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ROSA UNIT COM #238A
BASIN FRUITLAND COAL

Surface Location:

2325' FSL and 1765' FEL
NW/4 SE/4 Sec 3(J), T31N, R06W
Rio Arriba, NM

Bottom Hole Location:

2313' FSL and 2284' FWL
NE/4 SW/4 Sec 3(K), T31N, R06W
Rio Arriba, NM

Elevation: 6354' GR
API # 30-039-29967

Spud: 06/06/07

Completed: 08/09/07

1st Delivered: 09/13/07

Pump Install: 08/09/07

<u>Top</u>	<u>MD</u> <u>Depth</u>
Ojo Alamo	2654'
Kirtland	2781'
Fruitland	3245'
Base of Coal	3470'
Pictured Cliffs	3475'

Lukin C114DA-54-16A

7 jts 9-5/8", 36#, J-55, ST&C @ 345'.

79 jts 7", 23#, K-55, LT&C @ 3356'.

TIW H Latch Lnr Hgr @ 3304'

107 jts, 2-3/8", 4.7#, J-55, EUE, 8rd tbg @ 3522' as follows:
26' mud anchor, 1.78" F - nipple @ 3495', 106 jts, 2 - 10' pup
jts, 1 jt tbg (220' x 1/4" chem. cap string banded to outside tbg).

0.54", 4 SPF
300 holes total

Rod String: 10 - 1 1/4" sinker bars, 129 - 3/4" guided rods, 2' pony rod,
1 1/4" x 16' polished rod w/ 1 1/2" x 8' polished rod liner.

Insert Pump: 2' x 1/4" x 12' RHAC (Energy Pump) w/1" x 6' Gas
Anchor.

6 jts, 5 1/2", 17#, N-80 @
3304' - 3551'

Open hole from 6-1/4" to 9-1/2"
from 3356' to 3572'

TD @ 3572' MD

Hole Size	Casing	Cement	Volume	Top of Cmt
12-1/4"	9-5/8", 36#	250 sx	353 cu. ft.	Surface
8-3/4"	7", 23#	550 sx	1125 cu. ft.	Surface
6-1/4"	5-1/2", 17#	DID NOT CMT		