CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: Pennwell Energy Corp. Well: ORE IDA '14' Fed No. 10

Contact: John Gray Title: Sr. Prod. Eng. Phone: 915-683-2534

DATE IN 11.17.97 RELEASE DATE 12-2-97 DATE OUT 2-23-98

Proposed Injection Application is for: ___ **WATERFLOOD** ___ Expansion ___ Initial

Original Order: R-_____ XX Secondary Recovery ___ Pressure Maintenance

SENSITIVE AREAS X **SALT WATER DISPOSAL** ___ Commercial Well

___ WIPP ___ Capitan Reef

Data is complete for proposed well(s)? YES Additional Data Req'd _____

AREA of REVIEW WELLS

12 Total # of AOR 0 # of Plugged Wells

YES Tabulation Complete 1 Schematics of P & A's

YES Cement Tops Adequate ___ AOR Repair Required

INJECTION FORMATION

Injection Formation(s) Bell Canyon Compatible Analysis YES

Source of Water or Injectate Bone Springs + Brushy Canyon Production

PROOF of NOTICE

✓ Copy of Legal Notice ✓ Information Printed Correctly

✓ Correct Operators ✓ 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: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

2nd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

3rd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

SWD 12/2/97
695

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Oil Conservation Div.
2040 Pacheco St.
Santa Fe, NM 87505

FORM C-108
Revised 7-1-81

NOV 17 1997

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ____ Secondary Recovery ____ Pressure Maintenance X Disposal ____ Storage
Application qualifies for administrative approval? X Yes ___ No

II. OPERATOR: Penwell Energy, Inc.

ADDRESS: 600 N. Marienfeld, Suite 1100, Midland, TX 79701

CONTACT PARTY: John T. Gray, Senior Production Engineer PHONE: 915-683-2534

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 X No
If yes, give the Division order number authorizing the project _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate 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/1 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 source 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 T. Gray TITLE: Senior Production Engineer

SIGNATURE: John T. Gray DATE: 10/24/97

* 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. _____

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.

November 14, 1997

State of New Mexico
Energy, Minerals, and Natural
Resources Department
Oil Conservation Division
2040 Pacheco Street
Santa Fe, New Mexico 87505
Attn: Mr. David Catanach

NOV 17 1997

Re: Permit to inject produced water in Sec 14, T24S, R29E, Eddy County, New Mexico

Enclosed is Penwell Energy, Inc.'s APPLICATION FOR AUTHORIZATION TO INJECT into Penwell's Ore Ida "14" Federal # 10. This application is to inject water produced from the Bone Springs Formation at an interval between 7750' and 8115' and the Brushy Canyon Formation at an interval of 6668' to 6704' into the Bell Canyon Formation at perforations between 3210' and 3618'.

