

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 _____

Yates
 Fruit St. SWD# 1
 API - pending
 A/19/T215/R34E
 Delaware
 Cherry Canyon

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
 [B] X Offset Operators, Leaseholders or Surface Owner
 [C] X Application is One Which Requires Published Legal Notice
 [D] X Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] X 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.

Margrethe F. Hotter

Print or Type Name

Signature

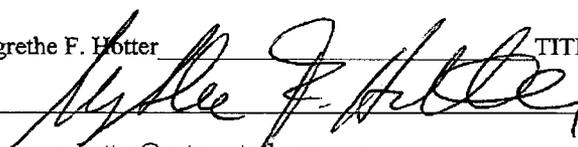
Area Engineer

Title

9/6/13
Date

mhotter@yatespetroleum.com
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 S. 4th St, Artesia, NM 88210 _____
CONTACT PARTY: _____ Margrethe F. Hotter _____ PHONE: _____ 575-748-4165 _____
- 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: _____ Margrethe F. Hotter _____ TITLE: _____ Area Engineer _____
SIGNATURE: _____  _____ DATE: _____ 10/25/13 _____
E-MAIL ADDRESS: _____ mhotter@yatespetroleum.com _____
- * 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: _____ 9/6/13 _____

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.

**C-108 Application for Authorization to Inject
Yates Petroleum Corporation
Fruit St SWD #1
Unit A, 330' FNL & 330' FEL, Sec. 19, T21S, R34E
Lea County, New Mexico**

- I. **The purpose of drilling this well is to make a disposal well for produced Bone Springs and Delaware water into the Delaware Sand formation. The Application qualifies for administrative approval.**

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

- II. **Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Margrethe Hotter (575) 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 no other wells within the area of review.**
- VII. **1. Proposed average daily injection volume approximately 5000 BWPD. Maximum daily injection volume approximately 10000 BWPD.**
- 2. This will be a closed system.**
- 3. Proposed average injection pressure –unknown.
Proposed maximum injection pressure – 1150 psi.**
- 4. Sources of injected water would be produced water from the Delaware and Bone Springs. (Attachment D)**
- VIII. **1. The proposed injection interval is the portion of the Delaware Sand formation consisting of porous Sandstone from 5,745'-7,125.**

**Application for Authorization to Inject
Fruit St SWD #1**

-2-

- 2. Possible Fresh water zones overlie the proposed injection formations at depths to approximately 150' based on well records from fresh water wells in Sec 11 T21S 33E and Sec 8,21&28 of 21S 34E. 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. Well logs will be filed with the Division after well is drilled. GR Neutron will be run from TD to surface. Density and Laterolog will be run from TD to Intermediate casing shoe. CBL log will be run after casing is set and cemented.**

- XI. There are no windmills or water wells 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
Fruit St SWD #1
A-19-T21S-R34E
Lea County, New Mexico**

Attachment A

- III. Well Data
- A. 1. Lease Name/Location
Fruit St SWD #1
A-19-T21S-R34E
330' FNL & 330' FEL
Will apply for APD when C-108 is approved.
2. Casing Strings:
a. 13 3/8" 48# & 54.5# J-55 ST&C @ +/-1,830' w 1,345 sx (circ)
9 5/8" 36# & 40# J-55 LT&C @ +/-5,700' w/1925 sx (circ)
7" 26# L-80 LT&C @ 7,200' w/830 sx (circ).
- b. Present Status:
Not yet drilled.
3. Proposed well condition:
Plan to drill well and set casing as described above.
Perforate porous sands between 5,745'-7,125'
3 1/2" 9.3 J55 plastic-coated injection tubing @ 5,645'
4. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 5,645'.
- B. 1. Injection Formation: Delaware Cherry Canyon Sands
2. Injection Interval will be through perforations from approximately 5,745'-7,125' gross interval.
3. Well will be a Delaware water disposal well when work is completed.
4. Perforations: High porosity sands between 5,745'-7,125'.
5. Next higher (shallower) oil or gas zone within 2 miles- no shallower production within 2 miles
Next lower (deeper) oil or gas zone within 2 miles- Bone Springs

WELL NAME: Fruit St SWD #1 FIELD: _____

LOCATION: 330' FNL & 330' FEL of Section 19-21S-34E Lea Co., NM

GL: 3,707' (est) ZERO: _____ KB: _____ 3,725' (est)

SPUD DATE: _____ COMPLETION DATE: _____

CASING PROGRAM

COMMENTS: New drill. APD application will be filed.

| | |
|------------------------------|---------------|
| 13-3/8" 48 & 54.5# J-55 ST&C | 1,830' |
| 9-5/8" 36# & 40# J-55 LT&C | 5,700' |
| 7" 26 # L-80 LT&C | 7,200' |

17-1/2" Hole

12 1/4" Hole

Nickel plated injection packer @ +/-5,645'

13-3/8" @ 1,830'
w/1.345 sx (Circ)

9-5/8" @ 5,700'
w/1925 sx (Circ)

Injection interval:
porous sands between
5,745' and 7,125'.
5000

8 3/4" Hole

TD: 7,200'

7" @ 7,200'
w/ 830sx cmt (circ)

