

CERTIFICATE OF APPROVAL

COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO  
ARTESIA UNIT

EDDY COUNTY, NEW MEXICO

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WATERFLOOD PROJECT

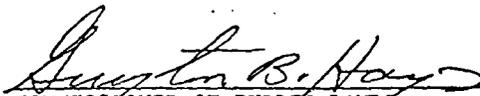
There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated FEBRUARY 1, 1967, which has been executed, or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement, the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area.
- (c) That each beneficiary Institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the area.
- (d) That such agreement is in other respects for the best interests of the state, with respect to state lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, and 7-11-48, New Mexico Statutes Annotated, 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 18th. day of OCTOBER, 19 67.



  
COMMISSIONER OF PUBLIC LANDS  
of the State of New Mexico

**ARTESIA POOL**  
(Depco Camp Artesia Waterflood)  
Eddy County, New Mexico

Order No. R-4027, Authorizing Depco, Inc., to Institute the Depco Camp Artesia Waterflood Project in the Artesia Pool, Eddy County, New Mexico, September 10, 1970.

Application of Depco, Inc., for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 4415  
Order No. R-4027

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on September 2, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of September, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Depco, Inc., seeks authority to institute a waterflood project in the Artesia Pool by the injection of water into the Grayburg and San Andres formations through five injection wells in Sections 27, 33, and 34, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional lands and injection wells in the area of the said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(7) That Order No. R-3454, which previously authorized water injection for disposal into one of the subject wells, should be superseded.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, Depco, Inc., is hereby authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Grayburg and San Andres formations through the following-described wells in Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico:

- Depco State 647 Well No. 100 - Unit A - Section 27
- Depco State 647 Well No. 82 - Unit F - Section 27
- Depco State 647 Well No. 92 - Unit N - Section 27
- Depco State 647 Well No. 207 - Unit I - Section 33
- Depco State 647 Well No. 217 - Unit E - Section 34

(2) That the subject waterflood project is hereby designated the Depco Camp Artesia Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the Depco Camp Artesia Waterflood Project on the State 647 Lease to include such additional lands and injection wells in the area of the project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That Order No. R-3454 is hereby superseded.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

(EUNICE (GRAYBURG-SAN ANDRES WATERFLOOD)  
POOL - Cont'd.)

(2) That the subject waterflood project is hereby designated the Texaco Eunice Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

ARTESIA POOL  
(International Oil & Gas Queen-Grayburg-San Andres Waterflood  
Project Amendment)  
Eddy County, New Mexico

Order No. R-2869-A, Authorizing the Substitution of Injection Wells in the Queen-Grayburg-San Andres Waterflood Project at the Artesia Pool, Eddy County, New Mexico, April 29, 1968.

Application of Depco, Inc., for an Amendment to Order No. R-2869, Eddy County, New Mexico.

CASE NO. 3747  
Order No. R-2869-A

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 17, 1968, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 29th day of April, 1968, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That by Order No. R-2869, International Oil & Gas Corporation was authorized to institute a waterflood project in the

Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine wells in Sections 10 and 11, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicant Depco, Inc., as successor to International Oil & Gas Corporation, seeks the amendment of said Order No. R-2869 to substitute the following-described water injection wells:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

WELL	LOCATION	SECTION
Dunn "B" No. 5	NE/4 SE/4	11
Dunn "A" No. 1	SW/4 NE/4	12
Dunn "B" No. 6	SW/4 SW/4	12

in lieu of the following-described wells which were included in the originally-authorized water injection wells:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

WELL	LOCATION	SECTION
Dunn "B" No. 15	SW/4 NW/4	10
Dunn "B" No. 19	SW/4 NE/4	10
Dunn "B" No. 21	SW/4 NW/4	11

(4) That approval of the subject application will not violate correlative rights and should increase the efficiency of the waterflood project and result in greater ultimate recovery of oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order No. R-2869 is hereby amended by deleting from the water injection wells authorized therein the following-described wells:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

WELL	LOCATION	SECTION
Dunn "B" No. 15	SW/4 NW/4	10
Dunn "B" No. 19	SW/4 NE/4	10
Dunn "B" No. 21	SW/4 NW/4	11

and substituting in lieu thereof as water injection wells the following-described wells:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

WELL	LOCATION	SECTION
Dunn "B" No. 5	NE/4 SE/4	11
Dunn "A" No. 1	SW/4 NE/4	12
Dunn "B" No. 6	SW/4 SW/4	12

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

ARTESIA POOL  
(Depco Artesia Waterflood Project Expansion)  
(Formerly Highway Waterflood Project)  
Eddy County, New Mexico

Order No. R-3311, Authorizing Depco, Inc. to Expand its Highway Waterflood Project in the Artesia Unit Area and Redesignate as Depco Artesia Waterflood Project, Artesia Pool, Eddy County, New Mexico, September 11, 1967.

Application of Depco, Inc., for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 3653  
Order No. R-3311

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on September 6, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of September, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Depco, Inc., as successor to International Oil and Gas Corporation, operates a waterflood project in the Artesia Pool pursuant to Order No. R-2876, dated March 5, 1965, by the injection of water into the Grayburg formation through two wells located in Sections 25 and 36, Township 17 South, Range 28 East.

