District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONS
Santa F

Repermitted

Form C-101
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, UGBACK, OR ADD A ZONE

[1] Operator Name an	[2] OGRID Number
WILLIAMS PRODUCTION COMPANY c/o Walsh Engr. & Prod. Corp. 7415 E. Main Farmington, New Mexico 87402	120782
	[3] API Number 30 - 039-25695

[4] Property Code	[5] Property Name	[6] Well No.
~~008480~~ 17033	Rosa Unit	152A

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	32N	6W		1065	South	1475	West	R.A.

[8] Proposed 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

[9] Proposed Pool 1	[10] Proposed Pool 2
Blanco Mesa Verde 72319 W/320	

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	Rotary	S	6359
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	6055	Mesa Verde	N/A	May 1996

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	36# K-55	250	132	Surface
8 3/4	7	20# K-55	3620	410 + 165	Surface
6 1/4	4 1/2	10.5# K-55	3520-6055	240	3520

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Williams Production proposes to drill a vertical well and test the Mesa Verde formation according to the attached drilling plan.

RECEIVED
JUN 16 1997
OIL CON. DIV.
DIST. 3

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Paul C. Thompson
Printed name: Paul C. Thompson
Title: Agent
Date: June 13, 1997
Phone: (505) 327-4892

OIL CONSERVATION DIVISION

Approved by: Ernie Busch 6-17-97
Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3
Approval Date: JUN 17 1997
Expiration Date: JUN 17 1998
Conditions of Approval:
Attached ☐

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-25695	72319	BLANCO MESA VERDE

4 Property Code	5 Property Name	6 Well Number
~~008480~~ 17033	Rosa Unit	152A

7 OGRID No.	8 Operator Name	9 Elevation
120782	Williams Production Co.	6359'

10 Surface Location

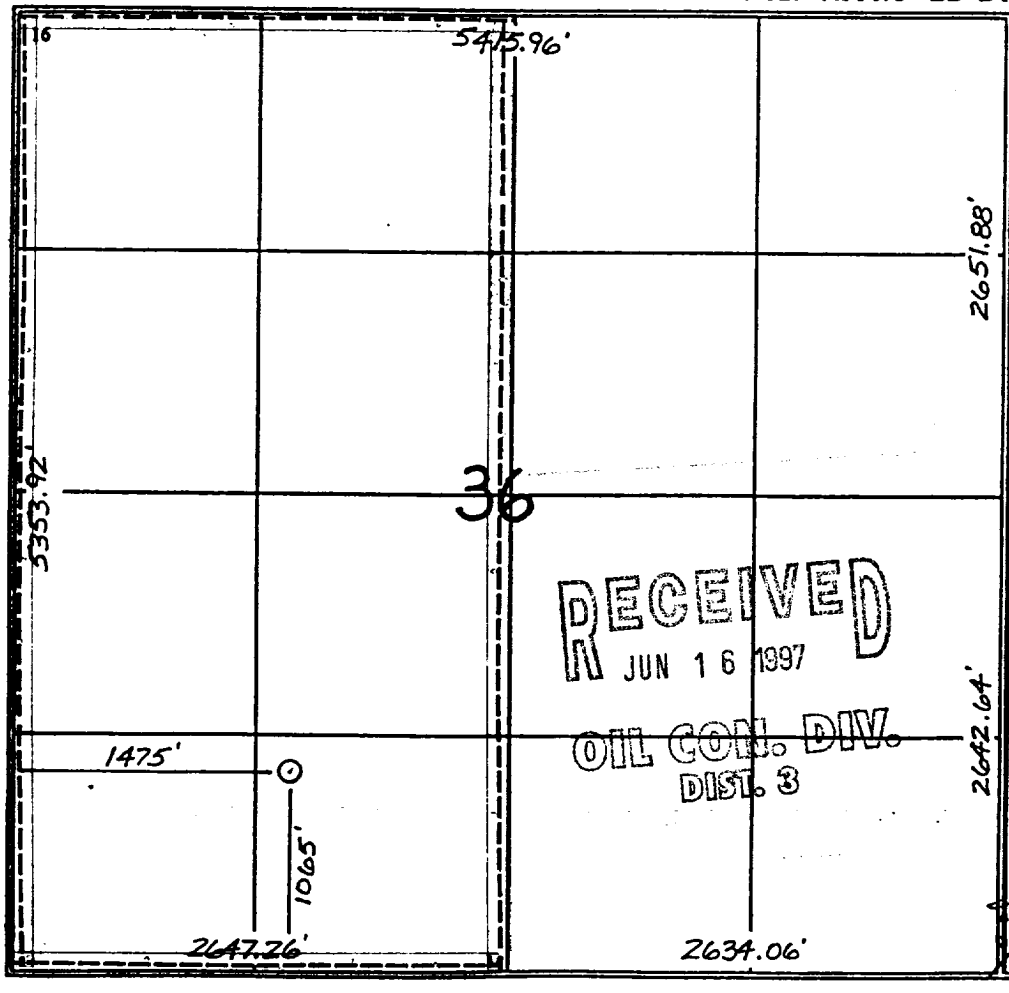
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	32N	6 W		1065	South	1475	West	R.A.