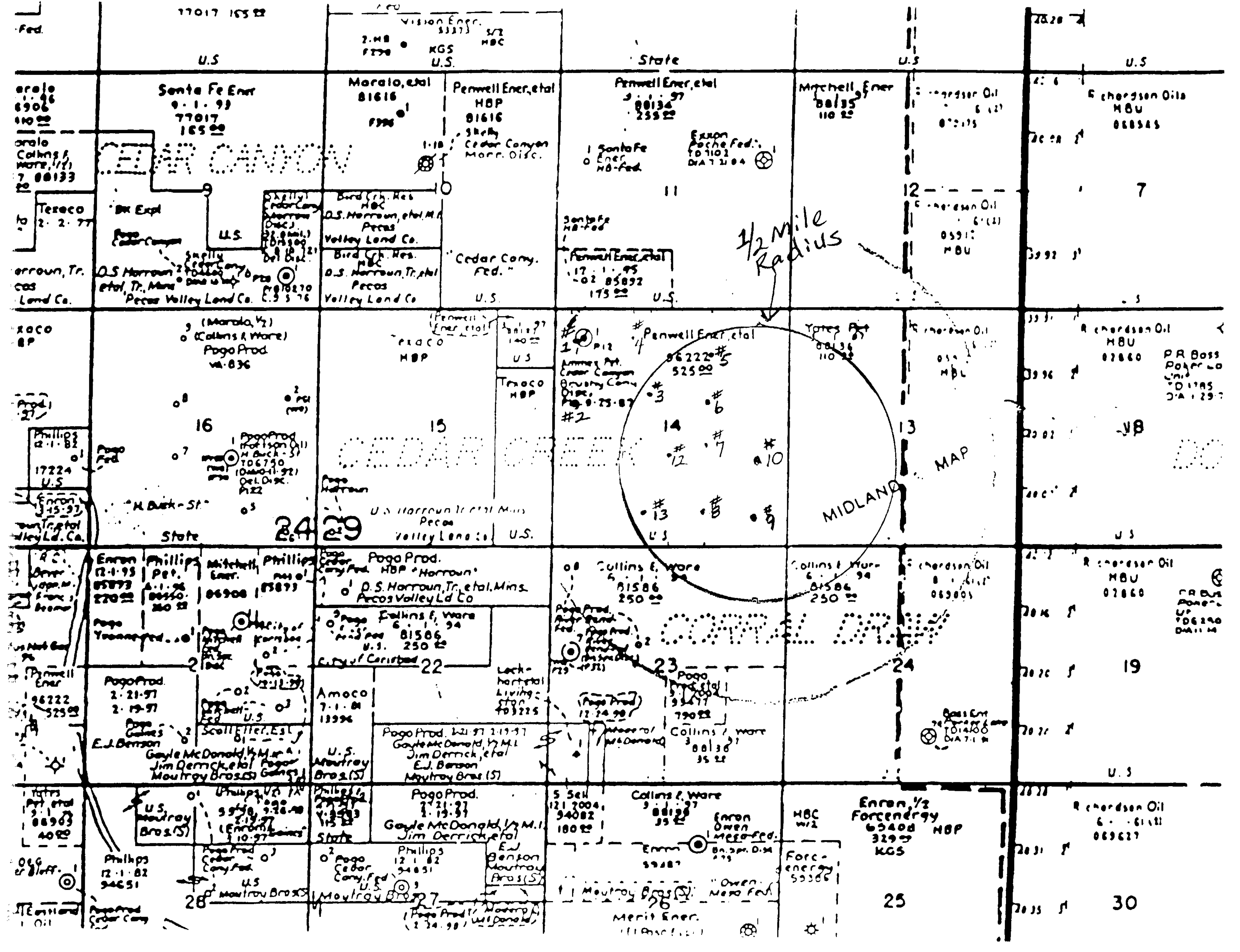
In support of this application, the following items are attached:

1. A map identifying all wells and leases within two miles of the proposed well with a one-half mile radius circle drawn around the proposed injection well.
2. All wells within the one-half mile radius area of review are wells that belong to Penwell Energy, Inc. All offset lease owners have been notified as shown by the enclosed certified mail receipts.
3. Data on the proposed operation.
4. Geologic data.
5. The only stimulation required was a small acid treatment to insure that the perforations were open.
6. Water analysis from the two tank batteries that will go to this injection well, a water analyis from the Bell Canyon from well # 10, and compatibility test of the mixed waters. There is only a very minor scaling tendency in these mixed waters.
7. Electric logs.
8. Injectivity tests in the Bell Canyon.
9. A search of records by Renee Romero of the New Mexico State Engineers Office reveals no water wells within a one mile radius of this well. In Sec 7, there are three water wells that all have chlorides in excess of 2000 ppm. In Sec 29, there is a single water well that has chlorides in excess of 5800 ppm.
10. Available geologic and engineering data has been examined and there is no evidence of open faults or other hydrologic connections between any source of drinking water and the Bell Canyon Formation.
11. Proof of Notice to the BLM, the surface owner, and the legal advertisement in the Carlsbad Current Argus newspaper.
12. The well data sheet and a full page wellbore schematic.

Your consideration of this proposal is greatly appreciated.