(3) That the applicant seeks permission to expand said waterflood project in its Artesia Unit Area, Artesia Pool, by the injection of water into the Grayburg formation through 15 additional injection wells in Sections 25, 34, 35, and 36, Township 17 South, Range 28 East, and Sections 2 and 3, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, Depco, Inc., is hereby authorized to expand its Highway Waterflood Project in its Artesia Unit Area, Artesia Pool, by the injection of water into the Grayburg formation through the following-described wells in Eddy County, New Mexico:

OPERA-TOR	LEASE	WELL NO.	UNIT	SEC-TION	TOWNSHIP	RANGE	SHIP
NMPM							
Depco	State 647	164	M	26	17	South 28	East
Depco	State 647	169	O	26	17	South 28	East
Depco	Delhi State	1	O	34	17	South 28	East
Depco	Welch State	2	E	35	17	South 28	East
Depco	MRY State	2	G	35	17	South 28	East
Depco	Sinclair B State	1	M	35	17	South 28	East
Depco	Castle State	2	O	35	17	South 28	East
Depco	State 647	139	E	36	17	South 28	East
Depco	Sinclair B State	2	M	36	17	South 28	East
Depco	State A	2	E	2	18	South 28	East
Depco	Featherstone State B	7	M	2	18	South 28	East
Depco	Lanning State	1	E	3	18	South 28	East
Depco	State 647	130	G	3	18	South 28	East
Depco	State 647	38	M	3	18	South 28	East
Depco	Resler State	2	O	3	18	South 28	East

(2) That the subject waterflood project is hereby redesignated the Depco Artesia Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

ARTESIA POOL  
(Penroc Phillips Artesia Waterflood Project)  
Eddy County, New Mexico

ATOKA-SAN ANDRES POOL  
(Kewanee Waterflood)  
Eddy County, New Mexico

Order No. R-3494, Authorizing Penroc Oil Corporation to Institute a Waterflood Project in the Grayburg Formation in the Artesia Pool, Eddy County, New Mexico, September 12, 1968.

Order No. R-3476, Authorizing Kewanee Oil Company to Institute a Waterflood Project in the Atoka-San Andres Pool, Eddy County, New Mexico, August 20, 1968.

Application of Penroc Oil Corporation for a Waterflood Project, Eddy County, New Mexico.

Applicant of Kewanee Oil Company for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 3849  
Order No. R-3494

CASE NO. 383  
Order No. R-3476

ORDER OF THE COMMISSION

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on September 4, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on August 7, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 12th day of September, 1968, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

NOW, on this 20th day of August, 1968, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Penroc Oil Corporation, seeks permission to institute a waterflood project in the Artesia Pool by the injection of water into the Grayburg formation through its Phillips State Well No. 4, located in Unit I of Section 27, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) That the applicant, Kewanee Oil Company, seeks permission to institute a waterflood project in its Atoka-San Andres Unit Area, Atoka-San Andres Pool, by the injection of water into the San Andres formation through 28 injection wells in Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(4) That two pilot waterflood projects have been conducted in the subject area under authority of Commission Orders Nos. R-2955 and R-3192.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(1) That the applicant, Penroc Oil Corporation, is hereby authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Grayburg formation through its Phillips State Well No. 4, located in Unit I of Section 27, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kewanee Oil Company, is hereby authorized to institute a waterflood project in its Atoka San Andres Unit Area, Atoka-San Andres Pool, by the injection of water into the San Andres formation through the following-described wells in Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico:

(2) That the subject waterflood project is hereby designated the Penroc Phillips Artesia Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

Operator	Well No.	Unit	Section
Standard of Texas	1	NE/4 SW/4	10
E. Holland	3	SE/4 SE/4	10
Ralph Rogers	4	SE/4 NE/4	10
Stroup	2	SE/4 NW/4	11
Stroup	6	NE/4 NW/4	11
M. G. Johnson	2	NW/4 SW/4	11
B. C. Aaron	1	SE/4 SW/4	11

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary. DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

*New  
Marbob Energy  
N.C. Phillips #4*

**HIGH LONESOME POOL**  
(International Oil & Gas Waterflood Expansion)  
Eddy County, New Mexico

Order No. R-2864, Authorizing International Oil & Gas Corporation to Expand the High Lonesome Waterflood Project in the High Lonesome Pool, Eddy County, New Mexico, February 11, 1965.

Application of International Oil & Gas Corporation for Expansion of a Waterflood Project, Eddy County, New Mexico.

CASE NO. 3194  
Order No. R-2864

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on January 27, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 11th day of February, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, International Oil & Gas Corporation, seeks permission to expand its High Lonesome Waterflood Project authorized by Order No. R-2458 in the High Lonesome Pool by converting to water injection three wells located in Units A, B, and J of Section 15, Township 16 South, Range 29 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the proposed project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed expansion of the High Lonesome Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, International Oil & Gas Corporation is hereby authorized to expand its High Lonesome Waterflood Project in the High Lonesome Pool by converting to water injection the following-described wells in Section 15, Township 16 South, Range 29 East, NMPM, Eddy County, New Mexico:

McCallister Federal Well No. 3, located in Unit A  
McCallister Federal Well No. 6, located in Unit B  
McCallister Federal Well No. 5, located in Unit J

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

**ARTESIA POOL**  
(International Oil & Gas Queen-Grayburg Waterflood Project)  
Eddy County, New Mexico

Order No. R-2876, Authorizing International Oil & Gas Corporation to Institute a Waterflood Project in the Queen and Grayburg Formations in the Artesia Pool, Eddy County, New Mexico, March 5, 1965.

