Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

SEP I 8 CUU8

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

	CEAU OF LAND MANAGI	AME CUC	NMSF-078764	0
SUNDRY	NOTICES AND REPORT	S ON WELLS armi	ngton Field 6. If Indian, Allot	tee or Tribe Name
	form for proposals to di Use Form 3160-3 (APD)			
SUBM		agreement, Name and/or No		
1. Type of Well	Well Other	8 Well Name and	No	
Oil Well Gas V	ROSA UNIT #85	5C		
2. Name of Operator WILLIAMS PRODUCTION CO., LL		Phone No. <i>(include area c</i>	9 API Well No 30-039-30220	
3a Address P O BOX 640 AZTEC, NM 87410	(505	BLANCO MV/BA		
4 Location of Well (Footage, Sec., T., Surface - 685 FNL & 835 FEL BHL - 2310 FNL & 330 FEL Sec 20,	R.,M., or Survey Description) T31N, R5W		11 Country or Par RIO ARRIBA, N	
12 CHEC	CK THE APPROPRIATE BOX(ES) TO INDICATE NATUR	E OF NOTICE, REPORT OR C	OTHER DATA
TYPE OF SUBMISSION		T	PE OF ACTION	
✓ Notice of Intent	Acidize	Deepen Deepen	Production (Start/Resume	· =
	Alter Casing	Fracture Treat	Reclamation	Well Integrity
✓ Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	Recomplete Temporarily Abandon	Other
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal	
Due to change in plans Williams Proplan.	NOT	FY AZTEC	dual completion. See attach UUD 24 HRS	•
				FAITA SEE 23:198
CONDITIONS OF	APPROVAL			and marked the marked
Adhere to previously issu	ed stipulations.	****	Hold C104 for Directional Survey and "As Drilled" plat	DIST. 3
14. I hereby certify that the foregoing is tr	ue and correct Name (Printed/Typed	0		
Larry Higgins		Title Drilling (COM	
Signature Lawrence	Hug =	Date 09/18/20	800	
	THIS SPACE FOR	FEDERAL OR ST	ATE OFFICE USE	
Approved by			•	
Troy L Salyers	A Complete State of the State o	Title Pe-	toleum Engineer	Date 9-22-2008
Conditions of approval, if any, are attached that the applicant holds legal or equitable ti entitle the applicant to conduct operations t	tle to those rights in the subject lease	which would Office	Fo	
			1 🛩	

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

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

District II 1301 W Grand Avenue, Artesia, NM 88210

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

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

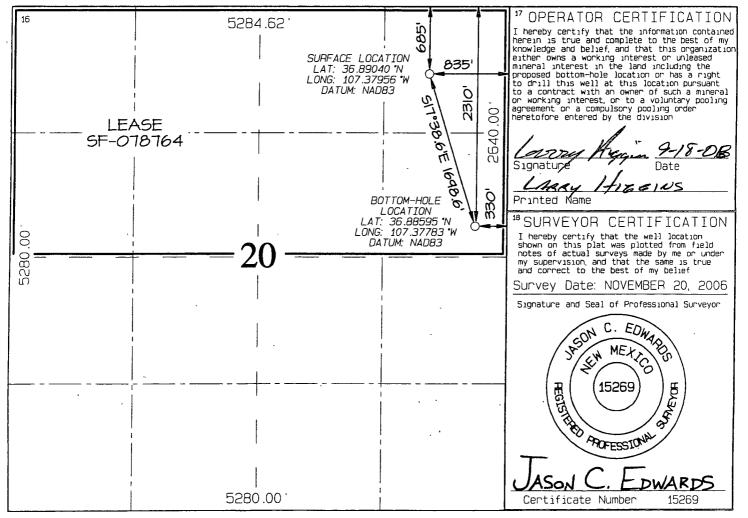
Santa Fe. NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

14	API Numbe	Г	Pool Code Pool Name								
		. 72319 / 71599 BLANCO MESAVERDE / BASIN DAKOTA						AKOTA			
'Property	Code		1		*Proper	ty Name		· · · · · · · · · · · · · · · · · · ·	⁵Well Number		
1703	3				ROSA	UNIT			85C		
'OGRID N	VO			· · · · · · · · · · · · · · · · · · ·	*Operat	or Name	<u> </u>		°Elevation		
12078	12			WILL	IAMS PROD	UCTION COMPAN	1Y		6429 '		
					¹⁰ Surface	Location					
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West lin			
А	20	31N	5W		685	NORTH	835	EAST	RIO ARRIBA		
		¹¹ B	ottom	Hole L	ocation	If Different	From Surf	ace			
UL or lot no	Sect ion	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County RIO		
H	20	31N	5W		2310	NORTH	ARRIBA				
12 Dedicated Acres						¹⁴ Consolidation Code	¹⁵ Order No				
320.0 Acres - (N/2)							NSL-5	699	,		

