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December 16, 2003

HAND DELIVERED

Ms. Lori Wrotenbery, Director
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Application of Melrose Operating Company to re-instate and amend Division Order R-11720 for the Artesia Unit Waterflood Project, Eddy County, New Mexico

Case 13199

Dear Ms. Wrotenbery:

On behalf of Melrose Operating Company, please find enclosed our referenced application which we request be set for hearing on the Examiner's docket now scheduled for January 8, 2004. Also enclosed is our proposed advertisement of this case for the NMOCD docket.

Very truly yours,

W. Thomas Kellahin

cc: Melrose Operating Company
Attn: Ann Ritchie

CASE 13199: Application of Melrose Operating Company to re-instate and amend Division Order R-11720 for its Artesia Unit Waterflood Project, Eddy County, New Mexico. Applicant seeks to re-instate Division Order R-11720, issued in case 12709, and to amend this order including altering the injection pattern, approving an additional injection well, Artesia Unit Well No. 21 located to Unit J of Section 35 and a replacement injection well, Artesia Unit Well No. 53 located in Unit J of Section 3, altering the injection interval for the Unit to temporarily delete the Penrose interval, increased the surface injection pressure to not less than to not less 1263 psi, and for the application of a "radius of endangerment calculation" for this Unit as utilized in Division Order R-11328-A, dated May 21, 2001. This Unit is located all or part of Sections 2 and 3, Township 18 South, Range 28 East, and Sections 25, 26, 34, 35, 36, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico. The injection will be into the Artesia Queen-Grayburg-San Andres Pool through the gross interval approximately 1,897 feet to 2,750 feet within the subject injection wells. This unit is located approximately 13miles southeast from Artesia, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF MELROSE OPERATING COMPANY TO RE-INSTATE AND AMEND DIVISION ORDER R-11720 FOR ITS ARTESIA UNIT WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

CASE NO. 13199

APPLICATION

MELROSE OPERATING COMPANY ("Melrose") by its attorneys, Kellahin & Kellahin, applies to the New Mexico Oil Conversation Division to re-instate Division Order R-11720, issued in case 12709, and to amend this order including altering the injection pattern, approving an additional injections well, Artesia Unit Well No. 21 located to Unit J of Section 35 and a replacement injection well, Artesia Unit Well No. 53 located in Unit J of Section 3, altering the injection interval for the Unit to temporarily delete the Penrose interval, increasing the surface injection pressure to not less than 1263 psi and for the application of a "radius of endangerment calculation" for this Unit as utilized in Division Order R-11328-A, dated May 21, 2001. This Unit is located all or part of Sections 2 and 3, Township 18 South, Range 28 East, and Sections 25, 26, 34, 35, 36, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico. The injection will be into the Artesia Queen-Grayburg-San Andres Pool through the gross interval approximately 1,897 feet to 2,750 feet within the subject injection wells.

In support of its application Melrose states:

1. Melrose is the current operator of the Artesia Unit Waterflood Project.

2. While the Artesia Unit Waterflood Project covers a larger area, Melrose's plan involves a pilot test of 4 areas within this unit:

   a. Area #1: SW/4 of Section 35, T17S, R28E
      Injecting wells involved: Nos. 21, 22, 23, 28 & 29

   b. Area #2: NW/4 of Section 35, T17S, R28E
      Injection wells involved: Nos. 10, 11, 12 & 13

   c. Area #3: S/2NW/4 and N/2SW/4 of Section 3, T18S, R28E
      Injection wells involved: Nos. 46, 53, 54 & 65
      (Well 65 is already an approved injection well)

   d. Area #4: S/2NW/4 and N/2SW.4 of Section 36, T18S, R28E
      Injection wells involved: Nos. 16, 17, 18 & 19

3. On February 5, 2002, the Division entered Order R-11720 approving Melrose's application in Case 12709 for the expansion of the Artesia Unit Waterflood Project and approval of additional injection wells. **See copy of order, attached hereto as Melrose Exhibit "A".**

4. Order R-11720 provided, among other things, that if injection for an approved injection well did not commence within one year after the effective date of this order, then injection approval for that well would terminate. See Ordering Paragraph (16)

5. As of February 5, 2003, Melrose had commenced injecting water into the following wells:
   (a) Artesia Unit Well No. 23
   (b) Artesia Unit Well No. 29
   (c) Artesia Unit Well No. 10
   (d) Artesia Unit Well No. 44

6. As of February 5, 2003, Melrose had failed to commence injection in the following wells: Artesia Unit Wells No. 2, 3, 11, 12, 13, 16, 17, 18, 19, 46, 54, and 57.

7. As of February 5, 2003, Order R-11720 injection approval expired for the injection wells listed in Paragraph (6) above.

8. As of February 5, 2003, the status of Melrose's remedial action for the 4 pilot areas is set forth. **See Melrose Exhibit "B" attached.**

9. Prior to the expiration of Order R-11720, Melrose completed some of the remedial action required by this order, including:

    a. Ran cement bond logs on Wells No. 10, 11, 12, 13,14, 15, 28 and 29
    b. Re-plugged Empire Abo Unit Well No. G-37, located in Unit L of Section 35.