Application of International Oil & Gas Corporation for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 3213  
Order No. R-2876

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on February 24, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 5th day of March, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, International Oil & Gas Corporation, seeks permission to institute a waterflood project in the Artesia Pool by the injection of water into the Queen and Grayburg formations through two injection wells in Sections 25 and 26, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

**(ARTESIA (INTERNATIONAL OIL & GAS QUEEN-GRAYBURG WATERFLOOD PROJECT) POOL - Cont'd.)**

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, International Oil & Gas Corporation, is hereby authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Queen and Grayburg formations through the following-described wells in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico:

- International-Yates State 647 Well No. 194, located in the SW/4 SW/4 of Section 25, and
- International-Yates State 647 Well No. 191, located in the NW/4 NW/4 of Section 36.

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

ARTESIA POOL  
(International Oil & Gas Queen-Grayburg-San Andres Waterflood Project)  
Eddy County, New Mexico

Order No. R-2869, Authorizing International Oil & Gas Corporation to Institute a Waterflood Project in the Queen-Grayburg-San Andres Formations in the Artesia Pool, Eddy County, New Mexico, February 11, 1965.

Application of International Oil & Gas Corporation for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 3202  
Order No. R-2869

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on January 27, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 11th day of February, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, International Oil & Gas Corporation, seeks permission to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine injection wells in Sections 10 and 11, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, International Oil & Gas Corporation, is hereby authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine wells at the following-described locations in Eddy County, New Mexico:

**TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM**

WELLS	LOCATION	SECTION
International-Yates-Dunn		
"B" Federal		
Well No. 13	NE/4 NE/4	10
Well No. 17	NE/4 NW/4	10
Well No. 15	SW/4 NW/4	10
Well No. 19	SW/4 NE/4	10
Well No. 24	NE/4 SE/4	10
Well No. 18	NE/4 NW/4	11
Well No. 21	SW/4 NW/4	11
Well No. 29	SW/4 NE/4	11
Well No. 30 (undrilled)	NE/4 SW/4	11

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87506  
(505) 827-7131

RECEIVED  
MAR 15 1998

ADMINISTRATIVE ORDER NO. WFX-733

*APPLICATION OF SDX RESOURCES, INC. TO EXPAND ITS WATERFLOOD PROJECT  
IN THE ARTESIA POOL IN EDDY COUNTY, NEW MEXICO*

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3311, SDX Resources, Inc. has made application to the Division on December 1, 1997 for permission to expand its Artesia Unit Waterflood Project in the Artesia Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection well is eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, SDX Resources, Inc., be and the same is hereby authorized to inject water into the Grayburg and San Andres formations at approximately 2072 feet to approximately 2600 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described wells for purposes of secondary recovery to wit:

*Administrative Order WFX-733*

*SDX Resources, Inc.*

*March 4, 1998*

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**Artesia Unit Well No.1**

**1650' FSL & 460' FWL**

**Unit Letter 'L', Section 26, Township 17 South, Range 28 East**

**Injection Interval: 2072 feet to 2600 feet**

**Packer Setting: 1972 feet**

**Maximum Injection Pressure: 394 psig**

**Located in Eddy County, New Mexico.**

**IT IS FURTHER ORDERED THAT:**

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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than .2 psi per foot of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Grayburg or San Andres formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

*Administrative Order WFX-733*  
*SDX Resources, Inc.*  
*March 4, 1998*  
*Page 3*

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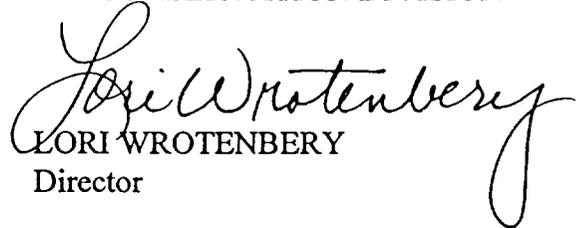
The subject well shall be governed by all provisions of Division Order No. R-3311, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 4th day of March, 1998.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director

S E A L

LW/BES/kv

cc: Oil Conservation Division - Artesia

## Order #WFX-768

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### Order WFX-768 Stipulations

1. Squeeze Artesia Unit Well #12
2. Squeeze Artesia Unit Well #13
3. Provide evidence - Empire ABO Unit Unit G#38 has TOC greater than 1700.

---

### Order WFX-768 Compliance

1. Squeezed Artesia Unit Well #12 & circulated cement to surface.
2. Squeezed Artesia Unit Well #13 & circulated cement to surface.
3. Calculated TOC on Empire ABO Unit G-38 to be 1,545'.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

*ADMINISTRATIVE ORDER NO. WFX-768*

***APPLICATION OF MELROSE OPERATING COMPANY TO EXPAND ITS WATERFLOOD  
PROJECT IN THE ARTESIA QUEEN-GRAYBURG-SAN ANDRES POOL IN EDDY COUNTY,  
NEW MEXICO***

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Orders No. R-3311, Melrose Operating Company has made application to the Division on October 16, 2000 for permission to expand its Artesia Unit Waterflood Project in the Artesia Queen-Grayburg-San Andres Pool in Eddy County, New Mexico.

**THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection well(s) are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced Waterflood Project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Melrose Operating Company be and the same is hereby authorized to inject water into the Queen, Grayburg and San Andres formations at approximately 2,082 feet to approximately 2,467 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described well(s) for purposes of secondary recovery to wit:

**Artesia Unit Well No. 23**

API No. 30-015-01746  
1980 FSL & 660 FWL, Unit 'L', Section 35  
Township 17 South, Range 28 East, NMPM  
Injection Interval: 2,082 feet to 2,378 feet (Perforated)  
Maximum Injection Pressure: (.2 psi/ft) 416 psig

**Artesia Unit Well No. 29**

API No. 30-015-01742  
990 FSL & 1650 FWL, Unit 'N', Section 35  
Township 17 South, Range 28 East, NMPM  
Injection Interval: 2,454 feet to 2,467 feet (Perforated)  
Maximum Injection Pressure: (.2 psi/ft) 491 psig

Eddy County, New Mexico.

IT IS FURTHER ORDERED THAT:

Prior to commencing injection operations into the subject well(s), the Artesia Unit Well No. 12, located 1980 feet from the North line and 660 feet from the West line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall cement squeeze the production casing from the top of cement, as determined by a cement bond log, to the surface.

Prior to commencing injection operations into the subject well(s), the Artesia Unit Well No. 13, located 1980 feet from the North line and 1980 feet from the West line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall either provide evidence that the surface casing is adequately cemented so as to effectively isolate and protect fresh water, or cement squeeze the production casing from the top of cement, as determined by a cement bond log, to the surface.

Prior to commencing injection operations into the subject well(s), the Empire Abo Unit G Well No. 38, located 2310 Feet from the South Line and 1650 Feet from the West Line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall either provide evidence that the top of cement in the 5 ½ production casing is above approximately 1700 feet, or the operator shall cement squeeze this well to obtain such results.

The Division's Artesia District Office shall be notified of the date and time that the cement bond logs are to be run. Copies of the logs shall be submitted to the Artesia District Office.

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.

Prior to commencing injection operations into the well(s), the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well(s) or systems shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well(s) to .2 psi per foot of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well(s) that such higher pressure will not result in migration of the injected fluid from the Queen, Grayburg and San Andres formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing or packer in said well(s) and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well(s) shall be governed by all provisions of Division Orders No. R-3311 and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

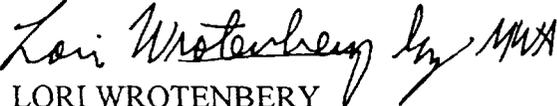
The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well(s), provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

*Administrative Order WFX-768*  
*Melrose Operating Company*  
*November 28, 2000*  
*Page 4*

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DONE at Santa Fe, New Mexico, on this 28<sup>th</sup> day of November, 2000.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director

SEAL

LW/MWA/kv

cc: Oil Conservation Division - Artesia  
Case File No. 3653 (Order No. R-3311)

Submit 3 Copies to Appropriate District Office

State of New Mexico Energy, Minerals and Natural Resources Department

Form C 103 Revised 1-1-89

DISTRICT I 2. Box 1980, Hobbs, NM 88240

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

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

WELL API NO. 30 015 01745
5. Indicate Type of Lease STATE [X] FEE [ ]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Artesia Unit
8. Well No. 12
9. Pool name or Wildcat Artesia, Q-G-SA (03230)

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well [X] Gas Well [ ] OTHER Injection well
2. Name of Operator Melrose Operating Company
3. Address of Operator c/o P.O. Box 953, Midland, TX 79702
4. Well Location Unit Letter E 1980' Feet From The North Line and 660 Feet From The West Line Section 35 Township 17S Range 28E NMPM Eddy County
10. Elevation (Show whether DF, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data
NOTICE OF INTENTION TO: FORM REMEDIAL WORK [ ] PLUG AND ABANDON [ ] TEMPORARILY ABANDON [ ] CHANGE PLANS [ ] PULL OR ALTER CASING [ ] OTHER: [ ]
SUBSEQUENT REPORT OF: REMEDIAL WORK [X] ALTERING CASING [ ] COMMENCE DRILLING OPNS. [ ] PLUG AND ABANDONMENT [ ] CASING TEST AND CEMENT JOB [X] OTHER As per Administrative Order #WEX 768 [ ]

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.
4-17-01: Rigged up BJ Services, pumped 20 bbls gel w/loss circulation material, 200 gals .RBP @ 2059'. Pumped 200 sx Cl C cement w/3% CaCl @ 15.4#/gal. Displaced with 2 1/2 bbls water. Rigged down BJ, ran in hole w/drill collars & bit, cleaned hole to 170'. SION.
4-18-01: Ran cement bond log - cement @ surface.
4-19-01: TOH w/RBP. Went in and tagged @ 2259', clean out, TIH w/bailer clean to 2310' PBTD.
4-20-01: TIH with packer set at 2112'. Loaded backside. Load tubing. SION.
4-21-01: Acidized well w/3000 gals 15% HCL. Swabbed, SION.
4-23-01: Ran tubing in hole. Shut-in well. Cleaned location.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE [Signature] TITLE Regulatory Agent DATE 7-2-01
E OR PRINT NAME Ann E. Ritchie TELEPHONE NO. 915 684-6381