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





WILLIAMS PRODUCTION COMPANY Drilling Plan

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

DATE: 9/3/2008

FIELD:

Blanco MV/DK/Mancos

WELL NAME:

Rosa Unit #85-C

Rio Arriba, NM

SURFACE:

BLM

S. LOCATION:

NE/4 NE/4 Sec 20-31N-5W

MINERALS:

BLM

ELEVATION:

6,429 ft. GL

LEASE #

NMSF-078764

MEASURED DEPTH:

8,607 ft. (MD)

API#:

30-039-30220

I. GEOLOGY:

Surface formation - San Jose

A. FORMATION TOPS: (KB)

	<u>TVD</u>	<u>MD</u>		TVD	MD
Ojo Alamo	2,583	2,99 1'	Menefee	5,553'	6,062
Kırtland	2,683	3,117'	Point Lookout	5,758'	6,267
Fruitland Fmtn	3,108'	3,601'	Mancos sh	6,068'	6,577
Pictured Cliffs	3,318'	3,821'	Gallup	7,068'	7,577
Lewis Sh	3,618'	4,127'	Greenhorn	7,788'	8,297
Int. Casing	3,793'	4,301'	Graneros	7,843'	8,352'
Cliff House Trans	5,193'	5,701'	Dakota	7,973'	8,482'
Cliff House	5,508'	6,017'	5-1/2" Casing	8,098'	8,607
			Total Depth	8,098	8,607'

- B. LOGGING PROGRAM: Mud Logger on at 100 ft above Gallup Ss to TD M. Logger will pick TD.
- C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

- A. <u>MUD PROGRAM:</u> Use a LSND mud (+/-40 Vis.) to drill 9-7/8 in. Intermediate Hole. Increase vis to +/-60 to run Casing. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer w/ 6-3/4 in. bit to drill-out 7-5/8 in. csg. to TD +/- 7,927 ft.
- 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 surface and Intermediate casing will be pressure tested to 1500 psi for 30 minutes after the BOPE test before drilling out cement. The drum brakes will be inspected and tested each tour. All tests, inspections and SPR's will be recorded in the tour book as to time and results.

III. MATERIALS

A. CASING PROGRAM:

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING	SIZE WT. & GRADE
Surface	14-3/4"	+310'	10-3/4"	40.5 43 2.75 # K-55
Intermediate	9-7/8"	4,301'	7-5/8"	26.4#-K-55
Prod. Casing	6-3/4"	+/-8,607'-Surf.	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 (3) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING: INTERMEDIATE CASING:</u> 7-5/8" cement nose guide shoe with a self-fill float Collar. Place Float Collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints. 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). (Call this in to BLM for approval. If denied, follow what is in the Operations Plan in the Permit package.)
- 3. <u>PRODUCTION CASING:</u> 5-1/2" whirler type cement nose guide shoe with a float collar on top of bottom joint. Place marker joint above 5,600'. Place one turbolizer every third joint thru Dakota and Mesa Verde intervals.). (Call this in to BLM for approval. If denied, follow what is in the Operations Plan in the Permit package.)

C. CEMENTING: Note: Volumes may be adjusted onsite due to actual conditions)

- 1. SURFACE: Slurry: 250sx (345 cu.ft.) of "Type III" + 2% CaCl₂ + ½ # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). NO EXCESS PUMP AS WRITTEN SHOULD CIRCULATE TO SURFACE WOC 12 hours. Test csg to 1500psi.
- 2. INTERMEDIATE: Lead 610sx (1,287 cu.ft.) of Premium Light with 8% gel, 1% CaCl₂, 4% Phenoseal and 1/4# cello-flake/sk (Yield = 2.11 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.). NO EXCESS IN EITHER SLURRY PUMP AS WRITTEN Total volume = 1,426 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. Lead: $85s\underline{x}$ (222ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 3 #/sk CSE. (Yield = 2.61 cu.ft./sk, Weight = 11.6 #/gal.). Tail: $110 \underline{sx}$ (234 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 3 #/sk CSE, ¼ #/sk cello flake and 5 #/sk LCM-1. (Yield = 2.15 ft³/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. NO EXCESS IN EITHER SLURRY PUMP AS WRITTEN. Should cover 100 ft into intermediate casing. Total volume 456ft³. WOC 12 hours.

