DATE IN SUPPENSE OF ENGINEER

136/37/09

P WUK 1000552215

ABOVE THIS LINE FOR DIVISION USE

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

THI	S CHECKLIST IS MA	NDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Applica	[DHC-Down [PC-Poo	
[1]	TYPE OF API	PLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD 30-025-3606
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI BOR PPR
	[D]	Other: Specify
[2]	[A][B][C][D][E][F]	ON REQUIRED TO: - Check Those Which Apply, or Does Not Apply Working, Royalty or Overriding Royalty Interest Owners Offset Operators, Leaseholders or Surface Owner Application is One Which Requires Published Legal Notice Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office For all of the above, Proof of Notification or Publication is Attached, and/or, Waivers are Attached
[3]		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE ATION INDICATED ABOVE.
	ral is accurate a	TION: I hereby certify that the information submitted with this application for administrative and complete to the best of my knowledge. I also understand that no action will be taken on this quired information and notifications are submitted to the Division.
Print o	Note:	Statement must be completed by an individual with managerial and/or supervisory capacity. Constraint Personal Participation Personal Partic

MARTIN YATES, III

FRANK W. YATES

5.P. YATES 1914-2008



JOHN A. YATES
CHAIRMAN OF THE BOARD
PRESIDENT

JOHN A. YATES JR.

JAMES S. BROWN

ARTESIA, NEW MEXICO 88210-2118 PM 2 33 JOHN D. PERINI TELEPHONE (575) 748-1471

December 17, 2009

Will Jones State of New Mexico Oil Conservation Division 1220 S. Saint Francis Drive Santa Fe, NM 87505

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said wells located in Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4361.

Sincerely,

Debbie Chavez

Engineering Technician

C-108 Application for Authorization to Inject Yates Petroleum Corporation Kiwi SWD #10

Unit K, 1980' FSL & 1980' FWL, Sec. 16, 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 6 wells within the area of review that penetrate the proposed injection zone, 1 of them are P&A (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.
 - Proposed average injection pressure –unknown.
 Proposed maximum injection pressure 1170 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 5850'-6450'.

- 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.

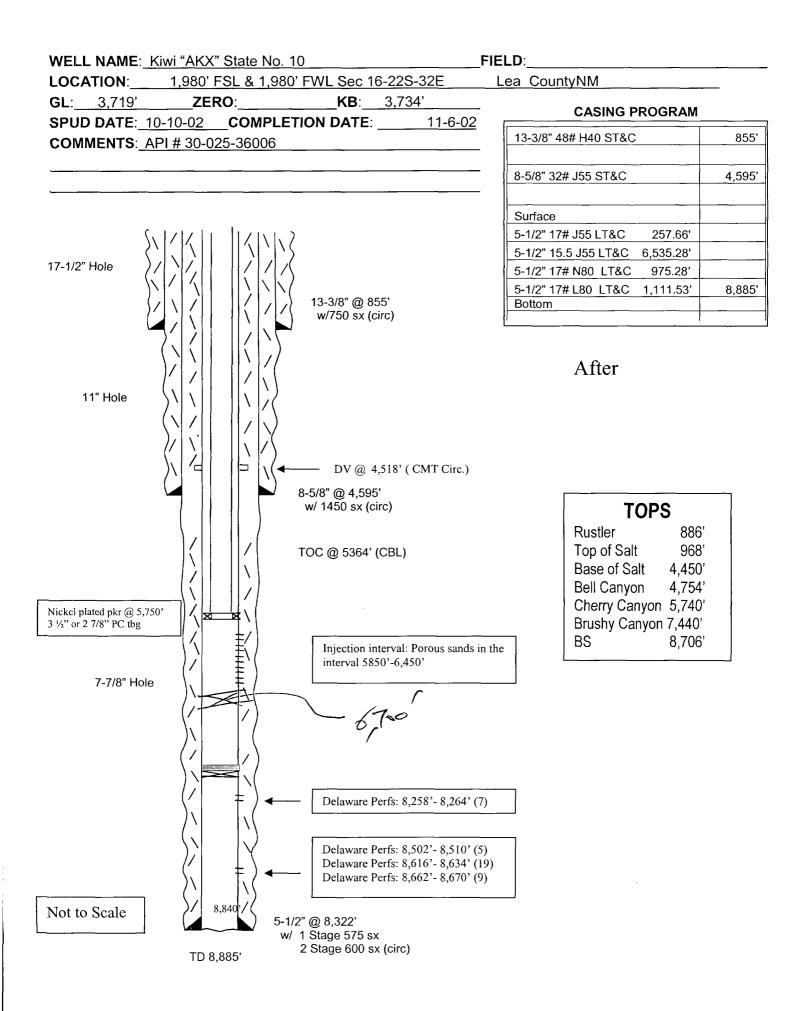
Yates Petroleum Corporation Kiwi SWD #10 K-16-T22S-R32E Lea County, New Mexico

