

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] TYPE OF APPLICATION - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____

- [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or
- [F] Waivers are Attached

Handwritten notes:

AUG 5/1/02

OLD Non-w/ Lakewood APE State #1

WAS is Surface Owner?

WHY was BLM NOTIFIED?

is this State Acreage?

WHY was State not NOTIFIED?

Called Sam & Ray 10AM FRIDAY 8/30/02

Need Production PLOT

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Sam Brandon
 Print or Type Name

Sam Brandon
 Signature

Operations Engineer
 Title

07/15/02
 Date

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Yates Petroleum Corporation

ADDRESS: 105 South Fourth Street, Artesia, NM 88210

CONTACT PARTY: Sam Brandon PHONE: (505) 748-4281

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: _____

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.

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.).

*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).

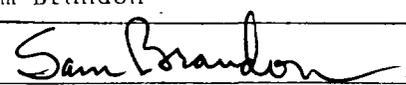
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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: Sam Brandon TITLE: Operations Engineer

SIGNATURE:  DATE: 07/15/2002

* 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 submital: _____

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

July 15, 2002

David Catanach
State of New Mexico
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Catanach,

(30-015-22233)

Enclosed please find a copy of form C-108 (Application for Authority to Inject) for the proposed Lakewood SWD #1 located in Section 30 Township 19 South, Range 26 East, Eddy County New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4281.

Sincerely,

A handwritten signature in cursive script that reads 'Sam Brandon'.

Sam Brandon
Operations Manager

SB/cm

Enclosure

MARTIN YATES, III
1912 - 1989
FRANK W. YATES
1936 - 1986



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DENNIS G. KINSEY
TREASURER

July 15, 2002

Joe L. & Janet S. Cox
3112 Dona Ana
Carlsbad, NM 88220

Dear Mr. & Mrs. Cox;

Yates Petroleum Corporation has made an application with the Oil Conservation Division for administrative approval for a "Salt Water Disposal Well", the Lakewood SWD #1 located in Section 30 Township 19 South Range 26 East, Eddy County, New Mexico.

Please find enclosed a copy of Form C-108 "Application for Authorization to Inject".

If you should have any questions please feel free to contact me at (505) 748-4281.

Sincerely,

A handwritten signature in black ink that reads "Sam Brandon". The signature is fluid and cursive, with a long horizontal stroke at the end.

Sam Brandon
Operations Engineer

Enc
SB/cm

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FRANK W. YATES
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SECRETARY
DENNIS G. KINSEY
TREASURER

July 15, 2002

Bureau of Land Management
Armando Lopez
2909 2nd Street
Roswell, New Mexico 88201

Dear Mr. Lopez;

Enclosed please find a copy of form C-108 (Application for Authority to Inject) for the proposed Lakewood SWD #1 located in Section 30 Township 19 South, Range 26 East, Eddy County New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4281.

Sincerely,

A handwritten signature in black ink that reads 'Sam Brandon'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Sam Brandon
Operations Manager

SB/cm

Enclosure

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

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SECRETARY
DENNIS G. KINSEY
TREASURER

July 15, 2002

Tim Gum
State of New Mexico
Oil Conservation Division
1301 West Grand
Artesia, New Mexico 88210

Dear Mr. Gum;

Enclosed please find a copy of form C-108 (Application for Authority to Inject) for the proposed Lakewood SWD #1 located in Section 30 Township 19 South, Range 26 East, Eddy County New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4281.

Sincerely,

A handwritten signature in black ink that reads 'Sam Brandon'. The signature is fluid and cursive, with the first name 'Sam' being more prominent than the last name 'Brandon'.

Sam Brandon
Operations Manager

SB/cm

Enclosure

**C-108 Application for Authorization to Inject
Yates Petroleum Corporation
Lakewood SWD #1
Sec. 30, T19S, R26E
Eddy County, New Mexico**

- I. **The purpose of completing this well is to make a disposal well for produced Canyon water into the Canyon.**
- II. **Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Sam Brandon (505) 748-4281**
- III. **Well Data: See Attachment A**
- IV. **This is not an expansion of an existing project.**
- V. **See attached map, Attachment B.**
- VI. **There are no wells within the area of review penetrating the proposed injection zone.**
- VII.
 1. **Proposed average daily injection volume approximately 8,000 BWPD. Maximum daily injection volume approximately 10,000 BWPD.**
 2. **This will be a closed system.**
 3. **Proposed average injection pressure 1200 psi.
Proposed maximum injection pressure 1800 psi.**
 4. **Sources of injected water would be produced water from the Canyon. (Attachment C)**
 5. **See Attachment C.**
- VIII. **The proposed injection interval is Cased Hole from 7936-8180.

