1290114.51	36	53	9.640 N	107	26	52.260 W
-Plan hit target													

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
2577.58	2307.00	Ojo Alamo Ss.		0.00	0.00
2687.72	2407.00	Kirtland Sh.		0.00	0.00
3138.12	2832.00	Fruitland Fm.		0.00	0.00
3393.88	3082.00	Pictured Cliff Ss.		0.00	0.00
3685.96	3372.00	Lewis Sh.		0.00	0.00
5261.09	4947.00	Cliff House Ss. Trans.		0.00	0.00
5571.09	5257.00	Cliff House Ss.		0.00	0.00
5626.09	5312.00	Menefee Fm.		0.00	0.00
5861.09	5547.00	Point Lookout Ss		0.00	0.00
6156.09	5842.00	Mancos Sh.		0.00	0.00
7181.09	6867.00	Gallup Ss.		0.00	0.00
7896.09	7582.00	Greenhorn Ls.		0.00	0.00



Weatherford International, L.L.C.

Proposal Plan Report

**Weatherford**

Company: WILLIAMS PRODUCTION Date: 2/16/2009 Time: 11:16:15 Page: 4
Field: Rio Arriba Co. NM (NAD 83) Co-ordinate(NE) Reference: Well: #18C, True North
Site: Rosa Unit #18C Vertical (TVD) Reference: SITE 6272.0
Well: #18C Section (VS) Reference: Well (0.00N, 0.00E, 229.40Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
7956.09	7642.00	Graneros Sh.		0.00	0.00
8086.09	7772.00	Dakota Ss.		0.00	0.00

Annotation

MD ft	TVD ft	
400.00	400.00	KOP
1277.48	1223.62	HOLD
2116.13	1909.77	DROP
3871.09	3557.00	Int. Csg. Pt.
8216.09	7902.00	TD

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
300.00	300.00	10.750	12.250	10 3/4"
3871.09	3557.00	0.000	0.000	7 5/8"

