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

OCT 1 0 2006

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

October 6, 2006

Will Jones State of New Mexico OIL CONSERVATION DIVISION 1220 South Saint Francis Drive Santa Fe, NM 87505

Re: Cleary AKC Federal #2

Dear Mr. Jones,

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates Petroleum Corporation Cleary AKC Federal #2 located in Unit D of Section 17, T22S-32E, Lea County, New Mexico.

If you have any questions or need additional information, please call me at (505) 748-4361.

Sincerely,

han

Debbie Chavez Engineering Technician

Enclosures

DEBE @ YPCNM. com

### C-108 Application for Authorization to Inject Yates Petroleum Corporation Cleary AKC Fed #2 Unit D, 330 FNL & 330 FWL, Sec. 17, T22S, R32E Lea County, New Mexico

I. The purpose of completing this well is to make a disposal well for produced Delaware Sand water into the Delaware Sand formation.

Yates Petroleum Corporation plans to convert this well to a water disposal well into the Delaware Sand.

- II. Operator: Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210 Margrethe Hotter (505) 748-4165
- 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 4 wells within the area of review that penetrate 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 – 964 psi.
  - 4. Sources of injected water would be produced water from the Delaware Sand. (Attachment D)
- VIII. 1. The proposed injection interval is the portion of the Delaware Sand formation consisting of porous Sandstone from estimated depths of 4,821'- 6,080'.

Application for Authorization to Inject Cleary AKC Fed #2 -2-

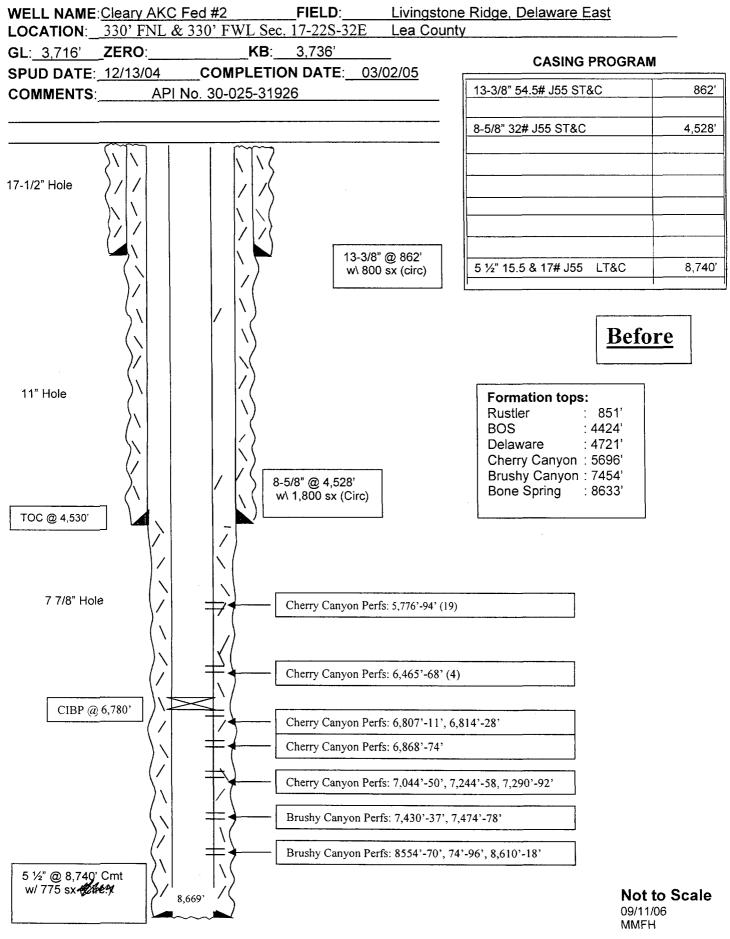
- 2. Possible Fresh water zones overlie the proposed injection formations at depths to approximately 850' or less. There are no fresh water zones underlying the formation.
- IX. The proposed disposal interval may be acidized with 7-1/2% HCL acid, or proppant fractured.
- X. Logs were filed at your office 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 letters sent to the surface owner and offset operators attached (Attachment E)
  - B. Copy of legal advertisement attached. (Attachment F)
- XIV. Certification is signed.

