

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

[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.

Print or Type Name \_\_\_\_\_ Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

e-mail Address \_\_\_\_\_

30-025-01820  
 LAGARTO AMZ STAGE #1  
 inactive to the nearest EOR well  
 I ACTIVE  
 0 PPA  
 1 AOR well  
 Production to  
 4 to  
 Seals  
 Send new laterals  
 4143-13230  
 Kuy  
 B.H. Pate  
 well was PPA  
 in post

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

April 3, 2006

New Mexico Energy & Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504

Dear Mr. Catanach;

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates Petroleum Corporation Lagarto SWD No. 1 located in Unit M, Section 1-T11S-R34E of Lea 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'.

Sam Brandon  
Operations Engineer

SB

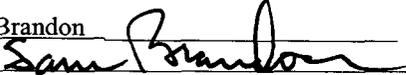
Enclosure

2006 APR 7 PM 1 35

30-025-01820

APPLICATION FOR AUTHORIZATION TO INJECT

Lagarto AMZ St. No. 3

- I. PURPOSE: Secondary Recovery Pressure Maintenance  Disposal Storage  
Application qualifies for administrative approval?  Yes  No
- II. OPERATOR:  
ADDRESS: 105 South 4<sup>th</sup> Street, Artesia, New Mexico 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  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:
- Proposed average and maximum daily rate and volume of fluids to be injected;
  - Whether the system is open or closed;
  - Proposed average and maximum injection pressure;
  - Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water; and,
  - 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 litho logic 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: 3/14/2006
- \* 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: \_\_\_\_\_

2006 APR 7 PM 1:35

**C-108 Application for Authorization to Inject  
Yates Petroleum Corporation  
Lagarto SWD No. 1  
Unit M Sec. 1, T11S, R34E  
Lea County, New Mexico**

- I. **The purpose of completing this well is to make a disposal well for produced Devonian, Mississippian, Morrow, Atoka and Penn Sands water into the Devonian Dolomite formation.**

**Yates Petroleum Corporation plans to convert this well to a water disposal well into the Devonian Dolomite.**

- 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. **1 well within the area of review penetrates the proposed injection zone. (See Attachment C)**
- VII. **1. Proposed average daily injection volume approximately 2500 BWPD. Maximum daily injection volume approximately 5000 BWPD.**
- 2. This will be a closed system.**
- 3. Proposed average injection pressure –unknown.  
Proposed maximum injection pressure –2500 psi.**
- 4. Sources of injected water would be produced water from the Mississippian, Morrow, Atoka and Penn Sands. (Attachment D)**
- VIII. **1. The proposed injection interval is the portion of the Devonian Dolomite formation consisting of porous Dolomite from estimated depths of 13115-13450’.**

**Application for Authorization to Inject  
Lagarto SWD No. 1**

**-2-**

- 2. Possible Fresh water zones overlie the proposed injection formations at depths to approximately 110'. There are no fresh water zones underlying the formation.**
  
- IX. The proposed disposal interval may be acidized with 15% HCL acid.**
  
- X. Logs were filed at your office when the well was drilled.**
  
- XI. There are no windmills within a one-mile radius of the subject location.**
  
- XII. Yates Petroleum Corporation has examined geologic and engineering data and has found that there is no evidence of faulting in the proposed interval. (Attachment G)**
  
- XIII. Proof of notice.**
  - A. Certified letter sent to the surface owner. Yates Petroleum Corporation is the operator of all leases within 1/2 mile of the proposed SWD well.**
  
  - B. Copy of legal advertisement attached. (Attachment F)**
  
- XIV. Certification is signed.**

**Yates Petroleum Corporation  
Lagarto SWD No. 1  
M-SEC. 1-11S-34E  
Lea County, New Mexico**

**Attachment A**

III. Well Data

A.

1. Lease Name/Location  
Lagarto SWD No. 1  
M-SEC. 1-11S-34E  
660' FSL & 660' FWL

*30-025-61820*

2. Casing Strings:

- a. Present well condition  
13<sup>3</sup>/<sub>8</sub>" 32.75# @ 304 w/350 sx (circ)  
9<sup>5</sup>/<sub>8</sub>" 36 & 40# @ 4132' w/1700 sx (circ.)  
5<sup>1</sup>/<sub>2</sub>" 17# & 20# @ 13205' w/200 sx (TOC 11140').
- b. Present Status:  
Completed in Atoka and Morrow at 11881-87' and 12100-10'  
Non-productive Atoka perfs 11602-28'

3. Proposed well condition:

Casing same as above.  
2<sup>7</sup>/<sub>8</sub>" 6.5# N80 plastic-coated injection tubing @ 13280'.

4. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 13080'.

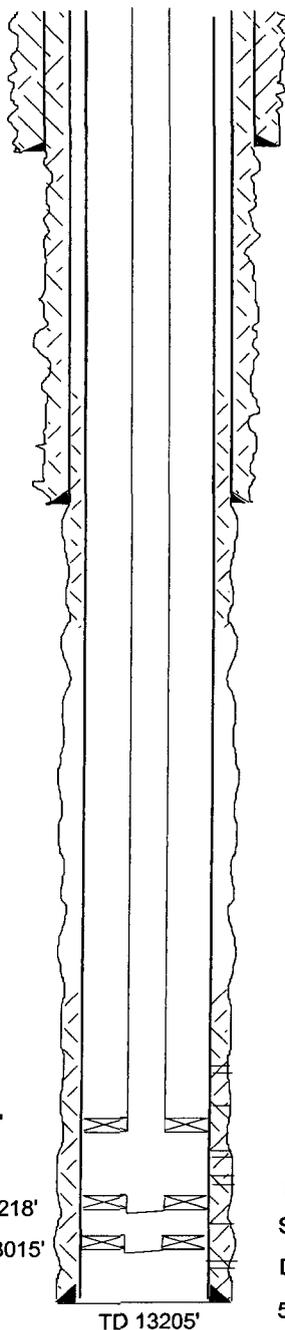
B.

1. Injection Formation: Devonian Dolomite.
2. Injection Interval will be through perforations and open hole from 13115-53', and 13205' to approximately 13450'.
3. Well was originally drilled as a Devonian Dolomite oil well. Well will be a Devonian Dolomite water disposal well (13115-13450') when work is completed.
4. Perforations: High porosity dolomite will be drilled and previous perforations 13115-53' will be utilized.
5. Next higher (shallower) oil or gas zone within 2 miles-Austin Cycle (Mississippian).  
Next lower (deeper) oil or gas zone within 2 miles-None.

Well Name: Lagarto SWD No. 1 Field: Sand Springs Atoka  
 Location: 660' FSL & 660' FWL Sec. 1-11S-34E Lea Co, NM  
 GL: 4139' Zero: \_\_\_\_\_ AGL: \_\_\_\_\_ KB: Est. 4152.2'  
 Spud Date: 6/1957 Completion Date: \_\_\_\_\_  
 Comments: Sinclair drilled to Devonian and completed. Re-entered by YPC in  
7/1990

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 32.75#	304'
9 5/8" 36 & 40#	4132'
5 1/2" 17 & 20#	13205'

**CURRENT CONFIGURATION**



13 3/8" csg @ 304'. Cmtd w/ 350 sx. Cmt circ.

TOC 3564' by calculation  
 (assumed 8 1/4" hole, 30% washout for OH section)

9 5/8" csg @ 4132'. Cmtd w/ 1700 sx.

5 1/2" csg spliced @ 4810'. Cemented with 250 sx.

TOC 11140'

U. Atoka perms 11602-28'

Perfed @ 11790' and squeezed 175 sx behind pipe.

Atoka perms 11881-87'

Morrow perms 12100-10'

NOTE: Could not get below 12141 with GR-JB 7/2005

Squeeze perf 12400', 11730', 11815', 12250'

Devonian perms 13115-53 Squeezed with 150 sx.

5 1/2" csg @ 13205'. Cmtd w/ 200 sx.

**CEMENT TOP CALCULATION**

4810'-4132' = 678'  
 8 1/4" hole w/ 5 1/2" csg vol = 0.2062 cu ft/ft  
 .2062 \* 1.3 = .26806 cu ft/ft  
 678' x .26806 = 182 cu ft to fill from splice to 9 5/8" csg

250 sx "C" x 1.32 cu ft/sk = 330 cu ft.  
 330 cu ft - 182 cu ft = 148 cu ft.

