Form 3160-5
(November 1994)

RECEIVED
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No
NM-016663

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
HE Roelofs Federal NCT-1 No. 1

2. Name of Operator
Cimarex Energy Co. of Colorado

9. API Well No.
30-041-20314

3a Address
5215 N. O'Connor Blvd., Ste. 1500; Irving, TX 75039

3b. Phone No. *(include area code)*
972-401-3111

10. Field and Pool, or Exploratory Area
Todd; Wolfcamp

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
21-7S-35E
1980 FSL & 1980 FEL

11. County or Parish, State
Roosevelt County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Cimarex Energy Co. of Colorado respectfully requests approval for disposal of produced water from the well above per the attached Water Production and Disposal information.

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
Natalie Krueger	Regulatory Analyst
Signature: Natalie Krueger	Date: May 13, 2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /S/ DAVID R. GLASS	Title PETROLEUM ENGINEER	Date MAY 14 2009
Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office SEE ATTACHED FOR CONDITIONS OF APPROVAL	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Attachment to Incident of Non Compliance Number 09LJ003WPA

WATER PRODUCTION & DISPOSAL INFORMATION

In order to process your disposal request, the following information must be completed:

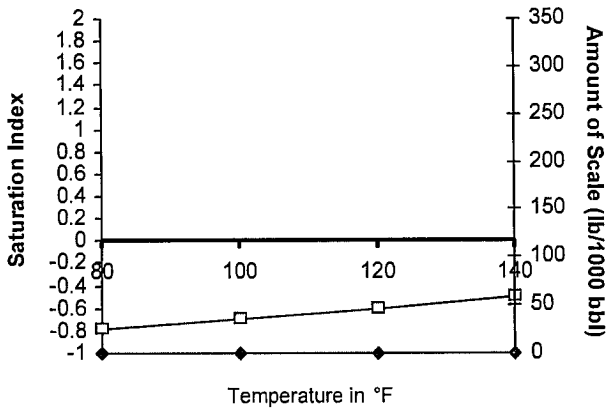
1. Name(s) of all formation(s) producing water on this lease.
   Todd; Wolfcamp
2. Amount of water produced from all formations in barrels per day.
   15.4 bpd
3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, pH, and the concentrations of chlorides and sulfates.
4. How water is stored on the lease.
   1 210 bbl fiberglass tank
5. How water is moved to the disposal facility.
   Trucked
6. Identify the disposal facility by:
   A. Facility Operator's Name: Stearns
   B. Name of facility or well name and number: Gray No. 1
   C. Type of facility or well (WDW, WIW), etc.: SWD
   D. Location by ¼ ¼, Section, Township, and Range: NENW 18-9S-34E
7. Attach a copy of the state-issued permit for the Disposal Facility.

Submit 1 original and 5 copies within the required time frame with 3160-5. This form may be used as an attachment to the sundry notice.