10. In addition to re-instating Order R-11720 as to the injection wells listed in paragraph 6 above, Melrose seeks approval of the following amendment to this order:

    a. Altering the injection pattern for Area 3 by substituting the Artesia Unit Well No. 53 as injection well for Artesia Unit Wells No. 44 and 57 which will be production wells;

    b. Applying the "radius of endangerment calculation" (Division Order R-11328-A) to the ½ mile area of review and amend Exhibits "C", "D" and "E" of Order R-11720 accordingly;

    c. Amending the approved injection interval for the Unit by temporarily deleting the Penrose interval;

    d. Expanding Area 1 to include an additional injection well, Artesia Unit Well No. 21, Unit J of Section 35;

    e. Increase wellhead injection pressure for the following wells:

        Artesia Unit Well No 7: 1350#
        Artesia Unit Well No. 23: 1050#
        Artesia Unit Well No. 26: 1480#
        Artesia Unit Well No. 59: 1170#

f. Increasing wellhead (surface) injection pressure Unit wide to 1050# unless higher pressure can be warranted by step rate testing.

11. There are new wells within the ½ mile area of review that were not included in previous C-108 filings. **See Melrose Exhibit "C" attached**

12. The Empire Abo Unit Well G-37 located in Unit L of Section 35 was plugged.

13. In accordance with the Division's notice requirements, a copy of this application has been sent to the parties as listed on Exhibit "D" notifying each of this case and of the applicant's request for a hearing of this matter before the Division on the next available Examiner's docket now scheduled for January 8, 2004.

WHEREFORE, Melrose, as applicant, requests that this application be set for hearing on January 8, 2004 before the Division's duly appointed examiner, and that after notice and hearing as required by law, the Division enter its order approving this application and for such other and further relief as may be proper.

RESPECTFULLY SUBMITTED:

W. THOMAS KELLAHIN
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Fax: (505) 982-2047

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12709
ORDER NO. R-11720

APPLICATION OF MELROSE OPERATING COMPANY TO EXPAND ITS ARTESIA UNIT WATERFLOOD PROJECT AND AMEND DIVISION ADMINISTRATIVE ORDER WFX-768, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 6 and 20, 2001, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

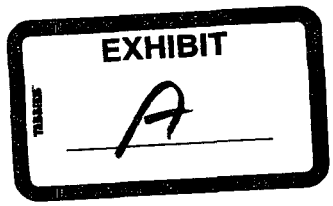
NOW, on this 5th day of February, 2002, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) By Order No. R-2876 issued in Case No. 3213 on March 5, 1965, the Division, upon the application of International Oil and Gas Corporation, approved a waterflood project in the Artesia Queen-Grayburg-San Andres Pool in Sections 25 and 26, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico. This waterflood was subsequently expanded by Division Order No. R-3311, dated September 11, 1967, to include additional lands within Sections 34, 35 and 36, Township 17 South, Range 28 East, NMPM, and Sections 2 and 3, Township 18 South, Range 28 East, NMPM.

(3) The above-described secondary recovery project is currently designated the Artesia Unit Waterflood Project. This project is operated by Melrose Operating Company and currently comprises the following-described area in Eddy County, New Mexico:



TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM

Section 25:	SW/4 SW/4
Section 26:	NW/4 SW/4, S/2 S/2
Section 34:	SE/4
Section 35:	All
Section 36:	W/2 NW/4, SE/4 NW/4, SW/4

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

Section 2:	NW/4 NE/4, N/2 NW/4, SW/4 NW/4, W/2 SW/4, SE/4 SW/4
Section 3:	All

(4) The applicant, Melrose Operating Company ("Melrose"), seeks:

(a) authority to expand its Artesia Unit Waterflood Project by converting the Artesia Unit Wells No. 2, 3, 10, 11, 12, 13, 16, 17, 18, 19, 44, 46, 54 and 57 to injection wells (all as shown on Exhibit "A" attached to this order); and

(b) to amend Division Order No. WFX-768 issued on November 28, 2000, which order authorized Melrose to convert its Artesia Unit Wells No. 23 and 29, located respectively in Units L and N of Section 35, Township 17 South, Range 28 East, NMPM, to injection wells within the Artesia Unit Waterflood Project.

(5) BP Amoco Production, an offset operator, appeared at the hearing through legal counsel.

(6) Division Order No. WFX-768 authorized Melrose to convert the Artesia Unit Wells No. 23 and 29 to injection within the subject secondary recovery project provided that Melrose first:

(a) cement squeeze the interval from the existing cement top to the surface behind the production casing in the Artesia Unit Wells No. 12 and 13

located respectively in Units E and F of Section 35, Township 17 South, Range 28 East, NMPM; and

(b) either cement squeeze the interval from the existing cement top to a depth of 1,700 feet behind the production casing in the Empire Abo Unit "G" Well No. 38 located in Unit K of Section 35, Township 17 South, Range 28 East, NMPM, or demonstrate to the Division that the existing cement top behind the production casing in this well is at or above 1,700 feet.

(7) At the hearing, Melrose testified that it does not seek to amend Division Order No. WFX-768, but rather requests Division confirmation that it has complied with the remedial cement requirements contained within this order.

(8) Melrose's evidence demonstrates that it has fully complied with the remedial cement requirements set forth within Division Order No. WFX-768, and should therefore be allowed to commence injection into the Artesia Unit Wells No. 23 and 29.

