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OXY USA INC.

Box 50250, Midland, TX 79710

September 14, 1993

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504

10867

Attention: Mr. Bill Lemay, Director

Re: Application of OXY USA Inc. for Enhanced Oil Recovery Project Qualification for Recovered Oil Tax Rate for the East Eumont Unit, Queen Formation, Eumont Yates Seven Rivers Queen Pool, Lea County, New Mexico

Dear Mr. Lemay:

Please find enclosed our application to qualify the north portion of the East Eumont Unit under the EOR severance tax program. OXY recently bought this property from Sirgo Operating Company. In the near future we plan to commence injection on 80 acre five-spot patterns in this portion of the unit. This area has never been waterflooded. The project will cost around \$3.8 MM and is estimated to recover approximately 775,000 barrels of additional oil. Consequently, we believe it qualifies as a new project as defined in NMOCD Order No. R-9708.

For ease of processing, following is a list of the attachments as they are described in Order No. R-9708:

1. Operator's Name & Address:

OXY USA Inc. P. O. Box 50250 Midland, Texas 79710

- 2. Legal description of the project area: (attached)
- 3. Status of operations in project area: First, a plat illustrating the project area (in yellow) is attached. Then a list of wells within this area and their current status follows. Note that all the wells in the project area are currently inactive. A copy of Order No. R-2894 approving the Unit Agreement is included. A production history graph for the entire unit follows the NMOCD order.
- 4. *Method of recovery to be used:* An information sheet about the injection fluids, volumes, etc., is next. Order No. R-2901, which originally authorized the waterflood project in 1965, follows. This order covered injection wells within the project area, but these wells were

never converted to injection service. However, a C-108 is included which covers all injection wells in this project area. This is in case there is a problem approving this application because the original injection order pre-dates the tax credit legislation. A C-108 is probably necessary anyway because our plan envisions an injection well that has not been previously approved by the Division.

5. **Description of the project:** A list of wells in the project area entitled "proposed status" is the next item. Following that are cost estimates for the project and a graph of the production history with expected oil recovery.

As mentioned above, included with this application is a request to administratively approve an expansion of our existing C-108 authority. If you have any questions relating to these requests, please call me at 915/685-5913 or Scott Gengler at 915/685-5825. Thank you for considering our applications.

Sincerely,

Richard E. Foppiano

Regulatory Affairs Advisor

Ruhard E. Forgran

Western Region - Midland

REF/ref

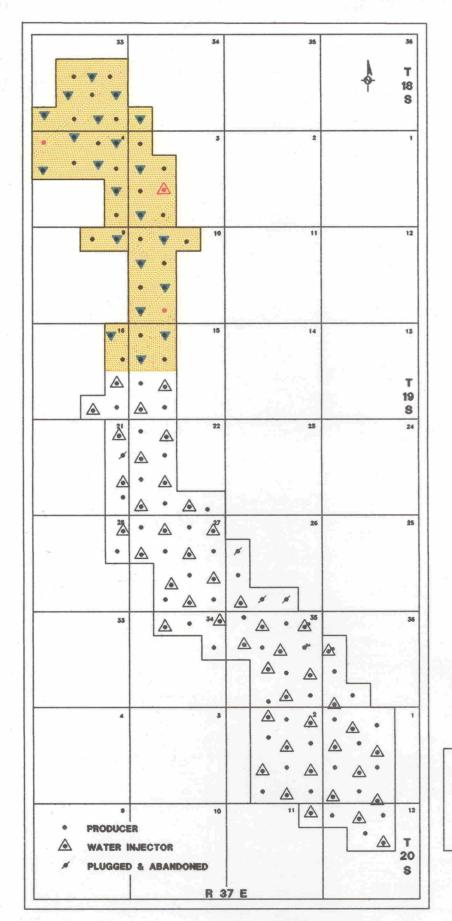
XC: NMOCD, Santa Fe (orig + 2 copies THIS COPY FOR

NMOCD, Hobbs Tom Kellahin

<u>East Eumont Unit</u> North Segment Waterflood Project

Field Name: Eumont Yates Seven Rivers Queen Formation Name: Queen (Penrose)