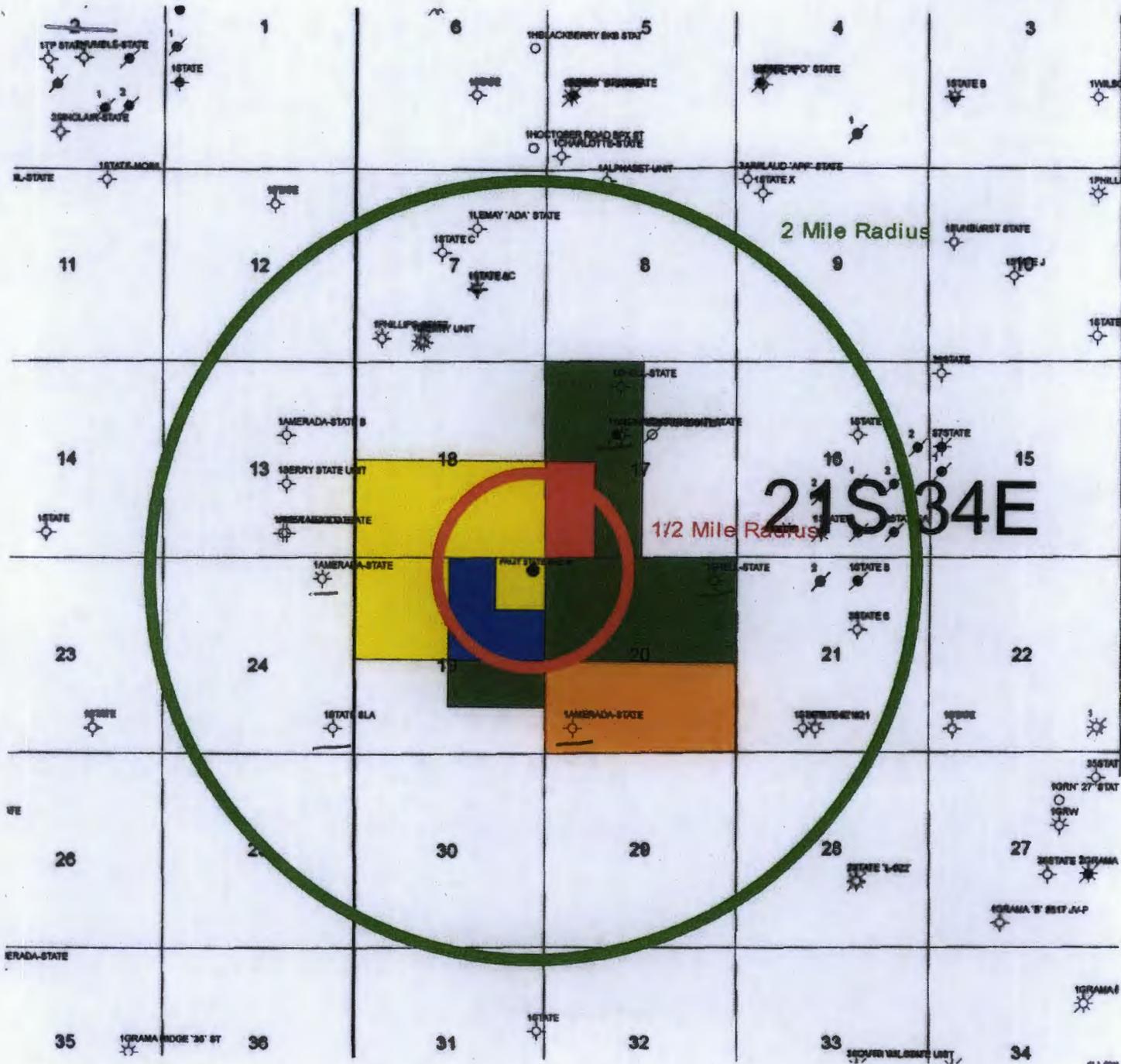
Proposed

TOPS

| | |
|---------------|--------|
| Rustler | 1,805' |
| TOS | 1,945' |
| BOS | 3,675' |
| Tansill | 3,715' |
| Yates | 3,905' |
| Capitan | 4,215' |
| Lamar | 5,675' |
| Cherry Canyon | 5,745' |
| Brushy Canyon | 7,125' |

*Capt Hiss
~1500'*

Not to Scale
8/30/13
MMFH



- Yates Petroleum Corporation, ETAL
- New Mexico Exploration and Production, LLC
- Elevation Resources, LLC
- EOG Resources, LLC
- COG Operating, LLC

| | | |
|---|---------------------|---------------------|
| Yates Petroleum Corporation | | |
| Lea County, NM Fruit State SWD #1 Plot: 21S-34E | | |
| Author: Mike M. | Date: 12/20/2013 | Scale: 1" = 100' |
| By: LJ | Check: LJ | Revision: 0 |