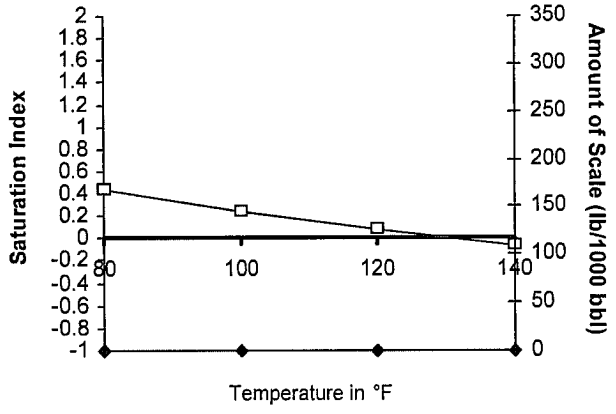
Scale Predictions from Baker Petrolite

Analysis of Sample 467465 @ 75 °F for CIMAREX ENERGY, 4/25/09

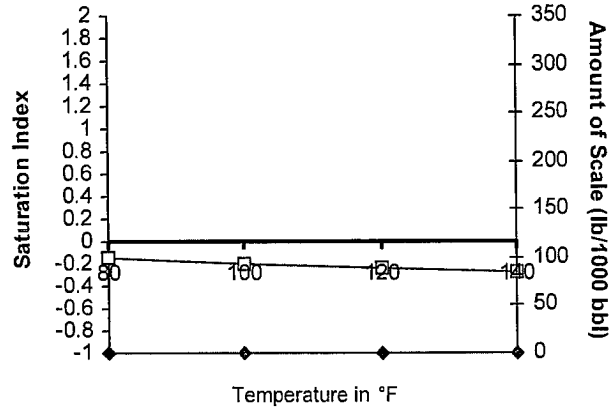
Calcite - CaCO3



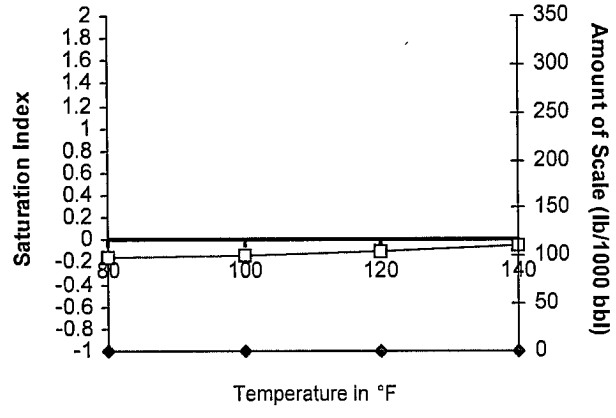
Barite - BaSO4



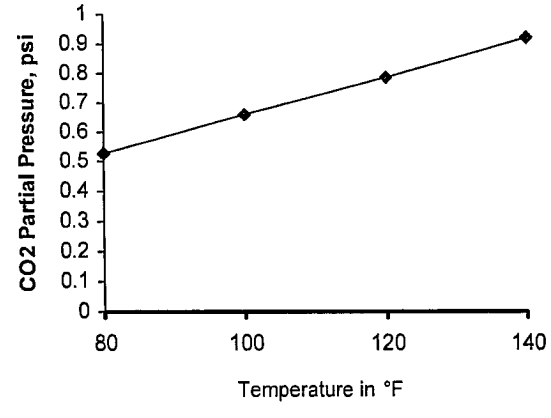
Gypsum - CaSO4*2H20



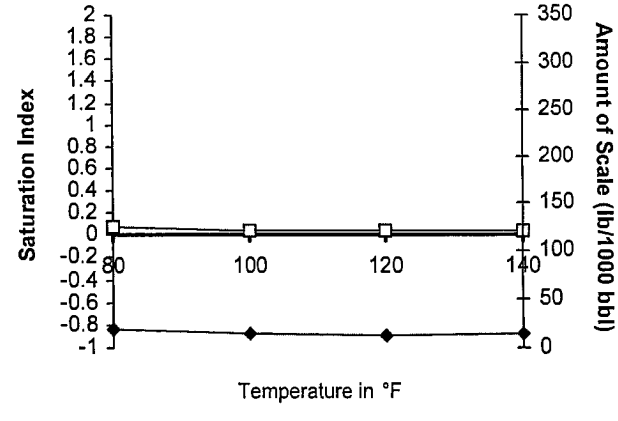
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GOVERNOR

6/14/99

SWD-751

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:
MC_____
DHC_____
NSL_____
NSP_____
SWD X
WFX_____
PMX_____

Gentlemen:

I have examined the application for the:

Stearns	Gray	#1-C-18-9s-34e
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

OK-

Yours very truly,

Chris Williams

Chris Williams
Supervisor, District 1

/ed

APPLICATION
FOR SALT WATER DISPOSAL
GRAY #1

Copy

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

FORM C-108
Revised 4-1-9.

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance __XX__Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: John R. Stearns, d/b/a., Stearns

ADDRESS: HC 65 Box 988 Crossroads, NM 88114

CONTACT PARTY: John R. Stearns PHONE: 675-2356

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 __XX__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: John R. Stearns TITLE: Owner

SIGNATURE: John R. Stearns DATE: 6-2-99

* 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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

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, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

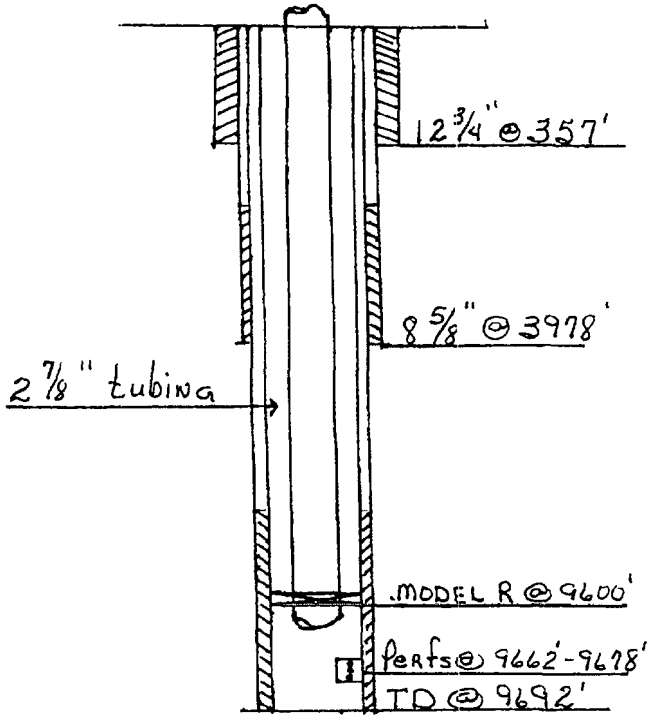
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

John R. Stearns dba Stearns		Gray #1		
Operator		Lease		
#1	660' FNL 3300 FEL	18	9S	34E
Well No.	Footage Location	Section	Township	Range

Lea, New Mexico
County

Schematic



Tabular Data

Surface Casing

Surface Casing 12 3/4" Cemented With 375 sx.

TOC Surface feet determined by Circulation

Hole size 15"

Intermediate Casing

Size 8 5/8" Cemented with 300 sx.

TOC 2700 feet determined by Circulation

Hole size 11"

Long String

Size 5 ½" Cemented with 500 sx.

TOC 7900 feet determined by Circulation

Hole size 7 7/8"

Total depth 9692'

Injection Interval

9662 feet to 9678 feet
(Perforated or open hole, indicate which.)

Tubing size 2 7/8" lined with IPC & PVC (Material) set in a Model R (Brand or Model)

packer at 9600 feet, or describe any other casing-tubing seal.