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
W/320	N	U	

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Paul C. Thompson
Signature
Paul C. Thompson, Agent
Printed Name
President
Walsh Engr. & Prod. Corp.
Title
2/20/96
Date

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.

11-14-95
Date of Survey
Signature and Seal of Professional Surveyor:

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED LAND SURVEYOR

6857
Certificate Number

WILLIAMS PRODUCTION COMPANY
OPERATIONS PLAN

DATE:	2/1/96		
WELLNAME:	ROSA UNIT #152A	**FIELD:**	Blanco MV
LOCATION:	SE/4 SW/4 Sec. 36, T32N, R6W San Juan Co., NM	**SURFACE:**	State of NM
ELEVATION:	6359' GR	**MINERALS:**	State of NM
TOTAL DEPTH:	6055'	**LEASE #**	E-347

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS:

Ojo Alamo	2401'	Cliff House	5396'
Kirtland	2516'	Menefee	5441'
Fruitland	2926'	Point Lookout	5656'
Pictured Cliffs	3141'	Mancos	5821'
Lewis	3471'	Total Depth	6055'

B. LOGGING PROGRAM: IND/GR, CDL/SNL. Log the Pictured Cliffs from TD to the Kirtland. Log the Mesa Verde from TD to 500' above the Cliff House.

C. 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" casing point. LSND to log and run pipe.

B. BOP TESTING: While drill pipe is in use, the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. The drum brakes will 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	HOLE SIZE	DEPTH	CASING SIZE	WT. & GRADE
Surface	12-1/4"	250'	9-5/8"	36# K-55
Intermediate	8-3/4"	3620'	7"	20# K-55
Prod. Liner	6-1/4"	3520'-6055'	4-1/2"	10.5# K-55

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.

2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place float one(1) joint above the shoe and five(5) centralizers, spaced every other joint, starting with the float collar. Place turbulent centralizers, at 120' intervals, starting at 2401' to the surface. Total centralizers = 5 regular and 19 turbulent.

3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' joint. Place 20' marker joint above 5396'.

C. CEMENTING:

1. SURFACE: Use 132 sx (157cu.ft.) of class "B" with 3% CaCl2 and 1/4# of cello-flake/sk (Yield = 1.19 cu.ft./sk, Weight = 15.6 #/gal.). Use 100% excess to circulate the surface. WOC 12 hours. Test to 1500#.

2. INTERMEDIATE: Lead - 410 sx (847cu.ft.) of class "B" 65/35 poz with 8%gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 165 sx (192 cu.ft.) of class "B" , 1/4# cello-flake/sk and 2% CaCl2 (Yield = 1.20 cu.ft./sk, Weight = 15.6#/gal.). Use 100% excess in Lead and 75% in tail to circulate to surface. Total volume = 1039 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.

3. PRODUCTION LINER: Use 240 sx (416 cu.ft.) of class "B" with 4% gel, 6-1/4# fine gilsonite/sk and 0.5% CF-14 (Yield = 1.73 cu.ft./sk, Weight = 13.5 #/gal.). Displace cement at a minimum of 10 BPM. Use 60% excess to cover liner top. WOC 12 hours. Run a temperature survey after 8 hours if liner top is not circulated.

IV COMPLETION

A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings.

B. PRESSURE TEST

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Stimulate with approximately 100,000# of 20/40 sand in slick water.
2. Isolate Point Lookout with a RBP.
3. Perforate the Menefee/Cliff House as determined from the open hole logs.
4. Stimulate with approximately 80,000# of 20/40 sand in slick water.
5. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. *Mesa Verde:* 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.

Lance A. Hobbs
Engineer, Production & Drilling

file:#152Aopp

GENERAL ROSA UNIT DRILLING PLAN
Mesa Verde

ROSA UNIT BOUNDARIES: T31N, R04W: All - Except sections 32-36; T31N, R05W: All - Except sections 1 & 2; T31N, R06W: All - Except sections 6,7, 18, 20, 27-36; T32N, R06W: Sections 32-36.

FORMATION CHARACTERISTICS:

FORMATION	LITHOLOGY	WATER	GAS	OIL	OVER PRES.	LOST CIRC.
NACIMIENTO	Interbedded shales, siltstones & sandstones	no	no	no	no	no
OJO ALAMO	Sandstone & conglomerates w/ lenses of shales	fresh	no	no	no	no
KIRTLAND	Shale w/ interbedded sandstones	no	poss.	no	no	no
FRUITLAND	Inter. SS, SltSt, SH & Coals w/ Carb. SS, SltSt, SH	yes	yes	no	poss.	no
PICTURED CLIFFS	Massive Sandstone w/ thin interbedded Shales	poss.	yes	poss.	no	poss.
LEWIS	Shale w/ thin interbedded sandstones & siltstones	no	poss.	no	no	no
CLIFF HOUSE	Transgressive sandstone	poss.	yes	no	no	no
MENEFEE	Sandstones, Carb shales & coal	poss.	yes	no	no	no
POINT LOOKOUT	Regressive coastal barrier sandstone	poss.	yes	poss.	no	yes
MANCOS	Marine shale	no	no	no	no	no

