



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

June 6, 1994

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:

Kelt Oil & Gas Co	State DH	#1-1	21-11-33
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed

Prime Operating Company

a subsidiary of **Prime** Energy Corporation

North Park Executive Center • 731 Wadley Avenue • Suite L-220 • Midland, TX 79705-5351
(915) 682-5600 • FAX (915) 682-0223

June 3, 1994

Via UPS Overnight Mail

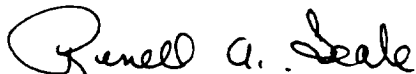
Mr. David Catanach
Energy, Minerals & Natural Resources Department
Oil Conservation Division
310 Old Santa Fe Trail
State Land Office Building
Room 211
Santa Fe, NM 87501

Re: Application for Authorization to Inject
Kelt Oil & Gas, Inc.
North Bagley Field
Lea Co., New Mexico

Gentlemen:

Enclosed please find the application for Authorization to Inject for the State DH #1, located in Sec. 1, Twp. 11S, Rge. 33-E, Lea County, New Mexico. Please contact Mr. Earl Levea at (915) 682-5600 should you have any technical questions concerning the permit. If you should have any administrative questions, please contact Mrs. Runell Seale at (915) 682-5600. Thank you for your assistance in this matter.

Sincerely,



Runell A. Seale
Engineering Assistant

RAS:l:\workfile\runells\welldata\n-bagley\ocdpermt.doc

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? XX Yes No
- II. OPERATOR: Kelt Oil & Gas, Inc., C/O Prime Operating Company
ADDRESS: 731 W. Wadley, Bldg. L-220, Midland, TX 79705
CONTACT PARTY: Earl Levea PHONE: 915 682-5600
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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 geological data on the injection zone including appropriate lithologic detail, geological 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. None required.
- * 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 source of drinking water. No connection found.
- 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: Jeff Goodrich TITLE: VP
SIGNATURE: [Signature] DATE: 6.1.94
- * 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 circumstance of the earlier submittal. Geological data on area, logging & test data & analysis are on file for this area with the NM OCD.

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.