(9) Division records indicate that four of the wells Melrose seeks to convert to injection have previously been approved as injection wells within the Artesia Unit Waterflood Project. These wells are described as follows:

(a) the Artesia Unit Well No. 16, located in Unit E of Section 36, Township 17 South, Range 28 East, NMPM, was originally permitted by Division Order No. R-3311;

(b) the Artesia Unit Well No. 44, located in Unit E of Section 3, Township 18 South, Range 28 East, NMPM, was originally permitted by Division Order No. R-3311;

(c) the Artesia Unit Well No. 10, located in Unit C of Section 35, Township 17 South, Range 28 East, NMPM, was originally permitted by Division Order No. WFX-385 dated February 6, 1973; and

(d) the Artesia Unit Well No. 18, located in Unit K of Section 36, Township 17 South, Range 28 East,

NMPM, was originally permitted by Division Order No. WFX-470 dated November 21, 1978.

(10) Although injection authority may still be valid for the Artesia Unit Wells No. 10, 16, 18 and 44, these wells were permitted prior to the time the Division made major changes in the process it utilizes to permit injection wells.

(11) The Artesia Unit Wells No. 10, 16, 18 and 44 should be re-permitted under modern Division regulations, and any provisions contained within Division Orders No. R-3311, WFX-385 and WFX-470 relating to injection authority for these wells should be superseded by this order.

(12) The evidence presented by Melrose demonstrates that the Artesia Unit Wells No. 44 and 46:

(a) do not have surface casing;

(b) have a cement top behind the production casing at a depth of approximately 1,500 feet; and

(c) are not adequately cased and cemented so as to protect fresh water aquifers that occur at depths from 0-450 feet below the surface.

(13) Prior to commencing injection operations into the Artesia Unit Wells No. 44 and 46, Melrose should be required to cement the production casing string from the top of the cement (approximately 1,500 feet) to the surface.

(14) The evidence presented by Melrose further demonstrates that the cement top behind the production casing in the Artesia Unit Well No. 54 is at a depth of 2,169 feet. According to applicant's evidence, it proposes to inject into this well through the perforated interval from 2,170 feet to 2,406 feet.

(15) Prior to commencing injection operations into the Artesia Unit Well No. 54, Melrose should be required to cement the production casing string from the top of the cement (approximately 2,169 feet) to the surface.

(16) The evidence presented by Melrose further demonstrates that the Artesia Unit Well No. 57 is currently plugged and abandoned.

(17) In the event the Artesia Unit Well No. 57 is re-entered and converted to injection, Melrose should be required to set a production casing string in the wellbore and circulate cement to surface on this casing string.

(18) Within the one-half mile "area of review," there are approximately two hundred-fourteen (214) wells that have penetrated to or through the Artesia Queen-Grayburg-San Andres Pool. Of these two hundred-fourteen (214) wells, thirty-five (35) wells are plugged and abandoned, one hundred seventy-four (174) wells are active, and five (5) wells have no data available regarding their construction or status.

(19) Exhibit "B" attached to this order is a list of three plugged and abandoned wells within the "area of review" that are not plugged adequately so as to preclude the migration of fluid from the proposed injection zone.

(20) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "B," Melrose should be required to:

(a) re-enter and re-plug these wells in a manner approved by the Supervisor of the Division's Artesia District Office; or

(b) provide additional geologic, engineering or well data to the Supervisor of the Division's Artesia District Office that will demonstrate that these wells, in their current condition, will not serve as a conduit for the migration of fluid from the proposed injection zone.

(21) Melrose identified seven (7) potential problem wells that were drilled in the 1920's for which there is limited well construction data on file with the Division. These wells are shown on Exhibit "C" attached to this order.

(22) Melrose has proposed that prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "C," it will run a cement bond log on these wells to determine the cement top behind the production casing. If the cement behind the production casing is insufficient to isolate the injection interval, Melrose will perform remedial cement work on the well(s) in a manner approved by the supervisor of the Division's Artesia District Office.

(23) Melrose has also identified three (3) potential problem wells that were drilled in the 1920's for which there is limited well construction data on file with the

Division. In addition, the data available indicates that these wells may not have surface casing set in the wellbore. By virtue of not having surface casing, these wells may not be adequately constructed so as to protect fresh water aquifers. These wells are shown on Exhibit "D" attached to this order.

(24) Melrose has proposed that prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "D," it will dig out the wellhead to determine whether surface casing is present in the wellbore. In addition, it will run a cement bond log on these wells to determine the cement top behind the production casing. If the cement behind the production casing is not adequate to isolate the injection zone and protect fresh water, Melrose will perform remedial cement work on the well(s) in a manner approved by the supervisor of the Division's Artesia District Office.

(25) There are a number of additional wells within the "area of review," shown on Exhibit "E," that may or may not be adequately cemented so as to confine the injected fluid to the proposed injection interval.

(26) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "E," Melrose should be required to consult with the supervisor of the Division's Artesia District Office and present additional geologic and/or engineering data to demonstrate that the cement behind the production casing in these wells is sufficient to effectively isolate the injection interval.

(27) The supervisor of the Division's Artesia District Office may require Melrose to perform remedial cement operations on any well shown on Exhibit "E" in the event Melrose cannot satisfactorily demonstrate that the cement behind the production casing in these wells is sufficient to effectively isolate the injection interval.

(28) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(29) Injection should be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer set within 100 feet of the uppermost injection perforation in each well. The casing-tubing annulus should be filled with an inert fluid, and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(30) The injection wells or pressurization system should be equipped with a pressure control device or acceptable substitute that will limit the surface injection

pressure to 0.2 psi/foot of depth to the uppermost injection perforation, all as shown on Exhibit "A."

(31) Prior to commencing injection operations, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(32) The operator should give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed; (ii) the mechanical integrity pressure tests will be conducted on the proposed injection wells, and (iii) remedial work will be conducted on any of the wells shown on Exhibits "A," "B," "C," "D" or "E," so these operations may be witnessed.

