SIGNED	essuet TITLE_	SR. ENGINEER	DATE 9/2/92 APPR DATE AS AM	oved ENDED
36 1 11/4	1 .	SR. ENGINEER	DATE9/2/92	
18. I hereby certify that the forsa	going is true and correct			
		OIL CON.	3 X Z Z	
		SEP2 5 19 OIL CON.	92	RECEIVE BLM
		-4	୍ର ଜୁନ ଜୁନ	
1, 12 1101 552 55		• •	•	
proposed work. If well is onent to this work.) *	ED OPERATIONS (Clearly state all pertin directionally drilled, give subsurface lo	extions and measured and true vertic	at depths for all markers and	zones perti-
(Other)	CHANGE PLANS	Completion or Recomp	s of multiple completion on W pletion Report and Log form.)	
SHOOT OF ACIDIZE	ABANDON*	SECOTING OR ACIDIZING	ABANDONMENT®	
TEST WATER SHUT-OFF	PULL OR ALTER CASING MULTIPLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING WELL ALTERING CASING	
	INTENTION TO:		UBNT REPORT OF:	
	6971' GR	No.	RIO ARRIBA   NM	
14. PERMIT NO.	15. ELEVATIONS (Show whether	DF, NT, GR, etc.)	SEC. 10 G, T31N,	STATE
1530' FNL 1790' FEL			11. SEC., T., R., M., OR BLE. AN	
	tion clearly and in accordance with an		10. FIELD AND FOOL, OR WILL UND GALLUP/BASIN	
	T LAKE CITY, UTAH 84158		9. WELL NO. #103	
NAME OF OPERATOR	L COMPANY ( For NORTHWES	T PIPELINE CORP.)	8. FARM OR LEASE NAME ROSA UNIT	
OIL CAS X OTH		/	7. UNIT AGREEMENT NAME ROSA UNIT	
(Do not use this form for t	NOTICES AND REPORTS proposals to drill or to deepen or plug PLICATION FOR PERMIT—" for such	ON WELLS  back to a different reservoir.	6. IF INDIAN, ALLOTTEE OR TE	HE NIME
SUNDRY N	REAU OF LAND MANAGEMEN		SF-078888	
SUNDRY N	RTMENT OF THE INTER			

\*See Instructions on Reverse Side NMOGD AREA MANAGE

## ROSA UNIT #103 GL/DK P&A PROCUDURE

- 1. MOL RU Service Unit. Notify BLM 24 hrs. prior to MOL.
- 2. Hold safety meeting and discuss procedure.
- 3. PU 3-7/8" drill bit on 2-3/8" tubing and TIH. Drill cement retainer at 7549'. TOH.
- 4. PU a 4-1/2" cement retainer and TIH. Set retainer at 8520'. Squeeze the Dakota perforations with 40 sx (47 cu.ft.) of class "B" and spot 16 sx (19 cu.ft.) inside casing (100% excess outside and 50% excess inside casing). Sting out of retainer leave 5 sx on top of retainer. Pull 2 joints.
- 5. Spot 7 BBLS of 9#/gal. mud from 8450' to 7994'. TOH.
- 6. PU a 4-1/2" cement retainer and TIH. Set retainer at 7555'. Squeeze Gallup perforations with 150 sx (177 cu.ft.) of class "B" and spot 49 sx (58 cu.ft.) inside casing (100% excess outside and 50% excess inside casing). Sting out of retainer an leave 5 sx on top of retainer. Pull 2 joints.
- 7. Spot 13 BBLS of 9#/gal. mud from 7487' to 6610'. TOH to 6610'.
- 8. Spot plug #3: 63 sx (74 cu.ft.) from 6610' to 6044' (50% excess to cover from 50' below the Point Lookout to 50' above the Cliff House). TOH to 6044'.
- 9. Spot 29 BBLS of 9#/gal. mud from 6044' to 4152'. TOH to 4152'.
- 10. Spot plug #4: 59 sx (70 cu.ft.) from 4152' to 3618' (50% excess to cover from 50' below the Pictured Cliffs to 50' above the Fruitland). TOH to 3618'.
- 11. Spot 3 BBLS of 9#/gal. mud from 3618' to 3431'. TOH to 3431'.
- 12. Spot plug #5: 24 sx (28 cu.ft.) from 3431' to 3215' (50% excess to cover from 50' below the Ojo Alamo to 50' above the Ojo Alamo). TOH to 3215'.
- 13. Spot 43 BBLS of 9#/gal. mud from 3215' to 458'. TOH.
- 14. Perforate at 458' (50' below surface casing shoe).
- 15. Establish circulation from the bradenhead and pump cement until the surface is circulated (estimate 370 sx).
- 16. Cut-off wellhead and install P&A marker. Release rig.