Attachement B

WATER ANALYSIS REPORT

| | | | |
|------------|-------------------|--------------|----------|
| Company | : YATES PETROLEUM | Date | : 8/3/13 |
| Address | : ARTESIA, NM | Date Sampled | : 8/2/13 |
| Lease | : HUNT "APO" | Analysis No. | : 00603 |
| Well | : # 1 | | |
| Sample Pt. | : SEPARATOR | | |

| ANALYSIS ----- | | mg/L ----- | | * meq/L ----- |
|---------------------------------------|------|---------------|------|------------------|
| 1. pH | | 5.6 | | |
| 2. H2S | | 0 | | |
| 3. Specific Gravity | | 1.170 | | |
| 4. Total Dissolved Solids | | 275114.6 | | |
| 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 | 171.0 | HCO3 | 2.8 |
| 12. Chloride | Cl | 169400.0 | Cl | 4778.6 |
| 13. Sulfate | SO4 | 375.0 | SO4 | 7.8 |
| 14. Calcium | Ca | 24800.0 | Ca | 1237.5 |
| 15. Magnesium | Mg | 1473.8 | Mg | 121.3 |
| 16. Sodium (calculated) | Na | 78864.8 | Na | 3430.4 |
| 17. Iron | Fe | 30.0 | | |
| 18. Barium | Ba | NR | | |
| 19. Strontium | Sr | NR | | |
| 20. Total Hardness (CaCO3) | | 68000.0 | | |

PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter | | Compound | Equiv wt X meq/L | = | mg/L |
|------------------------------------|-----------|-----------|------------------|--------|--------|
| +-----+ | | | | | |
| 1238 *Ca <----- *HCO3 | 3 | Ca(HCO3)2 | 81.0 | 2.8 | 227 |
| ----- /-----> | ----- | CaSO4 | 68.1 | 7.8 | 531 |
| 121 *Mg -----> *SO4 | 8 | CaCl2 | 55.5 | 1226.9 | 68081 |
| ----- <-----/ | ----- | Mg(HCO3)2 | 73.2 | | |
| 3430 *Na -----> *Cl | 4779 | MgSO4 | 60.2 | | |
| +-----+ | +-----+ | MgCl2 | 47.6 | 121.3 | 5772 |
| Saturation Values Dist. Water 20 C | | NaHCO3 | 84.0 | | |
| CaCO3 | 13 mg/L | Na2SO4 | 71.0 | | |
| CaSO4 * 2H2O | 2090 mg/L | NaCl | 58.4 | 3430.4 | 200472 |
| BaSO4 | 2.4 mg/L | | | | |

REMARKS:

Attachment D

Example of water to be disposed into well

WATER ANALYSIS REPORT

| | |
|---------------------------|-----------------------|
| Company : YATES PETROLEUM | Date : 8/3/13 |
| Address : ARTESIA, NM | Date Sampled : 8/2/13 |
| Lease : BLACKBERRY "BKB" | Analysis No. : 00602 |
| Well : # 1-H | |
| Sample Pt. : FWKO | |

| ANALYSIS | mg/L | | * meq/L | |
|---------------------------------------|----------|----------|---------|--------|
| ----- | ---- | | ----- | |
| 1. pH | 6.3 | | | |
| 2. H2S | 0 | | | |
| 3. Specific Gravity | 1.102 | | | |
| 4. Total Dissolved Solids | 165739.4 | | | |
| 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 | 683.0 | HCO3 | 11.2 |
| 12. Chloride | Cl | 100020.0 | Cl | 2821.4 |
| 13. Sulfate | SO4 | 2000.0 | SO4 | 41.6 |
| 14. Calcium | Ca | 4320.0 | Ca | 215.6 |
| 15. Magnesium | Mg | 2723.2 | Mg | 224.0 |
| 16. Sodium (calculated) | Na | 55973.3 | Na | 2434.7 |
| 17. Iron | Fe | 20.0 | | |
| 18. Barium | Ba | NR | | |
| 19. Strontium | Sr | NR | | |
| 20. Total Hardness (CaCO3) | | 22000.0 | | |

PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter | Compound | Equiv wt X meq/L | = | mg/L |
|------------------------------------|-----------|------------------|--------|--------|
| +-----+ | ----- | ----- | ----- | ----- |
| 216 *Ca <----- *HCO3 11 | Ca(HCO3)2 | 81.0 | 11.2 | 907 |
| ----- /-----> ----- | CaSO4 | 68.1 | 41.6 | 2835 |
| 224 *Mg -----> *SO4 42 | CaCl2 | 55.5 | 162.7 | 9030 |
| ----- <-----/ ----- | Mg(HCO3)2 | 73.2 | | |
| 2435 *Na -----> *Cl 2821 | MgSO4 | 60.2 | | |
| +-----+ | MgCl2 | 47.6 | 224.0 | 10665 |
| Saturation Values Dist. Water 20 C | NaHCO3 | 84.0 | | |
| CaCO3 13 mg/L | Na2SO4 | 71.0 | | |
| CaSO4 * 2H2O 2090 mg/L | NaCl | 58.4 | 2434.7 | 142283 |
| BaSO4 2.4 mg/L | | | | |

REMARKS:

Example of water to be disposed into wells

WATER ANALYSIS REPORT

| | |
|---------------------------|------------------------|
| Company : YATES PETROLEUM | Date : 7/12/13 |
| Address : ARTESIA, NM | Date Sampled : 7/11/13 |
| Lease : BERRY "APN" | Analysis No. : 00146 |
| Well : #2-H | |
| Sample Pt. : HEATER | |

| ANALYSIS ----- | mg/L ----- | * meq/L ----- |
|---------------------------------------|---------------|------------------|
| 1. pH | 6.0 | |
| 2. H2S | 0 | |
| 3. Specific Gravity | 1.110 | |
| 4. Total Dissolved Solids | 171404.6 | |
| 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 244.0 | HCO3 4.0 |
| 12. Chloride | Cl 105600.0 | Cl 2978.8 |
| 13. Sulfate | SO4 750.0 | SO4 15.6 |
| 14. Calcium | Ca 11440.0 | Ca 570.9 |
| 15. Magnesium | Mg 2776.5 | Mg 228.4 |
| 16. Sodium (calculated) | Na 50559.2 | Na 2199.2 |
| 17. Iron | Fe 35.0 | |
| 18. Barium | Ba NR | |
| 19. Strontium | Sr NR | |
| 20. Total Hardness (CaCO3) | 40000.0 | |

PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter | Compound | Equiv wt | X meq/L | = mg/L |
|------------------------------------|------------------|----------|---------|--------|
| +-----+ | +-----+ | ----- | ----- | ----- |
| 571 *Ca <----- *HCO3 | 4 Ca(HCO3)2 | 81.0 | 4.0 | 324 |
| ----- /-----> | ----- CaSO4 | 68.1 | 15.6 | 1063 |
| 228 *Mg -----> *SO4 | 16 CaCl2 | 55.5 | 551.2 | 30588 |
| ----- <-----/ | ----- Mg(HCO3)2 | 73.2 | | |
| 2199 *Na -----> *Cl | 2979 MgSO4 | 60.2 | | |
| +-----+ | +-----+ | ----- | ----- | ----- |
| Saturation Values Dist. Water 20 C | NaHCO3 | 84.0 | | |
| CaCO3 13 mg/L | Na2SO4 | 71.0 | | |
| CaSO4 * 2H2O 2090 mg/L | NaCl | 58.4 | 2199.2 | 128520 |
| BaSO4 2.4 mg/L | | | | |

REMARKS:

Example of water to be disposed into well

WATER ANALYSIS REPORT

| | |
|---------------------------|-----------------------|
| Company : YATES PETROLEUM | Date : 8/3/13 |
| Address : ARTESIA, NM | Date Sampled : 8/2/13 |
| Lease : BERRY "APN" | Analysis No. : 00601 |
| Well : # 1 | |
| Sample Pt. : SEPARATOR | |

| ANALYSIS | mg/L | * meq/L |
|---------------------------------------|-------------|-----------|
| ----- | ---- | ----- |
| 1. pH | 6.0 | |
| 2. H2S | 0 ✓ | |
| 3. Specific Gravity | 1.150 | |
| 4. Total Dissolved Solids | 241813.4 | |
| 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 207.0 | HCO3 3.4 |
| 12. Chloride | Cl 150100.0 | Cl 4234.1 |
| 13. Sulfate | SO4 750.0 | SO4 15.6 |
| 14. Calcium | Ca 19440.0 | Ca 970.1 |
| 15. Magnesium | Mg 4724.9 | Mg 388.7 |
| 16. Sodium (calculated) | Na 66541.5 | Na 2894.4 |
| 17. Iron | Fe 50.0 | |
| 18. Barium | Ba NR | |
| 19. Strontium | Sr NR | |
| 20. Total Hardness (CaCO3) | 68000.0 | |

PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter | Compound | Equiv wt | X meq/L | = mg/L |
|------------------------------------|-----------|----------|---------|--------|
| +-----+ | ----- | ----- | ----- | ----- |
| 970 *Ca <----- *HCO3 3 | Ca(HCO3)2 | 81.0 | 3.4 | 275 |
| ----- /-----> ----- | CaSO4 | 68.1 | 15.6 | 1063 |
| 389 *Mg -----> *SO4 16 | CaCl2 | 55.5 | 951.0 | 52774 |
| ----- <-----/ ----- | Mg(HCO3)2 | 73.2 | | |
| 2894 *Na -----> *Cl 4234 | MgSO4 | 60.2 | | |
| +-----+ | MgCl2 | 47.6 | 388.7 | 18505 |
| Saturation Values Dist. Water 20 C | NaHCO3 | 84.0 | | |
| CaCO3 13 mg/L | Na2SO4 | 71.0 | | |
| CaSO4 * 2H2O 2090 mg/L | NaCl | 58.4 | 2894.4 | 169147 |
| BaSO4 2.4 mg/L | | | | |

REMARKS:

Example of water to be disposed into well

Attachment E

Certified Notification letters sent to:

1. Surface owner:

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

} Location within R-III-P description

2. Operators within ½ mile radius:

T21S-R34E
Section 17: W/2SW/4
Lease: B0-1040-0014

LeaCo New Mexico Exploration and Production, LLC
2000 Post Oak Blvd., Suite 100
Houston, TX
77056

T21S-R34E
Section 18: S/2
Lease: VB-2096-0000
&
Section 19: NW/4, NE/4NE/4
Lease: VB-2097-0001

Yates Petroleum Corporation
105 S. 4th St., Artesia, NM 88210

Myco Industries, Inc.
105 S. 4th St., Artesia, NM 88210

GMT Exploration Company, LLC
1560 Broadway, Suite 2000
Denver, CO 80202

The Allar Company
P.O. Box 1567
Graham, TX 76450-1567

Abo Petroleum Corporation
105 S. 4th St., Artesia, NM 88210

T21S-R34E
Section 19: NW/4NE/4 , SW/4NE/4 , SE/4NE/4
Lease: B0-1651-0015

EOG Resources
P.O. Box 2267
Midland, TX 79702

T21S-R34E
Section 19: NE/4SE/4, NW/4SE/4
Lease: VB-2089-0002
&
Section 17: NW/4; E/2SW/4
VB-2088-0002
&
Section 20: N/2
Lease: V0-8646-0002

