

HOLLAND & HART LLP



Michael H. Feldewert
Recognized Specialist in the Area of
Natural Resources – oil and gas law –
New Mexico Board of Legal
Specialization

mfeldewert@hollandhart.com

April 15, 2008

HAND-DELIVERED

Mark E. Fesmire, P.E.
Director
Oil Conservation Division
New Mexico Energy, Minerals and
Natural Resources Department
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Case 14122

RECEIVED
2008 APR 15 PM 3 21

**Re: Application of Pecos Operating Company for approval of a
non-commercial salt water disposal well, Lea County, New
Mexico.**

Dear Mr. Fesmire, P.E.:

Pursuant to Rule 701, enclosed is the Form C-108 comprising the application of Pecos Operating Company for approval of a salt water disposal well, as well as a copy of a legal advertisement. Pecos Operating submitted this application for administrative approval, but a protest was filed requiring that this matter to be set for a hearing. Pecos Operating therefore requests that this matter be placed on the docket for the May 15, 2008, Examiner hearings.

Sincerely,

Michael H. Feldewert

Enclosures

Holland & Hart LLP

Phone [505] 988-4421 Fax [505] 983-6043 www.hollandhart.com

110 North Guadalupe Suite 1 Santa Fe, NM 87501 Mailing Address P.O. Box 2208 Santa Fe, NM 87504-2208

Denver Aspen Boulder Colorado Springs Denver Tech Center Billings Boise Cheyenne Jackson Hole Las Vegas Salt Lake City Santa Fe Washington, D.C. ☪

3/25/08 DATE IN	SUSPENSE	W Jones ENGINEER	3/25/08 LOGGED IN	SWD TYPE	PKUR0808542019 APP NO.
--------------------	----------	---------------------	----------------------	-------------	---------------------------

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.

Steve Gray
Print or Type Name

Signature


Title

Date

steve.g@pecoscompanies.com
e-mail Address

PECOS OPERATING
Side GA 11#7
Protected 4/12/08
Cancelled 4/12/08
2008 MAR 25 AM 7 25
RECEIVED

Case 14122

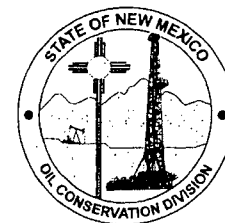


New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



April 10, 2008

Steve Gray
Pecos Operating Company
400 W. Illinois Avenue
Suite 1210
Midland, TX 79701

RE Application for SWD: State GA #1 API No. 30-025-03688

Unit B, Section 16, Township 15 South, Range 36 East, NMPM
Lea County, New Mexico

Dear Sir:

The Division has received a protest to your application from Mr. Donald M. Harrod with H&M Disposal and can no longer consider this administratively.

If negotiations with Mr. Harrod are successful, ask Mr. Harrod to send a letter to the Division withdrawing his protest, and then send a formal request to the engineering bureau of the Division to re-open this application and consider it administratively.

You have the option of pursuing this through the Division's hearing process. If you want to follow this route, then have your attorney send a request to Ms. Florene Davidson of this office along with a detailed application and summary to be placed in a docket, and notify the protesting party of the pending hearing.

MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc: State Land Office – Oil Gas and Minerals Division
Oil Conservation Division – Hobbs

Donald M. Harrod (575-396-5777)
H&M Disposal (PO Box 1544)
Lovington, NM 88260



H & M Disposal
P.O. Box 1544
Lovington, New Mexico 88260
April 9, 2008

Mr. William V. Jones
Oil Conservation Division
Engineering and Geological Services Bureau
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Info copy to: Pecos Operating Company, 400 W. Illinois Ave. Midland, TX 79701

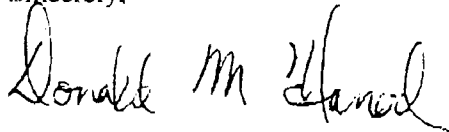
Dear Mr. Jones:

H & M Disposal recently received a copy of Pecos Operating Company's application to convert the former Shell Oil Company State "GA" No. 7 Sec. 16-T15S-R36E into a salt water disposal well.

We object to the granting of this permit for the following reasons:

1. The proposed disposal well is only 1320' away from our ongoing commercial installation that has been a gravity system for years.
2. The proposed well is unlikely to take the proposed volume of 4000 to 8000 bwpd without pumping at pressures that are likely to adversely affect our operation.
3. Pecos operating has declined to voluntarily limit the water to be disposed of to their on-lease production thus placing a competing commercial operation on our door step.

Sincerely,



Donald M. Harrod
Operator



RECEIVED

2008 MAR 25 AM 7 24

400 W. Illinois, Suite 1210, Midland, Texas 79701 (432) 620-8480 Office (432) 682-2197 Fax

March 18, 2008

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Case 14122

Dear Sirs:

Pecos Operating Company hereby makes application for administrative approval for a saltwater disposal well in Lea County, NM, as shown on the enclosed form C-108 and associated documents. Pecos is proposing to re-enter the former producer, the State GA #7 well that was drilled by Shell Oil Company in 1956 and plugged in 1965. The GA #7 produced from the Caudill Devonian field and is situated on a downdip eastern flank of the field. The proposed name of the new re-entry well will be the Caudill SWD No.1.

Pecos currently has one Devonian producer on the lease that is producing at a high water cut and is planning the re-activation of several more wells that are situated higher on the structure than the proposed disposal well. The Devonian reservoir in Caudill field was a strong water drive, however many of the producers that were plugged as uneconomic in the 1960's would be considered profitable in today's economic environment, provided that there is adequate and affordable water disposal capacity on the lease. For this reason we are permitting this well for non-commercial use.

