

APPLICATION FOR AUTHORIZATION TO INJECT

3/26/03
PKRVO307149017

I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No

II. OPERATOR: RAY WESTALL

ADDRESS: P.O. Box 4 Loco Hills, NM 88255

CONTACT PARTY: RANDALL L HARRIS

PHONE: 505 677 2370

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____

RECEIVED

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

MAR 11 2003

OIL CONSERVATION

DIVISION

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

3/14/03 - called R.L. Harris
and asked for S.L.O. NOTICE
Prof - Will Jones

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: RANDALL L HARRIS

TITLE: GEOLOGIST

SIGNATURE: [Signature]

DATE: 3/4/03

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

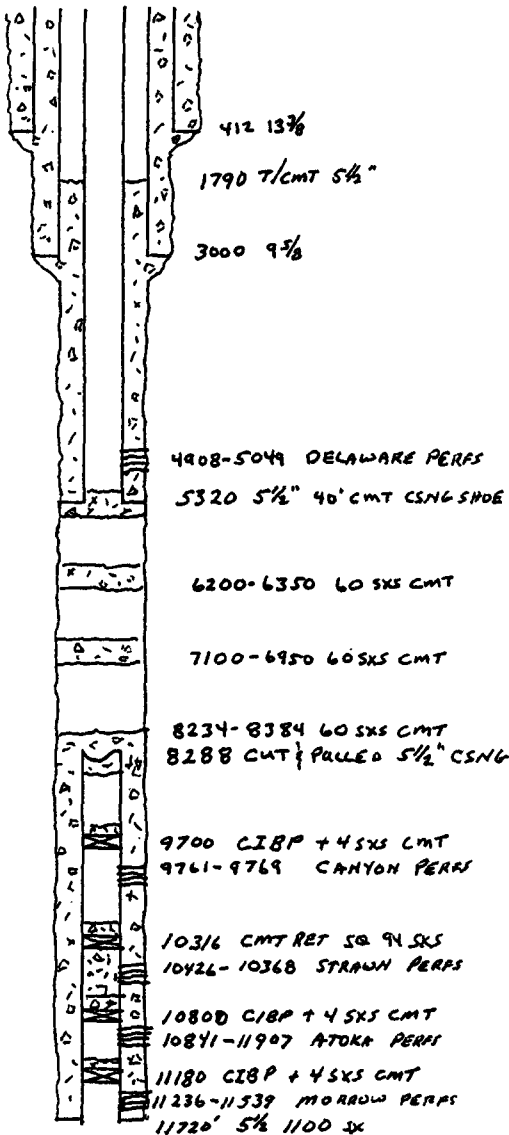
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

RAY WESTALL
MYRTLE MYRA #8
660' FNL & 1980 FEL SEC. 16 T21S-R27E

(30-015-21650)

Schematic



Tubular Data

Surface Casing

Size 13 3/8" 48# Set @ 412' Cemented with
875 sxs Circulated Hole size 17 1/2"

Intermediate Casing

Size 9 5/8" 36# set @ 3000' Cemented with
1060 sxs Circulated Hole size 12 1/4"

Long String

Size 5 1/2 15.5# set @ 5320 Cemented with
1100 sxs TOC 1790' (bond log)

Hole size 8 3/4"

Injection interval 4908' to 5049' Perforated

Tubing size 2 7/8" lined with Plastic set in a Baker Loc-set packer at 4850 feet.

Other Data

1. Name of the injection formation. DELAWARE
2. Name of field or pool. LA HUERTA DELAWARE
3. Is this a new well drilled for injection? No
If no, for what purpose was the well originally drilled? Oil & Gas production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used. SEE SCHEMATIC
5. Give the depth to and name of any overlying or underlying oil or gas zones in this area.
11000' Morrow, 7000' Bone Springs, 500' Yates

ATTACHMENT V

Maps that identifies all wells of public record within two miles of each proposed injection well, and the area of review one-half mile radius around each proposed injection well.