Elevation Resources, LLC
200 N. Loraine, Ste. 1010
Midland, TX 79701

T21S-R34E
Section 20: S/2
Lease: V0-8688-0000

COG Operating, LLC
550 W. Texas Ave., Suite 100
Midland, TX
79701

MARTIN YATES, III
1912-1985
FRANK W. YATES
1936-1986
S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471
www.yatespetroleum.com

JOHN A. YATES
CHAIRMAN EMERITUS
JOHN A. YATES JR.
CHAIRMAN OF THE BOARD
PRESIDENT
JOHN D. PERINI
EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER
JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

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

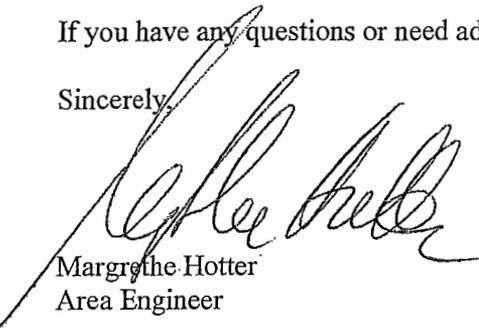
Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,


Margythe Hotter
Area Engineer

Enclosures

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PS Form 3800, September 2012

KATHY H. PORTER
SECRETARY

DENNIS G. KINSEY
TREASURER

Attachment E

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
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EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

COG Operating, LLC
550 W. Texas Ave., Suite 100
Midland, TX 79701

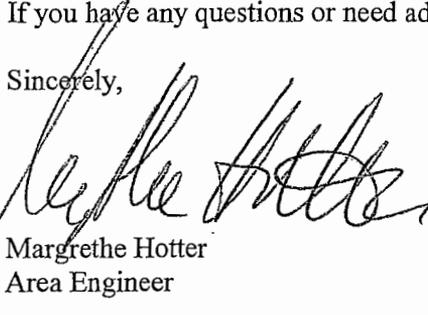
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Sincerely,


Margrethe Hotter
Area Engineer

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7010 3090 0002 5765 2809

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| Street, Apt. or PO Box | 550 W. Texas Ave., Suite 100 |
| City, State | Midland, TX 79701 |
| PS Form 3849 | ions |

MARTIN YATES, III
1912-1985
FRANK W. YATES
1936-1986
S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471
www.yatespetroleum.com

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JOHN D. PERINI
EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER
JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

Elevation Resources, LLC
200 N. Loraine, Ste. 1010
Midland, TX 79701

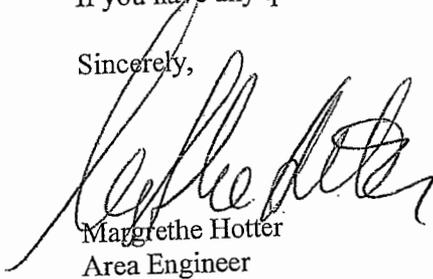
Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,



Margrethe Hotter
Area Engineer

Enclosures

7010 3090 0002 5765 2793

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| Street, Apt. or PO Box | 200 N. Loraine, Ste. 1010 |
| City, State | Midland, TX 79701 |
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SECRETARY

DENNIS G. KINSEY
TREASURER

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
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TELEPHONE (575) 748-1471
www.yatespetroleum.com

JOHN A. YATES
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EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

Abo Petroleum Corporation
105 S. 4th St
Artesia, NM 88210

Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,

Margrethe Hotter
Area Engineer

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ARTESIA, NM
SEP - 9 2013

Sent To
Abo Petroleum Corporation
105 S. 4th St
Artesia, NM 88210

PS Form 3848

MARTIN YATES, III
1912-1985
FRANK W. YATES
1936-1986
S. P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471
www.yatespetroleum.com

JOHN A. YATES
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JOHN A. YATES JR.
CHAIRMAN OF THE BOARD
PRESIDENT
JOHN D. PERINI
EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER
JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

The Allar Company
P.O Box 1567
Graham, TX 76450-1567

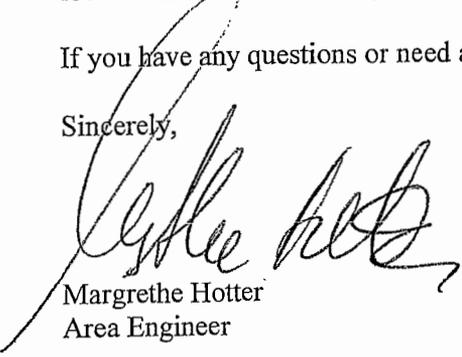
Re: Fruit St SWD #1

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Sincerely,


Margrethe Hotter
Area Engineer

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KATHY H. PORTER
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DENNIS G. KINSEY
TREASURER

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471
www.yatespetroleum.com

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JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

GMT Exploration Company, LCC
1560 Broadway, Suite 2000
Denver, CO 80202

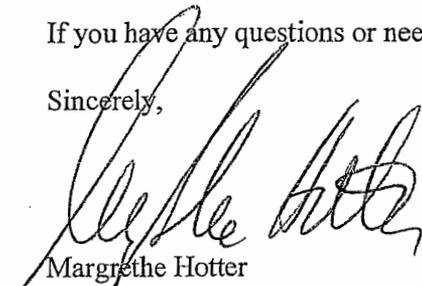
Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,



Margrethe Hotter
Area Engineer

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1560 Broadway, Suite 2000
Denver, CO 80202

PS Form 38

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1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
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TELEPHONE (575) 748-1471
www.yatespetroleum.com

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CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

EOG Resources Inc
P.O. Box 2267
Midland, TX 79702

Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,

Margrethe Hotter
Area Engineer

Enclosures

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Street, Ap or PO Box
City, State

EOG Resources Inc
P.O. Box 2267
Midland, TX 79702

PS Form

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1912-1985

FRANK W. YATES
1936-1986

S. P. YATES
1914-2008



105 SOUTH FOURTH STREET
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TELEPHONE (575) 748-1471
www.yatespetroleum.com

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CHAIRMAN EMERITUS

JOHN A. YATES JR.
CHAIRMAN OF THE BOARD
PRESIDENT

JOHN D. PERINI
EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

Myco Industries Inc
105 S. 4th St
Artesia, NM 88210

Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,

Margrethe Hotter
Area Engineer

Enclosures

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| Total Postage & Fees | \$ 6.97 |



Sent To
Street, Apt. or PO Box
City, State,
Myco Industries Inc
105 S. 4th St
Artesia, NM 88210

PS Form 3

ions

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S. P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471
www.yatespetroleum.com

JOHN A. YATES
CHAIRMAN EMERITUS

JOHN A. YATES JR.
CHAIRMAN OF THE BOARD
PRESIDENT

JOHN D. PERINI
EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

September 6th, 2013

LeaCo New Mexico Exploration and Production LLC.
2000 Post Oak Blvd, Suite 100
Houston, TX 77056

Re: Fruit St SWD #1

Dear Sirs:

Enclosed please find copies of form C-108 (Application for Authority to Inject) on said well located in Section 19 T21S, R34E of Lea County, New Mexico.

If you have any questions or need additional information, please call me at (575) 748-4165.

Sincerely,

Margrethe Hotter
Area Engineer

Enclosures

7010 3090 0002 5765 2571

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| Certified Fee | |
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| Total Postage | 6.51 |
| Sent To | LeaCo New Mexico Exploration and Production LLC. |
| Street, Apt. No. or PO Box No. | 2000 Post Oak Blvd, Suite 100 |
| City, State, ZIP | Houston, TX 77056 |
| PS Form 3800 | |

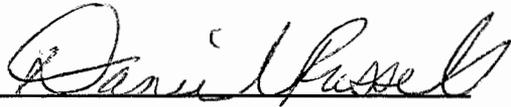
ARTESIA NM
Postmark Here
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USPS 88210

Affidavit of Publication

State of New Mexico,
County of Lea.

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

of 1 issue(s).
Beginning with the issue dated
August 31, 2013
and ending with the issue dated
August 31, 2013



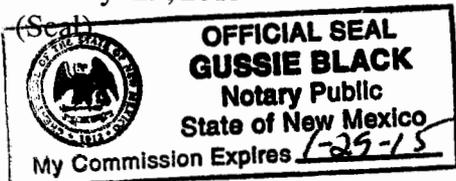
PUBLISHER

Sworn and subscribed to before me
this 3rd day of
September, 2013



Notary Public

My commission expires
January 29, 2015



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.

LEGAL NOTICE
AUGUST 31, 2013

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 Fruit St SWD #1, located 330' FNL & 330' FEL, Unit A, Section 19, Township 21 South, Range 34 East of Lea County, New Mexico, will be used for saltwater disposal. Produced waters from the Bone Springs and Delaware will be re-injected into the Delaware Sand at a depth of 5,745'-7,125' with a maximum pressure of 1,150 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 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.
#28403

01101029

00121606

ATTN: MARGRETHE F. HOTTER
YATES PETROLEUM CORPORATION
ATTN: H R DEPARTMENT
P.O. BOX 97
ARTESIA, NM 88210

Attachment F

Attachment G

C-108 Application for Authorization to Inject
Yates Petroleum Corporation
Fruit St SWD #1

Unit A, Section 19-T21S-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 Humphrey
Geologist
Yates Petroleum Corporation

9/5/2013
Date

MARTIN YATES, III
1912-1985
FRANK W. YATES
1936-1986
S.P. YATES
1914-2008



JOHN A. YATES
CHAIRMAN EMERITUS

JOHN A. YATES JR.
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EXECUTIVE VICE PRESIDENT
CHIEF FINANCIAL OFFICER

JAMES S. BROWN
CHIEF OPERATING OFFICER

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

www.yatespetroleum.com

September 6th, 2013

State of New Mexico
Oil Conservation Division
Attn: Philip Goetze
1220 S. Saint Francis Drive
Santa Fe, NM 87505

Re: Application for Authorization to Inject
Fruit St SWD #1
330' FNL&330FEL, sec 19 21S 34E
Lea County, New Mexico

Dear Mr. Philip Goetze

Yates Petroleum Corporation respectfully requests administrative approval for authorization to inject for the Fruit St SWD #1 well as referenced above.

Attached, for your review, is a copy of the C-108 application.

Please don't hesitate to contact me at (575) 748 4165 if you have any questions or need additional information.

Sincerely,

Margrethe Hotter
Area Engineer

Enclosures



C-108 Review Checklist: Received 09/16/13 Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 10]

PERMIT TYPE: WFX / PMX / SWD Number: 1449 Permit Date: 10/25/13 Legacy Permits/Orders: None

Well No. 1 Well Name(s): Fruit St SWD [Admin PPRG 1325960083]

API: 30-025-Pending Spud Date: TBD New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 330 FNL / 330 FEL Lot - Unit A Sec 19 Tsp 215 Rge 34E County Lea

General Location: Gamma Ridge area / 1/8 mi W of oil center Pool: Closest pool - Bone Spring Pool No.: _____
Gamma Pools

Operator: Yates Petroleum Corp OGRID: 25575 Contact: M. Hottel

COMPLIANCE RULE 5.9: Inactive Wells: 5 Total Wells: 2229 Fincl Assur: Yes Compl. Order? No IS 5.9 OK? Yes

Well File Reviewed Current Status: No API / no well record file - reviewed wells in area for logs & HC potential

Well Diagrams: NEW: Proposed RE-ENTER: Before Conv. After Conv. Are Elogs in Imaging?: _____

Planned Rehab Work to Well: NA - new well

| Well Construction Details: | Sizes (in) Borehole / Pipe | Setting Depths (ft) | Cement Sk or Cf | Cement Top and Determination Method |
|--|----------------------------|---------------------|-----------------|-------------------------------------|
| Planned ___ or Existing ___ Conductor | — | — | — | — |
| Planned ___ or Existing ___ Surface | 17 1/2 / 13 3/8 | 0 to 1830 | 1345 | Circulate to surf |
| Planned ___ or Existing ___ Interm/Prod | 12 1/4 / 9 5/8 | 0 to 5700 | No | Circulate to surf |
| Planned ___ or Existing ___ Prod/Interm | 8 3/4 / 7 | 0 to 7200 | No | Circulate to surf |
| Planned ___ or Existing ___ Liner/Prod | — | — | — | — |
| Planned <input checked="" type="checkbox"/> or Existing ___ OH / <u>PERF</u> | 8 3/4 / 7 | 5745 - 7125 | 1325 | Completion/Operation Details: |

| Injection Stratigraphic Units: | Depths (ft) | Injection or Confining Units | Tops? | Drilled TD | PBTD | NEW TD | NEW PBTD |
|---|-------------|------------------------------|-------|------------|------|--------|----------|
| Adjacent Unit: Litho. Struc. Por. | +70 | Capitan Reef | 4215 | NA | NA | 7200 | 7200 |
| Confining Unit: <u>Litho.</u> Struc. <u>Por</u> | +90 | Lamar sand | 5675 | | | | |
| Proposed Inj Interval TOP: | 5800 | Cherry Canyon Formation | 5745 | | | | |
| Proposed Inj Interval BOTTOM: | 7125 | | | | | | |
| Confining Unit: <u>Litho.</u> Struc. <u>Por</u> | +0 | Bowling Canyon | 7125 | | | | |
| Adjacent Unit: Litho. Struc. Por. | — | Bone Spring | — | | | | |

AOR: Hydrologic and Geologic Information

* POTASH: R-111-P Noticed? SLO BLM Sec Ord WIPP Noticed? NA SALADO: T: 1945 B: 3675 CLIFF HOUSE NA

FRESH WATER: Formation Alluvial Max Depth 340' Wells? 0 FW Analysis NA **HYDROLOGIC AFFIRM By Qualified Person**

Disposal Fluid: Formation Source(s) Bone Spring / Delaware Prod. Analysis? Yes On Lease Operator Only or Commercial

Disposal Interval: Injection Rate (Avg/Max BWPD): 5000/10000 Protectable Water: Salinity from log or sample **CAPITAN REEF:** thru adj NA Below Capitan

H/C Potential: Producing Interval? No Formerly Producing? No Method: E Log / Mudlog / DST / Depleted / Other _____

AOR Wells: 1/2-M Radius Map? Yes Well List? NA Total No. Wells Penetrating Interval: 0 Horizontals? 0

Penetrating Wells: No. Active Wells 0 Num Repairs? 0 on which well(s)? _____ Diagrams? NA

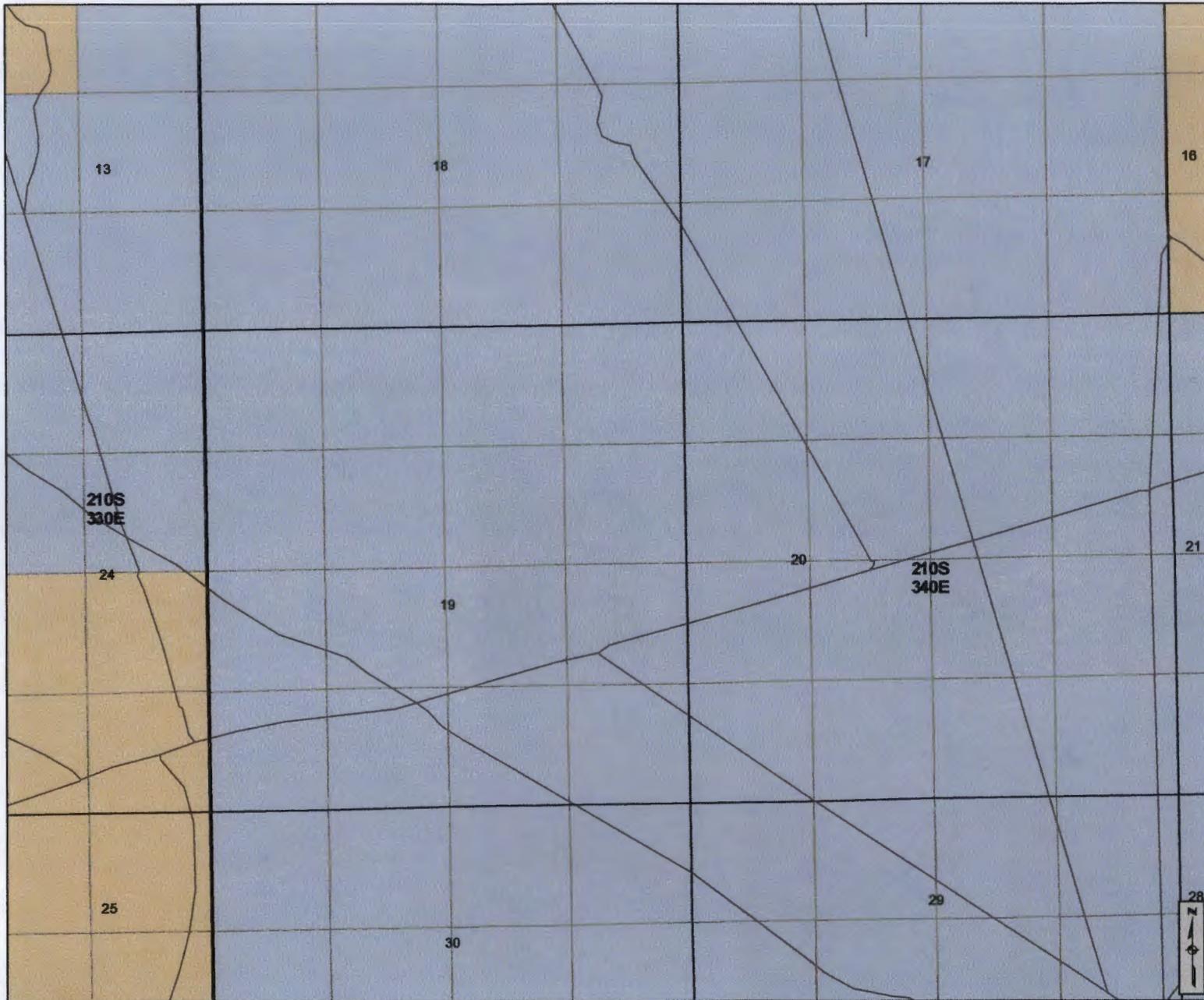
Penetrating Wells: No. P&A Wells 0 Num Repairs? 0 on which well(s)? _____ Diagrams? NA

NOTICE: Newspaper Date 08/31/2013 Mineral Owner SLO Surface Owner SLO N. Date Sept 6

RULE 26.7(A): Identified Tracts? Yes Affected Persons: Aho Pet. / Leaco NM E&P / Myco / GMT Expl. N. Date 01/06/13

Permit Conditions: Issues: No formation info on water / EOG / COG / Atlas Company / Elevation Res

Add Permit Cond: Added depth to top perf -> 5800 ft / Swab & water test



- Cartographic Features**
- County Boundaries
 - County Seats
 - City, Town or Village
 - ▲ SLO District Offices
 - SLO District Boundary
 - Hwy Mileposts
 - Interstate — US Hwy
 - NM Hwy — Local Road
 - Continental Divide
- Federal Minerals Ownership**
- All Minerals
 - Coal Only
 - Oil and Gas Only
 - Oil, Gas and Coal Only
 - Other Minerals
- State Trust Lands**
- Surface Estate
 - Subsurface Estate
 - Surface and Subsurface Estate
- State Leases**
- Oil and Gas Leases
 - Agricultural Leases
 - Commercial Leases
 - Minerals Leases
 - Not Available for Oil and Gas Leasing
 - Oil and Gas Leasing Influenced by Restriction
- Oil and Gas Related Features**
- Oil and Gas Unit Boundary
 - Participating Areas in Units
 - Geologic Regions
 - ★ Volcanic Vents
 - NMOCD Order R-111-P Potash Enclave Outline
- NMOCD Oil and Gas Wells**
- ★ CO₂
 - Injection
 - Oil
 - ◆ Water
 - ★ Gas
 - Miscellaneous
 - ▲ Salt Water Disposal
 - ◆ DA or PA

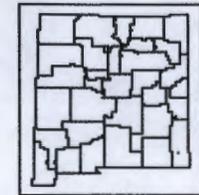
**New Mexico State Land Office
Oil, Gas and Minerals**

0 0.05 0.1 0.2 0.3 0.4
Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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