(33) The operator should immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells, or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and should take all steps as may be timely and necessary to correct such failure or leakage.

(34) The proposed expansion of the Artesia Unit Waterflood Project should be approved.

(35) The injection authority granted herein for any of the wells shown on Exhibit "A" should terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Melrose Operating Company, is hereby authorized to expand its Artesia Unit Waterflood Project by converting to injection the Artesia Unit Wells No. 2, 3, 10, 11, 12, 13, 16, 17, 18, 19, 44, 46, 54 and 57, all as shown on Exhibit "A" attached to this order. The applicant is further authorized to inject into the Artesia Queen-Grayburg-San Andres Pool through the gross interval from approximately 1,897 feet to 2,750 feet within the subject injection wells.

(2) Those portions of Division Orders No. R-3311, WFX-385 and WFX-470 relating to injection authority for the Artesia Unit Wells No. 10, 16, 18 and 44 should be superseded by this order.

(3) Pursuant to the request of Melrose Operating Company, the Division hereby certifies that the applicant has satisfactorily complied with the remedial cement

requirements set forth within Division Administrative Order No. WFX-768, and is hereby authorized to commence injection into its Artesia Unit Wells No. 23 and 29, located respectively in Units L and N of Section 35, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(4) Prior to commencing injection operations into the Artesia Unit Wells No. 44, 46 and 54, the applicant shall cement the production casing string from the top of the cement to the surface.

(5) In the event the Artesia Unit Well No. 57 is re-entered and converted to injection, the applicant shall, prior to commencing injection operations, set a production casing string in the wellbore and circulate cement to surface on this casing string.

(6) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "B," the applicant shall:

a. re-enter and re-plug these wells in a manner approved by the Supervisor of the Division's Artesia District Office; or

b. provide additional geologic, engineering or well data to the Supervisor of the Division's Artesia District Office that will demonstrate that these wells, in their current condition, will not serve as a conduit for the migration of fluid from the proposed injection zone.

(7) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "C," the applicant shall run a cement bond log on these wells to determine the cement top behind the production casing. The cement bond log shall be submitted to the supervisor of the Division's Artesia District Office for analysis. In the event the cement behind the production casing in any of these wells is insufficient to isolate the injection interval, the applicant shall perform remedial cement work on the well(s) in a manner approved by the supervisor of the Division's Artesia District Office.

(8) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "D," the applicant shall dig out the wellhead to determine whether surface casing is present in the wellbore. In addition, the applicant shall run a cement bond log on these wells to determine the cement top behind the production casing. The cement bond log shall be submitted to the supervisor of the Division's Artesia District Office for analysis. In the event the cement behind the production casing is not adequate to isolate the injection zone and protect fresh water, the

applicant shall perform remedial cement work on the well(s) in a manner approved by the supervisor of the Division's Artesia District Office.

(9) Prior to commencing injection into any injection well located within ½ mile of the wells shown on Exhibit "E," Melrose shall consult with the supervisor of the Division's Artesia District Office and present additional geologic and/or engineering data to demonstrate that the cement behind the production casing in these wells is sufficient to effectively isolate the injection interval. The supervisor of the Division's Artesia District Office may require the applicant to perform remedial cement operations on any well shown on Exhibit "E" in the event the applicant cannot satisfactorily demonstrate that the cement behind the production casing in these wells is sufficient to effectively isolate the injection interval.

(10) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(11) Injection shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer set within 100 feet of the uppermost injection perforation in each well. The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(12) The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to 0.2 psi/foot of depth to the uppermost injection perforation, all as shown on Exhibit "A."

(13) Prior to commencing injection operations, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(14) The operator shall give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed; (ii) the mechanical integrity pressure tests will be conducted on the proposed injection wells, and (iii) remedial work will be conducted on any of the wells shown on Exhibits "A," "B," "C," "D" or "E," so these operations may be witnessed.

(15) The operator shall immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells, or the leakage of water, oil or gas from or around any producing or plugged and

abandoned well within the project area, and shall take all steps as may be timely and necessary to correct such failure or leakage.

(16) The injection authority granted herein for any of the wells shown on Exhibit "A" shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(17) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

Exhibit "A"
Division Order No. R-11720
Artesia Unit Waterflood Project
Approved Injection Wells