There is already one commercial saltwater disposal well in the Devonian in this field. Based on the performance of that well, and the known high permeability in the Devonian, this proposed disposal well should take significant volumes of water at relatively low injection pressures. The Devonian is normally pressured based on static fluid levels observed on our producer (fluid level at approx 3000 ft)

Copies of this application have been sent to the landowner, Wanda Alexander, who owns the entirety of section 16, as well as offset operators. Proof of mailing and notice are included with this package. Please let us know if any additional information is needed to process this application.

Yours truly,

Steven Gray
Steven Gray
Manager

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance XXX Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No
- II. OPERATOR: Pecos Operating Company *Case 14122*
ADDRESS: 400 W. Illinois Ave., Suite 1210, Midland, TX 79701
CONTACT PARTY: Steven Gray PHONE: 432-620-8480
- 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 XXX 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: Steven Gray TITLE: Manager
SIGNATURE: *Steven Gray* DATE: 3/12/08
E-MAIL ADDRESS: steveg@pecoscompanies.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: _____

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.

Current Wellbore Condition

Shell Oil Company

State "GA" #7

660' FNL + 2310' FEL

Sec. 16, T15S, R36E

Lea County, NM.

Drilled: 1956

Plat'd: 1965

API: 30-025-03688

SURFACE CASING: 13 $\frac{3}{8}$ "
DEPTH: 336'
CEMENT: 400 sx.
circulated

INTERM. CASING: 8 $\frac{5}{8}$ "
DEPTH: 4,734'
CEMENT: 1,650 sx.
circulated

5 $\frac{1}{2}$ " casing cut
& pulled @ 9,010'

Toc 12,040

PROD CASING: 5 $\frac{1}{2}$ "
DEPTH: 13,615'
CEMENT: 250 sx

10 sk plug @ surface

25 sk. cement plug @ 4740'

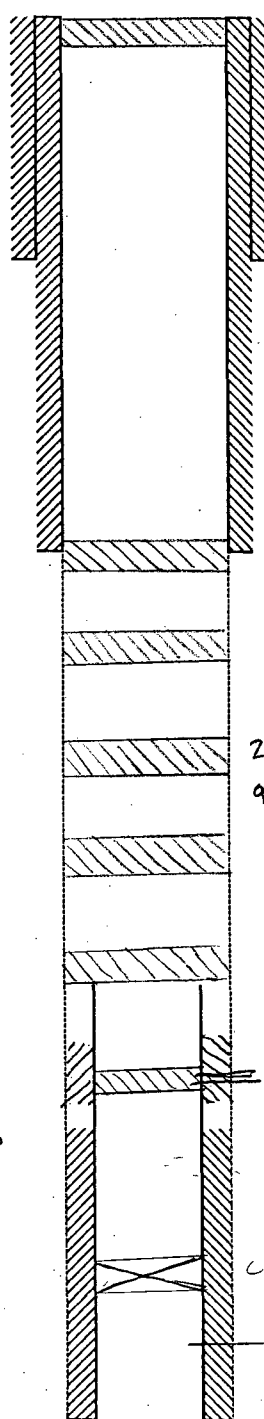
25 sk. cement plugs @
9010', 8118', 7409', 6206', 4740'

OLD PERFS. 10,150 - 10,600 overall (squeezed)
Plugged on top w/ 125 sx cement

CIBP - 10,680' w/ cement on top

Perfs. 13,495 - 13,570

TD: 13,615



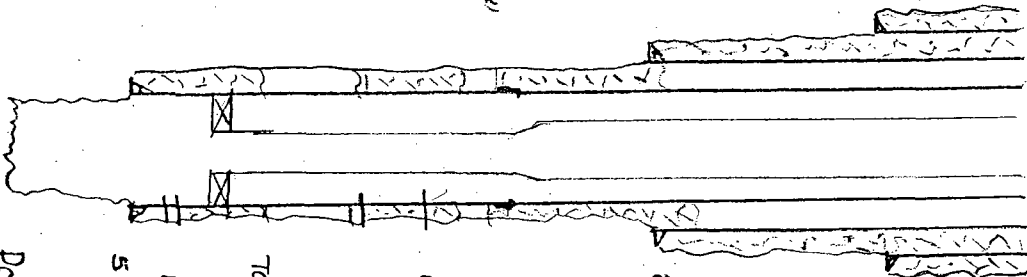
INJECTION WELL DATA SHEET

OPERATOR: Pecos Operating CompanyWELL NAME & NUMBER: Caudill SWD No. 1 (Formerly Shell Oil Company State 'GA' No. 7) 36-625-03645WELL LOCATION: 660' FNL & 2310' FEL

FOOTAGE LOCATION

UNIT LETTER B SECTION 16 TOWNSHIP 15N RANGE 36EWELLBORE SCHEMATIC - ProposedWELL CONSTRUCTION DATA
Surface CasingHole Size: 17 1/2" Casing Size: 13 3/8"Cemented with: 350 sx. or ft³Top of Cement: circulated Method Determined: Intermediate CasingHole Size: 11" Casing Size: 8 5/8"Cemented with: sx. or ft³Top of Cement: circulated Method Determined: Production CasingHole Size: 7 7/8" Casing Size: 5 1/2"Cemented with: 250 sx. or ft³Top of Cement: 12,040' Method Determined: temp surveyTotal Depth: old: 13,630' proposed: 13,800Injection Interval13,495 feet To 13,800

(old perfs 13495-13570 and new openhole 13630-13800)

3 1/2" & 2 3/8"
TUBING
@ 13,400'13 3/8" @ 336'8 5/8" @ 4,734'5 1/2" casing tied back to others
@ 9015' and cemented to tie back
in 8 5/8"OLD PERFS
10,150 - 10,600 overall (squeezed)TOC 12,040Perfs 13,495 - 13,5705 1/2" @ 13,629Proposed TD: 13,900'