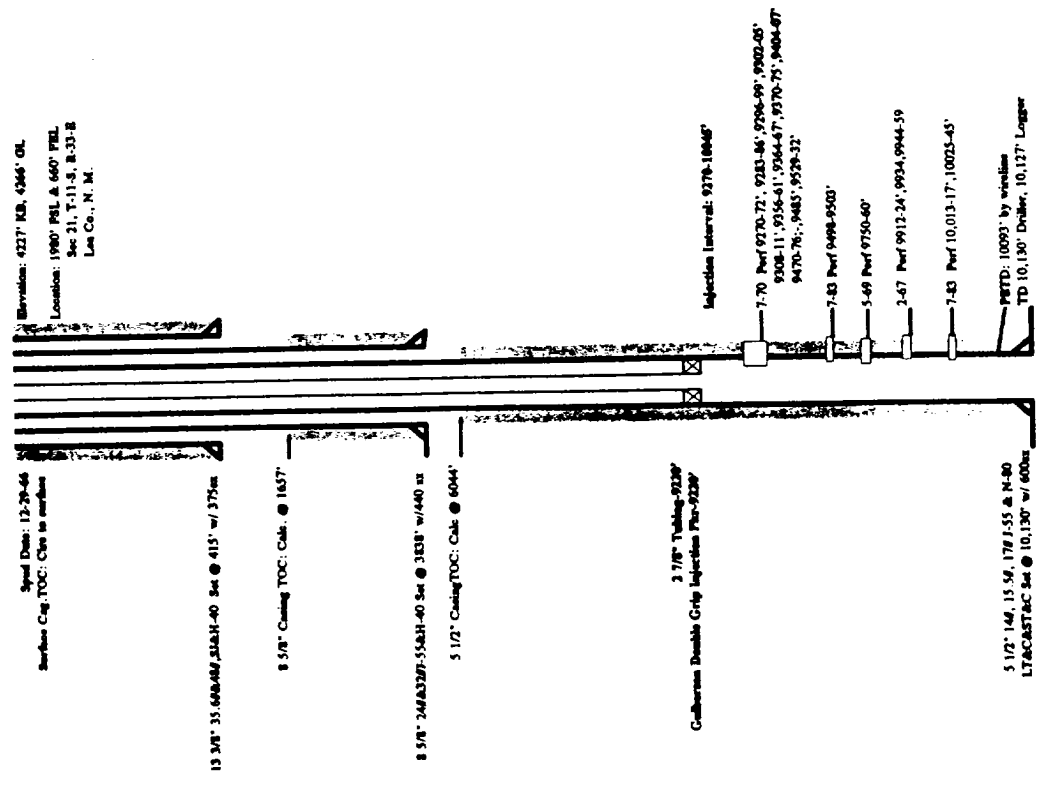
INJECTION WELL DATA SHEET

OPERATOR Kelt Oil & Gas, Inc. LEASE State DH

WELL NO. #1 1980' FSL & 660' FEL SECTION 21 TOWNSHIP 11-S RANGE 33-E

FOOTAGE LOCATION

Schematic



Well Construction Data

Surface Casing
Size 13 3/8" * Cemented with 375 sx.
TOC Surface feet determined by cement circulated.
Hole Size 17 1/2"

Intermediate Casing
Size 8 5/8" * Cemented with 420 sx.
TOC 1657' feet determined by cacl.
Hole Size 11"

Long String
Size 5 1/2" * Cemented with 600 sx.
TOC 6044' feet determined by cacl.
Hole Size 7 7/8"
Total Depth 10,130'

Injection Interval Perforated

9270' feet to 10,045 feet
(perforated or open-hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size 2 7/8" lined with plastic set in a
5 1/2" x 2 7/8" Guiberson Double Grippacker at 9220' (type of internal coating) feet

Other type of tubing / casing seal if applicable _____

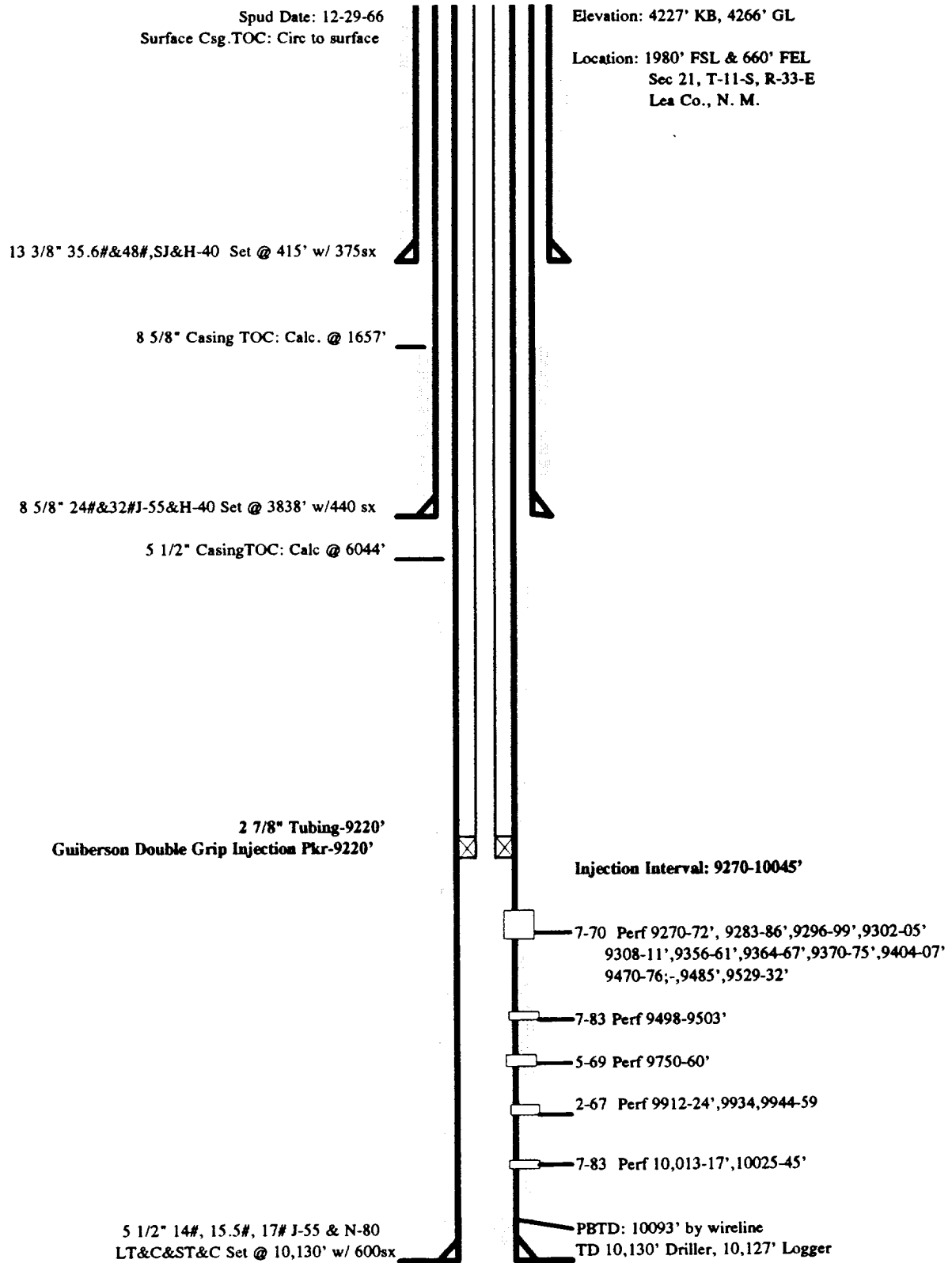
Other Data

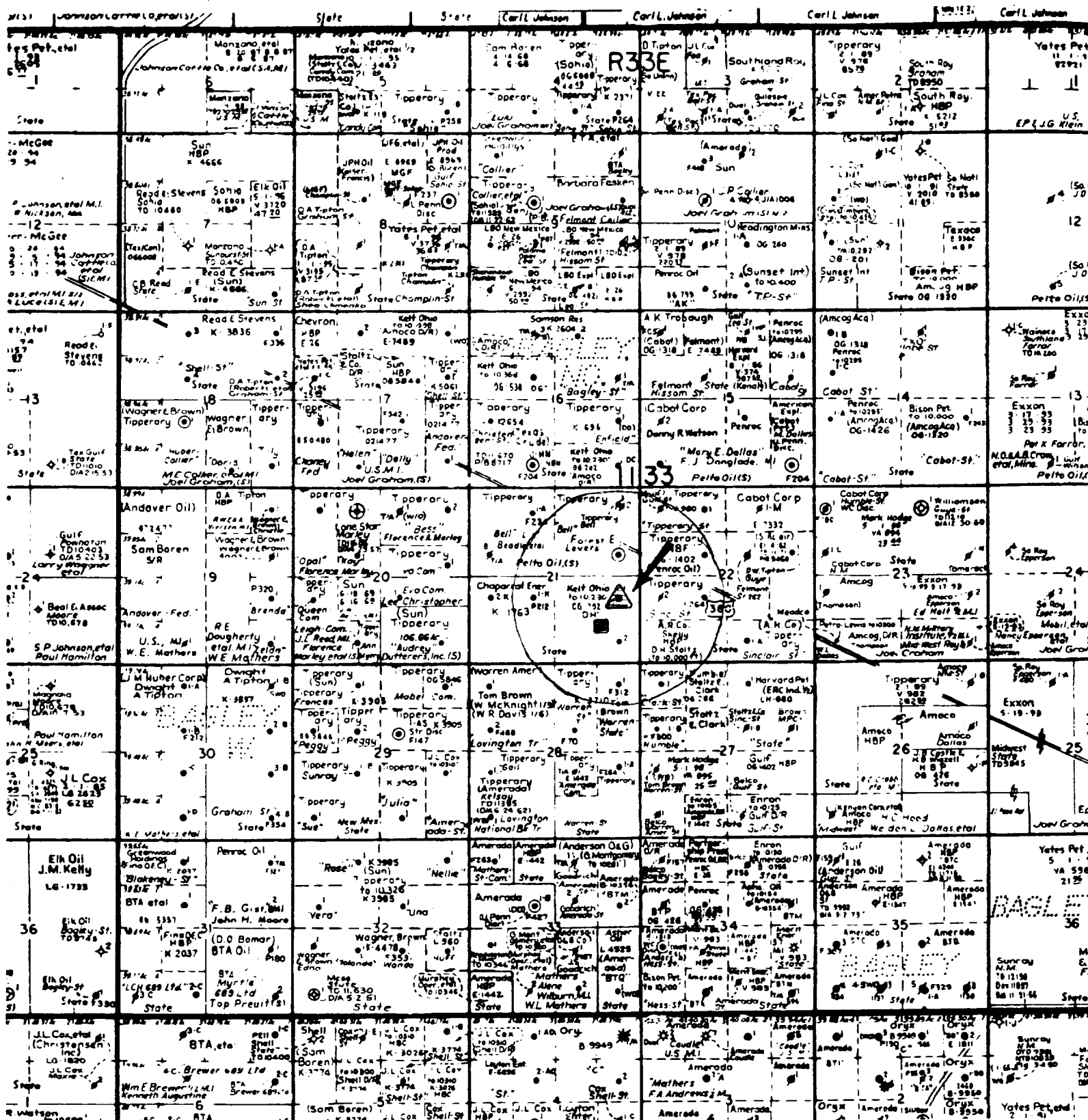
1. Is this a new well drilled for injection? Yes xx No
 If no, for what purpose was the well originally drilled? Oil production
2. Name of the injection formation Lower Penn, Strawn
3. Name of Field or Pool (if applicable) North Bagley
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e., sacks of cement or plug(s) used. _____
5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area.
 Undifferentiated Permo-Penn: approx. 9000'
 Wolfcamp Carbonate: approx. 8700'

INJECTION WELL DATA SHEET

KELT OIL & GAS, INC.

State DH #1





Offset Well Data
Area of Review
Application for Authorization to Inject
Kelt Oil & Gas Inc./State DH #1

Well Name & No.	Operator	Status/Type	TD	Date Drilled	Footage	ec, Twp, Rg	Perforations
Bell #1 (H)	Tipperary Oil & Gas	Producing Oil Well	10,109	2/26/65	1980' FNL & 660' FEL	21-11-33	9447-9129'
Bell #2 (A)	Tipperary Oil & Gas	Plugged	10,079	9/26/65	554' FNL & 554' FEL	21-11-33	9332-9343'
Bell #3 (A)	Tipperary Oil & Gas	Plugged	10,200	7/17/66	510' FNL & 660' FEL	21-11-33	9444-9848'
State K #1 (K)	Chaparral Energy Inc.	Plugged	10,240	3/2/67	1980' FSL & 1980' FWL	21-11-33	9094-9756'
State DH #2 (P)	Kelt Ohio	Producing Oil Well	10,130	12/29/66	660' FSL & 660' FEL	21-11-33	9270-10025'
Sinclair State #1 (K)	Tipperary Oil & Gas	Producing Oil Well	10,030	7/12/65	1980' FSL & 1980' FWL	22-11-33	9107-9505 Sqzd w/100 sxs.
Sinclair State #2 (L)	Tipperary Oil & Gas	Plugged	9,995	2/24/66	1980' FSL & 660' FWL	22-11-33	9146-9632'
Gulf State #1 (D)	Tipperary Oil & Gas	Plugged	10,107	4/10/65	660' FNL & 660' FWL	22-11-33	9338-9877'
State NBF #1 (F)	Tipperary Oil & Gas	Producing Oil Well	10,102	10/26/64	1980' FNL & 1980' FWL	22-11-33	9102'-9899'
Clark State #1 (D)	Tipperary Oil & Gas	Producing Gas Well	10,210	9/28/66	660' FNL & 660' FWL	27-11-33	9064'-10142'
Warren State #1 (A)	Tom Brown, Inc.	Producing Oil Well	10,100	5/22/67	660' FNL & 660' FEL	28-11-33	9432-9449.5'