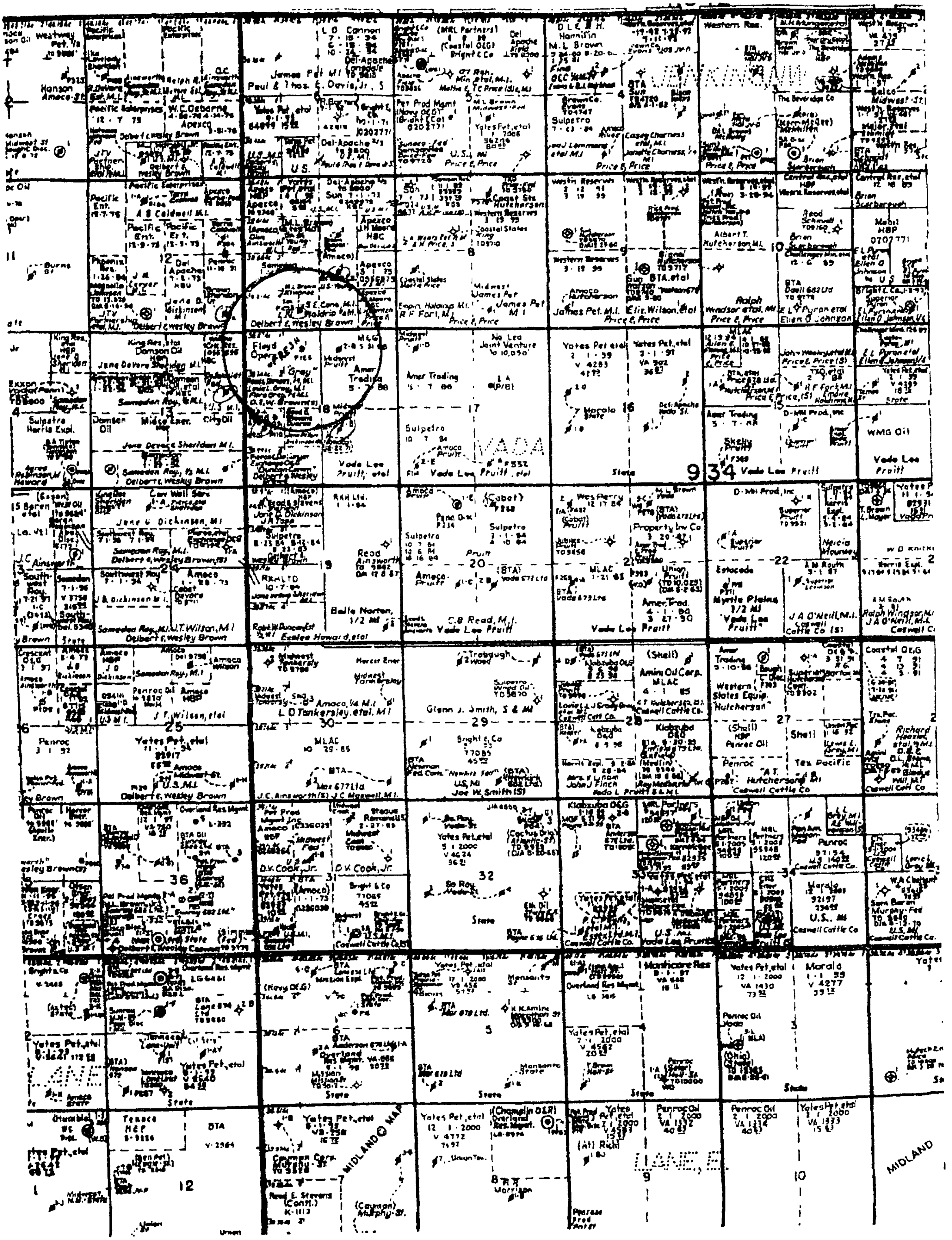
Other Data

1. Name of the injection formation Bough C Penn Formation
2. Name of field or pool, (if applicable). Vada Penn
3. Is this a new well drilled for injection? ____ Yes XX No

   If no, for what purpose was the well originally drilled? Penn Oil Production
4. Has the well been perforated in any other zone (s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used.

   None
5. Give the depth to and the name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Abo-approx. 7900' San Andres-approx. 4800'



Western Res.
James Pet. M.I.
Paul & Thos. E. Davis, Jr., S
Del-Apache
Sulpetro
Price & Price
Pacific Enterprises
Apexco
Delbert & Wesley Brown
Samedan Roy. & M.I.
Jane DeVore Sheridan M.I.
Amer Trading
Vada Lee Pruitt, etal
Yates Pet., etal
Midwest
Penn Disc.
Read Ainsworth
Belle Norton, 1/2 MI
C.B. Read, M.I.
Vada Lee Pruitt
Property Inv. Co.
Estacado
Myrtle Plains 1/2 MI
J.A. O'Neill, M.I.
Caswell Cattle Co.
Amoco
Coastal O&G
Glenn J. Smith, S & MI
L.D. Tankersley, etal, MI
Amini Oil Corp.
Western States Equip.
Tex Pacific
Penroc
Bright & Co
D.V. Cook, Jr.
Yates Pet., etal
Overland Res. Mgmt.
Penroc Oil
Morale
Texaco HBP
BTA
MIDLAND MAP
MIDLAND
State

Tabulation of data on all wells of Public Record in the Area of Review

Willow Creek Resources, Inc.
DeSchmidt Federal #1

1980' FNL 660' FEL Sec 13 T9S - R33E
Drilled 1/4/1979 Total Depth 9700'
Perfs. @ 9644-9664 P & A 3/7/1996

12 3/4' csg in 17" hole set @ 452' w/450 sx TOC suf.
8 5/8" csg in 11" hole set @ 3930' w/750 sx TOC 1880'
5 1/2 csg in 7 7/8" hole set @ 9700' w/325 sx
TOC 7900'

Maurice L. Brown Company
Sheridan #1

660' FSL 660' FEL Sec. 12 - T9S - R33E
Drilled 8/14/1972 Total Depth 9655'
Perfs. @ 9620'-9640' P & A 2/16/1978

11 3/4" csg in 15" hole set @ 375' w/350 sx TOC sur.
8 5/8" csg in 11" hole set @ 4000' w/375sx TOC 3000'
5 1/2" csg in 7 7/8" hole set @ 9655' w/400 sx
TOC 7500'