INJECTION WELL DATA SHEET

Tubing Size: 3 1/2" and 2 7/8" Lining Material: plastic coated

Type of Packer: 5 1/2" Lockset -internally plastic coated

Packer Setting Depth: 13,400'

Other Type of Tubing/Casing Seal (if applicable):

Additional Data

1. Is this a new well drilled for injection? Yes XXX No
If no, for what purpose was the well originally drilled? Devonian Producer

2. Name of the Injection Formation: Devonian

3. Name of Field or Pool (if applicable): Caudill Devonian

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Caudill Permo-Penn
10,190-10,531 - will be squeeze cemented during re-entry

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - Mississippian @ 12,650' Below - none

Pecos Operating Company
Caudill SWD No. 1
660' FNL & 2310' FEL
Section 16 – T15S – R36E

Form C-108 (cont'd)

V - See map attached, Exhibit 1

VI – See attached list of wells and wellbore sketches, Exhibit 2A and 2B

VII –

1. Proposed avg daily injection – 4000 bwpd Maximum – 8000 bwpd
2. The system will be closed
3. Avg injection pressure 100 psi. Maximum pressure – 1500 psi.
4. Water will be Devonian water – reinjected into Devonian formation

VIII - The injection zone is the Devonian. The Devonian is a 300 foot section of limestone and dolomite. This reservoir has excellent permeability and should be capable of taking significant volume of water at low pressure. Surface water in the area is located at a depth less than 200 ft from surface.

IX – We propose to deepen the old well by about 200 feet and inject in to the old perforations and openhole completion. Stimulation will include acid wash only.

X – Logs were previously filed under the original operator and well name: The Shell Oil Company – State “GA” No. 7 well

XI – Fresh water analysis from two area water wells was obtained in 2002 and submitted along with a previous permit to inject that was never completed. These two samples are attached as Exhibit 3.

XII – Affirmative statement attached and labeled as Exhibit 4.

XIII – Proof of notice is attached as Exhibit 5

Exhibit 1

Pecos Operating Company Caudill SWD No. 1 (Formerly Shell Oil Company State 'GA' No. 1) 660 FNL, 2310 FEL Sec 16, T15S, R36E Caudill Field Lea County, New Mexico