Well Control Equipment Schematic for 2M Service

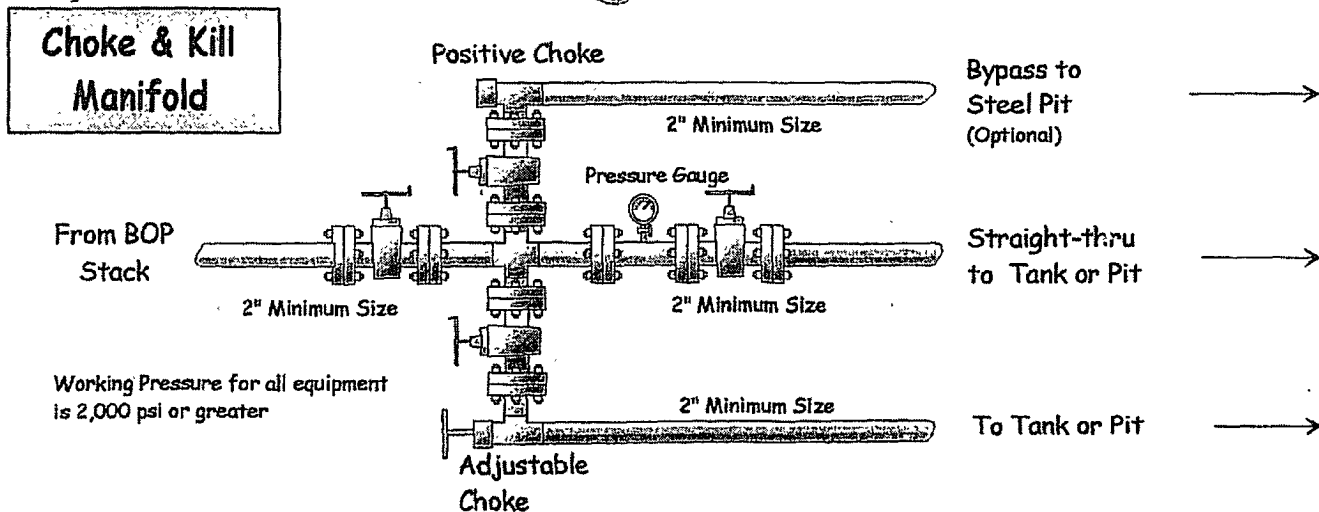
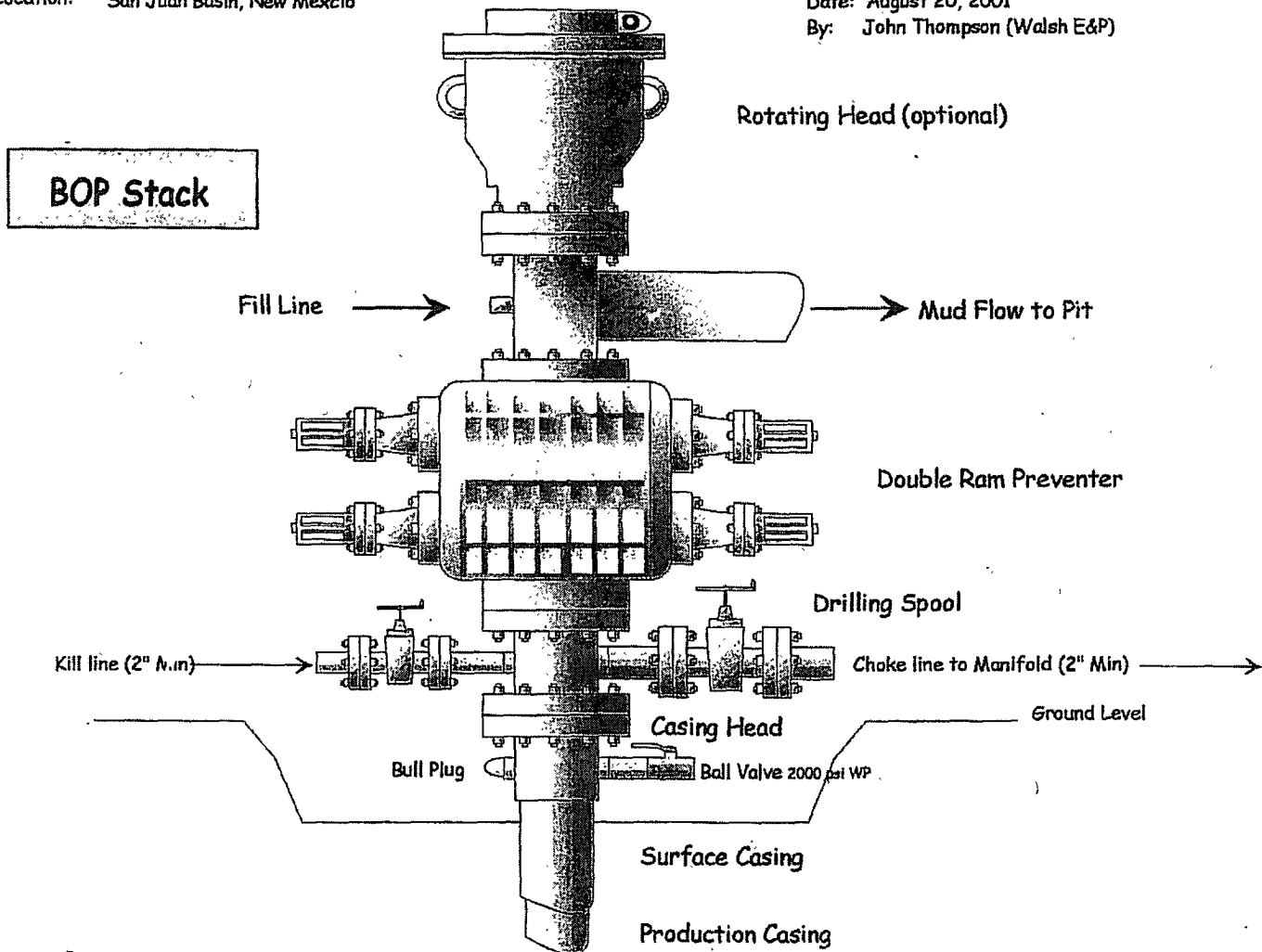
Attachment to Drilling Technical Program

Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)



Walsh Production Company, LLC

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

BOP Stack

Rotating Head (optional)

Fill Line

Mud Flow to Pit

Double Ram Preventer

Drilling Spool

Kill line (2" Min)

Choke line to Manifold (2" Min)

Ground Level

Casing Head

Bull Plug

Ball Valve 2000 psi WP

Surface Casing

Production Casing

Choke & Kill Manifold

Positive Choke

Bypass to Steel Pit (Optional)

2" Minimum Size

Pressure Gauge

From BOP Stack

Straight-thru to Tank or Pit

2" Minimum Size

2" Minimum Size

Working Pressure for all equipment is 2,000 psi or greater

2" Minimum Size

To Tank or Pit

Adjustable Choke