(this space for State Use)
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_
CONDITIONS OF APPROVAL, IF ANY:



**CEMENT JOB REPORT**

CUSTOMER S O X Resources Inc		DATE 10-APR-01	F.R. # 100617070	SERV. SUPV. Charles Folmar					
LEASE & WELL NAME Melrose/Artesia Unit #12 - API 30015017300000		LOCATION Sec.35.T17S,R26E		COUNTY-PARISH-BLOCK Eddy New Mexico					
DISTRICT Artesia		DRILLING CONTRACTOR RIG # Key		TYPE OF JOB Squeezo-Mole					
SIZE & TYPE OF PLUGS		LIST-CSG-HARDWARE		PHYSICAL SLURRY PROPERTIES					
		No Shoes		SLURRY WGT PPG	SLURRY YLD FT <sup>3</sup>	WATER CPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
MATERIALS FURNISHED BY BJ									
300sk C+ 3% CaCl2+8#/sk LCM-1				14.8	1.32	6.3	02:30	70.5	44.98
H2O				8.34				3	
Available Mix Water 120 Bbl. Available Displ. Fluid 120 Bbl.				TOTAL				73.5	44.98

HOLE			TDC-CSG-D.P.					COLLAR DEPTHS		
SIZE	% EXCESS	DEPTH	SIZE	WGT.	TYPE	DEPTH	GRADE	SHOE	FLOAT	STAGE
0	0	0	5.5	15.5	CSG	3000	J-55	0	0	0

LAST CASING				PKR-CMT RET-OR PL-LINER		PERF. DEPTH		TOP CONN		WELL FLUID	
SIZE	WGT	TYPE	DEPTH	BRAND & TYPE		DEPTH	TOP	BTM	SIZE	THREAD	WGT.
				no packer		0	180	180	5.5	BRD	FRESH WATER

DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TDC PSI		MAX CSG PSI		MIX WATER SOURCE
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SG. PSI	RATED	Operator	RATED	Operator	
3	BBLS	H2O	8.34	0	0	1000	0	0	2900	1000	transport

**EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING:**

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	BBL FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES 2000 PSI	
09:30	150	0	2	5	GEL	CIRCULATING WELL - RIG <input type="checkbox"/> BJ <input checked="" type="checkbox"/>	
09:40	150	0	2	70	CMT	Start Gel/Cedar Fiber spacer	
10:15	0	0	0	0	0	Start Cement @ 14.8PPG 300 sk	
15:20	60	0	2	48	CMT	Shut Down	
15:50	0	0	0	0	0	Start top out	
						Shut down and job Circulated 10sk to pit 2.3bbl	

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	DDL CMT RETURNS/ REVERSED	TOTAL BBL PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	SERV. SUPV.
Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	0	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	2.5	123	0	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

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to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C 103  
Revised 1-1-89

*Op*

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO. 30 015 01754

5. Indicate Type of Lease  
STATE  FEE

State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"  
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
Oil Well  Gas Well  OTHER *Injection*

Artesia Unit

2. Name of Operator  
Melrose Operating Company

8. Well No. 13

3. Address of Operator  
P.O. Box 953, Midland, TX 79702

9. Pool name or Wildcat  
Artesia, Q-G-SA (03230)

4. Well Location  
Unit Letter F 1980' Feet From The North Line and 1980' Feet From The West Line  
Section 35 Township 17S Range 28E NMPM Eddy County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
3668'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data  
NOTICE OF INTENTION TO:  
PERFORM REMEDIAL WORK  PLUG AND ABANDON   
TEMPORARILY ABANDON  CHANGE PLANS   
PULL OR ALTER CASING   
OTHER:   
SUBSEQUENT REPORT OF:  
REMEDIAL WORK  ALTERING CASING   
COMMENCE DRILLING OPNS.  PLUG AND ABANDONMENT   
CASING TEST AND CEMENT JOB   
OTHER: As per Administrative Order #WEX 768

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 4-30-01: MIRU - shot perf @ 1800' - cement top @ 1830' as per cement bond log - ran Computa log.
- 5-1-01: Cleaned out hole, changed out wellhead.
- 5-2-01: Rigged up BJ Services, ran in hole with tension packer set @ 1745', loaded backside w/500 psi. Moved packer to 1475' - mixed 200 sx 12.4# per/gal 1.98 cu. ft./sk tailed with 100 sx CI C 2% CaCl, washed to pit. Displaced tubing and casing to 1650'. Ordered out bond log.
- 5-4-01: Ran bond log, holding pressure on casing. Top of cement @ 1380', shot new squeeze holes @ 510'. Call for cement.
- 5-5-01: BJ Services - pumped 200 sx, lite cement 1.89 yield & 200 sx CI C 2% CaCl to displace to 100' above squeeze hole.
- 5-7-01: Started drilling cement @ 330' - drilled to 520' continued - ordered out bond log.
- 5-8-01: Ran CBL - showed good bond @ 520' to 330' - perforated @ 300' and @ 20', set packer & pumped down tubing w/reverse unit.
- 5-9-01: Rigged up BJ, set packer @ 80', pumped 200 sx BJ lite cement 1.89 at 12.4# - pumped cement & saw cement @ surface. Fell back, pumped 400 sx circulating, mixed 200 sx CI C 2% CaCl, circulated. Circulated 44 bbls cement to pit. TOH w/packer WOC.
- 5-10-01: Began drilling out cement.
- 5-11-01: Drilled out cement to 2311'. 5-12-01: Drilled out to 2370'.
- 5-14-01: Nipple down BOP - hang tubing off - shut-in for day.
- 5-15-01: Ran in hole with tubing and cleaned location.

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

SIGNATURE *Ann E. Ritchie* TITLE Regulatory Agent DATE 7-2-01

TYPE OR PRINT NAME Ann E. Ritchie TELEPHONE NO. 915 684-6381

(this space for State Use)

APPROVED BY *Mike Stubbins* TITLE Envt. Eng. Spec. I DATE 7/25/2001

CONDITIONS OF APPROVAL, IF ANY:



**CEMENT JOB REPORT**

CUSTOMER <b>Mcrose Operating Co.</b>		DATE <b>09-MAY-01</b>	F.R. # <b>285810103</b>	SERV. SUPV. <b>Paulon Jackson</b>					
LEASE & WELL NAME <b>Arlesia Unit #13</b>		LOCATION <b>Sec 35 - T17S - R28E</b>		COUNTY-PARISH-BLOCK <b>Eddy New Mexico</b>					
DISTRICT <b>Arlesia</b>		DRILLING CONTRACTOR RIG # <b>Basic Energy PU</b>		TYPE OF JOB <b>Squeeze-Block</b>					
SIZE & TYPE OF PLUGS		LIST-CSG-HARDWARE		PHYSICAL SLURRY PROPERTIES					
No Shoe				BLURRY WGT PPG	SLURRY YLD FT <sup>3</sup>	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
<b>MATERIALS FURNISHED BY BJ</b>									
<b>600bu 25.65.6(P.C.G)</b>				12.6	1.93	10.71		212	152.53
<b>200bu C-2%CaCl</b>				14.8	1.34	8.34		48	30.36
<b>Water</b>				8.34					
Available Mix Water <b>280</b> Bbl.				Available Displ. Fluid <b>100</b> Bbl.		<b>TOTAL</b>		<b>260</b>	<b>182.89</b>

HOLE			TBO-CSG-D.P.					COLLAR DEPTHS		
BOE	% EXCESS	DEPTH	SIZE	WGT.	TYPE	DEPTH	GRADE	SHOE	FLOAT	STAGE
0	0	0	2.375	4.7	TBG	60	N-80	0	0	0

LAST CASING				PKR-CMT RET-BR PL-LINER		PERF. DEPTH		TOP CONN		WELL FLUID	
SEC	WGT	TYPE	DEPTH	BRAND & TYPE	DEPTH	TOP	BTM	SIZE	THREAD	TYPE	WGT.
55	14	CSG		Retrievable packer	60	0	0	2.375	8 RD	BRINE	6.0

DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TBO PSI		MAX CSG PSI		MIX WATER SOURCE
VOLUME	NOM	TYPE	WGT.	BUMP PLUG	TO REV.	SG. PSI	RATED	Operator	RATED	Operator	
1.5	BBLs	Water	8.34	0	0	0	11200	8960	0	0	Transport

**EXPLANATION; TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING:**

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	2000 PSI
08:15	0	0	0	0		CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
08:30	0	0	0	0		Arrived on location	
08:35	2000	0	1	1	FMV	Safety meeting	
08:58	60	0	4	30	FMV	Test lines	
09:05	120	0	4	40	12.6# CMT	Break circulation	
09:15	100	0	2	80	12.6# CMT	Cement	
10:18	0	0	0	0		Cement	
10:27	110	0	2	15	12.6# CMT	Shutdown, Check to see if cement will fall back	
10:35	100	0	3	48	14.8# CMT	Cement	
10:45	100	0	3	1.5	FMV	Tail cement	
						Displace	
						Circulated 125 Bbls / 44 Bbls to pit	
						Thanks, Keith and Crew!!!	

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL CMT RETURNS/ REVERSED	TOTAL BBL PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	SERV. SUPV.
Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	44	285	0	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	<i>Keith</i>

+Submit 3 Copies to Appropriate District Office

State of New Mexico Energy, Minerals and Natural Resources Department

Form C 103 Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I O. Box 1980, Hobbs, NM 88240
DISTRICT II P.O. Drawer DD, Artesia, NM 88210
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO. 30 015 01746
5. Indicate Type of Lease STATE [X] FEE [ ]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Artesia Unit
8. Well No. 23
9. Pool name or Wildcat Artesia, Queen-Grayburg-San Andres (03230)

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well [ ], Gas Well [ ], OTHER Injection well [X]
2. Name of Operator Melrose Operating Company
3. Address of Operator c/o P.O. Box 953, Midland, TX 79702 915 684-6381
4. Well Location Unit Letter L 1980 Feet From The South Line and 660 Feet From The West Line
Section 35 Township 17S Range 28E NMPM Eddy County
10. Elevation (Show whether DF, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data
NOTICE OF INTENTION TO: FORM REMEDIAL WORK [ ], PLUG AND ABANDON [ ], TEMPORARILY ABANDON [ ], CHANGE PLANS [ ], PULL OR ALTER CASING [ ], OTHER [ ]
SUBSEQUENT REPORT OF: REMEDIAL WORK [ ], ALTERING CASING [ ], COMMENCE DRILLING OPNS. [ ], PLUG AND ABANDONMENT [ ], CASING TEST AND CEMENT JOB [ ], OTHER MIT [X]

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)SEE RULE 1103.
7-20-01: Ran mechanical integrity test - pressured up to 300 psi, held for 30 minutes. Test witnessed by Gerry Guy with the Oil Conservation Division. Chart given to Gerry.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE [Signature] TITLE Regulatory Agent DATE 7-26-01
E OR PRINT NAME Ann E. Ritchie TELEPHONE NO. 915 684-6381

(this space for State Use)
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_
CONDITIONS OF APPROVAL, IF ANY:

+Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C 103  
Revised 1-1-89

**DISTRICT I**

O. Box 1980, Hobbs, NM 88240

**DISTRICT II**

P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**

1000 Rio Brazos Rd., Aztec, NM 87410

**OIL CONSERVATION DIVISION**

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

WELL API NO.	30 015 01742
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	Artesia Unit
8. Well No.	29
9. Pool name or Wildcat	Artesia, Queen-Grayburg-San Andres (03230)

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> OTHER Injection well <input checked="" type="checkbox"/>
2. Name of Operator Melrose Operating Company
3. Address of Operator c/o P.O. Box 953, Midland, TX 79702 915 684-6381
4. Well Location Unit Letter <u>N</u> <u>990</u> Feet From The <u>South</u> Line and <u>1650</u> Feet From The <u>West</u> Line Section <u>35</u> Township <u>17S</u> Range <u>28E</u> NMPM <u>Eddy</u> County
10. Elevation (Show whether DF, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
REFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: _____ <input type="checkbox"/>		OTHER MIT <input checked="" type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

8-8-01: As per Administrative Order #WFX-768 the Oil Conservation Division was notified and witnessed a MIT test on the Artesia Unit, Well #29. The well was pressure tested to 300 psi and held for 30 minutes. The chart was kept by Gary Guy with the Oil Conservation Division.

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

SIGNATURE Ann E. Ritchie TITLE Regulatory Agent DATE 7-26-01  
TYPE OR PRINT NAME Ann E. Ritchie TELEPHONE NO. 915 684-6381

(this space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

+Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C 103  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

WELL API NO.  
30 015 01746/015 01742

5. Indicate Type of Lease  
STATE  FEE

6. State Oil & Gas Lease No.

**SUNDRY NOTICES AND REPORTS ON WELLS**  
( DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"  
(FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name  
  
Artesia Unit

1. Type of Well:  
Oil Well  Gas Well  OTHER Injection well X

8. Well No.  
23 & 29

2. Name of Operator  
Melrose Operating Company

9. Pool name or Wildcat  
Artesia, Queen-Grayburg-San Andres (03230)

3. Address of Operator  
c/o P.O. Box 953, Midland, TX 79702 915 684-6381

4. Well Location  
Unit Letter L 1980 Feet From The South Line and 660 Feet From The West (23) Line  
Section 35 Township 17S Range 28E NMPM Eddy County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

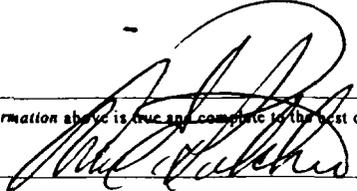
11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: _____ <input type="checkbox"/>		OTHER Compliance _____ <input checked="" type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

As per administrative Order NO. WFX-768, review of the data reveals that sufficient cement was utilized to bring cement to a calculated height @ surface using 25% excess. Wellbore diagram attached.

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

SIGNATURE  TITLE Regulatory Agent DATE 8-29-01

TYPE OR PRINT NAME Ann E. Ritchie TELEPHONE NO. 915 684-6381

(this space for State Use)