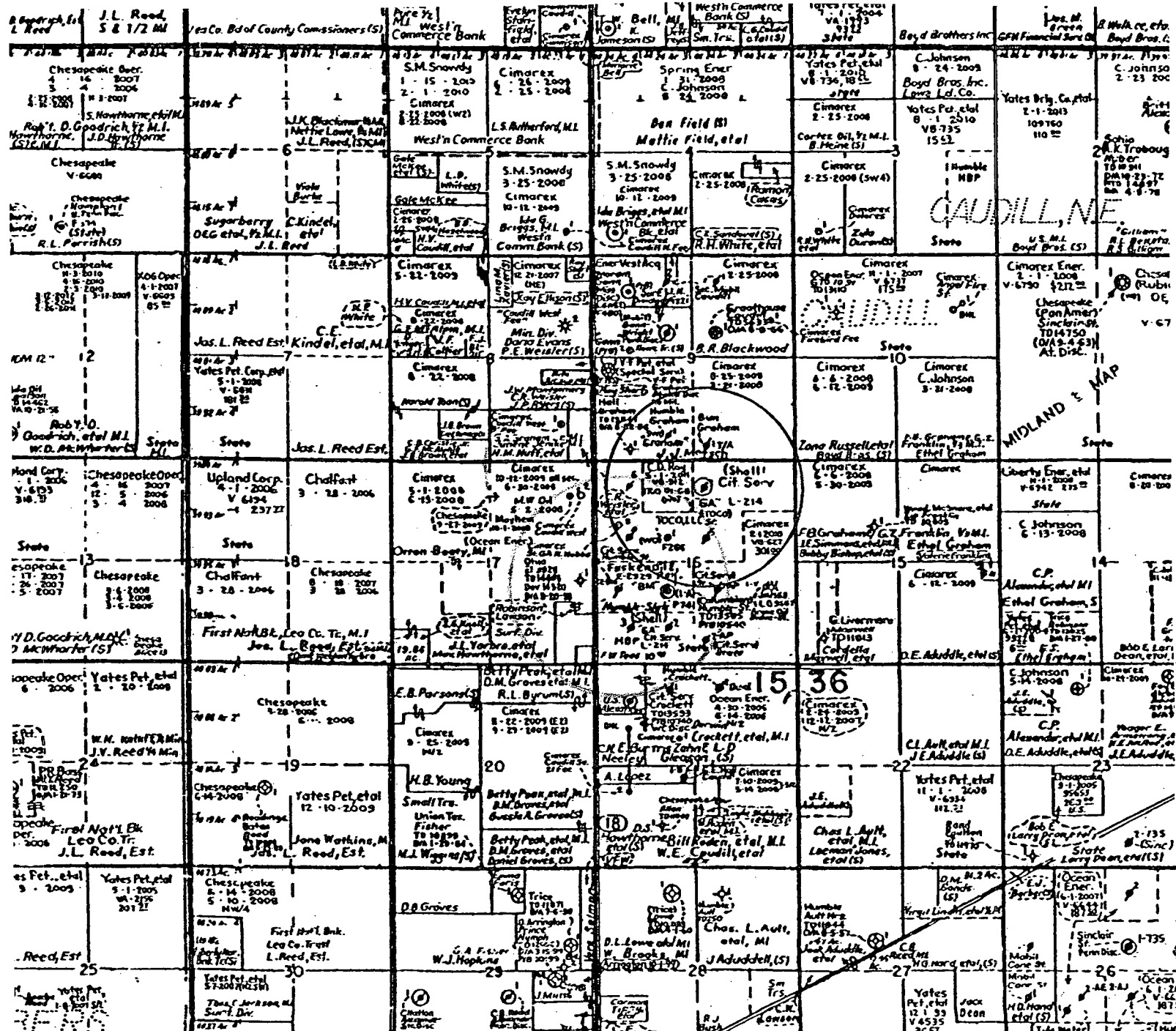


Exhibit 2A

WELLS WITHIN ½ MILE RADIUS OF STATE GA #7-SWD

1. J. D. Graham

Unit O Sec 9, T15S-R36E API No. 30-025-03676
Drilled: 1956 Plugged: 1975
Surface Casing: 13 3/8" @ 374' w/400 sx circulated
Intermediate Casing: 8 5/8" @ 4749' w/ 2300 sx TOC: 500'
Production Casing: 5 1/2" @ 13,630' w/ 450 sx TOC: 12,000'
See attached wellbore diagram for plugging details

2. Maymie Graham #1

Unit N Sec 9, T15S-R36E API No. 30-025-03673
Status: Active SWD well - Devonian
Surface Casing: 11 3/4" @ 309' w/ 300 sx circulated
Intermediate Casing: 8 5/8" @ 4900' w/2100 sx est TOC 880'
Production Casing: 5 1/2" @ 13,600' w/ 1320 sx TOC unknown
TD: 13600'

3. Graham #1

Unit M Sec 9, T15S-R36E API No. 30-025-03672
Status: D&A in 1956
Surface Casing: 13 3/8" @ 320' w/ 300 sx circulated
Intermediate Casing: 8 5/8" @ 4750' w/500 sx
Production Casing: none
See attached wellbore diagram for plugging details

4. State GA #6

Unit D Sec 16, T15S-R36E API No. 30-025-03687
Status: Drilled : 1955 P & A'd in 1967.
Surface Casing: 13 3/8" @ 352' w/400 sx circulated
Intermediate Casing: 8 5/8" @ 4749' w/1700 sx circulated
Production Casing: 5 1/2" @ 13,682' w/200 sx TOC--12,300
TD 13,682'
See attached wellbore diagram for plugging details

5. State GA #4

Unit E Sec 16, T15S-R36E API No. 30-025-03685
Status: P & A'd in 1967. Drilled in 1955.
Surface Casing: 13 3/8" @ 336' w/400 sx circulated
Intermediate Casing: 8 5/8" @ 4739' w/1700 sx circulated
Production Casing: 5 1/2" @ 13,700' w/300 sx TOC—11,872'
TD 13,700'
See attached schematic for plugging details.

6. State GA #1

Unit F Sec 16, T15S-R36E

API No. 30-025-03682

Status: Producing Devonian Well. Drilled in 1955. P&A'd in 1967. Re-entered 1976.

Surface Casing: 13 3/8" @ 353' w/400 sx circulated

Intermediate Casing: 8 5/8" @ 4738' w/1750 sx circulated

Production Casing: 5 1/2" @ 14,078' w/1250 sx TOC—6725'

Producing Devonian Perfs: 13,366' to 13,438'

7. State GA #5

Unit G Sec 16, T15S-R36E

API No. 30-025-03686

Status: Drilled in 1955. P&A'd in 1964

Surface Casing: 13 3/8" @ 338' w/ 400 sx circulated

Intermediate Casing: 8 5/8" @ 4747' w/ 2700 sx circulated

Production Casing: 5 1/2" @ 13,656' w/ 200 sx est. TOC—12,300'

TD 13,656'

See attached schematic for plugging details.

8. State AP #1

Unit J Sec 16, T15S-R36E

API No. 30-025-03678

Status: P & A'd in 1974. Drilled in 1955.

Surface Casing: 13 3/8" @ 315' w/ 300 sx circulated

Intermediate Casing: 8 5/8" @ 4659' w/ 3250 sx circulated

Production Casing: 5 1/2" @ 13,536' w/ 425 sx est. TOC 10,690'

TD 13,657'

See attached schematic for plugging details.

9. State GB #1

Unit C Sec 16, T15S-R36E

API No. 30-025-03689

Status: Inactive producer Drilled: 1955. P & A'd:1973. Re-entered : 2000

Surface Casing: 13 3/8" @354' w/ 350 sx circulated

Intermediate Casing: 8 5/8" @ 4748' w/ 2200 sx circulated

Production Casing: 5 1/2" @ 13,674' w/ 200 sx est. TOC 12,250

TD 13,674'

Exhibit 2B

**Wellbore Sketches of plugged wells within one half mile
of proposed re-entry**

Sunray Midcontinent Oil Co

J. D. Graham #1

330 FSL & 2310 FEL

SEC 9- T155- R36E

Lea County, NM

API No.: 30-025-03676

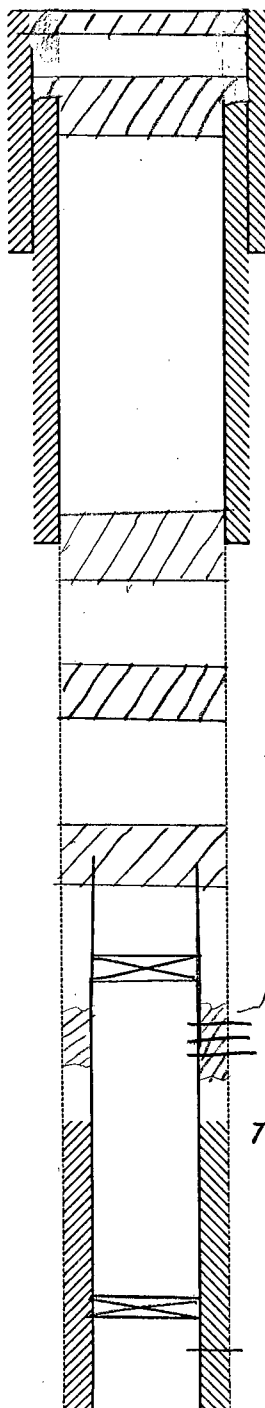
SURFACE CASING: 13 3/8
DEPTH: 374'
CEMENT: 400 SK

