Mack Energy Corporation-

Post Office Box 1359 Artesia, New Mexico 88211-1359 (505) 748-1288 OIL CONSERVATION DIVISION RECEIVED

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March 31, 1993

Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87501

Attn: Mike Stogner

Dear Mr. Stogner:

Mack Energy Corporation respectfully requests an administrative approval without notice and hearing of the following unorthodox well location pursuant to Order R-7808 of the New Mexico Oil Conservation Division. The well location's legal description is as follows:

> G-J West Coop Unit #120 2160 FNL 2615 FWL F Sec. 21-T17S-R29E Eddy County, New Mexico

This well will be completed in the Grayburg San Andres formation in the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool.

Attached to this application are the following exhibits.

- A.) Well location and acreage dedication plat (form C-102) filed with the Artesia office of the Oil Conservation Division (Exhibit A).
- B.) A plat showing the proposed unorthodox locations, the respective proration units, and the offsetting proration units (Exhibit C).

Please note that Mack Energy Corporation is the operator of all offsetting proration units in the Grayburg San Andres formation of the Grayburg Jackson Seven Rivers Queen San Andres Pool, and therefore no other operators are required to be notified. Oil Conservation Division March 31, 1993 Page 2

Thank you for your assistance in this matter. If you have any questions, please feel free to call.

Sincerely,

MACK ENERGY CORPORATION

>. Carter 11 mc

Crissa D. Carter Production Clerk

/cc

Enclosures

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

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OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

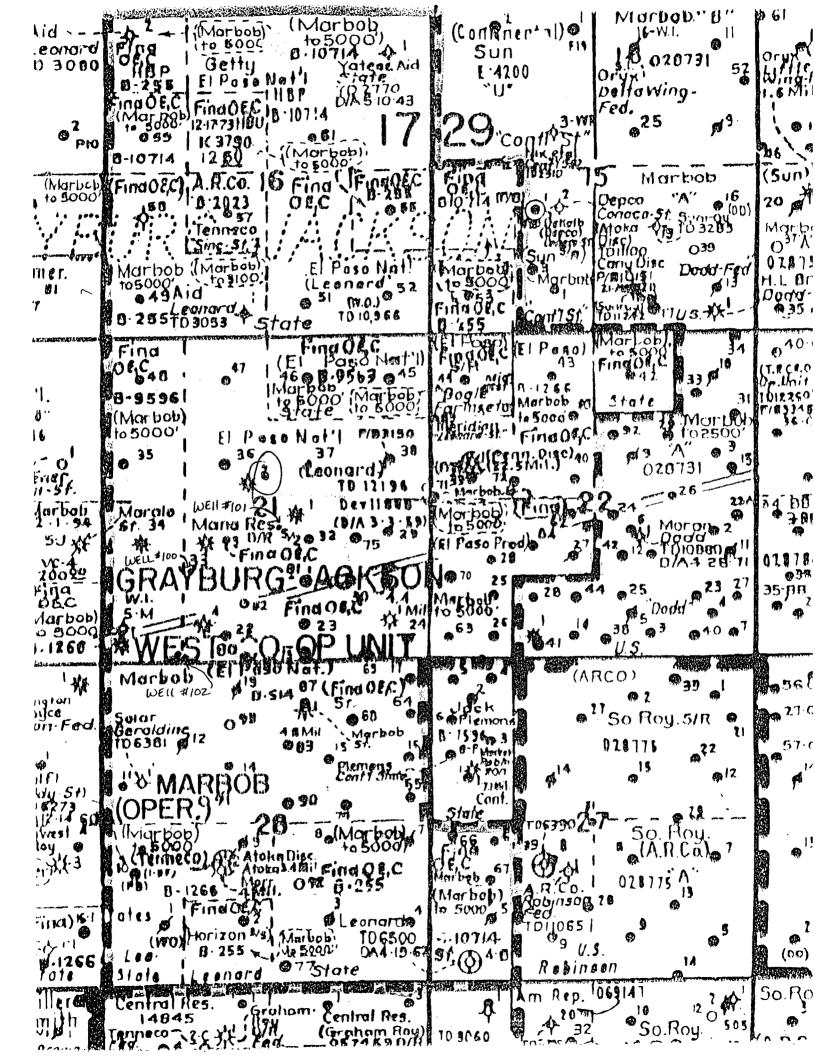
DISTRICT II P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator M	ACK ENERGY C	ORPORATION	G.J. WEST			Well No. 120	
Unit Letter Section Township			Range	······································	County		
F	21	17 SOUTH	-	29 EAST NMPM		EDDY	
Actual Footage Location of Well:							
		RTH line and	2615	feet from	the WES		
Ground Level Elev.			Pool	Jackson SR QN G	RGA	Dedicated Acreage: 40	
3607.2'	San Andre		<u>~</u>			40 Acres	
1. Outline the ac	creage dedicated to	the subject well by colored p	pench or nachure	marks on the plat below.			
2. If more than	2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).						
unitization, fo	orce-pooling, etc.?			he interest of all owners	been consol	idated by communitization,	
Yes		If answer is "yes" type o					
If answer is "no" this form necess		nd tract descriptions which l	nave actually been	n consolidated. (Use reve	rse side of		
No allowable wi	ill be assigned to	the well unit all interest rd unit, eliminating such in				nitization, forced-pooling,	
						OR CERTIFICATION	
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					Carlo Carlos	PROVALD J. ELDSON 3239	
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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3404 Order No. R-3069