Read & Stevens, Inc.
Duncan Comm. #1

1980' FSL 660' FWL Sec. 18 - T9S - R34E
Drilled 12/28/1971 Total Depth 9691'
Perfs. @ 9632'-9652' P & A 10/26/1983

12 3/4" csg in 15" hole set @ 351 w/375 sx TOC sur.
8 5/8" csg in 11" hole set @ 3983' w/300 sx TOC 2700
5 1/2" csg in 7 7/8" hole set @ 9691' w/500 sx
TOC 7900'

Maurice L. Brown Company
US Young Comm. #1

1980' FSL 1980' FEL Sec 7 - T9S - R34E
Drilled 7/6/1971 Total Depth 9706'
Perfs. @ 9648'-9668' P & A 10/23/79

12 3/4" csg in 17" hole set @ 370' w/ 350 sx TOC sur.
8 5/8" csg in 11" hole set @ 3964' w/375 sx no TOC
5 1/2" csg in 7 7/8" hole set @ 9706' w/400 sx
TOC 4000'

Maurice L. Brown Company
Keohane #1

3300' FEL 660' FSL Sec. 7 - T9S - R34E
Drilled 8/26/1971 Total Depth
Perfs. @ 9634'-9661' P & A

13 3/8" csg in 17.5" hole set @ 350' w/375 sx TOC sur
8 5/8" csg in 11" hole set @ 4000' w/375 sx TOC 2500
5 1/2" csg in 7 7/8" hole set @ w/ 400 sx
TOC 4000'

Amoco Production Company
Pruitt "B" #1

1980' FSL 1980' FEL Sec. 18 - T9S - R34E
Drilled 10/701972 Total Depth 9718'
Perfs. @ 9669'-9692' P & A

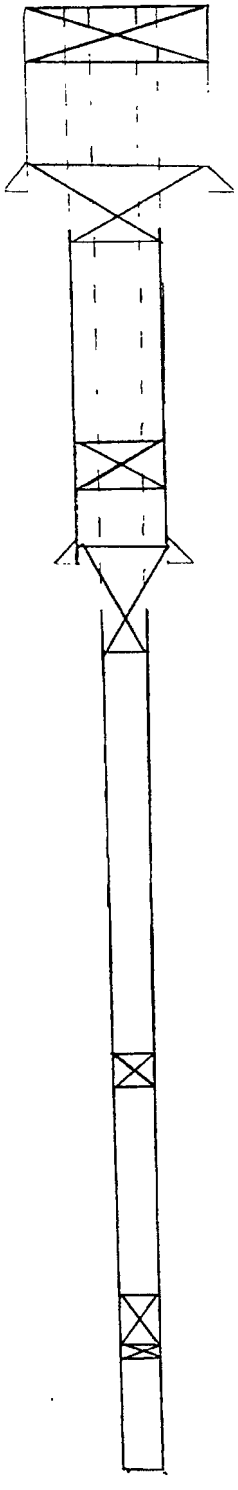
12 3/4" csg in 17" hole set @ 355' w/ 350 sx TOC sur.
8 5/8" csg in 11" hole set @ 3956' w/400sx TOC 3956'
5 1/2" csg in 7 7/8" hole set @ 9718' w/300sx
TOC 7400'

Amoco Production Company
Pruitt "B" #2

660' FNL 1980' FEL Sec. 18 - T9S - R34E
Drilled 9/16/1971 Total Depth 9710'
Perfs. @ P & A 2/3/1983

12 3/4" csg in 17" hole set @ 320' w/ 350 sx TOC sur.
8 5/8" csg in 11" hole set @ 3955' w/ 250 sx no TOC
5 1/2" csg in 7 7/8" hole set @ 9710' w/ 600sx no Toc

Willow Creek Resources, Inc.
DeSchmidt Federal #1
1980' FNL, 660' FEL
Sec 13-T9S-R33E



45 sx plug @ surface

75 sx plug @ 360'

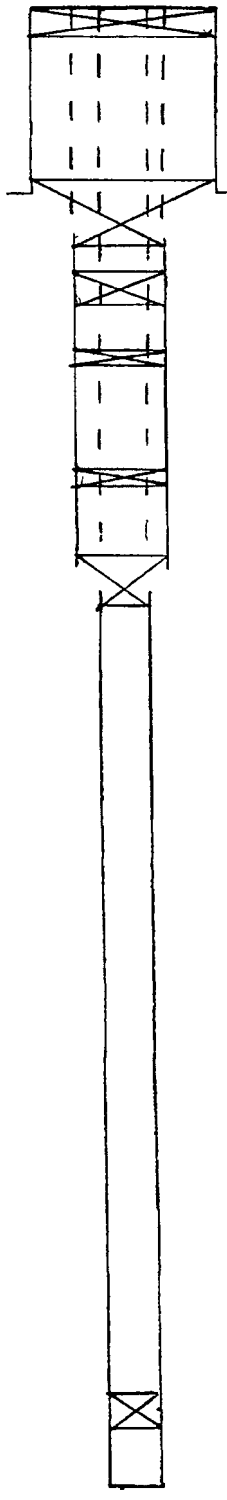
45 sx plug @ 740'

50 sx plug @ 3844'

25 sx plug @ 6079'

CIBP @ 8716 with 35' cement on top.