Well Name & Number	API Number	Well Location	Injection Interval	Packer Depth	Maximum Surface Inj. Pressure
Artesia Unit No. 2	30-015-01563	330' FSL & 330' FWL, Unit M, Section 26, T-17S, R-28E	1,897'-2,135'	1830'	379 PSIG
Artesia Unit No. 3	30-015-01565	330' FSL & 1750' FWL, Unit N, Section 26, T-17S, R-28E	1,932'-2,142'	1850'	386 PSIG
Artesia Unit No. 10	30-015-01749	360' FNL & 1952' FWL, Unit C, Section 35, T-17S, R-28E	1,959'-2,173'	1880'	392 PSIG
Artesia Unit No. 11	30-015-02654	360' FNL & 360' FWL, Unit D, Section 35, T-17S, R-28E	1,914'-2,140'	1850'	383 PSIG
Artesia Unit No. 12	30-015-01745	1980' FNL & 660' FWL, Unit E, Section 35, T-17S, R-28E	1,998'-2,290'	1940'	400 PSIG
Artesia Unit No. 13	30-015-01754	1980' FNL & 1980' FWL, Unit F, Section 35, T-17S, R-28E	2,040'-2,300'	1990'	408 PSIG
Artesia Unit No. 16	30-015-01759	1980' FNL & 660' FWL, Unit E, Section 36, T-17S, R-28E	2,236'-2,654'	2156'	447 PSIG
Artesia Unit No. 17	30-015-01761	1980' FNL & 1980' FWL, Unit F, Section 36, T-17S, R-28E	2,306'-2,685'	2260'	461 PSIG
Artesia Unit No. 18	30-015-01762	1980' FSL & 1980' FWL, Unit K, Section 36, T-17S, R-28E	2,356'-2,750'	2290'	471 PSIG
Artesia Unit No. 19	30-015-01760	1980' FSL & 660' FWL, Unit L, Section 36, T-17S, R-28E	2,296'-2,584'	2240'	459 PSIG
Artesia Unit No. 44	30-015-01796	2310' FNL & 990' FWL, Unit E, Section 3, T-18S, R-28E	2,085'-2,420'	2025'	417 PSIG
Artesia Unit No. 46	30-015-02541	2310' FNL & 2267' FWL, Unit F, Section 3, T-18S, R-28E	2,125'-2,419'	2075'	425 PSIG
Artesia Unit No. 54	30-015-01801	1654' FSL & 2272' FWL, Unit K, Section 3, T-18S, R-28E	2,170'-2,406'	2120'	434 PSIG
Artesia Unit No. 57	N/A	1570' FSL & 1070' FWL, Unit L, Section 3, T-18S, R-28E	2,322'-2,432'	2312'	464 PSIG

Exhibit "B"
Division Order No. R-11720
Artesia Unit Waterflood Project
Inadequately Plugged Wells

Well Name & Number	API Number	Well Location
Donnelly Drilling Sinclair State "B" No. 3	30-015-01765	660' FSL & 1980' FEL, Unit O, Section 36, T-17S, R-28E
Maloney Chambers State No. 1	30-015-02559	2390' FNL & 1070' FEL, Unit H, Section 4, T-18S, R-28E
Welch State No. 1	30-015-01729	2310' FNL & 250' FWL, Unit E, Section 35, T-17S, R-28E

Exhibit "C"
Division Order No. R-11720
Artesia Unit Waterflood Project
Wellbores with Limited Construction Data

Well Name & Number	API Number	Well Location
Melrose Operating Company Artesia Unit No. 40	30-015-01799	1070' FNL & 1570' FWL, Unit C, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 45	30-015-01775	2390' FNL & 1570' FWL, Unit F, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 58	30-015-01791	1070' FSL & 250' FWL, Unit M, Section 3, T-18S, R-28E
Melrose Operating Company Levers State No. 1	30-015-02580	1070' FSL & 1070' FEL, Unit P, Section 4, T-18S, R-28E
Melrose Operating Company Levers State No. 2	30-015-02581	250' FSL & 1070' FEL, Unit P, Section 4, T-18S, R-28E
Melrose Operating Company Levers State No. 3	30-015-02582	250' FSL & 250' FEL, Unit P, Section 4, T-18S, R-28E
Melrose Operating Company Levers State No. 4	30-015-02583	1070' FSL & 250' FEL, Unit P, Section 4, T-18S, R-28E

Exhibit "D"
Division Order No. R-11720
Artesia Unit Waterflood Project
Wells With Limited Construction Data That May Not Have Surface Casing

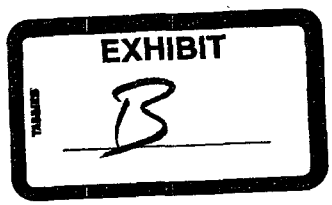
Well Name & Number	API Number	Well Location
Melrose Operating Company Artesia Unit No. 43	30-015-01790	1980' FNL & 250' FWL, Unit E, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 56	30-015-01797	1570' FSL & 1570' FWL, Unit K, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 55	30-015-01798	2390' FSL & 1570' FWL, Unit K, Section 3, T-18S, R-28E

Exhibit "E"
Division Order No. R-11720
Artesia Unit Waterflood Project
"Area of Review" Wells That May Not Be Adequately Cemented

Well Name & Number	API Number	Well Location
Melrose Operating Company Artesia Unit No. 27	30-015-01709	705' FSL & 550' FEL, Unit P, Section 34, T-17S, R-28E
Vintage Drilling Carpers-Levers No. 2	30-015-01705	330' FSL & 330' FWL, Unit M, Section 34, T-17S, R-28E
BP Amoco Empire Abo Unit No. E-39	30-015-01735	660' FNL & 1980' FEL, Unit B, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 14	30-015-01755	1980' FNL & 1980' FEL, Unit G, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 15	30-015-02126	1980' FNL & 990' FEL, Unit H, Section 35, T-17S, R-28E
BP Amoco Empire Abo Unit "G" No. 37	30-015-01734	2310' FSL & 330' FWL, Unit L, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 28	30-015-01732	990' FSL & 330' FWL, Unit M, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 29	30-015-01742	990' FSL & 1650' FWL, Unit N, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 31	30-015-01744	990' FSL & 990' FEL, Unit P, Section 35, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 7	30-015-10080	480' FNL & 330' FWL, Unit D, Section 36, T-17S, R-28E
R. B. Operating Company Five "J" No. 2	30-015-10543	1980' FNL & 1980' FEL, Unit G, Section 36, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 32	30-015-01764	990' FSL & 330' FWL, Unit M, Section 36, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 33	30-015-01758	330' FSL & 1631' FWL, Unit N, Section 36, T-17S, R-28E
Melrose Operating Company Artesia Unit No. 35	30-015-01785	330' FNL & 1650' FWL, Unit C, Section 2, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 37	30-015-01800	990' FNL & 990' FEL, Unit A, Section 3, T-18S, R-28E