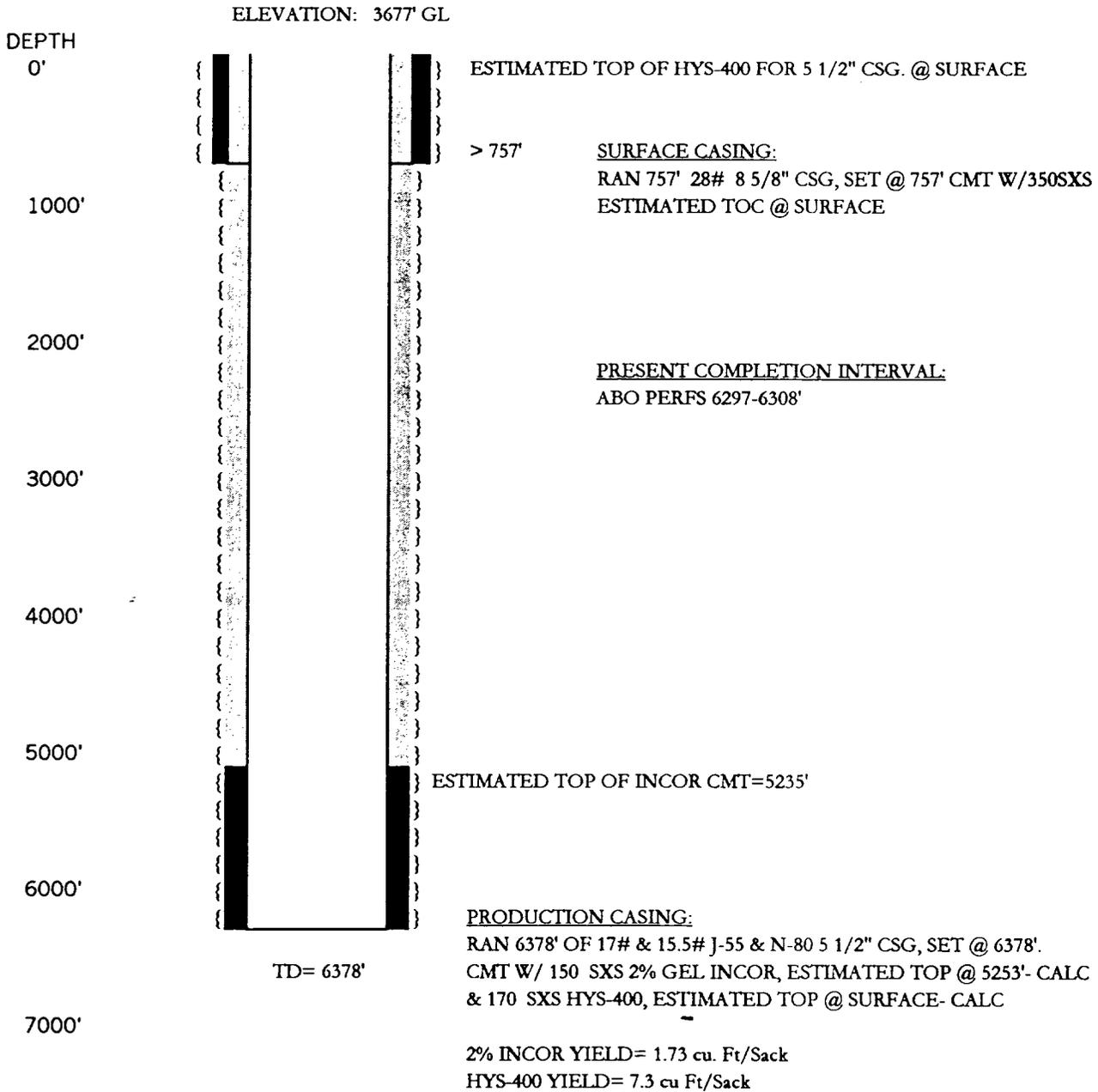
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

# ARCO PERMIAN OPERATING CURRENT CONFIGURATION

WELL: EMPIRE ABO UNIT G-38  
 FIELD: EMPIRE ABO  
 INTERVAL: ABO  
 COMP: 8/21/61  
 IP: 130 BOPD  
 SPUDED: 8/9/61

LOCATION:  
 2310' FSL & 1650' FWL  
 SEC 35, T-17-S, R-28-E  
 EDDY COUNTY, NM  
 API #: 30-015-01739



NEW MEXICO OIL CONSERVATION COMMISSION

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

RECEIVED

AUG 29 1961 FORM C-103 (Rev 3-55)

O. C. C. ARTESIA, OFFICE

Name of Company <b>Hondo-Western-Yates</b>		Address <b>Box 129, Artesia, New Mexico</b>				
Lease <b>State 'A'</b>	Well No. <b>39</b>	Unit Letter <b>K</b>	Section <b>35</b>	Township <b>17-S</b>	Range <b>28-E</b>	
Date Work Performed	Pool <b>Empire Abo</b>	County <b>Eddy</b>				

THIS IS A REPORT OF: (Check appropriate block)

- Beginning Drilling Operations   
  Casing Test and Cement Job   
  Other (Explain):  
 Plugging   
  Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

8-9-61 Ran 757' of 8-5/8" OD 28# used casing, set and cemented with 350 sks.

8-23-61 Ran 6378' of 5-1/2" casing as follows:  
 821' of 5-1/2" OD 17# N-80  
 2100' of 5-1/2" OD 17# J-55  
 3457' of 5-1/2" OD 15.5# J-55  
 Cemented casing with 170 Units of HYS 400 plus 150 sks.  
 2% gel Incore.

8-23-61 Ran 6170' of 2" EUE 4.70# J-55 smls. tubing.  
 Packer set at 6170  
 Perforations: 6297 - 6308 2/ft.  
 Treated formation thru perforations with 1000 gallons  
 15% regular acid with DS-50 added.

G-  
EAL #38

Witnessed by <b>A. J. Deans</b>	Position <b>Dist. Prod. Supt.</b>	Company <b>Hondo Oil &amp; Gas Company</b>
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FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

ORIGINAL WELL DATA				
D F Elev.	TD	P BTD	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval			Producing Formation(s)	

RESULTS OF WORKOVER						
Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION		I hereby certify that the information given above is true and complete to the best of my knowledge. <b>8-24-61</b>	
Approved by <i>M. L. Armstrong</i>	Title <b>OIL AND GAS INSPECTOR</b>	Name <i>A. J. Deans by Emburyson</i>	Position <b>Dist. Prod. Supt.</b>
Date <b>2116 30 1961</b>		Company <b>Hondo Oil &amp; Gas Company</b>	