TD 9700'



10 sx plug @ surface

70 sx plug @ 437'-310'

50 sx plug @ 1080'-1250'

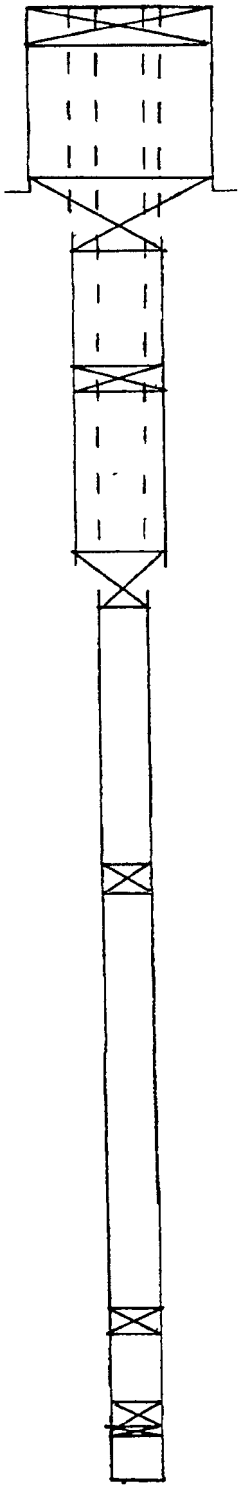
35 sx plug @ 2125'

35 sx plug @ 3886'-3980'

70 sx plug @ 5253' - 5520'

100 sx plug @ 7221'

Maurice L. Brown Company
Sheridan #1
660' FSL, 660' FEL
Sec. 12-T9S-R33E



10 sx Plug @ surface

60 sx plug @ 351'

35 sx plug @ 2100'-2200'

40 sx plug @ 3957'

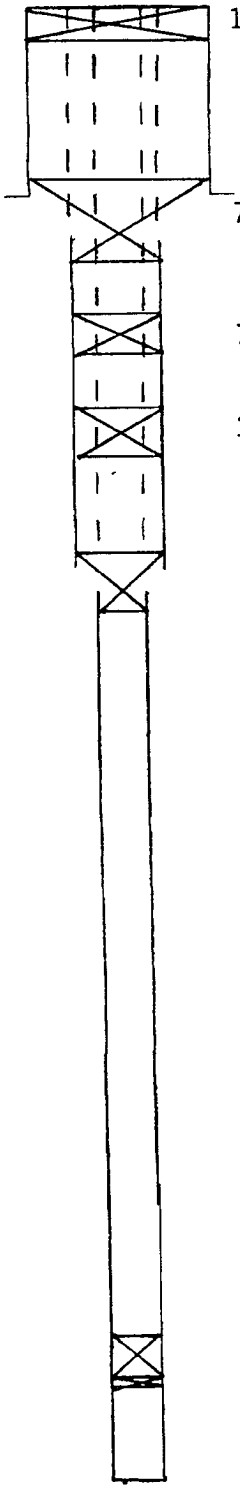
25 sx plug @ 6735±6835'

Read & Stevens, Inc.
Duncan Comm. #1
1980' FSL, 660' FWL
Sec. 18-T9S-34E

25 sx plug @ 8783'-8883'

CIBP & 35' cement @ 9575'

TD 9691'



10 sx plug @ surface

70 sx plug @ 310'-420'

70 sx plug @ 868'-1020'

35 sx plug @ 2100'

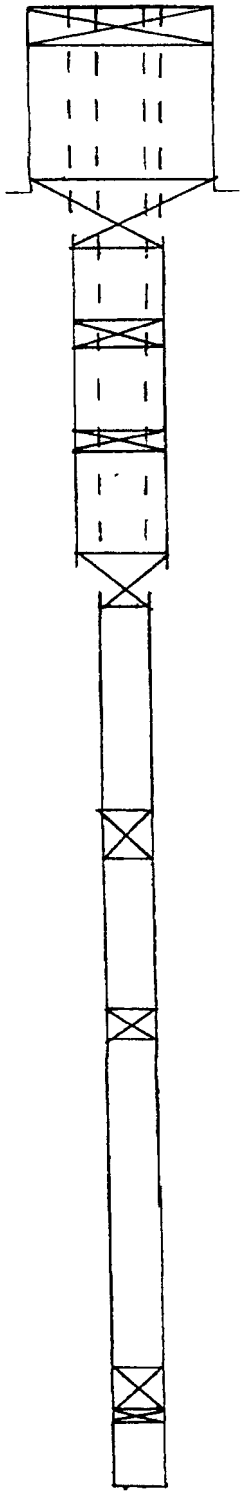
70 sx plug @ 3821'-4133'

CIBP & 35' cement on top @ 9598'

TD 9706'

Maurice L. Brown Company
US Young Comm. #1
1980' FSL, 1980' FEL
Sec. 7-T9S-R34E

Maurice L. Brown Company
Keohane #1
3300' FEL, 660' FSL
Sec. 7-T9S-R34E



10 sx plug @ surface

70 sx plug @ 292'-411'

70 sx plug @ 780'-889'

35 sx plug @ 2100'

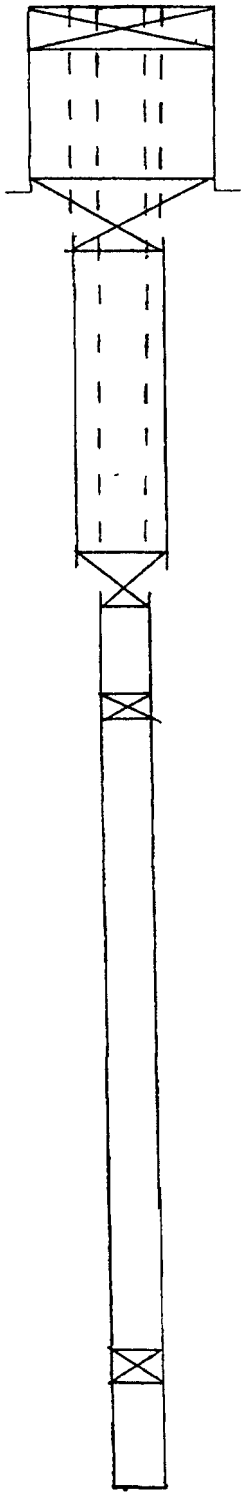
35 sx plug @ 3883'-4007'