Legal Description	<u> # of Acres</u>
S/2 of the NE/4 of Section 33, T-18-S, R-37-E, Lea County	80
SE/4 of the NW/4 of Section 33, T-18-S, R-37-E, Lea County	40
SW/4 of the SW/4 of Section 33, T-18-S, R-37-E, Lea County	40
E/2 of the SW/4 of Section 33, T-18-S, R-37-E, Lea County	80
SE/4 of Section 33, T-18-S, R-37-E, Lea County	160
SW/4 of the SW/4 of Section 34, T-18-S, R-37-E, Lea County	40
NW/4 of the NW/4 of Section 3, T-19-S, R-37-E, Lea County	40
S/2 of the NW/4 of Section 3, T-19-S, R-37-E, Lea County	80
SW/4 of Section 3, T-19-S, R-37-E, Lea County	160
N/2 of Section 4, T-19-S, R-37-E, Lea County	320
E/2 of the SE/4 of Section 4, T-19-S, R-37-E, Lea County	80
N/2 of the NE/4 of Section 9, T-19-S, R-37-E, Lea County	80
NW/4 of the NE/4 of Section 10, T-19-S, R-37-E, Lea County	40
W/2 of Section 10, T-19-S, R-37-E, Lea County	320
NW/4 of Section 15, T-19-S, R-37-E, Lea County	160
E/2 of the NE/4 of Section 16, T-19-S, R-37-E, Lea County	80
Total	1800



PROPOSED PRODUCER

A PROPOSED WATER INJECTOR

▼ CONVERT TO WATER INJECTION

EAST EUMONT QUEEN UNIT

PROJECT AREA

· 1000

Bovised: 9/7/93 Wells Revised: 5/26/93

East Eumont Unit North Segment Waterflood Project Current Status

Well	Location_	Status
East Eumont Unit #1	2310' FNL & 2310' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #2	2310' FNL & 1980' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #3	2310' FNL & 990' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #4	1980' FSL & 1980' FWL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #5	1980' FSL & 1980' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #6	1980' FSL & 660' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #7	880' FSL & 660' FWL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #8	660' FSL & 2310' FWL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #9	660' FSL & 1650' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #10	660' FSL & 660' FEL, Sec 33, T18S, R37E	Inactive Producer
East Eumont Unit #11	660' FSL & 660' FWL, Sec 34, T18S, R37E	Inactive Producer
East Eumont Unit #12	330' FNL & 2310' FWL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #13	660' FNL & 660' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #14	660' FNL & 1652' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #15	702' FNL & 660' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #16	2144' FNL & 589' FWL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #17	1739' FNL & 2304' FWL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #18	1837' FNL & 1650' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #19	2065' FNL & 660' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #20	2064' FNL & 660' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #21	2062' FNL & 1980' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #22	1983' FSL & 660' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #23	1982' FSL & 660' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #24	660' FNL & 660' FEL, Sec 4, T19S, R37E	Inactive Producer
East Eumont Unit #25	660' FSL & 660' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #26	660' FSL & 1980' FWL, Sec 3, T19S, R37E	Inactive Producer
East Eumont Unit #27	660' FNL & 1980' FEL, Sec 9, T19S, R37E	Inactive Producer
East Eumont Unit #28	660' FNL & 660' FEL, Sec 9, T19S, R37E	Inactive Producer
East Eumont Unit #29	660' FNL & 660' FWL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #30	660' FNL & 1950' FWL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #31	800' FNL & 2080' FEL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #32	1980' FNL & 660' FWL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #33	1980' FNL & 1980' FWL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #34	1980' FSL & 660' FWL, Sec 10, T19s, R37E	Inactive Producer
East Eumont Unit #35	1980' FSL & 1980' FWL, Sec 10, T198, R37E	Inactive Producer
East Eumont Unit #36	660' FSL & 660' FWL, Sec 10, T19S, R37E	Inactive Producer
East Eumont Unit #37	660' FNL & 990' FEL, Sec 16, T19S, R37E	Inactive Producer
East Eumont Unit #38	660' FNL & 660' FWL, Sec 15, T19S, R37E	Inactive Producer
East Eumont Unit #39	660' FNL & 1980' FWL, Sec 15, T19S, R37E	Inactive Producer
East Eumont Unit #40	1980' FNL & 330' FEL, Sec 16, T19S, R37E	Inactive Producer
East Eumont Unit #41	1980' FNL & 660' FWL, Sec 15, T19S, R37E	Inactive Producer
East Eumont Unit #42	1980' FNL & 1980' FWL, Sec 15, T19S, R37E	Inactive Producer

NOW, on this 21st day of April, 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.
- That the applicant, Tidewater Oil Company, seeks approval of the East Eumont Unit Agreement covering 5,535.06 acres, more or less, of State, Federal, and Fee lands described as follows:

LEA COUNTY, NEW MEXICO TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM Section 33: S/2 NE/4, SE/4 NW/4, SE/4, S/2 SW/4 and NE/4 SW/4

Section 34: SW/4 SW/4

TOWNSHIP 19 SOUTH, RANGE 37 EAST, NMPM Section 3: Lot 4, S/2 NW/4 and SW/4 Section 4: N/2 and E/2 SE/4

Section 9: N/2 NE/4 Section 10: W/2 and NW/4 NE/4

Section 15: W/2

Section 16: E/2 E/2 and SW/4 SE/4

Section 21: E/2 E/2

Section 22: W/2 and S/2 SE/4

Section 26: SW/4 NW/4, NW/4 SW/4,

S/2 SW/4, and SW/4 SE/4 Section 27: N/2, SE/4, and E/2 SW/4

Section 28: E/2 NE/4

Section 34: NE/4 NW/4, NW/4 NE/4, and

E/2 NE/4

Section 35: E/2, NW/4 and E/2 SW/4 Section 36: SW/4 NW/4, NW/4 SW/4 and

S/2 SW/4

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM Section 1: W/2 and W/2 E/2

Section 2: E/2, E/2 NW/4, and SE/4 SW/4
Section 11: NE/4 NE/4
Section 12: NW/4 NW/4, E/2 NW/4 and W/2 NE/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

- (1) That the East Eumont Unit Agreement is hereby approved.
- (2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.
- (3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or

EAST EUMONT UNIT Lea County, New Mexico

Order No. R-2894, Approving the East Eumont Unit Agreement, Lea County, New Mexico, April 21, 1965.

Application of Tidewater Oil Company for Approval of the East Eumont Unit Agreement, Lea County, New Mexico

> CASE NO. 3233 Order No. R-2894

ORDER OF THE COMMISSION

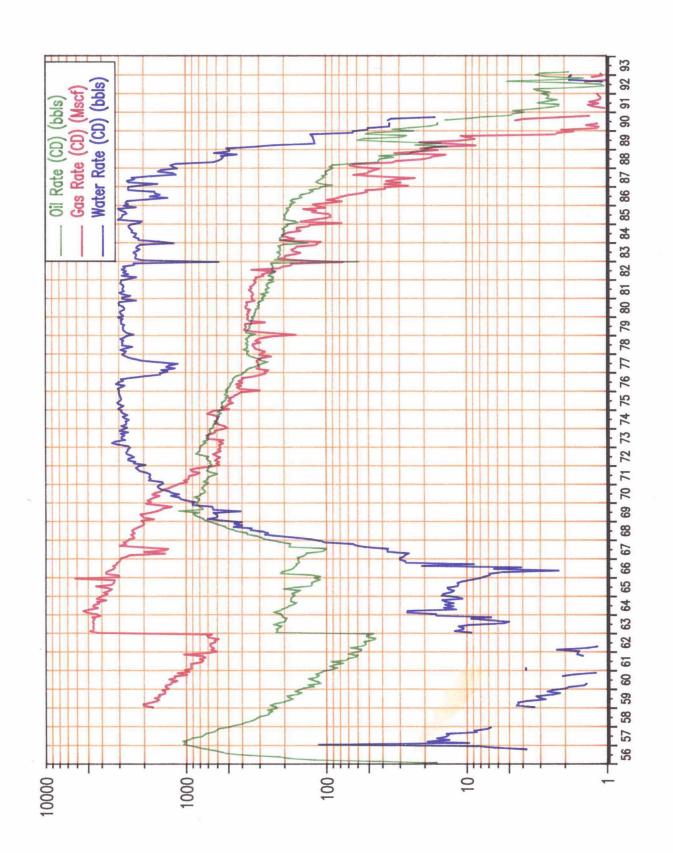
BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on April 7, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

(EAST EUMONT UNIT - Cont'd.)

contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

- (4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.
- (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.



East Eumont Unit North Segment Waterflood Project

Fluid to be Injected: Water

Volumes to be Injected:

300 BWPD per well

Source of Water:

1 - Produced water from the unit

2 - Fresh water

Proposed Date of Injection: November 1, 1993

EUMONT POOL (East Eumont Unit Waterflood) Lea County, New Mexico

Order No. R-2901, Authorizing Tidewater Oil Company to Institute a Waterflood Project in the East Eumont Unit Area in the Eumont Pool, Lea County, New Mexico, May 4, 1965.

Application of Tidewater Oil Company for a Waterflood Project, Lea County, New Mexico.

> **CASE NO. 3234** Order No. R-2901

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on April 7, 1965, at Santa Fe, New Mexico, before

Examiner Elvis A. Utz.

NOW, on this 4th day of May, 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

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

subject matter thereof.

- (2) That the applicant, Tidewater Oil Company, seeks permission to institute a waterflood project in the East Eumont Unit Area, Eumont Pool, by the injection of water into the Yates. Seven Rivers and Queen formations through 69 injection wells located in said unit area.
- (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, Tidewater Oil Company, is hereby authorized to institute a waterflood project in the East Eumont Unit Area, Eumont Pool, by the injection of water into the Yates, Seven Rivers and Queen formations through the followingdescribed 69 wells in Lea County, New Mexico:

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Operator - Lease	Well No.	Unit	Section			
TOWNSHIP 18 SOUTH, RA	NGE 37 EAS	T, NMI	P M			
Antwell Lowe State "B"	2	G	33			
Continental State "C-33"	3	K	33			
Continental State "C-33"	1	I	33			
Schermerhorn Linam "B"	1	M	33			
Aztec State ''E-33-A''	2	0	33			
Tidewater State "AH"	1	M	34			
TOWNSHIP 19 SOUTH, RA	NGE 17 EAS	T, NM	P M			
Schermerhorn Linam "F"	1	C	4			
Texaco-Saunders Federal	1	Α	4			
Schermerhorn Linam	1	S	4			
Atlantic Federal "A"	2	G	4			
Aztec State "E-3"	4	E	3 4 3 3			
Texaco McMillan "B"	2	I	4			
Proposed Inj. Well		K	3			
Texaco McMillan 'A''	2	M	3			
Tidewater State "AD"	1	A	3			
Aztec State "E-10"	2	С	10			
Gulf Kutter NCT E	2	S	10			
Humble State ''E''	4	K	10			
Humble State ''S''	2 3	M	10			
Continental State "KU"		Α	16			
Tidewater State "AI"	4	С	15			
Tidewater State "AI"	2	Ε	15			
Continental State "KU"	1	I	16			
Tidewater Mobil State "Q"	3	K	15			
Continental State "KJ"	1	0	16			
Tidewater Mobil State "O"	1	M	15			

(EUMONT (EAST EUMONT UNIT WATERFLOOD) POOL - Cont'd.)

	A	21
4	С	22
1	S	22
1	I	21
	K	22
2	M	22
1	0	22
4	A	26
3	С	27
4	A	27
3	S	27
ī	G	27
3	S	26
1	K	27
1	I	27
2	0	27
1	M	36
1	0	26
4	С	34
1	A	34
2		35
1	A	35
1		35
1		35
1		36
2		35
2		35
3	_	35
1	M	36
	1 1 2 1 4 3 4 3 1 3 1 1 2 1	4 C S I K M O A C A S G S K I O M O C A C A F G E I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM

Gulf Greutt "NCTT"	2	С	2
Tidewater State "AG"	3	A	2
Humble State "AG"	6	С	1
Tidewater State "AG"	2	G	2
Humble State "AG"	2	E	1
Schermerhorn Weir	1	G	1
Continental State "A-2-A"	2	I	2
Proposed Injector		K	1
Continental State "A-2-A"	3	0	2
Humble State "AG"	1	M	1
Water Flood Assoc. Gulf St.	2	0	1
Texaco Weir "B"	3	A	11
Continental U.SSkaggs "B"	3	Ç	12
Texaco Weir "A"	6	G	12

- (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.

<u>Fast Eumont Unit</u> North Segment Waterflood Project Proposed Status

	Well	L						Locat	ion				Status
East	Eumont	Unit	#1	2310'	FNL	&	2310′	FEL,	Sec	33,	T18S,	R37E	Producer
ı. East	Eumont	Unit	#2	2310'	FNL	&	1980'				T18S,		Injector
East	Eumont	Unit	#3	2310′	FNL	&	990′				T18S,		Producer
	Eumont			1980'	FSL	&	1980'				T18S,		Injector
	Eumont			1980'			1980'				T18S,		Producer
	Eumont			1980'			660′				T18S,		Injector
	Eumont			880'			660′				T18S,		Injector
	Eumont			660′			2310′	•		-	T18S,		Producer
	Eumont			660'			1650'				T18S,		Injector
	Eumont			660 ′			660′				T185,		Producer
	Eumont			660′	FSL	æ	660′	•		-	T185,		Injector
	Eumont			330′	FNL	&	2310'	FWL,			T195,		Injector
East	Eumont	Unit	#13	660 ′	FNL	&	660′	FEL,			T195,		Producer
	Eumont			660 ′	FNL	&	1652'	FEL,			T19S,		Injector
East	Eumont	Unit	#15	702′	FNL	&	660′	FWL,	Sec		T19S,		Producer
q East	Eumont	Unit	#16	2144'	FNL	&	589 ′	FWL,			T19S,		Injector
East	Eumont	Unit	#17	1739'	FNL	&	2304'	FWL,			T19S,		Producer
ιο.East	Eumont	Unit	#18	1837'	FNL	&	1650'	FEL,			T19S,		Injector
East	Eumont	Unit	#19	2065′	FNL	&	660 ′	FEL,	Sec	-	T19S,		Producer
₁₁ East	Eumont	Unit	#20	2064'	FNL	&	660′	FWL,			T195,		Injector
East	Eumont	Unit	#21	2062'	FNL	&	1980'	FWL,		3,	T195,	R37E	Producer
n East	Eumont	Unit	#22	1983'	FSL	&	660′	FEL,	Sec	4,	T19S,	R37E	Injector
East	Eumont	Unit	#23	1982'	FSL	&	660 ′	FWL,	Sec		T19S,	R37E	Producer
East	Eumont	Unit	#24	660 ′	FNL	&	660′	FEL,	Sec	4,	T19S,	R37E	Producer
ع East	Eumont	Unit	#25	660 ′	FSL	&	660′	FWL,			T19S,	R37E	Injector
East	Eumont	Unit	#26	660 ′	FSL	&	1980′	FWL,	Sec	3,	T19S,	R37E	Producer
East	Eumont	Unit	#27	660 ′	FNL	&	1980′	FEL,	Sec	9,	T19S,	R37E	Producer
14 East	Eumont	Unit	#28	660 ′			660 ′	FEL,			T19S,		Injector
East	Eumont	Unit	#29	660 ′	FNL	&	660 ′				T19S,		Producer
	Eumont			660′			1950′	FWL,	Sec	10,	T19S,	R37E	Injector
	Eumont			800 ′			2080′	FEL,	Sec	10,	T19S,	R37E	Producer
	Eumont			1980 ′			660′	FWL,	Sec	10,	T19S,	R37E	Injector
	Eumont		••	1980 ′	\mathtt{FNL}	&	1980′				T19S,		Producer
	Eumont		••	1980′			660′	FWL,	Sec	10,	T19s,	R37E	Producer
	Eumont			1980 ′			1980′				T19S,		Injector
,s East	Eumont	Unit	#36	660 ′	FSL	&	660 ′	FWL,			T19S,		Injector
	Eumont			660′	FNL						T19S,		Injector
	Eumont			660 ′			660 ′	•			T19S,		Producer
•	Eumont			660′			1980 ′	-		•	T19S,		Injector
	Eumont			1980'							T19S,		Producer
	Eumont			1980'				•		-	T19S,		Injector
	Eumont			1980'							T19S,		Producer
	Eumont			660′			660'	FWL,			T19S,		Producer
•	Eumont						1980'	FWL,		-	T19S,		Injector
East	Eumont	Unit	#134	660 ′	FSL	&	1980 ′	FWL,	Sec	10,	T19S,	R37E	Producer

Note: Well #132,133, and 134 may be moved due to surface conditions

East Eumont Unit North Segment Waterflood Project Cost Estimates

Drill and Equip 2 Producers	\$	450,000
Drill and Equip 1 Injector	\$	180,000
Convert 21 Producers to Injection	\$	588,000
Reactivate 21 Producers	\$ 3	1,301,000
Upgrade Battery and Injection Facilities	<u>\$ 1</u>	1,246,000
Total Project Cost Estimate	\$ 3	3,765,000