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V. 3. WELCH

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Russian Prop.
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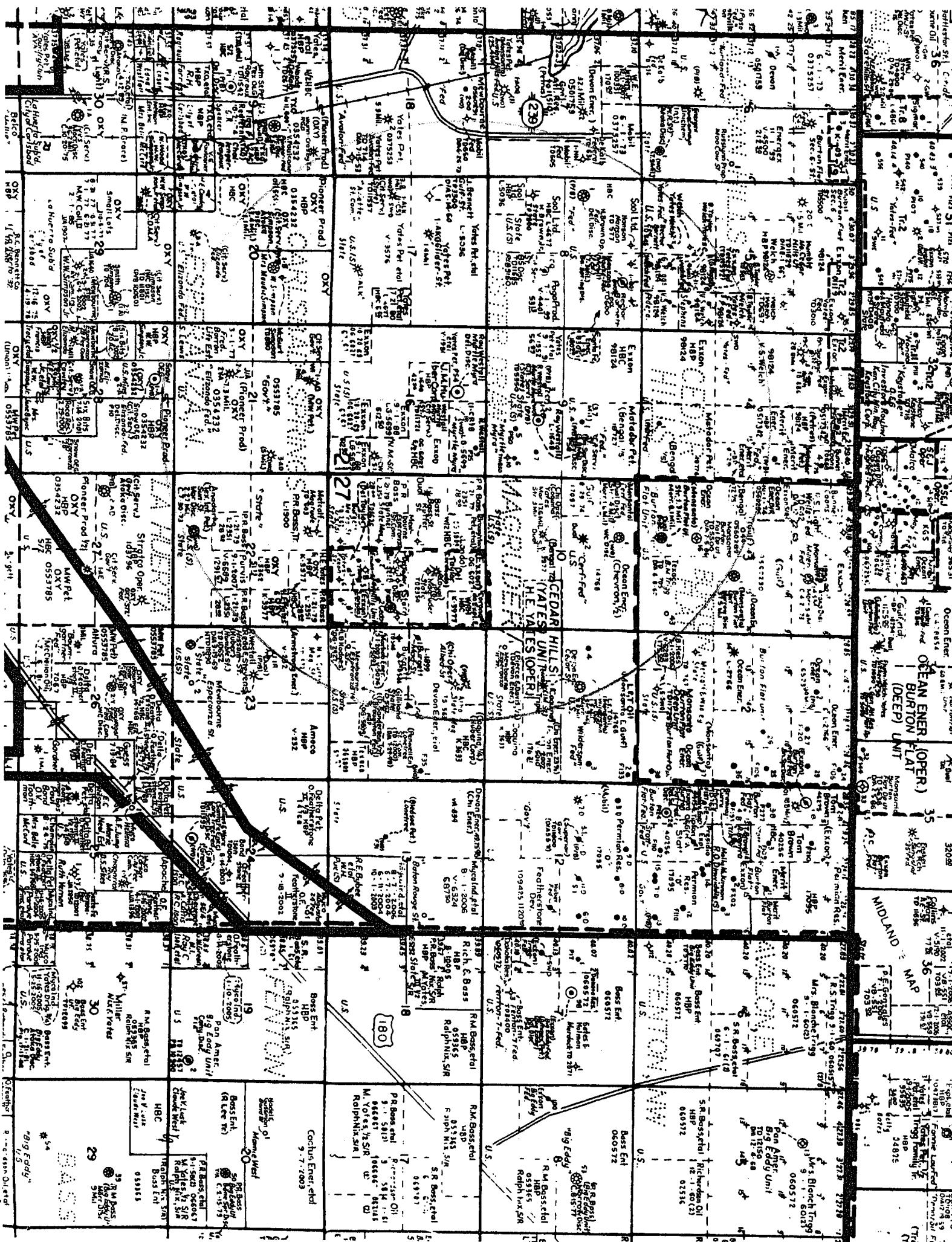
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Map showing property boundaries and owner names. Key features include:

- Property lots numbered 1 through 36.
- Owner names such as "OCEAN ENER", "BURTON FLAT", "MIDLAND", and "NAP".
- Geographical features like "OCEAN ENER" and "BURTON FLAT".
- Various land use designations and notes.

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- Various land use designations and notes.

ATTACHMENT VI

Data on all wells of public record within the area of review. There are no plugged wells that penetrated the proposed injection zone within the area of review.