55 sx plug @ 5963'-6060'

20 sx plug @ 6961'

CIBP & 35' cement @ 9584'

TD 9800'



10 sx plug @ surface

75 sx plug @ 290'-385'

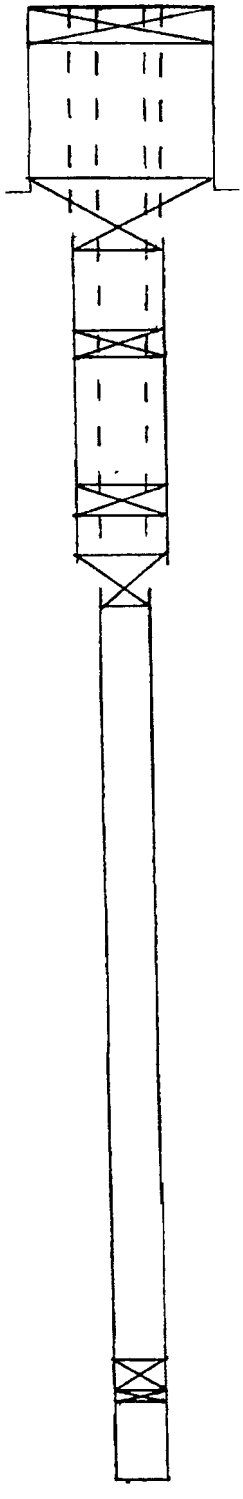
75 sx plug @ 3822'-4032'

25 sx plug @ 4743'

75 sx plug @ 8725'-7925'

TD 9718'

Amoco Production Co.
Pruitt "B" #1
1980' FSL, 1980' FEL
Sec. 18-T9S-R34E



10 sx plug @ surface

50 sx plug @ 320'

50 sx plug @ 680'-780'

50 sx plug @ 2657'-2700'

50 sx plug @ 4000'

Amoco Production Co.
Pruitt "B" #2
660' FNL, 1980' FEL
Sec. 18-T9S- R34E

CIBP & 75sx plug @ 9220'-9608'

TD 9710'

SUPPLEMENTAL DATA

Form C - 108

VII. 1. Proposed average daily injection rate is 2000 B/D with an anticipated rate of 2500 B/D.
2. The injection system will be open.
3. The injection pressure at the well head is anticipated to be no more than 100 psi.
4. Source of the injection fluid will be from the Bough "C", San Andres, Devonian, and Wolfcamp zones.
5. There are no active Penn wells within the prescribed Area of Review or within a two (2) square mile area of the proposed injection well.

VIII. 1. The Bough "C" or Penn Zone is a fine crystalline vuggy limestone of the Pennsylvanian Age, identified by late Criso Fossils. The gross zone is normally 20'-30' thick and in the proposed injection well is found at a depth of 9662'-9678'.
2. Fresh water zones are almost non-existent in this area. A few wells of low capacity have been found at a depth of 90-250 feet.

IX. 1. No stimulation of the well is planned except for acid to be dumped down tubing.

X. 1. Well logs are on file with the OCD. Last production on the well was February of 1999. Due to low production, the well is non-economic to produce.

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

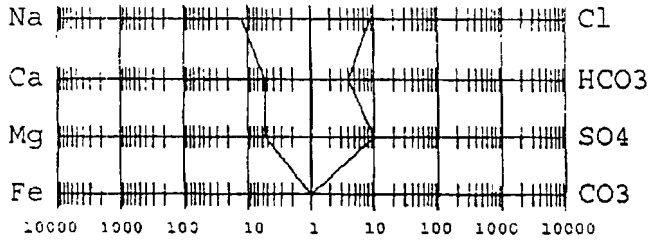
Oil Co. : **N/A**
Lease : **Delbert Brown**
Well No.: **# 1**
Lab No. : **041799.001**

Sample Loc. : **Fresh Water**
Date Analyzed: **17-April-1999**
Date Sampled : **15-April-1999**

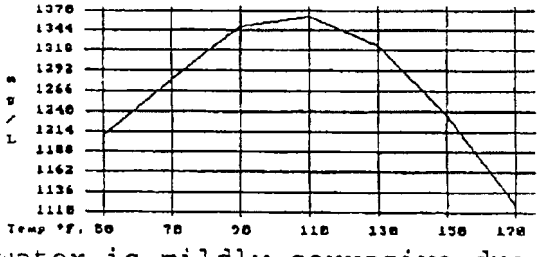
ANALYSIS

1.	pH		7.890		
2.	Specific Gravity 60/60 F.		1.006		
3.	$CaCO_3$ Saturation Index	@ 80 F.	+0.633		
		@ 140 F.	+1.333		
	Dissolved Gasses		MG/L	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide		Not Present		
5.	Carbon Dioxide		Not Determined		
6.	Dissolved Oxygen		Not Determined		
	Cations				
7.	Calcium	(Ca^{++})	104	/ 20.1 =	5.17
8.	Magnesium	(Mg^{++})	63	/ 12.2 =	5.16
9.	Sodium	(Na^{+}) (Calculated)	270	/ 23.0 =	11.74
10.	Barium	(Ba^{++})	Not Determined		
	Anions				
11.	Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate	($CO_3^{=}$)	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO_3^{-})	229	/ 61.1 =	3.75
14.	Sulfate	($SO_4^{=}$)	475	/ 48.8 =	9.73
15.	Chloride	(Cl^{-})	300	/ 35.5 =	8.45
16.	Total Dissolved Solids		1,441		
17.	Total Iron (Fe)		7	/ 18.2 =	0.36
18.	Total Hardness As $CaCO_3$		520		
19.	Resistivity @ 75 F. (Calculated)		4.777 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



