

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: HEADINGTON Oil COMPANY Well: STATE LAND '76' Well No 5

Contact: ALFRED POWELL Title: DIVISION MGR. Phone: 303-769-8280

DATE IN 8-10-95 RELEASE DATE 8-24-95 DATE OUT 9-11-95

Proposed Injection Application is for: ☐ WATERFLOOD ☐ Expansion ☐ Initial

Original Order: R- ☐ Secondary Recovery ☐ Pressure Maintenance

~~SENSITIVE AREAS~~

☒ SALT WATER DISPOSAL

~~WIPP~~ ☐ Capitan Reef ☐ Commercial Operation

Data is complete for proposed well(s)? ☐ Additional Data _____

AREA of REVIEW WELLS

5 Total # of AOR

0 # of Plugged Wells

YES Tabulation Complete

☐ Schematics of P & A's

YES Cement Tops Adequate

NO AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) WOLF CAMP

Source of Water AREA WOLF CAMP PRODUCTION Compatible YES

PROOF OF NOTICE

YES Copy of Legal Notice

YES Information Printed Correctly

YES Correct Operators

YES Copies of Certified Mail Receipts

NO Objection Received

☐ Set to Hearing _____ Date

NOTES: _____

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	_____ Date	Nature of Discussion _____
2nd Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	_____ Date	Nature of Discussion _____
3rd Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	_____ Date	Nature of Discussion _____

swd 8-24-95
604
DIVISION
1352

HEADINGTON OIL COMPANY

7114 W. JEFFERSON AVENUE, SUITE 213
DENVER, CO 80235
PHONE (303) 969-8280
FAX (303) 969-8201

August 8, 1995

Oil & Gas Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Application for SWD - State Land 76 Lease
Lea County, NM

Gentlemen:

Enclosed in the information required for a salt water disposal application for the State Land 76 lease, N. Anderson Ranch Field, Lea County, New Mexico.

The proposed SWD well is to be used only by our own producing wells on the same lease. Currently, these wells produce 80-100 BWPD. The water is to be re-injected in the Wolfcamp formation being produced in the State Land #5 and #1 wells. We have notified all land owners and operators within 1/2 mile radius and published the proposal in the Lovington newspaper. We have had no negative response. It is our belief the well will take the water with 0 surface pressure, but at maximum of 500 psi.

I believe all the information required for administrative approval is included herein.

Sincerely,



Alfred R. Powell
Division Manager

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

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 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, PO Box 2088, Santa Fe, NM 87504-2088 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

OPERATOR Headington Oil Company LEASE State Land 76
 WELL NO. 3 660' FEL & 4720' FSL FOOTAGE LOCATION
 SECTION 2 TOWNSHIP 16S RANGE 32E

Schematic

Well Construction Data

Surface Casing

Size 13 3/8 Cemented with 400 sx.
 TOC surface feet determined by circ to surface
 Hole Size 17 1/2"

Intermediate Casing

Size 8 5/8" Cemented with 2450 sx.
 TOC surface feet determined by circulated
 Hole Size 12 1/4

Long String

Size 5 1/2 Cemented with 850 sx.
 TOC 7550 feet determined by temp survey
 Hole Size 7 7/8
 Total Depth 10,626

Injection Interval

9814 feet to 9872 (PF) feet
 (perforated or open-hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size 2 3/8 lined with none set in a
 Baker Model R inj packer at 8250' (type of internal coating) feet

Other type of tubing / casing seal if applicable annulus filled w/fresh water w/corrosion inhibitor and bactericide.

Other Data

1. Is this a new well drilled for Injection? Yes ☒ No ☐

If no, for what purpose was the well originally drilled? production

2. Name of the Injection formation Wolfcamp

3. Name of Field or Pool (if applicable) Anderson Ranch

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. no; Wolfcamp

9814-21', 9836-40', 9862-66', 9868-72'

5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area.

