

District I
1625 N. French Dr., Hobbs, N.M. 88240
District II
1301 W. Grand Ave., Artesia, N.M. 88210
District III
1000 Rio Brazos Rd., Aztec, N.M. 87410
District IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE - ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Melrose Operating Co. c/o P.O. Box 953 Midland, TX 79702		² OGRID Number 184860
⁴ Property Code 26081		³ API Number 30-0 15 - 33635
⁵ Property Name Artesia Unit		⁶ Well No. 87

RECEIVED
SEP 10 2004

OOD-ARTESIA

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
C	35	17S	28E		990'	North	2518'	West	Eddy

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 Artesia, Queen-Grayburg-San Andres (03230)	¹⁰ Proposed Pool 2
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¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3684'
¹⁶ Multiple no	¹⁷ Proposed Depth 3500'	¹⁸ Formation San Andres	¹⁹ Contractor United Drilg.	²⁰ Spud Date 10/5/04

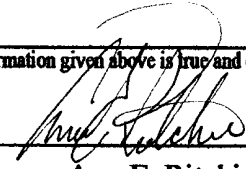
21. Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	390' 400'	275 sx	surface
7 7/8"	4 1/2" / 5 1/2"	9.5/17#	3500'	600 sx	surface

22. Describe the proposed program. If this 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.

Propose to drill 12 1/4" hole to 390', set 8 5/8" casing to 400', cement w/275 sx Cl C circulating to surface. Drill 7 7/8" hole to 3500', run open hole logs, set production string casing to TD, cementing w/600 sx Cl C, circulating to surface. Will perforate and stimulate and test.

(Initial Permit expired - this is a re-file)

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Ann E. Ritchie		Approved by: TIM W. GUM	
Title: Regulatory Agent		Title: DISTRICT II SUPERVISOR	
Date: 9-2-04		Approval Date: SEP 22 2004 Expiration Date: SEP 22 2005	
Phone: 432 684-6381		Conditions of Approval: Attached: <input type="checkbox"/>	

DISTRICT II
P.O. BOX 2088, ARTESIA, NM 88211-0719

DISTRICT III
30 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

re-filing

API Number	Pool Code 03230	Pool Name Artesia, Queen-Grayburg-San Andres
Property Code	Property Name ARTESIA UNIT	Well Number 87
OGRID No. 184860	Operator Name MELROSE OPERATING CO.	Elevation 3684

Surface Location

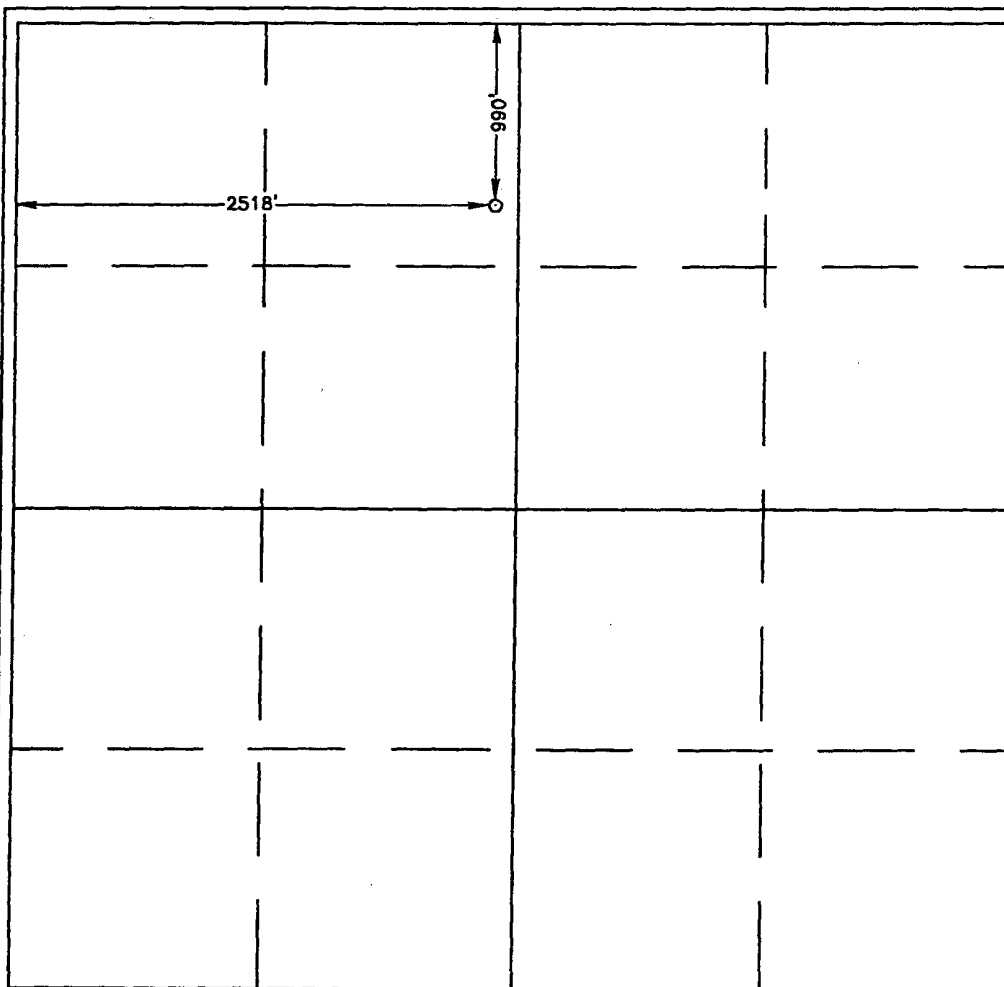
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	35	17 S	28 E		990	NORTH	2518	WEST	EDDY