Mark McCallister

Sr. Engineer, Production & Drilling

file:#103p&a

## WILLIAMS PRODUCTION COMPANY

PLUG & ABANDON

LEASE NAME: Rosa Unit		).: #103		IELD: Und		
LOCATION: SW/4 NE/4, Sec. 10, T31N,R04	W COUNTY:	Rio Arrib	a S		w Mexico	
FORMATION: Gallup/Dakota	TOTAL [	EPTH: 89821	1	TOTAL DAYS	: 4	
				TED COST :		
				TOTAL :		
WELLHEAD EQUIPMENT: Salvage OTHER EQUIPMENT			-8000	-8000 :		
			-0000	-9000 :		
Surface Production Equipment						
TOTAL TANGIBLE COSTS				-17000 :	:	0
DRILLING COSTS						
Service Unit 4 Days	a 200	0 <b>\$</b> /Day			·	
Rig Moving Costs			4000	12000 :		. 0
					<b>:</b> 	
CEMENTING (Cement, Pump Trucks and Dray	yage)		12500		:	
Squeeze Jobs & Plugs			1800		:	
Cement Retainer: 2					:	
SPECIAL SERVICES			. <b></b>			
Perforating			1500		:	-
MATERIALS		-			:	
			2600			
Drilling Mud and Chemicals			1500		:	
Tank Rental			500		:	
Water Bits			600			
Hauling			1800		:	
Tubular Inspection			3000		:	
Miscellaneous: Pipe dope, Stripping	rubbers, e	etc.	500	10500	:	_ 0
ACCESS and LOCATION and CLEANUP			2000		:	-
SUPERVISION, LEGAL etc			1800		:	_ 0
TOTAL INTANGIBLE COST				42100		0
Trad Disease Cook				25100		0
Total Direct Cost Plus 5% Contingency				1255	-	
Total Cost				26355	:	
Total WPC Cost				0	:	0
WORKING INTEREST						
Williams Production Company0	%	ESTIMATED C	COSTS ON	LYEach	participa	iting
Others		Owner to Pa	y Propo	rtionate:	Share of	Actual
		Well Cost S				
00.05.03				's Approv	_	
Date08/05/92	Date		raither	a vhhi ov	u (	
Prepared By Mark McCallister						
Approved By						<del></del>

## DATA SHEET

WELLNAME: Rosa unit #103 GL/DK

FIELD: Und. GL/Basin DK

LOCATION: SW/4 NE/4 Sec. 10, T31N R04W

ELEVATION: 6800'GR KB = 14'

COUNTY: Rio Arriba STATE: New Mexico

TOTAL DEPTH: 8982' PBTD = 8739'

DATE COMPLETED: 10/31/84

CASING RECORD	: CASING SIZE	: WT. & GRADE :	DEPTH SET :	CEMENT	: TOP CEMENT	:
	:	_::	=:	l	_:	_:
Surface	: 13-3/8"_	_:_54.50# J-55_:	1408':	350 sx	_:SURFACE	_:
Production	4-1/2"	: 11.6# N-80 :	89821 :	1940 sx	_:SURFACE	_:

WELLHEAD EQUIPMENT Casinghead: 11" 5000# WKM

Tubinghead: 11" 5000# X 6" 5000#

Spool:

Bonnett: 6" 5000# X 2-3/8"EUE

TUBING EQUIPMENT: None. The tubing was retired when the well was TA'd.

Ojo Alamo	32651	Menefee	61941
Kirtland	33811	Point Lookout	63471
Fruitland	36681	Gallup	74201
Pictured Cliffs	3894 '	Greenhorn	ا 8400
Lewis	4102'	Graneros	84521
Cliff House	60941	Dakota	85541
	Kirtland Fruitland Pictured Cliffs Lewis	Kirtland 3381' Fruitland 3668' Pictured Cliffs 3894' Lewis 4102'	Kirtland 3381' Point Lookout Fruitland 3668' Gallup Pictured Cliffs 3894' Greenhorn Lewis 4102' Graneros

LOGGING RECORD: GR/DIL & CDL/CNL

PERFORATIONS: DK: 8570' to 8605', 8628' to 8668' w/ 4spf. GL: 7605' to 7713', 7832' to 7994' w/ 2spf.

STIMULATION: DK: 179,000# 20/40 in 60# GEL GL: 174,000# 20/40 in 60# GEL

PRODUCTION HISTORY: The well was turned over to WPC from Amoco in June of 1985. The well was incapable of production and not tied in. The first packer test indicated communication and the packer was replaced in October of 1985. The Dakota remained logged and incapable of production. In November of 1985 the new packer failed and was replaced in July of 1986. The Dakota was swabbed for 16 days and the Dakota remained logged. The Gallup was tested making 1070 MCF/D AOF in October of 1986. Currently the Dakota is incapable of production and has not been tied in. In July of 1992 the well was TA'd. A Baker cement retainer was set at 7549'. The casing was pressure tested to 1000#.

ROSA UNIT #103 GL/DK

RIO ARRIBA CO., NM ELEV. = 6971' GR. KB = 13'

CASINGHEAD: 11" 5000# TUBINGHEAD: 11"5000 X 6" 5000# BONNETT: 6" 5000# X 2-3/8" DV TOOL @ 5854' TOPS: 3265' OJO ALAMO: 3381' KIRTLAND: 36681 FRUITLAND: 38941 PICTURED CLIFFS: LEWIS: 41021 |XXXXXX| Baker Cement Retainer @ 7549' 60941 CLIFF HOUSE: 61941 MENEFEE: 3 76051 63471 POINT LOOKOUT: FRAC: 174,000# 20/40 SAND IN 60# GEL 7713' MANCOS: 65601 ispf 74201 GALLUP: 3 7832° GREENHORN: 84001 3 79941 84521 **GRANEROS:** 85541 DAKOTA: MORRISON: 88701 FRAC: 179,000# 20/40 SAND IN 60# GEL ] 8570'- 8605' ] 8628'- 8668' w/ 4spf

CASING STRING	HOLE SIZE	CASING SIZE	CEMENT	CEMENT VOLUME	TOP OF CEMENT
SURFACE PRODUCTION STG 1 PRODUCTION STG 2	17-1/2" 7-7/8"	13-3/8" 4-1/2" DV @ 5477'	350 sx 1100 sx 1720 sx	413 cu.ft. 1195 cu.ft. 2019 cu.ft.	Surface 5477' (DV TOOL) 300'(survey)

PBTD € 8620'

\_ 4-1/2" 11.6# N-80 € 8750'