John T. Gray

Cc: Tim Gumm, OCD in Artesia


1/2 Mile Radius
MIDLAND MAP
CEDAR CANYON
CEDAR CREEK
CORRAL DRAW
Santa Fe Ener
9-1-93
77017
165.00
Moralo, etal
81616
Penwell Ener, etal
HBP
81616
Skelly
Cedar Canyon
Morr. Disc.
Penwell Ener, etal
88134
255.00
Exxon
Poche Fed.
Mitchell Ener
88135
110.00
Richardson Oil
HBU
Texaco
2-2-77
BK Expl
Pogo
Cedar Canyon
D.S. Harroun, etal, Tr., Mins
Pecos Valley Land Co.
Bird Crk. Res.
HBC
D.S. Harroun, etal M.I.
Pecos
Valley Land Co.
Cedar Cany.
Fed.
Santa Fe
HB-Fed.
Penwell Ener, etal
17-1-95
85892
175.00
Vision Ener.
KGS
HBC
U.S.
State
(Moralo, 1/2)
(Collins & Ware)
Pogo Prod.
Texaco
HBP
Penwell Ener, etal
96222
525.00
Yates Pet
88136
110.00
Ammex Pet.
Cedar Canyon
Phillips
12-1-82
17224
Pogo Prod.
Harroun Oil
H. Buck - St
Pogo Fed
Pogo Harroun
U.S. Harroun Tr. etal Mins
Pecos
Valley Land Co
P.R. Bass
Poker Lake Unit
16
15
14
13
11
12
7
18
19
22
23
24
25
26
27
28
30
#1
#2
#3
#4
#5
#6
#7
#8
#9
#10
#12
#13
Enron
12-1-95
85873
220.00
Phillips Pet.
Mitchell Ener.
86908
Pogo Prod.
HBP "Harroun"
D.S. Harroun, Tr., etal, Mins.
Pecos Valley Ld. Co.
Collins & Ware
81586
250.00
Pogo
Youngerfed.
Pogo Prod.
Collins & Ware
6-1-94
81586
U.S.
250.00
City of Carlsbad
Penwell Ener
96222
525.00
Pogo Prod.
2-21-97
2-19-97
Pogo
Gaines
E.J. Benson
Gayle McDonald, 1/2 M.I.
Jim Derrick, etal
Moutray Bros (5)
Scott Exler Est
Amoco
7-1-81
13996
U.S.
Moutray
Bros (5)
Lock-
hartetal
Living-
ston
Pogo Prod.
12-24-90
Pogo
Collins & Ware
88136
Pogo Prod.
Gayle McDonald, 1/2 M.I.
Jim Derrick, etal
E.J. Benson
Moutray Bros (5)
Yates
Pet. etal
88963
Phillips
12-1-82
94651
U.S.
Moutray
Bros (5)
Pogo Prod.
Cedar
Cany. Fed.
Pogo
Cedar
Cany. Fed.
Phillips
12-1-82
94651
U.S.
Moutray Bros
S. Sell
121 2004
94082
180.00
Collins & Ware
Enron
Owen
Mesa-Fed.
Moutray Bros (5)
Merit Ener.
HBC
W/2
Forc-
energy
Enron, 1/2
Forcenergy
65408
329.00
KGS
HBP
Richardson Oil
HBU

WELLS WITHIN THE RADIUS OF REVIEW
SECTION 14, T24S, R29E, EDDY COUNTY, NEW MEXICO

WELL #	TYPE	CONSTRUCTION	DATE DRILLED		LOCATION	DEPTH	RECORD OF COMPLETION
			SPUD	COMPLETION			
1	Oil	Rotary	3/7/96	6/4/96	480' FWL, 660' FNL	8122'	YES
2	Oil	Rotary	2/20/97	4/11/97	330' FWL, 1980' FNL	8350'	YES
3	Oil	Rotary	8/8/96	9/10/96	2050' FWL, 1830' FNL	8105'	YES
4	Oil	Rotary	10/30/96	11/15/96	1650' FWL, 660' FNL	8350'	YES
5	Oil	Rotary	11/30/96	3/8/97	1705' FEL, 935' FNL	8350'	YES
6	Oil	Rotary	12/21/96	4/2/97	1780' FEL, 1980' FNL	8350'	YES
7	Oil	Rotary	1/28/97	3/16/97	1780' FEL, 2180' FSL	8354'	YES
8	Oil	Rotary	1/9/97	4/6/97	1830' FEL, 760' FSL	8340'	YES
9	Oil	Rotary	4/6/97	5/9/97	760' FEL, 560' FSL	8350'	YES
10	Oil	Rotary	4/25/97		860' FEL, 1780' FSL	8350'	NO, Will be filed upon approval of injection.
12	Oil	Rotary	3/17/97	4/5/97	2480' FWL, 1980' FSL	8332'	YES
13	Oil	Rotary	4/8/97	4/21/97	1980' FWL, 660' FSL	8350'	YES

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
SANTA FE ENERGY
550 W. TEXAS, STE. 330
MIDLAND, TX 79701

4a. Article Number
Z 740 499 010

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
10-27-97

5. Received By: (Print Name)
Ardella "14" #6

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Ardella Coats

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Pogo Producing Co.
P.O. Box 10340
Midland, Tx 79702

4a. Article Number

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☒ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
NOV - 3 1997

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mitchell Energy
P.O. Box 4000
The Woodlands, TX 77387-4000

4a. Article Number
Z 740 489 009

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
10/27/97

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Texaco
P.O. Box 46513
Denver, CO. 80201

Dr# Dola "14"

4a. Article Number

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
10/24/97

5. Received By: *(Print Name)*
Reime

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Collins & WARE
508 W. WALL, Suite 1200
MIDLAND, TX 79701

4a. Article Number

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994

Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

YATES Petroleum
105 4th St.
Artesia, NM 88210

4a. Article Number

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
10-27-97

5. Received By: *(Print Name)*
JOANN GRIGGS

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X JoAnn Griggs

PS Form **3811**, December 1994

Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

DATA ON PROPOSED OPERATION
PENWELL ENERGY, INC.
ORE IDA "14" FEDERAL # 10
SEC 14, T24S, R29E, EDDY COUNTY, NEW MEXICO

The proposed operation is to set two 500-barrel water tanks on the well pad, plumb in a triplex pump, and pump into the well down plastic coated tubing. A packer will be set at 3150' to insure that the surface casing is not subjected to pressure. Annulus pressure and surface casing pressure will be monitored as required. Water will be transferred from the production batteries by way of plastic lines laid on the surface, which follow existing lease roads. Any surface leaks will be detected on the pumpers daily visits to the wells and batteries.