Bottom Hole Location If Different From Surface

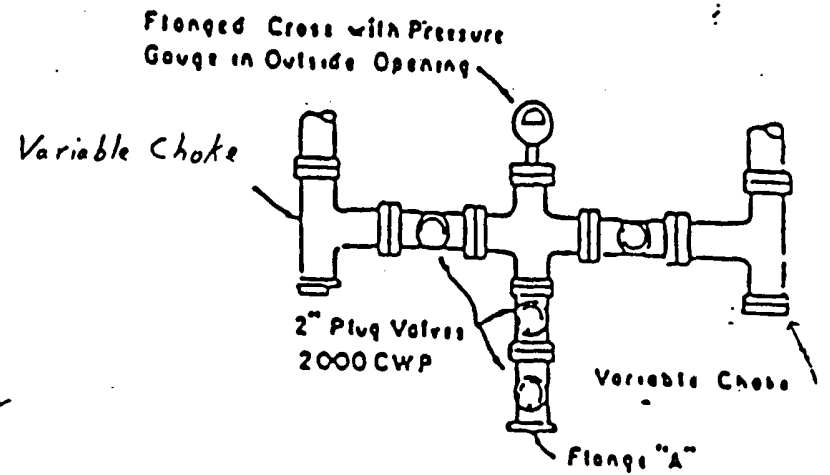
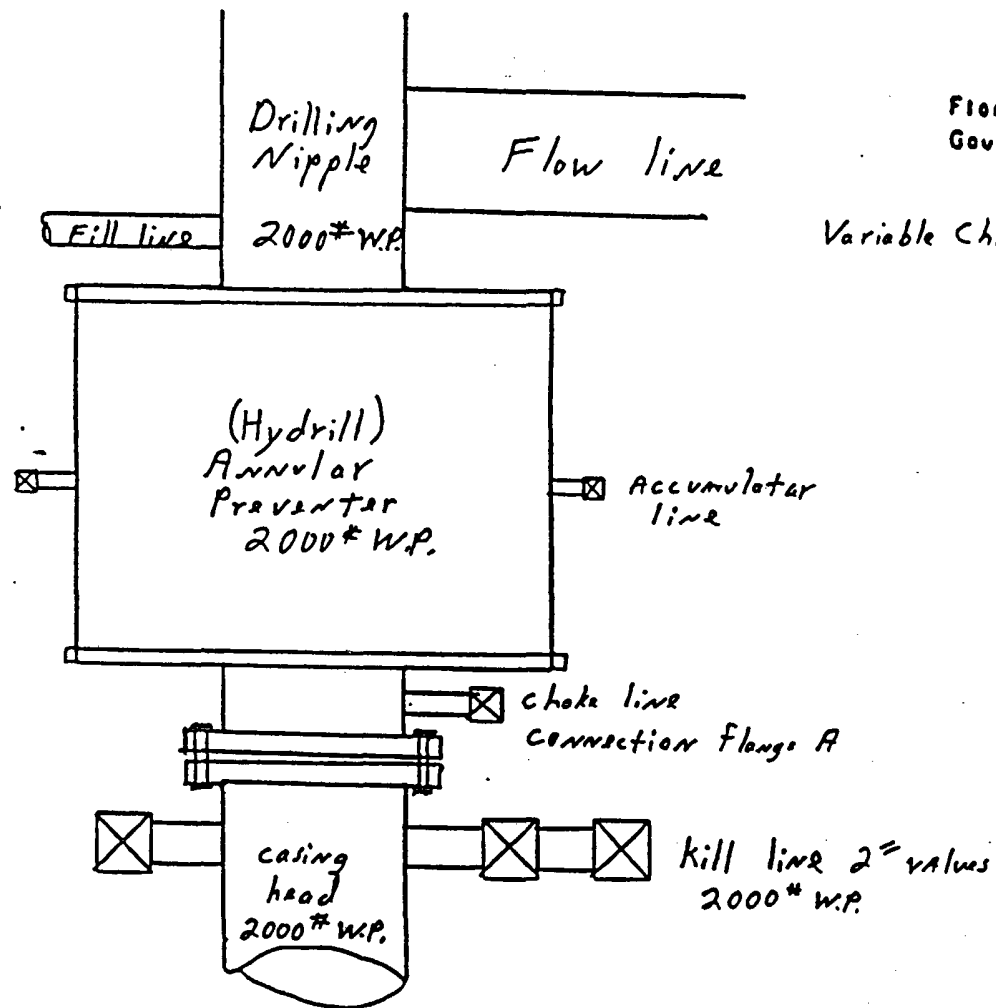
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill X	Consolidation Code	Order No.
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**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**