## Yates Petroleum Corporation Cleary AKC Fed #2 D-17-T22S-R32E Lea County, New Mexico

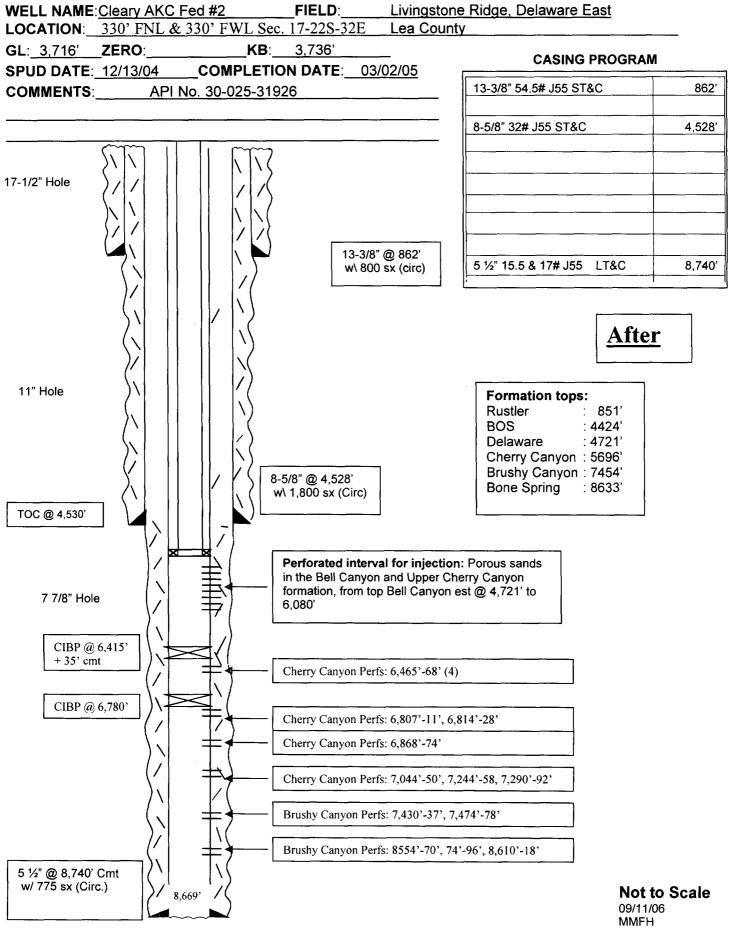
## Attachment A

### III. Well Data

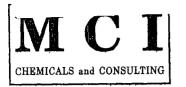
- A. 1. Lease Name/Location Cleary AKC Fed #2 D-17-T22S-R32E 330' FNL & 330' FWL
  - 2. Casing Strings:
    - a. Present well condition
      13 3/8", 54.5# J-55 @ 862' w/800 sx (circ)
      8 5/8", 32# J-55 @ 4,528' w/1800 sx (circ).
      5 ½", 15.5# &17# @ 8,740' w/775 sx
      TOC @ 4530'
    - b. Present Status: Non-commercial completion in Delaware at 5,776'-94', 6,465'-68', 6,807'-11', 6,814'-28', 6,868'-74', 7,044'-50', 7,244'-58', 7,290'-92', 7,430'-78', 8,554'-96', 8,610'-18'. CIBP @ 6780' + 35' cmt
  - 3. Proposed well condition: Casing same as above.
    3 1/2" 9.3 J55 or 2-7/8" 6.5 J55 plastic-coated injection tubing @ 4820'
  - 4. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 4820'.
- B. 1. Injection Formation: Delaware Sands (Bell Canyon & Upper Cherry Canyon.)
  - 2. Injection Interval will be through perforations from approximately 4821'-6,080' gross interval.
  - 3. Well was originally drilled as a Livingstone Ridge and Brushy Canyon oil well. Well will be a Bell Canyon and Upper Cherry Canyon Sand water disposal well (4,821'-6,080') when work is completed.
  - 4. Perforations: High porosity sands between 4822'-6,080'.
  - 5. Next higher (shallower) oil or gas zone within 2 miles-None. Next lower (deeper) oil or gas zone within 2 miles- Brushy Canyon







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 mci@plateautel.net

WATER ANALYSIS REPORT \_\_\_\_\_

Company Address Lease Well Sample	s : ARTESIA, NM : KIWI "AKX" : #10		Date Date Sampled Analysis No.		
	ANALYSIS		mg/L		* meq/L
_					
1.	рн 5.3				
2.	H2S 0				
3.	Specific Gravity 1.160		200002 0		
4.	Total Dissolved Solids		296923.2 NR		
5.	Suspended Solids				
6. 7.	Dissolved Oxygen Dissolved CO2		NR		
8.	Oil In Water		NR		
o. 9.	Phenolphthalein Alkalinity	(0-003)	NR		
9. 10.	Methyl Orange Alkalinity (C				
11.	Bicarbonate	HCO3	207.0	нсоз	3.4
	Chloride	Cl	183180.0	Cl	5167.3
	Sulfate	SO4	250.0	SO4	5.2
	Calcium	Ca	31200.0	Ca	1556.9
15.	Magnesium	Mq	1283.8		105.6
16.	Sodium (calculated)	Na	80772.4	Na	3513.4
17.	Iron	、 Fe	30.0		0010.1
18.	Barium	Ba	NR		
	Strontium	Sr	NR		
20.	Total Hardness (CaCO3)		83200.0		

#### PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound Equiv wt X meq/L = mg/L						
++		-					
1557  *Ca < *HCO3   3	Ca(HCO3)2 81.0 3.4 275						
/>	CaSO4 68.1 5.2 354						
106  *Mg> *SO4   5	CaCl2 55.5 1548.3 85914						
<	Mg(HCO3)2 73.2						
3513  *Na> *Cl   5167	MgSO4 60.2						
++	MgCl2 47.6 105.6 5028						
Saturation Values Dist. Water 20 C	NaHCO3 84.0						
CaCO3 13 mg/L	Na2SO4 71.0						
CaSO4 * 2H2O 2090 mg/L	NaCl 58.4 3513.4 205322						
BaSO4 2.4 mg/L							

REMARKS:

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Attachement D. Example of produced wate to be disposed into the cleary

9978 8E36 ENNN NNTN	CERTIFIED MAIL: REC CERTIFIED MAIL: REC Perestic Mellionity, Notinsurance or fordelivery information visit our website at O P P O CONTRACTOR OF A CONTRACTOR OF A Postage \$ Certified Fee Certified Fee Certified Fee Certified Fee Certified Fee Certified Fee Certified Pee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Po:	<ul> <li>SENDER: COMPLETE THIS SECTION</li> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> <li>1. Article Addressed to:</li> <li>BLM</li> </ul>	COMPLETE THIS SECTION ON DELIVER A. Signature B. Received by (Printed Name) C. D. Is delivery address different from item 12 If YES, enter delivery address below:	Agent Addressee Date of Delivery	RD ZNT JON 7
7.1	Street Ap or PO Box City, State	620 E. Greene Street Carlsbad, NM 88221 Clear y # 2	<ul> <li>3. Service Type</li> <li>Certified Mail</li> <li>Registered</li> <li>Return Receipt</li> <li>Insured Mail</li> <li>C.O.D.</li> <li>Restricted Delivery? (Extra Fee)</li> </ul>		•
	PSIForm 2000, June 2002	2. Article Number 7006 010		Yes	
		PS Form 3811, February 2004 Domestic Ret	turn Receipt	102595-02-M-1540	

BLM 620 E. Greene Street Carlsbad, NM 88221

Re: Cleary AKC Federal #2

Dear Sirs:

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates Petroleum Corporation Cleary AKC Federal #2, Unit D, 17-22S-32E, Lea County, New Mexico.

If you have any questions or need additional information, please call me at (505) 748-4361.

Sincerely,

Chann

Debbie Chavez Engineering Technician

Enclosures

קסכק טעקר ו	CLERSUIFIED MAILENF Teamestic Maillootr Statistican ATT More lives enternation visit anternat () (2 (2 (2 ) (0 ) A ) () (2 (2 ) (0 ) A ) () (2 (2 ) (0 ) A )	so that we can return	n the card to you. the back of the mailpiece,	MPLETE THIS SECTION ON DELIVERY  Signature B. Received by ( Plinted Name) C. Data of Delivery D. Is delivery address different from item 17 U yes
	Certilled Fee Hendrisenent Required) Residues Delivery Fee (Endorsement Required)	1. Article Addressed to: Pogo Producing P.O. Box 10340	Company	D. Is delivery address different from item 'th' □ yes If YES, enter delivery address below: □ No
9777	Pogo Producing Company P.O. Box 10340 P.O Midland, TX 79702-7340	Midland, TX 79	702-7340	3. Service Type         Image: Certified Mail       Image: Express Mail         Image: Certified Mail       Image: Comparison of the comparison o
		2. Article Number (Transfer from service	abel) 7006	0100 0003 9638 6582

PS Form 3811, February 2004

Domestic Return Receipt

£

102595-02-M-1540 ;

Pogo Producing Company P.O. Box 10340 Midland, TX 79702-7340

Re: Cleary AKC Federal #2

Dear Sirs:

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates Petroleum Corporation Cleary AKC Federal #2, Unit D, 17-22S-32E, Lea County, New Mexico.

If you have any questions or need additional information, please call me at (505) 748-4361.