DRILLING

Potential Hazards

1. There are no overpressured zones expected in this well.

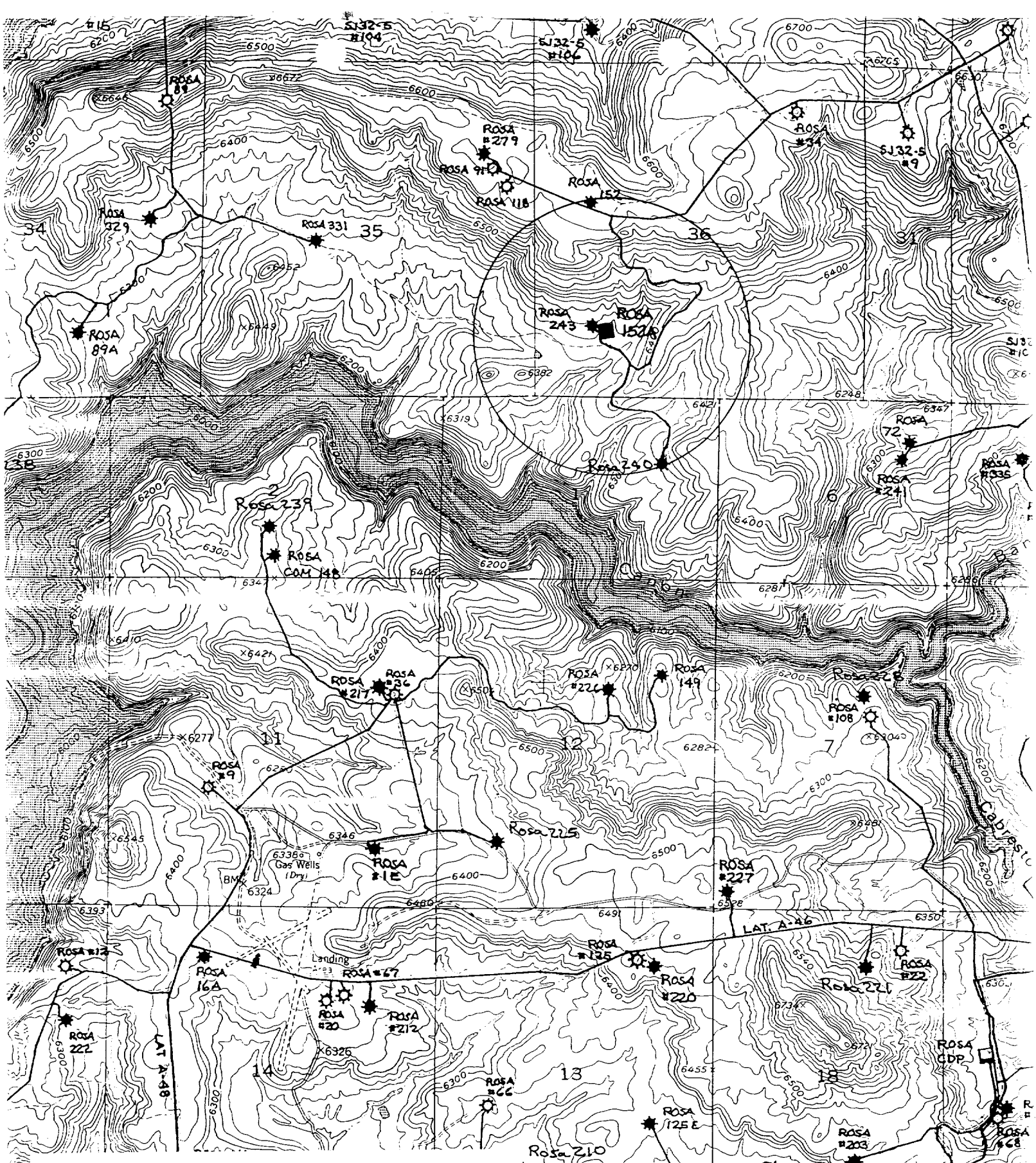
2. No H2S zones will be penetrated while drilling this well.

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 #/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 #/gal range as needed to control the well. Viscocities 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 natural gas from the intermediate casing point to TD.



WILLIAMS PRODUCTION COMPANY
Rosa Unit #152A
1065'FSL & 1475'FWL
Section 36, T32N, R6W
Rio Arriba County, New Mexico

N C E
SURVEYS, INC.
P.O. BOX 6612
FARMINGTON, NEW MEXICO 87402
(505) 325-2654

NAME: WILLIAMS PRODUCTION CO. ROSA UNIT #152A
FOOTAGE: 1065' FSL 1475' FWL
SECTION: 36 T 32 N, R 6 W, NMPM
COUNTY: RIO ARRIBA STATE: NEW MEXICO
ELEVATION: 6359' DATE: 11/14/95