<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature Ann E. Ritchie 9-2-04 Printed Name Regulatory Agent Title 11-28-00 915 684-6381 Date</p>
<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>NOVEMBER 09, 2000</p> <p>Date Surveyed LMP Signature & Seal of Professional Surveyor <i>[Signature]</i> 11/15/00 00-11-1422</p> <p>Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641</p>



PLAN VIEW-CHOKE MANIFOLD

District I
462-; N. French Dr., I I obbs. NM SN240
District II
130 I W. Grand Avenue, Artesia, NMI 1210
District III
1000 Rio Brazos Road, Aztec, NMVI S7410
District IV
1220 S. St. Francis Dr., Santa Fe, NMX4 8710-

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: <u>Melrose Operating Company</u> Telephone: <u>432 846381</u> e-mail address: <u>ann.ritchie@wtor.net</u>		
Address: <u>c/o P.O. Box 953, Midland, TX 79702</u>		
Facility or well name: <u>Artesia Unit, Well #87</u> API 4: <u>pending</u> U/L or Qtr/Qtr <u>C</u> Sec <u>35</u> T <u>17</u> R <u></u>		
County: <u>Eddy</u>	Latitude	Longitude
NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian		
Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>20</u> mm Clay <input type="checkbox"/> Pit Volume <u>6000</u> bbl		
Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____		
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <u>275'</u>	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) 0
Ranking Score (Total Points)		0 Points

If this is a off closure, (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite: ☐ offsite ☒ If offsite, name of facility _____ (3) Attach a general description of remedial action taken including, remediation start date and end date (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ FL and attach sample results. (.)

Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X a general permit, or an (attached) alternative OCD-approved plan

Date: 9-2-04

Printed Name title Ann E. Ritchie, Regulatory Agent

Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

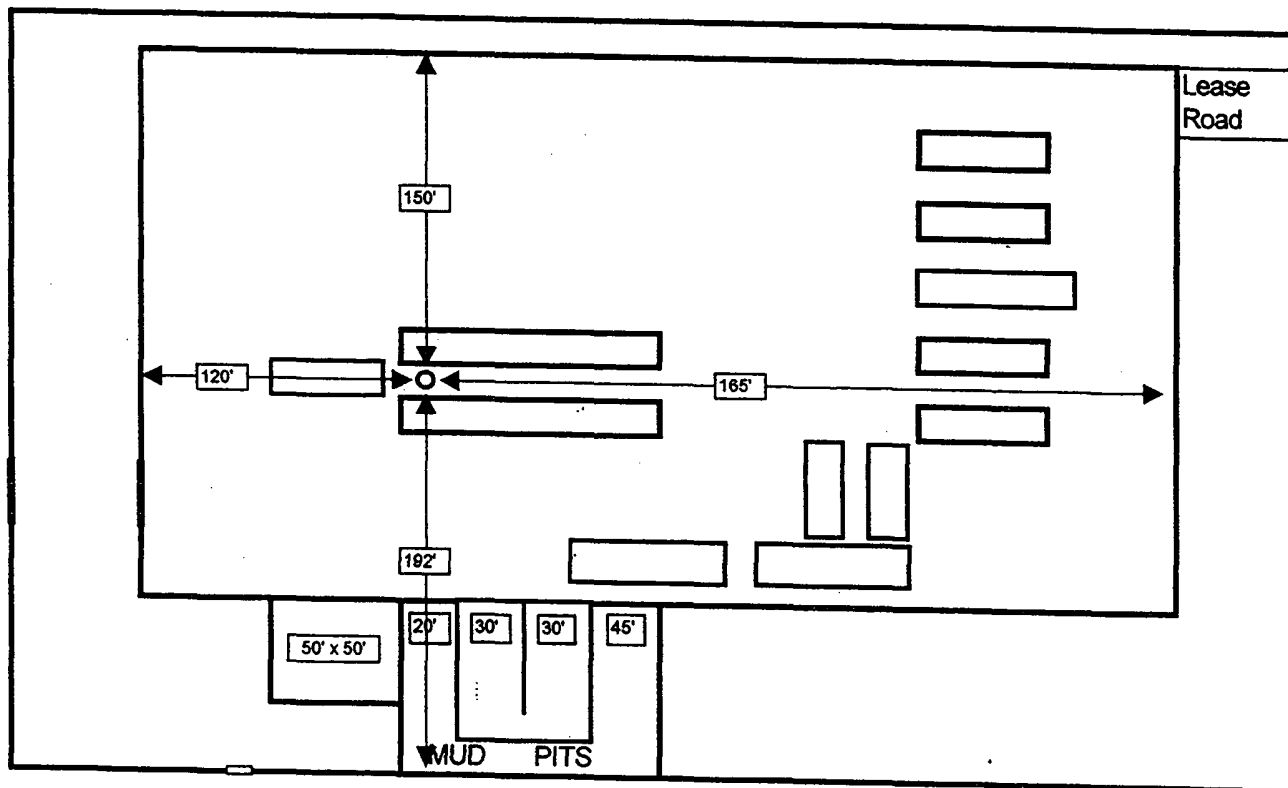
Printed Name/Title

Signature

Date:

SEP 13 2004

Melrose Operating Company
Drilling Rig Pad Schematic
Artesia Unit, Well # 87
Eddy County, New Mexico
Wellbore is 40' North of the pit



September 15, 2004

Bryan Armant
Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

RECEIVED
SEP 17 2004
OCC-ARTESIA

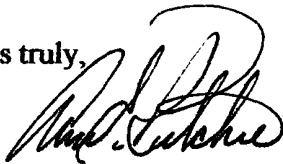
RE: Melrose Operating Company, Artesia, Queen-Grayburg-San Andres Pool, Artesia Unit, Township 17S, Range 28E, Eddy County, New Mexico

Concerning the above referenced Artesia Unit, operated by Melrose Operating Company, please see attached a copy of the Duke Energy Field Services gas statement. Please note on the "Analysis" that the H₂S Mol% concentration is 0.4970. This letter and statement are being submitted to comply with the NMAC Rule 118 concerning drilling operations.

As per the Oil Conservation Division, Rule 118, the gas produced from the Artesia Unit is less than 100 ppm. According to the field supervisor and as per the gas statement, this unit/pool is not in a gas producing area where there is a "substantial probability of encountering H₂S in concentrations of 100 ppm or more" (Rule 118). There are no public dwelling located on the Unit or within 1/4 mile of the Artesia Unit to the best of my knowledge.