The proposed average injection volume of produced water is anticipated to be 1500 BWPD.

The proposed maximum injection volume is 3500 BWPD.

The system will be a closed system.

The proposed average injection pressure will be 1000 psig.

The proposed maximum injection pressure will be 2000 psig.

The source water will be Bone Springs and Brushy Canyon Formation water. Compatibility tests have been run and show only a minor tendency for scaling.

An injectivity test was performed on the Bell Canyon perfs, which shows the zone will take water at the desired rates and pressures. No fracturing of the formation was indicated during this test.

GEOLOGIC DATA
PENWELL ENERGY, INC.
ORE IDA "14' FEDERAL # 10
SEC 14, T24S, R29E, EDDY COUNTY, NEW MEXICO

The proposed injection zone is the Bell Canyon Formation which is comprised mainly of sandstone. The top of the Bell Canyon is at 3100' and is approximately 1000' thick.

The only underground source for drinking water is surface rock, clay, sand and intermingled red beds at the surface to a depth of 350'.

Other geologic marker tops are:

Lamar	3050'
Brushy Canyon	5500'
Bone Springs	6800'
1st Bone Springs	7100'

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

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

RESULT OF WATER ANALYSES

LABORATORY NO. 1097136
SAMPLE RECEIVED 10-17-97
RESULTS REPORTED 10-21-97

TO: Mr. John Gray
600 N. Marienfeld, Ste 1100, Midland, TX 79701

COMPANY Penwell Energy, Inc. LEASE Ore Ida "14" Federal #10
FIELD OR POOL Pearce Crossing
SECTION ____ BLOCK ____ SURVEY ____ COUNTY Eddy STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Ore Ida "14" Federal #10. 10-15-97
NO. 2 Produced water - taken from "A" battery. 10-15-97
NO. 3 Produced water - taken from "B" battery. 10-15-97
NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1185	1.1278	1.1258	
pH When Sampled				
pH When Received	6.23	6.59	6.75	
Bicarbonate as HCO_3	117	556	508	
Supersaturation as $CaCO_3$	4	88	48	
Undersaturation as $CaCO_3$	--	--	--	
Total Hardness as $CaCO_3$	34,000	9,600	8,600	
Calcium as Ca	10,400	2,920	2,560	
Magnesium as Mg	1,944	559	535	
Sodium and/or Potassium	58,140	73,366	71,046	
Sulfate as SO_4	74	389	395	
Chloride as Cl	113,630	119,312	115,051	
Iron as Fe	105	68.8	32.3	
Barium as Ba	0	0	0	
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	184,305	197,102	190,094	
Temperature °F.				
Carbon Dioxide, Calculated	129	289	167	
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohms/m at 77° F.	0.061	0.059	0.060	
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Calcium Carbonate Scaling Tendency	None	Marginal	None	
Calcium Sulfate Scaling Tendency	None	None	None	
Barium Sulfate Scaling Tendency	None	None	None	

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The objective herein is to evaluate compatibility between the waters represented. A careful comparison fails to reveal evidence of any incompatibility. This is to say that any combination of these waters would not be expected to result in any precipitation or scaling potential. Contact us if we can be of any additional assistance in this matter.

Form No. 3

By _____
Waylan C. Martin, M.A.

