CASE 6093: OCC TO CONSIDER THE RECLASS-IFICATION OF PRESSURE MAINTENANCE PROJECTS AS SECONDARY RECOVERY PROJECTS IN SAN JUAN, AND MCKINLEY COUNTIES, NM

# OSE Number 6093

Application

ranscripts.

small Exhibits

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CASE NO. 6093 Order No. R-6172

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION ON ITS OWN MOTION TO CONSIDER THE RECLASSIFICATION OF CERTAIN PRESSURE MAINTENANCE PROJECTS IN SAN JUAN AND MCKINLEY COUNTIES, NEW MEXICO, AS SECONDARY RECOVERY PROJECTS.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 30, 1977, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>2nd</u> day of November, 1979, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the Oil Conservation Division heretofore authorized the following Northwest New Mexico pressure maintenance projects in the named pools by the designated order:

-	PROJECT	POOL	ORDER NO.
-	Atlantic Horseshoe Gallup	Horseshoe-Gallup	R-2210
A THE R LANGE	Dugan Central Cha Cha Unit Energy Reserves Horseshoe	Cha Cha-Gallup	R-2305
-	Gallup No. 3	Horseshoe-Gallup	R-1876
	Energy Reserves NE Hogback Eng. & Prod. Serv.	Horseshoe-Gallup	R-2026
	Horseshoe Gallup No. 2 Eng. & Prod. Serv. Many	Horseshoe-Gallup	R-1745
-	Rocks Gallup No. 1 Getty Many Rocks Gallup	Many Rocks-Gallup	R-2541
i	No. 3	Many Rocks-Gallup	R-2664
-	Shell Carson Bisti	Bisti-Gallup	R-2065

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PRCJECT	POOL	ORDER NO.	
Suburban NW Cha Cha Tenneco Lone Pine DK "D"	Cha Cha-Gallup Lone Pine-Dakota "D"	R-2154 R-4263	
Woosley Many Rocks Gallup No. 4	Many Rocks-Gallup	R-2700	

- (3) That each of the above-named pressure maintenance projects has declined to the point where it can no longer be correctly classified as a "pressure maintenance" project but can be correctly classified as a "secondary recovery" project.
- (4) That due to certain recent changes in the rules governing reports, the reporting of injection and production is less complicated and time-consuming to operators of secondary recovery projects than is the similar reporting for pressure maintenance projects.
- (5) That the processing of data relating to secondary recovery projects by the Oil Conservation Division of the New Mexico Energy and Minerals Department for the purpose of maintaining production records is less time-consuming than is the processing of similar data for pressure maintenance projects.
- (6) That the reclassification of the pressure maintenance projects named in Finding No. (2) above as secondary recovery projects will result in a saving of time and effort by both the operators of the projects and by the Division in reporting and processing data relating to the projects, thereby preventing waste, and that said reclassification will not impair correlative rights.
- (7) That even though some of the subject projects may not at this time be active projects, or even though some of the originally authorized injection wells may no longer be on active injection, the reclassification of said projects can most easily be carried out by rescinding the orders authorizing said projects as pressure maintenance projects and reauthorizing said projects as secondary recovery projects, subject to any particular rules previously promulgated for said projects which would still be applicable.
- (8) That portions of Order No. R-2210, as amended by R-2210-and R-2719, which authorized the Atlantic Refining Company Horseshoe Gallup Unit Pressure Maintenance Project should be rescinded and approval given for the Atlantic Horseshoe Gallup Waterflood Project.

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- (9) That Order No. R-2305 which authorized the Dugan Central Cha Cha Unit Pressure Maintenance Project should be rescinded and approval given for the Dugan Central Cha Cha Unit Waterflood Project.
- (10) That Order No. R-1876 which authorized the Energy Reserves Group Horseshoe Gallup Pressure Maintenance Project No. 3 should be rescinded and approval given to the Energy Reserves Group Hourseshoe Gallup Waterflood Project No. 3.
- (11) That Order No. R-2026 which authorized the Energy Reserves Group Northeast Hogback Pressure Maintenance Project should be rescinded and approval given to the Energy Reserves Group Northeast Hogback Waterflood Project.
- (12) That Order No. R-1745 which authorized the Engineering and Production Service Horseshoe Gallup Pressure Maintenance Project No. 2 should be rescinded and approval given to the Engineering and Production Service Horseshoe Gallup Waterflood Project No. 2.
- (13) That Order No. R-2541 which authorized the Engineering and Production Service Many Rocks Gallup Pressure Maintenance Project No. 1 should be rescinded and approval given for the Engineering and Production Service Many Rocks Gallup Waterflood Project No. 1.
- (14) That Order No. R-2664 which authorized the Getty Many Rocks Gallup Pressure Maintenance Project No. 3 should be rescinded and approval given to the Getty Many Rocks Gallup Waterflood Project No. 3.
- (15) That Order No. R-2065 which authorized the Shell Carson Bisti Lower Gallup Pressure Maintenance Project should be rescinded and approval given to the Shell Carson Bisti Lower Gallup Waterflood Project.
- (16) That Order No. R-2154 which authorized the Suburban Propane Northwest Cha Cha Pressure Maintenance Project should be rescinded and approval given to the Suburban Propane Northwest Cha Cha Waterflood Project.
- (17) That Order No. R-4263 which authorized the Tenneco Lone Pine Dakota "D" Pressure Maintenance Project should be rescinded and approval given to the Tenneco Lone Pine Dakota "D" Waterflood Project.

Case No. 6093 Order No. R-6172

(18) That Order No. R-2700 which authorized the James P. Woosley Many Rocks Gallup Pressure Maintenance Project No. 4 should be rescinded and approval given to the Woosley Many Rocks Gallup Waterflood Project No. 4.

#### IT IS THEREFORE ORDERED:

- (1) That Order No. (8) of Division Order No. R-2210 and Order No. (2) of Division Order No. R-2210-A, and Division Orders Nos. R-2719, R-2305, R-1876, R-2026, R-1745, R-2541, R-2664, R-2065, R-2154, R-4263, and R-2700 are hereby rescinded.
- (2) That the Atlantic Refining Company is hereby authorized to operate the Atlantic Horseshoe Gallup Waterflood Project, Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. The Division Director is authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the Horseshoe-Gallup Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 330 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Division, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:
    - (1) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.
    - (2) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, and depth.
    - (3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

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The Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Division Director administratively when good cause is shown therefor.