Canyon 10,460'

Devonian 13,330'

INJECTION WELL DATA SHEET

OPERATOR Headington Oil Company LEASE State Land 76

WELL NO. 3 660' FEL & 4720' FSL SECTION 2 TOWNSHIP 16S RANGE 32E

FOOTAGE LOCATION

SchematicWell Construction DataSurface Casing

Size 13 3/8 " Cemented with 400 sx.

TOC surface feet determined by circ to surface

Hole Size 17 1/2"

Intermediate Casing

Size 8 5/8" " Cemented with 2450 sx.

TOC surface feet determined by circulated

Hole Size 12 1/4

Long String

Size 5 1/2 " Cemented with 850 sx.

TOC 7550 feet determined by temp survey

Hole Size 7 7/8

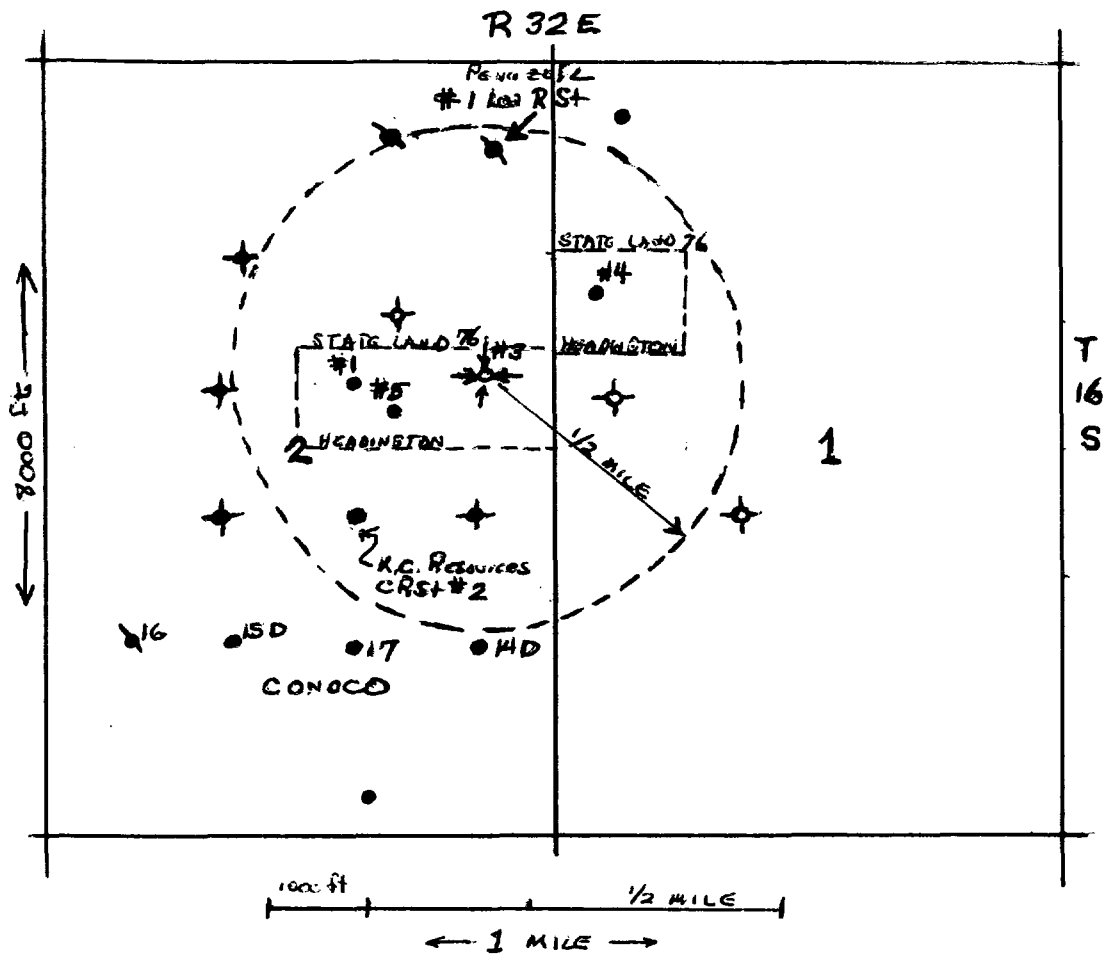
Total Depth 10,626

Injection Interval

9814 feet to 9872 (nf) feet
(perforated or open-hole; indicate which)