Active

	WELL NAME	LOCATION	SPUD DATE	SUR.CASING	INT.CASING	PROD. CASING	COMPLETION
30-015 26179	Ray Westall Myrtle Myra #1 ✓	NENW Sec 16 T21S-R27E 1830S 1980 E	5/29/74 990 FWL/2310 E	13 3/8" @ 585' 630 sxs Circ	9 5/8" @ 2980' 1575 sxs Circ	5 1/2" @ 5107' 715 sxs T/400 Bond log	4973-5002 La Hureta Delaware Oil
21146	Ray Westall Myrtle Myra #2	NWSE Sec 9 T21S-R27E 1830S 1980 E	11/17/90	13 3/8" @ 851 851 sxs Circ.	8 5/8" @ 4222 2075 sxs Circ.	7" @ 10155 300 sxs 450 sxs sqz @ 5475' T/1523 Calc	3506-5006 La Hureta Delaware Oil
25126	Ray Westall Myrtle Myra #3	NESW Sec 9 T21S-R27E 1980 FSL 1980 FWL	12/15/84 Re entered 1/2/90	13 3/8 @ 455' 650 sxs Circ.	8 5/8" @ 2500' 700 sxs Circ	5 1/2" @ 5350' 500 sxs T/2400' FP	4972-4980 La Hureta Delaware Oil
26363	Ray Westall Myrtle Myra #5	SWSE Sec 9 T21S-R27E 990S/1650 E	4/24/92	13 3/8" @ 433' 450 sxs Circ.	8 5/8" @ 2450' 1335 sxs Circ	5 1/2" @ 5125' 535 sxs T/1770' Bond	3370-5037 La Hureta Delaware Oil
21073	Ray Westall Myrtle Myra #6	SWSW Sec 9 T21S-R27E 990S/660 E	11/26/92	13 3/8" @ 430' 550 sxs Circ	8 5/8" @ 2440' 1335 sxs Circ	5 1/2" @ 5199 675 sxs T/1528' Bond	5005-5104 La Hureta Delaware Oil
27014	Ray Westall Myrtle Myra #7	NESE Sec 9 T21S-R27E	10/5/92	13 3/8" @ 453' 450 sxs Circ	8 5/8" @ 2477 1335 sxs Circ	5 1/2" @ 5150' 568 sxs T/1572' Bond	3970-5078 La Hureta Delaware Oil

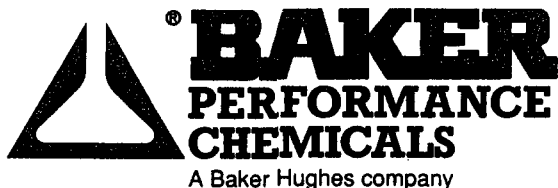
28055 = #11 F/9/25/21E
1853S
1853 E — not yet completed. —

21650 #8 ✓ B/16/215/21E
660N
1980E — Yes —

27685 #9 ✓ A/16/215/21E
330 N/990E — Yes —

ATTACHMENT VII

1. Proposed average of 300 bbls per day and maximum of 500 bbls per day of injected fluids. At a rate of one bbl per minuet.
2. System will be closed.
3. Average anticipated pressure of 450 psi and a maximum of 800 psi.
4. Source of produced water is reinjected produced water from offsetting leases of the same formation.
5. Water analysis attached.