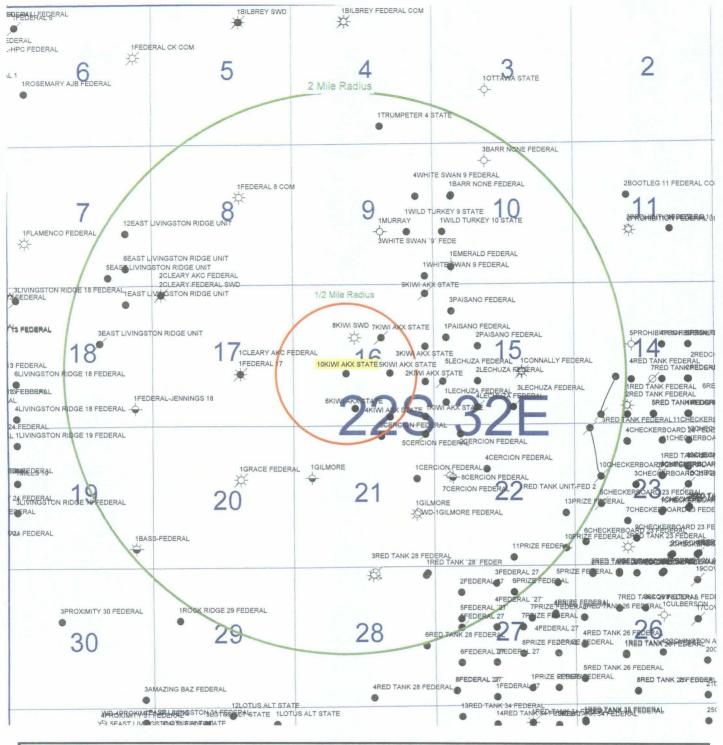
Attachment A

- III. Well Data
- A. 1. Lease Name/Location Kiwi SWD #10 (Prev. Kiwi AKX St #10) K-16-T22S-R32E 1980' FSL & 1980' FWL
 - 2. Casing Strings:
 - a. Present well condition
 13 3/8", 48# H040 @ 855' w/750 sx (circ)
 8 5/8", 32# J-55 @ 4,595' w/1450 sx (circ).
 5 ½", 15.5# &17# @ 8,322' w/DV tool @ 4,518'.
 Stage 1: 575sx (TOC @ 5364, CBL)
 Stage 2: 600sx
 - b. Present Status:
 Non-commercial completion in Delaware at 8258'-8264', 8502'-8510', 8616'-8634', 8662'-8670'
 - 3. Proposed well condition:
 Casing same as above.
 Set a CIBP @ 8208' and cap with 35' cement.
 3 ½" 9.3 J55 or 2-7/8" 6.5 J55 plastic-coated injection tubing @ 5750'
 - 4. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 5600'.
- B. 1. Injection Formation: Delaware Sands
 - 2. Injection Interval will be through perforations from approximately 5850'-6450'gross interval.
 - 3. Well was originally drilled as a Delaware oil well. Well will be a Delaware water disposal well when work is completed.
 - 4. Perforations: High porosity sands between 5850'-6450'.
 - 5. Next higher (shallower) oil or gas zone within 2 miles-None.