Sincerely,

Debbie Chavez Engineering Technician

Enclosures

# **ATTACHMENT F**

Affidavit of Publication	Copy of Publication:
STATE OF NEW MEXICO	
County of Eddy:	
Gary D. Scott being duly	the Cleary AKC Fed #2 located 330' FNL & 330'
sworn, says: That he is the <b>Publisher</b> of The	FWL, Unit D, Section 17, Township 22 South, Range 32 East of Lea
Artesia Daily Press, a daily newspaper of general	County, New Mexico, will be used for saltwater dis-
circulation, published in English at Artesia, said county	posal. Produced waters from the Delaware Sand will be re-injected into
and county and state, and that the here to attached	the Delaware Sand`at a depth of 4821'-6,080' with a maximum
Legal Notice	pressure of 964 psi and a maximum rate of 5000
was published in a regular and entire issue of the said	BWPD. All interested parties op- posing the aforemen- tioned must file objec-
Artesia Daily Press, a daily newspaper duly qualified	tions or requests for a hearing with the Oil
for that purpose within the meaning of Chapter 167 of	Conservation Division, 1220 South Saint Francis Legal Notice Drive, Santa Fe, New
the 1937 Session Laws of the state of New Mexico for	Yates Petroleum Corpo- Mexico. 87505-5472, ration, 105 South Fourth within 15 days. Additional
1 Consecutiv week/days on the same	Street, Artesia, NM information can be ob- 88210, has filed form tained by contacting C-108 (Application for Margrethe Hotter at (505)
day as follows:	Authorization to Inject) 748-4165. with the New Mexico Oil Published in the Artesia Conservation Division Daily Press, Artesia,
First Publication October 1 2006	seeking administrative
Second Publication	well. The proposed well
Third Publication	
Fourth Publication	
Jazn Sutt	
Subscribed and sworn to before me this	
4th Day October 2006 Bacher Ann Boans Notary Public, Eddy County, New Mexico	
My Commission expires September : 23, 2007	

:

## Attachment G

C-108 Application for Authorization to Inject Yates Petroleum Corporation Cleary AKC Fed #2 Unit D, Section 17-T22S-R32E Lea County New Mexico.

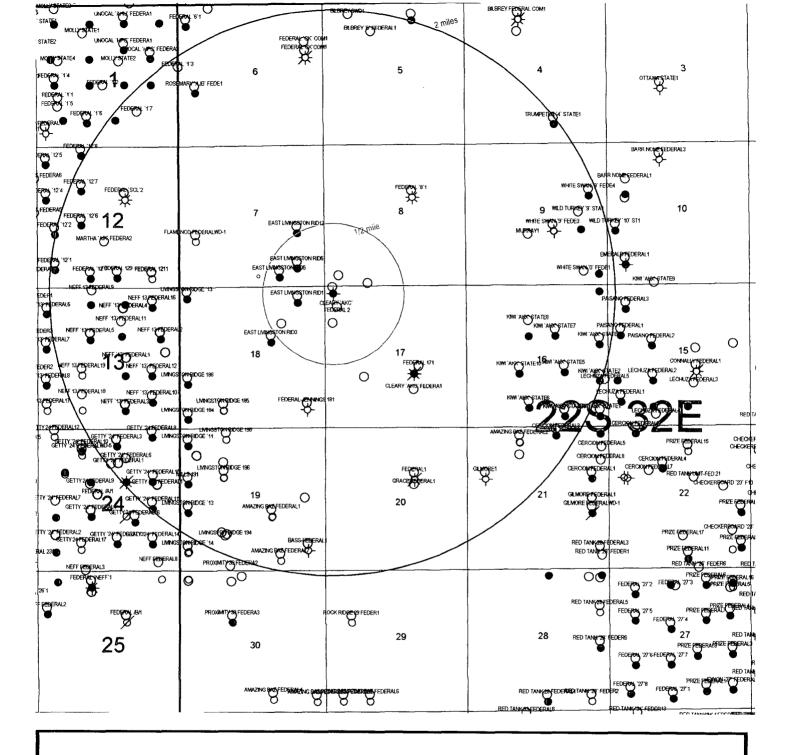
Available engineering and geological data have been examined and no evidence of open faults of hydrologic connection between the disposal zone and any underground sources of drinking water has been found.

toda Ray Podany

Geologist Yates Petroleum Corporation

9-26-06 Date

	YATES PETR	ΟΙΕυΜ
	Cleary AKC Federal #2	
<b>Author:</b> Debbie Chavez		<b>D a te</b> : 12 September, 2006
M. Hotter	17-22S-32E	



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Cleary AKC Fed #2 Form C-108 Tabulation of data on wells within area of review