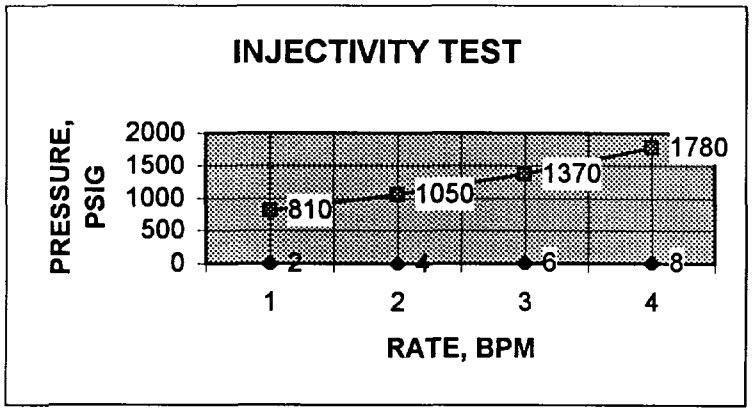
ORE IDA "14" FEDERAL ,# 10

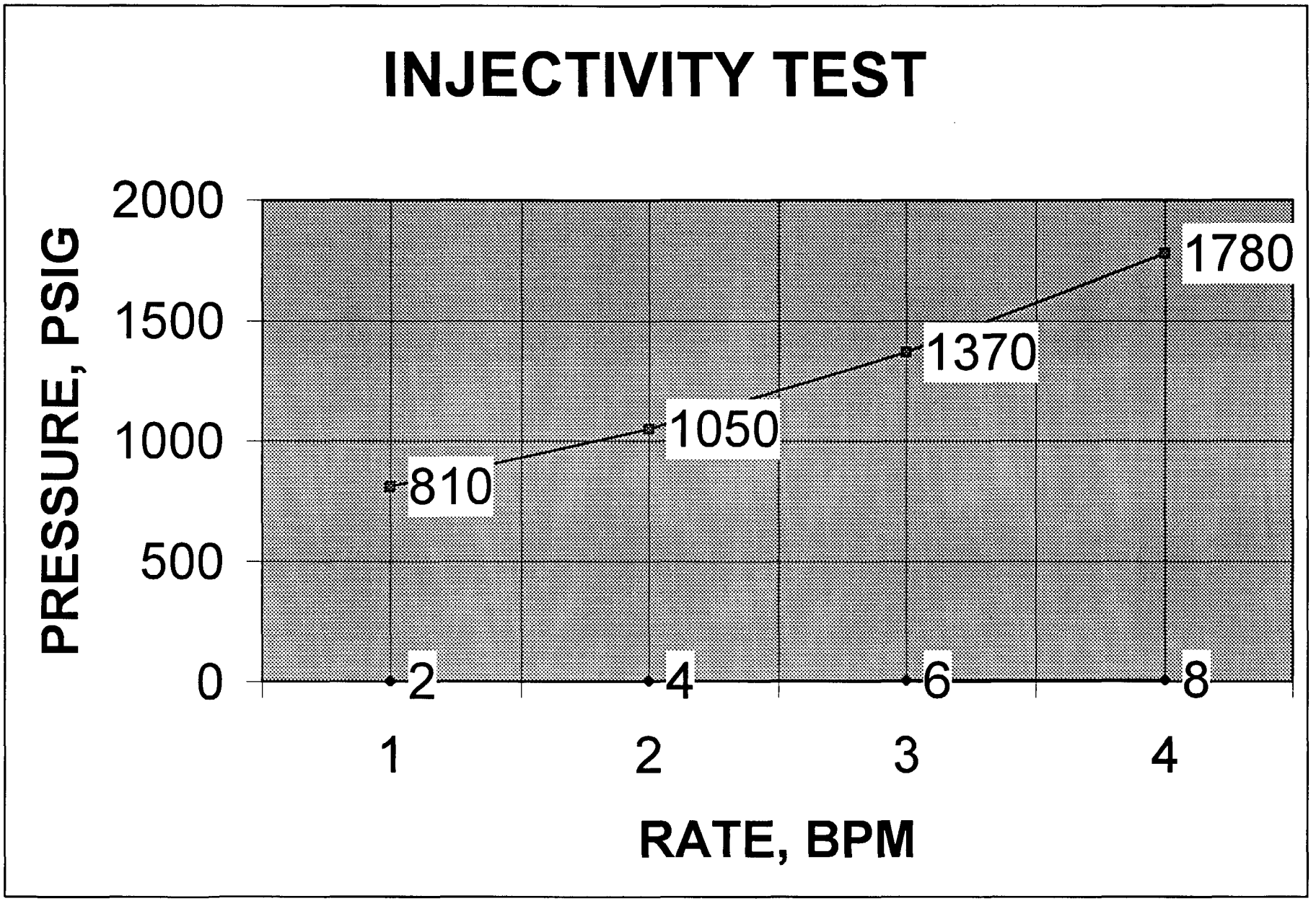
INJECTIVITY TEST

Test Date 10-16-1997

Perfs: Bell Canyon, 3210' - 3618'

RATE BPM	PRESSURE PSIG
2	810
4	1050
6	1370
8	1780




INJECTIVITY TEST
PRESSURE, PSIG
2000
1500
1000
500
0
810
1050
1370
1780
2
4
6
8
1
2
3
4
RATE, BPM

Affidavit of Publication

№ 18893

State of New Mexico,
County of Eddy, ss.