Well Name & Number	API Number	Well Location
Melrose Operating Company Artesia Unit No. 39	30-015-02542	992' FNL & 2275' FWL, Unit C, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 42	30-015-02547	990' FNL & 330' FWL, Unit D, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 47	30-015-02545	1980' FNL & 1980' FEL, Unit G, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 48	30-015-01789	2310' FNL & 990' FEL, Unit H, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 53	30-015-07880	1650' FSL & 1650' FEL, Unit J, Section 3, T-18S, R-28E
Melrose Operating Company Artesia Unit No. 54	30-015-01801	1654' FSL & 2272' FWL, Unit K, Section 3, T-18S, R-28E

Item #	OCD Order #	Requested Item	Pilot Area affected	
1	3	Remedial Cmt #23	1	Done
2	3	Remedial Cmt #29	1	Done
3	4	Cmt from TOC to Surface AU #44 (If used)	3	
4	4	Cmt from TOC to Surface AU #46 (If used)	3,3A	
5	4	Cmt from TOC to Surface AU #54 (If used)	3, 3A	
6	5	Circ Cmt in AU #57 if used	3	
7	6	Re-plug or Justify Sinclair ST B-3 O-36	4	
8	6	Re-plug or JustifySt #1 H-4	3	
9	6	Re-plug or Justify Welch St #1 E-35	1, 1A, 2	
10	7	Run CBL in AU #40	3, 3A	
11	7	Run CBL in AU #45	3, 3A	
12	7	Run CBL in AU #58	3, 3A	
13	7	Run CBL in Levers #1	3	
14	7	Run CBL in Levers #2	3	
15	7	Run CBL in Levers #3	3	
16	7	Run CBL in Levers #4	3	
17	8	Dig out WH & CBL AU #43	3, 3A	
18	8	Dig out WH & CBL AU #55	3, 3A	
19	8	Dig out WH & CBL AU #56	3, 3A	
20	9	Show Adequate cmt or repair A U #27	1, 1A	
21	9	Show Adequate cmt or repair A U #14	1, 1A, 2, 4	TOC @ 1620
22	9	Show Adequate cmt or repair A U #15	1, 1A, 2, 4	TOC @ 1760
23	9	Show Adequate cmt or repair A U #28	1, 1A, 2	TOC @ 1630
24	9	Show Adequate cmt or repair A U #29	1, 1A, 2	TOC @ 1730
25	9	Show Adequate cmt or repair A U #31	1, 1A, 4	TOC @ 1952
26	9	Show Adequate cmt or repair A U #7	4	
27	9	Show Adequate cmt or repair A U #32	1A, 4	
28	9	Show Adequate cmt or repair A U #33	4	TOC @ 2302
29	9	Show Adequate cmt or repair A U #35	1, 1A	
30	9	Show Adequate cmt or repair A U #37	1, 3, 3A	
31	9	Show Adequate cmt or repair Lever #2 M-34	3	
32	9	Show Adequate cmt or repair EAU #39 B-35	2	
33	9	Show Adequate cmt or repair EAU #37 L-35	1, 1A, 2	Done
34	9	Show Adequate cmt or repair 5-J #2 G-36	4	
35	9	Show Adequate cmt or repair A U #39	3,3A	
36	9	Show Adequate cmt or repair A U #42	3,3A	
37	9	Show Adequate cmt or repair A U #47	3,3A	
38	9	Show Adequate cmt or repair A U #48	3,3A	
39	9	Show Adequate cmt or repair A U #53	3,3A	
40	10	Show Adequate cmt or repair A U #54	3,3A	



Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
1	3	Remedial Cmt #23	1
2	3	Remedial Cmt #29	1
9	6	Re-plug or Justify Welch St #1 E-35	1
20	9	Show Adequate cmt or repair A U #27	1
21	9	Show Adequate cmt or repair A U #14	1
22	9	Show Adequate cmt or repair A U #15	1
23	9	Show Adequate cmt or repair A U #28	1
24	9	Show Adequate cmt or repair A U #29	1
25	9	Show Adequate cmt or repair A U #31	1
29	9	Show Adequate cmt or repair A U #35	1
30	9	Show Adequate cmt or repair A U #37	1
33	9	Show Adequate cmt or repair EAU #37 L-35	1

Item #	OCD Order #	ACTION PERFORMED	RESULTS
1	3	Remedial Cmt #23	Completed
2	3	Remedial Cmt #29	Completed
21	9	Show Adequate cmt or repair A U #14	TOC 1620'
23	9	Show Adequate cmt or repair A U #28	TOC 1630'
24	9	Show Adequate cmt or repair A U #29	TOC 1730'
22	9	Show Adequate cmt or repair A U #15	TOC 1760'
33	9	Show Adequate cmt or repair EAU #37 L-35	Completed
25	9	Show Adequate cmt or repair A U #31	TOC 1952

Item #	OCD Order #	ACTION REMAINING	RESULTS
9	6	Re-plug or Justify Welch St #1 E-35	
20	9	Show Adequate cmt or repair A U #27	
29	9	Show Adequate cmt or repair A U #35	
30	9	Show Adequate cmt or repair A U #37	

Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
9	6	Re-plug or Justify Welch St #1 E-35	1A
20	9	Show Adequate cmt or repair A U #27	1A
21	9	Show Adequate cmt or repair A U #14	1A
22	9	Show Adequate cmt or repair A U #15	1A
23	9	Show Adequate cmt or repair A U #28	1A
24	9	Show Adequate cmt or repair A U #29	1A
25	9	Show Adequate cmt or repair A U #31	1A
27	9	Show Adequate cmt or repair A U #32	1A
29	9	Show Adequate cmt or repair A U #35	1A
33	9	Show Adequate cmt or repair EAU #37 L-35	1A

Item #	OCD Order #	ACTION PERFORMED	RESULTS
21	9	Show Adequate cmt or repair A U #14	TOC 1620'
22	9	Show Adequate cmt or repair A U #15	TOC 1760'
23	9	Show Adequate cmt or repair A U #28	TOC 1630'
24	9	Show Adequate cmt or repair A U #29	TOC 1730'
33	9	Show Adequate cmt or repair EAU #37 L-35	Completed
25	9	Show Adequate cmt or repair A U #31	TOC 1952'

Item #	OCD Order #	ACTION REMAINING	RESULTS
9	6	Re-plug or Justify Welch St #1 E-35	
20	9	Show Adequate cmt or repair A U #27	
27	9	Show Adequate cmt or repair A U #32	
29	9	Show Adequate cmt or repair A U #35	

PILOT AREA #2

Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
9	6	Re-plug or Justify Welch St #1 E-35	2
21	9	Show Adequate cmt or repair A U #14	2
22	9	Show Adequate cmt or repair A U #15	2
23	9	Show Adequate cmt or repair A U #28	2
24	9	Show Adequate cmt or repair A U #29	2
32	9	Show Adequate cmt or repair EAU #E-39 B-35	2
33	9	Show Adequate cmt or repair EAU #37 L-35	2

Item #	OCD Order #	ACTION PERFORMED	RESULTS
21	9	Show Adequate cmt or repair A U #14	TOC 1620
22	9	Show Adequate cmt or repair A U #15	TOC 1700
23	9	Show Adequate cmt or repair A U #28	TOC 1630
24	9	Show Adequate cmt or repair A U #29	TOC 1730'
33	9	Show Adequate cmt or repair EAU #37 L-35	P & A ed

Item #	OCD Order #	ACTION REMAINING	RESULTS
9	6	Re-plug or Justify Welch St #1 E-35	
32	9	Show Adequate cmt or repair EAU #E-39 B-35	

PILOT AREA #3

Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
3	4	Cmt from TOC to Surface AU #44 (If used)	3
4	4	Cmt from TOC to Surface AU #46 (If used)	3
5	4	Cmt from TOC to Surface AU #54	3
6	5	Circ Cmt in AU #57 if used	3
8	6	Re-plug or Justify St #1 H-4	3
10	7	Run CBL in AU #40	3
11	7	Run CBL in AU #45	3
12	7	Run CBL in AU #58	3
13	7	Run CBL in Levers #1	3
14	7	Run CBL in Levers #2	3
15	7	Run CBL in Levers #3	3
16	7	Run CBL in Levers #4	3
17	8	Dig out WH & CBL AU #43	3
18	8	Dig out WH & CBL AU #55	3
19	8	Dig out WH & CBL AU #56	3
30	9	Show Adequate cmt or repair A U #37	3
31	9	Show Adequate cmt or repair Lever #2 M-34	3
35	9	Show Adequate cmt or repair A U #39	3
36	9	Show Adequate cmt or repair A U #42	3
37	9	Show Adequate cmt or repair A U #47	3
38	9	Show Adequate cmt or repair A U #48	3
39	9	Show Adequate cmt or repair A U #53	3
40	10	Show Adequate cmt or repair A U #54	3

Item #	OCD Order #	ACTION DONE	RESULTS

Item #	OCD Order #	ACTION REMAINING	RESULTS
3	4	Cmt from TOC to Surface AU #44 (If used)	
4	4	Cmt from TOC to Surface AU #46 (If used)	
5	4	Cmt from TOC to Surface AU #54	
6	5	Circ Cmt in AU #57 if used	
8	6	Re-plug or Justify St #1 H-4	

10	7	Run CBL in AU #40	
11	7	Run CBL in AU #45	
12	7	Run CBL in AU #58	
13	7	Run CBL in Levers #1	
14	7	Run CBL in Levers #2	
15	7	Run CBL in Levers #3	
16	7	Run CBL in Levers #4	
17	8	Dig out WH & CBL AU #43	
18	8	Dig out WH & CBL AU #55	
19	8	Dig out WH & CBL AU #56	
30	9	Show Adequate cmt or repair A U #37	
31	9	Show Adequate cmt or repair Lever #2 M-34	
35	9	Show Adequate cmt or repair A U #39	
36	9	Show Adequate cmt or repair A U #42	
37	9	Show Adequate cmt or repair A U #47	
38	9	Show Adequate cmt or repair A U #48	
39	9	Show Adequate cmt or repair A U #53	
40	10	Show Adequate cmt or repair A U #54	

Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
4	4	Cmt from TOC to Surface AU #46 (If used)	3A
5	4	Cmt from TOC to Surface AU #54	3A
10	7	Run CBL in AU #40	3A
11	7	Run CBL in AU #45	3A
12	7	Run CBL in AU #58	3A
17	8	Dig out WH & CBL AU #43	3A
18	8	Dig out WH & CBL AU #55	3A
19	8	Dig out WH & CBL AU #56	3A
30	9	Show Adequate cmt or repair A U #37	3A
35	9	Show Adequate cmt or repair A U #39	3A
36	9	Show Adequate cmt or repair A U #42	3A
37	9	Show Adequate cmt or repair A U #47	3A
38	9	Show Adequate cmt or repair A U #48	3A
39	9	Show Adequate cmt or repair A U #53	3A
40	10	Show Adequate cmt or repair A U #54	3A

