In Lieu of Form 3160

UNITED STATES DEPARTMENT OF INTERIOR

RECEIVED

FORM APPROVED

(June l	(990) BUREAU OF I	LAND MANAGEMENT MAR 24 20	108	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 cuch proposals.			nagement I Office	Lease Designation and Serial No. NMSF-078769	
	TO DRILL" for pern	ermit for such proposals		If Indian, Allottee or Tribe Name	
	✓ SUBMIT IN	TRIPLICATE	7	If Unit or CA, Agreement Designation Rosa Unit	
1.	Type of Well Oil Well Gas Well X Other		. 8.	Well Name and No. Rosa Unit #168C	
2.	Name of Operator WILLIAMS PRODUCTION COMPANY	WILLIAMS PRODUCTION COMPANY			
3	Address and Telephone No PO Box 640 Aztec, NM 87410-0640	10	Field and Pool, or Exploratory Area BLANCO MV/BASIN MC/BASIN DK		
4	Location of Well (Footage, Sec , T., R., M , or 1275' FNL & 280' FEL Sec. 28,	11.	County or Parish, State Rio Arriba, New Mexico		
	CHECK APPROPRIA	TE BOX(s) TO INDICATE NATURE OF NOTICE, RI	EPORT, OR (OTHER DATA	
	TYPE OF SUBMISSION TYPE O			N	
-	Notice of IntentSubsequent ReportFinal 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	directionally drilled, give subsurface locations	Clearly state all pertinent details, and give pertinent dates, and measured and true vertical depths for all markers are. C. hereby requests authority to drill this are and operations plan.	id zones perti	nent to this work.)*	
				RCVD HAR 27'09	
				DIL CONS. DIV.	

CONDITIONS OF APPROVAL Adhere to previously issued stipulations.

	MOLD CITAL FOR N.S.	L ;	Alipools		
14.	I hereby certify that the foregoing is true and correct				,
	Signed Larry Higgins	Title	Drilling C O M.	Date3-24-09	
	(This space for Federal or State office use)				
	Approved by Troy L Salpers	Title	Petroleum	Engineer	Date 3125/04
	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.

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

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102

Revised October 12, 2005

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

APOFESSION

Certificate Number

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

OIL CONSERVATION DIVISION

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

1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

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

3237 87 87 77 87 87 87	, 20.00					INDED HEFURI	
	WELL LOCA	A DNA NOIT	CREAGE DED:	ICATION PL	_AT		
'API Number	*Pool Code 97232 / 72319 / 7	1599 BASI	N MANCOS / E	Pool Name BLANCO MESA		BASIN DAKOTA	
Property Code			Property Name ROSA UNIT				
'0GRID No 120782	WIL		*Operator Name IAMS PRODUCTION COMPANY			Elevation 6793	
		¹⁰ Surface	Location				
UL or lot no Section A 28	Township Range Lot Idn 31N 5W	Feet from the	North/South line NORTH	Feet from the 280	East/West lin	RIO ARRIBA	
	¹¹ Bottom Hole	Location I	f Different	From Surf			
UL or lot no Section	Township Range Lot Idn	Feet from the	North/South line	Feet from the	East/West lin	ne County	
12 Dedicated Acres	.0 Acres - (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No			
NO ALLOWABLE W						CONSOLIDATED	
NO ALLOWABLE WILL BE ASSIGNED TO THOR A NON-STANDARD 15 5286.50		LEA SF-O	LAT: 36.87433 LONG: 107.35960 DATUM : NAD198	I hereby caherein is to knowledge all either owns mineral into proposed botto drill the to a contrain or working agreement or heretofore and contrain the state of the state o	rtify that the rue and complet and belief, and a working interest in the lettom-hole locatis well at this ct with an own interest, or to a compulsory entered by the EYOR CER certify that this plat was poctual surveys to to the best of Survey: and Seal of Proceedings of the control of the best of Survey:	Date Date	

5286.601



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE:

1/19/2009

FIELD:

Basin DK/ BlancoMV

WELL NAME:

Rosa #168C

Rio Arriba, NM

SURFACE:

USFS

BH LOCATION:

NENE Sec 28-31N-5W

MINERALS:

BLM

ELEVATION:

6,793' GR

LEASE #

SF-078769

MEASURED DEPTH:

8,462

I. I. GEOLOGY:

Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	Name	MD	
Ojo Alamo	2,932	Menefee	5,907	
Kirtland	3,082	Point Lookout 6		
Fruitland	3,442	Mancos	6,427	
Pictured Cliffs	3,712	Gallup	7,352	
Lewis	3,957	Greenhorn	8,142	
Cliff House	5,867	Graneros	8,197	
		Dakota	8,332	
		TD	8,462	

- B. MUD LOGGING PROGRAM: Mudlogger on location at 100' above Gallup SS to TD. Mudlogger to pick TD.
- C. LOGGING PROGRAM: HRI from surface casing to TD. SDL\DSN\DSEN over zones of interest.
- **D.** <u>NATURAL GAUGES:</u> 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. <u>BOP TESTING:</u> 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	4,187	7 5/8	26.4	K-55
Longstring	6 3/4	8,462	5 1/2	17	N-80

B. FLOAT EQUIPMENT:

- 1. <u>SURFACE CASING:</u> 10 3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING:</u> 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 + ¼ # 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 725 sx (1,520) 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 = 1,659 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
- 3. <u>PRODUCTION CASING</u>: 10 bbl Gelled Water space. Cement: 205 <u>sx</u> (438 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/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.

Rosa #168C MVDK Ops Plan

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 approximates 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 LitePropTM in slick water.
- 9. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. <u>Production Tubing</u>: 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