Amy McKay,
being first duly sworn, on oath says:

That she is Business Manager of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

October 23, 19 97
_____, 19____
_____, 19____
_____, 19____
_____, 19____
_____, 19____

That the cost of publication is $ 34.46, and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this
27th day of October, 1997

Donna Crump

My commission expires 8/1/98
Notary Public

October 23, 1997

NOTICE OF INTENT TO INJECT PRODUCED WATER

PENWELL ENERGY, INC.
600 N. Marienfeld
Suite 1100
Midland, Texas 79701

Contact Person: John T. Gray, Senior Production Engineer: 915/683-2534

The purpose is to inject water produced from the Bone Springs Formation at an interval of 7750' to 8115' and the Brushy Canyon Formation at an interval of 6668' to 6704' into the Bell Canyon Formation at an interval of 3210' to 3618' in PENWELL ENERGY, INC.'s Ore Ida "14" Federal Well #10.

The well is located 1780' FSL, 860' FEL, Sec 14, T26S, R29E, Eddy County New Mexico.

The produced water is from wells Penwell operates that are all located in Sec 14, T26S, R29E.

The injection perforations are in the Bell Canyon Formation at 3210' - 3240', 3252' - 3276', 3284' - 3326', 3382' - 3426', 3454' - 3483', 3504' - 3520', & 3606' - 3618'.

The maximum injection rate expected is 3500 BWPD.

The maximum injection pressure expected is 2500 PSIG.

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.

MW02997

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
BLM
2909 W. 2nd.
Roswell, NM 88201-2019

4a. Article Number
Z 740 499 006

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
10-23-97

5. Received By: *(Print Name)*
Ore Oda "14" #10

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

INJECTION WELL DATA SHEET

OPERATOR Penwell Energy, Inc. LEASE Ore Ida "14" Federal

WELL NO. 10, 1780' FSL & 860' FEL (FOOTAGE LOCATION) 14, (SECTION) 24S (TOWNSHIP) 29E (RANGE)

Schematic

Well Construction Data

Surface Casing

Size 13 3/8" " Cemented with 325 sx.

TOC Surface feet determined by Circulation

Hole Size 17 1/2"

Intermediate Casing

Size 8 5/8 " Cemented with 1200 sx.

TOC Surface feet determined by Circulation

Hole Size 12 1/4"

Long String

Size 5 1/2 " Cemented with 1230 sx.

TOC 2500' feet determined by CBL

Hole Size 7 7/8"

Total Depth 8350'

Injection Interval Perforations

3210 feet to 3618 feet

(perforated or open-hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size 2 7/8" lined with Plastic Coated (type of internal coating) set in a Baker AD-1 packer at 3150' feet

Other type of tubing / casing seal if applicable _____

Other Data

1. Is this a new well drilled for injection? ____ Yes X No

   If no, for what purpose was the well originally drilled? Oil & Gas Production.

   Well was not an economic well in the Bone Springs.

2. Name of the injection formation Bell Canyon

3. Name of Field or Pool (if applicable) E. Pierce Crossing

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. Yes, Bone Springs @

   7951'-55', 7990'-96' which are isolated by a CIBP & 6 sx. of cement.

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

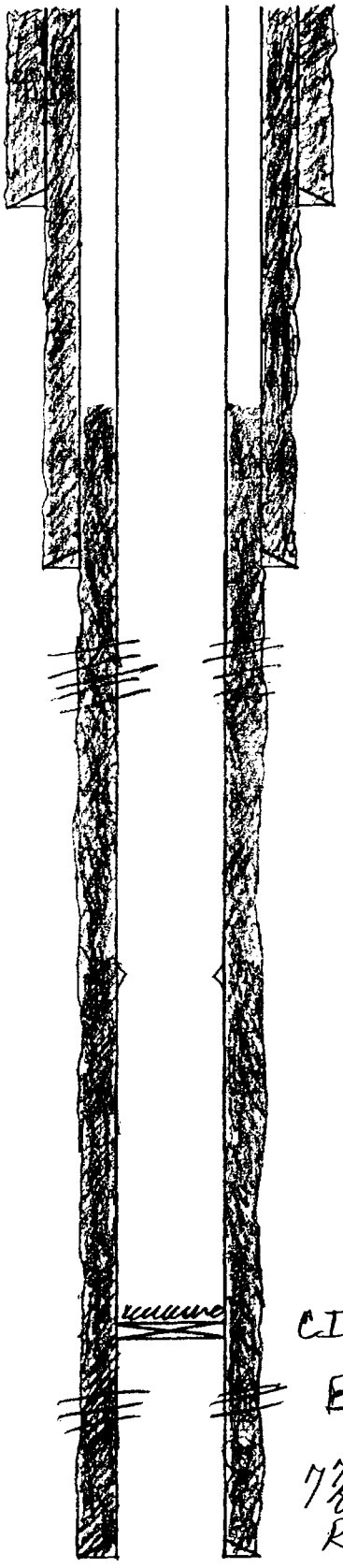
   Potential in Bell Canyon below 3720'

   Brushy Canyon below 5500'

   Bone Springs below 6800'

11-14-97

Ore Ida "14" Federal #10.
Wellbore Diagram.