- (3) That Dugan Production Company is hereby authorized to operate the Dugan Central Cha Cha Unit Waterflood Project, Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection in the Central Cha Cha Unit Project shall be through the following described wells in Section 31, Township 29 North, Range 13 West, NMPM:

Callow "B" Well No. 1, Unit K Callow "B" Well No. 2, Unit I

- (4) That Energy Reserves Group is hereby authorized to operate the Energy Reserves Group Horseshoe Gallup Waterflood Project No. 3, Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection in the Horseshoe Gallup Waterflood Project No. 3 shall be through the following described well in Section 5, Township 31 North, Range 17 West, NMPM:

Navajo Well No. 4-5, Unit M

- (5) That Energy Reserves Group is hereby authorized to operate the Energy Reserves Group Northeast Hogback Waterflood Project, Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Northeast Hogback Waterflood Project shall be through the following described wells in Township 30 North, Range 16 West, NMPM:

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Northeast Hogback Unit Well No. 4, Unit J, Section 14
Northeast Hogback Unit Well No. 6, Unit B, Section 15
Northeast Hogback Unit Well No. 10, Unit E. Section 14
Northeast Hogback Unit Well No. 11, Unit F, Section 14
Northeast Hogback Unit Well No. 13, Unit E, Section 13
Northeast Hogback Unit Well No. 14, Unit I, Section 14
Northeast Hogback Unit Well No. 16, Unit K, Section 13
Northeast Hogback Unit Well No. 17, Unit M, Section 13
Northeast Hogback Unit Well No. 20, Unit B, Section 24
Northeast Hogback Unit Well No. 21, Unit D, Section 15
Northeast Hogback Unit Well No. 22, Unit G, Section 15
Northeast Hogback Unit Well No. 23, Unit B, Section 10
Northeast Hogback Unit Well No. 25, Unit D, Section 11
Northeast Hogback Unit Well No. 29, Unit F, Section 11
Northeast Hogback Unit Well No. 30, Unit L, Section 10
Northeast Hogback Unit Well No. 32, Unit L, Section 11
Northeast Hogback Unit Well No. 37, Unit P, Section 10
Williams Well No. 2, Unit P, Section 11 Williams Well No. 3, Unit J, Section 11
Federal Well No. 3, Unit B, Section 14
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- (6) Engineering and Production Service, Inc., is hereby authorized to operate the Engineering and Production Service Horseshoe-Gallup Waterflood Project No. 2, Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Engineering and Production Service Horseshoe Gallup Waterflood Project No. 2 shall be through the following described wells in Township 31 North, Range 17 West, NMPM:

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Navajo "F" Well No. 1, Unit D, Section 4
Navajo "F" Well No. 3, Unit L, Section 4
Navajo "F" Well No. 8, Unit E, Section 10
Navajo "F" Well No. 9, Unit K, Section 10
Navajo "F" Well No. 11, Unit I, Section 10
Navajo "F" Well No. 14, Unit M, Section 10
Navajo "F" Well No. 15, Unit J, Section 9
Navajo "F" Well No. 17, Unit G, Section 10
Navajo "F" Well No. 18, Unit C, Section 10
Navajo "F" Well No. 21, Unit D, Section 10
Navajo "F" Well No. 22, Unit H, Section 9
Navajo "F" Well No. 23, Unit B, Section 9
Navajo "F" Well No. 24, Unit P, Section 4
Navajo "F" Well No. 25, Unit N, Section 4
Navajo "F" Well No. 27, Unit J, Section 4
Navajo "F" Well No. 28, Unit F, Section 4
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Navajo "F" Well No. 31, Unit N, Section 3
Navajo "F" Well No. 32, Unit L, Section 3
Navajo "F" Well No. 33, Unit D, Section 9
Navajo "F" Well No. 34, Unit F, Section 9
Navajo "F" Well No. 36, Unit A, Section 10
Navajo "F" Well No. 38, Unit H, Section 4
Navajo "F" Well No. 40, Unit P, Section 9
Navajo "F" Well No. 43, Unit O, Section 3
Navajo "F" Well No. 43, Unit O, Section 10
Navajo "G" Well No. 3, Unit K, Section 11
Navajo "G" Well No. 5, Unit O, Section 11
Navajo "G" Well No. 6, Unit E, Section 11
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- (7) That Engineering and Production Services, Inc., is hereby authorized to operate the Engineering and Production Service Many Rocks Gallup Waterflood Project No. 1, Many Rocks-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Engineering and Production Service Many Rocks Gallup Waterflood Project shall be through the following described wells in Township 31 North, Range 17 West, NMPM:

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Injection Well, Unit F, Section 1
Injection Well, Unit J, Section 1
Injection Well, Unit L, Section 1
Injection Well, Unit N, Section 1
Injection Well, Unit H, Section 2
Injection Well, Unit B, Section 12
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- (8) That Getty Oil Company is hereby authorized to operate the Getty Many Rocks Gallup Waterflood Project No. 3, Many Rocks-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Getty Many Rocks Gallup Waterflood Project No. 3 shall be through the following described well in Section 35, Township 32 North, Range 17 West, NMPM:

Navajo "P" Well No. 6, Unit P

(9) That Shell Oil Company is hereby authorized to operate the Shell Carson Bisti Lower Gallup Waterflood Project, Bisti-Lower Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:

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A. Injection into the Shell Carson Bisti Lower Gallup Waterflood Project shall be through the following described wells:

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Section 10: No. 31-10;
Section 11: Nos. 22-11, 23-11, 24-11;
Section 12: No. 13-12;
Section 13: Nos. 21-13, 22-13, 23-13; 24-13;
Section 14: Nos. 21-14, 22-14, 23-14, 24-14;
Section 15: No. 14-15;
Section 23: No. 21-23;
Section 24: Nos. 21-24, 23-24, 32-24;

In addition, Mudge 6 Lease Wells No. 12-16A and 14-16A, located in the SW/4 NW/4 and SW/4 SW/4, respectively, of Section 16, Township 25 North, Range 11 West, NMPM, are hereby approved for conversion to water injection, to form a water barrier between the Carson Unit Area and the acreage to the east thereof.