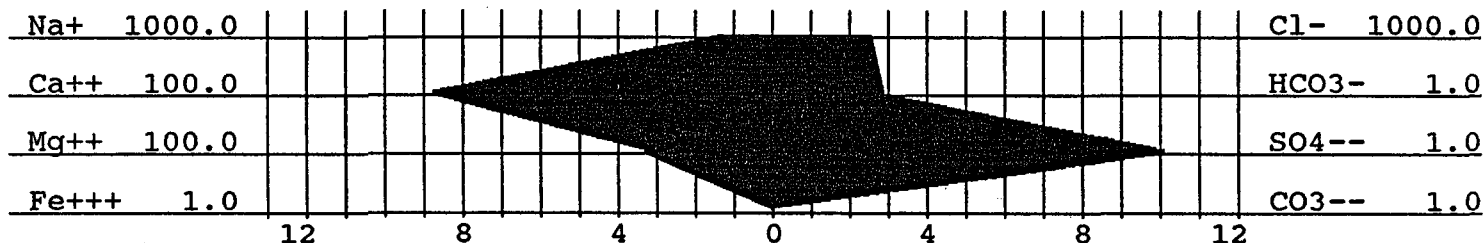


WATER ANALYSIS
for
RAY WESTALL

Date of Analysis:	SEPTEMBER 10, 1994	Analysis #:	5431
Company:	RAY WESTALL	Company Address:	LOCO HILLS
State:	N.M.	Field:	N/D
Lease:	MYRTLE MYRA #2	Well #:	#2
Oil (bbl/day):	N/D	Water (bbl/day):	N/D
Type of Water:	PRODUCED	Temp., C:	20
Sample Source:	WELL HEAD	Date of Sampling:	SEPTEMBER 3, 1994
Representative:	STEVE STROUD	Analysis By:	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness	: 1240.00	
Calcium, (Ca++)	: 900.00	18043.30
Magnesium, (Mg++)	: 340.00	4131.48
Iron, (Fe+++)	: 0.05	1.00
Barium, (Ba++)	: N/D	N/D
Sodium, Na+(calc)	: 1449.41	33336.46
Manganese, (Mn++)	: 0.00	0.00

ANIONS	me/l	mg/l
Chloride, Cl-	: 2676.06	94996.81
Sulfate, SO4--	: 10.41	500.00
Carbonate, CO3--	: 0.00	0.00
Bicarbonate, HCO3--	: 3.00	183.04
Hydroxyl, OH-	: 0.00	0.00
Sulfide, S--	: 0.00	0.00
TOTAL SOLIDS (quant.)		151192.00

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide	: 7.92	mg/l
Oxygen	: N/D	mg/l

PHYSICAL PROPERTIES

pH	: 5.80
Spec Grav.	: 1.125
TDS (calc.)	: 151195.08

SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
20.0	0.02	1085	1
30.0	0.25	1164	1
40.0	0.51	1329	1
Max entity, (calc.)	742		0
RESIDUAL HYDROCARBONS:		N/D	

N/D = not determined

@ 20'C...Calcium sulfate scaling is unlikely.

@ 20'C...Slightly corrosive, and slight carbonate scale.

FW01W127

BJ SERVICES COMPANY
WATER ANALYSIS #FW01W127
ARTESIA LAB

GENERAL INFORMATION

OPERATOR:	RAY WESTALL OPERATING	DEPTH:	
WELL:	MYRTLE MYRS #5	DATE SAMPLED:	11/11/96
FIELD:		DATE RECEIVED:	11/11/96
SUBMITTED BY:	RANDY HARRIS	COUNTY:	EDDY
WORKED BY:	CRAIG BAILEY	STATE:	NM
PHONE NUMBER:		FORMATION:	DELAWARE