Item #	OCD Order #	ACTION PERFORMED	RESULTS

Item #	OCD Order #	ACTION REMAINING	RESULTS
4	4	Cmt from TOC to Surface AU #46 (If used)	3A
5	4	Cmt from TOC to Surface AU #54	3A
10	7	Run CBL in AU #40	3A
11	7	Run CBL in AU #45	3A
12	7	Run CBL in AU #58	3A
17	8	Dig out WH & CBL AU #43	3A
18	8	Dig out WH & CBL AU #55	3A
19	8	Dig out WH & CBL AU #56	3A
30	9	Show Adequate cmt or repair A U #37	3A
35	9	Show Adequate cmt or repair A U #39	3A
36	9	Show Adequate cmt or repair A U #42	3A
37	9	Show Adequate cmt or repair A U #47	3A
38	9	Show Adequate cmt or repair A U #48	3A
39	9	Show Adequate cmt or repair A U #53	3A
40	10	Show Adequate cmt or repair A U #54	3A

PILOT AREA #4

Item #	OCD Order #	ACTION REQUIRED	Pilot Area affected
7	6	Re-plug or Justify Sinclair ST B-3 O-36	4
21	9	Show Adequate cmt or repair A U #14	4
22	9	Show Adequate cmt or repair A U #15	4
25	9	Show Adequate cmt or repair A U #31	4
26	9	Show Adequate cmt or repair A U #7	4
27	9	Show Adequate cmt or repair A U #32	4
28	9	Show Adequate cmt or repair A U #33	4
34	9	Show Adequate cmt or repair 5-J #2 G-36	4

Item #	OCD Order #	ACTION PERFORMED	RESULTS
21	9	Show Adequate cmt or repair A U #14	TOC 1620'
22	9	Show Adequate cmt or repair A U #15	TOC 1760'
25	9	Show Adequate cmt or repair A U #31	TOC 1952'
28	9	Show Adequate cmt or repair A U #33	TOC 2302'

Item #	OCD Order #	ACTION REMAINING	RESULTS
7	6	Re-plug or Justify Sinclair ST B-3 O-36	
26	9	Show Adequate cmt or repair A U #7	
27	9	Show Adequate cmt or repair A U #32	
34	9	Show Adequate cmt or repair 5-J #2 G-36	

Item #	OCD Order #	Requested Item	Pilot Area affected	
7	6	Re-plug or Justify Sinclair ST B-3 O-36	4	
8	6	Re-plug or JustifySt #1 H-4	3	
9	6	Re-plug or Justify Welch St #1 E-35	1, 1A, 2	
31	9	Show Adequate cmt or repair Lever #2 M-34	3	
32	9	Show Adequate cmt or repair EAU #39 B-35	2	BP Plans a R/C
34	9	Show Adequate cmt or repair 5-J #2 G-36	4	Hansen Energy says we could squeeze cmt.

Melrose Operating
Artesia Unit Waterflood Expansion Application
Eddy County, New Mexico

Offset Operator Notification List

Vastar Resources
15375 Memorial Drive
Houston, TX 77079-4101

Yates Drilling Co.
110 S. 4th ST, Yates Bldg
Artesia, NM 88210

Marbob Energy
PO Box 227
Artesia, NM 88211-0227

Fulton Co.
PO Box 1121
Artesia, NM 88211-1121

Mewbourne Oil
PO Box 7698
Tyler, TX 75711-7698

Mack Energy
PO Box 960
Artesia, NM 88211-0960

Laure, C.E. Muncy
PO Box 1370
Artesia, NM 88211-1370

Yates Energy
PO Box 2323
Roswell, NM 88202

R.B. Operating
5100 E. Skelly, Suite 650
Meridian Tower
Tulsa, OK 74135-6549

Brothers Production Co.
PO Box 7515
Midland, TX 79708

W.E. Jeffers
PO Box 65
Artesia, NM 88210

Sandlot Energy
PO Box 711
Lovington, NM 88260

B & W Oil Co.
R-252 N. Halderman Rd
Artesia, NM 88210

Vintage Drilling
PO Box 158
Loco Hills, NM 88255

BP Permian Business Unit
501 Westlake Park Blvd.
WL Suite 200
Houston, TX 77070

Louis Dreyfus Natural Gas Corp.
14000 Quail Springs Parkway, Ste 600
Oklahoma City, OK 73134

Devon Energy Corporation
20 North Broadway, Suite 1500
Oklahoma City, OK 73102

Aspen Oil
2625 N. Albertson Dr
Hobbs, NM 88240

EXHIBIT
C

Warren Hanson
342 Haldeman Rd
Artesia, NM 88210

Dominion Oklahoma-Texas
1415 Louisiana Ste 2700
Houston, TX 77002

Ricks Exploration
210 Park Avenue
Oklahoma City, OK 73102

Doyle Hartman
500 N. Main
Midland, TX 79701

SDX
PO Box 5061
Midland, TX 79704

Surface Owner:

Bogle LTD
PO Box 441
Artesia, NM 88210

State of New Mexico
Commissioner of Public Lands
PO Box 1148
Santa Fe, NM 87504-1148