Calcium Sulfate Solubility Profile

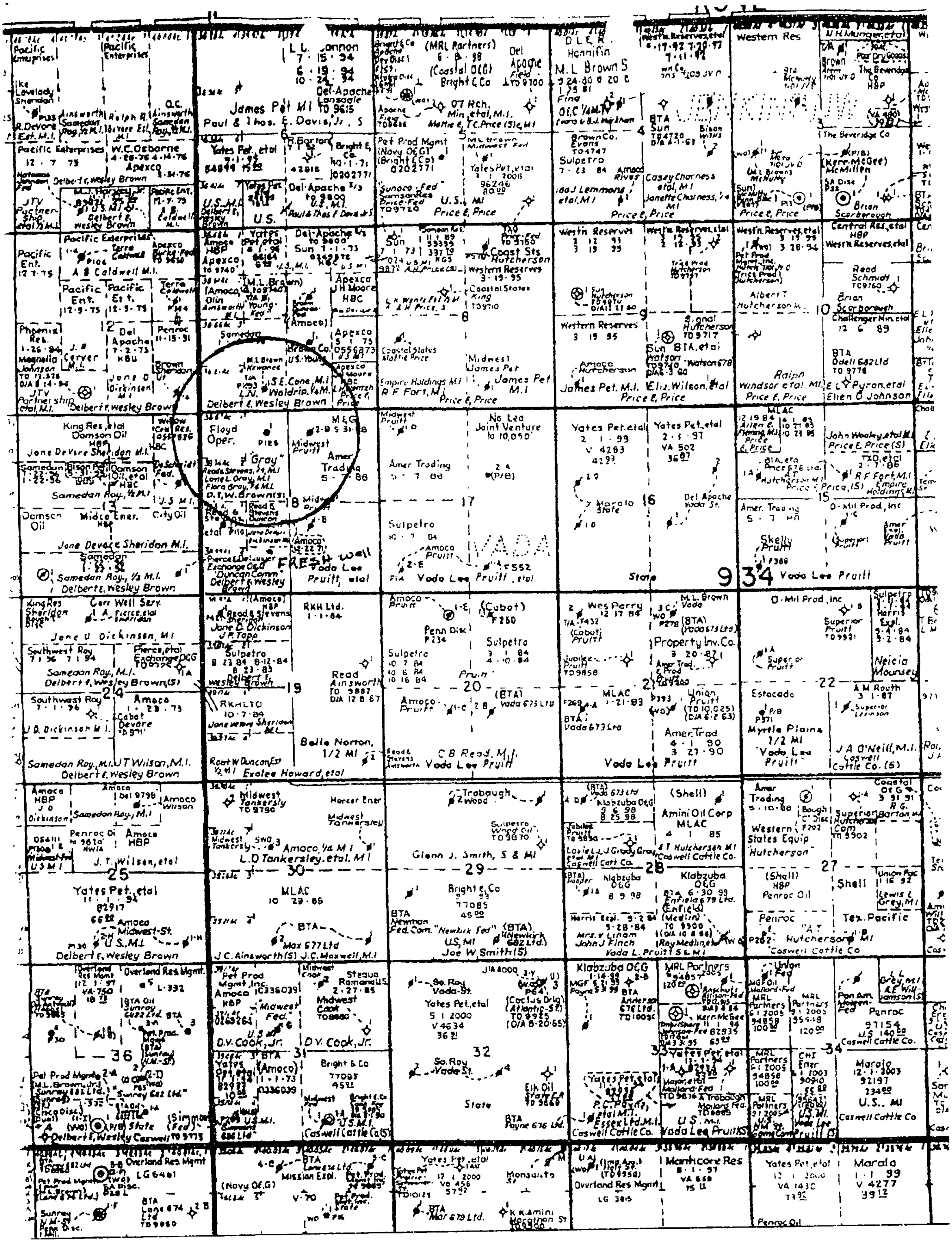


PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT. X	*meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	3.75	304
$CaSO_4$	68.07	1.43	97
$CaCl_2$	55.50	0.00	0
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	5.16	311
$MgCL_2$	47.62	0.00	0
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	3.14	223
NaCl	58.46	8.45	494

*Milli Equivalents per Liter

his water is mildly corrosive due to the pH observed on analysis.
he corrosivity is increased by the content of mineral salts in solution.



Pacific Enterprises
L.L. Gannon
James Pet MI
Del Apache
M.L. Brown S
Western Res
W.C. Osborne
Apexco
Yates Pet. etal
U.S.
Price & Price
Pacific Ent.
Coastal States
Western Reserves
Signal Hutcherson
Amoco
Floyd Oper.
"Gray"
Amer Trading
No Lea Joint Venture
Yates Pet. etal
Samedan Roy., 1/2 M.I.
Delbert E. Wesley Brown
FRESH well
Vada Lee Pruitt, etal
Sulpetro
State
Jane D. Dickinson, MI
Read Ainsworth
Property Inv. Co.
Belle Norton, 1/2 MI
C B Read, M.I.
Vada Lee Pruitt
J A O'Neill, M.I.
Midwest Tankersly
Amini Oil Corp
MLAC
Glenn J. Smith, S & MI
L.D Tankersley, etal. MI
Bright & Co
Hutcherson
Shell
Tex. Pacific
Joe W Smith (S)
Caswell Cattle Co
Overland Res. Mgmt
Yates Pet., etal
D.V. Cook, Jr.
MRL Partners
Penroc
Marala
U.S., MI
State
Manticore Res
Penroc Oil
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XII
AFFIRMATIVE STATEMENT

As required by Item XII of form C-108, John R. Stearns dba. STEARNS, has examined available geologic and engineering data and found no evidence of open faults or other hydrologic connection between the disposal zone and any other underground source of drinking water.