Kelt Oil & Gas Inc.
Application for Authorization to Inject
State DH #1, Lea Co., New Mexico

Attachment VII: Data on Proposed Operation

1. Proposed average and maximum daily rate and volume of fluids to be injected.

Avg. Inj. Rate: 400 BWPD Max. Inj. Rate: 1000 BWPD

2. System Open or Closed?

System is a closed system.

3. Proposed average and maximum injection pressure:

Avg. Inj. Pres. < 500# Max. Inj. Pres. 1800#

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water.

We will reinject produced water from the same formation as the disposal zone from the following leases:

Kelt Oil & Gas, Inc.	State DK Lease	Loc: 17-11S-33E
Kelt Oil & Gas, Inc.	State DG Lease	Loc: 16-11S-33E
Kelt Oil & Gas, Inc.	State DC Lease	Loc: 16-11S-33E
Kelt Oil & Gas, Inc.	State DH Lease	Loc: 21-11S-33E

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.)

Not Applicable.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 594203
SAMPLE RECEIVED 5-31-94
RESULTS REPORTED 6-1-94

COMPANY Prime Operating Company LEASE

FIELD OR POOL _____

SECTION 21 BLOCK SURVEY T-11S & R-33E COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO 1 Raw water - taken from water well. 5-28-94

NO. 2 _____

NO. 3

NO. 4

REMARKS: Sample taken by Runell Seale

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0015			
pH When Sampled				
pH When Received	7.60			
Bicarbonate as HCO ₃	239			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	310			
Calcium as Ca	98			
Magnesium as Mg	16			
Sodium and/or Potassium	60			
Sulfate as SO ₄	169			
Chloride as Cl	48			
Iron as Fe	0.05			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	629			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	12.95			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	2.4			

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

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

Legal Notice

~~a not numbered~~ ~~index~~

..... ~~Country~~ ~~was published in a regular and~~

~~Courts of 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(s) of the week, for one (1) day

_____ ~~has been~~ **is** a contributor, beginning with the issue of _____

May 31, 1994

and ending with the issue of

May 31 19 94

And that the cost of publishing said notice is the

sum of \$ 11.46

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

Subscribed and sworn to before me this 1st

day of June, 1994

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 94

LEGAL NOTICE

Kelt Oil & Gas, Inc.; c/o Prime Operating Company, 731 W. Wadley, Bldg. L-220, Midland, Texas 79705, Phone No. 915-682-5600, Mr. Earl Lovea, Contact Party, is applying to the New Mexico Oil Conservation Division for a permit to dispose of produced salt water by well injection into the State DH #1, located 1980' FSL and 660' FEL of Sec. 21, Twp. 11-S, Rge. 33-E, Lea Co., New Mexico. Injection will be into the Lower Penn and Strawn formations at a depth of 9270' to 10,045'. Expected maximum injection rate will be 650 BWPD at a maximum pressure of 1500#. All interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87504-2088 within 15 days from the date of this notice. Published in the Lovington Daily Leader May 31, 1994.