I abuiation of data of wells within alea of teview	UI IEVIEW					
Well Name	Operator	Type	Spud To	Producing Total Depth Zone	Perforations	Completion Information
EAST LIVINGSTON RIDGE UNIT #1 660FNL & 990FEL Sec 18 22S 32E	E UNIT #1 Pogo Producing Co	oil	9/29/1992	0il 9/29/1992 8780' Brushy Canyon 6,762'-6,771'	6,762'-6,771'	13 3/8" @ 862' Cmtd w/900 sx (circ) 8 5/8" @ 4,494' Cmtd w/1750 sx (circ) 5 1/2" @ 8,780' Cmtd w/1540 sx TOC @ 486'
EAST LIVINGSTON RIDGE UNIT #5 330FSL & 1650FEL Sec 7 22S 32E	Pogo Producing Co	Ĩ	12/12/1997	7350' Delaware	6,722'-6,746' 7,106'-7,120'	10 3/4" @ 655' Cmtd w/650 sx (circ) 5 1/2" @ 7,350' Cmtd w/2120 sx (circ) TOC @ surface
EAST LIVINGSTON RIDGE UNIT #6 660FSL & 990FEL Sec 7 22S 32E	Pogo Producing Co	lio	12/9/1995	7400' Delaware	6,724'-6,742'	8 5/8" @ 848' Cmtd w/350 sx (circ) 5 1/2" @ 7,400' Cmtd w/2730 sx (circ) TOC @ surface
EAST LIVINGSTON RIDGE UNIT #12 1980FSL & 990FEL Sec 7 22S 32E	Pogo Producing Co	Ō	10/22/1996	7364' Brushy Canyon 6,976'-6,992'	6,976'-6,992'	8 5/8" @ 718' Cmtd w/375 sx (circ) 5 1/2" @ 7,364' Cmtd w/3100 sx (circ) TOC @ surface

	Injection Permit Checklist						
SWD Order Number 1054 Dates: Division Approved District Approved							
Information Request Letter or Email sent							
Information Request Letter or Email sent Jacob Shield Apple							
API Num: (30-) 025-	31926 County: 1	-EA					
Footages 330 FNL/3			Rge <u>32</u> E				
,		-		16 De			
Operator Name: Vate	- Cu Co	rpm	Contact	grethe Trover			
Operator Address: 105	South For	KTAL ST. F	iktesta nm 2	30270			
-	Hole/Pipe Sizes	Depths	Cement	Top/Method			
Surface	1378 858	862	800	CIRC			
Intermediate	858	4528	1800	CIRC			
Production	5/2	8740	715	4530'			
Last DV Tool							
Open Hole/Liner							
Plug Back Depth		2 et 3/2 "	TUBNG C 4	\$20'			
Diagrams Included (Y/N): B	Before Conversion	After Conversion		VON- Commercial Constation FROM 5776- 8618 CTBP C 6786			
Checks (Y/N): Well File Rev	viewedELogs in	Imaging		FROM 5 110-5 3610			
Intervals:	Depths	Formation	Producing (Yes/No	Bushy			
(Salt)Potash			· · · · · · · · · · · · · · · · · · ·				
Capitan Reef							
Gliff House, Etc.				-			
Formation Above				-			
Top Inj Interval		OBJEC.		964 DSI MOY WILLID			
Bottom Inj Interval		Doland Sell C. Doland Karey C.		PSI Max. WHIP			
		Varian 1		Open Hole (Y/N)			
Formation Below	00.			Deviated Hole (Y/N)			
Fresh Water Site Exists (Y/			_	~			
Salt Water Analysis: Injection				Delaware			
Affirmative Statement Inclue	ded (Y/N): Mewsp	aper Notice Adequa	te (Y/N)Well Tal	ble Adequate (Y/N)			
Surface Owner	Noticed ()	(/N) Mineral Ow	ner(s)				
AOR Owners: Poc-o							
AON OWNERS: POGO	· · · · · ·		Ned - Minerland	Noticed (Y/N)			
CtD/Potash/Etc Owners:				· · · · · · · · · · · · · · · · · · ·			
AOR Num Active Wells				<b>.</b>			
AOR Num of P&A Wells	O_Repairs?C	)iagrams Included? _					
Data to	Generate New AOF	R Table	New Table	Generated? (Y/N)			
	STR	E-W Footages	N-S Footages				
Wellsite				Conditions of Approval:			
Northeast		· · · · · · · · · · · · · · · · · · ·					
North				2			
Northwest							
West				3			
Southwest							
South	<u> </u>			BBDMS Updated (V/N)			
Southeast				RBDMS Updated (Y/N)			
East	······································			UIC Form Completed (Y/N)			
Lasi				This Form completed			