- (10) That Suburban Propane Gas Company is hereby authorized to operate the Suburban Propane Northwest Cha Cha Waterflood Project, Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Suburban Propane Northwest Cha Cha Gallup Waterflood Project shall be through the following described wells in Township 29 North, Range 14 West, NMPM:

Navajo "B" Well No. 3, Unit K, Section 21
Navajo "E" Well No. 2, Unit I, Section 21
Ojo Amarillo Well No. 2, Unit C, Section 27
Navajo L Well No. 1, Unit E, Section 26
Navajo L Well No. 4, Unit O, Section 26
Navajo L Well No. 5, Unit E, Section 36

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- (11) That Tenneco Oil Company is hereby authorized to operate the Tenneco Lone Pine Dakota "D" Waterflood Project, Lone Pine-Dakota "D" Oil Pool, McKinley County, New Mexico, in accordance with the following:
  - A. Injection into the Tenneco Lone Pine Dakota "D" Waterflood Project shall be through the following described wells:

Well	Unit	Section	Township	Range
SFPRR No. 12	I	7	17N	8W
Lone Pine No.	1 D	19	17N	8W
Hospah No. 44	P	12	17N	9W
SFPRR No. 6	H	13	17N	9 <b>W</b>
SFPRR No. 10	В	13	17N	9W

- (12) That James P. Woosley is hereby authorized to operate the Woosley Many Rocks Gallup Waterflood Project No. 4, Many Rocks-Gallup Oil Pool, San Juan County, New Mexico, in accordance with the following:
  - A. Injection into the Woosley Many Rocks Gallup Waterflood Project No. 4 shall be through the following described wells in Township 32 North, Range 17 West, NMPM:

Injection Well, Unit D, Section 27 Injection Well, Unit O, Section 27 Injection Well, Unit I, Section 28

- (13) That each of the above-described waterflood projects shall be operated in accordance with Rules 701, 702, and 703 of the Division Rules and Regulations.
- (14) That monthly reports concerning said waterflood projects shall be filed in accordance with Rule 1115 of the Division Rules and Regulations.
- (15) That the injection wells herein authorized for each of the subject projects as well as such additional wells which have been previously authorized for pressure maintenance injection are hereby approved for injection purposes until further order of the Division.

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

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

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# BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico November 30, 1977

#### EXAMINER HEARING

IN THE MATTER OF:

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The hearing called by the Oil Conservation Commission on its own motion to consider the reclassification ) of pressure maintenance projects as secondary recovery projects.

CASE 6092 and

BEFORE: Daniel S. Nutter, Examiner.

## TRANSCRIPT OF HEARING

# APPEARANCES

For the New Mexico Oil 16 Conservation Commission:

Lynn Teschendorf, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

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MR. NUTTER: Call the next case, Case 6092, which is in the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of certain pressure maintenance projects in southeast New Mexico as secondary recovery projects.

We will also call at this time Case Number 6093, which is in the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of certain maintenance projects in northwest New Mexico as secondary recovery projects.

For the purpose of testimony we will consolidate Case Number 6092 and Case Number 6093 and I'll call for appearances.

MS. TESCHENDORF: Lynn Teschendorf, appearing on behalf of the Commission and I have one witness, Mr. Stamets, and I would like the record to reflect that he has previously been sworn.

MR. NUTTER: Mr. Stamets is still under oath. Are there other appearances in these two cases?

Would you please proceed?

RICHARD L. STAMETS

was called as a witness by the Commission, and having been first duly sworn, testified upon his oath as follows, to-wit:

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#### DIRECT EXAMINATION

BY MS. TESCHENDORF:

Mr. Stamets, what is the history behind these two
 cases?

A Beginning with the January 1978, secondary recovery project reports, we are eliminating Form C-120, which is the old water flood report form and requiring that the injection information be shown on Form C-115. This is for simplicity and convenience and let us use the computer to keep track of projects for us and the Enviornmental Protection Agency.

Pressure maintenance projects, historically, have required a different report form from Form C-120 and most required calculations of voidage and projections of needed project allowable.

Now, many of the old pressure maintenance projects have long since passed their peak and are producing little or no primary oil and are, in fact, at this stage simply secondary recovery projects.

Filing of the special pressure maintenance project report in these cases is really a waste of time. I have asked our District Supervisors to identify such projects for me and contact the operator of those projects to make sure they had no objection to the reclassification of the same to water floods and they submitted the same to me and these

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were advertised for hearing today.

- Q Do you have any exhibits showing these projects?
- A Yes. I have already handed the Examiner Exhibit
  Number One in both of these cases.
  - Q What does that exhibit show?

A. The exhibit, the top half of the exhibit is for southeast New Mexico and the bottom half is for northwest New Mexico and reading left to right it shows the project operator, the pool in which the project is located, and the pressure maintenance project name, the order number which authorized the project, the county in which it is located, and it indicates whether there are special rules applicable to the project, and what those rule numbers are.

And then, a proposed order number is in there simply for the convenience of the Examiner. I would assume that we would probably want to issue an order in these cases which would redesignate the project and rescind the special rules.

Now, for southeast New Mexico I have a couple of projects with asterisks -- the first one an Amoco project in Cato. It just simply points out that order R-3867 be restated -- the special project rules and regulations.

There was an earlier, I think R-3867, established the project but a later order established two projects and gave us special rules for that particular project.

The second one, Costal States gas project, the original project was approved by one order and a later order established the project with special rules and regulations.

Moving on down into northwest New Mexico, the first one listed is Atlantic Richfield and this is the only one that has a rule that I really believe needs to be retained.

Rule 11, and it provides for approval of injection and producing wells at orthodox and unorthodox locations.

The rest of these are general rules and regulations and would grant them in all of the special rules that had been provided for by the order.