Sr. Drilling Engineer



ROSA UNIT #85C RIO ARRIBA CO., NEW MEXICO

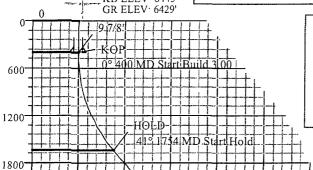
					SECTION I	DETAILS				
Sec	MD	Inc	Azı	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	162.65	0.00	0.00	0.00	0.00	0.00	0.00	
2	400 00	0.00	162.65	400.00	0.00	0.00	0.00	0.00	0 00	
3	1753.77	40.61	162.65	1643.22	-439.12	137.18	3.00	162 65	460.05	
4	2947.99	40 61	162.65	2549.78	-1181.13	368 97	0.00	0.00	1237.42	
5	4301.77	0.00	162.65	3793.00	-1620.25	506.15	3.00	180 00	1697.47	Int. Csg. Pt.
 6	8606.77	0.00	162.65	8098.00	-1620.25	506.15	0.00	162.65	1697.47	

			,	WELL DETAILS			
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#85-C	0.00	0.00	2145354.54	1310104.93	36°53'25.440N	107°22'46.420W	N/A

TARGET DETAILS

Name TVD +N/-S +E/-W Northing Easting Latitude Longitude Shape

Int. Csg. Pt. 3793.00 -1620.25 506.15 2143728.41 1310591.86 36°53'09.420N 107°22'40.190W Point



KB ELEV: 6443

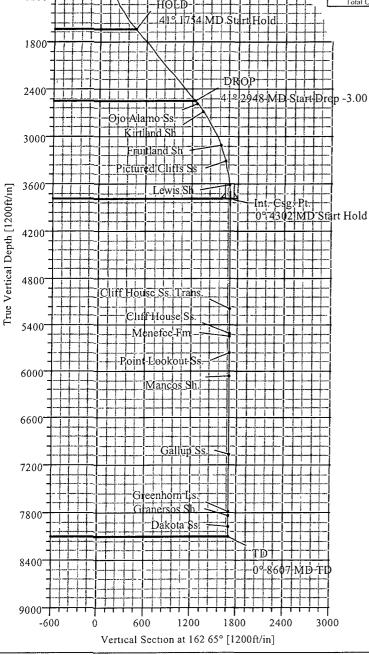
Total Correcti

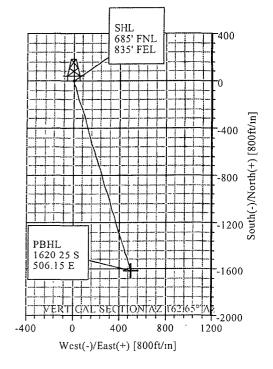
Azimuths to True North Magnetic North 10 16°

> Magnetic Field Stiength 51195nT Dip Angle 63 74° Date 9/2/2008 Model bggm2007

Total Correction to True North 10 162

FORMATION TOP DETAILS								
No.	TVDPath	MDPath	Formation					
1	2583.00	2991.34	O10 Alamo Ss.					
2	2683.00	3117.28	Kirtland Sh					
2	3108.00	3601.16	Fruitland Sh					
4	3318.00	3821.73	Pictured Cliffs Ss.					
4 5	3618.00	4126.52	Lewis Sh					
6	5193.00	5701.77	Cliff House Ss. Trans.					
7	5508.00	6016.77	Cliff House Ss.					
8	5553 00	6061.77	Menefee Fm.					
9	5758.00	6266.77	Point Lookout Ss.					
10	6068.00	6576.77	Mancos Sh.					
11	7068.00	7576.77	Gallup Ss.					
12	7788.00	8296.77						
13	7843.00	8351.77	Granersos Sh					
14	7973.00	8481.77	Dakota Ss.					





Weatherford*

CASING DETAILS							
	No.	TVD	MD	Name	Size		
	1 2	400.00 3793.00	400.00 4301.77	9 7/8" Int. Csg. Pt.	0.000 0.000		

Plan. Plan #1 (#85-C/1)

Created By. Lindsey Maddux

Date: 9/2/2008