 Next lower (deeper) oil or gas zone within 2 miles- Brushy Canyon

GL : 3,719'	ZERO:_	KB: 3,734	CASING PROGRAM	Λ.
SPUD DATE: 10-	<u>10-02</u> CC	MPLETION DATE:	11-6-02	1
COMMENTS: API	# 30-025-36	3006	13-3/8" 48# H40 ST&C	3
			8-5/8" 32# J55 ST&C	4,5
			0-3/8 32# 333 31&C	4,
			Surface	
(\	/ / L	(1/1/2	5-1/2" 17# J55 LT&C 257.66'	
(`)		\ ` \\	5-1/2" 15.5 J55 LT&C 6,535.28'	
17-1/2" Hole			5-1/2" 17# N80 LT&C 975.28'	
)]		; ` ` (5-1/2" 17# L80 LT&C 1,111.53'	8,
		13-3/8" @ 855'	Bottom	-
	$\langle \rangle $	/ \ \ w/750 sx (circ)		
((/)	7.0	
)	/ / ,	/ ((Before	
11" Hole	$ \mathbf{v} $			
(
(· /)		
(DV @ 4,518' (CMT	Circ.)	
\	4	8-5/8" @ 4,595'		
		w/ 1450 sx (circ)	TOPS	
		/ TOC @ 5364' (CBL)	Rustler 88	l l
		(022)	Top of Salt 96	
		` }	Base of Salt 4,45	
	171 1	'	Bell Canyon 4,75	
			Cherry Canyon 5,74	
		/	Brushy Canyon 7,444	
		\	DS 0,70	0
7-7/8" Hole	('			
7-776 Hole)\ \	, (
	(/ /	`)		
kel plated pkr @ 8,158')\			
2" or 2 7/8" PC tbg		,)		
·····		(
	(/ ±	Delaware Perfs: 8,25	8' 8 264' (7)	
)\ ,	Delawate Feris. 6,23	6 - 6,204 (/)	
		·)		
)/ `	Delaware Perfs: 8,50		
	\(\(\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Delaware Perfs: 8,61 Delaware Perfs: 8,66		
	()	()		
Not to Scale	8,840'/	5 1/0" @ 0 220'		
		√ 5-1/2" @ 8,322' w/ 1 Stage 575 sx		





YATES PETROLEUM KIWI AKX STATE #10 Author: Date: 26 August, 2009 16-22S-32E 1980 FSL & 1980 FW L Lea County, NM

Kiwi SWD #10 Form C-108 Tabulation of data on wells within area of review

	7				\	· ·
	Completion Information	13 3/8" @ 916' Cmtd w/800 sx 5 1/2" @ 8,803' Cmtd w/ Stage 1: 935 sx Stage 2: 2430 sx DV tool @ 5495	13 3/8" @867' Cmtd w/750 sx 8 5/8" @ 4,540' Cmtd w/1600 sx 5 1/2" @ 8,760' Cmtd w/ Stage 1: 200sx Stage 2: 738 sx DV tool @ 7528'	13 3/8" @850' Cmtd w/750 sx 8 5/8" @ 4,569' Cmtd w/1500 sx 5 1/2" @ 9,500' Cmtd w/ Stage 1: 310sx Stage 2: 800 sx DV tool @ 7661'	13 3/8" @852" Cmtd w/800 sx 8 5/8" @ 4,540" Cmtd w/1450 sx 5 1/2" @ 8,890" Cmtd w/ Stage 1: 235sx Stage 2: 745 sx Dv tool @ 7594"	13.3/8" @850" Cmtd w/800 sx 8 5/8" @ 4,610" Cmtd w/1650 sx 5 1/2" @ 8,900" Cmtd w/ Stage 1: 220sx Stage 2: 800 sx DV tool @ 7729" See attached P&A sketch CIBP @ 6970" + 25 sx cmt Spot 40 sxs @ 4853". Top @ 4560" Perf @ 2600", pump 35 sxs, tag @ 2403" Perf @ 925", pump 35 sxs, tag @ 2403" Perf @ 60", circulate 20 sx to surface
	Perforations	7148-7150, 7244-7304, 8478-8494, 8570-8621	7003-7020, 7169-7172 7266-7306, 7462-7512 7702-7718, 7889-7919 8208-8216, 8388-8449 8498-8503, 8601-8638	7174-7214, 7279-7324 7479-7525, 8435-8500 8622-8649	6660-6699, 6903-6906 7079-7088, 7291-7304 7364-7386, 7517-7521 7773-7873, 7916-7969 8127-8247, 8379-8438 8464-8500, 8574-8632	7136-7149, 7271-7280 7348-7358, 8478-8520 8651-8710
ć	Producing Total Depth Zone	8803 Delaware	8760 Delaware	9500 Delaware	8890 Delaware	8900 Delaware
	Spud	8/11/1992	6/9/1992	7/13/1992	7/24/1992	10/29/1992 P&A 4/9/08
	Type	ō	Ö	iō	ō	ō
	Operator	Strata Production Co	Yates Petroleum Co	Yates Petroleum Co	Yates Petroleum Co	Yates Petroleum Co
	Well Name	Cercion Fed #3 420FNL & 1650FEL Sec 21 22S 32E	Kiwi AKX St #4 330FSL & 1650FEL Sec 16 22S 32E	Kiwi AKX St #5 1980FSL & 1650FEL Sec 16 22S 32E	Kiwi AKX St #6 660FSL & 2310FWL Sec 16 22S 32E	Kiwi AKX St #7 1980FNL & 1980FWL Sec 16 22S 32E