Attachment
Application for Authority to Inject
State Land 76 Well #3

- III Well Data - attached.
- V Map of wells within 1/2 mile - attached.
- VI Schematic of nearby wells - attached.
- VII
 - 1) Inject 100 BWPD @ 0-50 psi
 - 2) Closed system
 - 3) Average = 50 psi, maximum = 500 psi
 - 4) Injected water going into same zone being produced
 - 5) Same zone - no analysis required.
- VIII Included in previous submittals. No nearby aquifers immediately underlying or overlying injection zone. 8 5/8" surface casing cemented to surface at 2450' to protect all potential fresh water aquifers.
- IX None
- X Logs filed previously.
- XI No fresh water wells nearby.
- XII No connection is evident between producing and disposal zone with any other formations or fresh water sources. No open faults are evident.
- XIII Proof of Notice - attached letters and legal ad.



State Land 76 #3
 Anderson Ranch Field
 Sec. 2, T16S-R32E
 4720' FSL & 660' FEL

Pertinent Data:

- Elevation: 4319' KB, 4302' GL
- 13 3/8" 48# H-40 casing @ 406' cmt'd to surface.
- 8 5/8" 24 & 32# K-55 casing @ 4191' cmt'd to surface.
- 5 1/2" 15.5# & 17# K-55 casing @ 10,626' cmt'd w/850 sx w/cement top @ 7550'.

Completion Data:

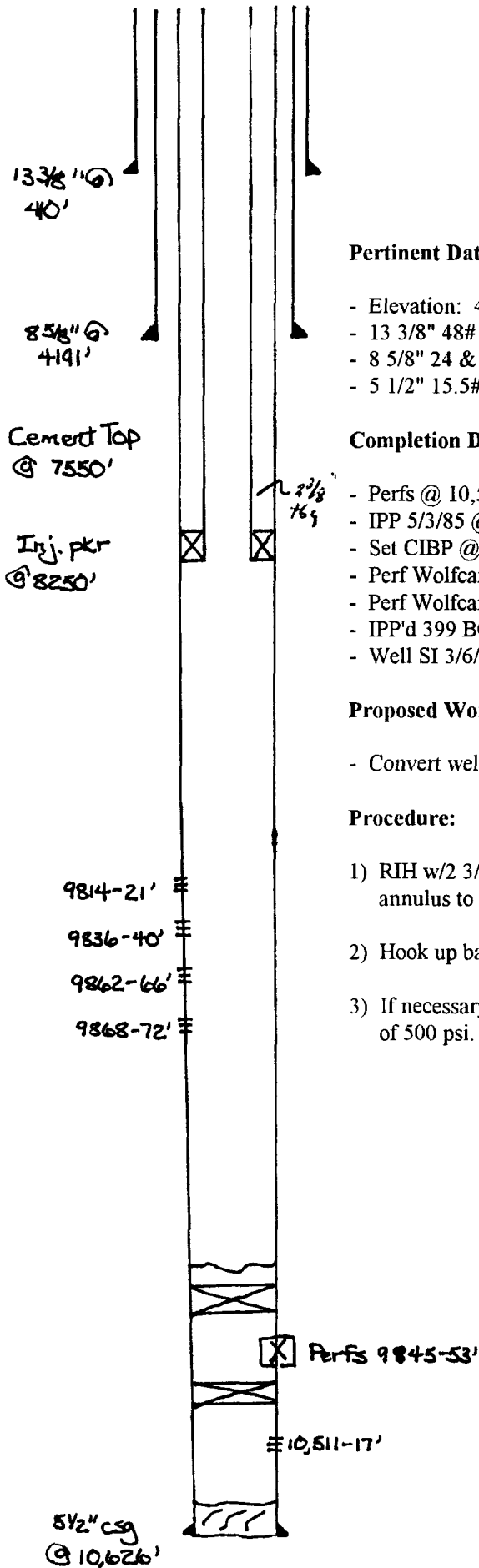
- Perfs @ 10,511-517' Canyon, treated.
- IPP 5/3/85 @ 152 BOPD.
- Set CIBP @ 10,475' & dumped 2 sxs cmt.
- Perf Wolfcamp 9945-53' set cmt retainer @ 9903'. Squeezed w/100 sxs cmt.
- Perf Wolfcamp 9814-21', 9836-40', 9862-66' & 9868-72' (treated).
- IPP'd 399 BOPD & 580 MCFGPD (5/2/86) from Wolfcamp perfs 9814-72'.
- Well SI 3/6/88 as uneconomic. Last test 10 BOPD w/307 BWPD on 3/6/88.

