

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

<sup>1</sup> Operator Name and Address <b>Melrose Operating Co.</b> <b>c/o P.O. Box 953</b> <b>Midland, TX 79702</b>		<sup>2</sup> OGRID Number <b>184860</b>
<sup>4</sup> Property Code <b>26081</b>		<sup>5</sup> Property Name <b>Artesia Unit</b>
<sup>3</sup> API Number <b>30-0 15 - 33634</b>		<sup>6</sup> Well No. <b>86</b>

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
B	35	17S	28E		990'	North	1650'	East	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

11. Work Type Code <b>N</b>	12. Well Type Code <b>O</b>	13. Cable/Rotary <b>R</b>	14. Lease Type Code <b>S</b>	15. Ground Level Elevation <b>3659'</b>
16. Multiple <b>no</b>	17. Proposed Depth <b>3500'</b>	18. Formation <b>San Andres</b>	19. Contractor <b>United Drig.</b>	20. Spud Date <b>10/9/04</b>

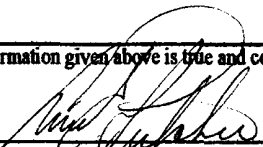
21. Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	<del>300'</del> <b>400'</b>	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 ~~300'~~ **400'**, set 8 5/8" casing to ~~300'~~ **400'**, cement w/275 sx CI 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 CI 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: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Ann E. Ritchie</b>		Approved by: <b>TIM W. GUM</b>	
Title: <b>Regulatory Agent</b>		<b>DISTRICT II SUPERVISOR</b>	
Date: <b>9-2-04</b>		Approval Date: <b>SEP 2 2 2004</b> Expiration Date: <b>SEP 2 2 2005</b>	
Phone: <b>432 684-6381</b>		Conditions of Approval: Attached: <input type="checkbox"/>	

II  
RD, Artesia, NM 88211-0719

DISTRICT III  
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**

API Number	Pool Code 03230	Pool Name Artesia, Queen-Grayburg-San Andres
Property Code	Property Name <b>ARTESIA UNIT</b>	Well Number 86
OGRID No. 184860	Operator Name <b>MELROSE OPERATING CO.</b>	Elevation 3679

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	35	17 S	28 E		990	NORTH	1650	EAST	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**

	<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Ann E. Ritchie Printed Name Regulatory Agent Title 11-28-00 915 684-6381 Date	
	<b>SURVEYOR CERTIFICATION</b> 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. NOVEMBER 09, 2000 Date Surveyed LMP Signature & Seal of Professional Surveyor  600-11-1421 Certificate No. RONALD J. KIDSON 3239 GARY KIDSON 12641	

District I

162-; N. French Dr. I I obbs. NM SN240

District II

130 I W. Grand Ax coue. Arte,ia. NNI I;N2 I 0

District III

1000 Rio Brazos Road. Aztec, N'V1 S7410

District IV

1220 S. St. Francis Dr., Santa Fe. NX4 87iO~.

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144

June 1, 2004

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

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 #86</u>	API 4- <u>pending</u>	U/L or Qtr/Qtr <u>B</u> See <u>35</u> T <u>175</u> R <u>28E</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				
<table border="1"> <tr> <td> <b>Pit</b>  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 </td> <td> <b>Below-grade tank</b>  Volume: _____ bbl Type of fluid: _____  Construction material: _____  Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____ </td> </tr> </table>			<b>Pit</b> 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	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____
<b>Pit</b> 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	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____			
<b>Depth to ground</b> 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		
<b>Wellhead protection area:</b> (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		
<b>Distance to surface water:</b> (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		
<b>Ranking Score (Total Points)</b>		<b>0 Points</b>		

If this is a oil 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:

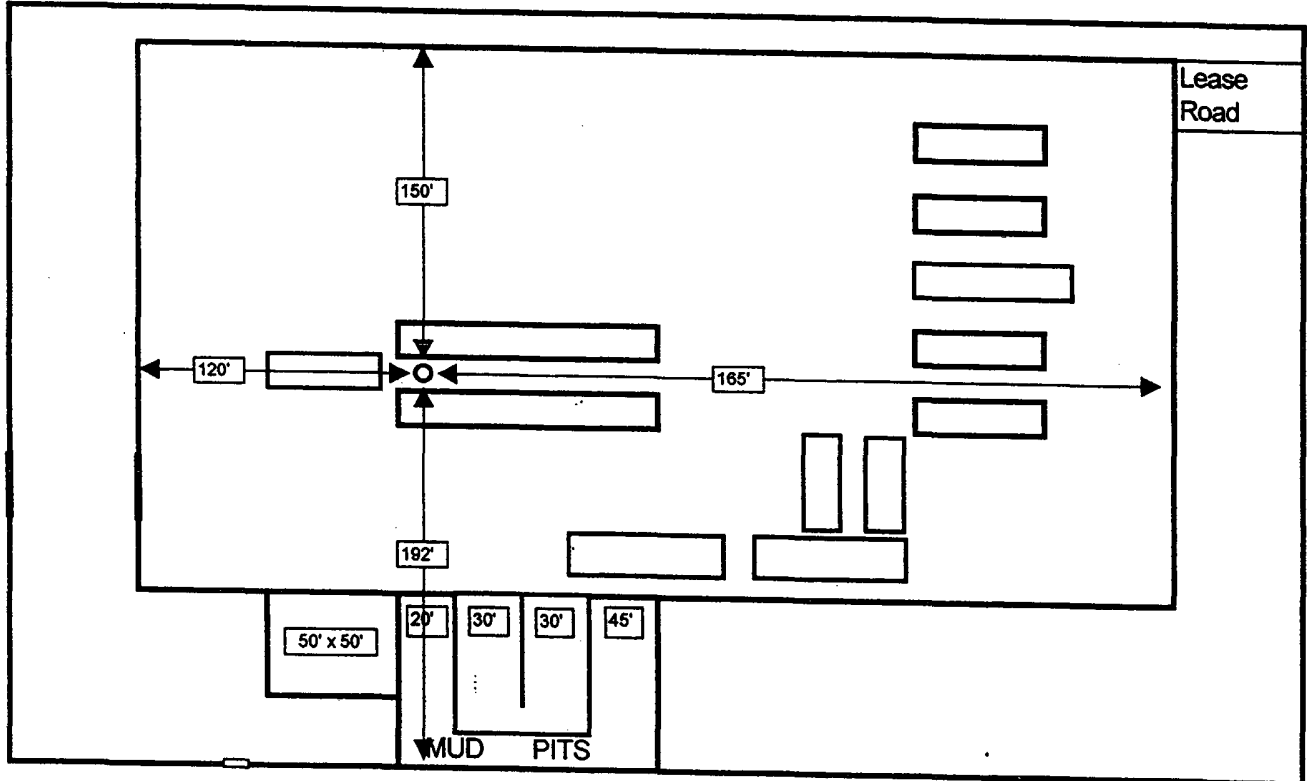
Printed Name/Title

Signature

SEP 13 2004

Melrose Operating Company  
Drilling Rig Pad Schematic

*Artesia - Unit, well #86*  
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  
OCD-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 H<sub>2</sub>S 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 H<sub>2</sub>S 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](mailto: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	14.650
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 Well:	717.00	1,057.00									
Allocation Decimal:		1.0000000									
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	334.39	0.9700	324.36	32.32	75.00	243.27	0.8311534	\$202.20
Net Delivered:	666.81	983.01	NORMAL BUTANE	858.96	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	353.78	0.00	356.56	353.78	75.00	265.34	\$ 775.3000	\$ 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
			Other Inerts	0.0000		(303) 605-1999	Contracts: BOB BROWN
			Methane	54.9930			(432) 620-4209
			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						