INTERM. CASING: 8 5/8"
DEPTH: 4749'
CEMENT: 2300 SK
TOC: 500'

Cut off & pulled 500'

5 1/2" cut & pulled @
8603'

PROD CASING: 5 1/2"
DEPTH: 13,630
CEMENT: 450 SK
Est TOC = 12,000'



20 SK cement plug - surface

125 SK cement plug 300'-543'

60 SK cement plug 4749-4543

50 SK Cement Plug 5946-6124

40 SK cement plug 8468-8603'

CIBP @ 10,150'

squeeze perfs 10190-11265 Overall

Perfs 10,204-11,252 overall

TOC 12,000

Plug @ 13,532'

Perf 13542-13605

TD: 13631

Columbia Carbon Company

Graham #1

330' FSL & 990 FWL

Sec 9 - T15S - R36E

Lea County, NM

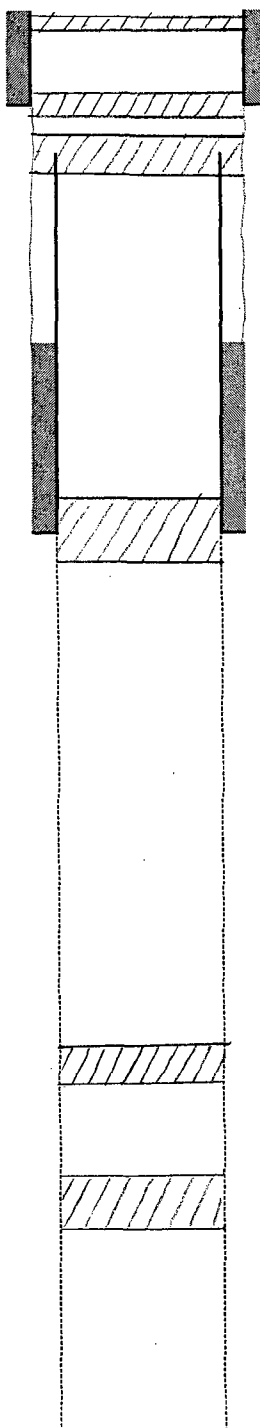
Drilled & abandoned in 1956 API No: 30-025-03672

SURFACE CASING:	13 $\frac{3}{8}$
DEPTH:	312'
CEMENT:	400 sk
circulated	

INTERM. CASING:	8 $\frac{5}{8}$
DEPTH:	4750'
CEMENT:	300 sk
TOC - ?	

Pulled 900 ft

PROD CASING:	None
DEPTH:	
CEMENT:	



10 sk cement plug - surface

25 sk cement plug 285 - 320

30 sk cement plug 860 - 940

100 sk cement plug 4700 - 5020

25 sk cement Plug 9605 - 9655

25 sk cement Plug 10,355 - 10,405

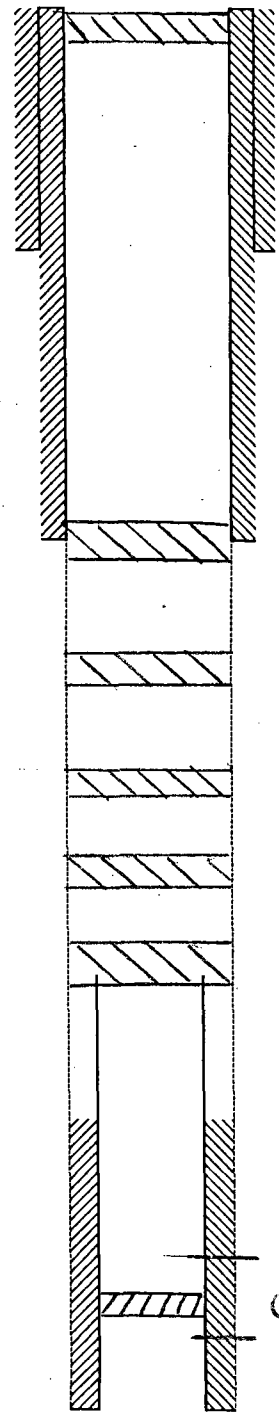
TD: 13,547

Shell Oil Company
 STATE "GA" #6
 660' FNL & 990' FWL
 Sec 16, T15S - R36E
 Lea County, NM

Drilled: 1955 P4A'd: 1967 API No. 30-025-03687

SURFACE CASING:	13 7/8
DEPTH:	352'
CEMENT:	400 SK
Circulated	

INTERM. CASING:	8 5/8"
DEPTH:	4749'
CEMENT:	1700 SK
Circulated	



10 sk plug @ surface

25 sack cement plugs @
 9006', 8100', 7408', 6146', 4748'

5 1/2" casing cut
 & Pulled @ 9006'

EST TDC 12,159'