Proposed Work:

- Convert well #3 to water injection or pressure maintenance.

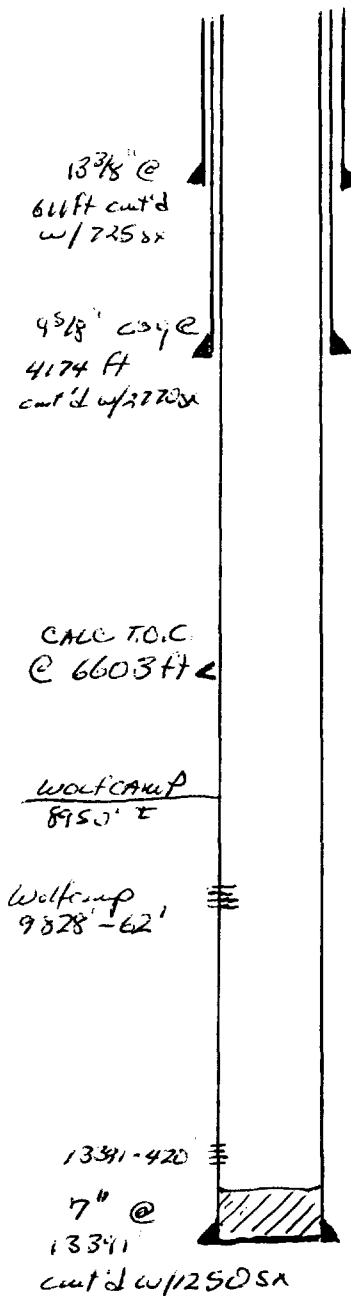
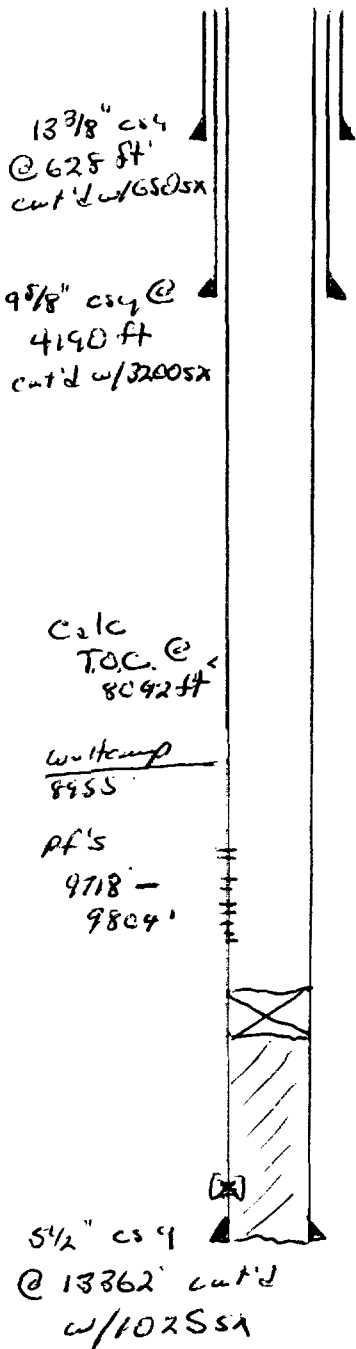
Procedure:

- 1) RIH w/2 3/8" tbg w/injection pkr & set pkr @ 8250'. Fill and pressure test annulus to 300 psi. Use inhibited fresh water w/bactericide.
- 2) Hook up battery disposal tanks to well. Put water in on vacuum.
- 3) If necessary, set duplex pump or equivalent to injection @ maximum of 500 psi. Also, consider adding additional Wolfcamp perfs.



K.C. RESOURCES
CR STATE #2
3300' FSL & 1980' FGL
COMP 1955

PENNY 2010 OIL COMPANY
#1 LEA "R" ST2/c (TA'D)
990' FNL & 660' FEL
COMP 1958

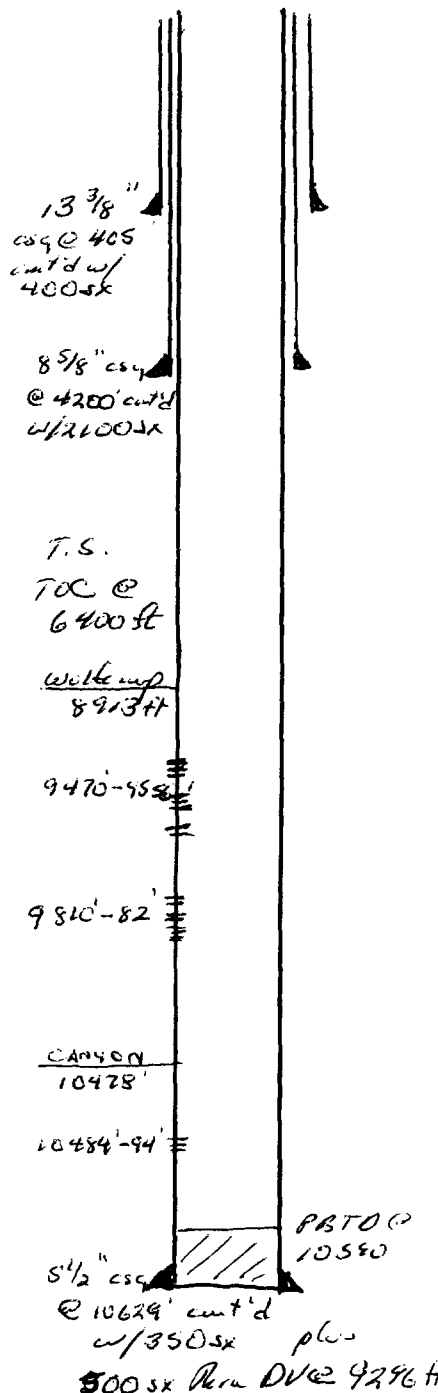
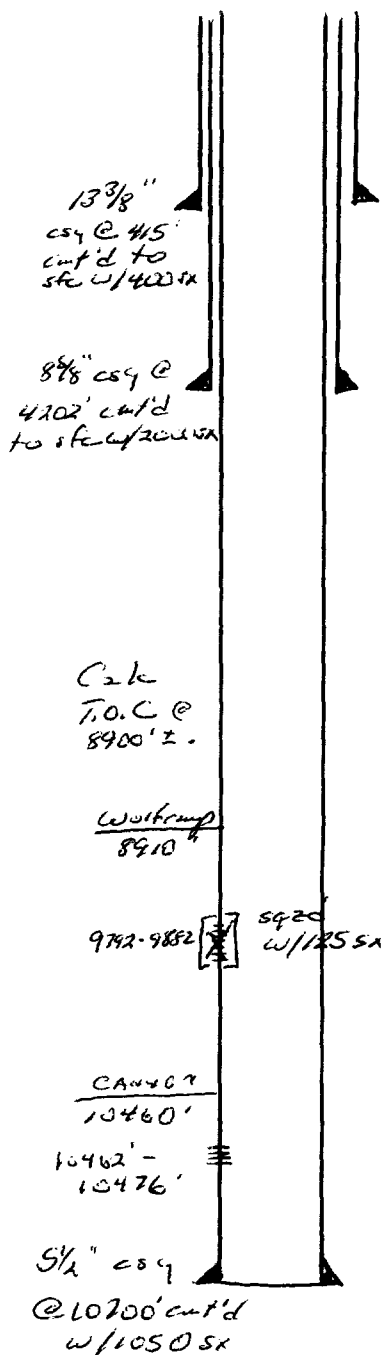