APPLICATION OF TENNECO OIL COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 25, 1966, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>lst</u> day of June, 1966, 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, Tenneco Oil Company, amended its application for water injection into the Grayburg and San Andres formations through six wells in Sections 22 and 28 at the hearing and now seeks permission to institute a waterflood project in the Grayburg-Jackson Pool by the injection of water into the San Andres formation only through four injection wells in Section 28, Township 17 South, Range 29 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.

-2-CASE No. 3404 Order No. R-3069

(5) That the applicant further seeks the establishment of an administrative procedure whereby additional wells could be placed on water injection and additional leases could be included in the waterflood project area upon unitization.

(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, Tenneco Oil Company, is hereby authorized to institute a waterflood project in the Grayburg-Jackson Pool by the injection of water into the San Andres formation through the following-described wells in Section 28, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico:

Well Name and Number Location

State	"Г"	No.	16	NE/4	SW/4
State	"L"	No.	18	SW/4	NE/4
State	₩Кп	No.	11	SW/4	SE/4
State	"K"	No.	13	NE/4	SE/4

(2) That the subject waterflood project is hereby designated the Grayburg Jackson West 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 said waterflood project to include additional injection wells and leases as may be necessary to complete an efficient waterflood injection pattern upon unitization, and provided that the name of said waterflood project shall be changed to Grayburg Jackson West Unit Waterflood Project upon such unitization.

(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.

-3-CASE No. 3404 Order No. R-3069

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 8433 Order No. R-7808

APPLICATION OF MARBOB ENERGY CORPORATION FOR AN EXCEPTION TO GENERAL RULE 104 F I AND FOR INFILL WELL FINDINGS, EDDY COUNTY, NEW MEXICO.

See Blie Order No

7808 - A

ORDER OF THE DIVISION

BY THE DIVISION:

A. A.

This cause came on for hearing at 8 a.m. on December 10, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana.

NOW, on this <u>5th</u> day of June, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Marbob Energy Corporation, seeks approval of an administrative procedure for the approval of unorthodox oil well locations within the lands described in Exhibit "A", attached hereto and made a part hereof, hereafter referred to as the "Subject Area".

(3) The applicant also seeks a finding that infill wells within the Subject Area, completed in the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool, are necessary to effectively and efficiently drain portions of the reservoir which cannot be drained by any existing wells in the Subject Area.

(4) Section 271.305(b) of the Rules of the Federal Energy Regulatory Commission promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new, onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the -2-Case No. 8433 Order No. R-7808

reservoir covered by the proration unit which cannot be so drained by any existing well within the proration unit.

(5) The lateral continuity of the Grayburg-San Andres pay zone throughout the Subject Area is considered to be good in a gross sense, but localized barriers to fluid flow exist between wells because of the lenticular nature of the reservoir rock.

(6) Applicant's drilling of nineteen "Infill" wells (as described in Exhibit "B" attached hereto and made a part hereof), have increased the estimated ultimate recovery of the Subject Area by 833,100 barrels of oil and 1,781,000 mcf of gas.

(7) The current 40-acre spacing and promation units in the Subject Area have been inadequately drained of recoverable reserves by the existing wells and "Infill" wells are necessary to effectively and efficiently drain reserves from said promation units.

(8) The applicant plans to drill additional "Infill" wells within the Subject Area.

(9) Much of the Subject Area has previously been subject to secondary recovery.

(10) The applicant plans to drill additional wells in the Subject Area at orthodox and unorthodox locations both to increase current recovery and to increase the efficiency of a planned secondary recovery project.

(11) Prior to initiation of active secondary recovery operations in the subject Area, an administrative procedure should be established for approval of the drilling of wells at unorthodox locations therein provided that no well should be located closer than 330 feet to the boundary of any lease or unitized area nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(12) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil in the affected pool, will prevent economic loss caused by the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

(13) The application should be approved.

-3-Case No. 8433 Order No. R-7808

IT IS THEREFORE ORDERED THAT:

(1) The nineteen infill wells drilled by the applicant, Marbob Energy Corporation, and described in Exhibit "B" attached to this order, are hereby found to be necessary for the effective and efficient drainage of reserves underlying the Subject Area, as described in Exhibit "A" attached to this order within the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool, Eddy County, New Mexico, which could not be drained by any other well.

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(2) Future infill wells within the Subject Area are hereby found to be necessary for the effective and efficient drainage of reserves underlying said Subject Area which could not be drained by existing wells therein.

(3) The Division Director shall have authority to grant approval of unorthodox well locations in the area subject to this order, provided that any such unorthodox location within such project is no closer than 330 feet to the outer boundary of the lease, or the unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(4) Applications for administrative approval of unorthodox locations shall be filed in triplicate and shall be accompanied by plats, showing the ownership of all leases offsetting the proration or spacing unit for which the unorthodox location is sought, and also all wells completed thereon.

(5) The Oil Conservation's district office at Artesia and all operators of proration or spacing units offsetting the unit for which the unorthodox location is sought shall be notified of the application by certified or registered mail, and the application shall state that such notification has been given. The Division Director may approve the unorthodox location upon receipt of waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Director has received the application.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-4-Case No. 8433 Order No. R-7808

hereinabove designated.

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

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION Winc R. L. STAMÉTS,

Director

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"SUBJECT AREA"

All of the leases and lands described in this Exhibit "A" are located in Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico. Unless otherwise shown below, Applicant is operator of the entire Grayburg-San Andres formation:

M. Dodd A Lease (LC-028731 A)

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M. Dodd B Lease (LC-028731 B)

Section 10: E/2 W/2, E/2 Section 11: W/2 Section 14: N/2, NE/4 SW/4, SE/4 Section 15: NE/4

Boyd-Dodd Lease (LC-058362)

Section 11: SE/4

Continental State (E-4200)

Section 15: NW/4, only to a subsurface depth of 3,500 feet E/2 SW/4, only to a subsurface depth of 3,403 feet

Folk Federal Lease (NM-0397623)

Section 17: N/2, N/2 SW/4

Folk State Lease (B-10714)

Section 17: N/2 SE/4

Grayburg-Jackson West Co-Op Unit

Section	16:	All
Section	21:	All
Section	28:	All
Section	15:	W/2 SW/4
Section	22:	NW/4, $NW/4$ $NE/4$, $NE/4$ $SW/4$,
		W/2 SW/4
Section	27:	W/2 SW/4

Only to a subsurface depth of 3,600 feet. (The Grayburg Jackson West Cooperative Unit covers that portion of the Grayburg-San Andres formation encountered between the depths of 2,220 feet and 3,600 feet.)

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EXHIBIT "A" ORDER NO. R-7808

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INFILL WELLS DRILLED AND COMPLETED FROM OCTOBER 82 TO OCTOBER 84 BY MARBOB ENERGY CORPORATION

WELL NO.	FOOTAGE LOCATION	SECTWN-RGE
M. Dodd A No. 21	660' FSL & 1934' FEL	15-17-29
M. Dodd A No. 22	2310' FSL & 330' FEL	22-17-29
M. Dodd A No. 23	2615' FSL & 1345' FEL	22-17-29
M. Dodd A No. 24	2310' FSL & 2310' FEL	22-17-29
M. Dodd A No. 25	990' FSL & 2210' FEL	22-17-29
M. Dodd A No. 26	2615' FSL & 1345' FEL	22-17-29
M. Dodd A No. 27	940' FSL & 330' FEL	22-17-29
M. Dodd A No. 28	990' FSL & 1652' FWL	22-17-29
M. Dodd A No. 29	1650' FNL & 1370' FEL	22-17-29
M. Dodd A No. 31	1350' FNL & 330' FEL	22-17-29
M. Dodd A No. 32	1650' FNL & 2210' FEL	22-17-29
M. Dodd A No. 33	990' FNL & 990' FEL	22-17-29
M. Dodd B No. 36	330' FSL & 1345' FEL	14-17-29
M. Dodd B No. 37	1345' FSL & 1295' FEL	14-17-29
M. Dodd B No. 38	1345' FSL & 2310' FEL	14-17-29
M. Dodd B No. 39	330' FEL & 1345' FSL	14-17-29
M. Dodd B No. 40	1650' FSL & 1650' FWL	14-17-29
M. Dodd B No. 41	2615' FNL & 330' FEL	14-17-29
M. Dodd B No. 42	2615' FNL & 1345' FEL	14-17-29

EXHIBIT "B" ORDER NO. R-7808

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CASE NO. 8433 Order No. R-7808-A

APPLICATION OF MARBOB ENERGY CORPORATION FOR AN EXCEPTION TO GENERAL RULE 104 F I AND FOR INFILL WELL FINDINGS, EDDY COUNTY, NEW MEXICO.

See Aler Onder No

NUNC PRO TUNC ORDER

R. 1808

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BY THE DIVISION:

It appearing to the Division that Division Order No. R-7808 dated June 5, 1985, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) The first paragraph of the introductory section on page 1 of Division Order No. R-7808 dated June 5, 1985, be and the same is hereby amended to read in its entirety as follows:

"This cause came on for hearing at 8 a.m. on December 19, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana."

(2) The corrections set forth in this order be entered nunc pro tunc as of June 5, 1985.

DONE at Santa Fe, New Mexico, on this <u>12th</u> day of June, 1985.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

- Lance

R. L. STAMETS Director

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