

UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT N.M. Oil Cons. Division

P.O. Box 1980

Hobbs, NM 88241

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

N.M. 14214

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Wells Federal 12 & 13

9. API Well No.

10. Field and Pool, or Exploratory Area

Langlie Mattix 7 Rivers

11. County or Parish, State

Lea County, N.M.

SUBMIT IN TRIPLICATE

Type of Well ☐ Oil Well ☒ Gas Well ☐ Other

Name of Operator

Petroleum Management Co.

Address and Telephone No.

Box 140907, Irving Tx. 75014-0907, 972-401-3111

Location of Well (Footage, Sec., T., R., M., or Survey Description)

SW, Sec. 4, Twp. 25S, Rge. 37 E

CHECK APPROPRIATE BOX (s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- ☐ Notice of Intent
- ☐ Subsequent Report
- ☐ Final Abandonment Notice

- ☐ Abandonment
- ☐ Recompletion
- ☐ Plugging Back
- ☐ Casing Repair
- ☐ Altering Casing
- ☒ Other Disposal Method Info.

- ☐ Change of Plans
- ☐ New Construction
- ☐ Non-Routine Fracturing
- ☐ Water Shut-Off
- ☐ Conversion to Injection
- ☐ Dispose Water
(Note: Report results of multiple completion on well
Completion or Recompletion Report and log form)

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If wells directionally drilled, subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Onshore Oil & Gas Order # 7 Information.

Name of formations, Langlie Mattix-7RV-Queen-GBC.

Wells Federal 12 water production (70 BBLS/Day), Well Federal 13 (80 BBLS/DAY).

Water Analysis (ATTACHED).

Water is stored in a Steel 300 BBI Tank, ONLY IN EMERGENCY.

Water is moved to the Rice Disposal by the Pressure on the facility Heater Treater.

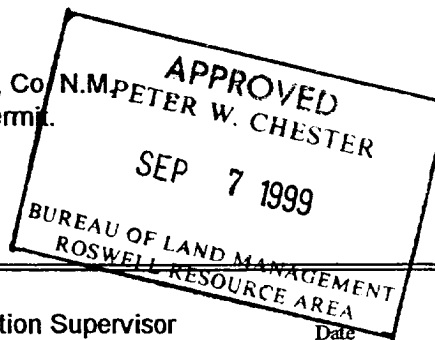
Rice Operating Co. Takes water off the pertinent Leases

Well name, Henry Well # 2

Injection well, Covered by Rule 701B, SWD-349

Well Location, N-Sec. 26, Twp. 25S, Rge. 37E. Lea, Co

Attached, a copy of the underground Injection Control Permit.

RECEIVED
1999 AUG -4 A 10: 01
BUREAU OF LAND MANAGEMENT
HOBBS, NEW MEXICO

I hereby certify that the foregoing is true and correct

Signed

Title Production Supervisor

Date

3-Aug-99

Space for Federal or State office use)

Reviewed by

Title

Date

Comments, if any:

U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or communications in any manner within its jurisdiction.

*See Instructions on Reverse Side

OPTIONAL FORM 90 (7-90)

FAX TRANSMITTAL

of pages 1

To <u>Beno Jarvis</u>	From <u>Kathy - Elm</u>
Dep't/Agency	Phone #
Fax # <u>972-443-6470</u>	Fax #
NEN 7540, 01 917 7368 5008.101 GENERAL SERVICES ADMINISTRATION	

ATTACHMENT to Incident of Noncompliance number _____

The following information is needed before your disposal of produced water can be approved, Onshore Oil & Gas Order # 7.

- 1.- Name(s) of all formation(s) producing water on the lease.
- 2.- Amount of water produced from all formations in barrels per day.
- 3.- A CURRENT water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates.
- 4.- How water is stored on the lease.
- 5.- How water is moved to the disposal facility.
- 6.- Identify the Disposal Facility by :
 - A.- Operators name.
 - B.- Well name. OR OGD Permitt.
 - C.- Well type and well number. (SWDW) (WIW)
 - D.- Location by 1/4 1/4, section, township, & range.
- 7.- A copy of the Underground Injection Control Permit - issued for the injection well by the Environmental Protection Agency or New Mexico Oil Conservation Division where the State has achieved primacy.

Submit all the above required information, to this office, on a Sundry Notice form 3160-5 in triplicate within the required time frame.

CAPITAN CHEMICAL WATER ANALYSIS REPORT

Company : GRUY PETROLEUM MANAGEMENT
 Well Name : WELLS
 Well Number : # 13
 Location :

Date Sampled : 8/3/99
 Capitan Rep. : JOE HUGHES
 Company Rep. :

ANALYSIS

1. pH	6.03	
2. Specific Gravity @ 60/60 F.	1.037	
3. CaCO3 Saturation Index @ 80 F.	-0.599	
	+0.341	'Calcium Carbonate Scale Possible'
		@ 140 F.