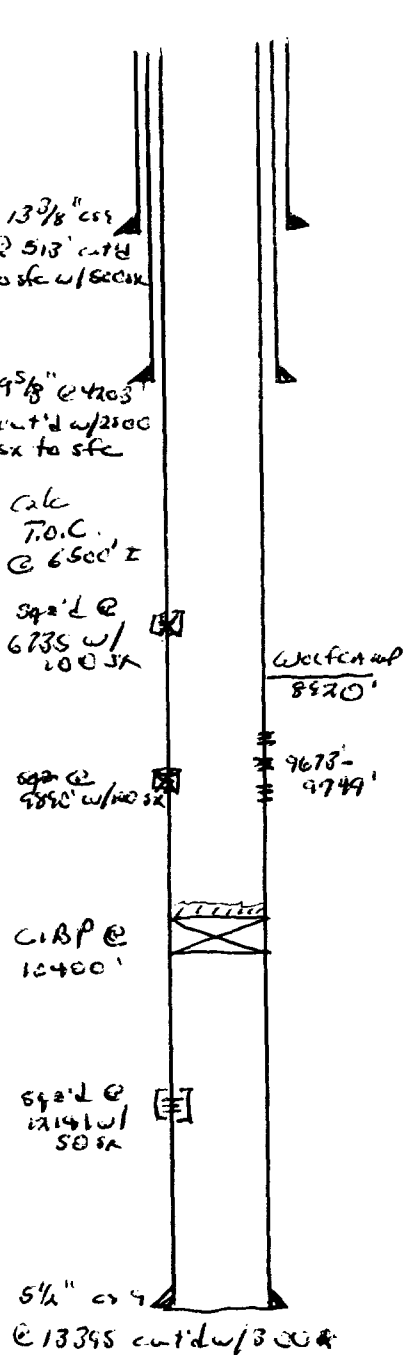


HEADINGTON PRODUCING WELLS

STATE LAND 76 #1
SEC 2 T16S R32E
4820' FSL - 1950' FEL

STATE LAND 76 #4
SEC 1 T16S R32E
Comp 2/8/55

State Land 76 #5
SEC 2 T16S R32E



Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is **Adv. Director** of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled
Notice

and numbered ~~XXXXXXXXXXXX~~ in the
~~County of~~
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, for ~~XXXXXXXXXXXX~~ **one (1) day**
~~consecutive~~ weeks, beginning with the issue of