5 1/2" x 9 5/8" annulus = 3.835 ft/cu ft  
 3.835 x 148 cu ft = 568' of fill inside 9 5/8"  
 4132' - 568' = 3564' = TOC

Pkr @ 11950'

Cmt Ret @ 12218'

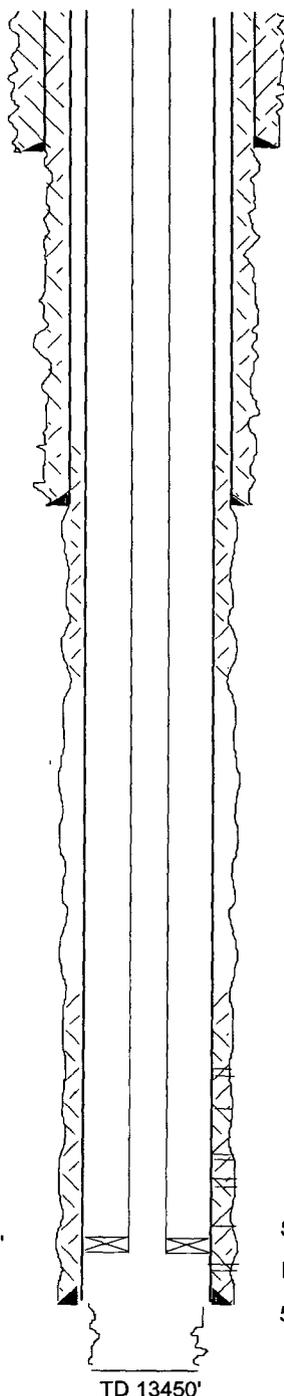
Cmt Ret @ 13015'

TD 13205'

Well Name: Lagarto SWD No. 1 Field: Sand Springs Atoka  
 Location: 660' FSL & 660' FWL Sec. 1-11S-34E Lea Co, NM  
 GL: 4139' Zero: \_\_\_\_\_ AGL: \_\_\_\_\_ KB: Est. 4152.2'  
 Spud Date: 6/1957 Completion Date: \_\_\_\_\_  
 Comments: Sinclair drilled to Devonian and completed. Re-entered by YPC in  
7/1990

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 32.75#	304'
9 5/8" 36 & 40#	4132'
5 1/2" 17 & 20#	13205'

PROPOSED CONFIGURATION



13 3/8" csg @ 304'. Cmtd w/ 350 sx. Cmt circ.

TOC 3564' by calculation  
 (assumed 8 1/4" hole, 30% washout for OH section)

9 5/8" csg @ 4132'. Cmtd w/ 1700 sx.

5 1/2" csg spliced @ 4810'. Cemented with 250 sx.

TOC 11140'

U. Atoka perms 11602-28' -- SQUEEZED  
 Perfed @ 11790' and squeezed 175 sx behind pipe.

Atoka perms 11881-87' -- SQUEEZED  
 Morrow perms 12100-10' -- SQUEEZED  
 Squeeze perf 12400', 11730', 11815', 12250'  
 Devonian perms 13115-53

5 1/2" csg @ 13205'. Cmtd w/ 200 sx.

CEMENT TOP CALCULATION  
 4810'-4132' = 678'  
 8 1/4" hole w/ 5 1/2" csg vol = 0.2062 cu ft/ft  
 .2062\*1.3= .26806 cu ft/ft  
 678' x .26806 = 182 cu ft to fill from splice to 9 5/8" csg  
 250 sx "C" x 1.32 cu ft/sk = 330 cu ft.  
 330 cu ft - 182 cu ft = 148 cu ft.  
 5 1/2" x 9 5/8" annulus = 3.835 ft/cu ft  
 3.835 x 148 cu ft = 568' of fill inside 9 5/8"  
 4132'-568' = 3564' = TOC

Pkr @ 13080'

TD 13450'

SKETCH NOT TO SCALE

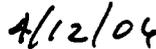
DATE: 12/27/05 LAG3SWDA

**C-108 Application for Authorization to Inject  
Yates Petroleum Corporation  
Lagarto SWD No. 1  
Unit M Sec. 1, T11S, R34E  
Lea County, New Mexico**

**Water analyses are attached for waters from the Devonian, Morrow, Atoka and Penn intervals. Based on these analyses and on the commingling of similar waters in other disposal wells in the vicinity, we believe that the waters are compatible and will not cause severe scaling that might impair injectivity in the well.**