Kiwi SWD #8 660FSL & 2310FWL Sec 16 22S 32E

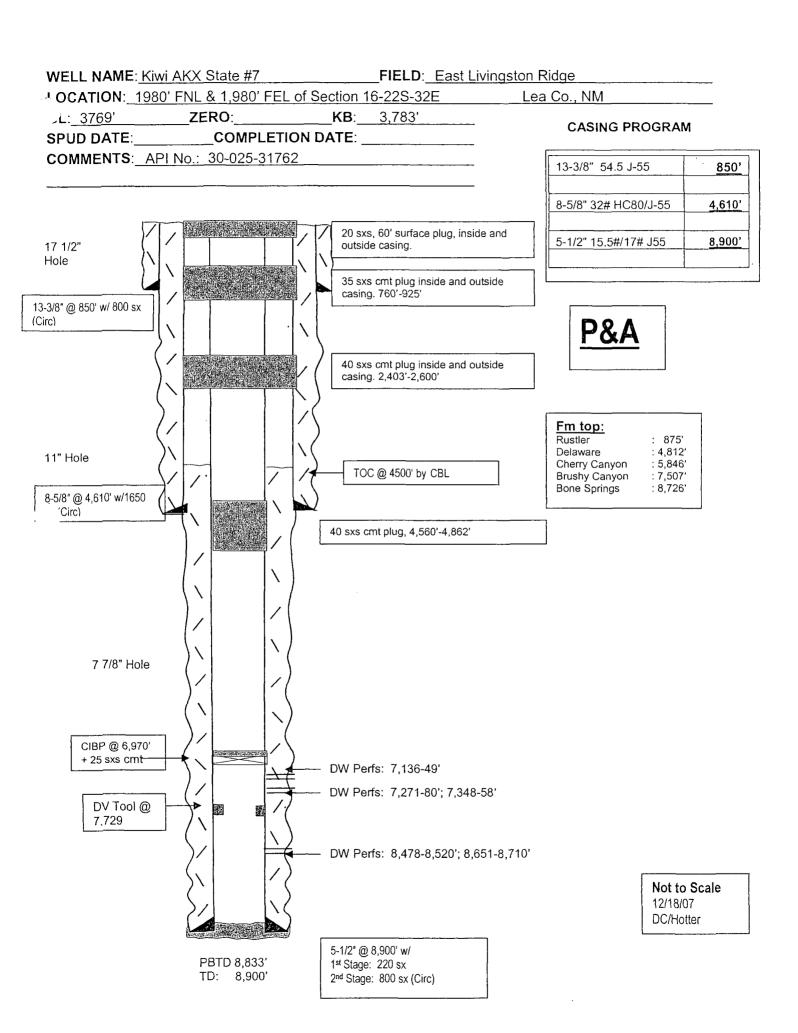
Yates Petroleum Co

2/8/94 ē

7028-7054, 7183-7185 8443-8470, 8539-8562 8653-8710

13 3/8" @850' Cmtd w/800 sx 8 5/8" @ 4,590' Cmtd w/1800 sx 5 1/2" @ 8,798' Cmtd w/ Stage 1: 525sx Stage 2: 830 sx DV tool @ 6386'

8840 Delaware



North Permian Basin Region P.O. Box 740 Sundown, TX 79372-0740 (806) 229-8121 Lab Team Leader - Sheila Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

Company: YATES PETROLEUM INC Sales RDT: 33514 PERMIAN BASIN REGGIE GUY (575) 910-9391 Region: Account Manager: ARTESIA, NM 354147 Area: Sample #: LOTUS 'ALT' STATE UNIT Lease/Platform: Analysis ID #: 94689 Analysis Cost: Entity (or well #): \$90.00 UNKNOWN Formation:

WELLHEAD

Sample Point:

Summ	ary		Ar	nalysis of Sa	ımple 354147 @ 75	°F	
Sampling Date:	9/15/09	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	9/23/09	Chloride:	142320.0	4014.33	Sodium:	69489.4	3022.62
Analyst:	LEAH DURAN	Bicarbonate:	36.6	0.6	Magnesium:	2815.0	231.57
TDC (231647.5	Carbonate:	0.0	0.	Calcium:	14251.0	711.13
TDS (mg/l or g/m3):		Sulfate:	350.0	7.29	Strontium:	1225.0	27.96
Density (g/cm3, tonne/m3): 1 Anion/Cation Ratio:		Phosphate:			Barium:	87.0	1.27
Anion/Cation Ratio:	'	Borate:			Iron:	15.0	0.54
		Silicate:			Potassium:	1053.0	26.93
A 1 B1 11	000 0014				Aluminum:		
Carbon Dioxide:	280 PPM	Hydrogen Sulfide:		0 PPM	Chromium:		
Oxygen:		pH at time of sampling:		5.7	Copper:		
Comments:				0.1	Lead:		
		pH at time of analysis:			Manganese:	5.500	0.2
		pH used in Calculation	on:	5.7	Nickel:		

Condi	Conditions		Values C	alculated	at the Giver	Conditio	ns - Amour	ts of Scal	e in lb/1000	bbl		
Temp	Gauge Press.	7) 0-00		- 7			Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.83	0.00	-0.43	0.00	-0.39	0.00	0.11	37.23	2.06	44.50	0.43
100	0	-0.74	0.00	-0.50	0.00	-0.40	0.00	0.08	29.67	1.86	44.22	0.51
120	0	-0.66	0.00	- 0.57	0.00	-0.38	0.00	0.07	26.31	1.69	43.94	0.59
140	0	- 0.57	0.00	-0.62	0.00	-0.35	0.00	0.08	26.59	1.54	43.39	0.67

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: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Attachment D Example of water to be disposed who swo well

North Permian Basin Region P.O. Box 740

Sundown, TX 79372-0740

(806) 229-8121

Lab Team Leader - Sheila Hernandez

(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:

YATES PETROLEUM INC

Sales RDT:

33514

Region:

PERMIAN BASIN

Account Manager:

REGGIE GUY (575) 910-9391

Area:

ARTESIA, NM

Sample #:

354157

Lease/Platform:

KIWI 'AKX' STATE LEASE

Analysis ID #:
Analysis Cost:

94687

\$90.00

Entity (or well #):

3

UNKNOWN

Formation:
Sample Point:

WELLHEAD

Summ	nary		Ar	alysis of Sa	ımple 354157 @ 75	°F	
Sampling Date:	9/15/09	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	9/23/09	Chloride:	177816.0	5015.54	Sodium:	81444.2	3542.62
Analyst:	LEAH DURAN	Bicarbonate:	73.2	1.2	Magnesium:	3828.0	314.91
TDC (202222	Carbonate:	0.0	0.	Calcium:	22006.0	1098.1
TDS (mg/l or g/m3):	289080.9	Sulfate:	774.0	16.11	Strontium:	1226.0	27.98
Density (g/cm3, toni	ne/m3): 1.192	Phosphate:			Barium:	2.5	0.04
Anion/Cation Ratio:	1	Borate:			Iron:	28.0	1.01
	,	Silicate:			Potassium:	1879.0	48.05
					Aluminum:		
Carbon Dioxide:	430 PPM	Hydrogen Sulfide:		0 PPM	Chromium:		
Oxygen:		pH at time of samplin	a:	5.5	Copper:		
Comments:		'	·	5.5	Lead:		
		pH at time of analysi	s:		Manganese:	4.000	0.15
		pH used in Calcula	tion:	5.5	Nickel:		

Condi	Conditions Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl											
Temn	Gauge Press.	0-00		- 71			Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.49	0.00	0.09	74.08	0.15	94.78	0.34	175.23	0.74	1.06	1.14
100	0	-0.41	0.00	0.00	2.12	0.13	84.16	0.31	165.14	0.54	0.80	1.33
120	0	-0.33	0.00	-0.07	0.00	0.14	87.62	0.30	161.43	0.37	0.80	1.51
140	0	-0.24	0.00	- 0.13	0.00	0.17	103.02	0.31	163.02	0.22	0.53	1.66

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: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Affachment D Example of water to be disposed into swo well.

North Permian Basin Region P.O. Box 740 Sundown, TX 79372-0740 (806) 229-8121

Lab Team Leader - Sheila Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

Company:

YATES PETROLEUM INC

Sales RDT:

33514

Region:

PERMIAN BASIN

Account Manager:

REGGIE GUY (575) 910-9391

Area:

ARTESIA, NM

Sample #:

354152

Lease/Platform:

LOTUS 'ALT' STATE UNIT

Analysis ID #:

94688

Entity (or well #):

3

Analysis Cost:

\$90.00

Formation:

UNKNOWN

Sample Point:

WELLHEAD

Sumn	nary		Ar	alysis of Sa	mple 354152 @ 75	·°F	
Sampling Date:	9/15/09	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	9/23/09	Chloride:	181989.0	5133.25	Sodium:	77172.6	3356.82
Analyst:	LEAH DURAN	Bicarbonate:	48.8	0.8	Magnesium:	4720.0	388.29
TDO (204540.4	Carbonate:	0.0	0.	Calcium:	26148.0	1304.79
TDS (mg/l or g/m3):	294549.4	Sulfate:	541.0	11.26	Strontium:	1946.0	44.42
	ensity (g/cm3, tonne/m3): 1.197		Phosphate:			3.5	0.05
Anion/Cation Ratio:	1	Borate:			Iron:	24.0	0.87
		Silicate:			Potassium:	1952.0	49.92
					Aluminum:		
Carbon Dioxide:	400 PPM	Hydrogen Sulfide:		0 PPM	Chromium:		
Oxygen:		nH at time of compline		5.2	Copper:		
Comments:		pH at time of sampling:		3.2	Lead:		
		pH at time of analysis:			Manganese:	4.500	0.16
		pH used in Calculation	on:	5.2	Nickel:		

Condi	tions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl												
ITemn	Temp Gauge Press.		Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ 0		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄				
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi			
80	0	-0.93	0.00	-0.01	0.00	0.05	24.84	0.36	151.42	0.70	1.32	1.41			
100	0	-0.84	0.00	-0.10	0.00	0.03	16.38	0.34	144.28	0.51	1.32	1.65			
120	0	-0.76	0.00	-0.17	0.00	0.04	20.61	0.33	142.17	0.34	1.06	1.86			
140	0	-0.67	0.00	-0.23	0.00	0.07	35.15	0.33	144.02	. 0.19	0.53	2.05			

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: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Affachment D Example of water to be disposed into SWD well

North Permian Basin Region P.O. Box 740 Sundown, TX 79372-074C (806) 229-8121 Lab Team Leader - Sheila Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

YATES PETROLEUM INC Company: Sales RDT: 33514 PERMIAN BASIN REGGIE GUY (575) 910-9391 Region: Account Manager: ARTESIA, NM Sample #: 354158 Area: KIWI 'AKX' STATE LEASE 94686 Lease/Platform: Analysis ID #: Entity (or well #): Analysis Cost: \$90.00

UNKNOWN

WELLHEAD

Formation: Sample Point:

	Analysis of Sample 354158 @ 75 °F									
Anions	mg/l	meq/l	Cations	mg/l	meq/l					
Chloride:	139881.0	3945.53	Sodium:	61614.9	2680.1					
Bicarbonate:	85.4	1.4	Magnesium:	3256.0	267.85					
Carbonate:	0.0	0.	Calcium:	18604.0	928.34					
Sulfate:	404.0	8.41	Strontium:	1504.0	34.33					
Phosphate:			Barium:	3.0	0.04					
Borate:			Iron:	23.0	0.83					
Silicate:			Potassium:	1709.0	43.71					
			Aluminum:							
Hydrogen Sulfide:		0 PPM	Chromium:							
		5.1	Copper:							
		5.1	Lead:							
pH at time of analysis:			Manganese:	4.000	0.15					
pH used in Calculati	on:	5.1	Nickel:							
	Bicarbonate: Carbonate: Sulfate: Phosphate: Borate: Silicate: Hydrogen Sulfide: pH at time of analysis:	Bicarbonate: 85.4 Carbonate: 0.0 Sulfate: 404.0 Phosphate: Borate: Silicate:	Bicarbonate: 85.4 1.4 Carbonate: 0.0 0. Sulfate: 404.0 8.41 Phosphate: Borate: Silicate: Hydrogen Sulfide: 0 PPM pH at time of sampling: 5.1 pH at time of analysis:	Chloride: 139881.0 3945.53 Sodium: Bicarbonate: 85.4 1.4 Magnesium: Carbonate: 0.0 0. Calcium: Sulfate: 404.0 8.41 Strontium: Borate: Borate: Iron: Silicate: Potassium: Aluminum: Hydrogen Sulfide: 0 PPM Chromium: pH at time of sampling: 5.1 pH at time of analysis: 5.1	Chloride: 139881.0 3945.53 Sodium: 61614.9 Bicarbonate: 85.4 1.4 Magnesium: 3256.0 Carbonate: 0.0 0. Calcium: 18604.0 Sulfate: 404.0 8.41 Strontium: 1504.0 Phosphate: Barium: 3.0 Borate: Iron: 23.0 Silicate: Potassium: 1709.0 Aluminum: Chromium: Copper: Lead: pH at time of analysis: 5.1 Manganese: 4.000					

Condi	tions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl												
ITemn	Gauge Press.	7 1 0000		Gypsum CaSO ₄ *2H ₂ 0		i	Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄				
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi			
80	0	-1.01	0.00	-0.29	0.00	-0.25	0.00	0.24	85.83	0.63	1.13	3.69			
100	0	-0.92	0.00	-0.36	0.00	-0.26	0.00	0.22	80.20	0.44	0.84	4.43			
120	0	-0.84	0.00	-0.42	0.00	-0.24	0.00	0.21	78.23	0.27	0.84	5.15			
140	0	-0.75	0.00	-0.46	0.00	-0.19	0.00	0.22	79.64	0.13	0.28	5.8			

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: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Affachment D Example of water to be disposed into swo well.

Attachment G

C-108 Application for Authorization to Inject Yates Petroleum Corporation Kiwi SWD #10

> Unit K, Section 16-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.

Ray Podany Geologist

Yates Petroleum Corporation

12-8-09

Date

Affidavit of Publication

NO. 20948

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 week/days on the same

day as follows:

First Publication

December 11, 2009

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

11 Day

December

2009



OFFICIAL SEAL
Jo Morgan

NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires:

Notary Public, Eddy County, New Mexico

Copy of Publication:

Kiwi SWD #10 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 Kiwi SWD #10 located 1980' FSL & 1980' FWL, Unit K, Section 16, Township 22 South, Range 32 East of Lea County, New Mexico, will be used for saltwater disposal. Produced waters from the Delaware Sand will be re-injected into the Delaware Sand at a depth of 5850'-6450' with a maximum pressure of 1170 psi and a maximum rate of 5000 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 Margrethe Hotter at (575) 748-4165.

Published in the Artesia Daily Press, Artesia, NM December 11, 2009.

Legal No. 20948

Attachment G

C-108 Application for Authorization to Inject Yates Petroleum Corporation Kiwi SWD #10

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Ray Podany Geologist

Yates Petroleum Corporation

Date



JOHN A. YATES LR.

JAMES 5. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

Oxy USA, Inc. P.O. Box 27\frac{4}{70} Houston, TX 77227-7570

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

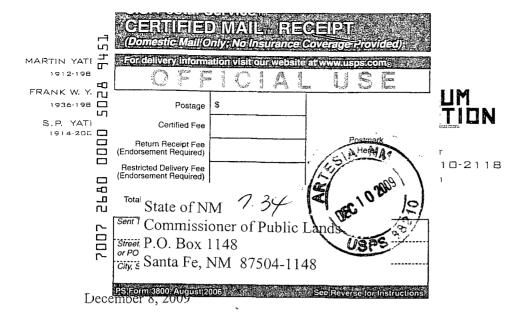
Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said wells located in Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4361.

Sincerely,

Debbie Chavez Engineering Technician



JOHN A. YATES JR.

JAMES S. BROWN

JOHN D. PERINI CHIEF FINANCIAL OFFICER

State of New Mexico Commissioner of Public Lands P.O. Box 1148 Santa Fe, NM 87504-1148

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said wells located in Lea County, New Mexico.

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Sincerely,

Debbie Chavez

Engineering Technician

JOHN A. YATES JR.

JAMES S. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

Chevron USA, Inc. 11111 S. Wilcrest Drive Houston, TX 77099-4310

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said wells located in Lea County, New Mexico.

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Sincerely,

Debbie Chavez

Engineering Technician



JOHN A. YATES JR.
ASSISTANT TO THE PRESIDENT

JAMES S. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

BP America Production Company P.O. Box 3092 Houston, TX 77253-3092

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

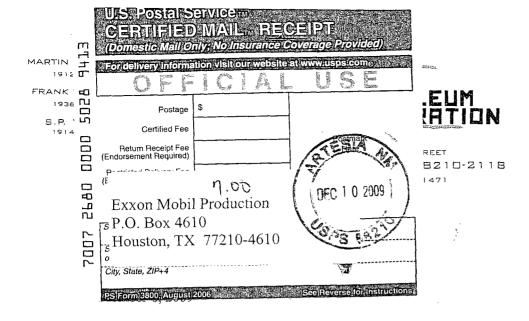
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Sincerely,

Debbie Chavez

Engineering Technician



JOHN A. YATES JR.
ASSISTANT TO THE PRESIDENT

JAMES 5. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

Exxon Mobil Production Company P.O. Box 4610 Houston, TX 77210-4610

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

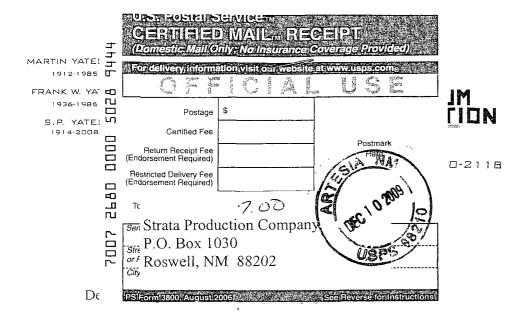
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Sincerely,

Debbie Chavez

Engineering Technician



JOHN A. YATES JR.

JAMES S. BROWN CHIEF OPERATING OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

Strata Production Company P.O. Box 1030 Roswell, NM 88202

Re: Lotus SWD #12 Kiwi SWD #5 Kiwi SWD #10

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said wells located in Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4361.

Sincerely,

Debbie Chavez

Engineering Technician

	Ligar	tion Permit Ch	ecklist (8/14/ng)			
Case R-	SWO	<i> </i>	IPI Permit Date	LUC Otr		2
# Wells Well Name:	1		woz K		X5t#1	0
API Num: (30-) 025-	•		7		1982)	
Footages 1985 FSL	r	4 .	•		Low	
Operator:	<u> </u>	(- /-	Contact	α . ()	Walter	
7					- 10	
OGRID:	RULE 5.9 Compliance ((Wells)	(Finan Assı	ur)	- OK	•
Operator Address:						
Current Status of Well:	hear - Com	~~~~	al .			
Guitoni Status St VVen., 2 p		7-000			1/2022/18	821898
Planned Work to Well:	C:	0.44	T	ubing Size/Depth:		,
	Sizes HolePipe	Setting Depths	Cement Sx or Cf	Cement Top and I Metho	1	
Existing Surface	171/2 133/5	895	750	C. 2356	`	
Existing Intermediate	11 858	4595	1450	C1125		
Existing Long String	778 512	8322	575 600		4 CBL	
DV Tool 4518	Liner	Open Hol	•	Total Depth <u>88</u> 8	5	
Well File Reviewed						
Diagrams: Before Convers	ionAfter Conversion	Elogs in Ima	ging File:	7 70-	FOR	P
Intervals:	Depths	Formation	Producing (Yes/No)	miles	East 9	Je corro
Above (Name and Top)		6		12	OTA>(700
Above (Name and Top) Injection	7440	Brushy	14	1170	,	
Interval TOP:	8258588	Braky	1101	165-EPSI Ma	x. WHIP	
InjectionInterval BOTTOM:	\$679W	0 -10	7	Q _t	en Hole (Y/N)	
Below (Name and Top)	8706	z.Sr	,		ated Hole?	
		Cliffeld	Salt Daatha	/ · · ·	50	
Sensitive Areas: Gapitan		_Cliff:House		703 11		
Potash Area (R-111-P)		Rotash Les	.see- <u>\</u>	Noticed?		/
Fresh Water: Depths:	$\overline{}$	S	Analysis?	Affirmative State	ement	
Disposal Fluid Sources:_	Del		7150		Analysis?	
<u>Disposal Interval</u> Product	ion Potential/Testing/An	alysis Analysis:	Doplat		red ovt	
		010				
Notice: Newspaper(Y/N)_		- Y	Mineral C	wner(s)	<u> </u>	
RULE 26.7(A) Affected Pa	rties: 100 Publication		Leen OX	1 64		(SS)
Area of Review: Adequa		1A/-# L :-4 /\//\				
Active Wells Num	_		1 5 0			860 (
P&A Wells Num				4		
Questions to be Answer		oooro Diagramo III		7.7		~ 1700
whe	water	7 7 1 G	flor Swo	510 al	Mount 1	~6°
			()			~
		10.4.4		V		
Required Work on This \				_ Request Sent		
AOR Repairs Needed: _				_ Request Sent		
				_ Request Sent	Reply:	

8252