Dissolved Gasses

4. Hydrogen Sulfide	350	PPM
5. Carbon Dioxide	180	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,350	/	20.1	=	67.16
8. Magnesium (Mg++)	1,154	/	12.2	=	94.61
9. Sodium (Na+) Calculated	11,651	/	23.0	=	506.56
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

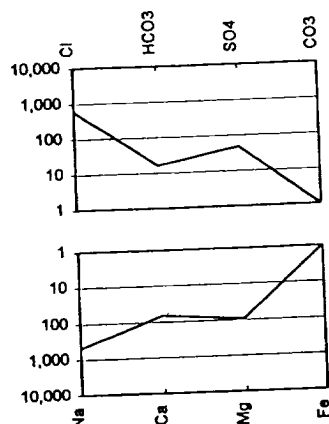
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	974	/	61.1	=	15.93
14. Sulfate (SO4=)	2,282	/	48.8	=	46.76
15. Chloride (Cl-)	21,500	/	35.5	=	605.63

Other

16. Soluble Iron (Fe)	3	/	18.2	=	0.16
17. Total Dissolved Solids	38,911				
18. Total Hardness As CaCO3	8,125				
19. Calcium Sulfate Solubility @ 90 F.	4,566				
20. Resistivity (Measured)	0.220	Ohm/Meters	@ 86	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	15.93	=	1,291
CaSO4	68.07	X	46.76	=	3,183
CaCl2	55.50	X	4.47	=	248
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	94.61	=	4,505
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	506.56	=	29,613

CAPITAN CHEMICAL WATER ANALYSIS REPORT

Company : GRUY PETROLEUM MANAGEMENT
Lease Name : WELLS
Well Number : # 12
Location :

Date Sampled : 8/3/99
Capitan Rep. : JOE HUGHES
Company Rep. :

ANALYSIS

1. pH	6.12	
2. Specific Gravity @ 60/60 F.	1.045	
3. CaCO ₃ Saturation Index @ 80 F.	-0.613	
	@ 140 F.	+0.327

'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	250	PPM
5. Carbon Dioxide	130	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,300	/	20.1	=	64.68
8. Magnesium (Mg++)	1,458	/	12.2	=	119.51
9. Sodium (Na+) Calculated	15,548	/	23.0	=	675.99
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

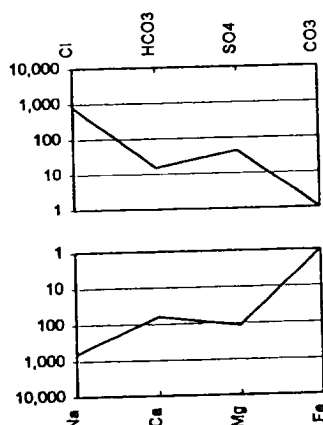
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	913	/	61.1	=	14.94
14. Sulfate (SO ₄ =)	2,070	/	48.8	=	42.42
15. Chloride (Cl-)	28,500	/	35.5	=	802.82

Other

16. Soluble Iron (Fe)	4	/	18.2	=	0.22
17. Total Dissolved Solids	49,788				
18. Total Hardness As CaCO ₃	9,250				
19. Calcium Sulfate Solubility @ 90 F.	4,995				
20. Resistivity (Measured)	0.175	Ohm/Meters	@ 86	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	14.94	=	1,210
CaSO ₄	68.07	X	42.42	=	2,887
CaCl ₂	55.50	X	7.32	=	406
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	119.51	=	5,691
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	675.99	=	39,518

122 West Taylor, Hobbs, NM 88240
Phone: (505)393-8174
Fax: (505)397-1471

RICE Operating Company

Fax

To: Reggie Reston, Gruy Petr.

From: Carolyn Doran Haynes

Fax: 383-9838

Pages: 8+cover

Phone:

Date: 07/23/98

Re: Disposal Orders for Justis SWD

CC:

☐ **Urgent** ☒ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

● **Comments:**

Mr. Reston:

At the Justis SWD System, there are three disposal wells. They are somewhat connected in sequence through the system to accommodate irregular water flow volumes and enhance capacity.

The Wells Federal lease most likely is disposed at SWD Well B-12.

Carlson Federal, Federal Carlson A and Federal Carlson leases most likely dispose at SWD Well N-26.

There is overflow capability from B-12 to N-26 and from N-26 to H-2.

Hence, here are all three Disposal Orders for the Justis SWD System.

If I can be of any further assistance, please call me at the above number.

Thank you,

Carolyn Doran Haynes, Ops. Engr.



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

ORDER NO. SWD-349

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

APPLICATION OF RICE ENGINEERING CORPORATION

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Rice Engineering Corporation made application to the New Mexico Oil Conservation Division on July 5, 1988, for permission to complete for salt water is Henry Well No. 2, located in Unit N, of Section 26, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations.
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

(1) The applicant herein, Rice Engineering Corporation is hereby authorized to complete its Henry Well No. 2 located in Unit N of Section 26, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres and Glorieta formations at approximately 3500 feet to approximately 5000 feet through 3 1/2-inch plastic lined tubing set in a packer located at approximately 3450 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Order SWD-349

Page 2

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

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

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 700 psi.

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

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

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

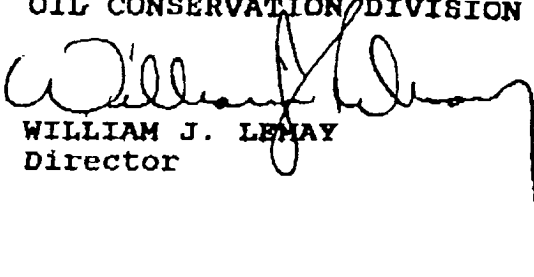
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for such further order or orders as any seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Order SWD-349
Page 3

Approved at Santa Fe, New Mexico, on this 14th day of
September, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

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SEP 14 1988

RICE ENGINEERING CORPORATION
HOBBS, N.M.

TO	✓
SAH	✓
GTB	✓
FILE	✓

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. 3845
Order No. R-3499

APPLICATION OF RICE ENGINEERING
& OPERATING, INC., FOR SALT WATER
DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 21, 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

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

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, Rice Engineering & Operating, Inc.,
is the owner and operator of the Justis SWD Well No. H-2 (formerly
the Resler & Sheldon-Bette Sue Well No. 2), located in Unit H of
Section 2, Township 26 South, Range 37 East, NMPM, Langlie-Mattix
Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Grayburg, San Andres,
and Glorieta formations, with injection into the open-hole
interval from approximately 3540 feet to 5616 feet.

(4) That the injection should be accomplished through 3 1/2-
inch plastic-lined tubing; that the casing-tubing annulus should
be filled with an inert fluid; and that a pressure gauge should

-2-

CASE No. 3845

Order No. R-3499

be attached to the annulus or the annulus left open at the surface in order to determine leakage in the tubing or casing.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Rice Engineering & Operating, Inc., is hereby authorized to utilize its Justis SWD Well No. H-2 (formerly the Resler & Sheldon-Bette Sue Well No. 2), located in Unit H of Section 2, Township 26 South, Range 37 East, NMPM, Langlie-Mattix Pool, Lea County, New Mexico, to dispose of produced salt water into the Grayburg, San Andres, and Glorieta formations, injection to be accomplished through 3 1/2-inch tubing into the open-hole interval from approximately 3540 feet to 5616 feet;

PROVIDED HOWEVER, that prior to said utilization, the applicant shall cause additional cementing of the 5 1/2-inch casing set at 3540 feet sufficient to ensure the annular space is cemented from said casing shoe back into the 8 5/8-inch casing set at 916 feet;

PROVIDED FURTHER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus left open at the surface in order to determine leakage in the tubing or casing.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(3) 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

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/ **RECEIVED**

SFP 17 1968

*11/2/76
B-12*

SUBJECT: SALT WATER DISPOSAL WELL

ORDER NO. SWD-179

THE APPLICATION OF RICE ENGINEERING
AND OPERATING, INC., FOR A SALT
WATER DISPOSAL WELL.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 701 (C) Rice Engineering and Operating, Inc., made application to the New Mexico Oil Conservation Commission on November 8, 1976, for permission to complete for salt water disposal the Texas Pacific Oil Co. N. E. Eaton Well No. 18 located in Unit B of Section 12, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

The Secretary-Director finds:

1. That application has been duly filed under the provisions of Rule 701 (C) of the Commission Rules and Regulations;
2. That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
3. That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.
4. That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Rice Engineering and Operating, Inc., is hereby authorized to complete Texas Pacific Oil Co. N. E. Eaton Well No. 18 located in Unit B of Section 12, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4236 feet to approximately 4524 feet through 3 1/2 inch plastic lined tubing

Order No. SWD-179

-2-

set in a packer located at approximately 4200 feet.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

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

That water disposed of into this well will be by gravity flow, and in no event shall injection pressures exceed 850 pounds per square inch.

That the operator shall notify the supervisor of the Commission's Hobbs District Office before injection is commenced through said well.

That the operator shall immediately notify the supervisor of the Commission's Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

PROVIDED FURTHER:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Commission may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operation in accordance with Rule

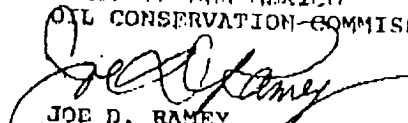
ORDER NO. SWD-179

-2-

704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 30th day
of November, 1976.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JOE D. RAMEY
Secretary-Director

S E A L