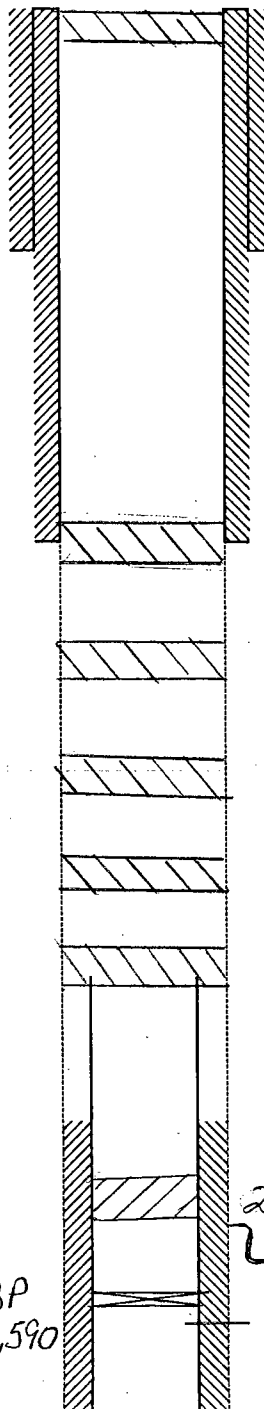
PROD CASING:	5 1/2
DEPTH:	13682
CEMENT:	200 SK

Perfs 13370 - 13510
 CIBP - 13538 w/ CMT ON TOP
 Perfs 13548 - 13606
 TD: 13,682'

SHELL Oil COMPANY
 STATE 'GA' #4
 1980' FNL & 990' FWL
 SEC 16 - T15S - R36E
 Lea County, NM
 Drilled: 1955 Plugged: 1967 API No: 30-025-03685

SURFACE CASING:	13 3/8
DEPTH:	336'
CEMENT:	400 SX
	Circulated

INTERM. CASING:	8 5/8
DEPTH:	4739'
CEMENT:	1700 SX
	Circulated



10 SK cement plug @ surface

25 sack cement plugs @
 9025', 8098', 7408', 6616', 4740'

5 1/2" casing cut
 & pulled @ 9025'

EST TOC 11,415'

PROD CASING:	5 1/2
DEPTH:	13,700'
CEMENT:	300 SX

CIBP
 @ 13,590

25 SX CMT PLUG 13454-13564

Perfs 13454-13564

Perfs 13614-13624

TD:

Shell Oil Company
STATE 'GA' #5
1980 FNL & 2310 FEL
Sec 16 - T15S - R36E
Lea County, NM
 Drilled: 1955 PAD: 1964 API No.: 30-025-03686

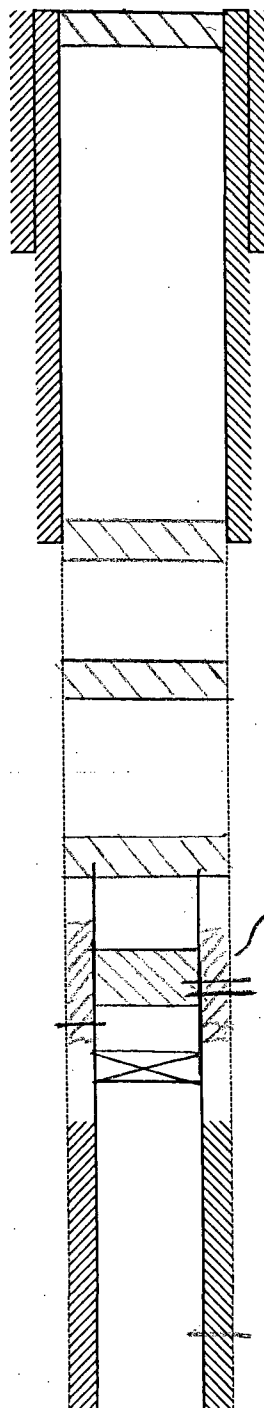
SURFACE CASING:	13 $\frac{7}{8}$ "
DEPTH:	338'
CEMENT:	400 SX
Circulated	

INTERM. CASING:	8 $\frac{5}{8}$ "
DEPTH:	4747'
CEMENT:	2700 SX
Circulated	

5 $\frac{1}{2}$ " casing cut
 & pulled @ 8224'

Perf 10650 + SQZ
 w/ 255 SX

PROD CASING:	5 $\frac{1}{2}$ "
DEPTH:	13,656'
CEMENT:	200 SX



15 sack cement plug @ Surface

25 sack cement plug @ 4800'

25 sack cement plug @ 6200'

50 sack cement plug @ 8224'

100 sack cement plug 10,560-10,189

Perfs 10,189 - 548 - SQUEEZED w/ 150 SX

ELBP @ 10,690 w/ CMT on TOP
 EST TOC - 12,134'

Perfs 13496 - 13560'

TD: 13,656'

Cities Service Oil Company

STATE 'AP' #1

1980 FSL & 1980 FEL

SEC 16- T15S- R36E

Lea County, NM

Drilled: 1955

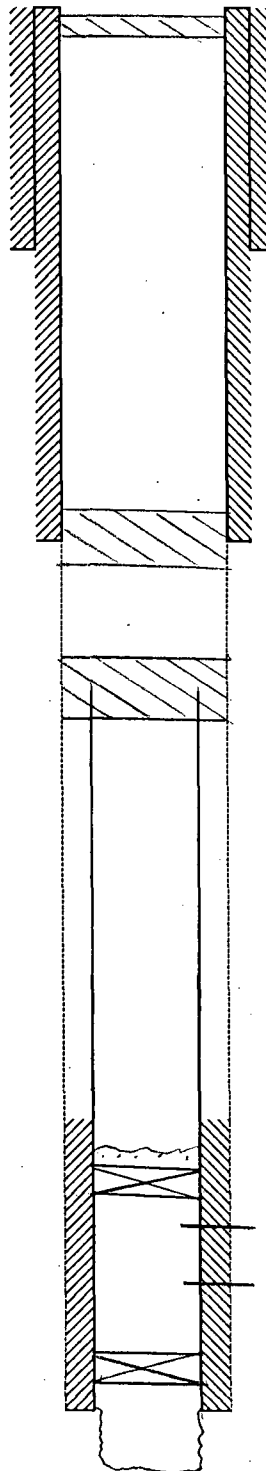
P&A'd: 1974 APINo: 30-025-03678

SURFACE CASING:	13 $\frac{3}{8}$
DEPTH:	315'
CEMENT:	300 SK
circulated	

INTERM. CASING:	8 $\frac{5}{8}$
DEPTH:	4659'
CEMENT:	3250 SK
circulated	

5 $\frac{1}{2}$ " casing cut &
pulled at 5430'

PROD CASING:	5 $\frac{1}{2}$
DEPTH:	13,550
CEMENT:	425 SK



10 sack cement plug @ surface

30 sk cement plug 4600 - 4700

30 sk cement plug 5478' - 5378'

EST TOC @ 10,690'

CIBP @ 10,260 w/ 5 sk cement cap

Perfs 10,290 - 10,310

Perfs 10,504 - 10,582

CIBP @ 13,500

TD: 13,657

Devonian openhole 13,550 - 13,657

Oilfield Solutions, Inc.
2814 S. G. R. 1257, Midland, TX 79705

WATER ANALYSIS REPORT

Company: C.W. TRAINOR
Location: FRESH WATER SAMPLE #1
Source: 0
Date Sampled: 0

Sampled By: L-CHEM
Analysis Date: 8/21/2005
Salesperson:

FD

ANALYSIS

ANALYSIS		mg/L	EQ. WT.	MEQ/L
1.	pH	7.50		
2.	Specific Gravity @60/60 F.	1.003		
3.	Hydrogen Sulfide			
4.	Carbon Dioxide			
5.	Dissolved Oxygen			
6.	Hydroxy (OH-)	0 /	17.0 =	0.00
7.	Carbonate (CO3=)	0 /	30.0 =	0.00
8.	Bicarbonate (HCO3-)	195 /	61.1 =	2.19
9.	Chloride (Cl-)	1,000 /	35.5 =	28.17
10.	Sulfate (SO4=)	1,980 /	48.0 =	31.87
11.	Calcium (Ca++)	0 /	20.1 =	0.00
12.	Magnesium (Mg++)	0 /	12.2 =	0.00
13.	Sodium (Na+)	1,467 /	23.0 =	63.33
14.	Barium (Ba++)			
15.	Total Iron (Fe)	0.00		
16.	Dissolved Solids	4,212		
17.	Filtrable Solids	4,212		
18.	Total Solids	0		
19.	Total Total Hardness As CaCO3			
20.	Suspended Solids			
21.	Volume Filtered (ml)	2.164 (cm)		
22.	Resistivity @ 75 F. (calculated)			
23.	CaCO3 Saturation Index			
24.	Calcium Sulfate solubility @ 90 F.	1,560 mg/L		

PROBABLE MINERAL COMPOSITION		mg/L
COMPOUND	EQ. WT.	X MEQ/L
Ca(HCO3)2	61.04	0.00
CaSO4	68.07	0.00
CaCl2	55.50	0.00
Mg(HCO3)2	73.17	0.00
MgSO4	60.10	0.00
MgCl2	47.62	0.00
MgHCO3	84.00	3.19
Na2SO4	71.03	31.97
NaCl	58.46	24.17

Character:

EXHIBIT 3B

Oilfield Solutions, Inc.
2614 S.C.R. 1267, Midland, TX. 79706

WATER ANALYSIS REPORT

GA

Company: C.W. TRANOR
Location: FRESH WATER SAMPLE #2
Source: #
Date Sampled: 0

Sampled By: L. CHEN
Analysis Date: 02/18/02
Collection:

ANALYSIS

	mg/L	EQ. WT.	MEQ/L
1. pH	7.50		
2. Specific Gravity @60°F	1.003		
3. Hydrogen Sulfide			
4. Carbon Dioxide			
5. Dissolved Oxygen			
6. Hydrazyl (OH-)			
7. Carbonate (CO ₃ =)	0 / 17.0 =		0.00
8. Bicarbonate (HCO ₃ -)	0 / 30.0 =		0.00
9. Chloride (Cl-)	186 / 61.1 =		3.18
10. Sulfate (SO ₄ =)	1,000 / 36.6 =		28.17
11. Calcium (Ca++)	800 / 48.8 =		12.30
12. Magnesium (Mg++)	0 / 20.1 =		0.00
13. Sodium (Na+)	0 / 12.2 =		0.00
14. Barium (Ba++)	1,004 / 23.0 =		43.55
15. Total Ion (Tm)	Not Determined		
16. Dissolved Solids	2,769		
17. Filtrable Solids	2,769		
18. Total Total Hardness As CaCO ₃	0		
19. Suspended Sol			
20. Volume Filtered (ml)			
21. Resistivity @ 75 F. (calculated)	1,182 cm.		
22. CACO ₃ Saturation Index			
23. @80 F.			
@100 F.			
@120 F.			
@140 F.			
@160 F.			
24. Calcium Sulfate			
solubility @ 80 F.	1,261 mg/L		

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
Ca(HCO ₃) ₂	61.04	0	0.00	0
CaSO ₄	68.07	0	0.00	0
CaCl ₂	66.60	0	0.00	0
Mg(HCO ₃) ₂	73.17	0	0.00	0
MgSO ₄	60.18	0	0.00	0
MgCl ₂	47.62	0	0.00	0
NaHCO ₃	64.00	3.18	12.30	268
NaSO ₄	71.03	28.17	12.30	874
NaCl	68.46	28.17	12.30	1,647

Chemist: _____

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

TO: Mr. C.W. Trainer
P.O. Box 754, Midland TX 79702

LABORATORY NO. 506-230
SAMPLE RECEIVED 5-24-06
RESULTS REPORTED 5-25-06

COMPANY Individual

LEASE

State "GA" #1

FIELD OR POOL

Caudill

SECTION _____ BLOCK _____ SURVEY

COUNTY Lea

STATE

NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Submitted water sample.

NO. 2

NO. 3

NO. 4

REMARKS:

Devonian

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 80° F.	1.0342			
pH When Sampled				
pH When Received	7.50			
Bicarbonate as HCO ₃	512			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	6,900			
Calcium as Ca	2,160			
Magnesium as Mg	365			
Sodium and/or Potassium	16,067			
Sulfate as SO ₄	1,311			
Chloride as Cl	28,400			
Iron as Fe	0.3			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	48,815			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	5.0			
Resistivity, ohm·m at 77° F.	0.166			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

records in the vicinity of this well.

This water shows characteristics that correlate well with our Devonian

Form No. 3

Bv

Greg Ogden, B.S.

Exhibit 4

Per instructions on form C-108, item XII – Pecos Operating Company have examined the 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.


Steven Gray, manager

7004 0750 0000 6928 1627
7004 0750 0000 6928 1610
7004 0750 0000 6928 1641
7004 0750 0000 6928 1665
7004 0750 0000 6928 1634

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
MIDLAND TX 79701
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *Jasken Oil & Ranch*
Street, Apt. No. or PO Box No. *303 W. Wall St.*
City, State, ZIP+4 *Midland, TX 79701*

PS Form 3800, June 2002 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
LONDON TX 78240
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *Mrs. Wanda Alexander*
Street, Apt. No. or PO Box No. *14 Remon Rd.*
City, State, ZIP+4 *Lawton NM 88340*

PS Form 3800, June 2002 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
MIDLAND TX 79702
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *V.F. Petroleum*
Street, Apt. No. or PO Box No. *P.O. Box 1889*
City, State, ZIP+4 *Midland TX 79702*

PS Form 3800, June 2002 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
MIDLAND TX 79705
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *Overkernian*
Street, Apt. No. or PO Box No. *6 N. 2nd Dr. Suite 6000*
City, State, ZIP+4 *Midland, TX 79705*

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
MIDLAND TX 79701
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *BC Operating*
Street, Apt. No. or PO Box No. *P.O. Box 50820*
City, State, ZIP+4 *Midland, TX 79710*

PS Form 3800, June 2002 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
LONDON TX 78240
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *Cinarel Energy*
Street, Apt. No. or PO Box No. *508 W. Wall, Suite 600*
City, State, ZIP+4 *Midland, TX 79701*

PS Form 3800, June 2002 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
LONDON TX 78240
OFFICIAL USE

Postage	\$	\$1.31
Certified Fee		\$2.65
Return Receipt Fee (Endorsement Required)		\$0.00
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$3.96

0702
Postmark Here
MAR 12 2008
03/12/2008

Sent To *H + m Disposal*
Street, Apt. No. or PO Box No. *P.O. Box 1544*
City, State, ZIP+4 *Lawton NM 88260*

PS Form 3800, June 2002 See Reverse for Instructions

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

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 15 2008

and ending with the issue dated

March 15 2008

Kathi Bearden

PUBLISHER

Sworn and subscribed to before

me this 17th day of

March

2008

Notary Public.

My Commission expires
February 07, 2009
(Seal)



OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires _____

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

Legal Notice
March 15, 2008

Pecos Operating Company, 400 W. Illinois Ave, Suite 1210,
Midland, TX 79701, has filed form C-108 (Application for
Authorization to Inject) with the New Mexico Oil Conserva-
tion Division, seeking administrative approval for a salt wa-
ter disposal well. The proposed well, the Caudillo SWD No.
1, which is located 880' FNL & 2310' FEL of Section 18,
T15S, R36E, Lea County, New Mexico, will be used for
saltwater disposal only. Produced waters will be injected in
to the Devonian formation at a depth of 13,495 to 13,800
feet with a proposed maximum pressure of 1500 psi and
maximum rate of 8000 barrels of water per day. Interested
parties must file any objections or requests for hearing with
the Oil Conservation Division, 1220 South St. Francis Drive,
Santa Fe, NM, 87505, within 15 days of this notice. Addi-
tional information may be obtained by contacting Steve
Gray at 432-620-8480.
#23812

02108548000

02598930

PECOS OPERATING COMPANY, LLC
400 W. ILLINOIS AVE, SUITE 1210
MIDLAND, TX 79701

CASE ____: **Application of Pecos Operating Company for approval of a non-commercial salt water disposal well, Lea County, New Mexico.** Applicant seeks approval to deepen and utilize the State GA Well No. 7 (API No. 30-025-03688) located 660 feet from the North line and 2310 feet from the East line in Unit B of Section 16, Township 15 South, Range 36 East, NMPM, to dispose of up to 8,000 barrels of produced water per day, at a maximum pressure of 1,500 psi, into the Caudill Devonian Pool in the Devonian Formation, at an approximate depth of 13495 feet to 13,900 feet. Applicant may be contacted through its representative, Steve Gray, 400 W. Illinois Ave., Suite 1210, Midland, TX 79701, Phone 432-620-8480. Said well is located approximately 3 miles north of Lovington and one-half mile off of Highway 206 (Tatum Hwy).