17½" Hole.
Ran 8 jts (369.66') of 13⅜", 48#, H-40 Csg to 362'.
Cmt w/ 325 sx Class "C" Cmt. w/ additives.
Circ 40 sx to Surface.

12¼" Hole.
Ran 71 jts (3147.43') of 8⅝", 32#, J-55 Csg to 3141'.
Cmt w/ 950 sx "C" Lite + additives followed by
250 sx "C" + 2% Ca Cl2.
Circ 220 sx to Surface.

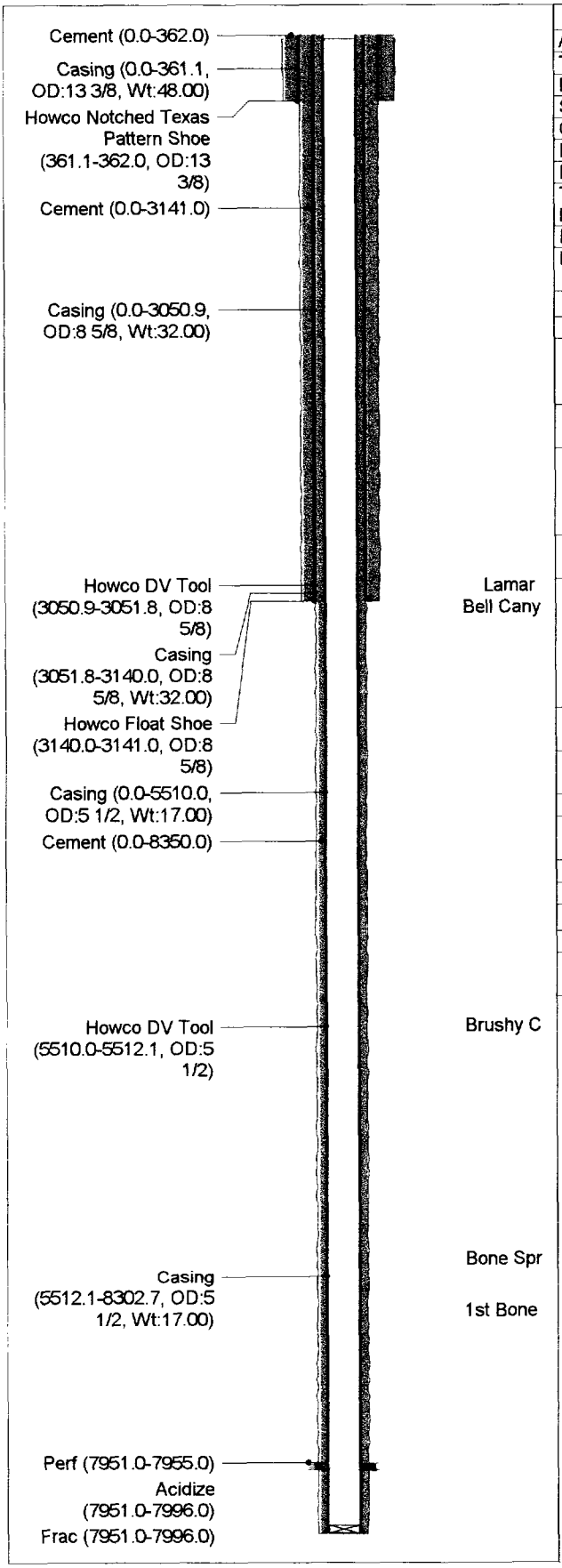
Bell Canyon Perfs: 3210'-40', 52'-76', 3284'-3326',
3382'-3426', 54'-83', 3504'-20', 3606'-3618'.

DV Tool @ 5,532.76'

CIBP @ 7890'. Dump 25x Cmt on Plug.

Bone Springs Perfs: 7951'-7955' & 7990'-7996'.

7⅞" Hole.
Ran 190 jts (8361.38') of 5½", 17#, J-55 Csg to 8350'.
Cmt 1st Stage w/ 600 sx "H" + additives. Circ 6 sx.
2nd Stage w/ 280 sx "C" Lite + additives F/B 350 sx "H" + adds.