**Sam Brandon  
Operations Engineer  
Yates Petroleum Corporation**



**Date**

SAND Springs #4

<b>B J Services Water Analysis</b>			
Artesia		District Laboratory (505)-746-3140	
<i>Devonian</i>			
<b>Date:</b>	12-Sep-00	<b>Test #:</b>	
<b>Company:</b>	Yates Petroleum	<b>Well #:</b>	ASU State #4
<b>Lease:</b>	Sand Springs	<b>County:</b>	Lea
<b>State:</b>	N.M.	<b>Formation:</b>	Devonian
<b>Depth:</b>		<b>Source:</b>	
<b>pH:</b>	6.74	<b>Temp (F):</b>	71.5
<b>Specific Gravity</b>	1.025		
<b>CATIONS</b>			
	mg/l	me/l	ppm
Sodium (calc.)	14059	611.5	13716
Calcium	1564	78.0	1526
Magnesium	243	20.0	237
Barium	< 25	—	—
Potassium	1500	38.4	1463
Iron	1	0.0	1
<b>ANIONS</b>			
Chloride	25200	710.9	24585
Sulfate	976	20.3	952
Carbonate	< 1	—	—
Bicarbonate	1171	19.2	1143
Total Dissolved Solids(calc.)	44714		43623
Total Hardness as CaCO3	4906	98.0	4786
<b>COMMENTS:</b>			
<b>SCALE ANALYSIS:</b>			
CaCO3 Factor	1831640	Calcium Carbonate Scale Probability →	Probable
CaSO4 Factor	1563900	Calcium Sulfate Scale Probability →	Remote
<b>Stiff Plot</b>			
60 50 40 30 20 10 00 10 20 30 40 50 60			
Na & K			Cl
Ca			HCO3
Mg			SO4

Attachment 'D'



**MILLER CHEMICALS, INC.**

Post Office Box 298  
 Artesia, N.M. 88211-0298  
 (505) 746-1919 Artesia Office  
 (505) 392-2893 Hobbs Office  
 (505) 746-1918 Fax

WATER ANALYSIS REPORT  
 -----

Company : YATES PETROLEUM Date : 6/25/04  
 Address : ARTESIA, NM Date Sampled : 6/24/04  
 Lease : SAND SPRINGS "ASU" Analysis No. : 00756  
 Well : #4  
 Sample Pt. : UNKNOWN *Morrow*

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	6.9			
2. H2S	0			
3. Specific Gravity	1.030			
4. Total Dissolved Solids		25916.5		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	671.0	HCO3	11.0
12. Chloride	Cl	15336.0	Cl	432.6
13. Sulfate	SO4	25.0	SO4	0.5
14. Calcium	Ca	1640.0	Ca	81.8
15. Magnesium	Mg	146.8	Mg	12.1
16. Sodium (calculated)	Na	8051.4	Na	350.2
17. Iron	Fe	46.3		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		4700.0		

PROBABLE MINERAL COMPOSITION  
 -----

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	=	mg/L
+-----+	+-----+	-----	-----	-----	-----	-----
82  *Ca <----- *HCO3	11	Ca(HCO3)2	81.0	11.0		891
-----  /----->	-----	CaSO4	68.1	0.5		35
12  *Mg -----> *SO4	1	CaCl2	55.5	70.3		3902
-----  <-----/	-----	Mg(HCO3)2	73.2			
350  *Na -----> *Cl	433	MgSO4	60.2			
+-----+	+-----+	MgCl2	47.6	12.1		575
Saturation Values Dist. Water 20 C		NaHCO3	84.0			
CaCO3	13 mg/L	Na2SO4	71.0			
CaSO4 * 2H2O	2090 mg/L	NaCl	58.4	350.2		20466
BaSO4	2.4 mg/L					

REMARKS:



**MILLER CHEMICALS, INC.**

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 Artesia, N.M. 88211-0298  
 (505) 746-1919 Artesia Office  
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 (505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM CORP Date : AUGUST 8, 2005  
 Address : Date Sampled : AUGUST 7, 2005  
 Lease : LIMBAUGH "AYD" STATE Analysis No. :  
 Well : #2  
 Sample Pt. : WELLHEAD

*Atoka*

ANALYSIS	mg/L	* meq/L
1. pH	6.5	
2. H2S	0	
3. Specific Gravity	1.055	
4. Total Dissolved Solids	70177.8	
5. Suspended Solids	NR	
6. Dissolved Oxygen	NR	
7. Dissolved CO2	NR	
8. Oil In Water	NR	
9. Phenolphthalein Alkalinity (CaCO3)		
10. Methyl Orange Alkalinity (CaCO3)		
11. Bicarbonate	HCO3 4.4	HCO3 0.1
12. Chloride	Cl 38979.0	Cl 1099.5
13. Sulfate	SO4 3555.0	SO4 74.0
14. Calcium	Ca 400.0	Ca 20.0
15. Magnesium	Mg -242.3	Mg -19.9
16. Sodium (calculated)	Na 26981.7	Na 1173.6
17. Iron	Fe 500.0	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO3)	1.3	