Fresh water zones overlie the proposed injection formation at depths to approximately 1100 feet.**
- IX. **The proposed disposal interval may be acidized with 15-20% HCL acid.**

- X. Logs will be filed at your office. Any new logs run after completing will also be submitted to your office.**

- XI. There is one windmill that exists within a one –mile radius of the subject location. A chemical analysis of the water from this well is attached (Attachment E)**

- XI. Available engineering and geologic data have been examined and no evidence of open faults or hydrologic connection between the disposal zone and any underground sources of drinking water has been found. (Attachment D)**

- XII. Proof of notice.**
 - A. Certified letters sent to the surface owner are attached. (Attachment F) There are no offset operators.**

 - B. Copy of legal advertisement attached. (Attachment G)**

- XIV. Certification is signed.**

**Yates Petroleum Corporation
Lakewood SWD #1
Sec. 30, T19S, R26E**

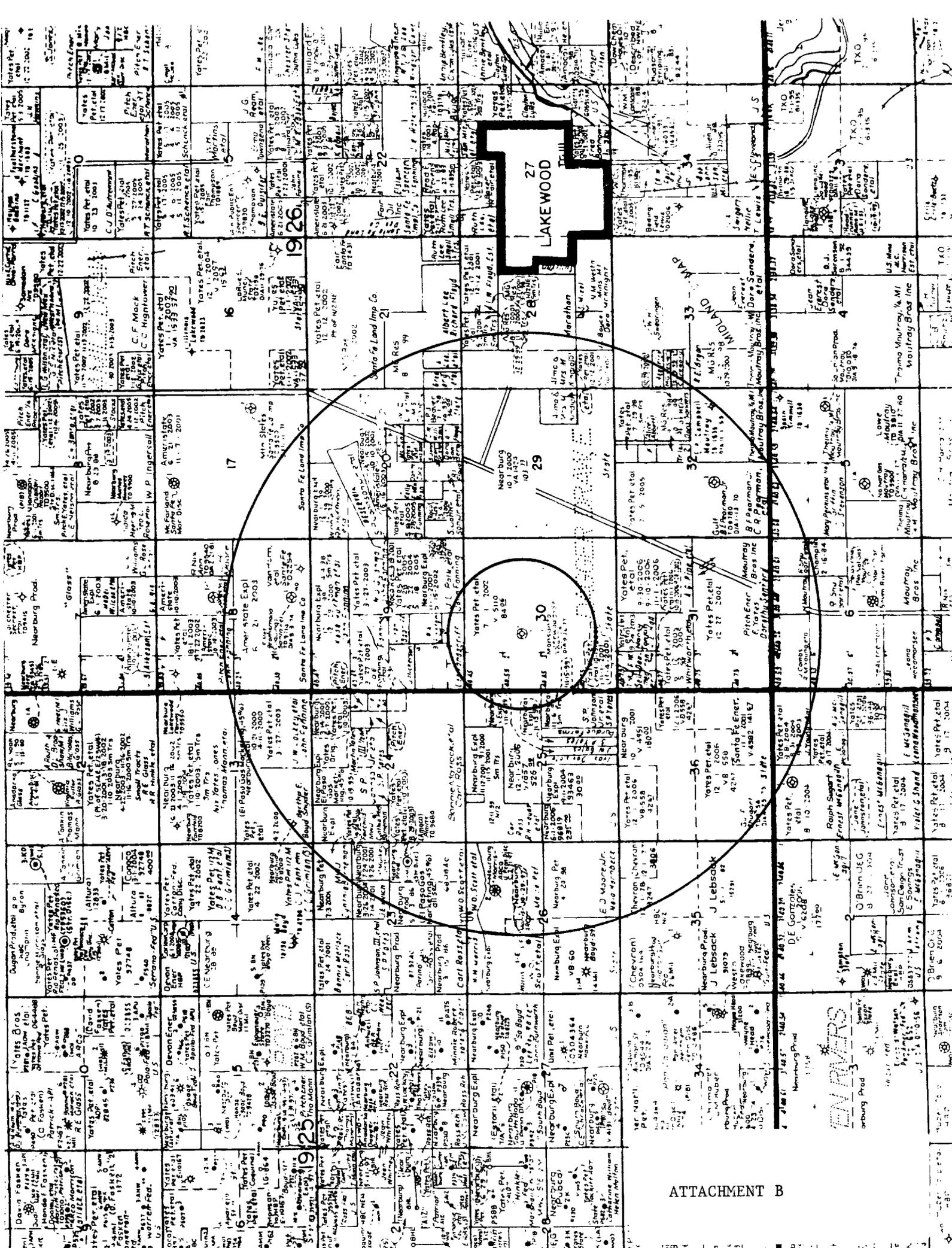
Attachment A

Page 1

API 30-015-22233

III. Well Data

- A.
1. Lease Name/Location
Lakewood SWD #1
Sec. 30, T19S, R26E
1980' FNL & 1980' FWL
 2. Casing Strings:
 - a. 13 3/8" 48#, H-40 ST&C at 500'
 - 9 5/8" 36# at 1400'
 - 7" 23 & 26# N80 & J55 @ 8567'
 - 3 1/2" Plastic Coated tubing (proposed) @ 7900' ±
 3. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 7900' ±
- B.
1. Injection Formation: Canyon
 2. Injection interval will be Perforated from 7936' to 8180'
 3. This is a conversion of an existing well originally completed in the Canyon.
 4. Next higher (shallower) oil or gas zone within 2 miles Upper Pennsylvanian Strawn.
Next lower (deeper) oil or gas zone within 2 miles-None.





Water Analysis Report from Petrolite Corporation

YATES PETROLEUM

HILLVIEW AHE
 WELL #5

ARTESIA, NEW MEXICO

Summary		Analysis: 15311					
Anion/Cation Ratio	1.00	Anions	mg/L	meq/L	Cations	mg/L	meq/L
TDS (mg/L or g/m ³)	7,914	Chloride	2,300	64.9	Sodium	2,084	90.7
Density (g/cm ³ or tonne/m ³)	1.006	Bicarbonate	817	13.4	Magnesium	110	9.05
Chemical Treatment		Carbonate	0.00	0.00	Calcium	457	22.8
Sample Condition		Sulfate	2,136	44.5	Strontium	10.0	0.23
Sampling Date	7/1/96	Phosphate	N/A	N/A	Barium	0.05	0.00
Sampled by		Borate	N/A	N/A	Iron	0.05	0.00
Submitted by	ANDY MILLER	Silicate	N/A	N/A	Potassium	N/A	N/A
Analysis Date	7/10/96	Hydrogen Sulfide			Aluminum	N/A	N/A
Sample analysis number	15311	pH at time of sampling		6.90	Chromium	N/A	N/A
		pH at time of analysis			Copper	N/A	N/A
		pH used in Calculations		6.90	Lead	N/A	N/A
					Manganese	N/A	N/A
					Nickel	N/A	N/A

Predictions of Saturation Index and Amount of Scale in lb/1000bbl												
Pressure (psi)		Temp.	Calcite CaCO3		Gypsum CaSO4.2H2O		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4	
CO2	Total	°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
		80	0.45	50.3	-0.23		-0.30		-0.20		0.65	0.02
		100	0.57	64.4	-0.24		-0.24		-0.20		0.49	0.02
		120	0.70	79.4	-0.24		-0.16		-0.13		0.37	0.02
		140	0.84	95.0	-0.23		-0.06		-0.15		0.27	0.01

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.
 Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.
 Note 3: CO2 Pressure is absolute pressure. Total Pressure is gauge pressure.

Water to be disposed

Affidavit of Publication

NO. 17800

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 July 14 2002

Second Publication _____

Third Publication _____

Fourth Publication _____

Subscribed and sworn to before me this

15th day of July 2002

Barbara Ann Beans
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

LEGAL NOTICE

Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well, the "Lakewood" SWD #1", Sec. 30, T19S, R26E, 1980' FNL & 1980' FWL, Eddy County, New Mexico, will be used for salt water disposal. Disposal waters from the Canyon will be re-injected into the Canyon at a depth of 7936'-8180' with a maximum pressure of 1800 psi and a maximum rate of 10,000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, NM 87505-5472, within 15 days. Additional information can be obtained by contacting Ray Stall at (505) 748-4174.

Published in the Artesia Daily Press, Artesia, NM July 14, 2002.

Legal 17800

7000 1530 0000 1625 4604

**U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 0.34

Postmark
Here

Sent To
18405 East
Signet Apt. No. or PO Box No.
3112
City, State, ZIP+4

Lepwood Blvd #1
Cherry Match

PS Form 3800, May 2000

See Reverse for Instructions

Well Name: Lakewood "AQE" St. No. 1 Field: _____

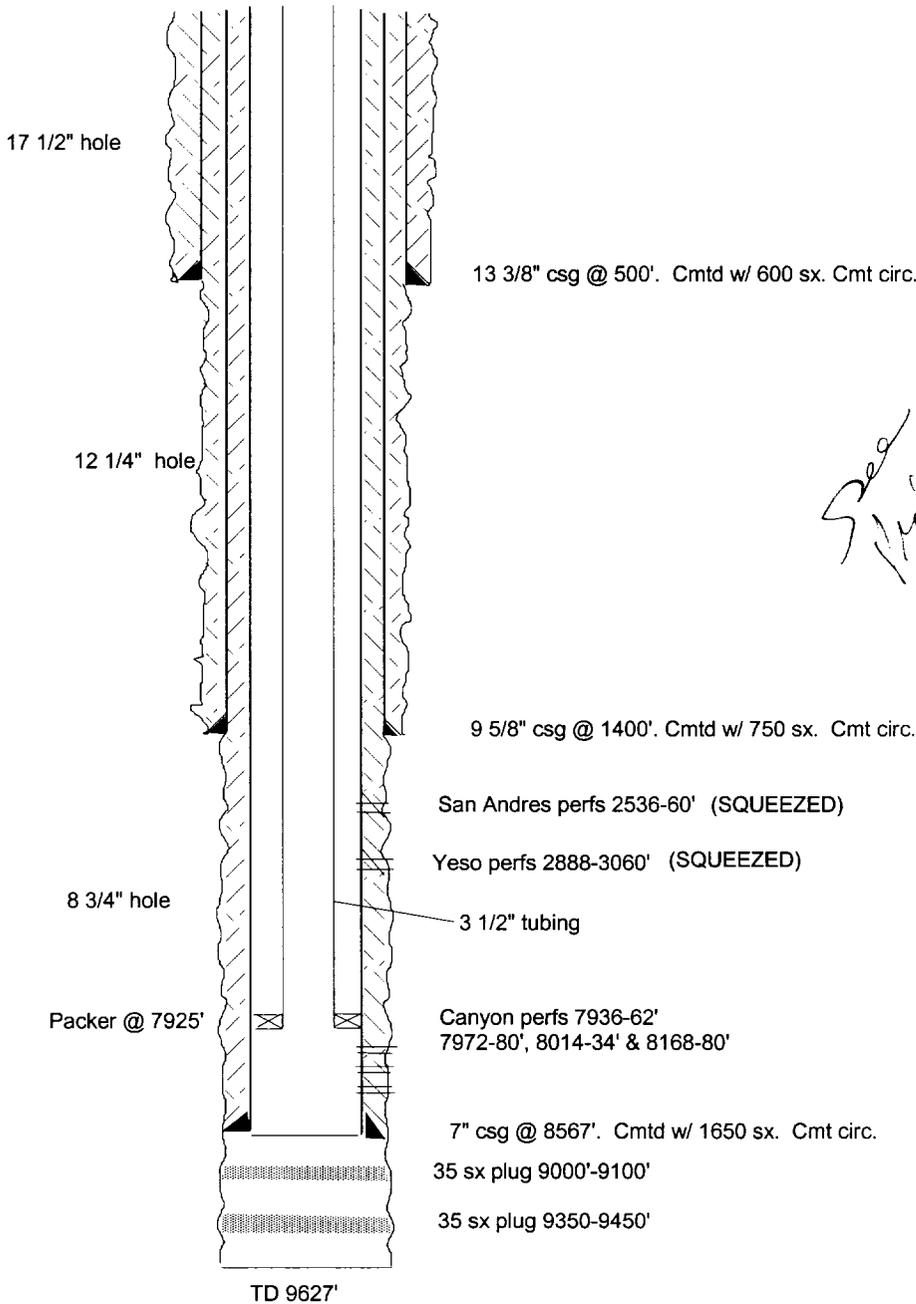
Location: 1980' FNL & 1980' FWL Sec. 30-19S-26E Eddy Co., NM

GL: 3422' Zero: _____ AGL: _____ KB: 3436'

Spud Date: _____ Completion Date: _____

Comments: _____

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 48#, H40 ST&C	500'
9 5/8" 36# K55 ST&C	1400'
7" 23 & 26# N80 & J55	8567'



See Perf. Curve

Canyon Production

21428 MCF in 7.5 months of 2000

= 950 MCF Day

520 BW/PAY

PROPOSED CONFIGURATION FOR CANYON ZONE DISPOSAL

SKETCH NOT TO SCALE

DATE: _____

Attachment D

C-108 Application for Authorization to Inject
Yates Petroleum Corporation
Lakewood SWD #1
Section 30 T19S-R26E
Eddy County, New Mexico

Available engineering and geologic data have been examined and no evidence of open faults or hydrologic connection between the disposal zone and any underground sources of drinking water has been found.

A handwritten signature in black ink that reads "Raymond H. Podany". The signature is written in a cursive style with a large, looping initial "R".

Ray Podany
Geologist
Yates Petroleum Corporation

A handwritten date in black ink that reads "19 July 2002". The date is written in a cursive style and is underlined.

Date

Cherry M



MILLER CHEMICALS, INC.

Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 393-2893 Hobbs Office
(505) 746-1918 Fax

De Smith
Lake wood

WATER ANALYSIS REPORT

Company : YATES PETROLEUM Date : 7/10/02
Address : ARTESIA, NM Date Sampled : 7/9/02
Lease : WILLIAMSON Analysis No. : 00423
Well : WATER WELL
Sample Pt. : WELL

Table with 4 columns: ANALYSIS, mg/L, and * meq/L. Rows include pH (6.9), H2S (0), Specific Gravity (1.000), Total Dissolved Solids (6463.6), Suspended Solids (NR), Dissolved Oxygen (NR), Dissolved CO2 (NR), Oil In Water (NR), Phenolphthalein Alkalinity (CaCO3), Methyl Orange Alkalinity (CaCO3), Bicarbonate (HCO3, 207.0), Chloride (Cl, 2343.0), Sulfate (SO4, 1875.0), Calcium (Ca, 1040.0), Magnesium (Mg, 340.7), Sodium (calculated) (Na, 657.6), Iron (Fe, 0.3), Barium (Ba, NR), Strontium (Sr, NR), and Total Hardness (CaCO3) (4000.0).

PROBABLE MINERAL COMPOSITION

Table with 4 columns: *milli equivalents per Liter, Compound, Equiv wt X meq/L, and mg/L. Rows show calculations for Ca, Mg, Na, and various compounds like Ca(HCO3)2, CaSO4, CaCl2, Mg(HCO3)2, MgSO4, MgCl2, NaHCO3, Na2SO4, and NaCl.

REMARKS:

ATTACHMENT "E"

SCALE TENDENCY REPORT

Company : YATES PETROLEUM Date : 7/10/02
Address : ARTESIA, NM Date Sampled : 7/9/02
Lease : WILLIAMSON Analysis No. : 00423
Well : WATER WELL Analyst : A. MILLER
Sample Pt. : WELL

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. = 0.3 at 70 deg. F or 21 deg. C
S.I. = 0.3 at 90 deg. F or 32 deg. C
S.I. = 0.3 at 110 deg. F or 43 deg. C
S.I. = 0.4 at 130 deg. F or 54 deg. C
S.I. = 0.4 at 150 deg. F or 66 deg. C

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S = 2200 at 70 deg. F or 21 deg C
S = 2253 at 90 deg. F or 32 deg C
S = 2274 at 110 deg. F or 43 deg C
S = 2261 at 130 deg. F or 54 deg C
S = 2236 at 150 deg. F or 66 deg C

Respectfully submitted,
A. MILLER