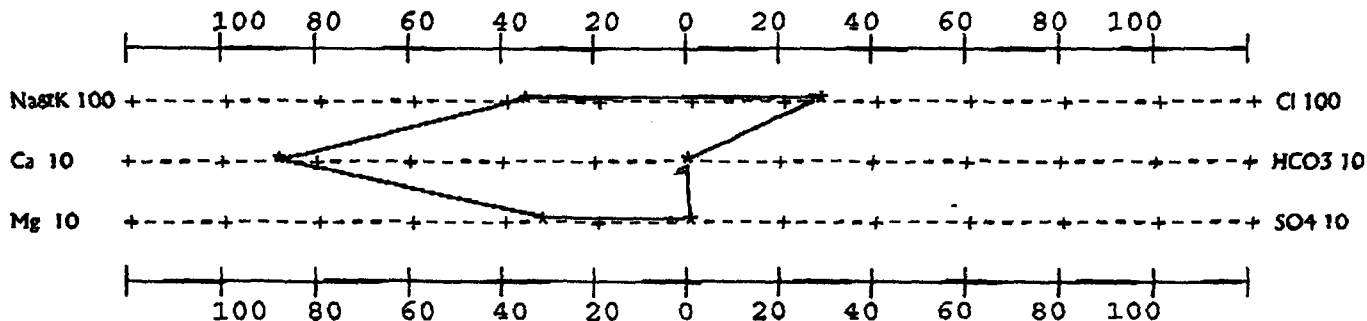
SAMPLE DESCRIPTION

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.135	@ 72°F	PH:	6.89
RESISTIVITY (CALCULATED):	0.035	ohms @ 75°F		
IRON (FE++) :	2	ppm	SULFATE:	396 ppm
CALCIUM:	17,992	ppm	TOTAL HARDNESS	61,711 ppm
MAGNESIUM:	4,068	ppm	BICARBONATE:	161 ppm
CHLORIDE:	105,703	ppm	SODIUM CHLORIDE (Calc)	173,882 ppm
SODIUM+POTASS:	54,627	ppm	TOT. DISSOLVED SOLIDS:	222,599 ppm
IODINE:			POTASSIUM CHLORIDE:	

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST

Craig Bailey
 CRAIG BAILEY

ATTACHMENT VIII

The proposed injection zone is a fine grained sand in the Delaware Formation. It has several sands with varying thickness. There is possible drinking water overlying the injection in the surface sands at a depth of 0-250' and in the Seven Rivers formation 1000-2300'. There is no known source underlying the injection interval.

ATTACHMENT IX

No proposed stimulation.

ATTACHMENT XI

There is one inactive fresh water well located in UL M Sec 9 T21S-R27E that is within one mile of the proposed disposal well.

ATTACHMENT XII

All available geologic and engineering data have been examined and there is no evidence of open faults or any other hydrologic connection between the disposal zone and any source of drinking water.

ATTACHMENT XIV

PROOF OF NOTICE

Leasehold operators within one-half mile of the well location are: Exxon, Chi Operating, Bass and Mewbourne. Each of the operators were provided a copy of our application by certified mail. Proof of notice is enclosed. The surface owner is the State of New Mexico.

PROOF OF PUBLICATION

Proof of publication is from the Artesia Daily Press.

Copies of the application have been sent to:

	Certified Mail #
Exxon 500 W. Illinois Midland, TX. 79701	7000 0600 0024 2324 1131
Chi Energy P.O. Box 1799 Midland, TX. 79702-1799	7000 0600 0024 2324 1124
Bass Enterprises P.O. Box 2760 Midland, TX. 79702-2760	7000 0600 0024 2324 1117
Mewbourne Oil Co. 500 W. Texas Ste. 1020 Midland, TX. 79701	7000 0600 0024 2324 1100
Oil Conservation Division 1301 W. Grand Artesia, NM 88210	
Oil Conservation Division 1220 S. St. Francis Santa Fe, NM. 87505	

Affidavit of Publication

NO. 18002

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn, says: That he is the Publisher of The
Artesia Daily Press, a daily newspaper of general
circulation, published in English at Artesia, said county
and county and state, and that the here to attached

Legal Notice

was published in a regular and entire issue of the said
Artesia Daily Press, a daily newspaper duly qualified
for that purpose within the meaning of Chapter 167 of
the 1937 Session Laws of the state of New Mexico for
1 consecutive weeks/days on the same

day as follows:

First Publication March 4 2003

Second Publication _____

Third Publication _____

Fourth Publication _____

Subscribed and sworn to before me this

7th day of March 2003

Barbara Ann Brown
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

LEGAL NOTICE

Ray Westall-Operator, P.O.
Box 4, Loco Hills, New
Mexico 88255 Phone
(505)677-2370. Contact
party for Ray Westall-
Operator is Randall Harris,
is seeking administrative
approval from the New
Mexico Oil Conservation
Division to utilize a well
located 660' FNL & 1980'
FEL Section 16, Township
21 South, Range 27 East,
Eddy County, New Mexico
known as the Myrtle Myra
#8 for water injection.
Proposed injection is in the
Delaware formation through
perforations 4908-5049
feet. Expected maximum
injection rate of 300 bbls per
day at 800 psi. Interested
parties must file objection or
requests for hearing with the
Oil Conservation Division,
1220 So. St. Francis Drive,
Santa Fe, NM 87505 within
15 days of the notice.
Published in the Artesia Daily
Press, Artesia, N.M. March 4,
2003.

Legal 18002