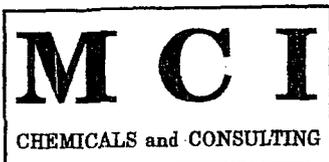
PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
20	Ca (HCO3)2	81.0	0.1 6
	CaSO4	68.1	19.9 1354
	CaCl2	55.5	
	Mg (HCO3)2	73.2	
	MgSO4	60.2	
	MgCl2	47.6	
	NaHCO3	84.0	
	Na2SO4	71.0	54.1 3845
	NaCl	58.4	1099.5 64258

Saturation Values Dist. Water 20 C  
 CaCO3 13 mg/L  
 CaSO4 \* 2H2O 2090 mg/L  
 BaSO4 2.4 mg/L

REMARKS: THIS WELL SHOWED A CONCENTRATION OF 1.25% KCL.

*This well was not even acidized*  
*TCF*



**MILLER CHEMICALS, INC.**

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 (505) 746-1919 Artesia Office  
 (505) 392-2893 Hobbs Office  
 (505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM Date : 11-11-05  
 Address : Date Sampled : 11-10-05  
 Lease : JUDSON "AUU"ST.COM Analysis No. :  
 Well : #2  
 Sample Pt. : UNKNOWN *Bough*

ANALYSIS	mg/L	* meq/L
1. pH	6.4	
2. H2S	0	
3. Specific Gravity	1.060	
4. Total Dissolved Solids	88177.8	
5. Suspended Solids	nr	
6. Dissolved Oxygen	nr	
7. Dissolved CO2	nr	
8. Oil In Water	nr	
9. Phenolphthalein Alkalinity (CaCO3)		
10. Methyl Orange Alkalinity (CaCO3)		
11. Bicarbonate HCO3	341.0	HCO3 5.6
12. Chloride Cl	52824.0	Cl 1490.1
13. Sulfate SO4	1250.0	SO4 26.0
14. Calcium Ca	4360.0	Ca 217.6
15. Magnesium Mg	658.7	Mg 54.2
16. Sodium (calculated) Na	28736.7	Na 1250.0
17. Iron Fe	7.5	
18. Barium Ba	nr	
19. Strontium Sr	nr	
20. Total Hardness (CaCO3)	13600.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
218   *Ca <----- *HCO3   6	Ca (HCO3) 2	81.0	5.6 453
-----  /----->  -----	CaSO4	68.1	26.0 1772
54   *Mg -----> *SO4   26	CaCl2	55.5	185.9 10318
-----  <-----/  -----	Mg (HCO3) 2	73.2	
1250   *Na -----> *Cl   1490	MgSO4	60.2	
+-----+	MgCl2	47.6	54.2 2580
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	1250.0 73048
BaSO4 2.4 mg/L			

REMARKS: resistivity- 0.1 @ 60%



Attachment "C"

Lagarto SWD No. 1  
Form C-108

Tabulation of data on wells within area of review

Well Name	Operator	Type	Spud	Total Depth	Producing Zone	Perforations	Completion Information
Tenneco ADP State Com No. 1 330' FSL & 990' FEL Sec 2-11S-34E	Yates Petroleum Corp	Gas	1/21/1978	13340'	Atoka Devonian	11911-11916'- perms squeezed 13133-13167', open hole 13180-13340'	13 3/8" 48# @ 457'. Cmtd w/ 450 sx. 8 5/8" 24 & 32# @ 4176' Cmtd w/ 1525 sx. 5 1/2" 17 & 20# @ 13180'. Cmtd w/ 455 sx.

# ATTACHMENT E

Postage

Certified Fee

Return Receipt Fee (Endorsement Required)

Restricted Delivery Fee (Endorsement Required)

Total Pct

Sent To Bogle P.O. D Dexter

Street, Ap. or PO Box

City, State

so that we can return the card to you.  
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bogle Limited Company  
 P.O. Drawer 460  
 Dexter, NM 88230

Lagarto Amz #3

2. Article Number (Transfer from service label) **7006 0100 0003 9638 7046**

### COMPLETE THIS SECTION ON DELIVERY

A. Signature  Agent  Addressee  
*X Kay Wagner*

B. Received by (Printed Name) *KAY WAGNER* C. Date of Delivery *3/22/06*

D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

S. P. YATES  
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 PEYTON YATES  
 EXECUTIVE VICE PRESIDENT  
 RANDY G. PATTERSON  
 SECRETARY  
 DENNIS G. KINSEY  
 TREASURER

Dear Sirs:

Our records show that you are the surface lessee at the location of our Lagarto AMZ State No. 3 well, located 660' FSL and 660' FWL of Section 1-11S-34E, Lea County.