The second one is the Dugan Production Corporation

Cha Cha project and that was established under one name

but subsequently a unit agreement was established and

changed the project name.

The last one is the Suburban Propane project and, again, this was established with one name and a unit has been established which is all Indian land in the unit and resulted in the project being called by a different name.

- Q Were there any errors in the exhibit as advertised?
- A. The exhibit is correct. There was one error in advertising in Case 6093. We did advertise the Tenneco South Upper Hospah Project to be reclassified but on closer

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examination this was already classified as a water flood and no change was needed.

Q I think you have already covered this but will you repeat as to what you would recommend as to the order?

A Yes, I feel that we should issue probably a series of orders reclassifying each of these projects as secondary recover and rescind any special rules and regulations with the exception of Rule 11 in the one case previously mentioned, the Arco project in the Horseshoe Gallup, and causing such projects to be subject to Rules 701, 2, 3 and 704, and this should be effective 1/1/78.

Q Do you have anything further?

A No, I don't.

Q Was Exhibit One in Cases 6092 and 6093 prepared by you or under your supervision?

A It was.

MS. TESCHENDORF: We offer Exhibit One in both cases.

MR. NUTTER: Exhibit Number One in Cases 6092 and 6093 will be admitted in evidence.

#### CROSS EXAMINATION

BY MR. NUTTER:

Mr. Stamets, as I understand it you are not proposing to change any of the methods of operation of these projects, it is simply to reclassify them as secondary recovery projects because they more appropriately fit that term than a pressure maintenance at this time?

- A That's correct.
- Q. And it would be easier to report secondary production and injection rather than secondary recovery as a pressure maintenance?
  - A. That's right.

MR. NUTTER: Are there any questions of Mr. Stamets on these cases?

Mr. Tully?

MR. TULLY: This is kind of a clarification thing.

If these are reclassified as secondary recovery projects

and then assuming that these 701, 702 -- 700 Series that

were previously before the Commission earlier in the day, then,

are we going to have to retroactively go back and file these

reports that you were talking about previously?

THE WITNESS: Mr. Tully, that would apply no matter what they are classified as -- whether they continued to be classified as pressure maintenance or if they are changed over to secondary recovery. There would be no difference in the application of the rules. The only difference would be in the monthly reporting.

MR. NUTTER: Are there any other questions?

The witness may be excused. Does anyone have anything they

wish to offer in Case 6092 or 6093?

We will take the cases under advisement.

(THEREUPON, the witness was excused and the case was concluded.)

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# REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

I do nereby certify that

Dockets Nos. 39-77 and 1-78 are tentatively set for hearing on December 14, 1977 and January 4, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### EXAMINER HEARING - WEDNESDAY - NOVEMBER 30, 1977

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 6089: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rules 701, 702, 703, 704, and 705 of the Commission Rules governing applications for approval of injection wells and projects, well construction and operations standards, reports and records requirements, and automatic termination of authorization for abandoned wells or projects.

Please see proposed rules enclosed.

CASE 6090: In the matter of the hearing called by the 0il Conservation Commission on its own motion to consider the amendment of Rule 107 of the Commission Rules to provide a requirement for the determination of cement tops outside all casing strings by means of temperature or mechanical surveys.

Please see proposed rule enclosed.

CASE 6091: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 405 of the Commission Rules, the adoption of a new Rule 1131, and a new Form C-131, all for the purpose of reporting gas injections and withdrawals in underground natural gas storage projects.

Please see proposed rule and amended form enclosed.

CASE 6092: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Amoco Baskett and Wasley Projects, and the Union Texas Baskett Project, all in Cato-San Andres Pool, Chaves County, New Mexico. The Amoco Horton Project, Milnesand-San Andres Pool, Roosevelt County, New Mexico. The Midwest Project, Nonombre-Pennsylvanian Pool, the Coastal States Flying "M" Project, Flying M-San Andres Pool, and the Mobil Vacuum Middle Penn Project, Vacuum-Middle Pennsylvanian Pool, all in Lea County, New Mexico, Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification.

CASE 6093:

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Atlantic Richfield Horseshoe Gallup Unit Project, the Energy Reserves Group Horseshoe Gallup Project No. 3 and Northeast Hogback Unit Project, and the Engineering and Production Services Horseshoe Gallup Project No. 2, all in Horseshoe Gallup Oil Pool, the Engineering and Production Services Many Rocks Gallup Project No. 1, Getty Many Rocks Gallup Project No. 3, and the J. P. Woosley Many Rocks Gallup Project No. 4, all in the Many Rocks-Gallup Oil Pool; the Dugan Central Cha Cha Project and the Suburban Propane Northwest Cha Cha Unit Project, both in Cha Cha-Gallup Oil Pool; and the Shell Carson Unit Project, Bisti-Gallup Oil Pool, all in San Juan County, New Mexico. The Tenneco Lower Hospah Project, South Hospah-Lower Sand 0il Pool; South Upper Hospah Project, South Hospah-Upper Sand 0il Pool; and Lone Pine Dakota D Unit Project, Lone Pine Oakota D 0il Pool, all in McKinley County, New Mexico. Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification.

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the repeal of Commission Order No. 67 and the amendment of Rule 406 of the Commission Rules, both of which relate to carbon dioxide gas. The repeal of said Order 67 and the amendment of Rule 406 would be for the purpose of abolishing the existing special rules for carbon dioxide exploration, development, and processing, and placing such activities under the general rules of the Commission.

Dockets Nos. 39-77 and 1-78 are tentatively set for hearing on December 14, 1977 and January 4, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 30, 1977

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Hutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 6089: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rules 701, 702, 703, 704, and 705 of the Commission Rules governing applications for approval of injection wells and projects, well construction and operations standards, reports and records requirements, and automatic termination of authorization for abandoned wells or projects.

Please see proposed rules enclosed.

CASE 6090: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 107 of the Commission Rules to provide a requirement for the determination of cement tops outside all casing strings by means of temperature or mechanical surveys.

Please see proposed rule enclosed.

CASE 6091: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 405 of the Commission Rules, the adoption of a new Rule 1131, and a new Form C-131, all for the purpose of reporting gas injections and withdrawals in underground natural gas storage projects.

Please see proposed rule and amended form enclosed,

CASE 6092:

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Amoco Baskett and Wasley Projects, and the Union Texas Baskett Project, all in Cato-San Andres Pool, Chaves County, New Mexico. The Amoco Horton Project, Milnesand San Andres Pool, Roosevelt County, New Mexico. The Midwest Project, Nonombre-Pennsylvanian Pool, the Coastal States Flying "M" Project, Flying M-San Andres Pool, and the Mobil Vacuum Middle Penn Project, Vacuum-Middle Pennsylvanian Pool, all in Lea County, New Mexico, Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification,

CASE 6093:

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Atlantic Richfield Horseshoe Gallup Unit Project/ the Energy Reserves Group Morseshoe Gallup Project No. 3 and Northeast Hogback Unit Project, and the Engineering and Production Services Horseshoe Gallup Project No. 2, all in Horseshoe Gallup Oil Pool, the Engineering and Production Services Many Rocks Gallup Project No. 1, Getty Many Rocks Gallup Project No. 3, and the J. P. Woosley Many Rocks Gallup Project No. 4, all in the Many Rocks Gallup Oil Pool; the Dugan Central Cha Cha Project and the Suburban Propane Northwest Cha Cha Unit Project, both in Cha Cha-Gallup Oil Pool; and the Shell Carson Unit Project, Bisti-Gallup Oil Pool, all in San Juan County, New Mexico. The Tenneco Lower Hospah Project, South Hospah-Lower Sand Oil Pool; South Upper Hospah Project, South Hospah-Upper Sand Oil Pool; and Lone Pine Dakota D Unit Project, Lone Pine Dakota D 011 Pool, all in Lickinley County, New Mexico. Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification.

CASE 6094: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the repeal of Commission Order No. 67 and the amendment of Rule 406 of the Commission Bules, both of which relate to carbon dioxide gas. The repeal of said Order 67 and the amendment of Rule 406 would be for the purpose of abolishing the existing special rules for carbon dioxide exploration, development, and processing, and placing such activities under the general rules of the Commission.

# Southeast New Mexico

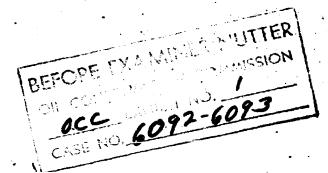
<u>Operator</u>	<u>Pool</u>	Pressure Maintenance Project Name	<u>Order</u>	County	Special Rules	Proposed Order
##Coastal St. Gas Prod. Co. Nobil Oil Corp. Union Tex. Pet. Corp.	Cato-San Andres  " " " " " " " " " " " " " " " " " " "	Cato Baskett PM Cato Wasley PM Milnesand Horton PM Midwest Nonombre PM Flying "M"-San Andres PM Vacuum Middle Pennsylvanian Baskett PM	R-3867 R-3867B R-3456 R-3071 R-3229 R-4688 R-4362	Chaves Chaves Roosevelt Lea Lea Lea Chaves	Yes (1-10) Yes (1-10*Order(5)) Yes (1-11) None Yes (1-11) None Yes (1-10)	R-3867-C R-3867-C R-3456-A R-3071-A R-3229-A R-4686-A R-4362-A

\*R-3867 B restated special project rules and regulations
\*\*Criginal project approved by Order R-3033, R-3229 re-established the project with special rules and regulations.

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Northwest New Mexico		• •				<b>V</b> .
Orerator	Pool	Pressure Maintenance Project	Crder	County	Special Rules	Proposed Order
*Atlantic Richfield	Horseshoe-Gallup	Horseshoe Gallup Unit PM	R-2210	San Juan	Yes (1-11)	R-2210-B
**Dugan Pred. Corp.	Cha Cha-Gallup	Central Cha Cha Unit PM	R-2305	San Juan	Yes (1-11)	R-2305-A
Energy Reserves Group	Horseshoe-Gallup	Horseshoe Gallup PM No. 3	R-1876	San Juan	Yes (1-11)	R-1876-A
W W	* "	NE Hogback PM	R-2026	San Juan	Yes (1-11)	_ R-2026-A
Eng. & Prod. Serv. Inc.	H H	Horseshoe Gallup PM No. 2	R-1745	San Juan	Yes (1-11)	R-1745-A
4 H H	Mary Rocks-Gallup	Many Rocks Gallup PM No. 1	R-2541	San Juan	Yes (1-11)	R-2541-A
Getty Oil Co.	W W W	Many Rocks Gallup PM No. 3	R-2664	San Juan	Yes (1-11)	R-2664-A
Smell Oil Co.	Bisti-Gallup	Careon Bisti-Lower Callum PM	R-2065	San Juan	Yes (1-10)	R-2065-A
eseSuburban Propane Gas Co.	Cha Cha-Gallup	Northwest Cha Cha Unit	R-2154	San Juan	Yes (1-11)	R-2154-A
Tenneco Oil Co.	South Hospah-Lower Sand	Lower Hospah PM	R-4389	McKinley		B-4369-C
* * * *	Lone Pine-Dakota "D"	Lone Pine Dakota "D" PM	R-4263	McKinley	Yes (1-10) Yes (1-10)	B-4362-A
James P. Woosley	Many Rocks-Gallup	Many Rocks-Gallup PM No. 4	B-2700	San Juan	Tee (1-1)	B-2700-A

\*Rule 11 provides for approval of injection and producing wells at orthodox and unorthodox locations. \*\*Established as Cha Cha-Gallup PM Project. R-2512 established Central Cha Cha Unit, \*\*Established as Cha Cha-Gallup PM Project. All indian land Unit subsequently established,



In the matter of the hearing called by the Oil Conserva Commission on its own mation to consider the reclasification of the following pressure maintenance projects as secondary recovery projects: The Atlantic Richfield Horseshae Halling Unit Project, the Energy Reserves Group Horseshoe Gallup Praject 70.3 and northeast Hogback Unit Praject, and the Engineering and Production Services Horsechoe Gallup Project 70.2, all in Horseshoe Gallup Oil Pool, he Engineering and thoduction Services many Rock's Geeleng Payet to. 1, tet, many Rooks Ballup Prajech no. 3, and the J.P. Woosley many Rocks Galley Project Max, all in the many Rooks-Galley Oil Pool, the Dugan Central Cha Cha Project and the Suburban Propone northwest Chacha Unit Brajest, both in Chacha-Kalley Oil Past, and the Shell Carron Unit Prajeck, Bisti haden Oil Pool, all in San Juan Carrety, new medico. The Towness Lower Horsel Per South Hospati Cower Sand Oil Paul, South Magen Hospah Praject, Sawk Hospah-Upper Sand Oil Gast, and Lone Pine Dakola D. Propoet Some Pine Daketa D Oil Pool, are in makinley County, hew mexico. Bloo to be Rousidered will be the amendment of the orders authorizing said prejects to reflect the aforerail reclassifi

CASE NO.

NSP; SF Gallup Farmington

In the matter of the hearing called by Application of the Oil Conservation Commission on its own to conside the the following motion for reclassification of cortain pressure maintenance projects in Mckinley and San Juan County of recovery projects: To be considered will be the recalssification of the following named projects in the following named pools from pressure maintenance to secondary recovery - The Atlantic Richfield Horseshoe Gallup Unit Project, in the Horseshoe-Gallup Pool; the Dugan Central Chacha Pressure Maintenance Project, Cha Cha-Gallup Pool: the Energy Reserves Horseshoe Gallup Project No. 3 and Northeast Hogback Unit Project, in the Horseshoe Gallup Pool, We Engineering and Production .... Horseshoe Gallup Project No. 2, 4R the Horseshoe Gallup Pool, and the Many Rocks Gallup Project No. 1, in the Many Rocks-Gallup Pool; Cetty Many Rocks Gallup Project No. 3 in the Many Rocks-Gallup Pool; the Shell Care Unit Project in the Bisti-Gallup Pool; the Substan Propane Northwest Che Che Unit Project in the Che Cha-Gallup Poul: and the James S. Messley Many Nocks deline Engl e Many Bocks-Gallup Post, sel in San Juan Comily, her merico . The Tenneco Oil Company Lower Hospan Project in the Bouth Boss

Lower Sand Pool, the South Upper Hospah Project in the South

Hospah-Upper Sand Pool, and the Lone Pine Dakota D Unit Project

in the home Pine Dakota D Unit Project in the Lone Pine-Dakata

to reflect the aforesid reclassifications.

D POOLs all be McKinley County, how makes, also to be considered

Replication of the Oil Conservation Commission on its own motion for maintenance projects in Mckinley and San Juan Countries, New Mexico. To be considered will be the reclossitions of the following named projects in the following radiced pools from pressure The Atlantic Rich Field Company The Horseshor Gallap Unit Project in the Horseshoe-Gallap Part; Cha Cha Pressure 1779, terrice Project Cha Cha - Gollup Paul . \* Energy Reserves Group, Inc. Kappipo Horseshoe Gellup Popper No3 and Northeast Hogback Unit Project in the Horseshoe Gallup Post; The Engineering and Production Services Inc. Horseshoe Gallap Project No 2 & in the Hormohoe Gallup Pool and the Many Rocks Geflup Project No 1 in the Many Rocks - Geallup Pool: The bretty Oil to- many Bocks Gallup Project No 3 in the Many Rocks - Go lap Pool : The Shell Oil Co Carson Unit Project in the Bisti bullup Pool; the Suburban Propose Ges Go Northwest Cha Cha Unit Project in the Cha Chai Gallap Pool; The Tenneco" Lower Hospah Project in The South Hospah - Lower Sun L Pool, the south Hoshop Toper Sand Project in the South Hospah - Upper Sand Pool, and the Lone Pine Do Hoto DUnit Project in the Lone Pine-Dakota D Pool; and

to the designation of the control of the second of	
	-3.086
	M. O. P. W. L. M. R. L. C. M.
7	The James P. Woosloy Many Rocks Grolles Project No 4 in the Thony Rocks - Brolles Prol. Farther & to be considered will be the am and man + of the orders Commission Orders authorizing soid projects
A Companya <del>and and and and and and and and and and </del>	Troject No 7 in the Illany Bocks -
	Grullup Pool, Further & to be considered
/ 	will be the am end you t of the orders
: :	Commission Orders authorizing said projects
7 2	

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CALLED BY THE OIL CONSERVATION
DIVISION FOR THE FURFOSE OF DA

CONSIDER THE RELLASSITICATION

OF CERTAIN PRESSURE

MAINTENANCE PROJECTS IN

ORDER NO. 6093

AN JUAN AND MCKINLEY COUNTIES

DEW MERICO, AS SECONDARY

RECOVERY PROJECTS.

7

## ORDER OF THE DIVISION

# BY THE DIVISION:

IN THE MATTER OF THE HEARING

# FINDS:

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

(2) That the Oil Conservation Division heretafore anthorized the following northwest here mexico pressure maintenance projects in the named pools by the designated order

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(2) That the Oil Conservation Division heretofore anthorized the fallowing northwest her mexico pressure maintenance projects in the named pools by the designated order.

Horseshor-Kally CRAER HE Atlantic Horseshoe Gally R-2210 Cha Cha- Stalling Dagan Central Cha Cha Unit RYJOS Energy Recense Horseshoe Gallup no. 3 Tresque Reserves NE Hogheck Horseshee-Hallup R-1876 Eng. & Prod. Serv. Horse-shae Sallup No. 2 Horses hae . Hally Eng. & Prod. Serv. Many many Rocks Sally Rocks Hallup no. 1 R-2541 Geety many Rosks many Rocks Sally R-2664 Dullup no. 3 Bisti Hallup 2-2065 Chalha-Hallup R.2154 5. Hogyah Amerond R 4389 Shell Carson Birti Inburban NWChacka Termico Coroca Horpe Termes o Kone Phe DKD Kone Pine Dakola D' R-4263 Woosley many Kocks Gallyp No. 4 many Rocks Gally R-2700

- (3) That each of the above-named pressure maintenance projects has declined to the point where it can no longer be correctly classified as a "pressure maintenance" project but can be correctly classified as a "secondary recovery" project.
- (4) That due to certain recent changes in the rules governing reports, the reporting of injection and production is less complicated and time-consuming to operators of secondary recovery projects than is the similar reporting for pressure maintenance projects.
- (5) That the processing of data relating to secondary recovery projects by the Oil Conservation Division of the New Mexico Energy and Minerals Department for the purpose of maintaining production records is less time-consuming than is the processing of similar data for pressure maintenance projects.
- (6) That the reclassification of the pressure maintenance projects named in Finding No. (2) above as secondary recovery projects will result in a saving of time and effort by both the operators of the projects and by the Division in reporting and processing data relating to the projects, thereby preventing waste, and that said reclassification will not impair correlative rights.
- (7) That the reclassification of said projects can most easily be carried out by rescinding the orders authorizing said projects as pressure maintenance projects and reauthorizing said projects as secondary recovery projects, subject to any particular rules previously promulgated for said projects which would still be applicable.

(8) That Ordo No. R-2210 which anthough the attention Sitting House balling Unit Presence maintaneaux Project should be rescived and approval give the attention of the Order No. R-2305 which anthorized the Dugan Central Cha Cha Unit Presence maintaneaux Project should be rescinded and approval gives for the Fugan Central ChaCha Unit waterfood Project

(10) That Order No. R-1876 which authorized the Energy Reserves beaup Horsishoe Galley Bressure mainlinauce Project Bo. 3 should be tossinded and approval given to the Energy Reserves Group Horseshoe Gallup Walter flood Project Bo. 3. (11) That Order No. R-2026 which authorized the Energy Reserves Group northeast Hogbook Pressure maintenance Project should be rescended and approval gire to the Energy Reserves Group Morthand Hagorek Water flood Project. (12) That Order 30. R-1745 which authorized the Enguaring and Production Service Horaskae Gally Pressure maintanance Project Shadd be tescircled and approval given to the Enquiring and Production Service Horseshar Galley Water flood Project no. Z. (13) That Order No. R-2541 which arethorized the Maring Kocks Halley Pressure maintenance Project no. 1 should be resembled and ago given for the Engineering and Production Strike (14) That Order No. R-2664 which authorized the two Rely of many Rocks Brown Hally Pressure maintenance Project should be toscinded and approval given to the selly Many Rocks Hallup Wain floud Project No. 3. Grell Carson Biti Lawer Gallup Pressure heariterance Project should be rescirbed and approval guzen to the Shell Carron Birti At)

The Secretary-Director is the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the Horseshoe-Gallup Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 330 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:

- (1) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.
- (2) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, and depth.
- (3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Division Secretary Director of the Commission administratively when good cause is shown therefor.

(3) That Dugan Production Company is hereby authorized to sperate the Dugan Central Cha Cha Unit Waterflood Project, Cha Cha Hallup Oil Pool, San Juan Country, her Mexico, in accordance with the fallowing:

A. Injection in the Central Chalhathinh Praject shall be through the following Cleseribed wills in Section 31, Township 29 north, Range 13 West, AMBA Callow "B" Well TO. 1, Unit K
Callow "B" Well No. 2, Unit I

(4) That Energy Pererves Grang is hereby anthorized to operate the Energy Reserves Grang Horseshoe Ballup Water ploud Project 70.3, Horseshoe Ballup Bill Pool, San Juan Camty, how herico in accordance with the fallowing:

A. Injection atta in the Horseshoe Gallup Waterflowd Project 70.3 shall be through the following described wills in Section 5, Tawadip 31 North, Range 17 West, NMM:

Navajo Well 710. 4-5, ilnit M

(5) That Everyy Averies Group in hereby authorized to aparate the Everyy Reserves Group Kortheast Hogback Waterflood Project, Horseshoz-Ballup

Oil Pool, San Juan County, hew Mexico, in accordance with the following: A. Injection into the Morthcart Hogback waterflood Project shall be through the following described wells in Township 30 north, Dange 16 west, MAN:

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Northeast Hogback Unit Well No. 4, Unit J, Section 14
Northeast Hogback Unit Well No. 6, Unit B, Section 15
Northeast Hogback Unit Well No. 10, Unit E, Section 14
Northeast Hogback Unit Well No. 11, Unit F, Section 14
Northeast Hogback Unit Well No. 13, Unit E, Section 13
Northeast Hogback Unit Well No. 14, Unit I, Section 13
Northeast Hogback Unit Well No. 16, Unit K, Section 13
Northeast Hogback Unit Well No. 17, Unit M, Section 13
Northeast Hogback Unit Well No. 20, Unit B, Section 24
Northeast Hogback Unit Well No. 21, Unit D, Section 15
Northeast Hogback Unit Well No. 22, Unit G, Section 15
Northeast Hogback Unit Well No. 23, Unit B, Section 10
Northeast Hogback Unit Well No. 25, Unit D, Section 11
Northeast Hogback Unit Well No. 30, Unit I, Section 10
Northeast Hogback Unit Well No. 30, Unit I, Section 10
Northeast Hogback Unit Well No. 32, Unit I, Section 11
Northeast Hogback Unit Well No. 32, Unit I, Section 10
Northeast Hogback Unit Well No. 32, Unit I, Section 11
Northeast Hogback Unit Well No. 37, Unit P, Section 10
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Williams Well No. 2, Unit P, Section 11 Williams Well No. 3, Unit J, Section 11

Federal Well No. 3, Unit B, Section 14

(6) Engineering and Production Service due, is hereby activity since Pack of the Horseshoe Gallup Warnish Project ON. 2, Horseshoe Ballup Oil Pool, San Jacun County, how Mayied, in accordance with the following:

A. Dijection into the Engineering and Production Service, Horseshoe Gallup Warisfood Project 70. 2 shall be through the following Cescribed well in Township 31 North, Range (7 West, NMPM:

Navajo "F" Well No. 1, Unit D, Section Navajo "F" Well No. 3, Unit L, Section Navajo "F" Well No. 8, Unit E, Section 10 Navajo "F" Well No. 9, Unit K, Section 10 Navajo "F" Well No. 11, Unit I, Section 10 Navajo "F" Well No. 14, Unit M, Section 10 Navajo "F" Well No. 15, Unit J, Section 9 Navajo "F" Well No. 17, Unit G, Section 10 Navajo "F" Well No. 18, Unit C, Section 10 Navajo "F" Well No. 21, Unit D, Section 10 Navajo "F" Well No. 22, Unit H, Section 9 Navajo "F" Well No. 23, Unit B, Section Navajo "F" Well No. 24, Unit P, Section Navajo "F" Well No. 25, Unit N, Section Navajo "F" Well No. 27, Unit J, Section Navajo "F" Well No. 28, Unit F, Section Navajo "F" Well No. 31, Unit N, Section Navajo "F" Well No. 32, Unit L, Section Navajo "F" Well No. 33, Unit D, Section 9 Navajo "F" Well No. 34, Unit F, Section 9 Navajo "F" Well No. 36, Unit A, Section 10 Navajo "F" Well No. 38, Unit H, Section Navajo "F" Well No. 40, Unit P, Section Navajo "F" Well No. 43, Unit O, Section 3 Navajo "F" Well No. 44, Unit O, Section 10 Navajo "G" Well No. 3, Unit K, Section 11 Navajo "G" Well No. 4, Unit M, Section 11 Navajo "G" Well No. 5, Unit O, Section 11 Navajo "G" Well No. 6, Unit E, Section 11

(9) That Engineering and Production Services, Inc., is hereby an thorized to apperate the Engineering and Production Service reamy Locks ballup waterflood Project Do. 1, Many Rocks-Dellup Paol, San Juan launty, hew Mexico, in accordance with the Saleaving:

A. Sinjection into the Engineering and Reduction Strice heavy Rooker Badley waterflood Project shall be through the fallowing-described wells in Tauschip in north, Lange 17 west, NMPM:

Injection Well, Unit F, Section 1

" Uhint J, Section 1

" Uhint L, Section 1

" Uhint N, Section 1

" Uhint N, Section 2

" Uhint H, Section 2

That kelly Oil langary is hereby anthorized to aperate the Kelly heavy Rocks that present weinflowed Project 70.3, Many Rocks-Garenp Oil Pool, San Jacan County, here Mexico, in accordance with the following:

A. Duzection into the Beely Many Rocks ballup Waterflood Project that the following the ballup oil Pool San Jacan County, has hapen, shall be through the following described the well in Rockin 35, Township 32 North, Range Mont, Marries War War No. 6, Unit P

9) That There Oil Company is hereby enthorized to operate the Sheel Conson Benti Rawer beaup water flower Property Bisti-Kawer Gracery Oil Pool, San Jean County, how heavier, in accordance with the foreawing:

(8)

A. Lujechin into the Shell Carson Bisti Lawer Kally Wacriflood Praject shall be through the following described wells:

Section 10: No. 31-10; Section 11: Nos. 22-11, 23-11, 24-11; Section 12: No. 13-12; Section 13: Nos. 21-13, 22-13, 23-13; 24-13; Section 14: Nos. 21-14, 22-14, 23-14, 24-14; Section 15: No. 14-15; Section 23: No. 21-23; Section 24: Nos. 21-24, 23-24, 32-24;

In addition, Mudge 6 Lease Wells No. 12-16A and 14-16A, located in the SW/4 NW/4 and SW/4 SW/4, respectively, of Section 16, Township 25 North, Range 11 West, NMPM, are hereby approved for conversion to water injection, to form a water barrier between the Carson Unit Area and the acreage to the east thereof.

hereby authorized to a perace the Suburban

Propane horthwest Cha Cha Whitefood Project

Cha Cha Isallup Oil P. . , San Juan fount,

kew kneised, in assordance with the following:

A. Dujech in into the Suburban Repane

Cha Cha Isallup Wain flood Project Phall

be through the fallowing described wells in

Township ag North, Range 14 West, NMPM:

havajo "B" Weel No. 3, Unit K, Sulion 21

Novajo "E" Well No. 2, Unit I, Sustion 21

Ojo Amarillo Well No. 2, Unit C, Section 27

Wevajo L Well No. 1, Unit E, Dection 26

havajo L Well No. 1, Unit E, Dection 26

havajo L Well No. 5, Unit E, Dection 36

(1) That Termeco Oil Company is hereby an thoriged to aperate the Tenneco Kone Pine Dakata "D' Wainflood Project, Love Pine-Dakata "D"Oil

Pool, McKinley County, hew Melico, in accordance with the following: A Dujection into the Tennes Lone Pine Datata "D" Walinglood Project Phace be trough the Journing described Wills:

wen	Unit	Section	Township	Range
SFPRR ho. 12	I	7	17 N	8W
Lone Pine 40.1	D	19	17 N	8W
Hospah ho. 44	P	12	17 N	9w
SFPRR No. 6	H	13	17N	9 W
SFPRR ho. 10	B	13	17N	9W

12) That Junes P. Woosley is hereby authorized to aperate the Weosley Many Pocks Ballup Ville Hooks Sallup Oil Project to many Rocks- Ballup Oil Pool, San Juan County, Lew Messes, in accordance with the fallowing:

A Injection into the woodley Many Rocks Backup waterflood Project whole le Through the faceowing described with in Township 32 North, Range 17 West, NMPM: Injection Weel, Unit D, Section 27 Dujection Weel, Unit 0, Section 27 Injection Well, Unit I, Section 28

(13) That each of the above-described waterflood projects shall be operated in accordance with Rules 701, 702, and 703 of the Division Rules and Regulations.

That monthly reports concerning said waterflood projects shall be filed in accordance with Rule 1115 of the Division Rules and Regulations.

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.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION DIVISION

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member and Division Director

(15) That the hyperion wells herein anthorized for each of the subject projects as well as such additional wells which have been previously anthorized for pressure maintenance injection are hereby approved for injection purposes until further order of the Division.