Ore Ida 14 Federal #10

API Code	30-015-0000	Field Code	
TD	8350.0 ftKB	Basin	Permian
PBTD	8306.0 ftKB	Basin Code	
State	NM	Permit	
County	Eddy	Spud	4/25/97
District		Finish Drl	5/16/97
Permit No.		Completion	
TD Measured	8350	Abandon	
Reservoir	Bone Spring		
Field	East Pierce Crossing		

Event History

Date	Event	Description
4/25/97	Cas Run	13 3/8 in Casing, Jnts: 8, ID: 12 23/32in, 13 3/8 in Howco Notched Texas Pattern Shoe, Jnts: 1, ID: 0in
4/25/97	Cas Cmnt	Surface Casing, Top Found At 0.0ftKB, Amnt 7*
5/2/97	Cas Run	8 5/8 in Casing, Jnts: 69, ID: 7 59/64in, 8 5/8 in Howco DV Tool, Jnts: 1, ID: 0in, 8 5/8 in Casing, Jnts: 2, ID: 7 59/64in, 8 5/8 in Howco Float Shoe, Jnts: 1, ID: 0in
5/2/97	Cas Cmnt	Intermediate 1 Casing, Top Found At 0.0ftKB, Amnt 24*
5/15/97	Cas Run	5 1/2 in Casing, Jnts: 127, ID: 4 57/64in, 5 1/2 in Howco DV Tool, Jnts: 1, ID: 0in, 5 1/2 in Casing, Jnts: 62, ID: 4 57/64in, 5 1/2 in Howco Float Collar, Jnts: 1, ID: 0in, 5 1/2 in Casing, Jnts: 1, ID: 4 57/64in, 5 1/2 in Howco Float Shoe, Jnts: 1, ID: 0in
5/15/97	Cas Cmnt	Production Casing, Top Found At 0.0ftKB, Amnt 25*
5/21/97	Other Run	Plug Back, 8306.0 - 8350.0ftKB, OD: 4 57/64in
5/23/97	Log	CBL, 2500.0 - 8306.0ftKB, Western Atlas
5/23/97	Perf	7951.0 - 7955.0ftKB, 1.0/ft, Jet, 7990.0 - 7996.0ftKB, 1.0/ft, Jet
5/24/97	Stim/Treat	Acidize, 7951.0 - 7996.0ftKB
5/28/97	Stim/Treat	Frac, 7951.0 - 7996.0ftKB

Events Without Dates

Event	Description
Bore Hole	17 1/2in, Depth 362.0ftKB, 12 1/4in, Depth 3141.0ftKB, 7 7/8in, Depth 8350.0ftKB

OMPANY: Penwell Energy Inc.

ELL: Ore Ida "14" Federal #10

ELD: E. Pierce Crossing Bone Springs

OUNTY: Eddy STATE: New Mexico

Schlumberger

Dual Laterolog
Micro-SFL
Gamma Ray

LOCATION

1780' FSL and 860' FEL

Elev.: K.B. 3031 F
G.L. 3017 F
D.F. 3030 F

Permanent Datum: Ground Level Elev.: 3017 F
Log Measured From: Kelly Bushing 14.0 F above Perm. Datum
Drilling Measured From: Kelly Bushing

API Serial No.	SECTION	TOWNSHIP	RANGE
	14	24S	29E

Field: E. Pierce Crossing Bone Spring
Location: 1780' FSL and 860' FEL
Well: Ore Ida "14" Federal #10
Company: Penwell Energy Inc.

gging Date		12 May 1997					
Number		One					
oth Driller		8350 F					
lumberger Depth		8355 F					
tom Log Interval		8355 F					
Log Interval		3140 F					
sing Driller Size @ Depth		8.625 IN	@	3138 F		@	
sing Schlumberger		3140 F					
Size		7.750 IN					
e Fluid In Hole		Cut Brine					
nsity	Viscosity	9 LB/G	30 S				
id Loss	PH	9.8 C3	10				
urce Of Sample		Flowline					
@ Measured Temperature		0.010 OHMM	@	78 DEGF		@	
F @ Measured Temperature			@			@	
C @ Measured Temperature			@			@	
urce RMF	RMC						
@ MRT	RMF @ MRT	0.007 @ 120		@ 120	@		@
ximum Recorded Temperatures		120 DEGF					
culation Stopped	Time	12 May 1997		15:00			
gger On Bottom	Time	12 May 1997		20:43			
t Number	Location	3005	Roswell, N.M.				
corded By		Trevor Speldrich / Stephen Totterman					
nessed By		Corky Stewart					

MUD