In accordance with the rules of the New Mexico Oil Conservation Division, I am enclosing a copy of our application to the New Mexico Oil Conservation Division to convert our Lagarto AMZ State No. 3 well to SWD service.

If you have any questions, please contact Sam Brandon at (505) 748-4281.

Sincerely,



Sam Brandon

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

Attachment "F"

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated March 18 2006 and ending with the issue dated March 18 2006

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 22nd day of

March 2006

Una Montz  
Notary Public.

My Commission expires February 07, 2009 (Seal)



OFFICIAL SEAL  
DORA MONTZ  
NOTARY PUBLIC  
STATE OF NEW MEXICO

My Commission Expires: \_\_\_\_\_

LEGAL NOTICE  
March 18, 2006

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 Lagarto SWD No. 1 located 660' FSL & 660' FWL, Unit M, Section 1, Township 11 South, Range 34 East of Lea County, New Mexico, will be used for saltwater disposal. Disposal waters from the Devonian, Mississippian, Morrow, Atoka and Penn Sands will be injected into the Devonian Dolomite at a depth of 13115'-13450' with a maximum pressure of 2500 psi and a maximum rate of 5,000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505-5472, within 15 days. Additional information can be obtained by contacting Sam Brandon at (505) 748-4281.  
#22214

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

01101029000 67536653  
YATES PETROLEUM CORPORATION  
P.O. BOX 97  
ARTESIA, NM 88210

**Attachment G**

C-108 Application for Authorization to Inject  
Yates Petroleum Corporation  
Lagarto SWD No. 1  
Unit M, Section 1 T11S-R34E  
Lea County, New Mexico

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

  
\_\_\_\_\_  
John Amiet  
Geologist  
Yates Petroleum Corporation

3/20/06  
Date

**Jones, William V., EMNRD**

**From:** Jones, William V., EMNRD  
**Sent:** Monday, April 10, 2006 10:28 AM  
**To:** 'sbrandon@ypcnm.com'  
**Cc:** Kautz, Paul, EMNRD; Ezeanyim, Richard, EMNRD; Sanchez, Daniel J., EMNRD  
**Subject:** SWD application: Lagarto AMZ State #1 30-025-01820

Hello Sam Brandon:  
 Received your SWD application today.

The well file indicates this well has been abandoned in the past, and the casing recovered, then re-entered. For some reason recently the Atoka and Morrow played out? It appears from the deep resistivity curve that the actual fresh waters may extend to 470 feet? ~~The surface pipe was set shallower~~ in the year 1957, but the intermediate was circulated - so Fresh water should be OK. I assume the Bradenhead flows are OK here?

Would you please:

- 1) Send a before and after wellbore diagram of the proposed well (Attachment A is missing). ✓
- 2) If you have a legible copy of the Laterolog run from about 4,000 feet to 13,230 feet, send a copy to Hobbs for our files. ✓
- 3) Send to me here, copies of any temp surveys or CBLs in your files from the re-entry cement jobs. ✓
- 4) Send analogous or actual water analysis of the Devonian as the injection zone. ✓
- 5) Send typical water analysis of the Miss, Morrow, Atoka, and Penn Sands waters as waters to be injected. ✓
- 6) A statement about compatibility of waters. ✓

Everything else seems OK at this point.

Regards,

William V. Jones PE

Engineering Bureau

Oil Conservation Division

Santa Fe

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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DENNIS G. KINSEY  
TREASURER

April 12, 2006

Mr. William V. Jones  
New Mexico Energy & Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504

Dear Mr. Jones;

Enclosed please find a copies of before and after wellbore diagrams, Cement Evaluation Logs, water samples and statement of compatibility for the Lagarto SWD No. 1 located in Unit M, Section 1-T11S-R34E of Lea 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'.

Sam Brandon  
Operations Engineer  
Yates Petroleum Corporation

SB

Enclosure

2006 APR 24 PM 1 07