Stearns
HC 65 Box 988
Crossroads, NM 88114
505-675-2356

April 26, 1999

TO WHOM IT MAY CONCERN:

JOHN R. STEARNS, d/b/a STEARNS, has made application with the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico for the purpose of operating a disposal well located as follows, to wit:

660 feet from the North line, 3300 feet from the East line of Section 18, township 9 South, Range 34 East, N.M.P.M., Lea County, New Mexico. Said well more commonly known as the Gray #1.

The proposed well will dispose liquids into the Penn Zone pursuant to the application enclosed herewith.

Z 265 929 080

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

Sent to Delbert Brown	
Street & Number Box 467	
Post Office, State & ZIP Code Tatum, NM 88267	
Postage JUN 09 1999	.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.25
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$ 2.98
Postmark or Date	

PS Form **3800**, April 1995

LEGAL NOTICE

John R. Stearns, dba, Stearns, HC 65 Box 988, Crossroads, NM 88114, 505-675-2356, is making an application to the State of New Mexico, Oil Conservation Division for a permit to dispose of produced water into the Gray #1. The well located 660' FNL and 3300' FEL, Sec. 18-T9S-R34E, Lea County, New Mexico. Injection will be into the Bough "C" (Penn) Formation at a depth of 9662'-9678', anticipated rates of 2000-2500 B/D at 0 pressure.

Interested parties may file objections or request a hearing within 15 days to the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505.

Published in the Lovington Daily Leader June 3, 1999.

Pitzer, Donna
From: Phillips, Dorothy
Sent: Monday, June 14, 1999 2:26 PM
To: Pitzer, Donna
Subject: RE: API NO. for Stearns - OGRID 21566

I tried again, the message reads: double check footage cells, they exceed 2640 fee.

From: Pitzer, Donna
Sent: Monday, June 14, 1999 2:11 PM
To: Phillips, Dorothy
Subject: RE: API NO. for Stearns - OGRID 21566

6/14/99 Try again. The total depth of the well was wrong on Ongard. I corrected that

so the bond should go in now. Thanks dp

From: Phillips, Dorothy
Sent: Monday, June 14, 1999 1:58 PM
To: Pitzer, Donna
Subject: RE: API NO. for Stearns - OGRID 21566

Donna, I tried to put on ONGARD but it would not accept as it said that footage exceeds amount? The amount on the bond is $7,500. Do they need more? Let me know. Thanks.

From: Pitzer, Donna
Sent: Monday, June 14, 1999 7:06 AM
To: Phillips, Dorothy
Subject: RE: API NO. for Stearns - OGRID 21566

--Hi-- API # is 30-025-23898 c104 is here for approval. We will work it today.

Thanks dp

From: Phillips, Dorothy
Sent: Thursday, June 10, 1999 1:21 PM
To: Pitzer, Donna
Subject: API NO. for Stearns - OGRID 21566

Have a one-well bond for approval:
John E. Stearns dba Stearns
660' FNL and 3300' FEL of Section 18, Township 9 South, Range 34 East , Lea County.

Need an API, thanks.

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	CIMAREX ENERGY	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	FRANK GARDNER (575) 390-5194
Area:	MILENSAND, NM	Sample #:	467465
Lease/Platform:	ROELOFS UNIT	Analysis ID #:	91104
Entity (or well #):	1	Analysis Cost	$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	4/20/09
Analysis Date:	4/25/09
Analyst:	STACEY SMITH
TDS (mg/l or g/m3):	137892.5
Density (g/cm3, tonne/m3):	1.097
Anion/Cation Ratio:	1
Carbon Dioxide:	130 PPM
Oxygen:	N/A
Comments:	
RESISTIVITY - 0.06 OHM-M @ 75°F	

Analysis of Sample 467465 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**84004.0**	**2369.45**	**Sodium:**	**43140.8**	**1876.52**
Bicarbonate:	**61.0**	**1.**	**Magnesium:**	**1564.0**	**128.66**
Carbonate:	**0.0**	**0.**	**Calcium:**	**7545.0**	**376.5**
Sulfate:	**1102.0**	**22.94**	**Strontium:**	**224.0**	**5.11**
Phosphate:			**Barium:**	**0.4**	**0.01**
Borate:			**Iron:**	**16.0**	**0.58**
Silicate:			Potassium:	235.0	6.01
			Aluminum:		
Hydrogen Sulfide:		<10 PPM	Chromium:		
pH at time of sampling:		5.9	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**5.9**	Manganese:	0.300	0.01
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.79	0.00	-0.14	0.00	-0.15	0.00	0.07	19.00	0.43	0.00	0.53
100	0	-0.69	0.00	-0.20	0.00	-0.14	0.00	0.05	14.71	0.24	0.00	0.66
120	0	-0.60	0.00	-0.24	0.00	-0.10	0.00	0.05	13.48	0.08	0.00	0.79
140	0	-0.49	0.00	-0.28	0.00	-0.04	0.00	0.05	14.71	-0.07	0.00	0.92

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.

BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201
575-627-0272

Disposal of Produced Water From Federal Wells
Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. Any on-lease open top storage tanks shall be covered with a wire screen to prevent entry by birds and other wildlife.
6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
7. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office for wells in Chaves or Roosevelt County if you have not already done so.