Please let us know if you need any further information concerning the gas production from the Artesia Unit, or any information concerning the drilling program for this unit.

Yours truly,



Ann E. Ritchie, Regulatory Agent
Melrose Operating Company
c/o P.O. Box 953
Midland, TX 79702
(432) 684-6381
(432) 682-1458-fax
ann.ritchie@wtor.net

attachment – gas analysis



A New Kind of Energy

Production Date: July 2004
Statement Date: August 19, 2004

PERCENT OF PROCEEDS STATEMENT
(Fixed Recovery)

Recipient: 1254991
MELROSE OP CO

8/19/2004
8:19:24AM

Lease Information							
Settle ID	Payment ID	Lease Name	Facility Name	State	Contract ID	Operator Name/ID	Pressure Base
700317	068370031700	ARTESIA LN BATT #1 (1)	NM SOUR SUPERSYSTEM	NM	ART064001R	MELROSE OP CO 1254991	14650
Settlement Summary							
System		LOW	Component Value	Residue Value	Fees & Adjustments	Gross Value	Net Value
Rate per MCF:		6.43432					
Rate per MMBTU:		4.36463	\$ 3,202.16	\$ 1,532.40	\$ 121.15	\$ 4,613.41	\$ 4,613.41

Wellhead Information			Component Settlement								
	MCF	MMBTU		Theoretical Gallons	Fixed Recoveries	Allocated Gallons	Shrink MMBTU	Contract %	Settlement Gallons	Price	Component Value
Gross WH:	717.00	1,057.00									
Allocation Decimal:		1.000000									
Paystation:	717.00	1,057.00	H2S				2.18				
			ETHANE	2,413.38	0.8900	1,930.71	128.14	75.00	1,448.03	0.4359153	\$631.22
			PROPANE	1,734.09	0.9000	1,560.68	142.96	75.00	1,170.51	0.6844570	\$801.16
Raw Field Deducts	-50.19	-73.99	ISO-BUTANE	134.39	0.9700	324.36	32.32	75.00	243.27	0.8311534	\$202.20
Net Delivered:	666.81	983.01	NORMAL BUTANE	\$58.96	0.9700	831.19	86.42	75.00	624.89	0.8053796	\$503.27
			PENTANES PLUS	1,509.39	0.9900	1,494.30	170.94	75.00	1,120.72	0.9496653	\$1,064.31
Wellhead BTU (14.650W):		1.4742									
Gas Factor:	0.9798										
Z Factor:	0.9935			6,850.21		6,143.24	562.96		4,607.42		\$3,202.16

Residue Settlement											
Net Delivered MMBTU	Shrink	Fuel/Flare	Theoretical Residue	Allocated Residue		Net Residue MCF	Net Residue MMBTU	Settlement %	Settlement Residue	Price	Residue Value
979.97	562.96	63.23	333.78	333.78	0.00	356.56	353.78	75.00	265.34	5.7753000	\$ 1,532.40

Fees / Adjustments			Analysis			Contacts		
	Fee Rate	Value	Components	Mol %	GPM	Primary:		
H2S TREATING	0.1442	\$103.41	Helium	0.0000		LILLIE G HEREDIA		
NEW MEXICO GAS PROC	0.0186	\$17.74	Nitrogen	5.3250		(432) 620-4072		
			Carbon Dioxide	4.2140				
			H2S	0.4970		Measurement:	ANITA STOKER	Contracts: BOB BROWN
			Other Inerts	0.0000		(303) 605-1999		(432) 620-4209
			Methane	54.9930				
			Ethane	13.8070	3.6700	Taxes:	ROGER RADEBAUGH	
			Propane	9.6300	2.6370	(918) 523-1169		
			Iso Butane	1.5630	0.5085			
			Nor Butane	4.1660	1.3062			
			Iso Pentane	1.5920	0.5794			
			Nor Pentane	1.5200	0.5475			
			Hexanes Plus	2.6930	1.1684			
			Totals	100.0010	10.4170			
Plant Product Volumes								
Plant BTU	0.9954							