June 8, 19 **95**

and ending with the issue of

June 8, 19 **95**

And that the cost of publishing said notice is the
sum of \$ **8.02**

which sum has been (Paid) (Assessed) as Court Costs

Joyce Clemens
Subscribed and sworn to before me this **11th**

day of **June**, 19 **95**

Jean Sevier
Notary Public, Lea County, New Mexico

My Commission Expires **Sept. 28**, 19 **98**

LEGAL NOTICE NOTICE

Headington Oil Company
7114 W. Jefferson Ave.
Denver, CO 80235

Attn: Al Powell
(303) 969-8280

Headington is proposing to install a disposal well in it's State Land 76 Lease #3 (SE/NE Sec. 2, T16S-R32E in the Wolfcamp formation at 100-150 BWPD @ 50-500 psi. Any objections or requests for hearing should be filed with the Oil Conservation Div.: 2040 S. Pacheco, Santa Fe, NM 87505, within 15 days.

Published in the Lovington Daily Leader June 8, 1995.

HEADINGTON OIL COMPANY

7114 W. JEFFERSON • SUITE 213

DENVER, COLORADO 80235

(303) 969-8280 • FAX (303) 969-8201

June 13, 1995

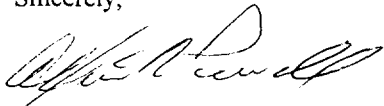
Bob Eidson
Eidson Ranch Inc.
P.O. Box 1286
Lovington, NM 88260

Dear Mr. Eidson:

Headington Oil Company is proposing to utilize it's well #3 to dispose it's produced water from well #1, #4 & #5 on the State Land 76 lease back into the Wolfcamp zone at the same depth. There will be no changes at the surface and the produced water will go through a closed system. This will actually decrease the truck traffic on the property, which will be to everyone's benefit. It also will help the wells to remain economic by eliminating the hauling costs.

If you have any questions or objections, please notify us.

Sincerely,



Alfred R. Powell
Division Manager

505-396-4137

HEADINGTON OIL COMPANY

7114 W. JEFFERSON • SUITE 213

DENVER, COLORADO 80235

(303) 969-8280 • FAX (303) 969-8201

June 13, 1995

K.C. Resources, Inc.
2533 S. Highway 101
Suite 260
Cardiff, California 92007

Gentlemen:

Headington proposes to dispose of its produced water (100 BWPD) in the Wolfcamp formation in its State Land 76 #3 well. The produced waters are primarily from the Wolfcamp in its #1 and #5 (see map) wells. The zone will take the water at little, if any pressure.

K.C. Resources has a producing well 3/8 of a mile from the disposal site. Headington's own wells are within 1/4 mile or less in the same general direction, so the minor amount of disposal should be positive pressure maintenance for Headington's wells. We do not believe K.C. Resources' well will be affected, but if so, it will be positive for the oil production.

If you do not object, there is no need to reply. If you do have questions, please call me at (303) 969-8280.

Sincerely,



Alfred R. Powell
Division Manager

HEADINGTON OIL COMPANY

7114 W. JEFFERSON AVENUE, SUITE 213
DENVER, CO 80235
PHONE (303) 969-8280
FAX (303) 969-8201

RECEIVED
1995 AUG 10 10 52

August 8, 1995

Oil & Gas Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Application for SWD - State Land 76 Lease
Lea County, NM

Gentlemen:

Enclosed in the information required for a salt water disposal application for the State Land 76 lease, N. Anderson Ranch Field, Lea County, New Mexico.

The proposed SWD well is to be used only by our own producing wells on the same lease. Currently, these wells produce 80-100 BWPd. The water is to be re-injected in the Wolfcamp formation being produced in the State Land #5 and #1 wells. We have notified all land owners and operators within 1/2 mile radius and published the proposal in the Lovington newspaper. We have had no negative response. It is our belief the well will take the water with 0 surface pressure, but at maximum of 500 psi.

I believe all the information required for administrative approval is included herein.

Sincerely,



Alfred R. Powell
Division Manager



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

8/21/95

GOVERNOR

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:

Headington Oil Co State Land 76 #3-I 2-16s-32e
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Did not get data on P&A well
OTHER WISE OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed