

BW - 30

**GENERAL
CORRESPONDENCE**

YEAR(S):

2005 → 2001



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

March 16, 2005

Mark E. Fesmire, P.E.
Director

Joanna Prukop
Cabinet Secretary

Oil Conservation Division

Mr. Gary Schubert
H.R.C. Inc.
P.O. Box 5102
Hobbs, New Mexico 88241

Re: Discharge Plan Approval Conditions
H.R.C. Inc. State #10 Brine Station BW-030
Lea County, New Mexico

Subject: Notice of deficiency

Dear Mr. Schubert:

The groundwater discharge plan for the State #10 Brine Well and Station BW-030 operated by H.R.C. Inc. located in SE/4 NW/4 of Section 29, Township 18 South, Range 38 East, and NW/4 NE/4 Section 29, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico was approved on May 29, 2002 with conditions. OCD is hereby notifying HRC of the following discharge plan deficiencies:

1. HRC has not submitted the 2004 annual report. Please ensure that all information required to be submitted is included. See conditions #'s 6,7,13, 14,23, 24, and 25.
2. HRC conducted the brine well mechanical integrity tests without it being witnessed by OCD. See condition # 5.
3. HRC has not fulfilled condition #26. Properly plugging and abandoning the Hobbs State #5 well located 300-400 feet northwest of the permitted brine well.

HRC is hereby ordered to correct these deficiencies within 60 days. If you have any questions please do not hesitate to contact me at 505-476-3487 or e-mail

WPRICE@state.nm.us.

Sincerely;

A handwritten signature in black ink, appearing to read "Wayne Price".

Wayne Price- Environmental Engr.

cc: OCD Hobbs Office

Environmental Facility Inspection

Facility Name	HOBBS STATE #5	Time Out	10:00	Time In	10:30	Hrs	
Inspector	Wayne Price	Dt Mod	8/23/2004	Purpose	Normal Routine Activity		
Inspection Date	08/19/2004	Inspect No.	ELWFP0423654013	Type	Field Inspection		

Violations / Documentation

List Violations or Indicate Compliance	Specific Violation	Additional Violation Notes
	No Violations Identified - All O.K.	

Documentation Acquired: Samples Statements Sketch Video Photos

Compliance Items (Checked Items Denote Non-Compliance)

Write Compliance Based on this Inspection

- Drums Process AG Tanks AG Saddle Tk Labeling Tanks/Sumps Permits
 UG Lines WD Practice Class V Housekeepin Spill Rpt Potential ENV Wtr Wells

Describe Remedial Action Required

Drilling pit still has some salt residue. Per telephone conversation with Mr. Schubert on 8/23/04 he will remove salt stained soil.

Use [SHIFT] + [F2] to Expand any Notes or Comment Field



Price, Wayne

From: Price, Wayne
Sent: Thursday, July 29, 2004 3:18 PM
To: 'garymschubert@aol.com'
Subject: Brine well BW-30

Contacts: Gary Schubert

631-0962
cell

Dear Gary:

Attention Brine Well Operators:

Last year several operators complained about the scheduling of the brine well testing. As a result of those complaints OCD is allowing each Brine well operator to schedule their own test. Test must be conducted before December 31, 2004 and witnessed by OCD. Please return this E-mail by August 13, 2004 notifying OCD the date of your test. OCD will make arrangements to have an inspector witness the test.

In addition, please note Item 26. of your permit conditions have not been complied with. Please provide this office a date of compliance.

Sincerely:

Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us

Price, Wayne

From: Beckham, Denise (DKBE) [DKBE@chevrontexaco.com]
Sent: Friday, May 24, 2002 11:09 AM
To: 'Price, Wayne'
Subject: RE: HRC Inc Brine well -BW-030

Mr. Price, ChevronTexaco does not intend to request a hearing. Please advise if you need additional information. Denise Beckham

-----Original Message-----

From: Price, Wayne [mailto:WPrice@state.nm.us]
Sent: Tuesday, May 21, 2002 4:11 PM
To: 'dkbe@chevron.com'
Cc: Eddie Seay (E-mail); Williams, Chris
Subject: HRC Inc Brine well -BW-030

Dear Ms Beckham:

Please find attached the DRAFT PERMIT for the above subject site: If Chevron USA wishes to request a hearing on this matter please file within 15 days.

<<BWAPPdraft.DOC>>

Sincerely:

<<...OLE_Obj...>>

Wayne Price

New Mexico Oil Conservation Division

1220 S. Saint Francis Drive

Santa Fe, NM 87505

505-476-3487

fax: 505-476-3462

E-mail: WPRICE@state.nm.us

Price, Wayne

From: Price, Wayne
Sent: Thursday, May 23, 2002 3:18 PM
To: Price, Wayne; 'dkbe@chevron.com'
Cc: 'Eddie Seay (E-mail)'; Williams, Chris
Subject: RE: HRC Inc Brine well -BW-030

Dear Ms Beckham:

I just received your telephone message indicating that Chevron is not going to request a hearing on this matter. Thank you for your comments.

-----Original Message-----

From: Price, Wayne
Sent: Tuesday, May 21, 2002 3:11 PM
To: 'dkbe@chevron.com'
Cc: Eddie Seay (E-mail); Williams, Chris
Subject: HRC Inc Brine well -BW-030

Dear Ms Beckham:

Please find attached the DRAFT PERMIT for the above subject site: If Chevron USA wishes to request a hearing on this matter please file within 15 days.

<< File: BWAPPdraft.DOC >>

Sincerely:

<< OLE Object: Picture (Metafile) >>

Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us

Price, Wayne

From: Rick_Foppiano@oxy.com
Sent: Wednesday, May 22, 2002 2:28 PM
To: WPrice@state.nm.us
Cc: seay04@leaco.net
Subject: RE: HRC Inc. Brine Well-BW-030

OXY does not object to the granting of this permit. Thanks for keeping us in the loop on this proposal.....

Rick
Richard E. Foppiano P.E.
Senior Advisor - Regulatory Affairs
OXY Permian, Houston, Texas
Phone: 281-552-1303
Fax: 281-552-1383
E-mail: Rick_Foppiano@oxy.com

-----Original Message-----
From: Price, Wayne [mailto:WPrice@state.nm.us]
Sent: Tuesday, May 21, 2002 4:06 PM
To: 'rick_foppiano@oxy.com'
Cc: Eddie Seay (E-mail)
Subject: HRC Inc. Brine Well-BW-030

Dear Mr. Foppiano:

Please find attached the DRAFT PERMIT for the above subject site: If Oxy wishes to request a hearing on this matter please file within 15 days.

<<BWAPPdraft.DOC>>

Sincerely:
<<...OLE_Obj...>>
Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us

Price, Wayne

From: Eddie Seay

Sent: Friday, May 10, 2002 7:47 AM

To: Wayne Price

Subject: HRC Brine well

Mr. Price:

As per our conversation and your e-mail, HRC does not have any problem in increasing the pressure to 375 #. This will still keep us far below the frac pressure. If you have any other questions, please call.

Sincerely,

Eddie W. Seay

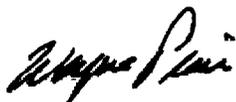
5/10/2002

Price, Wayne

From: Price, Wayne
Sent: Thursday, May 09, 2002 3:05 PM
To: 'seay04@leaco.net'
Subject: HRC Brine well

Contacts: Eddie Seay

Eddie, received your frac calculations. You indicated that the test pressure would not exceed 300 psig. Normally we require that the test pressure be 1.5 times the normal operating pressure unless it exceeds the frac pressure. $250 \times 1.5 = 375$ psig. If 375 is well under the frac pressure then we would like to see you propose that test pressure. If you (HRC) have a problem with this test pressure then please demonstrate that why it would be a problem.
Sincerely:



Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us

May 2, 2002

Wayne Price
NMOCD Environmental Bureau
P.O. Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

RECEIVED
MAY 09 2002
Environmental Bureau
Oil Conservation Division

RE: H.R.C. Brine Application BW-030
Revised information

Mr. Price:

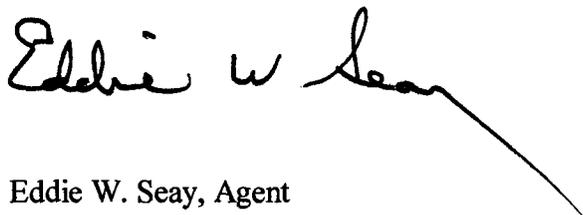
Find within a copy of the new C-103 for the plugging of Hobbs State #5, Item #1.

Also find within, information and a new calculation for the frac pressure. I received information from Monty Newton with the Texas RRC, Brine Mining Section. The Salado formation in West Texas is the same as we have in SE New Mexico.

The symbol (') in question, is for feet. This was a typing error in part 3.

If you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

BW-030

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Oil Conservation Division

Item #1 State #5 well, within is new C-103 with modifications.

Item #2 As you suggested, I contacted the State of Texas RRC for information on calculating Frac Pressures, a copy of the fax received is attached.

1700' - Depth of injection interval.

0.95 - Fracture pressure gradient - 0.95 psi/ft.

1615# - Predicted formation breakdown pressure, at injection zone or casing shoe, depth X fracture pressure.

736# - Formation breakdown pressure - hydrostatic pressure.

879# - Proposed maximum allowable surface injection pressure.

The maximum injection pressure will be 250#.

The maximum test pressure will be 300# on a recorder for 8 hrs.

Fresh water is 8.33# per gal. and .433# per ft. of depth.

The production casing is to be set at 1700 ft.

Hydrostatic pressure = .433 X depth 1700 feet = 736#

Pressure gradient = maximum surface pressure + hydrostatic pressure divided by the depth.

Pressure Gradient = $\frac{300\# + 736\#}{1700 \text{ feet}}$ = .609 psi/ft.

With the fracture pressure of the salt formation being 1615 lbs. and our operating pressure plus hydrostatic pressure not exceeding 1036 lbs. this will be below what it takes to fracture the formation. We will install Murphy shut down switches to control the pressure, and also test the cavity as the OCD requires.

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised March 25, 1999

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO.
 30-025-23662

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.
 992279

7. Lease Name or Unit Agreement Name:
 Hobbs State

8. Well No. 5

9. Pool name or Wildcat

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
 Oil Well Gas Well Other P & A well

2. Name of Operator
 H.R.C. Inc.

3. Address of Operator
 Box 5102 Hobbs, NM 88241

4. Well Location
 Unit Letter F : 2280 feet from the north line and 1980 feet from the west line
 Section 29 Township 18 S. Range 38 E. NMPM County Lea

10. Elevation (Show whether DR, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK PLUG AND ABANDON
 TEMPORARILY ABANDON CHANGE PLANS
 PULL OR ALTER CASING MULTIPLE COMPLETION
 OTHER:

REMEDIAL WORK ALTERING CASING
 COMMENCE DRILLING OPNS. PLUG AND ABANDONMENT
 CASING TEST AND CEMENT JOB
 OTHER:

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

- To drill out and re-plug:
 1) Rig up, drill out surface plug.
 2) Run in hole with tubing to base of salt + 2600' spot 25 sx plug.
 3) Cut and pull 7" casing + 1600' top of salt.
 4) Spot 100' plug 50 ft. in and out of 7" stub, and tag.
 5) Spot 100' plug 50 ft. in and out of surface shoe at 364'. Tag
 6) 10 sx surface plug.

* Hole will be loaded with salt gel.
 * OCD will be notified prior to beginning work.

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 MAY 19 2002
 Environmental Bureau
 Oil Conservation Division

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Eddie W. Seay TITLE Agent DATE 5/2/02

Type or print name Eddie W. Seay Telephone No. 392-2236

(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

WELL SCHEMATIC:
E-O-TEX HOBBS STATE #5

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.

*Present
Condition*

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

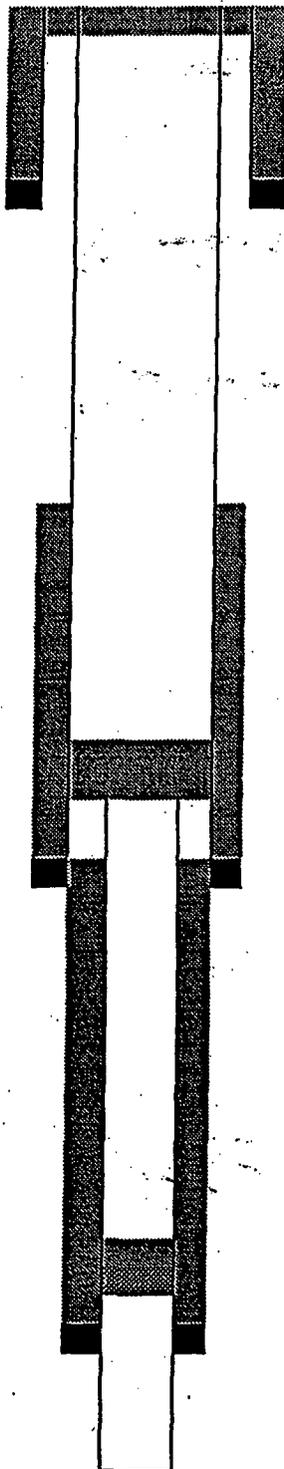
Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effic.

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Environmental Bureau
Oil Conservation Division

PBTD: 5959'

TD: 5986'

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

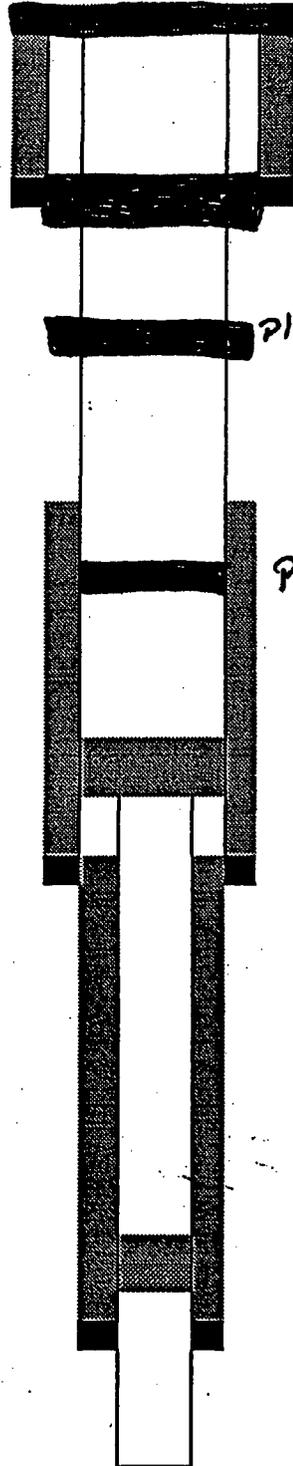


**WELL SCHEMATIC:
O-TEX HOBBS STATE #5**

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effc.

Spotted 10' cmt plug at surf.



*After re-plugging
plug at shoe and Tag*

plug at top salt ± 1400' and csg stab Tag

plug at base of salt ± 2400'

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effc.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

TD: 5986'

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Environmental Bureau
Oil Conservation Division

To:

Eddie Seay

Calculation of Allowable Surface injection pressure

1800 Depth of Injection Interval
 0.95 Fracture pressure gradient - 0.95 psi/ft
 1710 Predicted formation Breakdown Pressure (at injection zone), depth x fracture gradient
 779 Hydrostatic Pressure (Depth of injection interval x 0.433)
 931 Formation Breakdown Pressure (at surface), formation breakdown pressure - hydrostatic pressure
 93 Safety Factor (10% of Fm breakdown pressure)
 838 Proposed Maximum Allowable surface injection pressure

Example

Calculation of operating pressure (from RDH letter in 1987)

1800 depth of inj. interval
 2.31 hydrostatic column
 779 divide depth by 2.31
 0.20
 156 adding pressure drop would raise this operating pressure to 120-140# depending on the injection

Calculation of maximum allowable injection pressure from a TWC hearing

1800 depth
 0.95 psi/ft pressure gradient
 1710
 2.31 hydrostatic column
 779 depth divided by 2.31
 931 times .90 safety factor
 838

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MAY 09 2007

Environmental Bureau
Oil Conservation Division

Monty Newton
RRC
512-475-4655

Price, Wayne

From: Price, Wayne
Sent: Tuesday, April 30, 2002 3:34 PM
To: 'seay04@leaco.net'
Subject: HRC Inc Brine Well April 24, 2002 submittal

Contacts: Eddie Seay

Dear Eddie:

Item #1. State #5 well: After discussing the State #5 well with Chris Williams, it appears that another plug at the bottom of the salt will be required also. Please modify your C-103.

Item # 3. Frac Pressure calculations: Please provide documentation showing how you derived the fracture pressure of the salt section being from 1500' to 1800'.
What units are the symbol (')?? feet, lbs, psi ??

CC: Gary Schubert-HRC Inc.

April 24, 2002

NMOCD Environmental Bureau
ATTN: Wayne Price
P.O. Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

RE: H.R.C. Brine Application BW-030
Supplemental Information

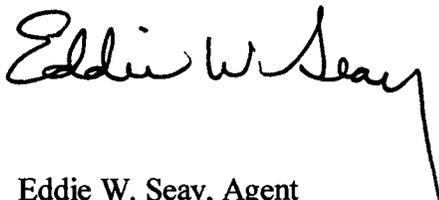
OIL CONSERVATION DIV.
02 APR 29 PM 2:07

Mr. Price:

Within is the additional information as requested in your letter dated 4/20/2002. Mr. Schubert is sending a bond covering the new Hobbs State #10. The bond which is in place, will cover the re-plugging of Hobbs St. #5. After visiting with OCD, Hobbs, a plugging procedure is being submitted to re-enter and plug #5 after drilling the Hobbs St. #10, so we can utilize the same workover rig. After the Hobbs State #5 is plugged, we will request release of bond. Within is C-103 submitted to Hobbs OCD and additional information.

If you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

BW-030

1) Re-enter and re-plug Hobbs State #5.

I visited with the Hobbs district Geologist and a plugging procedure was recommended:

- a) Rig up, drill out top plug.
- b) Run in with tubing and spot a 25 sx plug at top of salt approximately 1600'.
- c) Pull tubing to 415', spot 100' plug fifty feet in and out of a surface casing show, and tag.
- d) Spot 10 sx surface plug.
- e) Hole will be loaded with salt gel.
- f) Erect marker.

(Find copy of C-103.)

2) Mr. Schubert is sending new bond on Hobbs State #10. After plugging #5, we will request release of old bond.

3) The maximum injection pressure will be 250#.

The maximum test pressure will be 500# on a recorder for 8 hrs.

Fresh water is 8.33# per gal. and .433# per ft. of depth.

The production casing is to be set at 1700'.

Hydrostatic pressure = .433 X depth 1700' = 736 lbs.

Pressure gradient = surface pressure + hydrostatic pressure divided by the depth.

Pressure gradient:

$$\frac{500\# + 736\#}{1700} = .727 \text{ psi/ft.}$$

With the fracture pressure of the salt section being from 1500' to 1800' and our operating pressure plus hydrostatic pressure not exceeding 1250#, this will be below what it takes to frac the formation. We will install murphy switches to control the pressure, and also testing cavity as OCD requires.

4) Air-break.

H.R.C. has several precautions to keep from backflowing to the City water supply. First of all, the city has installed check valves at H.R.C.'s connection. The fresh water line will run to the fresh water tank at the facility first and go into the top of the tank. From the fresh water tank at the facility, the water line will go to the brine well storage tank. This tank will store fresh water to be injected into the brine well. The fresh water will go into the top of the tank, below the top of the tank will be an overflow or break in case of malfunction and salt water backflows, it will go out overflow, not into the fresh water line, plus all lines will have check valves. (See drawing)

Submit 3 Copies To Appropriate District Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals and Natural Resources

Form C-103 Revised March 25, 1999

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

WELL API NO. 30-025-23662
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. 992279

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		7. Lease Name or Unit Agreement Name: Hobbs State
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other P & A well		8. Well No. 5
2. Name of Operator H.R.C. Inc.		9. Pool name or Wildcat
3. Address of Operator Box 5102 Hobbs, NM 88241		
4. Well Location Unit Letter F : 2280 feet from the north line and 1980 feet from the west line Section 29 Township 18S Range 38E NMPM County Lea		
10. Elevation (Show whether DR, RKB, RT, GR, etc.)		

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

To drill out and re-plug.

- 1) Rig up, drill out top of plug.
- 2) Run tubing to top of salt approx. 1600', spot 25 sx cement plug.
- 3) Pull tubing to surface shoe 364, put 100' plug 50/50 in and out of shoe and tag.
- 4) 10 sx surface plug.
- 5) clean location, erect marker.

*Hole will be loaded with salt gel.
OCD will be notified prior to beginning work.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Eddie W. Seay TITLE Agent DATE 4/24/2002

Type or print name Eddie W. Seay Telephone No. 392-2236

(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

GENERAL FRACTURING TREATMENT FORMULAS

- Nomenclature:**
- P_F = Bottom-hole fracturing pressure, psi (kPa)
 - P_{FG} = Bottom-hole fracturing pressure gradient, psi/ft (kPa/m)
 - P_W = Total surface pressure, psi (kPa)
 - P_h = Total hydrostatic pressure, psi (kPa)
 - P_{pf} = Perforation friction pressure, psi (kPa)
 - P_{tf} = Total tubular friction pressure, psi (kPa)
 - Q = Injection rate, bbl/min (m^3/min)
 - HHP = Hydraulic horsepower *
 - kw = Kilowatts
 - P_i = Instantaneous shutdown pressure, psi (kPa)
 - D = Depth of producing interval, feet (m)

Basic Equations

- (1) Bottom-hole Fracturing Pressure Gradient:
$$P_{FG} = \frac{P_W + P_h - P_{tf} - P_{pf}}{D}$$
- (2) Bottom-hole Fracturing Pressure:
$$P_F = P_W + P_h - P_{tf} - P_{pf}$$
- (3) Instantaneous Shutdown Pressure:
$$P_i = P_F - P_h = P_{FG} D - P_h$$
- (4) Total Surface Pressure:
$$P_W = P_F + P_{tf} + P_{pf} - P_h$$
- (5) Hydraulic Horsepower:
$$HHP = 0.0245 P_W Q$$

HYDROSTATIC PRESSURE AND FLUID WEIGHT CONVERSION TABLES

To find the Hydrostatic pressure of a column of fluid, multiply the appropriate value in Lbs./Sq. In. per foot of depth times the depth in feet.

Example: Find the Hydrostatic Pressure at a depth of 13.760 feet in a hole filled with mud weighing 12.3 Lbs./Gal. (92.01 Lbs./Cu. Ft.) The value 0.6390 is found opposite 12.3 Lbs./Gal. in the table. Then $0.6390 \times 13760 = 8793$ Lbs. per Sq. In. hydrostatic pressure.

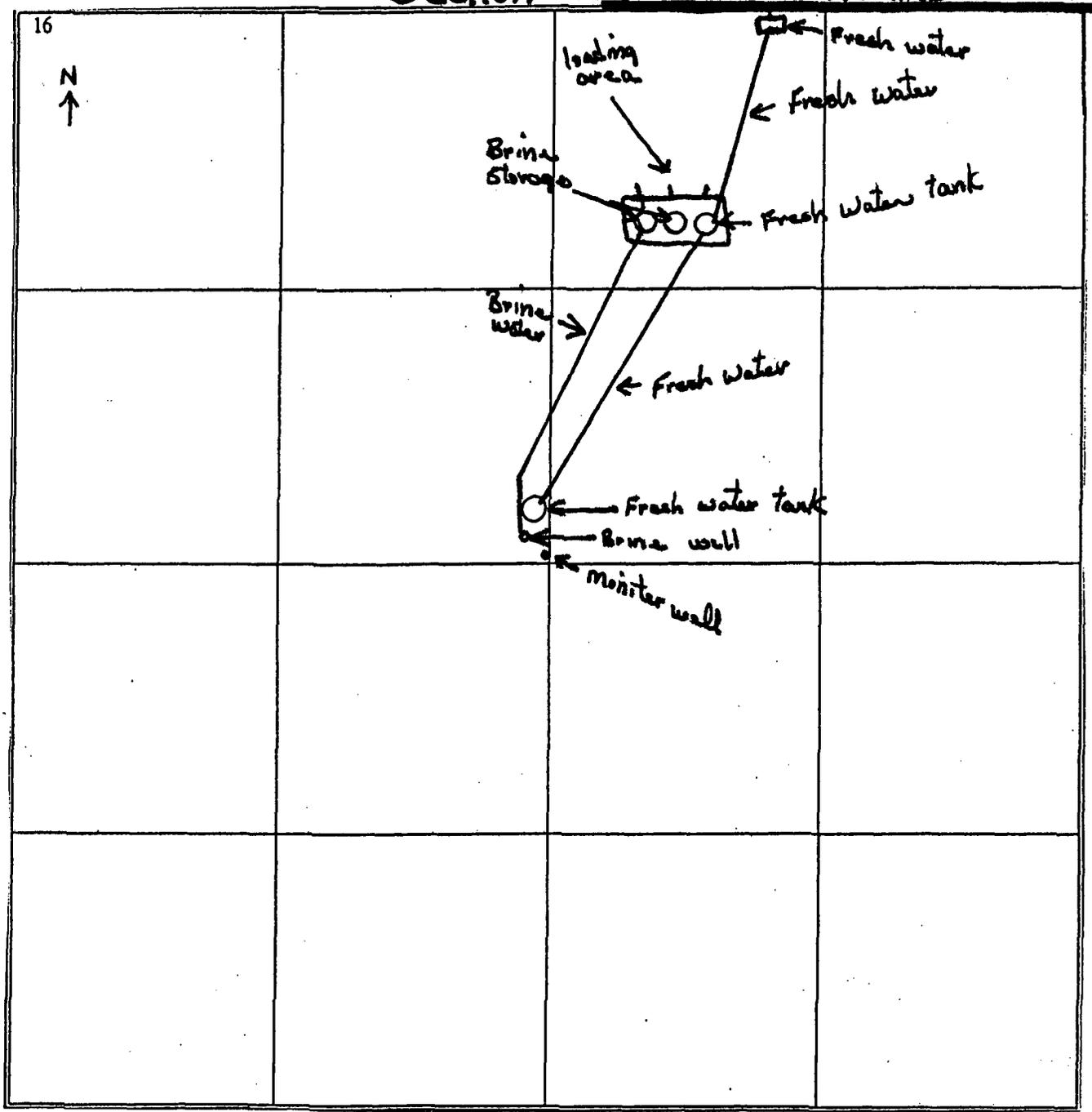
230

Lbs./Gal.	Lbs./Cu. Ft.	Sp. Gr.	Lbs./Sq. In. Per Ft. of Depth
7.0	52.36	0.84	0.3636
7.1	53.11	0.85	0.3688
7.2	53.86	0.86	0.3740
7.3	54.61	0.87	0.3792
7.4	55.36	0.89	0.3844
7.5	56.10	0.90	0.3896
7.6	56.85	0.91	0.3948
7.7	57.60	0.92	0.4000
7.8	58.35	0.93	0.4052
7.9	59.10	0.95	0.4104
8.0	59.84	0.96	0.4156
8.1	60.59	0.97	0.4208
8.2	61.34	0.98	0.4260
8.3	62.09	0.99	0.4312
* 8.33*	62.31	1.00	0.433
8.4	62.84	1.01	0.4364
8.5	63.58	1.02	0.4416
8.6	64.33	1.03	0.4468
8.7	65.08	1.04	0.4519
8.8	65.83	1.05	0.4571
8.9	66.58	1.07	0.4623
9.0	67.32	1.08	0.4675
9.1	68.07	1.09	0.4727
9.2	68.82	1.10	0.4779
9.3	69.57	1.11	0.4831
9.4	70.32	1.13	0.4883
9.5	71.06	1.14	0.4935
9.6	71.81	1.15	0.4987
9.7	72.56	1.16	0.5039
9.8	73.31	1.17	0.5091
9.9	74.06	1.19	0.5143
10.0	74.80	1.20	0.5195
10.1	75.55	1.21	0.5247
10.2	76.30	1.22	0.5299
10.3	77.05	1.23	0.5351
10.4	77.80	1.25	0.5403

* Density of water at 20°C. or 68°F.

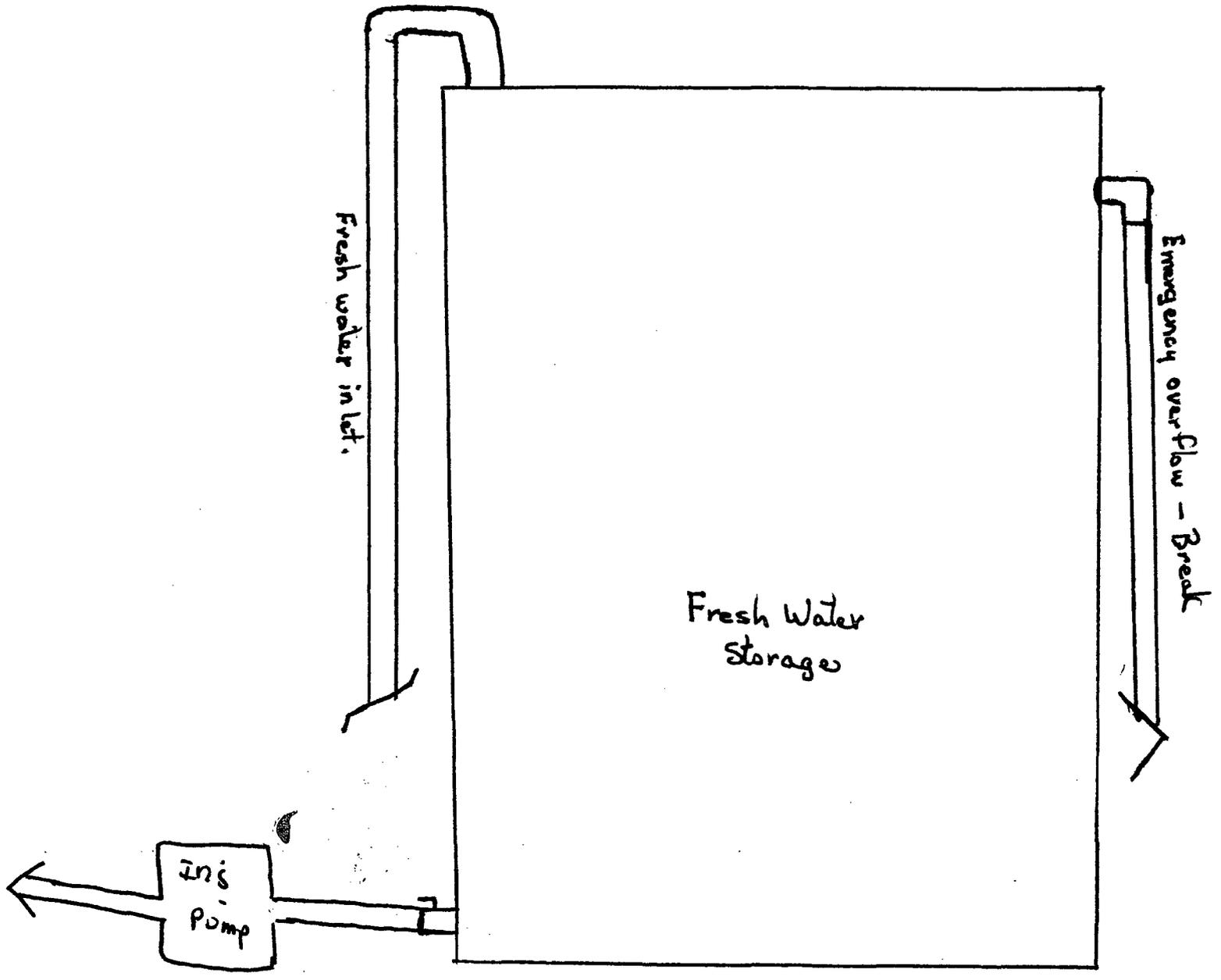
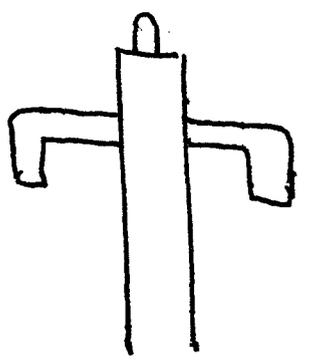
Section 29

city of Hobbs water line



4

Brine well #10





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

April 26, 2002

Lori Wrotenberg
Director
Oil Conservation Division

To: Chris Williams
OCD Hobbs District Supervisor

From: Wayne Price *W.P.*
OCD Environmental Bureau

Re: H.R.C. Inc. Brine Well Application-State #10 well

Dear Chris:

Please find enclosed the OCD brine well permitting procedure, HRC's C-101 application with attachments and copy of approved bond. Please process this application and add your normal APD requirements required by the district. The OCD Environmental Bureau will require at a minimum, that each cemented to surface casing string shall have a cement bond log ran to verify bonding to pipe and formation. Also each string shall have a hydrostatic mechanical integrity test performed. The test pressure shall be a minimum of 300 psig for 30 minutes with a variance of no more than $\pm 1\%$ for acceptance. The test pressure instrument shall be calibrated within the last 6 months and have a calibrated range of 0-500 lbs with a maximum of 2 hour clock. All test shall be witnessed by OCD during our normal business hours.

After the district has processed and approved the C-101 please **return it to this office** and we will issue H.R.C. Inc. the approved discharge plan including approval to construct and operate. H.R.C. Inc. will be submitting a C-103 to properly plug the State #5 well that is in the area of review. As soon as we receive it I will forward it to your office for processing and approval.

In order to expedite this project would you have your office call Ed Martin 476-3492 and provide him with the API # for the new State #10 well so we can enter the bond information.

Cc: Eddie Seay-Agent for H.R.C. Inc.
GARY SEHORT - HRC INC.

H.R.C. Inc. Brine Well Permitting Procedure:

1. Send the HRC Inc submitted C-101 including attachments, copy of approved bond and OCD Environmental Bureau's well construction requirements i.e. (cement bond log, MIT's, etc.) to the district office. Have District process C-101 and approve with District's additional requirements (if any) and send back to OCD Environmental Bureau.
2. While C-101 is being processed by District, write draft discharge plan with proposed approval conditions and send to HRC. Inc., OXY and Chevron-Texaco and give them 15 days to supply comments or request a hearing.
3. If no hearing request, then evaluate comments.
4. Send out discharge plan with approval conditions. Approval conditions will include approval to construct and operate well.

If operator wants to proceed with construction of well without an approved discharge plan, then he may do so at his own risk, being that the discharge plan may not be approved as submitted, and the fact that the operator **will not** be allowed to operate the well unless he conforms to the discharge plan approval conditions. This procedure of allowing the construction of a well "prior to the approval of a discharge plan" is currently allowed pursuant to WQCC 20.6.2.5210 B., if certain information and commitments for corrective action in the area of review has already been supplied.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

April 20, 2002

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL
RETURN RECEIPT NO. 7923 4221

Mr. Gary M. Schubert
H.R.C. Inc.
P.O. Box 5102
Hobbs, New Mexico 88241

Re: Application For Brine Extraction Well and Discharge Plan For Brine Facility.
Hobbs State #10- UL F (2565 FNL, 2330 FWL)-Sec 29-T18s-R38e; and surface
facility BW-030 will be located in UL B- Sec 29- Ts 18s-R38e. Lea Co., NM.

Dear Mr. Schubert:

The New Mexico Oil Conservation Division (OCD) is in receipt of the following H.R.C. Inc. submittals; document dated February 08, 2002 voiding H.R.C. Inc.'s application to use the Hobbs State #5 well as a brine extraction well; March 04, 2002 E-mail providing OCD with the location of a new well and surface facility as shown in the above caption; February 20, 2002 "APPLICATION FOR BRINE EXTRACTION WELL AND DISCHARGE PLAN FOR BRINE FACILITY"; March 12, 2002 document of well logs; and April 05, 2002 document "Evaluation of Wells in the Area of Review". After reviewing the submittal OCD determined the application met the criteria required to issue the discharge plan public notice. This notice was issued on March 04, 2002.

OCD is in receipt of comments submitted pursuant to the public notices. Please find attached a copy of letter dated March 14, 2002 submitted to the OCD from Chevron-Texaco. OCD is in the process of evaluating their comments.

Upon reviewing the submittals, OCD noted the following deficiencies and requires the following information or actions to be performed in order to continue the review process.

1. The H.R.C. Inc. area of review "Well Evaluation" submitted on April 05, 2002, item #18 indicated that the Hobbs State #5 well located approximately 400 feet to the northwest of H.R.C. Inc. current proposed location has the salt section being exposed and may become a pathway to the surface. OCD's engineering staff and district office has recommended corrective action on this well. Submit a one well plugging bond along with a C-103 for OCD approval

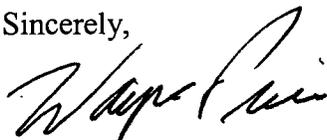
To re-enter and properly plug this well pursuant to the OCD Hobbs district plugging procedures.

Please note the OCD is currently holding a bond for the State #5 well. H.R.C. Inc. may use this bond for the re-entry and plugging of this well. Please notify us of your intentions.

2. OCD has not received a bond for the new proposed State #10 well. Please provide.
3. Provide the maximum injection and/or test pressure at the well head, system estimated fracture pressure calculated at the bottom casing shoe, fracture pressure gradient (psi/ft) for the system. Demonstrate that the maximum surface injection and/or test pressure will not cause new fractures or propagate existing fractures.
4. Submit a plan to provide an "Air-Break" i.e. air gap between the city of Hobbs fresh water line and the brine station fresh water tank. The city line shall be above the fresh water tank overflow. This is required to prevent brine water from back flowing into the city of Hobbs Public Water Supply; or provide a statement from the city of Hobbs indicating the present design is sufficient.

If you have any questions please do not hesitate to contact me at 505-476-3487 or E-mail WPRICE@state.nm.us.

Sincerely,



Wayne Price- Environmental Engineer

cc: David Catanach-UIC Director
Chris Williams-Hobbs District I Supervisor
Dorothy Phillips-OCD Bond Specialist
State Land Office-Santa Fe
Eddie W. Seay-Agent for H.R.C. Inc.-E-mail
Denise K. Beckham-Chevron-Texaco
Richard E. Foppiano-Oxy

Price, Wayne

From: Price, Wayne
Sent: Wednesday, April 17, 2002 2:30 PM
To: Price, Wayne; 'Rick_Foppiano@oxy.com'
Subject: RE: HRC Inc. Brine Well- New Location

Sorry forgot the PN!

-----Original Message-----

From: Price, Wayne
Sent: Wednesday, April 17, 2002 2:27 PM
To: 'Rick_Foppiano@oxy.com'
Subject: HRC Inc. Brine Well- New Location

Dear Mr. Foppiano:

On February 18, 2002 OCD received correspondence from Oxy requesting to be an intervener in the above subject case. Please note HRC Inc. withdrew their application and has resubmitted for a new location. Please find attached a copy of the public notice. Please let this office know within 10 days if Oxy wishes to continue to be an intervener and or request a hearing on this re-submitted application.

[Price, Wayne]



PUBNOT#2.DOC

Tracking:

Recipient
Price, Wayne
'Rick_Foppiano@oxy.com'

Read
Read: 4/17/2002 2:30 PM

April 5, 2002

RECEIVED
APR 16 2002
Environmental Bureau
Oil Conservation Division

NMOCD Environmental
ATTN: Wayne Price
Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

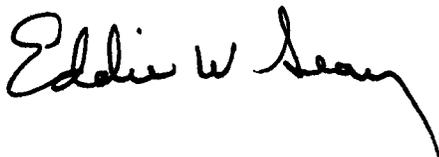
RE: H.R.C. Inc. - Supplemental Information

Mr. Price:

Find within the supplemental information on the evaluation of the wells in the area of review. The new proposed brine well will be over 300' from the closest well. It is my understanding and from research, that it takes approximately twenty (20) years before a cavity reaches 300' in diameter. This is why H.R.C. proposes to run caliper logs and will test to keep up with the size and any problems which may occur pertaining to the brine operation.

If you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

H.R.C. WELL EVALUATION

The evaluation is to examine concerns about any possibility of contamination to groundwater. The groundwater in the area is located at depths of, top of water at 50' to 70' and base of the groundwater at approximately 150'. The application lists all wells within the area of review. The proposed brine well will be producing brine from the salt section at levels of approximately 1700' to 2600' below the surface.

- 1) Bowers A Federal #28 - This well located approximately 2600' southwest has surface casing set at 374' with cement circulated to surface, and production casing set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 2) Bowers A Federal #29 - Located approximately 1300' southwest has surface casing set at 370' and cemented to surface, and production casing set through the salt section and cemented. The well has sufficient pipe and cement to protect fresh water.
- 3) W.D. Grimes #6 - Located approximately 1500' southeast, has surface casing set at 377' and circulated to surface. Production casings are set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 4) Hobbs State #1 - This well is located approximately 1000' NW, surface casing is set at 400' and cement circulated to surface, production casings are set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 5) Hobbs State #2 - This well is located approximately 1300' east, surface casing is set at 400' and cement circulated to surface, production casings are set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 6) Hobbs SWD F #29 - This well, located approximately 1200' NW, has surface casing set at 400' and cement circulated to surface. The production casing is set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 7) Hobbs State #3 - This well, located approximately 2000' NE, has surface casing set at 350' and cemented to surface, production casings are set through the salt section and cemented. The well has sufficient pipe and cement to protect fresh water.
- 8) St. A #4 - This well, located approximately 1300' SE, has cement circulated on all pipe strings. This well has sufficient pipe and cement to protect fresh water and is properly plugged.
- 9) State A #5 - Located approximately 1000' south, has cement circulated on all strings of pipe. This well has sufficient pipe and cement to protect fresh water and is properly plugged.

- 10) State A #6 - Located approximately 2500' south, has cement circulated on all strings of casing. This well has sufficient pipe and cement to protect fresh water and is properly plugged.
- 11) Bowers A #12 - Located approximately 2000' SW, has surface casing set at 236' and cemented to surface. The production casing is set through the salt section and cemented. The well has sufficient pipe and cement to protect fresh water and is properly plugged.
- 12) Bowers A #14 - Located approximately 2400' SE, has cement circulated on all strings of casing. This well has sufficient casing and cement to protect fresh water and is properly plugged.
- 13) Bowers A-B #1 - Located approximately 2000' NW, has cement circulated on all strings of casing. This well has sufficient casing and cement to protect fresh water and is properly plugged.
- 14) Bowers A Federal #9 - Located approximately 1800' west, has surface casing set at 2750' and cement circulated to surface. The production casings are set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water and is properly plugged.
- 15) Bowers A Federal #31 - Located approximately 1800' west, has been properly plugged and has sufficient pipe and cement to protect fresh water.
- 16) Bowers A Federal #33 - Located approximately 2000' NW. This well has been properly plugged and has sufficient pipe and cement to protect fresh water.
- 17) W.D. Grimes #2 - Located approximately 2400' NE, has been properly plugged and has sufficient pipe and cement to protect fresh water.
- 18) Hobbs State #5 - Located approximately 400' NW, this well has been plugged. Surface casing was set at 364' and cement circulated to surface. The salt section is exposed in this well, and may become a pathway to surface. Since our fresh water is protected by adequate surface casing, it is proposed to install monitor valves on this well so as to check for pressures in case it were to occur. If pressure were to develop on the casing annulus, the well would be re-entered and properly cemented as OCD requires.
- 19) St #1 - Located approximately 2400' SE, this well has been properly plugged and has sufficient pipe and cement to protect fresh water.
- 20) St #2 - Located approximately 2000' S, this well has been properly plugged and has sufficient casing and cement to protect fresh water.

- 21) W.D. Grimes #1 - Located approximately 1800' SE, this well has been plugged and has sufficient casing and cement to protect fresh water.
- 22) Grimes #2 - Located approximately 2000' E, this well has been properly plugged and has sufficient casing and cement to protect fresh water.
- 23) Grimes #5 - Located approximately 1800' E, this well has been properly plugged and has sufficient casing and cement to protect fresh water.
- 24) Oxy 131 - Located approximately 1500' SW, the well has surface casing set at 225' with cement circulated to surface. The production casings are set through the salt section and cemented. The well has sufficient pipe and cement to protect fresh water.
- 25) Oxy 132 - Located approximately 1600' SW, this well has all casing strings set and cemented to surface. The well has sufficient pipe and cement to protect fresh water.
- 26) Oxy 141 - Located approximately 2400' SW, this well has surface casing set at 203' and cement circulated to surface. All production casing strings are set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 27) Oxy 211 - Located approximately 1600' north, this well has surface casing set at 243' with cement circulated to surface. The production casings have been set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 28) Oxy 221 - Located approximately 600' west, this well has 210' of surface casing with cement circulated to surface. Production casings have been set through the salt section and cemented. This well has sufficient pipe and cement to protect fresh water.
- 29) Oxy 222 - Located approximately 800' west, the well has all casing string set and cemented to surface. This well has sufficient pipe and cement to protect fresh water.
- 30) Oxy 231 - Located approximately 700' south, this well has 252' of surface casing with cement circulated to surface. Production casing strings are set through the salt section and cemented. The well has sufficient pipe and cement to protect fresh water.
- 31) Oxy 241 - Located approximately 2000' south, this well has surface casing set at 217' with cement circulated to surface. The production casing strings are set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 32) Oxy 242 - Located approximately 2200' south, this well has conductor pipe circulated to surface, and surface pipe set at 1511' with cement circulated to surface. The production casing was set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.

- 33) Oxy 311 - Located approximately 1800' NE, this well has surface casing set at 241' with top of cement at 113'. The well has multiple casing strings through the salt section and cemented. There is sufficient pipe and cement to protect the fresh water.
- 34) Oxy 321 - Located approximately 800' east, this well has surface casing set at 211' and circulated to surface. The production casing strings have been set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 35) Oxy 322 - Located approximately 900' NE, this well has all casing string set and cement circulated to surface. There is sufficient pipe and cement to protect fresh water.
- 36) Oxy 323 - Located approximately 1000' NE, this well has conductor and surface pipe set and cemented to surface. The production casing was set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 37) Oxy 331 - Located approximately 1000' SE, this well has all casing string set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 38) Oxy 341 - Located approximately 2000' SE, this well has all surface casing set at 210' and cement circulated to surface. Production casing strings set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 39) Oxy 342 - Located approximately 2200' SE, this well has surface casing set at 1520' with cement circulated to surface. The production string was set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 40) Oxy 411 - Located approximately 2300' NE, this well has surface casing set at 245' with cement circulated to surface. The production casing strings have been set through the salt section and properly cemented. There is sufficient pipe and cement to protect fresh water.
- 41) Oxy 431 - Located approximately 1500' ESE, this well has surface casing set at 228' with cement circulated to surface. The production casing strings are set through the salt section and properly cemented. There is sufficient pipe and cement to protect fresh water.
- 42) Oxy 441 - Located approximately 2500' SE, the surface casing in this well is set at 232' with cement circulated to surface. The production casings are set through the salt section and properly cemented. There is sufficient pipe and cement to protect fresh water.
- 43) Oxy 442 - Located approximately 2600' SE, the surface casing was set at 1536' with cement circulated to surface. The production casing was set through the salt section and properly cemented. There is sufficient pipe and cement to protect fresh water.

- 44) Oxy 544 - Located approximately 2400' SE, the surface casing and production casing were set and cement circulated to surface. There is sufficient pipe and cement to protect fresh water.
- 45) Oxy 111 - Located approximately 2300' SE, the surface casing was set at 310' with cement circulated to surface. The production casing was set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 46) Oxy 121 - Located approximately 2500' SE, the surface casing was set at 231' and cement was circulated to surface. The production casing strings were set through the salt section and properly cemented. There is sufficient pipe and cement to protect fresh water.
- 47) Oxy 421 - Located approximately 2300' east, this well was plugged. The plugging procedure and cementing is sufficient to protect fresh water.
- 48) State B #5 - Located approximately 1300' east, this well has surface casing set at 220' with cement circulated to surface. The production casings are set through the salt section and properly cemented. There is sufficient cement to protect fresh water.
- 49) State B #6 - Located approximately 1000' north, this well has surface casing set at 414' with top of cement at 390'. Production casing was set at 3137' and cement circulated to surface. There is sufficient casing and cement to protect fresh water.
- 50) St I #5 - Located approximately 2400' SE, this well has surface casing set through the salt section and cemented. The production casing is set at 3575' and cement circulated to surface. There is sufficient casing and cement to protect fresh water.
- 51) State A #7 - Located approximately 1900' south, this well has surface casing set at 360' with cement circulated to surface. The production casing strings were set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.
- 52) State A #8 - Located approximately 900' south, this well has surface casing set at 360' with cement circulated to surface. Production casing strings were set through the salt section and cemented. There is sufficient pipe and cement to protect fresh water.



Chevron

Chevron U.S.A. Inc.
P. O. Box 1150, Midland, TX 79702
15 Smith Road, Midland, TX 79705
Phone 915 687-7235
Fax 915 687-7448

March 14, 2002

Denise K. Beckham, CPL/ESA
Senior Landman
Permian Basin Land Division
Internet dkbe@chevron.com

Oil Conservation Division
P. O. Box 6429
Santa Fe, NM 87505

Brine Extraction Well
Hobbs State #10
Unit F, Section 29,
T-18-S, R-38-E,
Lea County, New Mexico

Gentlemen:

ChevronTexaco has been informed of Gary Schubert's plan to use the captioned well as part of a brine extraction system. ChevronTexaco has reviewed the information provided by Mr. Schubert.

While ChevronTexaco does not plan to request a hearing regarding the facility, please be advised of the following concern.

ChevronTexaco requests the OCD consider a limit on the size of the salt cavern (cavity) that will be created as a result of this facility. In ChevronTexaco's opinion, if no limit is put on the size of the cavern, it could pose a risk to future drilling in the vicinity or could have the potential to result in surface collapse.

ChevronTexaco is in agreement that wells monitoring water quality be kept in place around the facility and that the equipment meet strict integrity tests.

Should you have questions or desire additional information, please contact me at (915) 687-7235 or Greg Minnery at (915) 687-7385.

Yours truly,

Denise K. Beckham, CPL/ESA
Senior Landman

Cc: Gary Schubert

March 12, 2002

RECEIVED
MAR 18 2002
Environmental Bureau
Oil Conservation Division

NMOCD Environmental Bureau
ATTN: Wayne Price
Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

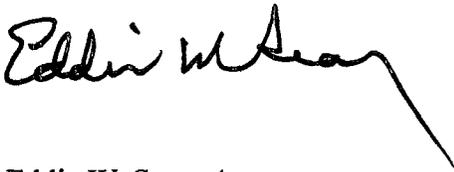
RE: HRC Brine

Mr. Price:

Within are copies of two well logs from wells in close proximity to the proposed brine well. Log #1 indicates top of salt at approximately 1645'. Log #2 indicates top of salt at approximately 1620'. These tops were picked by OCD Geologist Paul Kautz. HRC will set casing at least 100' into the salt section.

If you have any questions or need anything else, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236



THE REPRODUCTION OF

THE

FOLLOWING

DOCUMENT (S)

CANNOT BE IMPROVED

DUE TO

THE CONDITION OF

THE ORIGINAL

J-29-18s-38e
 OCCIDENTAL PERMIAN LTD
 NORTH HOBBS G/SA UNIT 29 # 533
 30-025-35541 . 2

Ltd.

29-533

FIELD: Hobbs (Grayburg- San Andres)

COUNTY: Lea

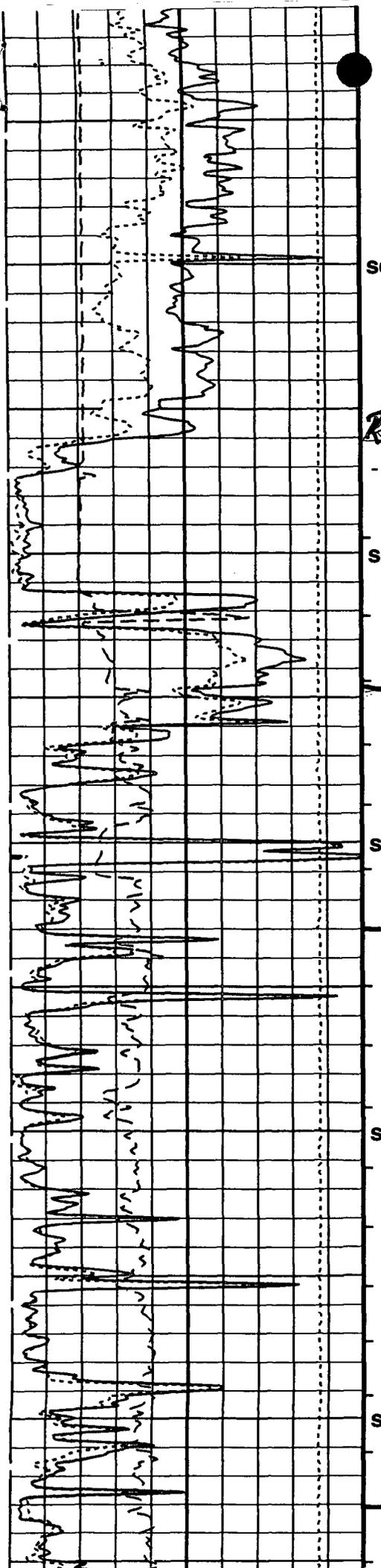
STATE: New Mexico

COUNTY: Lea
 Field: Hobbs (Grayburg- San Andres)
 Location: (Surface) 2326' FSL & 1902' FEL
 Well: North Hobbs Unit #29-533
 Company: Occidental Permian Ltd.

LOCATION	Schlumberger		PLATFORM EXPRESS	
			Three Detector Litho-Density	
			Compensated Neutron-NGS	
	(Surface) 2326' FSL & 1902' FEL		Elev.:	K.B. 3658 ft
<i>Unit J</i>			G.L. 3646 ft	
			D.F. 3657 ft	
Permanent Datum: <u>Ground Level</u>		Elev.:	<u>3646 ft</u>	
Log Measured From: <u>Kelly Bushing</u>		12.0 ft	above Perm. Datum	
Drilling Measured From: <u>Kelly Bushing</u>				

API Serial No. 30-025-35541	SECTION 29	TOWNSHIP 18S	RANGE 38E
--------------------------------	---------------	-----------------	--------------

Logging Date	20-MAY-2001		
Run Number	One		
Depth Driller	4420 ft		
Schlumberger Depth	4395 ft		
Bottom Log Interval	4377 ft		
Top Log Interval	200 ft		
Casing Driller Size @ Depth	8.625 in	@	1575 ft @
Casing Schlumberger	1572 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Brine/Starch		
MUD	Density	Viscosity	10 lbm/gal 32 s
	Fluid Loss	PH	8.8 cm3 9.5
Source Of Sample		Circulation Pit	
RM @ Measured Temperature	0.053 ohm.m	@	95 degF @
RMF @ Measured Temperature	0.053 ohm.m	@	95 degF @
RMC @ Measured Temperature		@	@
Source RMF	RMC	Calculated	
RM @ MRT	RMF @ MRT	0.049 @ 102	0.049 @ 102 @ @
Maximum Recorded Temperatures		102 degF	
Circulation Stopped	Time	20-MAY-2001	16:30
Logger On Bottom	Time	20-MAY-2001	22:30
Unit Number	Location	3125	Hobbs, NM
Recorded By	Charles Bartlett		
Witnessed By	George Lambert		



sc 1500

Rustha

- CSG -

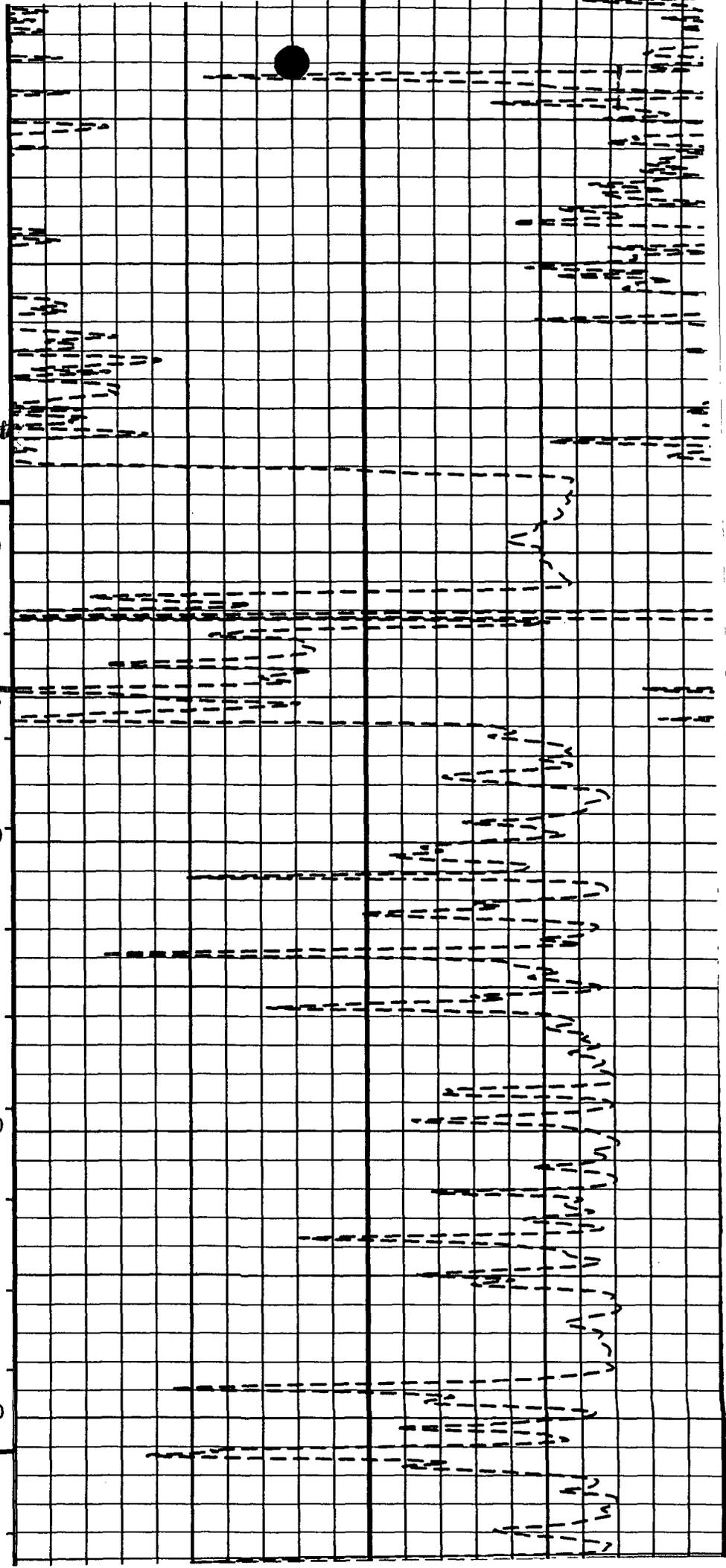
sc 1600

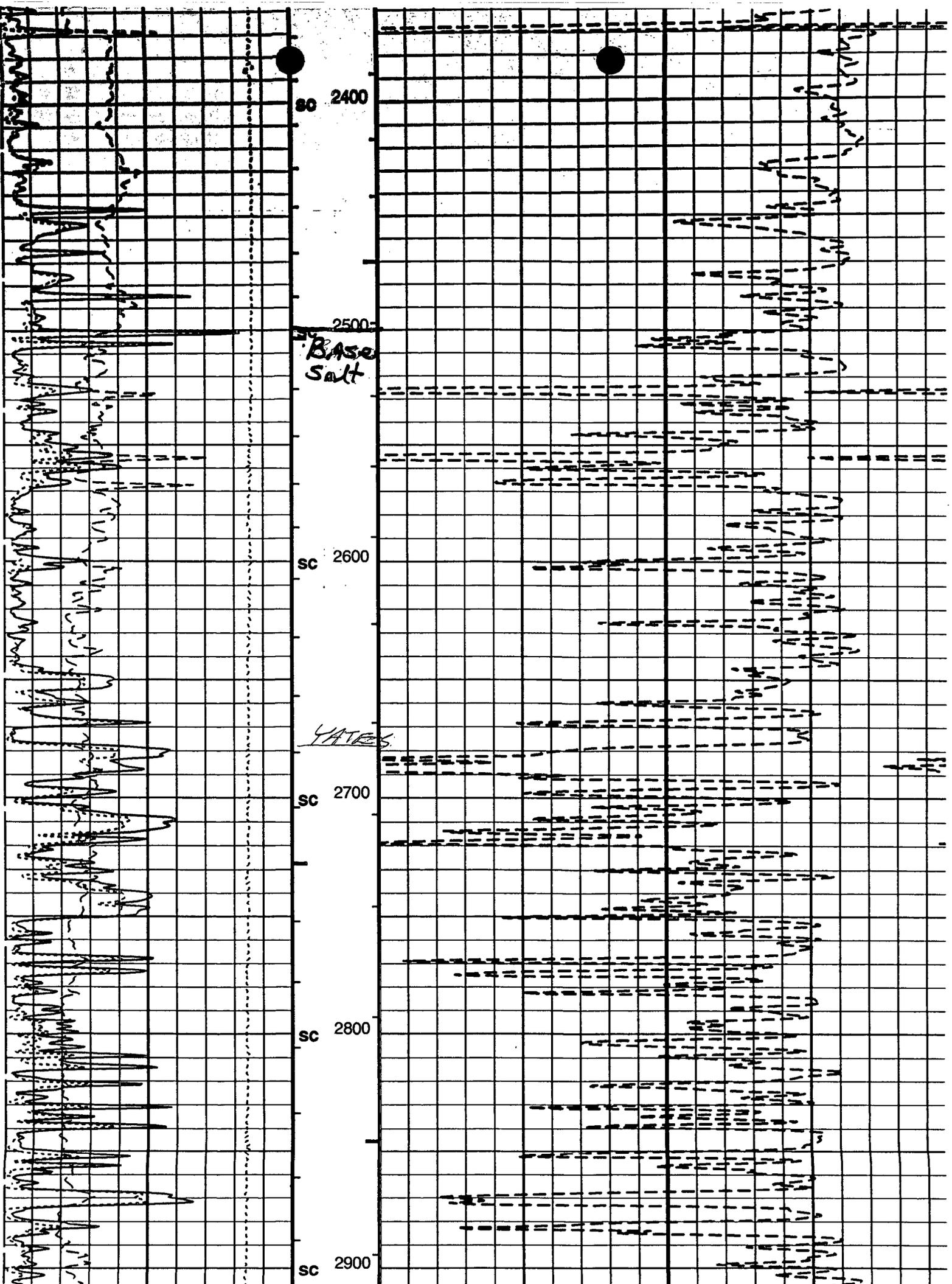
TAP
SALT

sc 1700

sc 1800

sc 1900





E-29-18-38
 Shell Western E&P, Inc.
 NHUnit #29-122

GEARHART

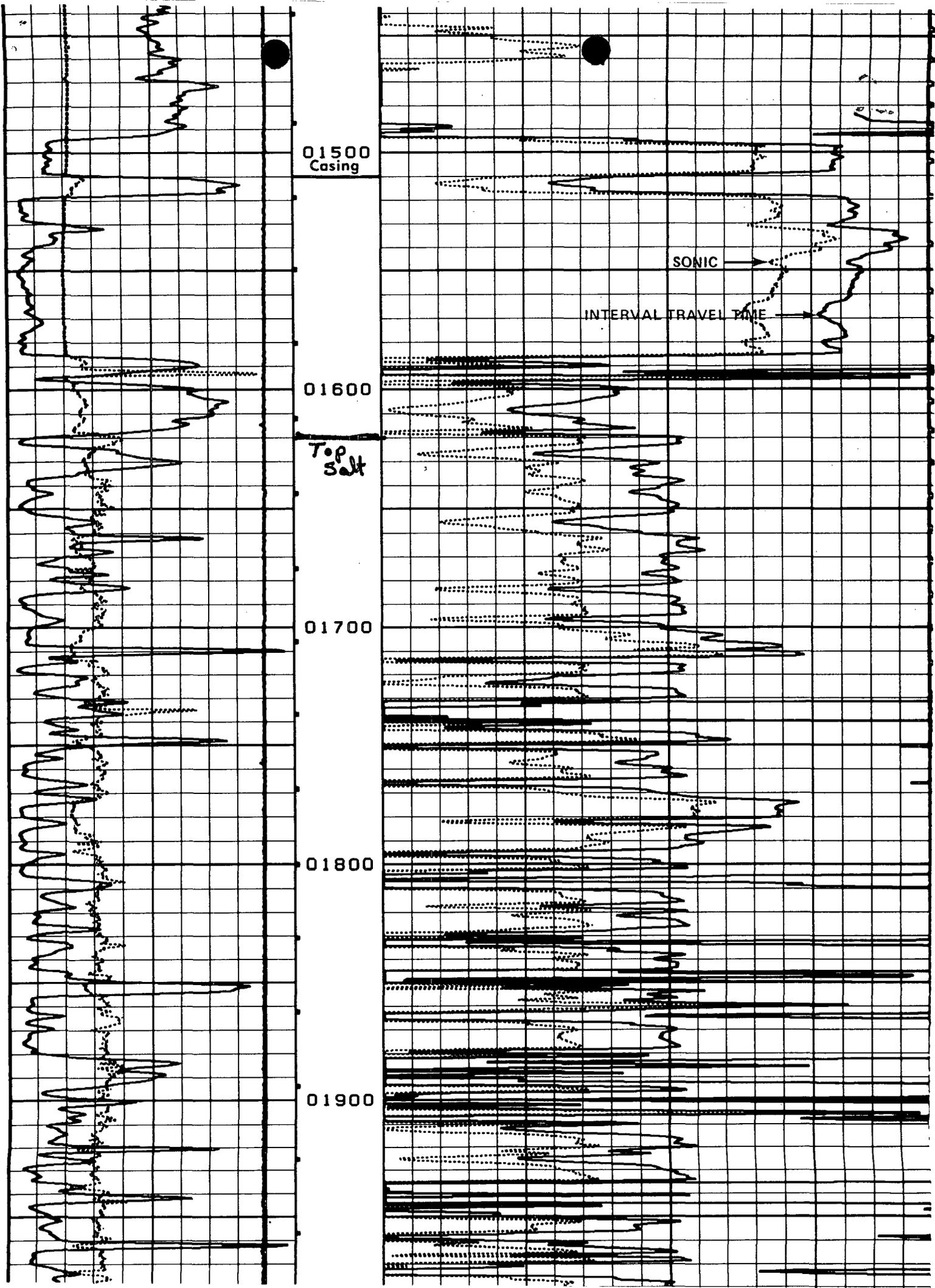
B.H.C. SONIC LOG

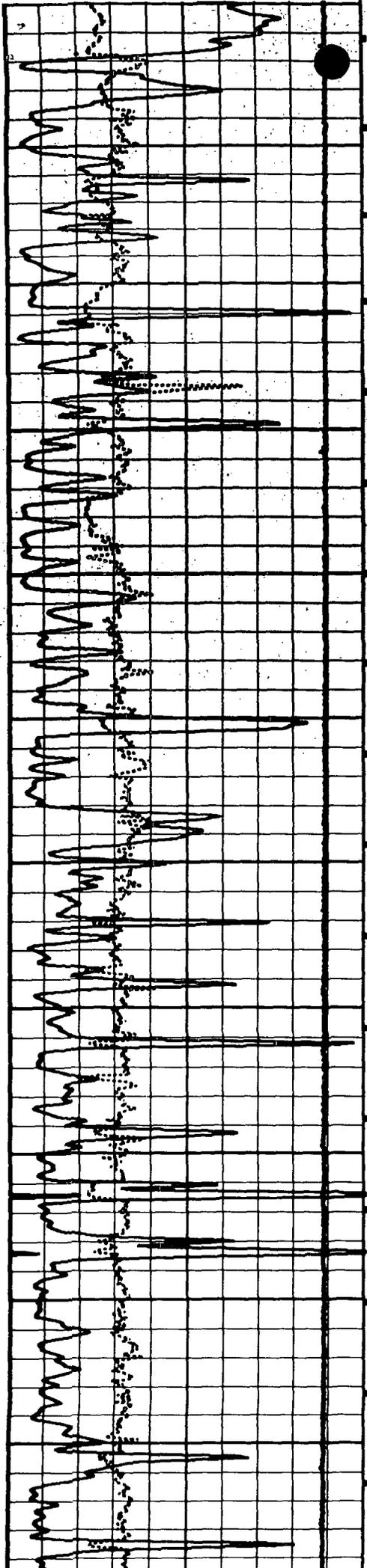
59314.1	FILING NO.	COMPANY <u>SHELL WESTERN EXPLORATION & PRODUCTION, INC.</u>	
		WELL <u>NORTH HOBBS UNIT NO. 29-122</u>	
		FIELD <u>NORTH HOBBS</u>	
		COUNTY <u>LEA</u>	STATE <u>NEW MEXICO</u>
	LOCATION:	1600' FNL & 180' FWL API. NO. 30-025-28953	Other Services SNL DLL/MSFL
	SEC <u>29</u>	TWP <u>T18S</u>	RGE <u>BLK. 38E</u>

Permanent Datum <u>GL</u>	Elev <u>3649</u>	KB	Elevations: <u>3664</u>
Log Measured from <u>KB</u>	<u>15</u> Ft Above Perm Datum	DF	<u>3663</u>
Drilling Measured from <u>KB</u>		GL	<u>3649</u>

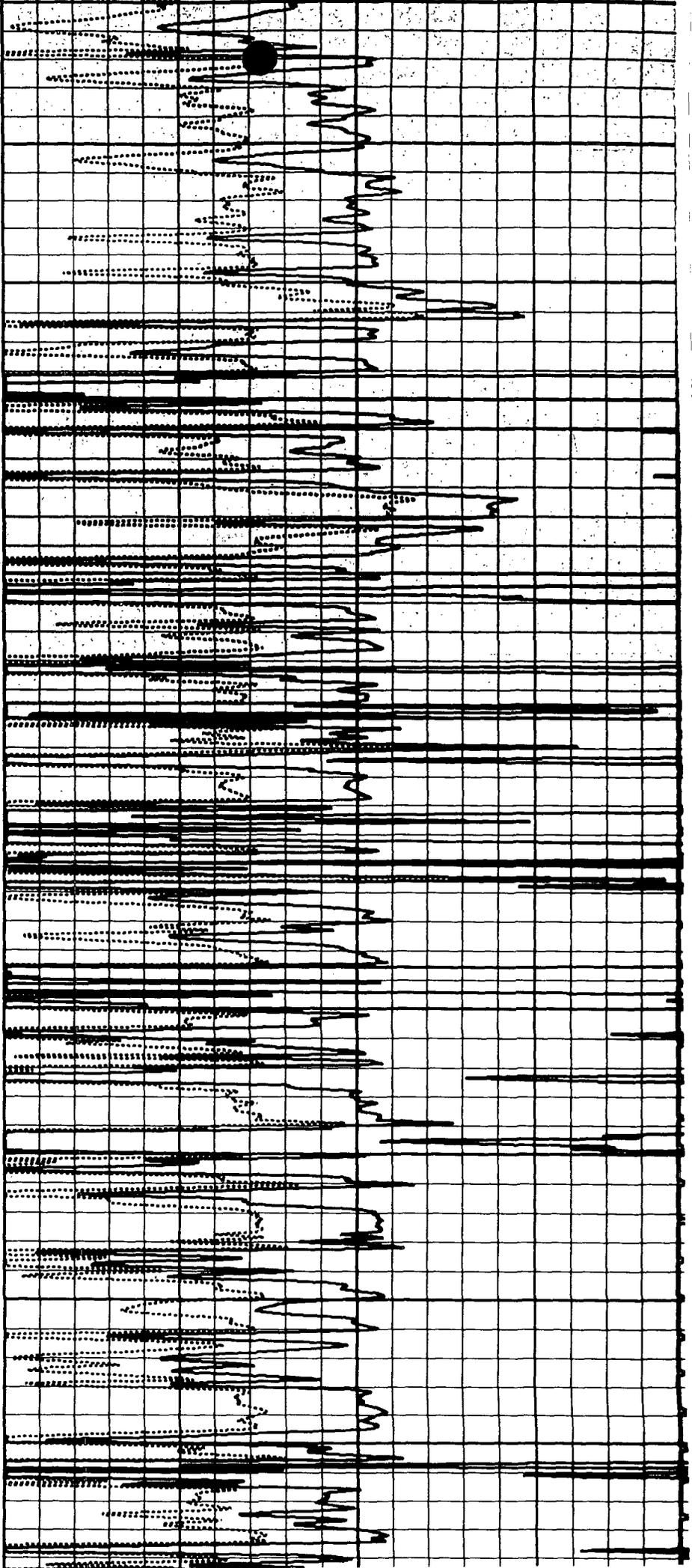
Date	12-10-84			
Run No.	One			
Depth-Driller	4370			
Depth-Logger	4371			
Bottom Logged Interval	4360			
Top Logged Interval	1510			
Casing-Driller	8 5/8 @ 1510	@	@	@
Casing-Logger	1510			
Bit Size	7 7/8			
Type Fluid in Hole	Brine Polymer w/LCP			
Density and Viscosity	10.3 40			
pH and Fluid Loss	10 10 cc		cc	cc
Source of Sample	Flowline			
Rm @ Meas. Temp.	0.057 @ 65 F	@	F	@ F
Rmf @ Meas. Temp.	0.054 @ 70 F	@	F	@ F
Rmc @ Meas. Temp.	N/A @ N/A F	@	F	@ F
Source of Rmf and Rmc	Mud Press			
Rm @ BHT	0.038 @ 97			
Time	End Circulation	0915	12/10	
	Logger on Bottom	1227	12/10	
Max. Rec. Temp. Deg. F	97	F	F	F
Equipment No. and Location	7625	Mid.		
Recorded By	Nino			
Witnessed By	Mr. Casada			

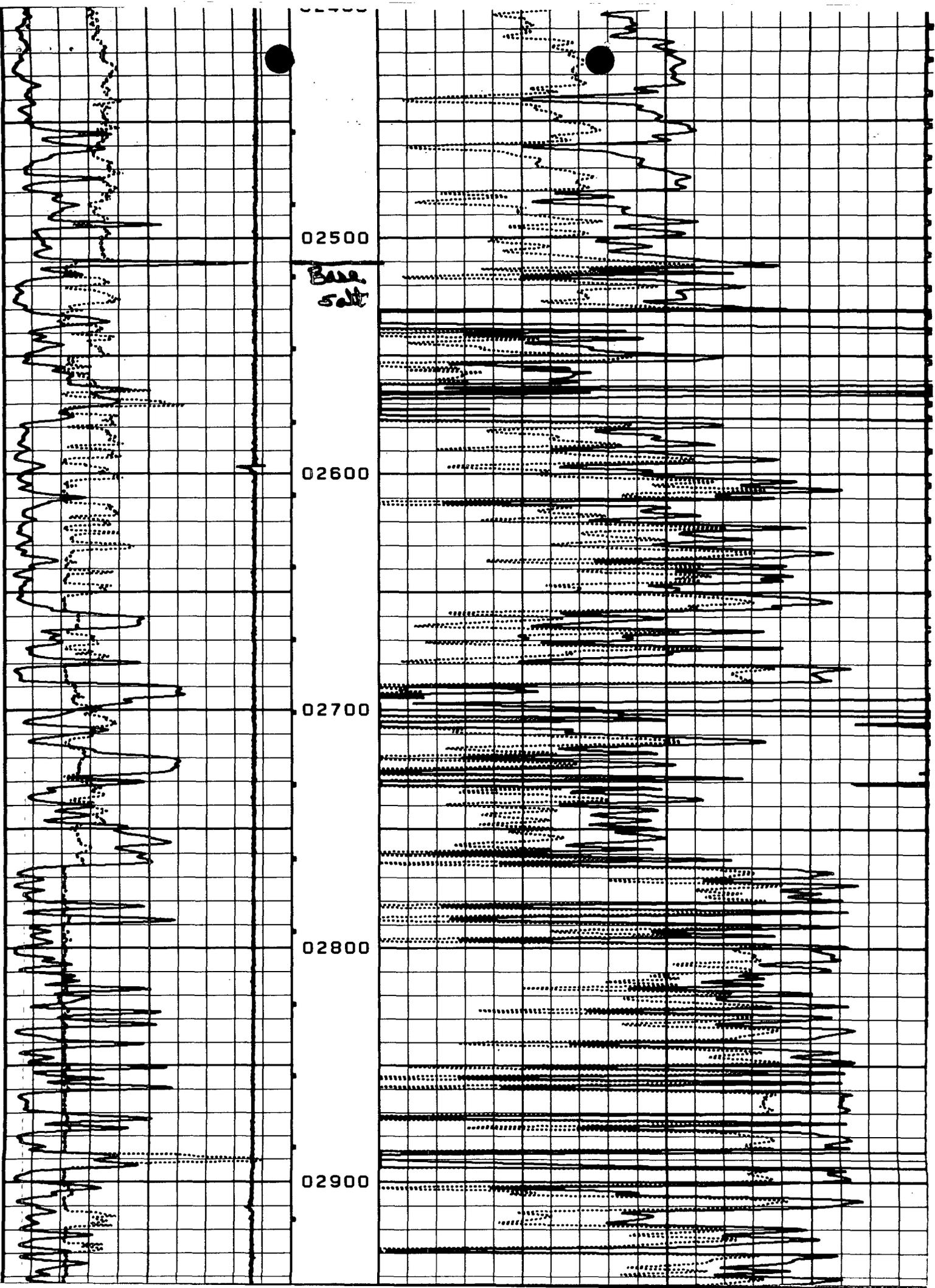
New Mexico Oil Conservation Commission
 Hobbs, N.M. Box 1980
 New Mexico 88240





01600
01700
01800
01900
02000
02100





02500

Base
salt

02600

02700

02800

02900



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Carol Leach

Acting Cabinet Secretary

Lori Wrotenberg

Director

Oil Conservation Division

MEMO

DATE:

2/18/02 3/5/02

TO:

Wayne Price #476-3462

FROM:

Donna Mull & Paul

For Your Files

Prepare a Reply for My Signature

For Your Review and Return

For Your Information

For Your Handling

For Your Approval

As Per Your Request

For Your Signature

Please Advise

For Your Attention

Holding for your approval

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-101
Revised March 17, 1999

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address H.R.C. P.O. Box 5102 Hobbs, NM 88241		² OGRID Number
		³ API Number 30 -
⁴ Property Code	Hobbs State ⁵ Property Name	⁶ Well No. 10

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	29	18S	38E		2565	N	2330	W	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹¹ Work Type Code N	¹² Well Type Code M	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3655.3
¹⁶ Multiple NO	¹⁷ Proposed Depth 1700	¹⁸ Formation Salt	¹⁹ Contractor Unknown	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program

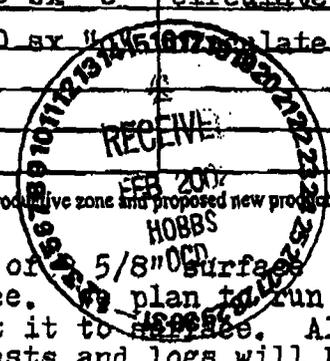
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
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8 5/8	7	23#	1700	300 BX "c"	circulate
6 1/2	3.5 tubing	10.5	+ or - 2000		

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

Plan to drill a brine extraction well, will set 450' of 9 5/8" surface casing into the redbed and circulate cement to surface. We plan to run 7" casing to the top of the salt formation and cement it to surface. All cementing will be done by Halliburton. All casing tests and logs will be run as OCD requires.
BOP Schematic attached.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway



²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>Eddie W. Seav</i>	Approved by:		
Printed name: Eddie W. Seav	Title:		
Title: Agent	Approval Date:	Expiration Date:	
Date: 2/14/2002	Phone: (505) 392-2236	Conditions of Approval: Attached <input type="checkbox"/>	



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Carol Leach
Acting Cabinet Secretary

Lori Wrotenbery
Director
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MEMO

DATE: 2/18/02 3/5/02
TO: Wayne Price 476-3462
FROM: Donna Mull & Paul

- For Your Files
- For Your Review and Return
- For Your Handling
- As Per Your Request
- Please Advise
- Prepare a Reply for My Signature
- For Your Information
- For Your Approval
- For Your Signature
- For Your Attention

Holding ¹¹ for your approval

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Form C-101
Revised March 17, 1999

Oil Conservation Division
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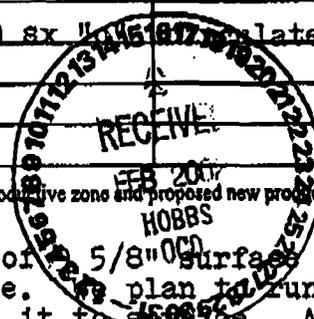
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Signature: <i>Eddie W. Seay</i>		Approved by:	
Printed name: Eddie W. Seay		Title:	
Title: Agent		Approval Date:	Expiration Date:
Date: 2/14/2002	Phone: (505) 392-2236	Conditions of Approval:	
Attached <input type="checkbox"/>			

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.
Beginning with the issue dated

March 6 2002
and ending with the issue dated

March 6 2002

Kathi Bearden
Publisher

Sworn and subscribed to before
me this 6th day of

March 2002

Jodi Jensen
Notary Public.

My Commission expires
October 18, 2004
(Seal)



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

LEGAL NOTICE
March 6, 2002
NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications has been submitted to the Director of the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(BW-030) - H.R.C. Inc., Mr. Gary Schubert, (505) 393-3194, P.O. Box 5102, Hobbs, New Mexico, 88241 has submitted a discharge plan application for a new in-situ brine extraction well and surface storage facilities. The new brine well and facility will be located in unit letter F and B respectfully of Section 29, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico. Fresh water obtained from the city of Hobbs will be injected in the Salado formation at a approximate depth of 1600 feet and brine water will be extracted out of the formation from a depth of approximately 2000 feet with an average total dissolved solids concentration of 300,000 mg/l. H.R.C. INC. proposes to drill a new well to be located 2565 FNL and 2330 FWL of Section 29, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico. Ground water most likely to be affected by any accidental release or discharge is the Ogallala water bearing formation at a depth of approximately 50 feet and has a total dissolved solids content of approximately 800 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
(seal)
LORI WROTENBERY, Director
#18799

01100060000 02553962
State of New Mexico Oil &
1220 S. St. Francis
Santa Fe, NM 87505

THE SANTA FE
NEW MEXICAN
Founded 1849

NM OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DR.
SANTA FE, NM 87505
ATTN WAYNE PRICE

AD NUMBER: 250307 ACCOUNT: 56689
LEGAL NO: 70866 P.O.#: 02199000249
198 LINES 1 time(s) at \$ 87.29
AFFIDAVITS: 5.25
TAX: 5.78
TOTAL: 98.32

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ENERGY, MINERALS
AND DEPARTMENT
OIL CONSERVATION
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 2002.

STATE OF NEW MEXICO
OIL CONSERVATION
DIVISION
S E A L
LORI WROTENBERY, Director
Legal #70866
Pub. March 8, 2002

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, K. Voorhees being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #70866 a copy of which is hereto attached was published in said newspaper 1 day(s) between 03/08/2002 and 03/08/2002 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 8 day of March, 2002 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

K. Voorhees
1st LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this
8 day of March A.D., 2002

Notary Laura R. Hardy

Commission Expires 11/23/03

11/23/03

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ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

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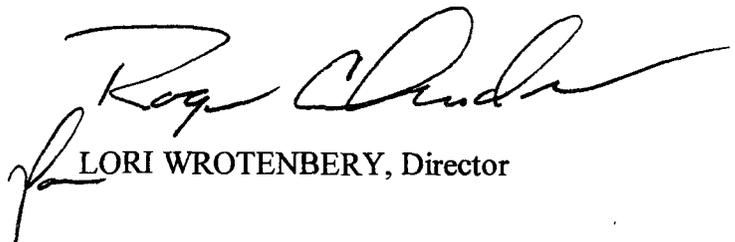
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

S E A L

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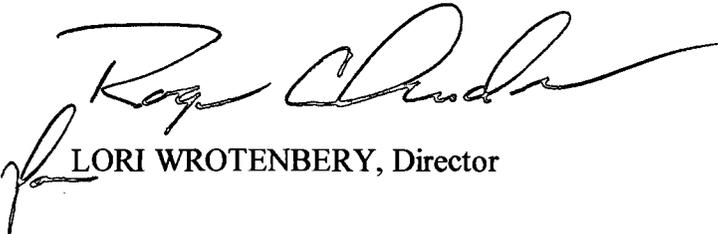
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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

S E A L

Price, Wayne

From: Eddie Seay [seay04@leaco.net]

Sent: Monday, March 04, 2002 10:22

To: Wayne Price

Subject: HRC Application

March 4, 2002

NMOCD Environmental Bureau

ATTN: Wayne Price

1220 South St. Francis Drive

Santa Fe, NM 87505

RE: HRC Application for Brine well and facility

Mr. Price:

The new location of the brine well which HRC proposes to drill is located in Unit F 2565/FNL 2330/FWL, Section 29, Township 18 S., Range 38 E., Lea Co., NM. HRC amended the location of the well because of the risk of re-entering an old plugged well and the new location is better located from the existing wells.

The brine extraction facility will be located in Unit B 990/FNL 1650/FEL, Section 29, Township 18 S., Range 38 E. approximately. The amended facility located was moved to get it away from West County Road, and will be located within the same area as Schubert SWD, making it convenient for operations.

If you have any questions, please call.

Sincerely,

Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

3/4/2002



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor

Carol Leach
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Lori Wrotenbery
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MEMO

DATE: 2/18/02
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FROM: Donna Mull

- | | |
|--|---|
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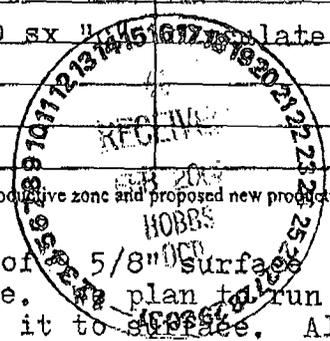
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Signature: <i>Eddie W. Seay</i>			
Printed name: Eddie W. Seay		Approved by:	
Title: Agent		Title:	
Date: 2/14/2002		Approval Date:	
Phone: (505)392-2236		Expiration Date:	
Conditions of Approval:		Attached <input type="checkbox"/>	

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96173		³ Pool Name BSW Salado	
⁴ Property Code	⁵ Property Name Hobbs State			⁶ Well Number 10	
⁷ OGRID No. 131652	⁸ Operator Name H. R. C. Inc.			⁹ Elevation 3655.3	

¹⁰ Surface Location

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F	29	18S	38E		2565	North	2330	West	Lea

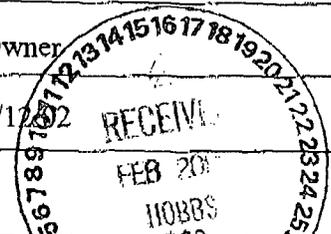
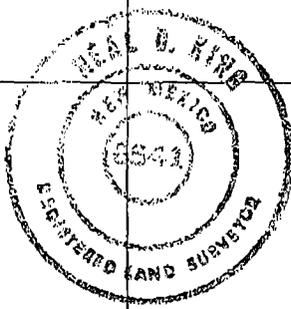
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

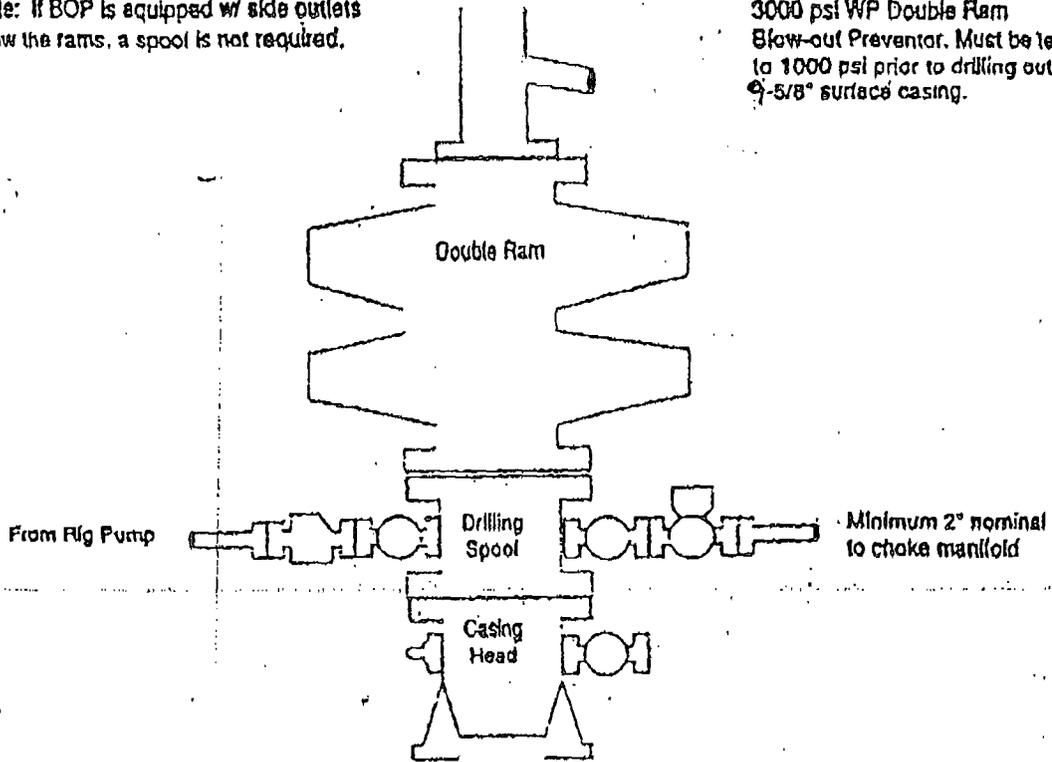
	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Gary M. Schubert</i> Signature</p> <p>Gary M. Schubert Printed Name</p> <p>Owner</p> <p>Title</p> <p>Date 2/17/02</p>
	<p>¹⁸ SURVEYOR'S CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>02-09-02 Date of Survey</p> <p>Signature and Seal of Professional Surveyor: <i>Neal D. Kire</i></p> <p>Certificate Number 6541</p>



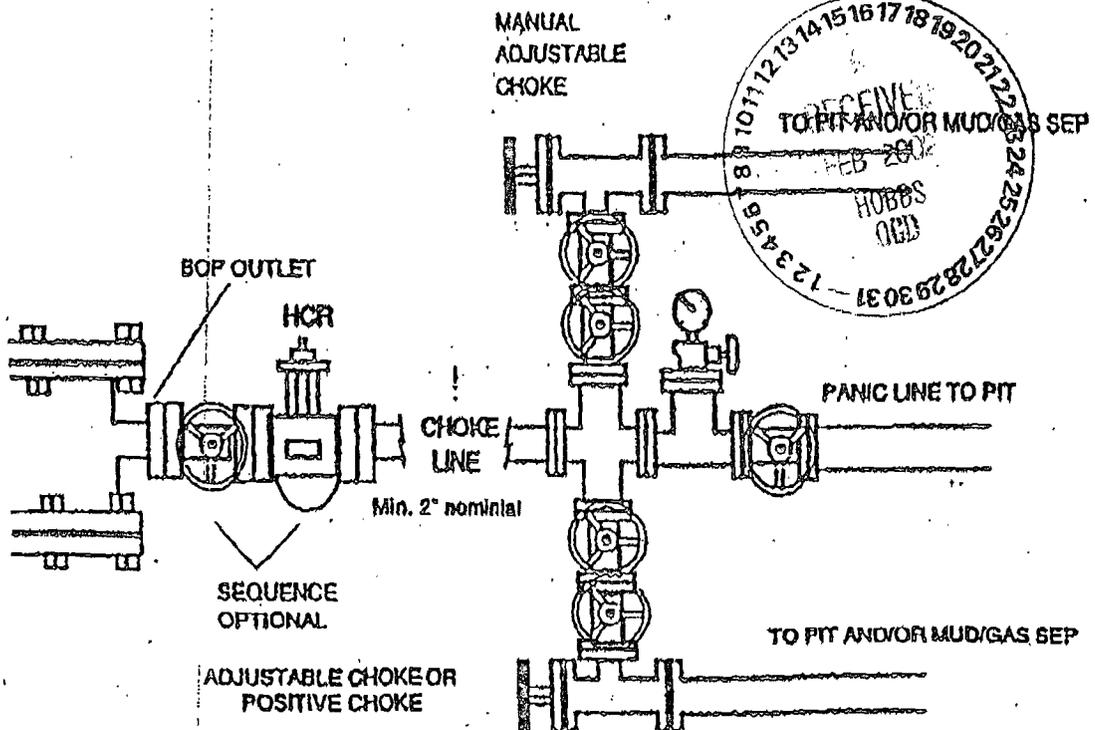
BOP Schematic

*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram Blow-out Preventor. Must be tested to 1000 psi prior to drilling out of 5/8" surface casing.



Choke Manifold Schematic





Occidental Permian Ltd.

580 WestLake Park Blvd.
Houston, TX 77079
PO Box 4294
Houston, TX 77210-4294
281-552-1000

February 11, 2002

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attention: Lori Wrottenbery, Director

Re: Discharge Plan Application of H.R.C. Inc. for a Brine Mining Facility
Unit F, Section 29, Township 18 South, Range 38 East, NMPM
Lea County, NM

RECEIVED
FEB 14 2002
Environmental Bureau
Oil Conservation Division

Dear Ms. Wrottenbery:

Occidental Permian Limited Partnership ("OPL") has received notice of the referenced application, and wishes to intervene and become a party of record in this proceeding so we may participate in any hearing that is called regarding this application. OPL operates the North Hobbs Unit which has oil and gas wells in close proximity to the applicant's proposed brine mining well. Additionally, we are installing a major EOR project in the North Hobbs Unit that will utilize wells in this immediate vicinity to inject carbon dioxide into the Hobbs-Grayburg San Andres pool. We have not yet had an opportunity to review the applicant's complete discharge plan and supporting documentation, and we plan to do so. Until that time and when a hearing is called, if at all, we reserve the right to protest the referenced application and will present evidence and testimony to support our position. As a party of record, we request that the NMOCD, applicant and any other parties of record direct all correspondence related to this matter to the undersigned at the letterhead address.

Thank you for consideration of our request.

Sincerely,

Richard E. Foppiano, P.E.
Senior Advisor - Regulatory Affairs

REF:ref

Cc: Mr. Gary Schubert, H.R.C. Inc., P.O. Box 5102, Hobbs, NM 88241

02:40pm

From-OXY PERMIAN

281-552-1383

T-512 P.001/002 F-864

Richard E. Foppiano, P.E.
Senior Advisor - Regulatory Affairs
OXY USA WTP LP
OXY USA INC.
Occidental Permian Ltd.
P. O. Box 4294
Houston, Texas 77210-4294
Telephone (281) 552-1303
Fax: (281) 552-1383

FACSIMILE TRANSMISSION

No. of Pages	Cover + 1
--------------	-----------

Date: February 11, 2002

To: **Wayne Price**
Company: New Mexico Oil Conservation Deivision, Environmental Dept.
Fax No.: (505) 476-3462

CC:
CC:
CC:

From: Richard E. Foppiano *Rick*
Company: OXY USA Inc.
Subject: Attached Letter

Wayne, thanks for returning my call. Attached is a fax copy of a letter that I am sending by snail mail today.

----- PLEASE DELIVER IMMEDIATELY -----



Occidental Permian Ltd.

580 WestLake Park Blvd.
Houston, TX 77079
PO Box 4294
Houston, TX 77210-4294
281-552-1000

February 11, 2002

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

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Thank you for consideration of our request.

Sincerely,

Richard E. Foppiano, P.E.
Senior Advisor - Regulatory Affairs

REF:ref

Cc: Mr. Gary Schubert, H.R.C. Inc., P.O. Box 5102, Hobbs, NM 88241

February 8, 2002

RECEIVED
FEB 11 2002
Environmental Bureau
Oil Conservation Division

NMOCD Environmental Bureau
ATTN: Wayne Price
Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

RE: HRC Brine well
Hobbs State #5

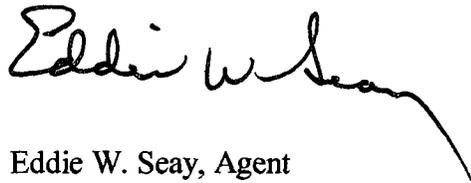
Mr. Price:

Please accept this letter as notice to void their application to use the Hobbs State #5 well as a brine extraction well.

As we discussed, HRC's plan is to drill a new well SE of the #5, a new C-108 and application to drill will be sent after the location has been surveyed. The new well will be the Hobbs State #10.

If you have any questions, please call.

Thank you,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated February 5 2002 and ending with the issue dated February 5 2002

Kathi Bearden
Publisher

Sworn and subscribed to before me this 5th day of

February 2002

Jodi Benson
Notary Public.

My Commission expires October 18, 2004 (Seal)



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

LEGAL NOTICE
FEBRUARY 5, 2002
NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications has been submitted to the Director of the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(BW-030) - H.R.C. Inc., Mr. Gary Schubert, (505) 393-3194, P.O. Box 5102, Hobbs, New Mexico, 88241 has submitted a discharge plan application for a new In-situ brine extraction well and surface storage facilities. The new brine facility will be located in unit letter F of Section 29, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico. Fresh water obtained from the city of Hobbs will be injected in the Salado formation at a approximate depth of 1600 feet and brine water will be extracted out of the formation from a depth of approximately 2000 feet with an average total dissolved solids concentration of 300,000 mg/l. H.R.C. INC. proposes to re-enter the Hobbs State well #5 API # 30-025-23662 which is currently plugged and abandoned.

Ground water most likely to be affected by any accidental release or discharge is the Ogallala water bearing formation at a depth of approximately 50 feet and has a total dissolved solids content of approximately 800 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 18th day of January 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
LORI WROTENBERY, Director
#18729

*Approved
2/7*

01100060000 02553369
State of New Mexico Oil &
1220 S. St. Francis
Santa Fe, NM 87505

THE SANTA FE
NEW MEXICAN
 Founded 1849

NM OIL CONSERVATION DIVISION
 1220 ST. FRANCIS DR.
 SANTA FE, NM 87505
 ATTN WAYNE PRICE

AD NUMBER: 244228 ACCOUNT: 56689
 LEGAL NO: 70778 P.O.#: 02199000249
 198 LINES 1 time(s) at \$ 87.29
 AFFIDAVITS: 5.25
 TAX: 5.78
 TOTAL: 98.32

NOTICE OF PUBLICATION STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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 S E A L
 LORI WROTENBERY, Director
 Legal #70778
 Pub. January 25, 2002

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
 COUNTY OF SANTA FE

I, K. Voorhees being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #70778 a copy of which is hereto attached was published in said newspaper 1 day(s) between 01/25/2002 and 01/25/2002 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 25 day of January, 2002 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/s/ K. Voorhees

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this
 25 day of January A.D., 2002

Notary Laura R. Hardy

Commission Expires 11/23/03

*APPROVED
 Wayne Price
 11/30/02*



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Carol Leach
Acting Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

January 25, 2002

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 7256

Mr. Gary M. Schubert
H.R.C. Inc.
P.O. Box 5102
Hobbs, New Mexico 88241

Re: Application For Brine Extraction Well and Discharge Plan For Brine Facility.

Dear Mr. Schubert:

The New Mexico Oil Conservation Division (OCD) is in receipt of the additional information dated December 10, 2001. After reviewing the submittal OCD determined the application met the criteria required to issue the discharge plan public notice. This notice was issued with a publish date by January 25, 2002. OCD is in receipt of the \$5000.00 cash collateral bond and Change of Ownership form C-104 and is in the process of approving and recording these documents. OCD will forward your copies upon completion.

Upon reviewing the submittal OCD noted the following deficiencies and requires the following information in order to continue the review process.

1. Provide copies of lithologic logs along with a written determination verifying the location of the top and base of the salt section beneath the site. OCD will require the 7" inch casing (new shoe or retainer) to be set at a minimum 100 feet below the top of the salt section. The lower 7" inch casing string left in place shall have at a minimum 100 feet remaining above the base of the salt section and shall have a continuous plug from the lower existing plug to the top where the casing will be cut.
2. Submit a casing/cement inspection plan to determine the location top and verify external mechanical integrity (EMI) for the lower 7" (inch) cemented casing that will remain in the hole before plugging back. The plan shall also include a cement bond and pipe inspection log for the 7" casing above the new (casing shoe/retainer) to surface. The plan shall commit to including an evaluation section with conclusions and recommendations for any corrective action required.

3. The submitted C-101 proposed casing and cement program does not agree with the submittal write-up. Submit a C-101 that reflects the correct program including the construction requirements of items (1. and 2.) above. The C-101 shall have attached a detailed drilling and completion program, blow-out prevention plan and a detailed proposed well bore schematic to include details for above and below the salt section.
4. Items V. and VI of the C-108 were not submitted in a manner that OCD could readily evaluate. There was a comprehensive list of wells titled "Offset Wells Within One-half Mile of Proposed Injectors". Thirty Six (36) of the wells were highlighted and Ten (10) well schematics were included. There were no written descriptions included for any of the wells listed. It appears this information was copied from another project and injected into this report. OCD will accept public information but it must be configured to this application.

OCD's Engineering Bureau noted that twenty four (24) of the wells listed as "Offset Wells Within One-half Mile of Proposed Injectors" had intervals open in the proposed injection zone. There was no evaluation included for these wells. In addition, the well schematics supplied did not have a ledger distinguishing between cemented or mud laden sections. The map included was too small for OCD to properly evaluate the area of review.

OCD requests a larger scaled map showing all wells, including fresh water wells, comprising the area of review. Each well that penetrates the proposed injection zone shall be evaluated. A written description shall be provided and cross-referenced to the map and schematic supplied. The descriptions shall contain conclusions, recommendations and any corrective actions required.

5. Items VII of the C-108 did not address the following issues:
 - VII.2. Whether the system is open or closed system. Please provide.
 - VII.3. Did not provide the maximum injection pressure. Please provide the maximum operating injection and/or test pressure at the well head, system fracture pressure calculated at the bottom casing shoe, fracture pressure gradient (psi/ft) for the system. Demonstrate that the maximum surface injection and/or test pressure will not cause new fractures or propagate existing fractures.

6. Submit a plan to provide an "Air-Break" between the city of Hobbs fresh water line and the brine station. This is required to prevent brine water from back flowing into the city of Hobbs Public Water Supply.
7. The plan submitted proposed a plastic liner under the tanks, loading pad etc. Please provide manufacture, type, thickness and compatibility with fluids or elements of exposure, and estimated life.
8. OCD will require totalizing meters to measure the volume of fresh and brine water injected. Please include in plan.
9. The plan aerial photo shows that the loading area is not adjacent to the brine well and tanks. Please provide a scaled plot plan of the proposed site including legal description and all associated equipment, brine lines, etc. Also it appears the original design information submitted was copied from another project and injected into this report. OCD will accept public information but it must be configured to this application.
10. The plan did not provide a proposed wellhead diagram depicting valves, sampling points, pressure gauges, etc. Please provide.
11. Please provide location of proposed monitor well on plot plan.

If you have any questions please do not hesitate to contact me at 505-476-3487 or E-mail WPRICE@state.nm.us.

Sincerely,



Wayne Price- Environmental Engineer

cc: OCD Hobbs Office
David Catanach-UIC Director
Eddie W. Seay-Agent for H.R.C. Inc.

NOTICE OF PUBLICATION

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

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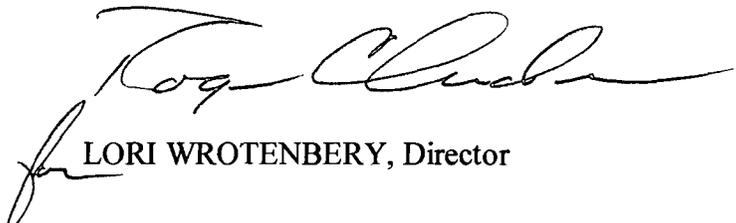
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 18th day of January 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

SEAL

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ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

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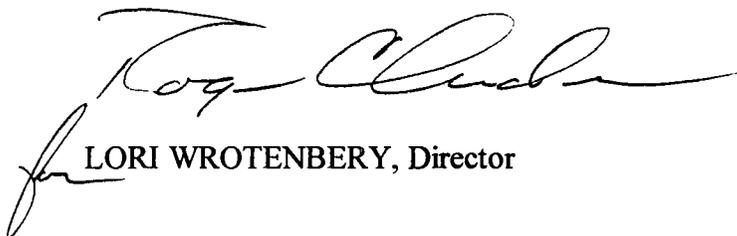
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 18th day of January 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

S E A L

January 16, 2002

To: David Catanach-UIC Director

From: Wayne Price 

Re: HRC Brine Well Permit

Dear David:

As discussed in your office today the Environmental Bureau is soliciting your assistance in this permitting process. I understand this well is going to be located in a new CO₂ fluid in the Hobbs area. Please find enclosed the permit application and C-108 submittal. I have made a preliminary review of this project and have the following concerns:

1. The well bore is approximately 29 years old and condition of pipe is unknown.
2. The area of review maps are not detailed.
3. I conducted an on-site survey and there are three wells within 300-400 feet of the proposed brine well. OCD has documented cases of communication on wells in close proximity of brine wells.
4. They did not provide detailed lithology maps or logs showing the top and bottom of the salt formation.
5. There appears to be a large open hole area below the bottom plug. OCD environmental bureau is concerned about salt creep which can cause large pressure gradients and causing the plugged to fail.
6. The proposed hand draw sketch of the well bore shows the casing shoe to be above the salt section. ??? The salt institute recommends the salt to be a minimum distance into the salt section. The drawing does not provide any completion information below the salt section.
7. They did not demonstrate that the existing water protection string is actually embedded in the Red Bed.

December 10, 2001

RECEIVED
JAN 15 2002
Environmental Bureau
Oil Conservation Division

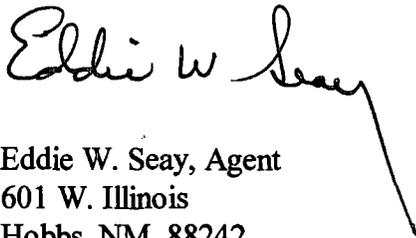
NMOCD Environmental Bureau
ATTN: Wayne Price
P.O. Box 6429
1220 South Saint Francis Drive
Santa Fe, NM 87504

RE: H.R.C. Brine

Mr. Price:

Find within additional information as requested. If you have any questions or need any additional information, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

TABLE OF CONTENTS

- I. Completed C-108
- II. Groundwater Monitoring
- III. C-104
- IV. Bond

C-108

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: H.R.C. Inc.

ADDRESS: P.O. Box 5102 Hobbs, NM 88241

CONTACT PARTY: Gary M. Schubert PHONE: (505) 393-3194

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 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 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: Eddie W. Seay TITLE: Agent

SIGNATURE: *Eddie W. Seay* DATE: 12/10/2001

* 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

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.

- VI. List of wells within.
- VII. Fresh water will be used to produce brine by injecting fresh water down the back side of the tubing at 200# to 250# and producing brine out the tubing. Based on activity at the facility, productions could be 10 to 15 thousand bls. per month.

VIII. HYDROLOGY

Underground aquifers in this area are the Ogallala and Quaternary Alluvium formations. The groundwater in these formation is unconfined where the underlying red beds are relatively impermeable. This underlying layer prevents further downward or upward movement. From information reviewed, the groundwater flow from the Ogallala formation flows to the south southeast, the water level for this area ranges from 50' to 70' below ground level and the average depth of the wells are 150'. Find within State Engineers list of water wells in the general area and analytical from two of the wells.

GEOLOGY

The proposed site is located on the Central basin Platform of the Permian Basin. The sub-surface formations are in transitional area between Delaware Basins back reef or shelf area and the platform. The brine product is from the Salado Formation of the Ochoa series. The series is of upper Permian Age, and extends across the Delaware Basin, Central Basin Platforms, thins and pinches out on the eastern shelf. This series layers are predominately evaporates which contain strings of dolomite, shale, siltstone, and sandstone. The thickness of this salt section averages about 1000 ft. The Triassic rock overlying the Permian formation is the Dockem group, and is divisible into the Santa Rosa sandstone and the Chinle formation. The Tertiary rocks are represented by the Ogallala formation. This formation ranges in thickness from 0' to 300'. It is chiefly calcareous, unconsolidated sand, clay, silt and gravel. This is the formation most of Lea Co. obtains its drinking water from.

- IX. No stimulation needed.
- X. Logs on file with OCD.
- XI. Attached.
- XII. I, Eddie W. Seay, as agent, have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the salt section and any underground source of drinking water near this site.
- XIII. Proofs of Notice attached.

District I
PO Box 1960, Hobbs, NM 88241-1960
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Briscoe Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: H. R. C. Inc. P. O. Box 5102 Hobbs, NM 88241		OGRID Number 131652
		API Number 30-025-23662
Property Code 992279	Property Name Hobbs State	Well No. 5

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
F	29	18S	38E		2280	North	1980	West	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County

Proposed Pool 1 BSW - Salado	Proposed Pool 2
---------------------------------	-----------------

Work Type Code Multiple	Well Type Code	Cable/Rotary Workover	Lease Type Code	Grossed Level Elevation 3655
	Proposed Depth	Formation Salt	Contractor	Spud Date

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	36#	364	200	
8 3/4	7	23#	3826	140	
6 1/4	4 1/2	11.6 #	5986	120	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Gay M. Schubert</i>		OIL CONSERVATION DIVISION	
Printed name: GAY M. SCHUBERT		Approved by:	
Title: PRES.		Title:	
Date: 7/9/01		Approval Date: Expiration Date:	
Phone: 505-393-3194		Conditions of Approval: Attached <input type="checkbox"/>	

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State Fee
5. State Oil & Gas Lease No.
A-1469-Z

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL GAS WELL OTHER-
2. Name of Operator
E S H Corporation
3. Address of Operator
P. O. Box 774 , Midland, Texas 79701
4. Location of Well
UNIT LETTER F , 2280 FEET FROM THE North LINE AND 1980 FEET FROM
THE West LINE, SECTION 29 TOWNSHIP 18 S RANGE 38 E NMPM.
15. Elevation (Show whether DF, RT, GR, etc.)
3655 GL
12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
		OTHER <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

5-11-73 - Set 4 1/2" Bridge Plug at 5757' with 35' of cement.
Estimated top of cement at 5722'

Shot and pulled Casing at 3744'

Pumped 25 sack plug at 3744' to 3644'

Spotted 10' plug at surface

Installed dry hole marker

Cleaned and leveled location

Location is clear and ready for inspection.

E.S. HITCHCOCK 915-694-7461
2809 EXETER 79705

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED E. S. Hitchcock TITLE President DATE 22 October 1973
APPROVED BY John W. Runyan TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

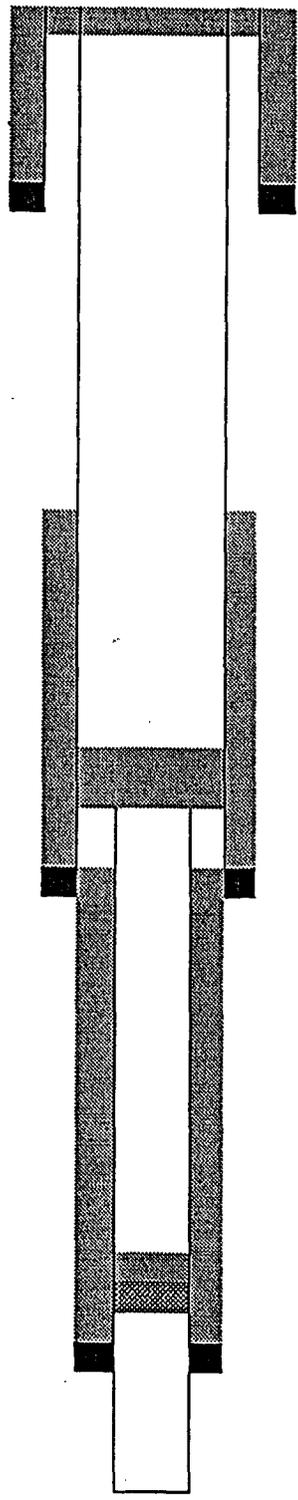
NE-O-TEX HOBBS STATE #5

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.

*Existing condition
of well # 5*



Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

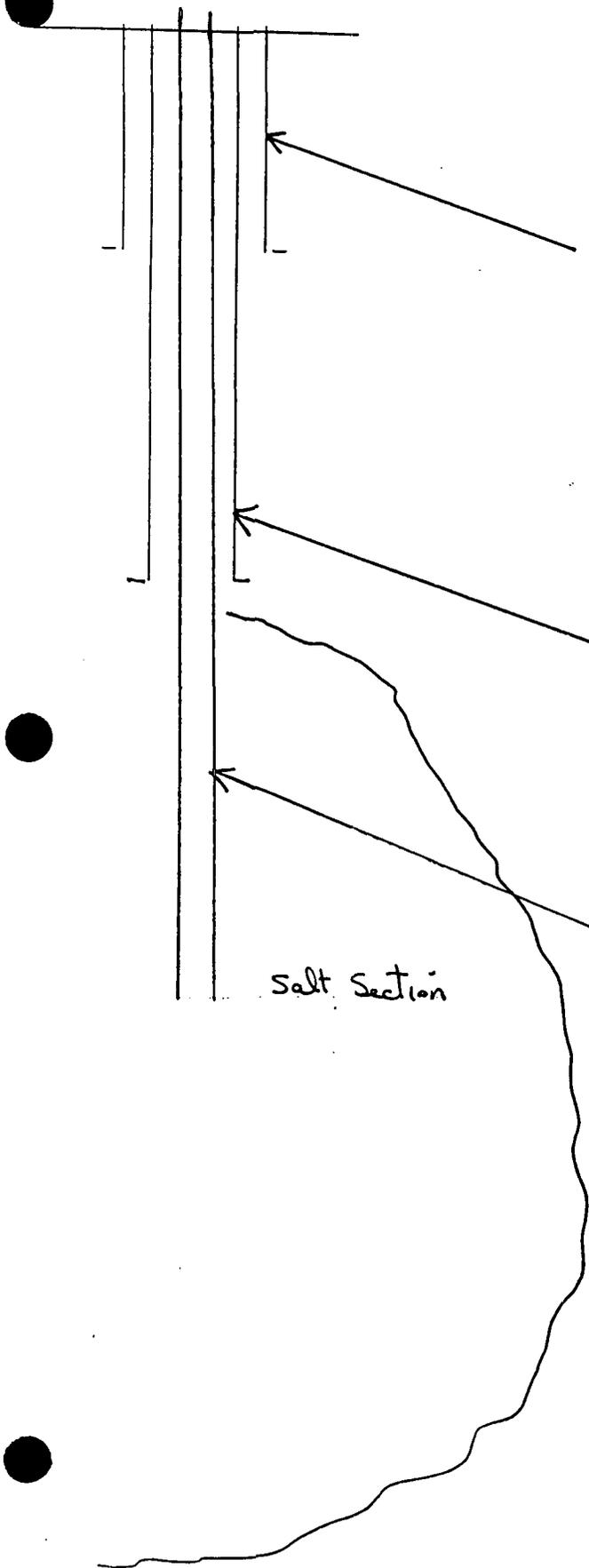
Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effic.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

TD: 5986'

Proposed completion for
HRC # 5 Brine well



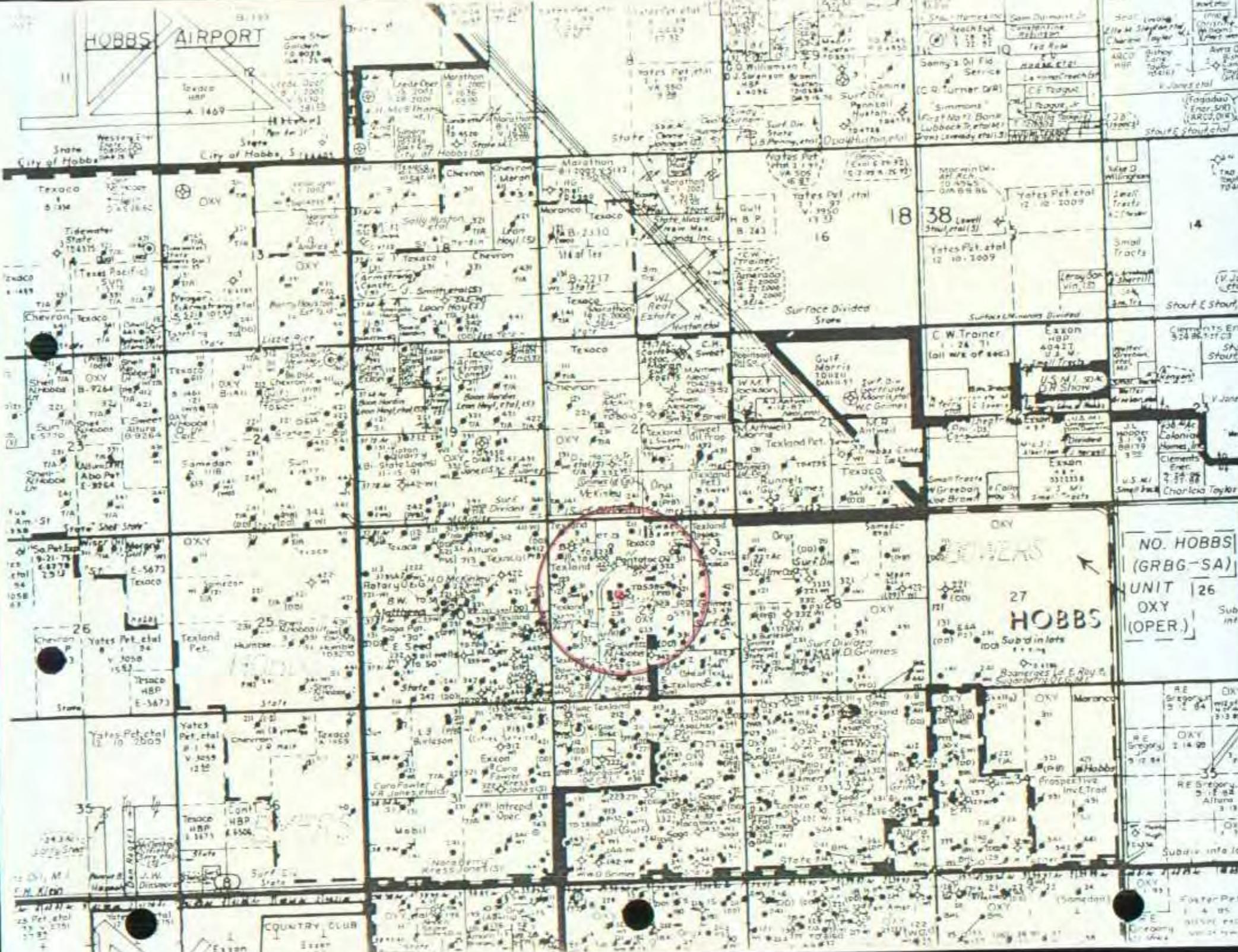
$9 \frac{5}{8}$ " surface casing set at 364'
cement circ to surface

7" casing set at 1600'
cement circulated to surface

Salt Section

$2 \frac{7}{8}$ " production tubing set
into salt at approx. 2000'

HOBBS AIRPORT



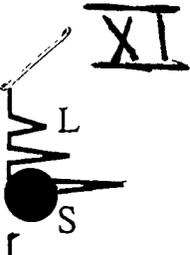
NO. HOBBS
(GRBG-SA)
UNIT 26
OXY
(OPER.)

27
HOBBS

COUNTRY CLUB

Exxon

Foster Pet
3-4-85
Oxy
3-11-85
Oxy
3-11-85



Laboratory Services, Inc.
 4016 Fiesta Drive
 Hobbs, New Mexico 88240
 Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well for Wells 29321, 29231, 32312

SAMPLED BY _____

DATE TAKEN 8/8/00

REMARKS T18S-R38E-Sec29; Qtr Sec 4,1,2

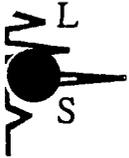
Barium as Ba	0	
Carbonate alkalinity PPM	68	
Bicarbonate alkalinity PPM	260	
pH at Lab	7.21	
Specific Gravity @ 60°F	1	
Magnesium as Mg	32	
Total Hardness as CaCO3	56	
Chlorides as Cl	325	
Sulfate as SO4	130	
Iron as Fe	0	
Potassium	0.1	
Hydrogen Sulfide	0	
Rw	12	@ 23° C
Total Dissolved Solids	841	
Calcium as Ca	24	
Nitrate	2.2	

Results reported as Parts per Million unless stated

Langelier Saturation Index -54

Analysis by: Vickie Walker
 Date: 8/11/00

VI



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Wells 33111 & 28131 + 29231

SAMPLED BY _____

DATE TAKEN 5/9/00

REMARKS T18S-R38E-Sec 29, Qtr Sec. 4,2,1

Barium as Ba	0	
Carbonate alkalinity PPM	40	
Bicarbonate alkalinity PPM	216	
pH at Lab	7.63	
Specific Gravity @ 60°F	1	
Magnesium as Mg	174	
Total Hardness as CaCO ₃	300	
Chlorides as Cl	155	
Sulfate as SO ₄	115	
Iron as Fe	0.1	
Potassium	0.09	
Hydrogen Sulfide	0	
Rw	9.4	@ 25° C
Total Dissolved Solids	850	
Calcium as Ca	126	
Nitrate	7.5	

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.05

Analysis by: Vickie Walker

Date: 6/6/00

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	Depth	No. of	TOC
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size		Sxs.	
Oxy								PBTD				7	8.75	4000	500	976**
28331	30-025-07412	28	-18S	-38E	J	5/35	P	4280	4015	4268	4081-4093	10.75	13.5	245	150	CIRC
Oxy												7.625	9.625	1635	300	186
												5.5	6.25	4015	300	2662-CBL
												4.5	6.5	3987-4280	100	3987
28411	30-025-07419	28	-18S	-38E	A	4/36	P	4223	4133	4225	15	12.5	16	227	160	CIRC**
Oxy								PBTD			17	7	8.75	4133	750	2550-CBL
											475					
28421	30-025-07418	28	-18S	-38E	H	5/35	TA	4262	4020	4262	NONE	12.5	16	235	150	CIRC
Oxy												7	8.75	4020	200	2677-CBL
28422	30-025-27243	28	-18S	-38E	H	5/48	I	4470	4239	4268	4222-4228	16	20	40	40	CIRC
Oxy											4242-4244	8.625	12.25	1600	850	CIRC
											4252-4256	5.5	7.875	4503	1050	CIRC
											4269-4271					
28431	30-025-07413	28	-18S	-38E	I	8/35	P	4225	3993	4218	2660	10.75	13.5	225	150	CIRC**
Oxy												7.625	9.625	1640	400	CIRC**
												5.5	7.875	3993	400	2698-CBL
28441	30-025-07411	28	-18S	-38E	P	1/35	I	4272	4102	4257	NONE	10.75	13.5	243	150	CIRC
Oxy								PBTD				7.625	9.625	1634	300	185
												5.5	6.25	4015	300	CIRC
29111	30-025-23919	29	-18S	-38E	D	12/71	P	4287	4183	4287	3905-4260	8.625	11	310	150	CIRC
Oxy								PBTD				5.5	7.875	3905	300	2427**
29121	30-025-07449	29	-18S	-38E	E	3/47	P	4275	3924	4275	4070-85	9.625	12.25	2739	650	890
Oxy											4110-20	7	8.75	3104	100	2640 CBL
											4130-50	4.5 Lnr	6.25	2900-4201	100	2900
29122	30-025-28953	29	-18S	-38E	E	2/85	I	4215	4154	4211	NONE	13.375	17.5	40	NA	CIRC
Oxy								(CIBP)				8.625	11	1510	785	CIRC
												5.5	7.875	4370	435	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBDT	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
29131 Oxy	30-025- 07447	29	-18S	-38E	L	10//30	P	4168 PBDT	4050	4210	NONE	12.5 9.625 7 5	18 12 8.75 6.125	225 2750 3976 3870-4220	250 650 300 50	CIRC 660** 1504-CBL 3930-CBL
29132 Oxy	30-025- 26917	29	-18S	-38E	L	12//80	I	4470 PBDT	4025	4245	NONE	16 8.625 5.5	20 12.25 7.875	40 1595 4510	40 785 900	CIRC CIRC CIRC**
29141 Oxy	30-025- 07448	29	-18S	-38E	M	8//30	I	4238 PBDT	3690	4228	3960-4108 4033-4053	12.5 9.625 7 5.5 4.5	18 12 8.75 7.875 6.25	203 2736 3960 3941 3417-4238	200 650 300 250 50	CIRC 1000** 1850** 3460-CBL 3774-CBL
29211 Oxy	30-025- 07433	29	-18S	-38E	C	11//30	TA	4003 CIBP	4217	4270	4053-4150 4180-4200 4211-4215	12.5 9.625 7 5.5	18 12 8.75 6.25	243 2796 4007 3957-4238	250 400 500 50	CIRC CIRC 3014** 3957
29221 Oxy	30-025- 07430	29	-18S	-38E	F	9//30	P	4210 PBDT	4118	4176	4154-4182 4175-4185 4195-4200 4213-4267	12.5 9.625 7 4.5	18 12 8.75 6.125	210 2704 3979 3910-4213	200 400 500 50	CIRC 1236 2753 3910
29222 Oxy	30-025- 26934	29	-18S	-38E	F	4//81	I	4465	4175	4265	NONE	16 8.625 5.5	20 12.25 7.875	40 1605 4510	40 950 1050	CIRC CIRC CIRC
29231 Oxy	30-025- 07438	29	-18S	-38E	K	10//30	P	4255	4106	4255	NONE	15.5 9.625 7 5	18 12.25 8.75 6.25	252 2729 3953 3906-4220	1000 600 300 50	CIRC** CIRC 2718 3906
29241 Oxy	30-025- 07437	29	-18S	-38E	N	10//30	I	4255	4076	4239	NONE	12.5 9.625 7	18 12 8.75	217 2730 3929	160 500 350	CIRC 895 1850

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBDT	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
												5.5	7.875	3822-4299	60	3822
29242 Oxy	30-025-28413	29	-18S	-38E	N	3/84	P	4370	4005	4257	4019 4037 4040	16 8.625 5.5	20 12.25 7.875	30 1511 4368	NA 750 750	CIRC CIRC 2330
29311 Oxy	30-025-07432	29	-18S	-38E	B	10/30	P	4269	4044	4269	4090-4110 4171	12.5 9.625 7 5.5	16 11.75 8.75 6.25	241 2776 4008 3921-4234	250 400 500 350	113 2750 2949 3786
29321 Oxy	30-025-07431	29	-18S	-38E	G	9/30	P	4301 PBDT	4137	4271	3895 4100	12.5 9.625 7 5	16 11.75 8.75 6.25	211 2756 3995 3812-4308	250 250 300 100	CIRC 921 2930-CBL 3894-CBL
29322 Oxy	30-025-28883	29	-18S	-38E	G	11/84	I	4342 PBDT	4160	4256	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1520 4384	NA 620 850	CIRC CIRC CIRC
29323 Oxy	30-025-28941	29	-18S	-38E	G	1/85	P	4180 PBDT	3089	4272	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1542 4370	NA 375 450	CIRC CIRC 575-CBL
29331 Oxy	30-025-07436	29	-18S	-38E	J	9/30	I	4261	4100	4258	4044-4065	9.625 7 4.5	11.75 8.75 6.25	2742 3929 4270	500 300 750	907 2115 3788 CBL
29341 Oxy	30-025-07445	29	-18S	-38E	O	10/30	P	4090 PBDT	4050	4146	4010-4035	13.375 9.625 7 5	15 12 8.75 6.25	210 2750 3934 4162	150 700 300 350	CIRC** CIRC** 3430-CBL CIRC
29342 Oxy	30-025-28884	29	-18S	-38E	O	11/84	I	4375	4083	4250	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1520 4375	NA 620 875	NA CIRC CIRC
29411	30-025-07454	29	-18S	-38E	A	10/30	I	4335	4200	4335	4102-4137	12.5	16	245	250	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTB	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
Oxy											4057-4091	9.625	11.75	2750	650	365**
											4154-4158	7	8.75	4045	300	2231**
												5.5	6.25	3941-4223	30	3941**
29431 Oxy	30-025-07458	29	-18S	-38E	I	10/30	P	4227 PBTB	4155	4225	4010 4075	15.5 9.625	18 12.25	228 2720	200 600	CIRC** 978**
												7	8.75	3900	400	2086**
												5.5	6.25	3209-4229	120	3209**
29441 Oxy	30-025-07444	29	-18S	-38E	P	10/30	P	4211 PBTB	4058	4266	4020-4028	13.375 9.625	18 12	232 2743	150 1400	CIRC** CIRC**
												7	8.75	3950	300	3240-CBL
												5	6.5	4172	22	4020
29442 Oxy	30-025-28885	29	-18S	-38E	P	2/85	I	4237 CIBP	4065	4210	4031 4036	13.375 9.625	17.5 12.25	40 1536	NA 575	CIRC CIRC
												7	7.875	4370	1100	CIRC
29544 Oxy	30-025-34844	29	-18S	-38E	P	7/09	P	4359 PBTB	4124	4256	NONE	14 8.625	18 12.25	40 1565	50 725	CIRC CIRC
												5.5	7.875	4400	775	CIRC
30112 Oxy	30-025-29063	30	-18S	-38E	D	3/85	TA	4000 CIBP	4034	4264	NONE	13.375 9.625	17.5 12.25	40 1520	NA 250	NA CIRC
												7	8.75	4369	675	CIRC
30113 Oxy	30-025-29064	30	-18S	-38E	D	1/85	P	4310 CIBP	4042	4285	NONE	13.375 8.625	17.5	55 1495	NA 620	CIRC CIRC
												5.5	7.875	4370	990	CIRC
30121 Oxy	30-025-07464	30	-18S	-38E	E	9/30	I	4115 PBTB	4160	4271	4042-4096	12.5 9.625	16 11.75	212 2749	200 400	CIRC** 1281**
												7	8.75	3994	425	2738-CBL
												5	6.125	3841-4312	40	CIRC-CBL
30131 Oxy	30-025-07481	30	-18S	-38E	L	10/30	P	4256 CIBP	4082	4270	4006-70 4116-40	9.625 7	11.75 8.75	2751 3900	550 350	733 1783

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

FOR WELLS 28332,29231,29321,30223,32312,32431																	
Well Name	API No.	Sec	T	R	Un	Drill	Well	TD or	Top	Bot	Sqz	Csg	Hole		No. of		
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs	TOC	
St A #4	30-025-23076	32	-18S	-38E	B	4/69	TA	5325	5375	5966	NA	11.75	15	380	350	CIRC	
Amerada								CIBP				8.625	11	3810	590	2400	
												5.5	7.875	5998	325	5281**	
St A #5	30-025-23116	32	-18S	-38E	A	6/69	P	6954	6674	6936	NA	11.75	15	385	400	CIRC**	
Amerada												8.625	11	3798	590	1099**	
												5.5	7.875	7000	501	4772**	
State B #5	30-025-07434	29	-18S	-38E	G	12/48	P	3224	3136	3224	1680-1682	10.75	13.75	220	200	CIRC**	
Collins & Ware												7.625	9.875	1665	300	CIRC**	
												5.5	6.75	3136	300	CIRC**	
State B #6	30-025-07435	29	-18S	-38E	F	1/47	P	3219	3137	3219	NONE	7.625	9.875	414	200	390	
Collins & Ware												5.5	6.75	3137	304	CIRC**	
St I #5	30-025-23173	29	-18S	-38E	O	7/69	P	6970	6648	6930	NONE	8.625	12.25	3808	300	3418**	
Texland Pet.												8.625	8.75	3575	530	CIRC**	
												5.5	7.875	7022	NA	NA	
State A #7	30-025-22934	29	-18S	-38E	N	2/69	P	6050	5823	5941	NONE	11.75	15	360	250	CIRC**	
Conoco												8.625	11	3800	240	2515-TS	
												5.5	7.875	6050	405	3300-TS	
State A #8	30-025-23048	29	-18S	-38E	K	4/69	TA	3567	3552	5787	5824-5924	11.75	15	360	250	CIRC**	
Conoco								CIBP				8.625	11	3800	240	3064**	
												5.5	7.875	5960	405	4309**	
State A-33 # 12	30-025-23195	33	-18S	-38E	L	9/69	P	6985	6686	6946	NONE	13.375	17.5	422	375	CIRC	
Conoco/Brothers Prod.								PBTD				9.625	12.5	3750	325	2850	
												7	8.75	7018	525	3700	

** Denotes calculated TOC with 50% efficiency

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✓
✓
✓
CONCERN

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A Fed #28	30-025-23022	29	-18S	-38E	M	4//69	P	5345	5856	5928	NONE	11.75	15	374	300	CIRC**
Exxon								CIBP				8.625	11	3850	500	1879**
												5.5	7.875	5989	450	3838**
Bowers A Fed #29	30-025-23131	29	-18S	-38E	L	5//69	P	6000	5808	5889	NONE	11.75	15	370	300	CIRC**
Exxon												8.625	11	3849	500	1877**
												4.5	7.875	6000	450	5087**
Bowers A Fed #38	30-025-28580	30	-18S	-38E	I	4//84	P	7006	6764	6962	NONE	13.375	17.5	1476	1220	CIRC
Exxon												10.75	12.25	4491	1650	CIRC
												5.5	7.875	7000	660	4985
WD Grimes #6	30-025-23400	29	-18S	-38E	I	2//70	P	7018	6631	6984	NONE	13.375	17.5	377	400	CIRC**
Lewis B. Burleson								PBTD				9.625	12.25	3847	2300	CIRC**
												7	8.75	7049	540	3458**
HD McKinley #8	30-025-23151	30	-18S	-38E	H	6//69	P	5615	3676	3754	NONE	13.375	17.5	360	340	CIRC
Getty												8.625	11	3842	1400	CIRC
												5.5	7.875	6057	650	3300
HD McKinley #9	30-025-23221	30	-18S	-38E	G	8//69	TA	6961	5761	6965	NONE	13.375	17.5	378	400	CIRC**
Getty								CIBP				9.625	12.25	3851	1748	CIRC**
												7	8.75	6909	650	1933**
Grimes A #4	30-025-07522	32	-18S	-38E	C	9//30	P	3884	3604	3700	270	15.5	20	220	200	CIRC**
Gulf								PBTD				9.625	12.25	2742	600	318**
												8.625	7.875	3931	400	CIRC**
Grimes NCT-A #17	30-025-22792	32	-18S	-38E	C	11//68	P	6051	5780	5998	NONE	13.375	17.5	368	370	CIRC
Gulf/Chevron								PBTD				9.625	12.25	3399	1450	CIRC**
												7	8.75	6149	545	2510
Grimes NCT-A #18	30-025-22915	32	-18S	-38E	F	2//69	P	6000	5772	5928	NONE	13.375	17.5	351	335	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No	Sec	T	R	Un	Drill	Well	TD or	Top	Bot	Sqz	Csg	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Marathon												5.5	7	3116	1000	CIRC
State #8	30-025-07542	32	-18S	-38E	I	7//48	P	3192	3124	3192	NONE	8.625	11	300	125	CIRC
Marathon												5.5	7	3124	1000	CIRC
St #8	30-025-07486	30	-18S	-38E	L	4//48	P	3180	3223	3271	NA	8.625	11	295	125	CIRC
Marathon									OH			5.5	7	3173	900	CIRC
Hobbs State #1	30-025-23585	29	-18S	-38E	F	10//70	P	7032	6660	6992	NONE	12.75	17.5	356	400	CIRC
Marcum Drilling								PBTD				8.625	11	3795	300	2600
												5.5	7.875	7050	150	3839-CBL
Conoco-State #2	30-025-23856	33	-18S	-38E	K	11//71	P	7075	5830	6533	NONE	13.375	17	402	410	CIRC
Penroc												9.625	12.25	3797	350	998
												7	8.75	7075	600	3503
Hobbs State #2	30-025-23620	29	-18S	-38E	G	1//71	P	6397	6705	7031	6318-8350	9.625	12.75	358	200	CIRC
Marcum Drilling								PBTD				7	8.75	3850	250	2481**
												4.5	6.125	7075	425	1672**
Hobbs SWD F #WD29	30-025-12802	29	-18S	-38E	F	2//60	I	5050	4469	5050	NA	9.625	12.25	400	300	CIRC**
Rice										OH		7	8.75	4700	700	CIRC**
State Land S32 #9	30-025-23309	32	-18S	-38E	J	1//70	P	6710	5954	6560	NONE	13.375	17.5	364	160	90**
Saga									CIBP			9.625	12.25	3799	1140	CIRC**
												7	8.75	573-6998	490	CIRC**
Seed St 30 #1	30-025-22994	30	-18S	-38E	K	2//69	P	45	10	45	NONE	7	8.5	10	2	CIRC**
C E Seed																

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No	Sec	T	R	Un	Drill	Well	TD or	Top	Bot	Sqz	Csg	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A #14	30-025-07451	29	-18S	-38E	O	8/47	PA	3207	3162	3207	NONE	8.625	11	496	400	CIRC**
Exxon												5.5	7.625	3120	1350	CIRC**
Bowers A-B #1	30-025-07453	29	-18S	-38E	D	9/48	PA	3238	3179	3238	NA	8.625	11	260	150	CIRC**
Exxon									OH			5.5	7.625	3179	1050	CIRC**
Bowers A Fed #9	30-025-07448	29	-18S	-38E	E	8/30	PA	4259	NA	NA	NA	9.625	12	2750	650	CIRC**
Exxon												7	8.75	3976	300	2011**
												5	6.25	4259	NA	NA
Bowers A Fed #13	30-025-07476	30	-18S	-38E	J	7/47	PA	3189	3148	3189	NA	8.625	11	225	200	CIRC**
Exxon									OH			5.5	7.625	3150	1350	CIRC**
Bowers A Fed #17	30-025-21900	30	-18S	-38E	J	10/66	PA	50	10	50	NONE	7	8	12	6	CIRC**
Exxon																
Bowers A Fed #31	30-025-23176	29	-18S	-38E	E	8/69	PA	7050	6075	6991	NONE	8.625	11	3836	500	1858**
Exxon												5.5	7.875	7038	650	3125**
												2	7.875	7005	NA	NA
Bowers A Fed #33	30-025-23222	29	-18S	-38E	D	7/69	PA	3970	4144	5953	4258-66	13.375	17	416	400	CIRC**
Exxon									CIBP		5939	9.625	12.25	3836	350	2555-TS
												7	8.75	5988	550	2900-TS
Bowers A Fed #34	30-025-23260	30	-18S	-38E	J	8/69	PA	7010	5822	6979	5848-98	9.625	12.25	3850	550	2296**
Exxon											6932-75	3.5 B	7.875	6088	895	2600**
												3.5 D	7.875	6098	895	2615**
Bowers A Fed #CT24	30-025-21963	29	-18S	-38E	E	1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Humble																
Bowers A Fed #CT25	30-025-21964	29	-18S	-38E	E	1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Exxon																
Bowers A Fed. #CT26	30-025-21969	30	-18S	-38E	J	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Exxon																
Bowers A Fed. #CT27	30-025-21970	30	-18S	-38E	H	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Exxon																
WD Grimes #2	30-025-07455	29	-18S	-38E	A	2/1/48	PA	4045	NA	NA	NA	8.625	11	242	150	CIRC**
Humble												5.5	7.375	3205	450	CIRC**
G O Mckinley #3	30-025-07481	30	-18S	-38E	H	7/1/30	PA	3199	NA	NA	NA	9.625	12.25	2755	600	337**
Marathon/Getty												7	8.25	3166	100	2985**
G O Mckinley #6	30-025-07488	30	-18S	-38E	G	6/1/47	PA	3200	1453	NA	NA	8.625	11	1474	400	CIRC**
Marathon/Getty												5.5	5.875	3178	200	CIRC**
G O Mckinley #7	30-025-07489	30	-18S	-38E	B	7/1/47	PA	3224	NA	NA	NA	8.625	11	1504	400	CIRC**
Marathon/Getty												5.5	6.5	3192	200	CIRC**
Hobbs State #5	30-025-23682	29	-18S	-38E	F	1/1/71	PA	5959	5813	5879	NA	9.625	12.25	364	200	CIRC
Ne-O-Tex												7	8.75	3826	200	2250
												4.5	6.25	5986	120	3800 (C)
State-Northrup #1	30-025-07535	32	-18S	-38E	J	6/1/30	PA	3227	3140	3203	NONE	12.5	16	1482	175	1046**
Ohio Oil								PBTD				10.75	12.25	2776	200	2050**
												7	8.75	3850	275	CIRC
												5	7	3244	500	CIRC
WD Grimes #6	30-025-07428	28	-18S	-38E	F	11/1/47	PA	3325	NONE	NONE	NONE	9.625	13	441	300	CIRC**
Repallo/Sinclair												7	9	3185	800	CIRC**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

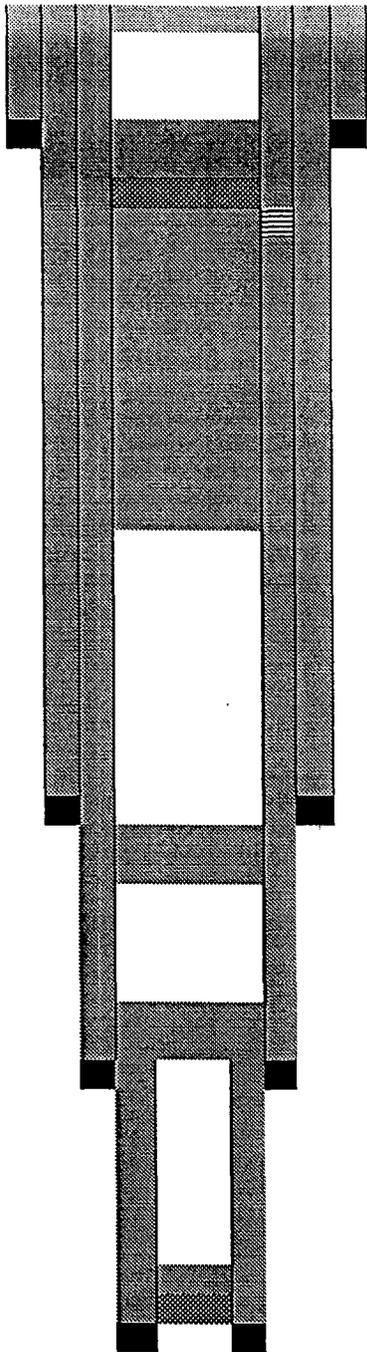
Well Name	API No	Sec	T	R	Un	Drill	Well	TD or	Top	Bot	Sqz	Csg	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs	TOC
WD Grimes #5	30-025-07424	28	-18S	-38E	L	7/47	PA	3150	3191	3197	NONE	8.625	11	409	195	CIRC**
Shell								CMT				4.5	7.875	1958	600	CIRC**
WD Grimes #6	30-025-12500	28	-18S	-38E	M	7/47	PA	3090	3155	3161	NONE	8.625	11	411	200	CIRC**
Shell								CMT				5.5	7.875	2778	1400	CIRC**
Grimes #8	30-025-07423	28	-18S	-38E	L	9/47	PA	3120	3215	3221	NONE	8.625	11	402	200	CIRC**
Shell								CMT				4.5	7.875	2108	850	CIRC**
McKinley A #9	30-025-12492	19	-18S	-38E	N	8/47	PA	3247	3205	3247	NA	8.625	11	407	200	CIRC**
Shell												4.5	7.875	3168	850	CIRC**
WD Grimes #5	30-025-07426	28	-18S	-38E	E	10/47	PA	3222	3212	3222	NONE	9.625	13	441	300	CIRC**
Sinclair												7	9	3185	600	CIRC**
St #1	30-025-07442	29	-18S	-38E	P	8/30	PA	4191	3150	4191	NA	13.375	17.5	217	200	CIRC**
Std of Tx										OH		9	12.25	2735	500	1473**
												6.625	7.875	3907	174	2374**
St #2	30-025-07443	29	-18S	-38E	O	9/30	PA	4171	3155	4156	NA	13	17.5	225	150	CIRC**
Std of Tx												9.625	12.25	2810	725	CIRC**
												7	8.75	3951	300	1973**
WD Grimes #1	30-025-07456	29	-18S	-38E	I	8/30	PA	4160	3168	3189	3259-61	12.5	17.5	238	200	CIRC**
Tidewater											3049-50	9.625	12.25	2712	600	273**
												6.625	8.75	3828	300	2404**
Grimes #2	30-025-07457	29	-18S	-38E	H	10/30	PA	4176	3148	3255	3086-3088	15.5	18	230	200	CIRC**
Tidewater											3270-3272	9.625	12.25	2718	600	282**
												7	8.75	3880	300	1867**
												5.5	7.875	3350	100	3088**
Grimes #5	30-025-07460	29	-18S	-38E	H	12/30	PA	4196	NA	NA	NA	12.5	16	214	250	CIRC

** Denotes calculated TOC with 50% efficiency

WELL SCHEMATIC:
URA NHU 29-421

WELL PLUGGED:
12/3/97

12.5"
220'
200 SX
TOC: CIRC



10 sx cmt from 62' to surf.

Stung out and left 60' cmt on
Top of ret.

Perf at 500'. Set CIRC at 308'

Squeeze 100 sx cmt below
Ret. to surf in 7" csg. x 9.625"
Csg.

Pumped 20 sx cmt from 1868
To 1748'.

9.625"
2720'
600 SX
TOC: 518'

Pumped 20 sx cmt from 2862
To 2742'.

7"
3880'
300 SX
TOC: 2914 CBL

Pumped 20 sx cmt from 3873
To 3722'.

5.5"
3796'-4236'
50 SX
TOC: 3866'

Set CIBP at 4100'. Cap w/40'
Cmt.

**WELL SCHEMATIC:
KON BOWERS A FED #9**

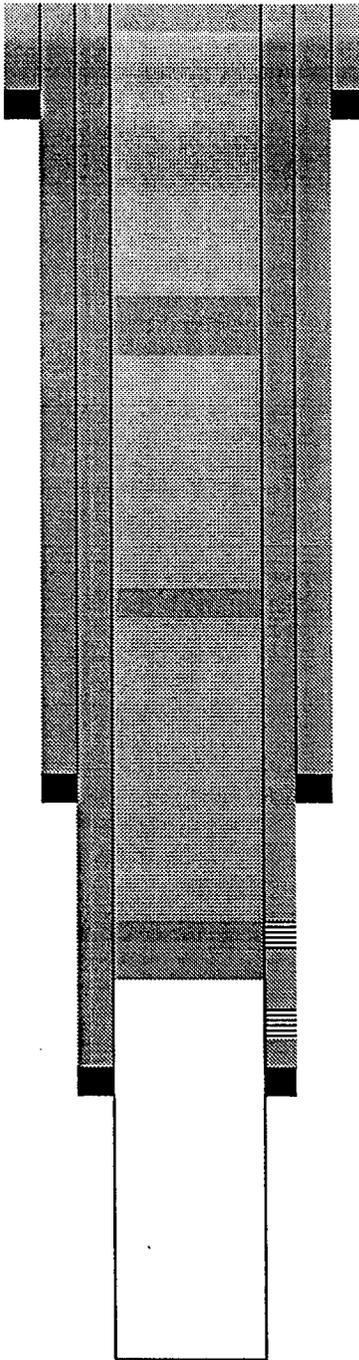
WELL PLUGGED:
12/3/70

12.5"
213'
650 SX
TOC: SURF (C)

9 5/8"
2736'
650 SX
TOC: SURF (C)

7"
3970'
300 SX
TOC: 2000(C)

TD: 4259'



Spotted 10 sx cmt plug from
0' to 25'.

Hole was loaded with mud
Laden fluids.

Spotted 20 sx cmt plug from
1400' to 1550'.

Spotted 40 sx cmt plug from
2300' to 2400'.

Perf's at 3220'-3227'.

Spotted 50 sx cmt plug from
3000' to 3250'.

Squeezed perf's at 3726'
To 3741'.

**WELL SCHEMATIC:
DEWATER WD GRIMES #1**

WELL PLUGGED:
7/25/68

Size: 12 1/2"
Depth: 236'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effc.

Laid 10 sx plug at surface.

Laid 25 sx cmt at bottom of
12 1/2" csg.

Laid 25 sx over 7" stub.
Shot at 787' and pulled.
Shot at 899'.

Shot at 1044'.
Shot at 1193'.

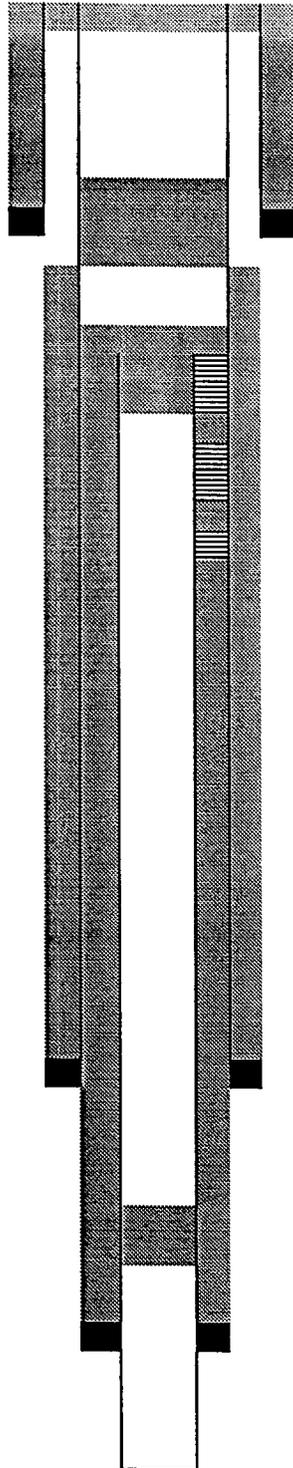
Shot at 1404'.

Size: 9 5/8"
Depth: 2712'
Hole size: 12.25"
Cmt: 600 sxs
TOC: 273'- Calc.
With 50% effc.

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 800' FP

TD:4160'

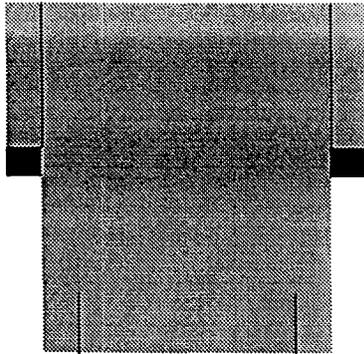
Spotted 25 sx cmt plug from
3599' to 3467'.



W.D. Grimes #2
Tidewater Oil Co.
Unit H, 990 FEL & 2310 FNL
Sec 29, T-18S, R-38E

WELL PLUGGED:
2/18/82

Size: 15.5"
Depth: 230'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
50% efficiency

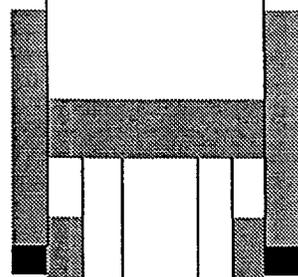


Circ. 15335 sxs from 1361 to surface

Cut off 9.625" at 1200'

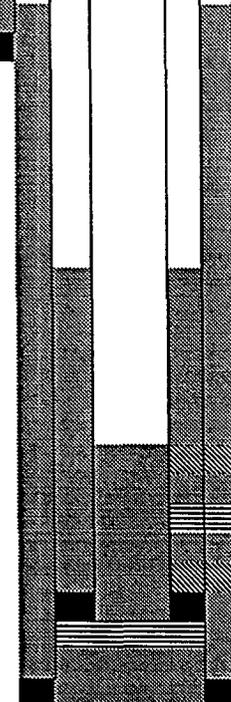
25 sxs cmt. Plug

Size: 9.625"
Depth: 2718'
Hole size: 12.25"
Cmt: 600 sxs
TOC:



Cut off 7 and 5.5" at 2030'

Size: 5.5"
Depth: 3350'
Hole size: 7"
Cmt: 100
TOC: 3088' - Calc
with 50% effc.



15 sxs plug

Perfs 3086-88, sqz'd w/ 100 sxs

Perfs 3148-3255

Perfs 3270-72, sqz'd w/ 50 sxs

Cmt Ret. 3350'

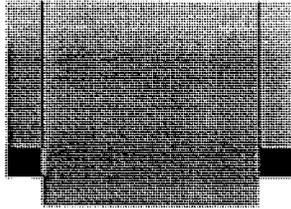
Size: 7"
Depth: 3880'
Hole size: 8.75"
Cmt: 300 sxs
TOC:

TD: 4176

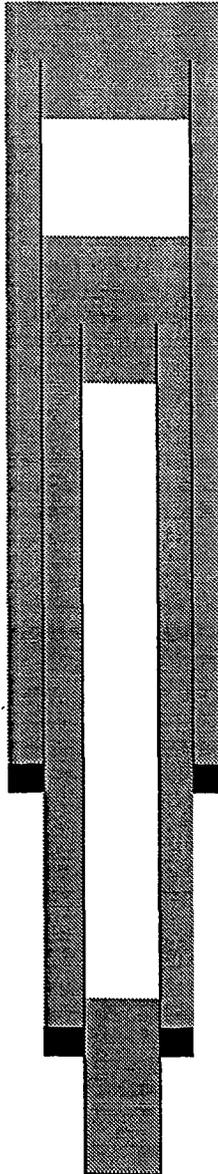
Grimes #3
Tidewater Oil Co.
Unit H, 1650 FNL & 990 FEL
Sec. 29, T-18S, R-38E

WELL PLUGGED:
3/17/81

Size: 12.5"
Depth: 214'
Hole Size: 17.5"
Cmt: 325 sxs
TOC: Circ.



Spotted 500 sxs at 400' to surface



9.625" top at 1198

Spotted 100 sxs at 1249'

7" top at 1750'

Spotted 100 sxs at 1800'

Size: 9.625"
Depth: 2715'
Hole Size: 12.25"
Cmt: 600 sxs
TOC:

Size: 7"
Depth: 3911'
Hole size: 8.75"
Cmt: 400 sxs
TOC:

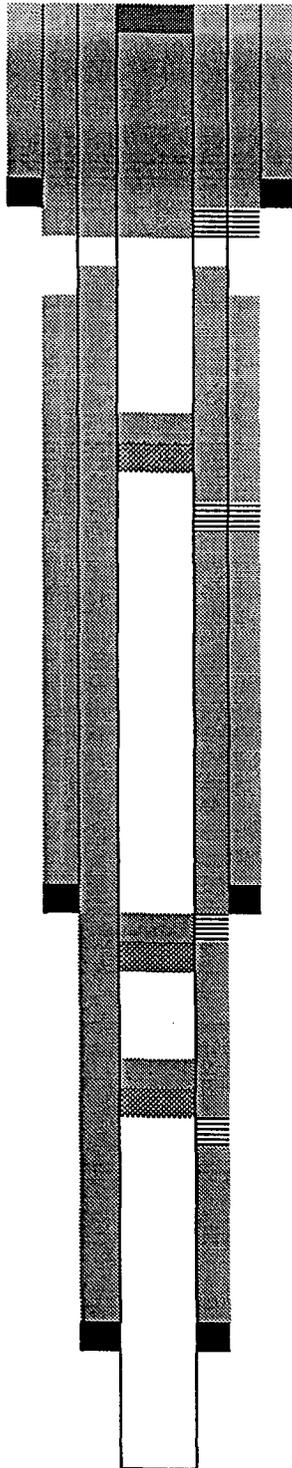
Spotted 100 sxs at 4107

TD: 4200'

WELL SCHEMATIC:
NO. OF TX- STATE #1

WELL PLUGGED:
11/25/89

Size: 13 3/8"
Depth: 217'
200 SX
TOC: SURF (C)
TOC: Circ. - Calc.
With 50% effc.



Weld 1/2" plate on top.

Perf 6 5/8" and 9" at 267'.
Pumped 170 sx cmt down
Prod csg, circ cmt out
Intermediate and surf csg
Annuli. Cut off 6 5/8" csg 3'
Below GL. Cap w/ 1/2" plate
And valve wellbore.

Set circ at 1404'.

Perf 6 5/8" and 9" at 1500'.
Sqzd perfs w/200 sx cmt.

Size: 9"
Depth: 2735'
Hole size: 12.25"
Cmt: 500 sxs
TOC: 1200'- Calc.
With 50% effc.

Perfd 6 5/8" csg at 2785'.
Sqzd perfs w/55 sx cmt.
Set cast iron cmt ret at 2681'.
Cap cmt ret w/35' cmt.

Size: 6 5/8"
Depth: 3907'
Hole size: 7.875"
Cmt: 357 sxs
TOC: Circ. - Calc.
With 50% effc.

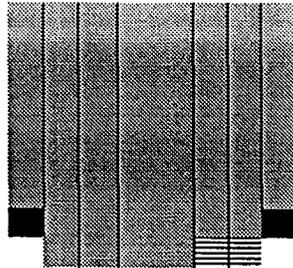
Capped CICR w/35' cmt to
3000'.
Set cast iron cmt ret at 3060'
Sqzd perfs w/106 sx to 3000'
Perfs at 3138' to 3241'

TD: 4191'

**WELL SCHEMATIC:
WELL OF TX STATE #2**

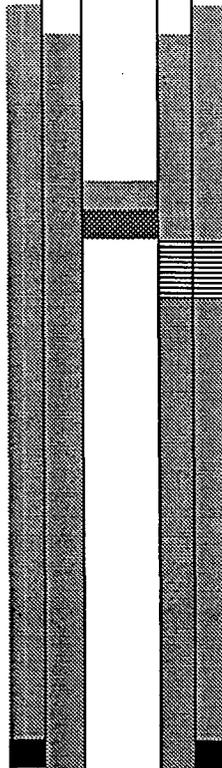
WELL PLUGGED:
12/5/89

Size: 13"
Depth: 225'
Hole size: 17.5"
Cmt: 150 sxs
TOC: Circ. - Calc.
With 50% effc.



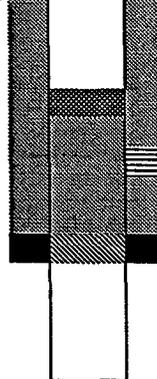
Sqzd perms at 292' with 220
sx. Circ to surface

Size: 9 5/8"
Depth: 2810'
Hole size: 12.25"
Cmt: 725 sxs
TOC: Circ. - Calc.
With 50% effc.



Set circ at 1404' and capped
With cmt.
Perf'd at 1500'.
Sqzd perms at 1500' with 300
sx

Size: 7"
Depth: 3951'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 1240' - Calc.
With 50% effc.



Set circ at 2744'.

Perfs sqzd at 2852', sqzd
With 55 sx.
Dumped 35' cmt onto CIBP.
CIBP at 3072'

PBTD: 3072'

**WELL SCHEMATIC:
O-TEX HOBBS STATE #5**

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

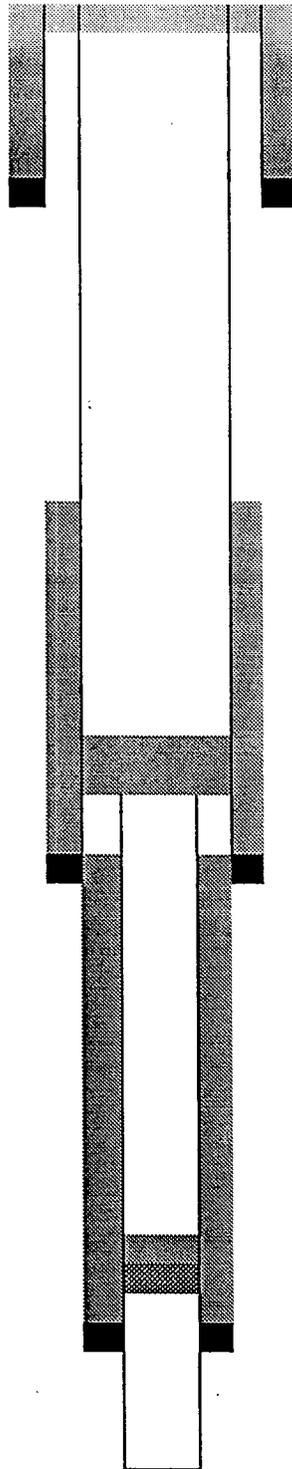
Shot and pulled csg at 3744'.
Pumped 25 $\frac{1}{2}$ sx cmt plug
From 3744' to 3644'.

Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effic.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

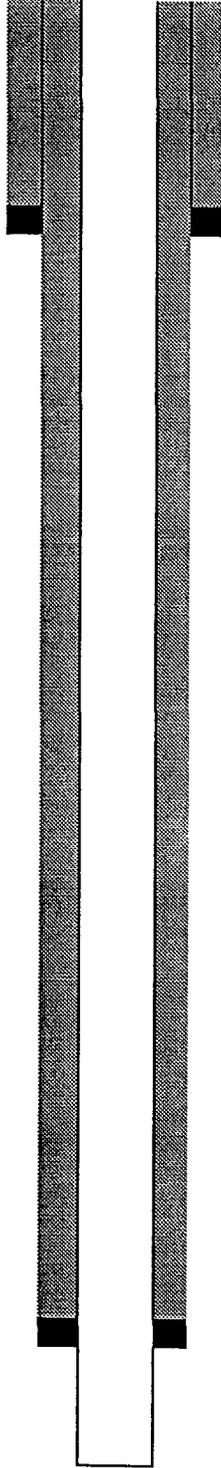
TD: 5986'



W. D. Grimes #2
Humble Oil & Refining Co.
Unit A, NE/4 of NE/4
Sec 29, T-18S, R-38E

WELL PLUGGED:
3/23/48

Size: 8.625"
Depth: 242'
Hole size: 11"
Cmt: 150 sxs
TOC: Circ.- Calc.
50% efficiency



WELL
PLUGS?

Size: 5.5"
Depth: 3140'
Hole size: 7.375"
Cmt.: 450 sxs
TOC: Circ.- Calc.
50% efficiency

TD: 4045'

**WELL SCHEMATIC:
ONOCO STATE A #4**

WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 200'
Hole size: 15"
Cmt: 250 sxs
TOC: Circ. - Calc.
With 50% effc.

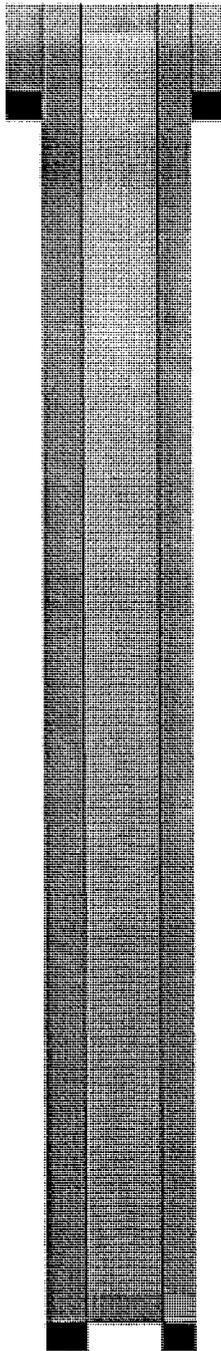
Spotted a 10 sx cmt plug at
Surface.

Filled well bore with 10# mud.

Size: 5 1/2"
Depth: 3215'
Hole size: 7.875"
Cmt: 600 sxs
TOC: Circ. - Calc.
With 50% effc.

TD: 3215'

Set a 40 sx cmt plug over
Perfs from 3164' to 3197'.



**WELL SCHEMATIC:
NOCO STATE A #5**

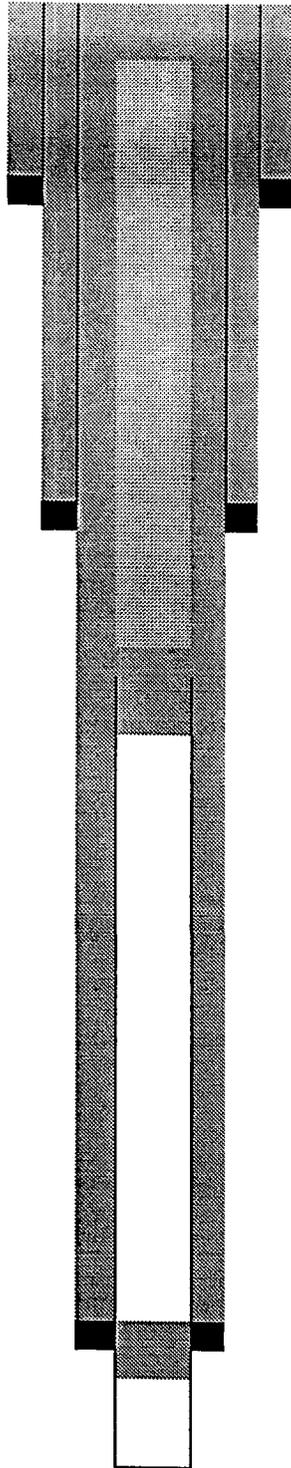
WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 272'
Hole size: 15"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 7 5/8"
Depth: 999'
Hole size: 9.875"
Cmt: 425 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 5 1/2"
Depth: 3206'
Hole size: 7.875"
Cmt: 450 sxs
TOC: Circ. - Calc.
With 50% effc.

PBTD:3168'



Spotted a 10 sx cmt plug
At surface.

Filled well bore with 10# mud

Cut 5 1/2" csg at 1570' and
Pulled out of hole. Set a 55
Sx cmt plug in and out of
5 1/2" stub.

Spotted 40 sx cmt plug over
Perfs from 3188' to 3168'.

**H.R.C. INC.
P.O. Box 5102
Hobbs, NM 88241
(505)393-3194**

RE: Brine Extraction Well
Hobbs State #5
Unit F, Sect. 29, Tws. 18S, Rng. 38E., Lea Co., NM

Dear Sir:

As per the Rules and Regulations of the Oil Conservation Division of New Mexico, you are being provided a copy of the Application for the construction of a brine extraction facility at the above location.

If you have any questions, please call Gary Schubert at (505)393-3194. Any objections or request for hearing must be filed with the Oil Conservation Division within fifteen (15) days. Objections and request for hearing should be addressed to Oil Conservation Division, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 or call (505)476-3440.

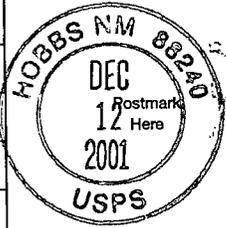
Thank you,

Gary M. Schubert

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$ /
Certified Fee	/
Return Receipt Fee (Endorsement Required)	/
Restricted Delivery Fee (Endorsement Required)	/
Total Postage & Fees	\$ 5.32



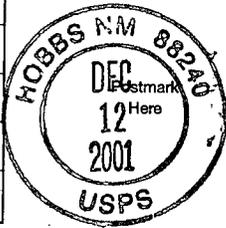
Name (Please Print Clearly) (To be completed by mailer)
Marcum Drilling Co.
 Street, Apt. No., or PO Box No.
P.O. Box 3699
 City, State, ZIP+4
Midland, TX 79705

PS Form 3800, July 1999 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$ /
Certified Fee	/
Return Receipt Fee (Endorsement Required)	/
Restricted Delivery Fee (Endorsement Required)	/
Total Postage & Fees	\$ 5.32



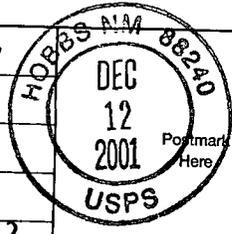
Name (Please Print Clearly) (To be completed by mailer)
Grimes Land Company
 Street, Apt. No., or PO Box No.
P.O. Box 5102
 City, State, ZIP+4
Hobbs, NM 88241

PS Form 3800, July 1999 See Reverse for Instructions

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Article Sent To:

Postage	\$ /
Certified Fee	/
Return Receipt Fee (Endorsement Required)	/
Restricted Delivery Fee (Endorsement Required)	/
Total Postage & Fees	\$ 5.32



Name (Please Print Clearly) (To be completed by mailer)
Conoco Inc.
 Street, Apt. No., or PO Box No.
10 Desta Dr. West
 City, State, ZIP+4
Midland, TX 79705

PS Form 3800, July 1999 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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Article Sent To:

Postage	\$ 1.72	UNIT ID: 0640 Postmark Here Clerk: KJVY1 12/12/01
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)	/	
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)
Occidental Petroleum L.P.
 Street, Apt. No., or PO Box No.
P.O. Box 4294
 City, State, ZIP+4
Houston, TX 77210-4294

PS Form 3800, July 1999 See Reverse for Instructions

7099 3220 0002 3941 0195

7099 3220 0002 3941 0164

7099 3220 0002 3941 0171

7099 3220 0002 3941 0225

U.S. Postal Service
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Article Sent To:

[Empty field for recipient name]

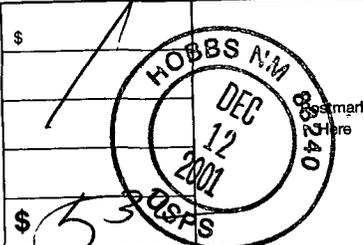
Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees



Name (Please Print Clearly) (To be completed by mailer)

HRC Inc.

Street, Apt. No., or PO Box No.
P.O. Box 5102

City, State, and ZIP+4[®]
Hobbs, NM 88241

PS Form 3800, July 1999

See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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Article Sent To:

[Empty field for recipient name]

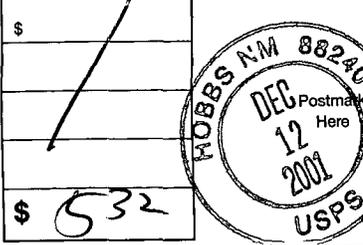
Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees



Name (Please Print Clearly) (To be completed by mailer)

Lewis B. Burleson, Inc.

Street, Apt. No., or PO Box No.
P.O. Box 2479

City, State, and ZIP+4[®]
Midland, TX 79705

PS Form 3800, July 1999

See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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Article Sent To:

[Empty field for recipient name]

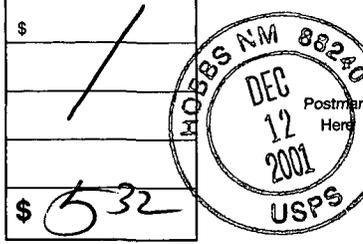
Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees



Name (Please Print Clearly) (To be completed by mailer)

Collins & Ware, Inc.

Street, Apt. No., or PO Box No.
508 W. Wall, Suite 1200

City, State, and ZIP+4[®]
Midland, TX 79701

PS Form 3800, July 1999

See Reverse for Instructions

U.S. Postal Service
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(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

[Empty field for recipient name]

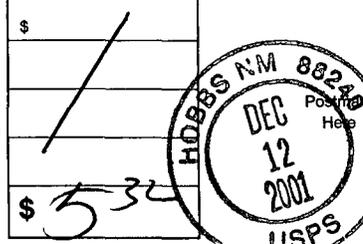
Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees



Name (Please Print Clearly) (To be completed by mailer)

Rice Operating Co.

Street, Apt. No., or PO Box No.
122 West Taylor

City, State, and ZIP+4[®]
Hobbs, NM 88240

PS Form 3800, July 1999

See Reverse for Instructions

7099 3220 0002 3941 0157

9218 1466 0002 3941 0218

7099 3220 0002 3941 0201

9218 1466 0002 3941 0188

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 321
Letter G, Section 29, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

Occidental Permian Limited Partnership
P.O. Box 4294
Houston, TX 77210-4294

Conoco Inc.
10 Desta Dr. West
Midland, TX 79705

Lewis B. Burleson, Inc.
P.O. Box 2479
Midland, TX 79705

HRC, Inc.
P.O. Box 5102
Hobbs, NM 88241

Collins & Ware, Inc.
508 W. Wall, Suite 1200
Midland, TX 79701

Marcum Drilling Co.
P.O. Box 3699
Midland, TX 79705

Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Surface Owners

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

LEGAL NOTICE

Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of Hobbs, NM, is filing application for a brine extraction well and facility. The well is the Hobbs State #5 located 2280 FNL and 1980 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co. NM. The well and facility will be producing brine water from the Salado formation at approximately 2000 ft. with productions pressures of from 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, P.O. Box 5102, Hobbs, NM 88241, (505)393-3194, or any request for hearing or objections should be directed to the Oil Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505)476-3440, within fifteen (15) days.

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising 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

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of December 12, 2001 and ending with the issue of December 12, 2001.

And that the cost of publishing said notice is the sum of \$ 19.61 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this 20th day of December 2001.

Debbie Schilling
Debbie Schilling
Notary Public, Lea County, New Mexico
My Commission Expires June 22, 2002

LEGAL NOTICE

Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of Hobbs, NM, is filing application for a brine extraction well and facility. The well is the Hobbs State #5 located 2280 FNL and 1980 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co. NM. The well and facility will be producing brine water from the Salado formation at approximately 2000 ft. with productions pressures of from 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, P.O. Box 5102, Hobbs, NM 88241, (505) 393-3194, or any request for hearing or objections should be directed to the Oil Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505) 476-3440, within fifteen (15) days. Published in the Lovington Daily Leader December 12, 2001.

GW Monitoring

GROUNDWATER MONITORING

H.R.C. Inc. proposed to monitor the groundwater at the site by installing a two inch monitor well completed through the Ogallala formation. The well location will be down gradient on the edge of the brine well location, south southeast or along water gradient.

The installation will consist of drilling with an air rotary to the top of the redbed or base of the Ogallala. Running 2 inch schedule 40 pvc well casing to TD with .10 slot well screen across the entire saturated zone. Sand pack well to five feet above upper most perforations. Cap sand with 10 ft. of bentonite, and grout from top of bentonite to surface, installing a locking cover at surface. This will enable us to monitor the entire water area.

It is our proposal to take samples from this well prior to any brine activity, for background purposes. We plan to sample for BTEX, TPH, Cations, Anions, and Metals initially. After starting operations, we plan to sample the well on bi-annual schedule, testing for Cations and Anions. All results will be reported to the OCD as they are obtained.

C-104

ORIGINAL C-109
SENT TO HARRIS

JL

Original Bond

FILED IN OGD

ENVIRONMENTAL BOND FILES

LWP

ASSIGNMENT OF CASH COLLATERAL DEPOSIT

H.R.C. Inc. (OPERATOR) of P.O. Box 5102 (address) has deposited with the First National Bank (name of state or national bank or savings association, which must be a federally-insured bank or savings institution in the State of New Mexico) of 600 West Bender, Hobbs, NM (address) (FINANCIAL INSTITUTION), the sum of \$5,000.00 dollars in Certificate of Deposit or Savings Account No. 2802198-30 (FUND).

To comply with NMSA 1978, Section 70-2-14, OPERATOR hereby assigns and conveys all right, title and interest in the FUND to the FINANCIAL INSTITUTION in trust for the Oil Conservation Division of the Energy, Minerals and Natural Resources Department or successor agency of the State of New Mexico (DIVISION).

OPERATOR and the FINANCIAL INSTITUTION agree that as to the FUND:

- a. The DIVISION acquires by this assignment the entire beneficial interest in the FUND, with the right to order the FINANCIAL INSTITUTION in writing to distribute the FUND to persons determined by the DIVISION to be entitled thereto, including the DIVISION itself, in amounts determined by the DIVISION, or to the OPERATOR upon sale or proper plugging, in compliance with the rules and orders of the DIVISION, of the well(s) covered by this assignment.
- b. OPERATOR retains no legal or beneficial interest in the FUND and has only the right to interest, if any, thereon, and to return of the FUND upon written order of the DIVISION.
- c. The FINANCIAL INSTITUTION agrees that the FUND may not be assigned, transferred, pledged or distributed except upon written order of the DIVISION or a court of competent jurisdiction made in a proceeding to which the DIVISION is a party. The FINANCIAL INSTITUTION waives all statutory or common law liens or rights of set-off against the FUND.

OPERATOR agrees that the FINANCIAL INSTITUTION may deduct from interest due OPERATOR any attorney fees incurred by the FINANCIAL INSTITUTION if claim or demand via writ, summons or other process arising from OPERATOR'S business is made upon the FINANCIAL INSTITUTION.

Gary Schubert
Signature of OPERATOR
Personally or by Authorized Officer

Zane S. Bergman
Signature of Authorized Officer
of FINANCIAL INSTITUTION

Gary Schubert, President
Title

Zane S. Bergman, President
Title

State of New Mexico
County of Lea) ss.

On this 3rd day of December, 20 01, before me personally appeared Gary Schubert and Zane S. Bergman, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

My Commission Expires:
10-7-04

ONE-WELL CASH BOND

KNOW ALL MEN BY THESE PRESENTS THAT H.R.C. Inc. (an individual) (a partnership) (a corporation organized in the State of New Mexico with its principal office at P.O. Box 5102 in the City of Hobbs, State of New Mexico and authorized to do business in the State of New Mexico) is held and firmly bound to the Oil Conservation Division of the Energy, Minerals and Natural Resources Department of the State of New Mexico (or its successor agency), as DIVISION in the sum of \$ 5,000.00.

The conditions of this obligation are such that:

The PRINCIPAL desires to drill a well or purchase or operate an existing well, the depth of which does not exceed 5000 feet, to prospect for and produce oil or gas, carbon dioxide gas, helium gas or brine minerals on property in the State of New Mexico, the particular identification and footage location of said well being as follows:

(well name and footage) Hobbs State #5 2280 FNL/1980 FWL in Section 29 Township 18S Range 38E, NMPM, Lea County, New Mexico.

The PRINCIPAL has deposited on behalf of the DIVISION \$ 5,000.00, in the manner indicated on the Assignment, attached to this bond, being the principal sum intended to be secured. PRINCIPAL pledges this sum as a guarantee that it, its executors, assigns, heirs or administrators shall plug the well described above if dry, or when abandoned, in accordance with the rules and orders of the DIVISION in such way as to confine the oil, gas and water in the strata in which they are found, and to prevent same from escaping to other strata. If the PRINCIPAL does not so properly plug and abandon said well upon order of the DIVISION, the total sum of the bond shall be forfeited to the DIVISION, and such amount as is necessary may be used to properly plug said well. If the principal sum of this bond is less than the actual cost incurred by the DIVISION in plugging said well, the PRINCIPAL, its successors, assigns, heirs or administrators shall be liable under the provisions of NMSA 1978, Section 70-2-38 of the Oil and Gas Act, and the DIVISION may take action to recover any amounts expended over and above the principal sum of the bond.

NOW THEREFORE, if the PRICIPAL or its successors, assigns, heirs, or administrators or any of them shall plug the above-described well when dry or abandoned, in accordance with the rules and orders of the DIVISION, in such a manner as to confine the oil, gas, and water in the strata in which they naturally occur, and to prevent them from escaping into other strata, and further to clean up the surface location of said well, then therefore, this obligation shall be null and void and the principal sum shall be paid to the PRINCIPAL or its successors, heirs, or administrator, otherwise it shall remain in full force and effect.

H.R.C. Inc.
PRINCIPAL
P.O. Box 5102 Hobbs N.M. 88241
Address City State Zip
By Gary Schubert By _____
Signature
Gary Schubert, President
Title

If PRINCIPAL is a corporation, affix corporate seal here.

ACKNOWLEDGMENT FORM FOR INDIVIDUALS OR PARTNERSHIPS

STATE OF _____)

ss.

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

My Commission Expires

ACKNOWLEDGMENT FORM FOR CORPORATION

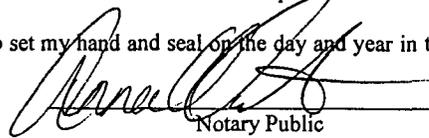
STATE OF New Mexico)

ss.

COUNTY OF Lea)

On this 3rd day of December, 2001, before me personally appeared Gary Schubert, to me personally known who, being by me duly sworn, did say that he is President of H.R.C. Inc. and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.



Notary Public

10-7-04
My Commission Expires

APPROVED BY:

Oil Conservation Division of New Mexico

By _____

Date _____

Chaves, Eddy, Lea, McKinley, Rio Arriba, Roosevelt, Sandoval, and San Juan Counties, New Mexico:

<u>Projected Depth of Proposed Well or Actual Depth of Existing Well</u>	<u>Amount of Bond</u>
Less than 5,000 feet	\$ 5,000
5,000 feet to 10,000 feet	\$ 7,500
More than 10,000 feet	\$10,000

All Other Counties in the State:

<u>Projected Depth of Proposed Well or Actual Depth of Existing Well</u>	<u>Amount of Bond</u>
Less than 5,000 feet	\$ 7,500
5,000 feet to 10,000 feet	\$10,000
More than 10,000 feet	\$12,500



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 13, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 7409

Mr. Gary M. Schubert
H.R.C. Inc.
P.O. Box 5102
Hobbs, New Mexico 88241

Re: Application For Brine Extraction Well and Discharge Plan For Brine Facility.

Dear Mr. Schubert:

The New Mexico Oil Conservation Division (OCD) is in receipt of the Application For Brine Extraction Well and Discharge Plan For Brine Facility dated August 03, 2001. The OCD is hereby requesting additional information necessary for the evaluation of the application in order to deem it administratively complete. Please provide to OCD the following information:

1. A C-104 showing the proof of ownership of the well.
2. A plugging bond pursuant to OCD rules.
3. A completed form C-108 with attachments.
4. A groundwater monitoring plan.

In order to expedite the review process the OCD recommends that all future submittals have an index with associated page numbers or appendices that are cross-reference in the document write-up. OCD had a difficult time in determining which documents submitted pertained to what aspect of the application. OCD also recommends that any maps, schematics, geographic cross sections, and any other pertinent information be site specific, detailed in the write-up and scaled appropriately.

In order to assist H.R.C. Inc. in this permitting process OCD is willing to meet with HRC Inc. to address issues pertaining to the application. If you have any questions please do not hesitate to contact me at 505-476-3487 or E-Mail WPRICE@state.nm.us.

Sincerely,

Wayne Price- Engineer

cc: OCD Hobbs Office
Mr. Eddie Seay-Consultant

Attachments- C-108 form

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated RECIEVED
AUG 19, 2001
or cash received on _____ in the amount of \$ 100⁰⁰
from HRC, INC.

for HOBBS STATE #5 BRINE WELL BW-030

Submitted by: WAYNE PRICE (Family Name) Data: 8/30/01 (DP No.)

Submitted to ASD by: [Signature] Data: "

Received in ASD by: _____ Data: _____

Filing Fee New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2002

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

HRC, INC.
P.O. BOX 1606
HOBBS, NM 88241
(505) 393-3194

FIRST NATIONAL BANK
600 W. BENDER (505) 392-9200
P.O. BOX 460
HOBBS, NM 88241
95-43/1122

PAY
TO THE
ORDER OF

WATER QUALITY MGMT. FUND

\$ 100⁰⁰
DOLLARS

EXACTLY ONE HUNDRED & NO/100

[Signature]
AUTHORIZED SIGNATURE

RECEIVED
AUG 14 2001
Environmental Bureau
Oil Conservation Division

H.R.C. INC.

HOBBS STATE #5 SECT. 29, T. 18 S., R. 38 E.

APPLICATION FOR BRINE EXTRACTION WELL

AND

DISCHARGE PLAN FOR BRINE FACILITY

August 3, 2001

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico RECEIVED
 Energy, Minerals & Natural Resources Department

Form C-101
 Revised February 10, 1994
 Instructions on back
 Permit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088
 Environmental Bureau
 Oil Conservation Division

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: H. R. C. Inc. P. O. Box 5102 Hobbs, NM 88241		OGRID Number 131652
		API Number 30-025-23662
Property Code 992279	Property Name Hobbs State	Well No. 5

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
F	29	18S	38E		2280	North	1980	West	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
Proposed Pool 1 BSW - Salado					Proposed Pool 2				

Work Type Code	Well Type Code	Cable/Rotary Workover	Lease Type Code	Ground Level Elevation 3655
Multiple	Proposed Depth	Formation Salt	Contractor	Spud Date

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Secks of Cement	Estimated TOC
12 1/4	9 5/8	36#	364	200	
8 3/4	7	23#	3826	140	
6 1/4	4 1/2	11.6 #	5986	120	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Gary M. Schubert*
 Printed name: GARY M. SCHUBERT
 Title: PRES.
 Date: 7/9/01
 Phone: 505-393-3194

OIL CONSERVATION DIVISION

Approved by:
 Title:
 Approval Date: Expiration Date:
 Conditions of Approval:
 Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102
Revised August 15, 2000

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Aug 14 2001
Submit to Appropriate District Office
Environmental Bureau State Lease - 4 Copies
Oil Conservation Division Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-23662		² Pool Code 96173		³ Pool Name BSW Salado	
⁴ Property Code 992279		⁵ Property Name Hobbs State			⁶ Well Number 5
⁷ OGRID No. 131652		⁸ Operator Name H. R. C. Inc.			⁹ Elevation 3655 GL

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	29	18S	38E		2280	North	1980	West	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Gary M. Schubert Printed Name Owner Title 7/9/01 Date
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
	Date of Survey Signature and Seal of Professional Surveyor:
	Certificate Number

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised March 25, 1999

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

WELL API NO. 30-025-23662
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. Salt Mining Lease
7. Lease Name or Unit Agreement Name: Hobbs State
8. Well No. 5
9. Pool name or Wildcat BSW Salado

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
 Oil Well Gas Well Other Brine Well

2. Name of Operator
 H. R. C. Inc.

3. Address of Operator
 P. O. Box 5102

4. Well Location
 Unit Letter _____ F : 2280 feet from the North line and 1980 feet from the West line.
 Section 29 Township 18S Range 38E NMPM Lea County

10. Elevation (Show whether DR, RKB, RT, GR, etc.)
 3655 GL

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input checked="" type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

- Remove dry hole marker
- Rig up completion unit
- Drill out surface plug
- Run in hole and cut 7" at salt bottom (2500')
- Pull 7" to salt top
- Run in hole and spot 50 sk. cm. plug behind 7" csg.
- Pull up to 1600 and circ. 100 sk. cmt plug behind 7" csg.
- Test csg to 1500#
- Run in hole w/2 7/8" tbg to 2400'
- Install wellhead and circ. fresh water down csg. to produce brine through tbg.

RECEIVED
 AUG 14 2001
 Environmental Bureau
 Oil Conservation Division

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Gary M. Schubert TITLE President DATE 7/9/01

Type or print name Gary M. Schubert Telephone No. 393-3194

(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED

AUG 14 2001

Environmental Bureau

Oil Conservation Division

5a. Indicate Type of Lease
State Fee
5. State Oil & Gas Lease No.
A-1469-Z

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- 2. Name of Operator E S H Corporation 3. Address of Operator P. O. Box 774 , Midland, Texas 79701 4. Location of Well UNIT LETTER F . 2280 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 29 TOWNSHIP 18 S RANGE 38 E NMPM. 15. Elevation (Show whether DF, RT, GR, etc.) 3655 GL	7. Unit Agreement Name 8. Farm or Lease Name Hobbs State 9. Well No. 5 10. Field and Pool, or Wildcat 12. County Lea
--	--

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

5-11-73 - Set 4 1/2" Bridge Plug at 5757' with 35' of cement.
Estimated top of cement at 5722'

Shot and pulled Casing at 3744'
Pumped 25 sack plug at 3744' to 3644'
Spotted 10' plug at surface
Installed dry hole marker
Cleaned and leveled location
Location is clear and ready for inspection.

E.S. Hitchcock 915-694-7461
2809 EXETER 79705

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED *E. S. Hitchcock* TITLE President DATE 22 October 1973

APPROVED BY *John W. Runyan* TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	
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SANTA FE	
LE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

RECEIVED

Form C-101
Revised 1-1-65 30-025-23112

AUG 14 2001

Environmental Bureau
Oil Conservation Division

5A. Indicate Type of Lease
STATE FEE

5. State Oil & Gas Lease No.
A-1469-Z

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Agreement Name
2. Name of Operator No. 1 - Tex Corporation & Wood & Cockburn		8. Farm or Lease Name Hobbs State
3. Address of Operator 610 Wilkinson Foster Bldg., Midland, Texas 79701		9. Well No. 5
4. Location of Well UNIT LETTER F LOCATED 2280 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE OF SEC 29 TWP. 18S RGE. 38 E NMPM		10. Field and Pool, or Wildcat Hobbs (Blinebry)
21. Elevations (Show whether DF, RT, etc.) 3655 G.L.		12. County Lea
21A. Kind & Status Plug. Bond Blanket	19. Proposed Depth 6100'	19A. Formation Blinebry
21B. Drilling Contractor Rod Ric Corp.	20. Rotary or C.T. Rotary	22. Approx. Date Work will start Dec. 22, 1970

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 5/8"	9 5/8"	36#	350'	200	Circulate
8 5/8"	7"	23#	3850'	200	2600'
6 3/4"	4 1/2"	9.5#	6100'	225	3700'

To drill 12 5/8" hole to 350', set 9 5/8" csg. circulate cement. Nipple up and drill 8 5/8" hole to 3850', cement with 200sxs. after running 7" casing. Drill out from under 7" with 6 3/4" to 6100' and set 4 1/2", cement back to 3700'; perforate Blinebry zone approximately 5750' - 6050' acidize and test.

THE COMMISSION MUST BE NOTIFIED
24 HOURS PRIOR TO RUNNING CASING. 9 3/8

3-21-71

ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Title Geologist Date 12/18/70

(This space for State Use)

PROVED BY [Signature] TITLE SUPERVISOR DISTRICT DATE DEC 21 1970

CONDITIONS OF APPROVAL, IF ANY:

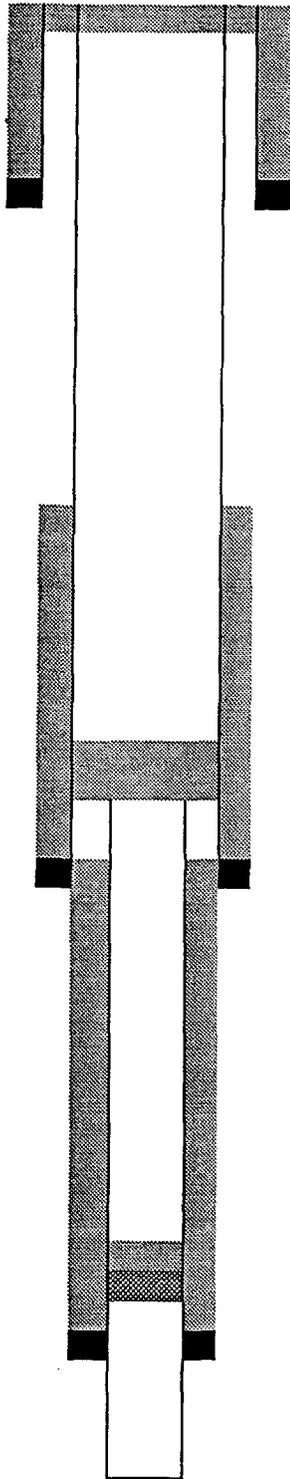
**WELL SCHEMATIC:
NE-O-TEX HOBBS STATE #5**

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effc.

Spotted 10' cmt plug at surf.

*Existing condition
of well # 5*



RECEIVED

AUG 14 2001
Environmental Bureau
Oil Conservation Division

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

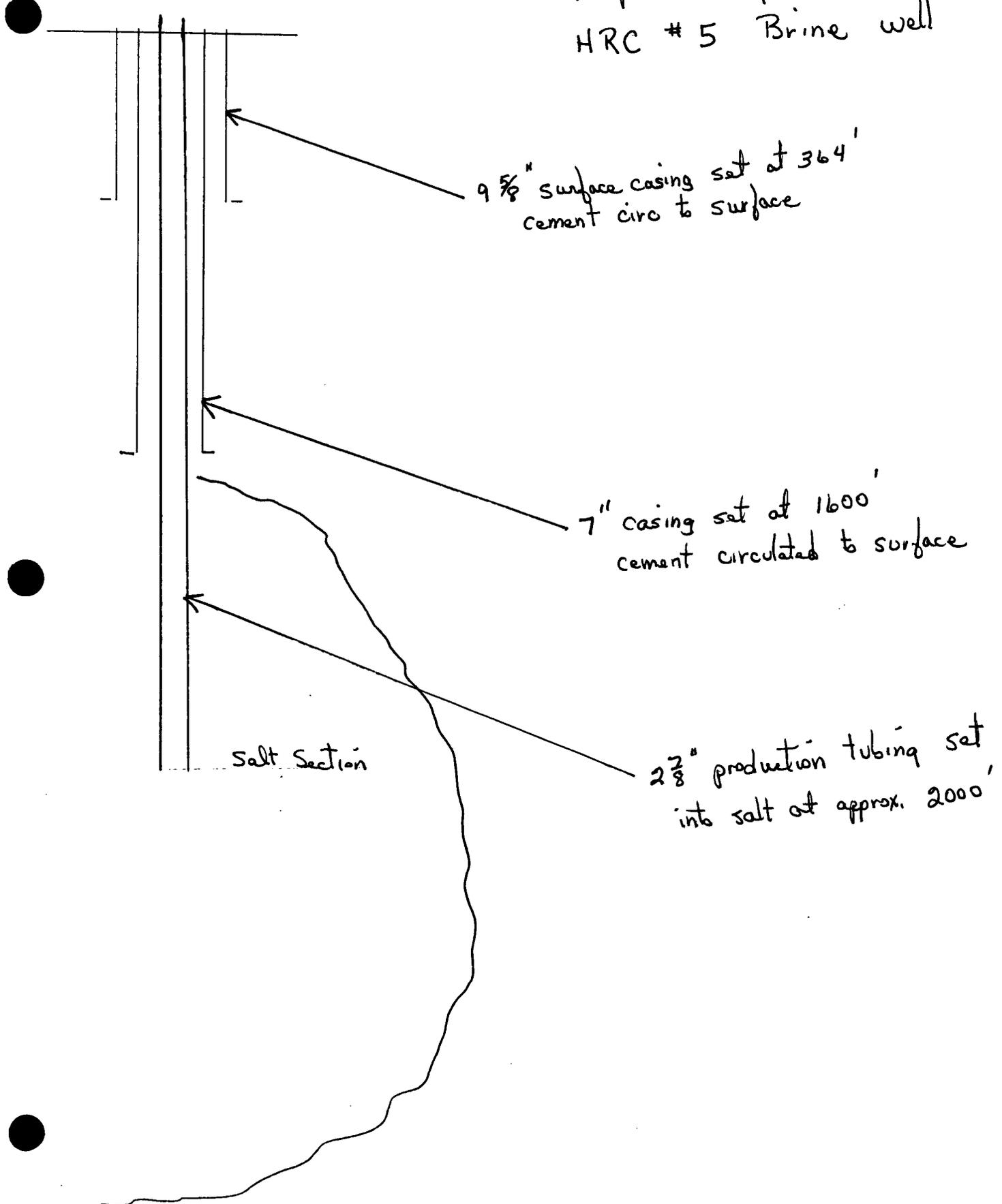
Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effc.

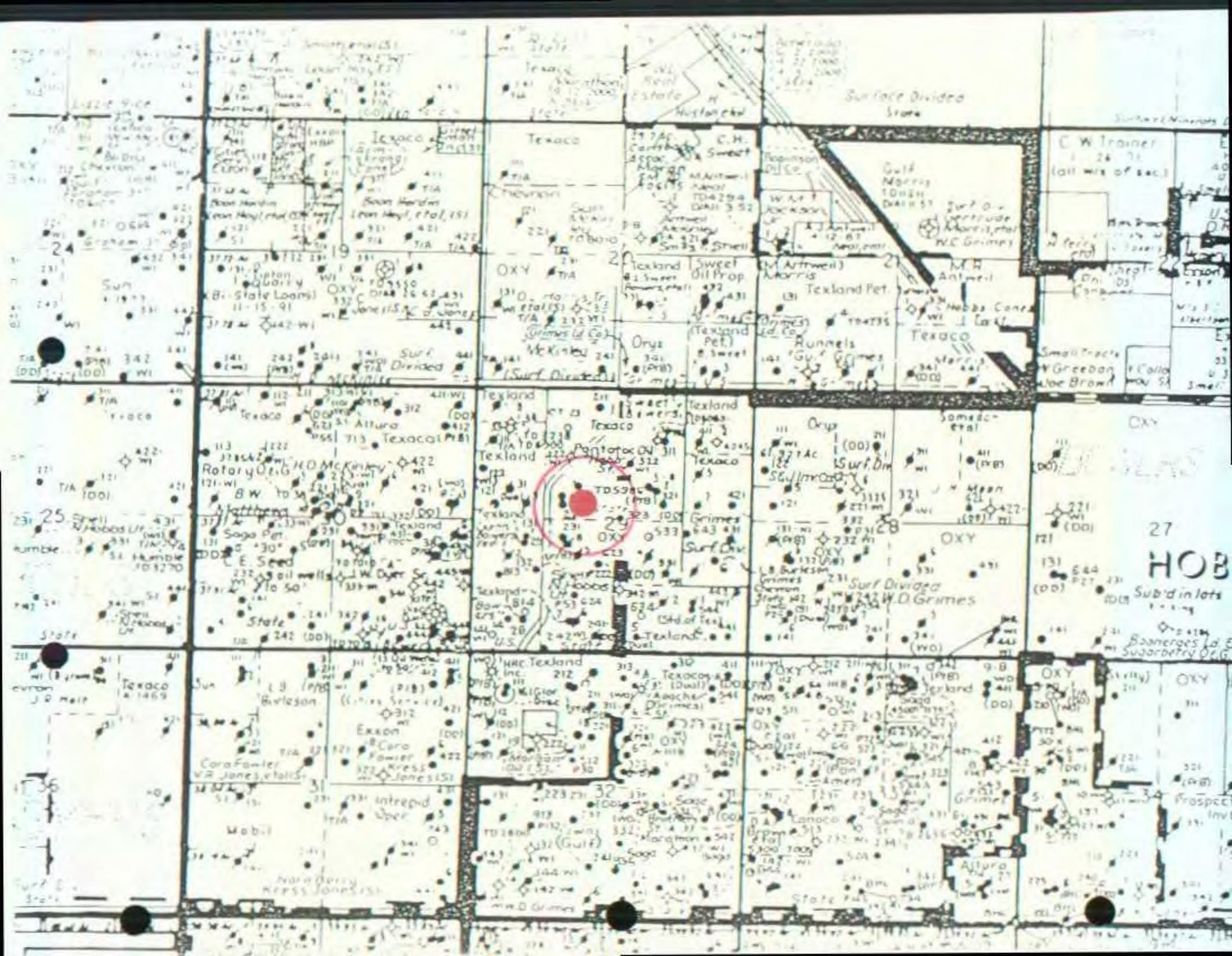
Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

TD: 5986'

Proposed completion for
HRC # 5 Brine well





LIST OF WELLS WITHIN AREA OF REVIEW

All wells are cased and/or cemented through the salt section.

Occidental Permian	well 29-231
Occidental Permian	well 29-323
Occidental Permian	well 29-222
Texland Petroleum	well 8
Apache Corporation	well 5
Rice Engineering Inc.	well F-29

Apache well #5

TAOURET

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	185'	185	Caliche and Surface Sand
185'	230'	45'	Red Bed and Shells
230'	1167'	937'	Red Bed
1167'	1340'	173'	Red Bed & Shells
1340'	1520'	180'	Red Bed and Anhydrite
1520'	1525'	5'	Red Bed
1525'	1617'	92'	Anhydrite and Shale
1617'	1670'	53'	Anhydrite
1670'	1710'	40'	Anhydrite and Shale
1710'	1885'	175'	Salt and Shale
1885'	2405'	520'	Salt and Shells
2405'	2626'	221'	Salt and Anhydrite Shells
2626'	2685'	59'	Anhydrite
2685'	2805'	120'	Anhydrite and Shells
2805'	2882'	77'	Anhydrite and Lime
2882'	2938'	56'	Anhydrite
2938'	3071'	133'	Anhydrite and Lime
3071'	3142'	71'	Anhydrite
3142'	3204'	62'	Lime
3204'	3211'	7'	Bowers Sand
3211'	3224'	13'	Lime
3224'			Total Depth

GEOLOGICAL TOPS

Elevation, Derrick Floor	3655'
Elevation, Ground	3645'
Base of Red Bed	1580'
Top of Salt	1710'
Top of Yates	2710'
Top of Pay (Bowers Sand)	3204-3211'

SLOPE TESTS

500'	Straight
950'	1 Degree
1350'	1 Degree
1617'	1 Degree
1850'	3/4 Degree
2250'	1 1/4 Degree
2600'	1 1/2 Degree
2750'	1 1/4 Degree
2900'	1 3/4 Degree
3010'	1/2 Degree

Oxy well 323

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or reopened well. It shall be accompanied by two copies of all electrical and radio-activity logs run in the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 20 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt <u>1619'</u>	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates <u>2640'</u>	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers <u>2885'</u>	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen <u>3402'</u>	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg <u>3738'</u>	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres <u>4023'</u>	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzite _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinberry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____	No. 4, from _____ to _____
No. 2, from _____ to _____	No. 5, from _____ to _____
No. 3, from _____ to _____	No. 6, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____	feet _____
No. 2, from _____ to _____	feet _____
No. 3, from _____ to _____	feet _____
No. 4, from _____ to _____	feet _____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	1542	1542	RED BEDS				
1542	1582	40	ANHYDRITE				
1582	2706	1124	SALT, ANHYDRITE, & SHALE				
2706	3175	469	SHALE & ANHYDRITE				
3175	3530	355	ANHYDRITE, SAND & SHALE				
3530	4370	840	DOLOMITE				

APR 25 1985

430 123 137097

Rice Eng F-29

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 5050 feet, and from ... feet to ... feet. Cable tools were used from ... feet to ... feet, and from ... feet to ... feet.

PRODUCTION

Put to Producing ... 19 ... OIL WELL: The production during the first 24 hours was ... barrels of liquid of which ... % was oil; ... % was emulsion; ... % water; and ... % was sediment. A.P.I. Gravity ...

GAS WELL: The production during the first 24 hours was ... M.C.F. plus ... barrels of liquid Hydrocarbon. Shut in Pressure ... lbs.

Length of Time Shut in ...

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico

Northwestern New Mexico

Table with 2 columns: Southeastern New Mexico and Northwestern New Mexico. Rows list formation tops with depths in feet (e.g., T. Anhy 1538', T. Devonian, T. Ojo Alamo, etc.).

FORMATION RECORD

Table with 8 columns: From, To, Thickness in Feet, Formation, From, To, Thickness in Feet, Formation. It is a grid for recording detailed formation data.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised July 12, 2001

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

New Renewal

1. Facility Name: H.R.C. Brine Facility
2. Operator: H.R.C. Inc.
Address: P.O. Box 5102 Hobbs, NM 88241
Contact Person: Gary M. Schubert Phone: (505) 393-3194
3. Location: SE /4 NW /4 Section 29 Township 18 S. Range 38 E.
Submit large scale topographic map showing exact location.
4. Attach the name and address of the landowner of the facility site.
5. Attach a description of the types and quantities of fluids at the facility.
6. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.
7. Attach a description of underground facilities (i.e. brine extraction well).
8. Attach a contingency plan for reporting and clean-up of spills or releases.
9. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.
10. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
11. CERTIFICATION:

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Name: Gary M. Schubert

Title: Owner

Signature: 

Date: 8-3-01

H.R.C. BRINE FACILITY
DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITY

- 1) H.R.C. Brine Facility - well #5
- 2) H.R.C. Inc.
P.O. Box 5102 Hobbs, NM 88241
Gary M. Schubert (505)393-3194
- 3) Unit F SE 1/4 of NW 1/4 Section 29 T. 18 S. Rng. 38 E.
Map attached.
- 4) Grimes Land Co. - Schubert
P.O. Box 5102
Hobbs, NM 88241
Lea County - tax and ownership records attached.
- 5) This facility will store brine water produced from the underground salt formation at the site. No other fluids will be stored at the facility. Salt brine will be recovered up the tubing from well #5 and stored in 2, 500 bl. above ground tanks. These tanks will be located inside and on a polyethylene lined dike area. The dike area will be sized to hold more than 133% of the brine tanks combined capacity. The volume of brine production will be determined by the amount of oil and gas drilling activities, and will vary from month to month. Based on activity at other brine facilities, this volume could be 12,000 to 15,000 bls. per month.
- 6) Fluid Transfer and Storage
Fresh water will be received at the brine well for inspection from the City of Hobbs water supply system via polyethylene pipe, the connection to the city system is approximately 1/2 mile north of the proposed brine well #5. The fresh water line will be connected to the suction side of a pump which will pump fresh water down the annulus of the well casing at a rate of approximately 100 barrels per hour and a normal operating pressure of from 200 to 250 psi. Brine water will be produced up the well through the tubing and delivered to the two 500 bl. tanks by polyethylene piping. Except for the short section of steel pipe between the pump and well, all other piping is low pressure with tank head pressure less than 50 psi. All piping will be above ground and visible for quick on site leak detection.

Brine water will be transported from the site by tanker truck for sale and use in oil and gas drilling and production operations. Tanker trucks will be positioned inside a polyethylene-lined dike loading area to retain fluids in the event an accidental discharge or spill were to occur. Brine water will flow from the storage tanks to a header system by piping positioned above the poly liner. Tank trucks will connect to the header valve by hose and the pumps on the truck will pull the fluids from the header valve and discharge the brine to the tanker. When the loading is complete, the driver or operator will close the

header valve and continue to suck the line empty, this will prevent any spills, leaks or drips. As a precaution, an above ground drip tank will be located at the header valve to catch any drips that might occur during the loading process. The operator or driver will be present during the loading process and will fill out a run ticket for volume and destination. These tickets will be used for billing and also for monitoring the volumes of fresh water and brine production which will help in keeping up with the integrity of the system.

A meter will be located at the fresh water connection provided by the City of Hobbs. This meter will be used by the City of Hobbs for billing purposes and by H.R.C. in calculating volumes. The brine well injection pump will be a positive displacement pump. The pump generally pumps at the same flow rate as the well. A pressure chart will be installed on the pumps discharge which will record operating pressure and run time. Run time multiplied by pump flow rate gives an indication of water volume pumped into the formation and brine water recovered. Tank gauges, fresh water meter readings, pump run time and product sales tickets will be compared to give an idea as to the integrity of the operation. The volume of fresh water injected and the volume of brine produced will be recorded monthly and submitted to the OCD office in Santa Fe on a quarterly schedule.

Tanks and piping will be above ground for rapid visual leak inspection and detection. The loading area will be a poly lined dike area to contain any spillage that may occur. Dike areas will prevent run-off of storm water. Any water that does accumulate will be vacuumed up and hauled to an OCD approved facility for disposal. H.R.C. will be at the facility on a daily basis checking for leaks and/or spills. The inspection will be recorded and kept on file, any corrections or repairs will be noted on inspection file.

Prior to starting injection and after approval, the casing will be pressure tested for integrity. A bridge plug will be run into bottom of the casing and pressure will be applied to casing to check for any leakage. This process will be conducted on at least a five year schedule. The tubing-casing formation test will be conducted annually to insure integrity.

No fluids or solids will be disposed of at this site. All brine fluids will be sold for use or stored in tanks. In the event it becomes necessary to dispose of brine fluids, it will be taken to an OCD approved facility. Any solids, such as soil containing chloride contamination, will be taken to an approved OCD facility.

CLOSURE PLAN

In the event it becomes necessary to abandon this facility, the well will be plugged and abandoned according to the specifications recommended by the OCD at time of closure, which will meet the requirements for protection of groundwater. All fluids and solids will be removed from the site and transported to an OCD approved facility. After removal of all surface equipment, the area will be remediated and graded in a manner to reflect its original condition.

7) Description of Underground Facility

The only underground facilities will be the brine well and its piping construction. Enclosed is schematic of proposed completion and a schematic of existing P & A status.

The proposed construction will be:

9 5/8" surface casing at 364' cement circulated to surface.

7" production casing pulled and set at approx. 1600' with cement circulated to surface.

2 7/8" production tubing drilled into salt cavity and set at approx. 2000'.

General operation is to pump fresh water down annulus between 2 7/8" tubing and 7" casing and produce brine water up the 2 7/8" tubing. Once a month, the flow is reversed for 24 hours to dissolve any buildup in tubing.

Mechanical integrity tests will be conducted on the well and salt dome foundation as OCD designates. The well and formation will be pressured up to one and one half times the normal operating pressure and shut in for four hours with pressure recorded on a pressure chart. The OCD will notify H.R.C. of the date and time for testing so it can be witnessed.

Cavity configuration tests will be conducted as required by OCD to determine size and configuration of the mined cavity.

The OCD office will be notified for approval prior to any drilling, deepening or plug back operations using the appropriate forms and notification. The OCD will also be notified before any remedial work, plugging or altering of well has started and after approval.

8) Reporting and Clean up of Spills (Contingency Plan)

All above ground piping and tanks will be visually inspected for leaks by company personnel during each site visit. Any problems such as leaks, spills or well abnormality will be taken to the attention of H.R.C. supervisor immediately. Supervisor will assess the problem and proceed with proper notification and repairs as OCD rule 116 requires.

9) Site Characteristics

The proposed site is located west of Hobbs, NM adjacent to West County Road. The area is relatively flat with very little elevation differences. There is no surface water in close proximity to the proposed site. The average rainfall for this area is 12 to 15 in. annually. The last recorded 100 year flood was in 1990, where 10 in. of rain was recorded in a 24 hour period. In normal conditions, rain soaks in and is absorbed into the soil as fast as it comes down. With the present facility design, it is highly unlikely any run off or run on of the property would occur. If, in the future, some problems were to occur, revisions to the discharge plan for this facility would be incorporated.

HYDROLOGY

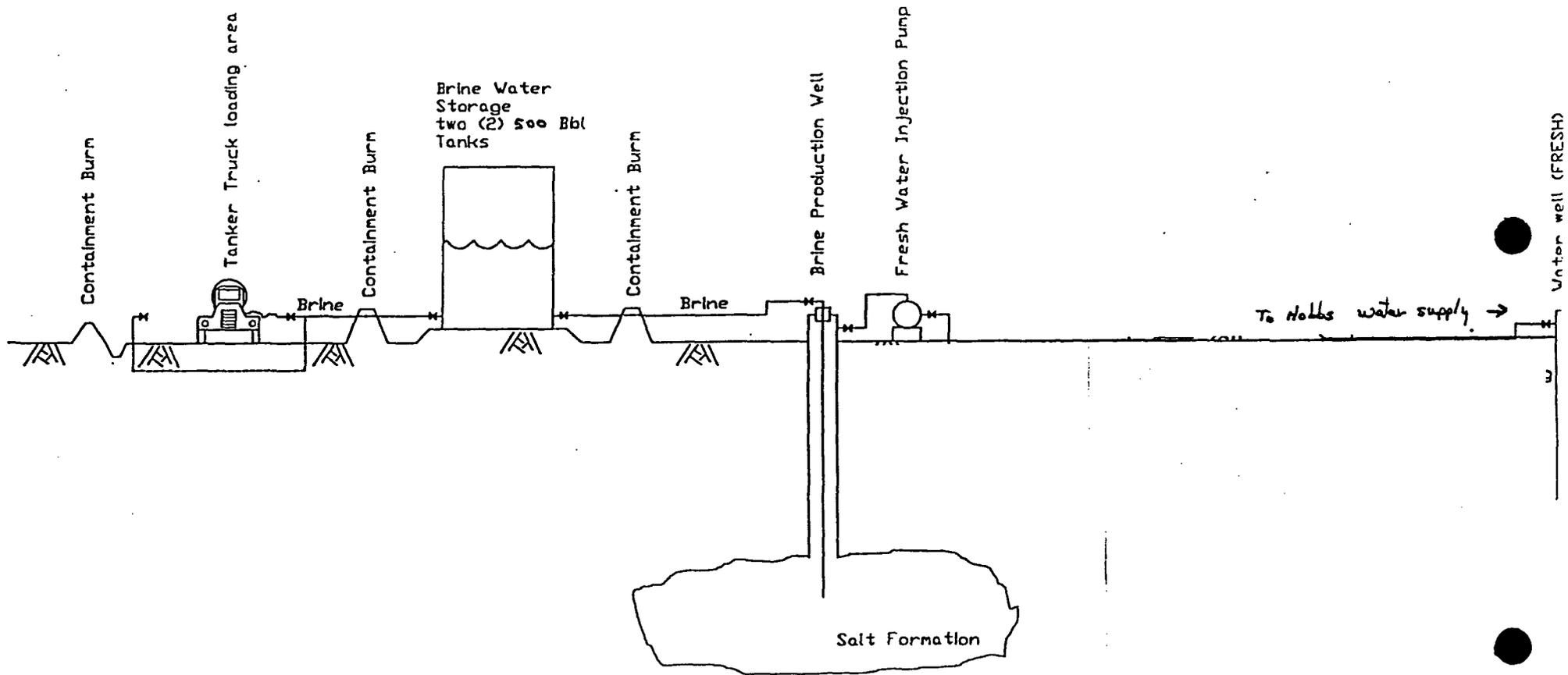
Underground aquifers in this area are the Ogallala and Quaternary Alluvium formations. The groundwater in these formations is unconfined where the underlying red beds are relatively impermeable. This underlying layer prevents further downward or upward movement. From information reviewed, the groundwater flow from the Ogallala formation flows to the south southeast, the water level for this area ranges from 50' to 70' below ground level and the average depth of the wells are 150'. Find within State Engineers list of water wells in the general area and analytical from two of the wells.

GEOLOGY

The proposed site is located on the Central Basin Platform of the Permian Basin. The sub-surface formations are in transitional area between Delaware Basins back reef or shelf area and the platform. The brine product is from the Salado formation of the Ochoa series. The series is of upper Permian Age, and extends across the Delaware Basin, Central Basin Platforms, thins and pinches out on the eastern shelf. This series layers are predominately evaporates which contain strings of dolomite, shale, siltstone, and sandstone. The thickness of this salt section averages about 1000 ft. The Triassic rock overlying the Permian formation is the Dockem group, and is divisible into the Santa Rosa sandstone and the Chinle formation. The Tertiary rocks are represented by the Ogallala formation. This formation ranges in thickness from 0' to 300'. It is chiefly calcareous, unconsolidated sand, clay, silt and gravel. This is the formation most of Lea Co. obtains its drinking water from.

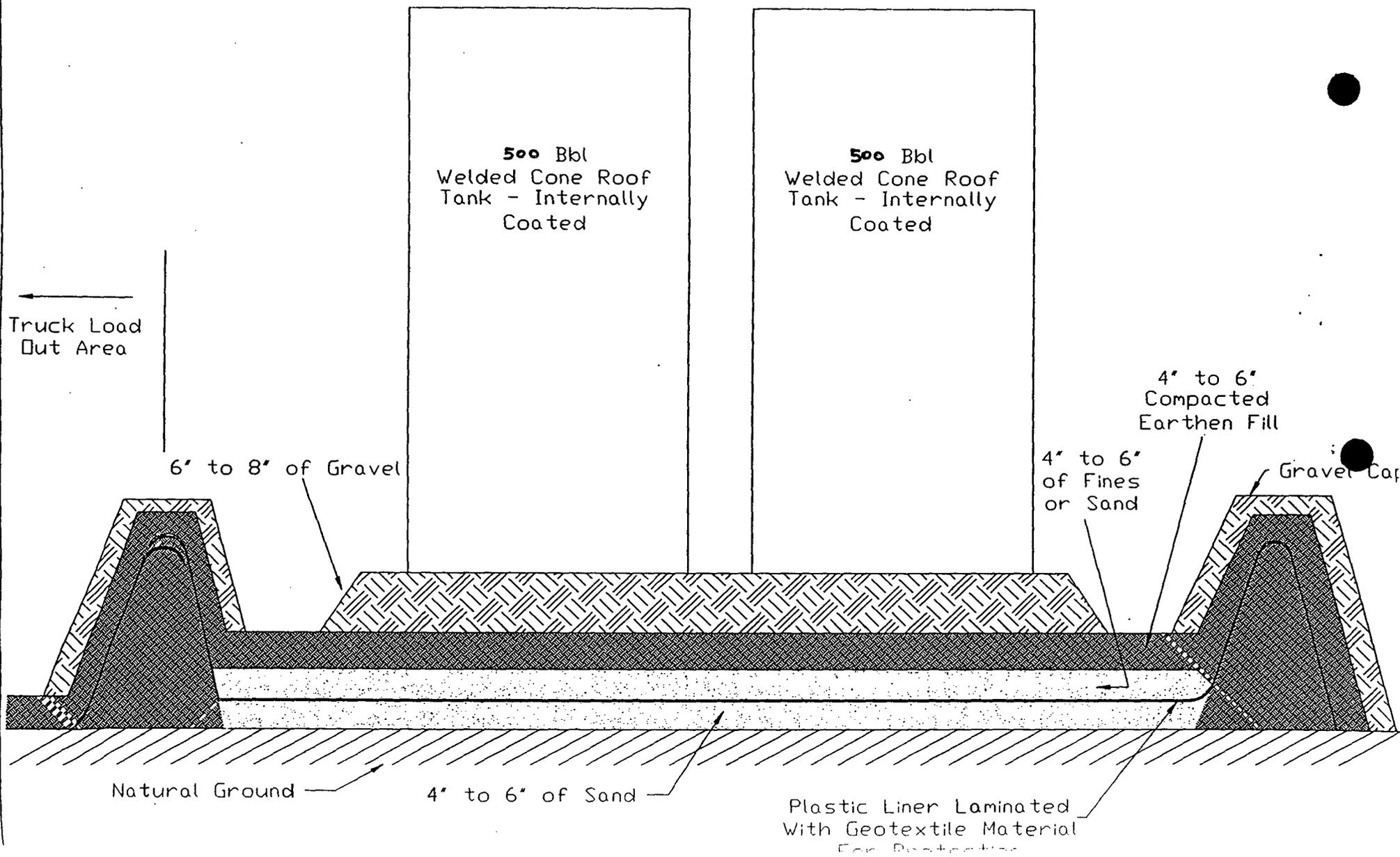
- 10) H.R.C. Inc. will comply with any rule, regulation or order which the OCD currently has or any new rule and regulation that pertains to this type of facility that the OCD may initiate in the future.

← FLOW

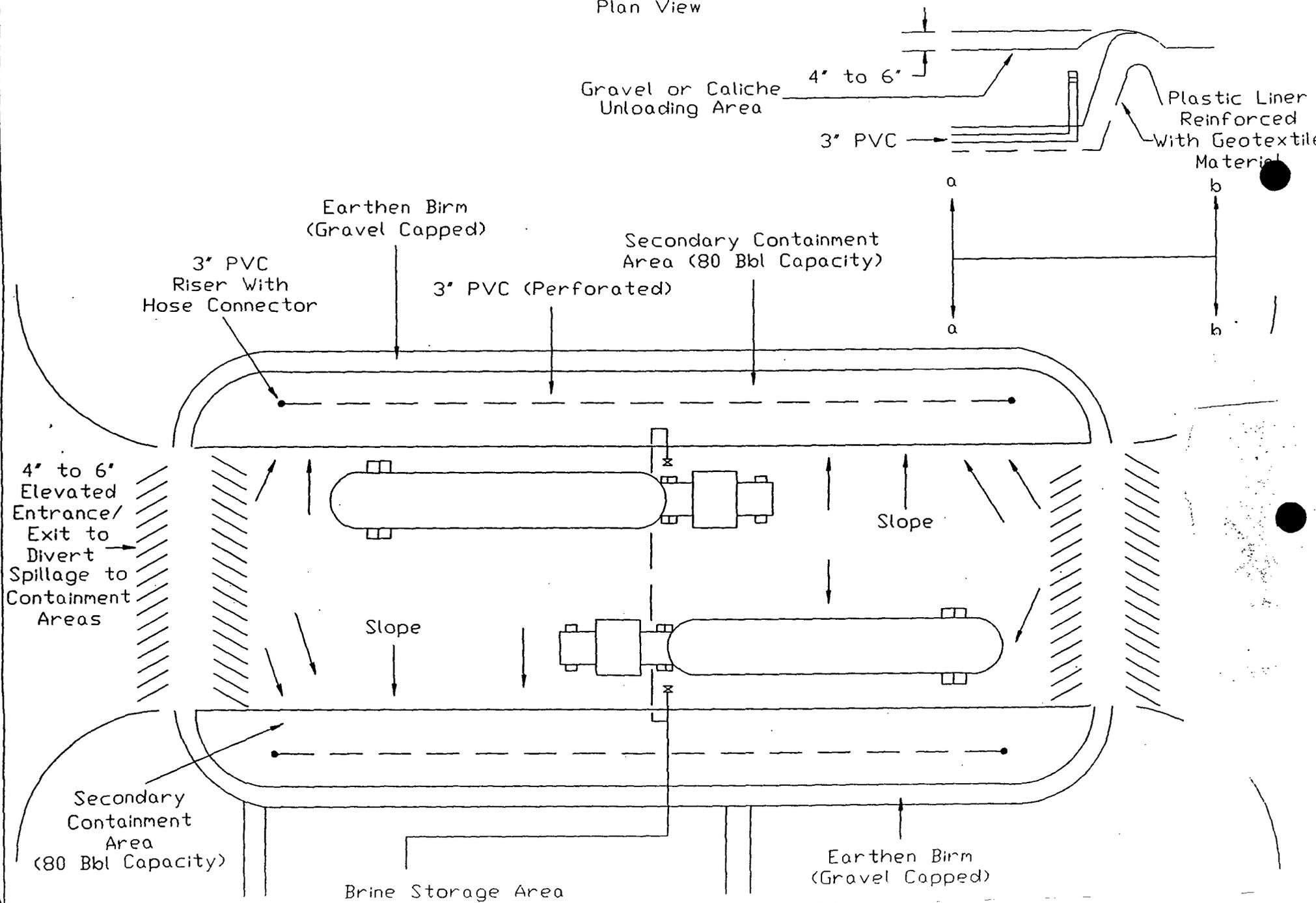


PROCESS FLOW DIAGRAM

Brine Storage Containment Area Specification Drawing
(Containment Area Sized For 133% Of Tank Storage Capacity)



Truck Loading and Containment Area
Plan View



New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 38E Sections: 29

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

Well Data Report Avg. Depth to Water Report Water Column Report
Clear Form WATERS Menu Help

WELL DATA REPORT 07/25/2001

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	Well Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)				X Y are in Feet			UTM Zone are in Meters			Start Date	Finish Date	Depth Well	Depth Water
						Tws	Rng	Sec	q	q	Zone	X	Y	UTM Zone	Easting				
L 04547		DOM	3	B. A. MALECHECK	L 04547	18S	38E	29	1	3	1	13	670787	3621633	11/04/1960	11/04/1960	110	70	
					L 04547 APPRO	18S	38E	29	1	3	1	13	670787	3621633	11/04/1960	11/04/1960	110	70	
L 05577	DOM			DAVE E. WOOD	L 05577 EXP	18S	38E	29	2	2		13	672090	3621958					
L 06203	DOM			DOW COTTRELL	L 06203 EXP	18S	38E	29	2			13	671895	3621749					
L 06453 (E)	PRO			CONTINENTAL OIL COMPANY	L 06453 (E) EXP	18S	38E	29	3	4	1	13	671205	3620834					
L 06453 (E)2	PRO			CONTINENTAL OIL COMPANY	L 06453 (E)2 EXP	18S	38E	29	3	4	1	13	671205	3620834					
L 06570 (E)	PRO		0	MORAN OIL PROD & DRILLING COR	L 06570 (E)	18S	38E	29	3	3	3	13	670802	3620628	08/05/1969	08/05/1969	110	54	
L 06603	DOM			RICHARD JOHNSON	L 06603 EXP	18S	38E	29	2	1	2	13	671786	3622050					
L 06717	DOM		3	E. C. FOWLER	L 06717	18S	38E	29	2	4		13	672098	3621555	10/06/1970	10/08/1970	130	55	
L 07005	SAN		3	TWO-STATE TANK RENTAL CO.	L 07005	18S	38E	29	3	3	1	13	670802	3620828	10/14/1972	10/18/1972	150	50	
L 07017	DOM		3	APEX FREIGHT LINES	L 07017	18S	38E	29	3	3		13	670903	3620729	12/09/1972	12/11/1972	150	60	
L 07163	DOM		3	JOE LISEBEE	L 07163	18S	38E	29	1	2		13	671284	3621944	02/01/1974	02/04/1974	110	67	
L 07427	DOM		3	DON COTTRELL	L 07427	18S	38E	29	2	4		13	672098	3621555	09/16/1975	09/18/1975	130	60	
L 07432	DOM		3	NORMAN L. WILLIAMS	L 07432	18S	38E	29	2	4		13	672098	3621555	09/24/1975	09/26/1975	125	55	
L 07434	DOM		3	N.E. WILLIAMS	L 07434	18S	38E	29	2	4	4	13	672197	3621454	09/28/1975	09/30/1975	125	55	
L 07528	OBS			PHILLIPS PETROLEUM COMPANY	L 07528 EXP 2	18S	38E	29	4	1	4	13	671801	3621044					
					L 07828 EXP	18S	38E	29	4	1	4	13	671801	3621044					
L 07530	OBS			PHILLIPS PETROLEUM COMPANY	L 07530 EXP	18S	38E	29	1	2	4	13	671303	3621843					
					L 07530 EXP 2	18S	38E	29	1	2	4	13	671383	3621843					
L 07531	OBS			PHILLIPS PETROLEUM COMPANY	L 07531 EXP	18S	38E	29	1	3	1	13	670787	3621633					
					L 07531 EXP 2	18S	38E	29	1	3	1	13	670787	3621633					
L 07570	DOM		3	SOUTHWESTERN DRILLING MUD	L 07570	18S	38E	29	3	3	3	13	670802	3620628	06/21/1976	06/22/1976	122	48	
L 07673	DOM		3	LARRY FELKINS	L 07673	18S	38E	29	2	2	2	13	672169	3622057	02/05/1978	02/10/1978	125	50	
L 07754	OBS		3	CROWN CHEMICAL COMPANY	L 07754	18S	38E	29	2	4		13	672098	3621555	09/08/1977	09/14/1977	207	50	
L 07825	DOM		3	DONNY CAMPBELL	L 07825	18S	38E	29	2	2	1	13	671989	3622057	01/18/1978	01/18/1978	105	45	
L 07826	DOM		3	JERRY BERRY	L 07826	18S	38E	29	2	2	3	13	671989	3621857	01/16/1978	01/16/1978	110	45	
L 08131	DOM		3	A. T. JOHNSON	L 08131	18S	38E	29	3	1		13	670895	3621131	08/18/1979	08/23/1979	110	60	
L 08135	DOM		3	J. D. WHESENHUNT	L 08135	18S	38E	29	2	4		13	672098	3621555	08/15/1979	08/18/1979	130	62	
L 08191	SAN		3	TOMMY MCDANIEL	L 08191	18S	38E	29	2	2	2	13	672189	3622057	01/05/1980	01/20/1980	120	120	
L 08228	SAN		3	DOW COTTRELL	L 08228	18S	38E	29	2	1	4	13	671786	3621850	03/10/1980	03/11/1980	115	68	
L 08229	DOM		3	MAX WHITE	L 08229	18S	38E	29	2	4	1	13	671997	3621654	03/08/1980	03/09/1980	115	68	
L 08370	SAN		3	NORMAN L. WILLIAMS	L 08370	18S	38E	29	2	2	4	13	672189	3621857	10/20/1980	10/20/1980	120	60	
L 08429	DOM		3	DOW COTTRELL	L 08429	18S	38E	29	4	1	2	13	671801	3621244	08/10/1981	08/11/1981	120	62	
L 08446	DOM		3	JERRY L. BROTHERS	L 08446	18S	38E	29	2			13	671895	3621749	05/03/1981	05/07/1981	120	42	

L 08448	SAN	3	JACK STRINGER	L 08448	18S	38E	29	2	4	1	13	671997	3621654	11/19/1981	11/20/1981	130	38
L 08737	DOM	3	DANIEL SAGE	L 08737	18S	38E	29	2	4		13	672098	3621555	04/07/1982	04/07/1982	132	60
L 08860	SAN	3	TOMMY MCDANIEL	L 08860	18S	38E	29	2			13	671895	3621749	12/12/1983	12/12/1983	130	39
				L 08860 EXP	18S	38E	29	2			13	671895	3621749				
L 08867	SAN	3	BIG HORN TANK RENTAL	L 08867	18S	38E	29	2	2		13	672090	3621958	07/09/1982	07/10/1982	120	52
L 09586	DOM	3	KELDON COTTRELL	L 09586	18S	38E	29	2	4		13	672098	3621555	11/26/1984	11/28/1984	120	76
L 09682	SAN	3	JERRY BROTHERS	L 09682	18S	38E	29	2	2	3	13	671989	3621857	09/29/1985	09/30/1985	120	45
L 09705	SAN	3	TJ & C	L 09705	18S	38E	29	3	3	4	13	671002	3620628	07/19/1985	07/19/1985	135	65
L 09777	SAN	3	PAUL MUSSELEWHITE TRUCKING CO.	L 09777	18S	38E	29	1			13	671089	3621735	01/10/1986	01/13/1986	150	84
L 10860	DOM	3	KELLY WILLIAMS	L 10860	18S	38E	29	1	1	1	13	670780	3622036	07/20/1998	07/21/1998	160	39
L 10913	DOM	0	RAYMOND STONE	L 10913	18S	38E	29	1	3	3	13	670787	3621433			160	
L 11171	SAN	3	CONOCO	L 11171	18S	38E	29	3	4	1	13	671205	3620834	04/19/2001	04/19/2001	206	
L 11176	nul	0	TEXLAND PETROLEUM-HOBBS, LLC	L 11176	18S	38E	29	4	1	4	13	671801	3621044			210	

Record Count: 47

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 38E Sections: 29

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

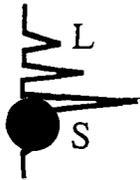
Owner Name: (First) (Last) Non-Domestic Domestic All

Well Data Report	Avg Depth to Water Report	Water Column Report
Clear Form	WATERS Menu	Help

AVERAGE DEPTH OF WATER REPORT 07/25/2001

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
1	18S	38E	29				32	38	120	59

Record Count: 32



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well for Wells 29321, 29231, 32312
SAMPLED BY _____

DATE TAKEN 8/8/00

REMARKS T18S-R38E-Sec29; Qtr Sec 4,1,2

Barium as Ba	0
Carbonate alkalinity PPM	68
Bicarbonate alkalinity PPM	260
pH at Lab	7.21
Specific Gravity @ 60°F	1
Magnesium as Mg	32
Total Hardness as CaCO3	56
Chlorides as Cl	325
Sulfate as SO4	130
Iron as Fe	0
Potassium	0.1
Hydrogen Sulfide	0
Rw	12 @ 23° C
Total Dissolved Solids	841
Calcium as Ca	24
Nitrate	2.2

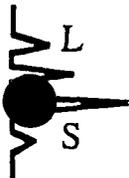
Results reported as Parts per Million unless stated

Langelier Saturation Index -54

Analysis by: Vickie Walker
Date: 8/11/00

Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713



Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Wells 33111 & 28131 + 29231

SAMPLED BY _____

DATE TAKEN 5/9/00

REMARKS T18S-R38E-Sec 29, Qtr Sec. 4,2,1

Barium as Ba	0
Carbonate alkalinity PPM	40
Bicarbonate alkalinity PPM	216
pH at Lab	7.63
Specific Gravity @ 60°F	1
Magnesium as Mg	174
Total Hardness as CaCO3	300
Chlorides as Cl	155
Sulfate as SO4	115
Iron as Fe	0.1
Potassium	0.09
Hydrogen Sulfide	0
Rw	9.4 @ 25° C
Total Dissolved Solids	850
Calcium as Ca	126
Nitrate	7.5

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.05

Analysis by: Vickie Walker
Date: 6/6/00

LIST OF OFFSET OPERATORS & SURFACE OWNERS

Offset Operators

Occidental Permian Limited Partnership
P.O. Box 4294
Houston, TX 77210-4294

Exxon Company, U.S.A.
Attn: Joint Interest Operations
P.O. Box 4707
Houston, TX 77210-4707

Collins & Ware, Inc.
508 W. Wall, Suite 1200
Midland, TX 79701

Marcum Drilling Co.
P.O. Box 3699
Midland, TX 79705

Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Texland Petroleum – Hobbs, LLC
500 Throckmorton, Suite 3100
Ft. Worth, TX 76102-3818

Surface Owners

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

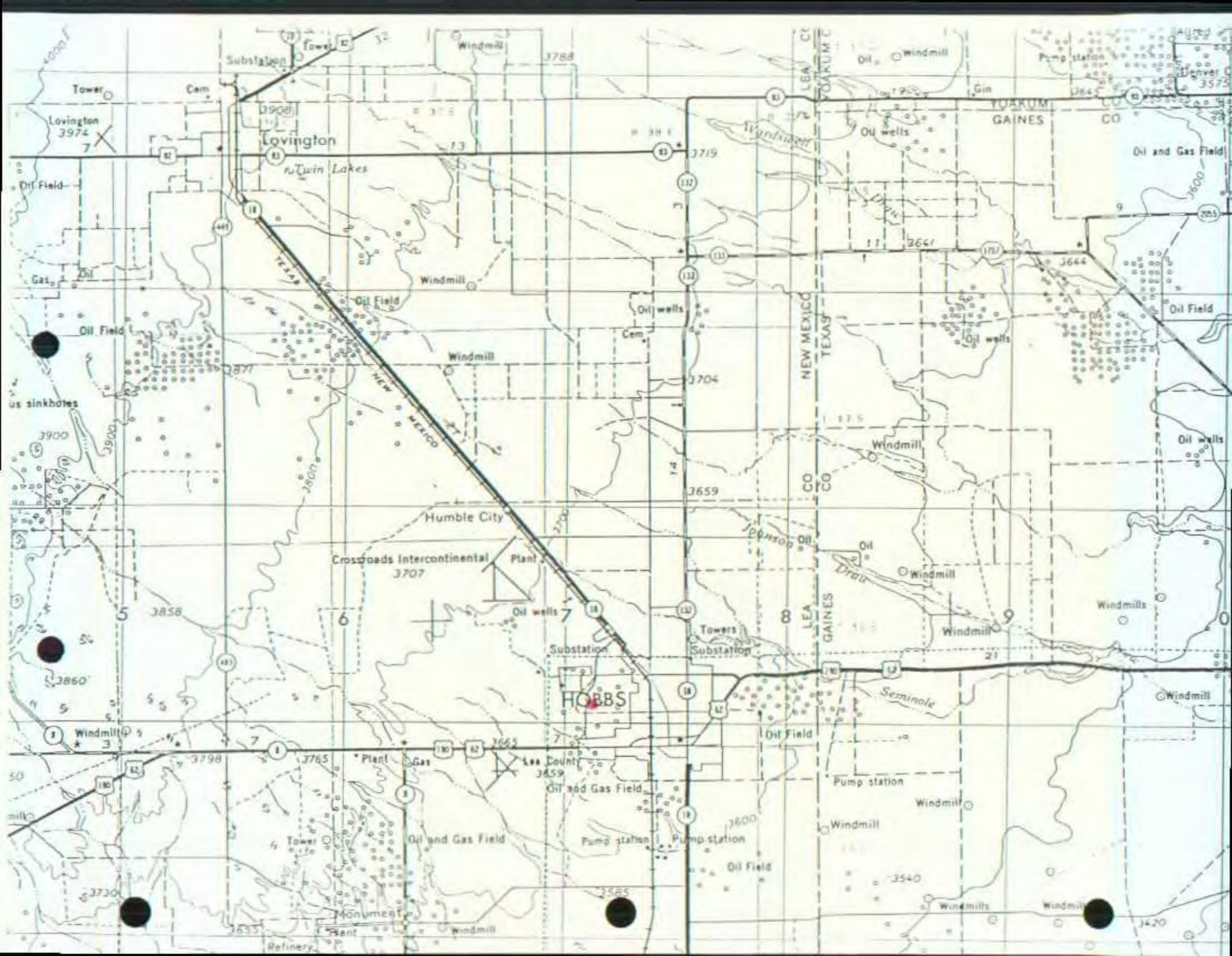
COUNTY OF LEA STATE OF NEW MEXICO		VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
NOTICE OF VALUATION FOR 20 01					FULL VALUE	TAXABLE VALUE
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT 160		LAND		4180	12540	4180
OWNER # 0001950 SCHUBERT, ELOISE H GRIMES LAND CO % PO BOX 5102 HOBBS, NM 88241		PERSONAL				
		MOBILE HOME				
		LIVESTOCK				
		IMPROVEMENTS	2864		8592	2864
		TOTAL VALUE	2864	4180	21132	7044
		VETERAN EXEMPTION				
		FAMILY EXEMPTION				
		OTHER EXEMPTION				
		NET TAXABLE VALUE	2864	4180		7044
PROPERTY DESCRIPTION AND/OR CODE	CODE	VALUE DESCRIPTION	TYPE	QUANTITY	RATE	TAXABLE VALUE
PROP CD# 4-000-019-500-001 BOOK 805 PAGE 00593 SECTION-29, TOWNSHIP-18S, RANGE-38E 4.18 AC LOC NW4 TR BEG N89D57'55"W 580.94' & S0D2'5"W 1532.39' FROM N4 COR SEC 29, TH S0D0'17"E 685.73', N88D49'18"W 660', TO PT ON R/W, CURVE CA-11D27'4" R-960' FOR 191.86', S88D49'18"E 420.97', N85D59'24"W 125.87', N53D16'E 345.59' TO BEG *6/97-GRIMES LAND CO PRT 40900*	150	MISCELLANOUS LAND	N/R	4.18		4180
	210	SINGLE FAMILY	RES			2864
TOTAL ACRES				4.18		

COUNTY OF LEA	STATE OF NEW MEXICO	VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
NOTICE OF VALUATION FOR 20 01					FULL VALUE	TAXABLE VALUE
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT 160		LAND				
OWNER # 0040900 GRIMES LAND CO LTD		PERSONAL				
PO BOX 5102 HOBBS, NM 88241		MOBILE HOME				
		LIVESTOCK				
		IMPROVEMENTS				
		TOTAL VALUE				
		VETERAN EXEMPTION				
		FAMILY EXEMPTION				
		OTHER EXEMPTION				
		NET TAXABLE VALUE				

PROPERTY DESCRIPTION AND/OR CODE	CODE	VALUE DESCRIPTION	TYPE	QUANTITY	RATE	TAXABLE VALUE
PROP CD# 4-000-409-000-001 BOOK 513 PAGE 00530 SECTION-29, TOWNSHIP-18S, RANGE-38E 20.00 AC BEING N2NE4SW4 102.63 AC LOC NW4 TR BEG N4 COR SEC 29 TH SOD2'30"W 50' N89D58'30"W 295.16' SOD2'30"W 295.16' S89D58'30"E 295.16' SOD2'30"W 2299.99' TO SE COR NW4 TH S89D54'44"W 2639.52' TO SW COR NW4 TH NOD5'16"W ALONG W LINE NW4 FOR 1144.5' TO PT WHICH IS 1503.16' SOUTHERLY ALONG W LINE NW4*SW COR STONE TR B 423 P 719* N89D58'E 686.69' *SE COR STONE TR* NOD2'W 133.15'*TO SW COR MUSSEL- WHITE TR B 421 P 365*, N89D58'E 825' NOD2'W 1370' TO PT ON N LINE NW4 SEC 29, N89D58'E 1132.38' ALONG SAID LINE TO BEG *LESS TR BEG NOD02'E 3254.44' & W 3390.32' FROM SE COR SEC 29 TH W 433.17' TO PT ON E R-O-W- LINE OF WEST CO RD BY-PASS, ALSO A PT ON A CURVE TO THE NE, TH ALONG CURVE (CA 20D20'39" RA 960') FOR 340.87' N53D15'10"E 79.40' E 137.94' S 295.16' TO BEG (2.07 AC MORE OR LESS) *LESS TR BEG N89D57'55"W 580.94' & SOD02'05"W 1532.39' FROM	150	MISCELLANOUS LAND	N/R	171.27		9348

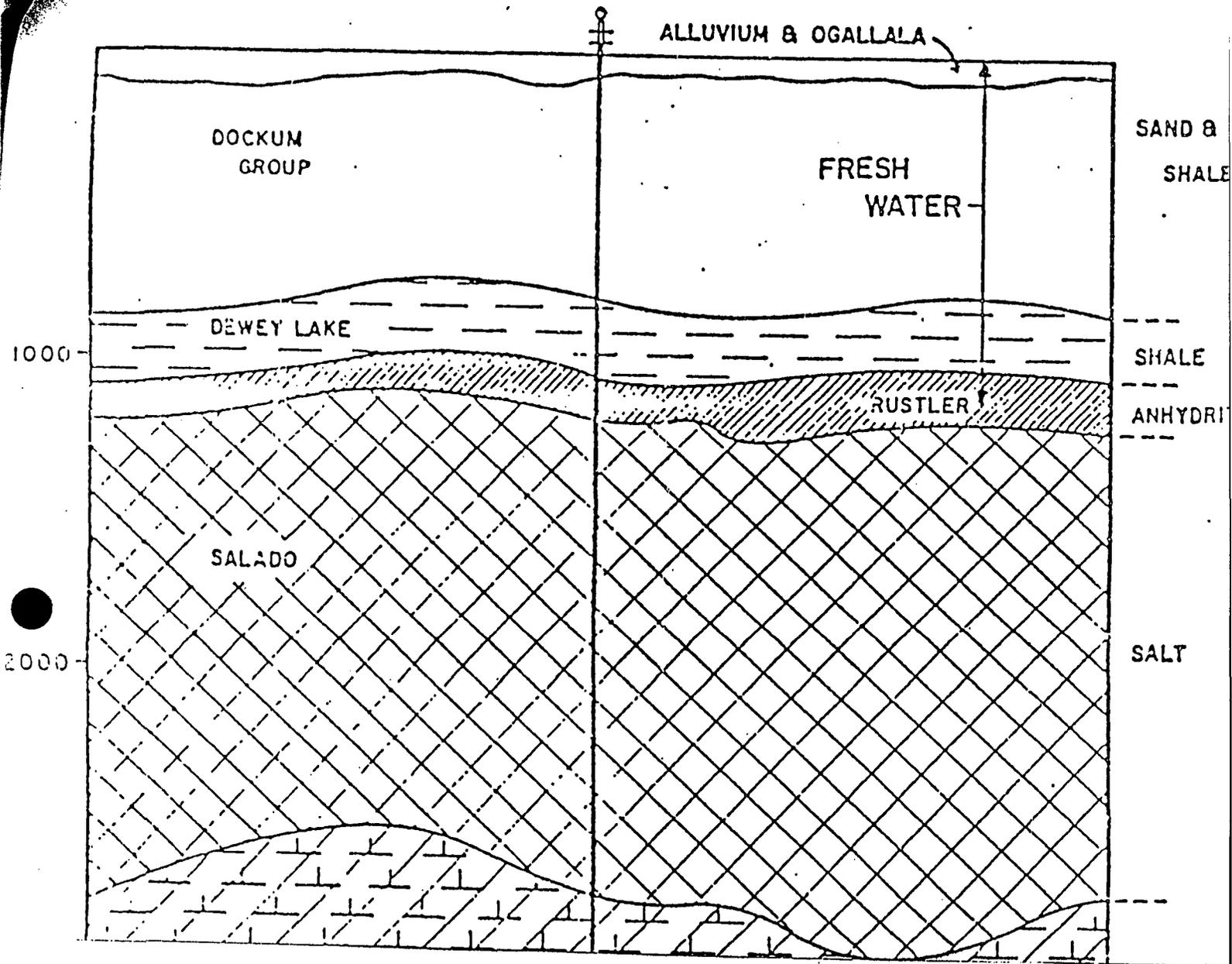
COUNTY OF LEA	STATE OF NEW MEXICO	VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
NOTICE OF VALUATION FOR 20					FULL VALUE	TAXABLE VALUE
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT		LAND				
		PERSONAL				
		MOBILE HOME				
		LIVESTOCK				
		IMPROVEMENTS				
		TOTAL VALUE				
		VETERAN EXEMPTION				
		FAMILY EXEMPTION				
		OTHER EXEMPTION				
		NET TAXABLE VALUE				

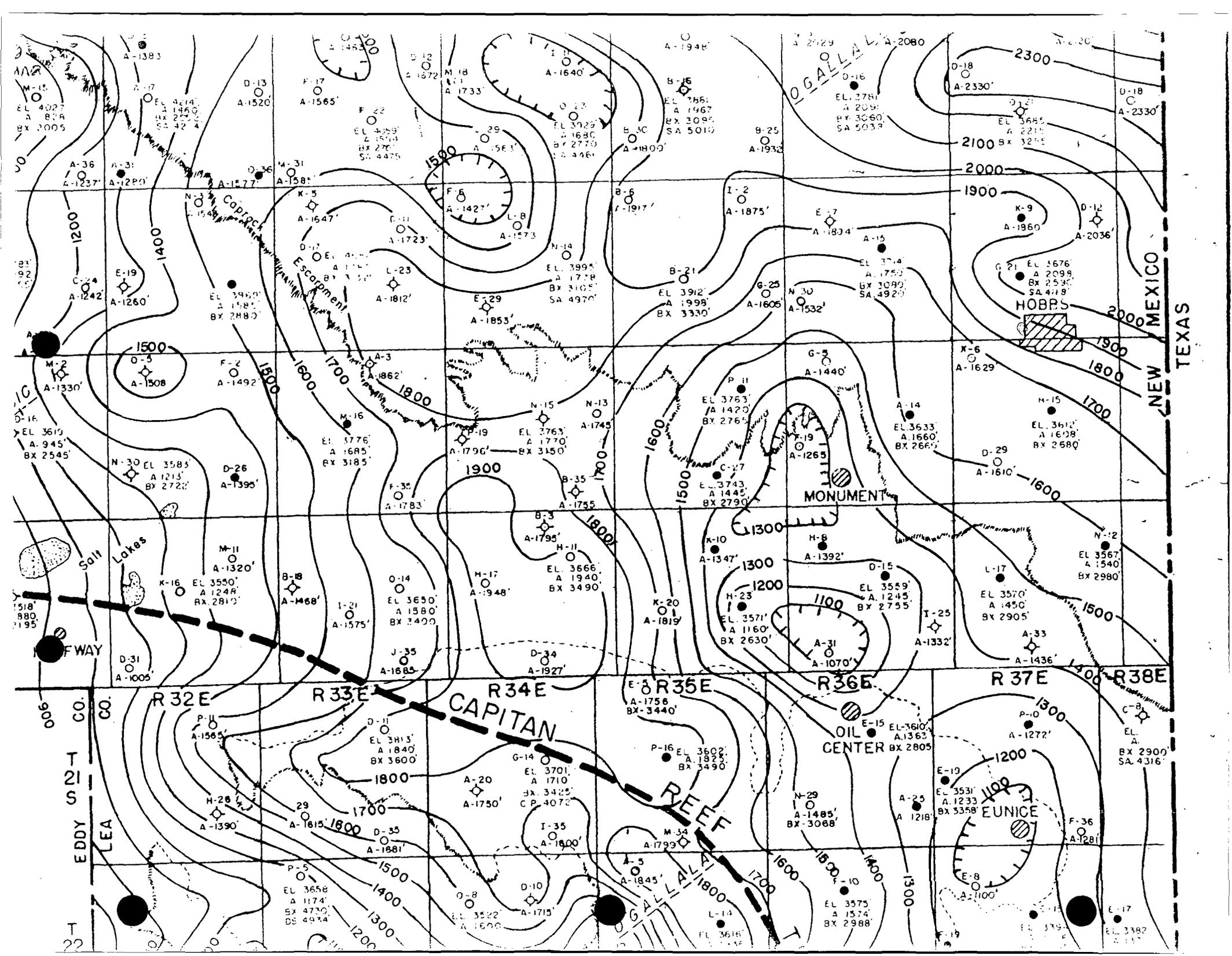
Maps



SCHEMATIC OF A LEA COUNTY INJECTION WELL

M. HOLLAND OCD '80





NEW MEXICO
TEXAS

OGALLA

Escarpment

MONUMENT

Salt Lakes

CAPITAN

REEF

OIL CENTER

EUNICE

EL 4027
A 838
BX 2005

EL 3619
A 945
BX 2545

EL 1518
A 880
BX 1195

EL 3658
A 1174
BX 4730
DS 4944

EL 1460
A 1460
BX 2324
SA 4244

EL 3960
A 1980
BX 2880

EL 3585
A 1215
BX 2722

EL 3550
A 1248
BX 2810

EL 3813
A 1840
BX 3600

EL 1565
A 1565

EL 1862
A 1862

EL 1776
A 1685
BX 3185

EL 3650
A 1580
BX 3400

EL 3522
A 1600

EL 1733
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EL 1995
A 1778
BX 3105
SA 4970

EL 3763
A 1770
BX 3150

EL 3666
A 1940
BX 3490

EL 3701
A 1710
BX 3425
C.P. 4072

EL 1640
A 1640

EL 1917
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EL 1755
A 1755

EL 1948
A 1948

EL 1845
A 1845

EL 1967
A 1967
BX 3095
SA 5019

EL 3912
A 1998
BX 3330

EL 3763
A 1470
BX 2765

EL 3602
A 1825
BX 3490

EL 3575
A 1574
BX 2988

EL 3781
A 2091
BX 3060
SA 5038

EL 374
A 1750
BX 3090
SA 4920

EL 3743
A 1445
BX 2790

EL 3549
A 1245
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EL 3575
A 1574
BX 2988

EL 2330
A 2330

EL 3676
A 2098
BX 2530
SA 4118

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A 1608
BX 2680

EL 3570
A 1450
BX 2905

EL 3531
A 1233
BX 5358

EL 3685
A 2215
BX 3215

EL 3676
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A 2330

EL 3676
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SA 4118

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BX 2905

EL 3575
A 1574
BX 2988

EL 3382
A 1111

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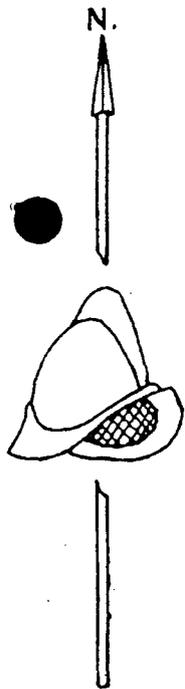
R 70E

R 71E

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R 74E



N.M. OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO

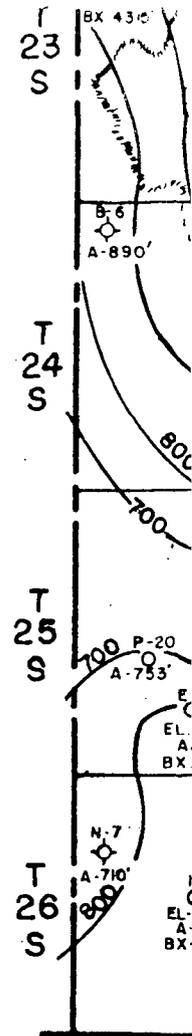
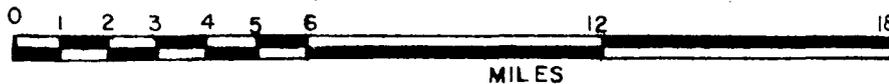
TOP ANHYDRITE STRUCTURE MAP

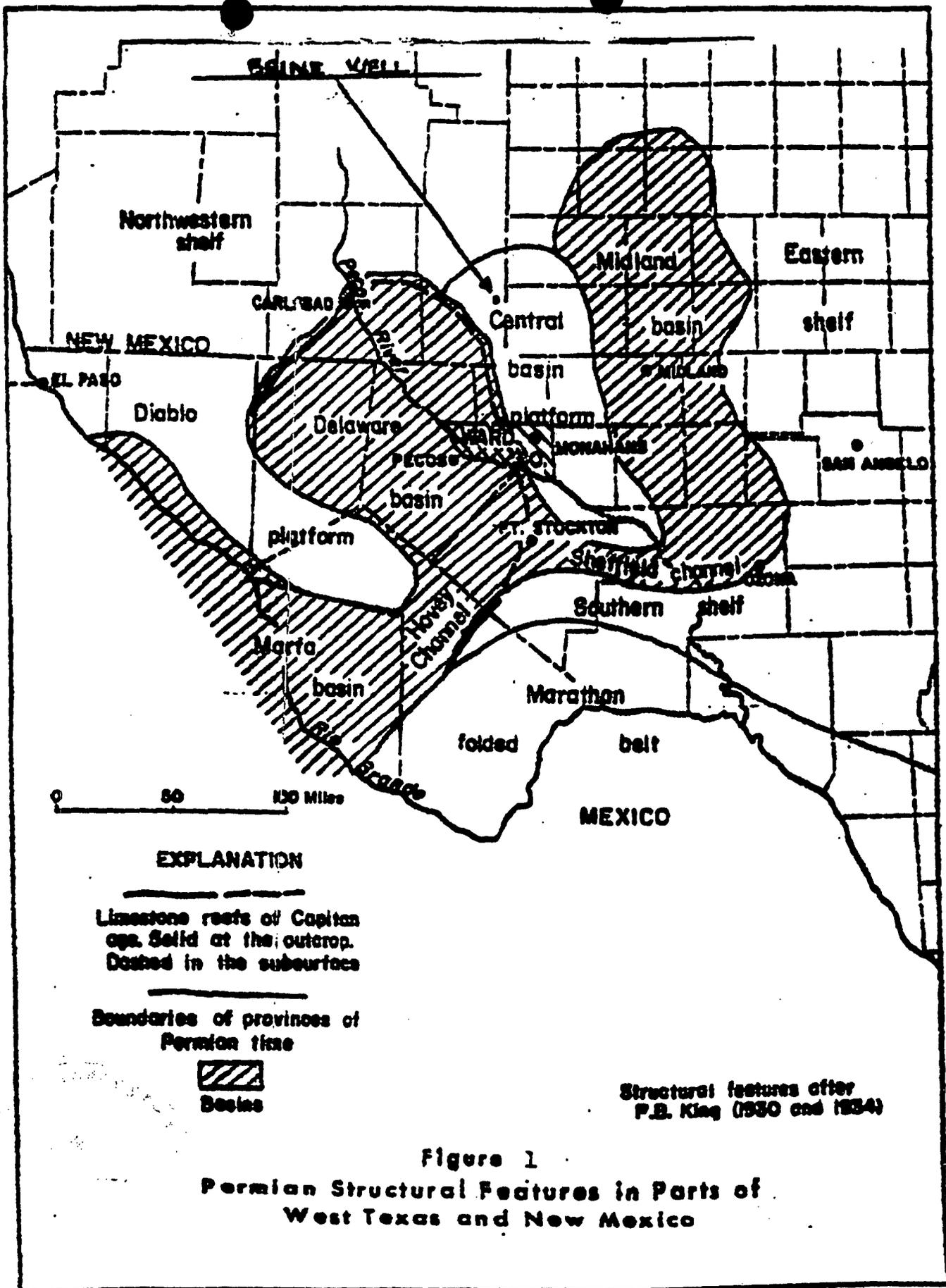
*LEA, ROOSEVELT AND
CURRY, COUNTIES*

CONTOUR INTERVAL 100'
GEOLOGIST: JOHN W. RUNYAN

SCALE: 1 1/2" = 6 MILES
DATE: JAN. 6, 1965

REV. 6-23-77
REV. 2/5/74



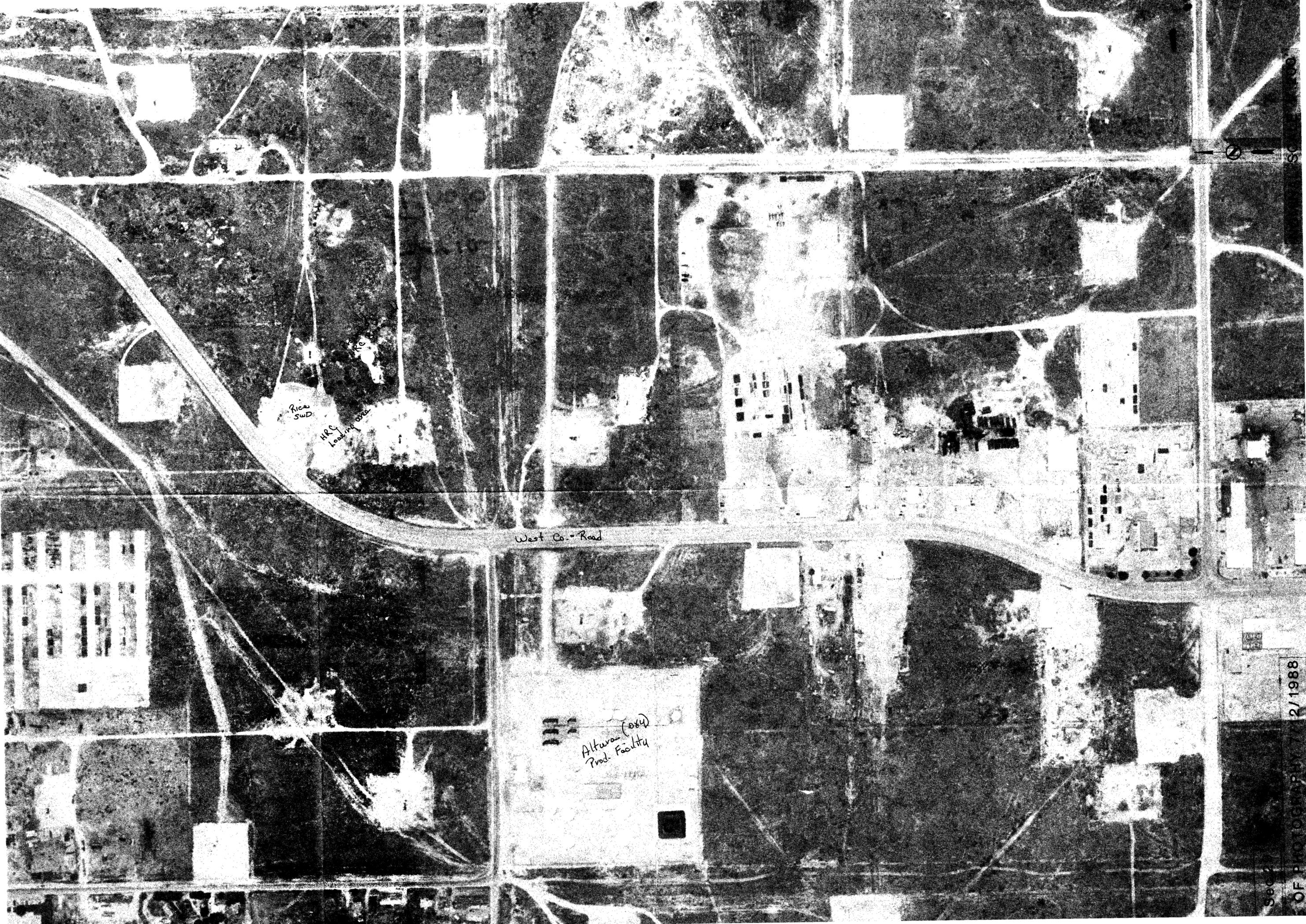


GENERALIZED SECTIONS SOUTHEASTERN NEW MEXICO

PLATFORM - SHELF				DELAWARE BASIN				
SYSTEM	SERIES	GROUP	FORMATION	FORMATION	GROUP	SERIES	SYSTEM	
QUATERNARY			*Bolsom, Caliche & Alluvium*				QUATERNARY	
TERTIARY			OGALLALA	OGALLALA			TERTIARY	
CRETACEOUS	(Wedge on Shelf)							
TRIASSIC	DOCKUM	DOCKUM	CHINLE	CHINLE	DOCKUM	DOCKUM	TRIASSIC	
			Santa Rosa	Santa Rosa				
			Dewey Lake	Dewey Lake				
			Rustler	Rustler				
PERMIAN	OCHOAN	SALADO	"Salt"	"Salt & Anhydrite"	SALADO	OCHOAN	PERMIAN	
					CASTILE			
	GUADALUPIAN	ARTESIA GROUP CHALK BLUFF WHITEHORSE	TANSILL	Lamar Lt.	DELAWARE MOUNTAIN	GUADALUPIAN		
			YATES					
			SEVEN RIVERS					
			QUEEN					
			GRAYBURG					
		N.D.	SAN ANDRES	BUSHY CANYON				
	LEONARDIAN	YESO	N.D.	GLORIETA	BONE SPRINGS	LEONARDIAN		
			UPPER	PADDOCK				
MIDDLE			BLINEBRY					
LOWER			TUBB					
ABO			ORINKARD					
WOLF-CAMP	"HUECO"	WOLF-CAMP	"HUECO"	WOLF-CAMP	WOLF-CAMP			
PENNSYLVANIAN	VIRGIL	CISCO	CISCO		CISCO	VIRGIL		
	MISSOURI	CANYON	UNDEFINED	UNDEFINED	CANYON	MISSOURI		
	DES MOINES	STRAWN	UNDEFINED	UNDEFINED	STRAWN	DES MOINES		
	ATOKA	ATOKA	UNDEFINED	UNDEFINED	ATOKA	ATOKA		
	MORROW	MORROW	UNDEFINED	UNDEFINED	MORROW	MORROW		
MISSISSIPPIAN	CHESTER		Bainell Sh.	Bainell Sh.		CHESTER		
	MERAMEG	N.D.	MISS. LS.	MISS. LS.	N.D.	MERAMEG		
	OSAGE					OSAGE		
	KINDERHOOK	Percha	Woodford Sh.	Woodford Sh.	Percha	KINDERHOOK		
DEVONIAN	N.D.	N.D.	DEVONIAN	DEVONIAN	N.D.	DEVONIAN		
SILURIAN	NIAGARAN		FUSSELMAN	FUSSELMAN	NIAGARAN	SILURIAN		
ORDOVICIAN	UPPER	N.D.	MONTOYA	MONTOYA	N.D.	UPPER		
	MIDDLE	SIMPSON	MCKEE	MCKEE	SIMPSON	MIDDLE		
			WADDELL	WADDELL				
			GONNELL	GONNELL				
LOWER		ELLENBURGER	ELLENBURGER		LOWER			
GRANITE WASH				GRANITE WASH				
PRE-CAMBRIAN								

N.D. = Not Defined.

John W Runyon
N.M.O.C.C. - Hobbs



Rica SWD

HRC leading SWD

West Co. Road

Alturas (ex)
Prod. Facility





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenberg
Director
Oil Conservation Division

July 13, 2001

Mr. Gary Schubert
HRC Inc.
P.O. 5011
Hobbs, NM 88241

Re: Brine Well Application

Dear Mr. Schubert:

Per your request please find enclosed an application and guidelines for brine extraction facilities. If you decide to apply please fill out the application in detail and submit with a \$100.00 filing fee. All checks shall be made out to: "Water Quality Management Fund".

If you have any questions please do not hesitate to contact me at 505-476-3487 or e-mail WPRICE@state.nm.us.

Sincerely;

A handwritten signature in black ink, appearing to read "Wayne Price".

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

attachments-2

RECEIVED
MAR 01 2002
Environmental Bureau
Oil Conservation Division

H.R.C. INC.

HOBBS STATE #10 SECT. 29, T. 18 S., R 38 E.

APPLICATION FOR BRINE EXTRACTION WELL

AND

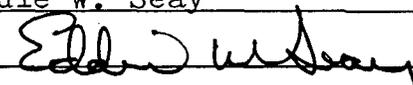
DISCHARGE PLAN FOR BRINE FACILITY

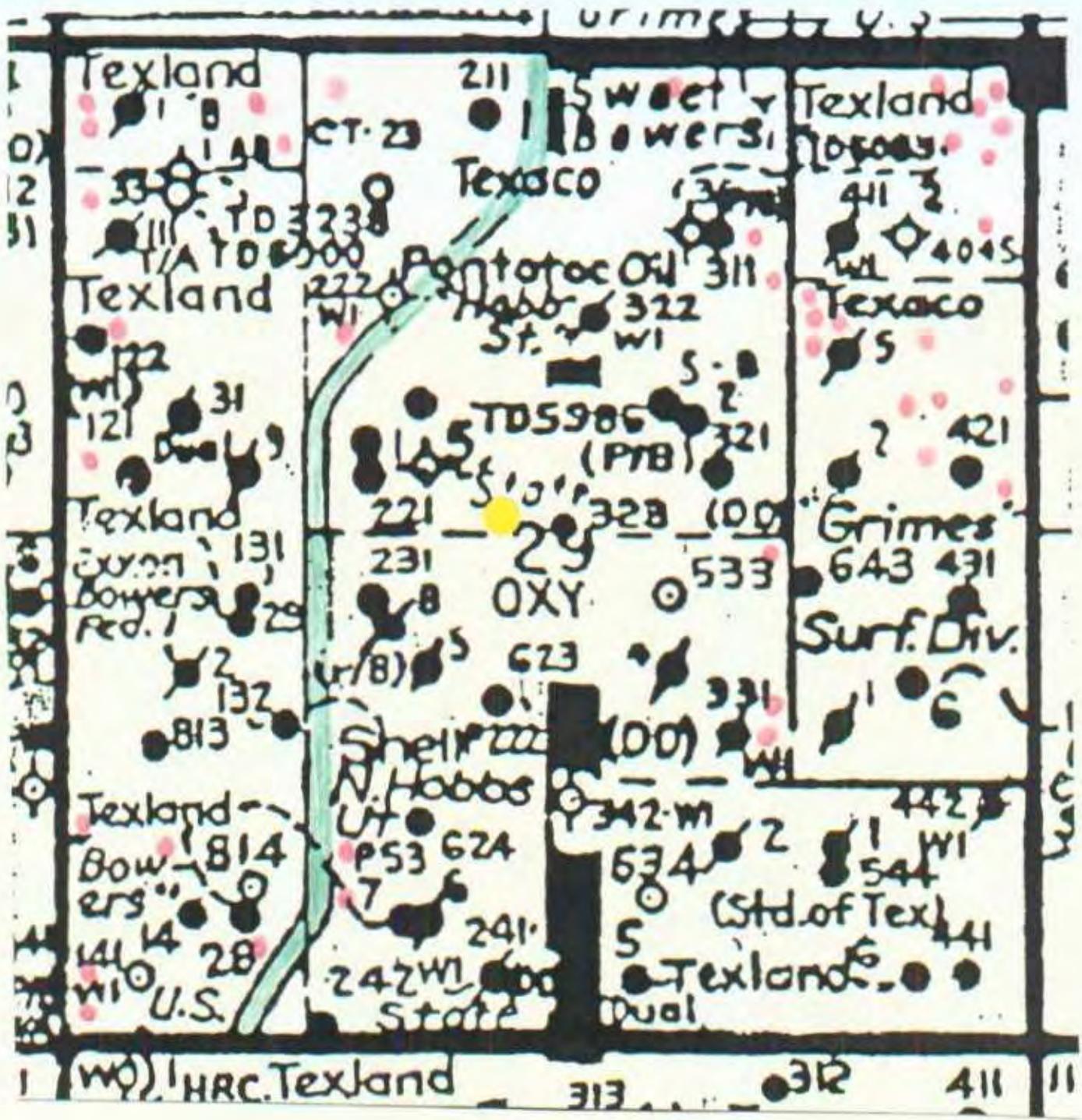
February 20, 2002

CONTENTS

- I. Complete C-108
- II. Drilling Application C-101 and C-102
- III. Additional information as requested.
- IV. Bond

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No X Brine
- II. OPERATOR: H.R.C. Inc.
ADDRESS: P.O. Box 5102 Hobbs, NM 88241
CONTACT PARTY: Gary M. Schubert PHONE: (505) 393-3194
- 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 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 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: Eddie W. Seay TITLE: Agent
SIGNATURE:  DATE: 2/18/2002
- * 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: _____



- West county road
- oil and gas wells
- Brine well, proposed
- Fresh water wells

VI. A list of wells within the area of review is attached. All of the producing wells in the area penetrate the salt section and are cased through the same. Some of the wells do not have cement circulated through the salt section. This is why HRC moved its original location to the new location we will be drilling. HRC will run pressure tests on the salt formation to determine if it will hold pressure and caliper logs to determine size of cavity, after we begin operations. Our new location is a minimum of 300 ft. from the nearest well. If after testing formation and running logs a problem is found, tests on the surrounding wells will be done and work performed as needed or as OCD requires.

VII. Fresh water will be used to produce brine. The fresh water will be injected down the casing and brine will be produced out the tubing.

The average injection pressure will be 200# and the maximum operating pressure 250#. Based on the activity at the facility, the average daily production will be 500 bls. and the maximum daily will be 1000 bls. The operation will be a closed system. Fresh water analysis enclosed.

VIII. HYDROLOGY

Underground aquifers in this area are the Ogallala and Quaternary Alluvium formations. The groundwater in these formations is unconfined where the underlying red beds are relatively impermeable. This underlying layer prevents further downward or upward movement. From information reviewed, the groundwater flow from the Ogallala formation flows to the south southeast, the water level for this area ranges from 50' to 70' below ground level and the average depth of the wells are 150'. Find within State Engineers list of water wells in the general area and analytical from two of the wells.

GEOLOGY

The proposed site is located on the Central Basin Platform of the Permian Basin. The sub-surface formations are in transitional area between Delaware Basins back reef or shelf area and the platform. The brine product is from the Salado Formation of the Ochoa series. The series is of upper Permian Age, and extends across the Delaware Basin, Central Basin Platforms, thins and pinches out on the eastern shelf. This series layers are predominately evaporates which contain strings of dolomite, shale, siltstone, and sandstone. The thickness of this salt section averages about 1000 ft. The Triassic rock overlaying the Permian formation is the Dockum group, and is divisible into the Santa Rosa sandstone and the Chinle formation. The Tertiary rocks are represented by the Ogallala formation. This formation ranges in thickness from 0' to 300'. It is chiefly calcareous, unconsolidated sand, clay, silt and gravel. This is the formation most of Lea Co. obtains its drinking water from.

IX. No stimulation needed.

X. Logs as the OCD requires.

XI. Attached.

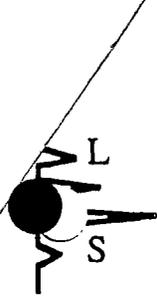
XII. I, Eddie W. Seay, as agent, have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the salt section and any underground source of drinking water near this site.

XIII. Proofs of Notice attached.

COUNTY OF LEA STATE OF NEW MEXICO		VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
NOTICE OF VALUATION FOR 20 01					FULL VALUE	TAXABLE VALUE
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT 160		LAND PERSONAL MOBILE HOME LIVESTOCK IMPROVEMENTS TOTAL VALUE VETERAN EXEMPTION FAMILY EXEMPTION OTHER EXEMPTION NET TAXABLE VALUE				
OWNER # 0040900 GRIMES LAND CO LTD PO BOX 5102 HOBBS, NM 88241						
PROPERTY DESCRIPTION AND/OR CODE	CODE	VALUE DESCRIPTION	TYPE	QUANTITY	RATE	TAXABLE VALUE
PROP CD# 4-000-409-000-001 BOOK 513 PAGE 00530 SECTION-29, TOWNSHIP-18S, RANGE-38E 20.00 AC BEING N2NE4SW4 102.63 AC LOC NW4 TR BEG N4 COR SEC 29, TH SOD2'30"W 50', N89D58'30"W 295.16', SOD2'30"W 295.16' S89D58'30"E 295.16', SOD2'30"W 2299.99' TO SE COR NW4, TH S89D54'44"W 2639.52', TO SW COR NW4, TH NODS'16"W ALONG W LINE NW4 FOR 1144.5' TO PT WHICH IS 1503.16' SOUTHERLY ALONG W LINE NW4*SW COR STONE TR B 423 P 719* N89D58'E 686.69' *SE COR STONE TR*, NOD2'W 133.15'*TO SW COR MUSSEL- WHITE TR B 421 P 365*, N89D58'E 825', NOD2'W 1370' TO PT ON N LINE NW4 SEC 29, N89D58'E 1132.38' ALONG SAID LINE TO BEG *LESS TR BEG NOD02'E 3254.44' & W 3390.32' FROM SE COR SEC 29 TH W 433.17' TO PT ON E R-O-W- LINE OF WEST CO RD BY-PASS, ALSO A PT ON A CURVE TO THE NE, TH ALONG CURVE (CA 20D20'39", RA 960') FOR 340.87', N53D15'10"E 79.40', E 137.94', S 295.16' TO BEG (2.07 AC MORE OR LESS) *LESS TR BEG N89D57'55"W 580.94' & SOD02'05"W 1532.39' FROM	150	MISCELLANEOUS LAND	N/R	171.27		9348

COUNTY OF LEA STATE OF NEW MEXICO		VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
NOTICE OF VALUATION FOR 20					FULL VALUE	TAXABLE VALUE
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT		LAND PERSONAL MOBILE HOME LIVESTOCK IMPROVEMENTS TOTAL VALUE VETERAN EXEMPTION FAMILY EXEMPTION OTHER EXEMPTION NET TAXABLE VALUE				

COUNTY OF LEA	STATE OF NEW MEXICO	VALUE RECAP	RESIDENTIAL TAXABLE VALUE	NON-RESIDENTIAL TAXABLE VALUE	TOTAL VALUATION	
					FULL VALUE	TAXABLE VALUE
NOTICE OF VALUATION FOR 20 01		LAND		4180	12540	4180
NET TAXABLE VALUES WILL BE ALLOCATED TO THE GOVERNMENTAL UNITS IN SCHOOL DISTRICT 160		PERSONAL				
OWNER # 0001950		MOBILE HOME				
SCHUBERT, ELOISE H		LIVESTOCK				
GRIMES LAND CO %		IMPROVEMENTS	2864		8592	2864
PO BOX 5102		TOTAL VALUE	2864	4180	21132	7044
HOBBS, NM 88241		VETERAN EXEMPTION				
		FAMILY EXEMPTION				
		OTHER EXEMPTION				
		NET TAXABLE VALUE	2864	4180		7044
PROPERTY DESCRIPTION AND/OR CODE	CODE	VALUE DESCRIPTION	TYPE	QUANTITY	RATE	TAXABLE VALUE
PROP CD# 4-000-019-500-001 BOOK 805 PAGE 00593 SECTION-29, TOWNSHIP-18S, RANGE-38E 4.18 AC LOC NW4 TR BEG N89D57'55"W 580.94' & S0D2'5"W 1532.39' FROM N4 COR SEC 29, TH S0D0'17"E 685.73', N88D49'18"W 660', TO PT ON R/W, CURVE CA-11D27'4" R-960' FOR 191.86', S88D49'18"E 420.97', N85D59'24"W 125.87', N53D16'E 345.59' TO BEG *6/97-GRIMES LAND CO PRT 40900*	150	MISCELLANOUS LAND	N/R	4.18		4180
	210	SINGLE FAMILY	RES			2864
TOTAL ACRES				4.18		



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Wells 33111 & 28131 + 29231
SAMPLED BY

DATE TAKEN 5/9/00

REMARKS T18S-R38E-Sec 29, Qtr Sec. 4,2,1

Table with 2 columns: Parameter and Value. Rows include Barium as Ba (0), Carbonate alkalinity PPM (40), Bicarbonate alkalinity PPM (216), pH at Lab (7.63), Specific Gravity @ 60°F (1), Magnesium as Mg (174), Total Hardness as CaCO3 (300), Chlorides as Cl (155), Sulfate as SO4 (115), Iron as Fe (0.1), Potassium (0.09), Hydrogen Sulfide (0), Rw (9.4 @ 25° C), Total Dissolved Solids (850), Calcium as Ca (126), Nitrate (7.5).

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.05

Analysis by: Vickie Walker
Date: 6/6/00



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well for Wells 29321, 29231, 32312

SAMPLED BY _____

DATE TAKEN 8/8/00

REMARKS T18S-R38E-Sec29; Qtr Sec 4,1,2

Barium as Ba	0	
Carbonate alkalinity PPM	68	
Bicarbonate alkalinity PPM	260	
pH at Lab	7.21	
Specific Gravity @ 60°F	1	
Magnesium as Mg	32	
Total Hardness as CaCO3	56	
Chlorides as Cl	325	
Sulfate as SO4	130	
Iron as Fe	0	
Potassium	0.1	
Hydrogen Sulfide	0	
Rw	12	@ 23° C
Total Dissolved Solids	841	
Calcium as Ca	24	
Nitrate	2.2	

Results reported as Parts per Million unless stated

Langelier Saturation Index -54

Analysis by: Vickie Walker
Date: 8/11/00

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 38E Sections: 29

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

Well Data Report Avg Depth to Water Report Water Column Report
Clear Form WATERS Menu Help

WELL DATA REPORT 07/25/2001

DB File Nbr	Use	Diversion	Owner	Well Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)				X Y are in Feet		UTM are in Meters)		Start Date	Finish Date	Depth Well	Depth Water	
					Tws	Rng	Sec	q q q	Zone	X	Y	UTM_Zone					Easting
L 04547	DOM	3	B. A. MALECHECK	L 04547	18S	38E	29	1 3 1			13	670787	3621633	11/04/1960	11/04/1960	110	70
				L 04547 APPRO	18S	38E	29	1 3 1			13	670787	3621633	11/04/1960	11/04/1960	110	70
L 05577	DOM		DAVE E. WOOD	L 05577 EXP	18S	38E	29	2 2			13	672090	3621958				
L 06203	DOM		DOW COTTRELL	L 06203 EXP	18S	38E	29	2			13	671895	3621749				
L 06453 (E)	PRO		CONTINENTAL OIL COMPANY	L 06453 (E) EXP	18S	38E	29	3 4 1			13	671205	3620834				
L 06453 (E) 2	PRO		CONTINENTAL OIL COMPANY	L 06453 (E) 2 EXP	18S	38E	29	3 4 1			13	671205	3620834				
L 06570 (E)	PRO	0	MORAN OIL PROD & DRILLING COR	L 06570 (E)	18S	38E	29	3 3 3			13	670802	3620628	08/05/1969	08/05/1969	110	54
L 06603	DOM		RICHARD JOHNSON	L 06603 EXP	18S	38E	29	2 1 2			13	671786	3622050				
L 06717	DOM	3	E. C. FOWLER	L 06717	18S	38E	29	2 4			13	672098	3621555	10/06/1970	10/08/1970	130	55
L 07005	SAN	3	TWO-STATE TANK RENTAL CO.	L 07005	18S	38E	29	3 3 1			13	670802	3620828	10/14/1972	10/18/1972	150	50
L 07017	DOM	3	APEX FREIGHT LINES	L 07017	18S	38E	29	3 3			13	670903	3620729	12/09/1972	12/11/1972	150	60
L 07163	DOM	3	JOE LISEBEE	L 07163	18S	38E	29	1 2			13	671284	3621944	02/01/1974	02/04/1974	110	67
L 07427	DOM	3	DON COTTRELL	L 07427	18S	38E	29	2 4			13	672098	3621555	09/16/1975	09/18/1975	130	60
L 07432	DOM	3	NORMAN L. WILLIAMS	L 07432	18S	38E	29	2 4			13	672098	3621555	09/24/1975	09/26/1975	125	55
L 07434	DOM	3	N.E. WILLIAMS	L 07434	18S	38E	29	2 4 4			13	672197	3621454	09/28/1975	09/30/1975	125	55
L 07528	OBS		PHILLIPS PETROLEUM COMPANY	L 07528 EXP 2	18S	38E	29	4 1 4			13	671801	3621044				
				L 07828 EXP	18S	38E	29	4 1 4			13	671801	3621044				
L 07530	OBS		PHILLIPS PETROLEUM COMPANY	L 07530 EXP	18S	38E	29	1 2 4			13	671383	3621843				
				L 07530 EXP 2	18S	38E	29	1 2 4			13	671383	3621843				
L 07531	OBS		PHILLIPS PETROLEUM COMPANY	L 07531 EXP	18S	38E	29	1 3 1			13	670787	3621633				
				L 07531 EXP 2	18S	38E	29	1 3 1			13	670787	3621633				
L 07570	DOM	3	SOUTHWESTERN DRILLING MUD	L 07570	18S	38E	29	3 3 3			13	670802	3620628	06/21/1976	06/22/1976	122	48
L 07673	DOM	3	LARRY FELKINS	L 07673	18S	38E	29	2 2 2			13	672189	3622057	02/05/1978	02/10/1978	125	50
L 07754	OBS	3	CROWN CHEMICAL COMPANY	L 07754	18S	38E	29	2 4			13	672098	3621555	09/08/1977	09/14/1977	207	50
L 07825	DOM	3	DONNY CAMPBELL	L 07825	18S	38E	29	2 2 1			13	671989	3622057	01/18/1978	01/18/1978	105	45
L 07826	DOM	3	JERRY BEKRY	L 07826	18S	38E	29	2 2 3			13	671989	3621857	01/16/1978	01/16/1978	110	45
L 08131	DOM	3	A. T. JOHNSON	L 08131	18S	38E	29	3 1			13	670895	3621131	08/18/1979	08/23/1979	110	60
L 08135	DOM	3	J. D. WHESENHUNT	L 08135	18S	38E	29	2 4			13	672098	3621555	06/15/1979	08/18/1979	130	62
L 08191	SAN	3	TOMMY MCDANIEL	L 08191	18S	38E	29	2 2 2			13	672189	3622057	01/05/1980	01/20/1980	126	120
L 08228	SAN	3	DOW COTTRELL	L 08228	18S	38E	29	2 1 4			13	671786	3621850	03/10/1980	03/11/1980	115	68
L 08229	DOM	3	MAX WHITE	L 08229	18S	38E	29	2 4 1			13	671997	3621654	03/08/1980	03/09/1980	115	68
L 08370	SAN	3	NORMAN L. WILLIAMS	L 08370	18S	38E	29	2 2 4			13	672189	3621857	10/20/1980	10/20/1980	126	60
L 08429	DOM	3	DOW COTTRELL	L 08429	18S	38E	29	4 1 2			13	671801	3621244	08/10/1981	08/11/1981	120	62
L 08446	DOM	3	JEKRY L. BROTHERS	L 08446	18S	38E	29	2			13	671895	3621749	05/03/1981	05/07/1981	120	42

L 08448	SAN	3	JACK STRINGER	L 08448	18S	38E	29	2	4	1	13	671997	3621654	11/18/1981	11/20/1981	130	38
L 08737	DOM	3	DANIEL SAGE	L 08737	18S	38E	29	2	4		13	672098	3621555	04/07/1982	04/07/1982	132	60
L 08860	SAN	3	TOMMY MCDANIEL	L 08860	18S	38E	29	2			13	671895	3621749	12/12/1983	12/12/1983	130	39
				L 08860 EXP	18S	38E	29	2			13	671895	3621749				
L 08867	SAN	3	BIG HORN TANK RENTAL	L 08867	18S	38E	29	2	2		13	672090	3621958	07/09/1982	07/10/1982	120	52
L 09586	DOM	3	KELDON COTTRELL	L 09586	18S	38E	29	2	4		13	672098	3621555	11/26/1984	11/28/1984	120	76
L 09682	SAN	3	JERRY BROTHERS	L 09682	18S	38E	29	2	2	3	13	671989	3621857	09/29/1985	09/30/1985	120	45
L 09705	SAN	3	TJ & C	L 09705	18S	38E	29	3	3	4	13	671002	3620628	07/19/1985	07/19/1985	135	65
L 09777	SAN	3	PAUL MUSSELEWHITE TRUCKING CO.	L 09777	18S	38E	29	1			13	671089	3621735	01/10/1986	01/13/1986	150	84
L 10860	DOM	3	KELLY WILLIAMS	L 10860	18S	38E	29	1	1	1	13	670780	3622036	07/20/1998	07/21/1998	160	39
L 10913	DOM	0	RAYMOND STONE	L 10913	18S	38E	29	1	3	3	13	670787	3621433				
L 11171	SAN	3	CONOCO	L 11171	18S	38E	29	3	4	1	13	671205	3620834	04/19/2001	04/19/2001	206	
L 11176	nul	0	TEXLAND PETROLEUM-HOBBS, LLC	L 11176	18S	38E	29	4	1	4	13	671801	3621044				210

Record Count: 47

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.		Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	No. of		
Operator						Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A Fed. #28	30-025-	23022	29	-18S	-38E	M	4/1/69	P	5345	5856	5928	NONE	11.75	15	374	300	CIRC**
Exxon									CIBP				8.625	11	3850	500	1879**
													5.5	7.875	5989	450	3838**
Bowers A Fed. #29	30-025-	23131	29	-18S	-38E	L	5/1/69	P	6000	5808	5889	NONE	11.75	15	370	300	CIRC**
Exxon													8.625	11	3849	500	1877**
													4.5	7.875	6000	450	5087**
WD Grimes #6	30-025-	23400	29	-18S	-38E	I	2/1/70	P	7018	6631	6984	NONE	13.375	17.5	377	400	CIRC**
Lewis B. Burleson									PBTD				9.625	12.25	3847	2300	CIRC**
													7	8.75	7049	540	3458**
Bowers A Fed. #CT22	30-025-	21961	29	-18S	-38E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Humble																	
Bowers A Fed. #CT23	30-025-	21962	29	-18S	-38E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Humble																	
Hobbs State #1	30-025-	23585	29	-18S	-38E	F	10/1/70	P	7032	6680	6992	NONE	12.75	17.5	356	400	CIRC
Marcum Drilling									PBTD				8.625	11	3795	300	2600
													5.5	7.875	7050	150	3839-CBL
Hobbs State #2	30-025-	23620	29	-18S	-38E	G	1/1/71	P	6397	6705	7031	6318-6350	9.625	12.75	358	200	CIRC
Marcum Drilling									PBTD				7	8.75	3850	250	2481**
													4.5	6.125	7075	425	1672**
Hobbs SWD F #WD29	30-025-	12802	29	-18S	-38E	F	2/1/60	I	5050	4469	5050	NA	9.625	12.25	400	300	CIRC**
Rice											OH		7	8.75	4700	700	CIRC**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.		Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	No. of		
Operator						Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Hobbs State #3	30-025-	23621	29	-18S	-38E	B	12//70	SWD	6060	5144	6029	NONE	9.625	12.25	350	200	CIRC
HRC, Inc.													7	8.75	3850	200	2300
													4.5	6.25	6083	200	3112
St I #6	30-025-	23252	29	-18S	-38E	P	8//69	P	6986	6652	6929	NA	9.625	12.25	3800	600	1905**
Std of Tx													7	8.75	3549	700	CIRC**
													5.5	7.875	7013	NA	NA
St A #4	30-025-	07439	29	-18S	-38E	J	2//47	PA	3215	3167	3194	NA	10.75	15	200	250	CIRC**
Conoco													5.5	7.875	3200	600	CIRC**
State A #5	30-025-	07440	29	-18S	-38E	K	3//47	PA	3200	3168	3188	NONE	10.75	15	280	200	CIRC**
Conoco													7.625	9.875	1573	425	CIRC**
													5.5	7.875	3197	450	CIRC**
State A #6	30-025-	07441	29	-18S	-38E	N	7//47	PA	3172	3158	3166	NONE	12.75	15	260	200	CIRC
Conoco													8.625	10.75	1562	475	CIRC**
													7	8.25	2721	350	CIRC**
													5	6.25	3172	500	CIRC**
Bowers A #12	30-025-	07450	29	-18S	-38E	L	4//47	PA	3088	NA	NA	NA	8.625	11	236	100	CIRC**
Exxon									PBTD				5.5	7.625	3144	675	880-TS
Bowers A #14	30-025-	07451	29	-18S	-38E	O	8//47	PA	3207	3162	3207	NONE	8.625	11	496	400	CIRC**
Exxon													5.5	7.625	3120	1350	CIRC**
Bowers A-B #1	30-025-	07453	29	-18S	-38E	D	9//48	PA	3238	3179	3238	NA	8.625	11	260	150	CIRC**
Exxon										OH			5.5	7.625	3179	1050	CIRC**
Bowers A Fed. #9	30-025-	07446	29	-18S	-38E	E	8//30	PA	4259	NA	NA	NA	9.625	12	2750	650	CIRC**
Exxon													7	8.75	3976	300	2011**
													5	6.25	4259	NA	NA

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	Depth	No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A Fed. #31	30-025-23176	29	-18S	-38E	E	6/1/69	PA	7050	6075	6991	NONE	8.625	11	3836	500	1858**
Exxon												5.5	7.875	7038	650	3125**
												2	7.875	7005	NA	NA
Bowers A Fed. #33	30-025-23222	29	-18S	-38E	D	7/1/69	PA	3970	4144	5953	4256-66	13.375	17	416	400	CIRC**
Exxon							CIBP				5939	9.625	12.25	3836	350	2555-TS
												7	8.75	5988	550	2900-TS
Bowers A Fed. #CT24	30-025-21963	29	-18S	-38E	E	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Humble																
Bowers A Fed. #CT25	30-025-21964	29	-18S	-38E	E	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Exxon																
WD Grimes #2	30-025-07455	29	-18S	-38E	A	2/1/48	PA	4045	NA	NA	NA	8.625	11	242	150	CIRC**
Humble												5.5	7.375	3205	450	CIRC**
Hobbs State #5	30-025-23662	29	-18S	-38E	F	1/1/71	PA	5959	5813	5879	NA	9.625	12.25	364	200	CIRC
Ne-O-Tex												7	8.75	3826	200	2250
												4.5	6.25	5986	120	3800 (C)
St #1	30-025-07442	29	-18S	-38E	P	8/1/30	PA	4191	3150	4191	NA	13.375	17.5	217	200	CIRC**
Std of Tx												9	12.25	2735	500	1473**
												6.625	7.875	3907	174	2374**
St #2	30-025-07443	29	-18S	-38E	O	9/1/30	PA	4171	3155	4156	NA	13	17.5	225	150	CIRC**
Std of Tx												9.625	12.25	2810	725	CIRC**
												7	8.75	3951	300	1973**
WD Grimes #1	30-025-07456	29	-18S	-38E	I	8/1/30	PA	4160	3168	3189	3259-61	12.5	17.5	236	200	CIRC**
Tidewater											3049-50	9.625	12.25	2712	600	273**
												6.625	8.75	3826	300	2404**
Grimes #2	30-025-07457	29	-18S	-38E	H	10/1/30	PA	4176	3148	3255	3086-3088	15.5	18	230	200	CIRC**
Tidewater											3270-3272	9.625	12.25	2718	600	282**
												7	8.75	3880	300	1867**
												5.5	7.875	3350	100	3088**
Grimes #5	30-025-07460	29	-18S	-38E	H	12/1/30	PA	4196	NA	NA	NA	12.5	16	214	250	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Tidewater												9.625	12.25	2715	600	277**
												7	8.75	3911	400	595**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTB	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
29131 Oxy	30-025- 07447	29	-18S	-38E	L	10//30	P	4168 PBTB	4050	4210	NONE	12.5 9.625 7 5	18 12 8.75 6.125	225 2750 3976 3870-4220	250 650 300 50	CIRC 660** 1504-CBL 3930-CBL
29132 Oxy	30-025- 26917	29	-18S	-38E	L	12//80	I	4470 PBTB	4025	4245	NONE	16 8.625 5.5	20 12.25 7.875	40 1595 4510	40 785 900	CIRC CIRC CIRC**
29141 Oxy	30-025- 07448	29	-18S	-38E	M	8//30	I	4238 PBTB	3690	4228	3960-4108 4033-4053	12.5 9.625 7 5.5 4.5	18 12 8.75 7.875 6.25	203 2736 3960 3941 3417-4238	200 650 300 250 50	CIRC 1000** 1850** 3460-CBL 3774-CBL
29211 Oxy	30-025- 07433	29	-18S	-38E	C	11//30	TA	4003 CIBP	4217	4270	4053-4150 4180-4200 4211-4215	12.5 9.625 7 5.5	18 12 8.75 6.25	243 2796 4007 3957-4238	250 400 500 50	CIRC CIRC 3014** 3957
29221 Oxy	30-025- 07430	29	-18S	-38E	F	9//30	P	4210 PBTB	4118	4176	4154-4162 4175-4185 4195-4200 4213-4267	12.5 9.625 7 4.5	18 12 8.75 6.125	210 2704 3979 3910-4213	200 400 500 50	CIRC 1236 2753 3910
29222 Oxy	30-025- 26934	29	-18S	-38E	F	4//81	I	4465	4175	4265	NONE	16 8.625 5.5	20 12.25 7.875	40 1605 4510	40 950 1050	CIRC CIRC CIRC
29231 Oxy	30-025- 07438	29	-18S	-38E	K	10//30	P	4255	4106	4255	NONE	15.5 9.625 7 5	18 12.25 8.75 6.25	252 2729 3953 3906-4220	1000 600 300 50	CIRC** CIRC 2718 3906
29241 Oxy	30-025- 07437	29	-18S	-38E	N	10//30	I	4255	4076	4239	NONE	12.5 9.625 7	18 12 8.75	217 2730 3929	160 500 350	CIRC 895 1850

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.		Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	No. of		
Operator						Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
													5.5	7.875	3822-4299	60	3822
29242	30-025-	28413	29	-18S	-38E	N	3//84	P	4370	4005	4257	4019	16	20	30	NA	CIRC
Oxy												4037	8.625	12.25	1511	750	CIRC
												4040	5.5	7.875	4368	750	2330
29311	30-025-	07432	29	-18S	-38E	B	10//30	P	4269	4044	4269	4090-4110	12.5	16	241	250	113
Oxy												4171	9.625	11.75	2776	400	2750
													7	8.75	4008	500	2949
													5.5	6.25	3921-4234	350	3786
29321	30-025-	07431	29	-18S	-38E	G	9//30	P	4301	4137	4271	3895	12.5	16	211	250	CIRC
Oxy									PBTD			4100	9.625	11.75	2756	250	921
													7	8.75	3995	300	2930-CBL
													5	6.25	3812-4308	100	3894-CBL
29322	30-025-	28883	29	-18S	-38E	G	11//84	I	4342	4160	4256	NONE	13.375	17.5	40	NA	CIRC
Oxy									PBTD				8.625	12.25	1520	620	CIRC
													5.5	7.875	4384	850	CIRC
29323	30-025-	28941	29	-18S	-38E	G	1//85	P	4180	3089	4272	NONE	13.375	17.5	40	NA	CIRC
Oxy									PBTD				8.625	12.25	1542	375	CIRC
													5.5	7.875	4370	450	575-CBL
29331	30-025-	07436	29	-18S	-38E	J	9//30	I	4261	4100	4258	4044-4065	9.625	11.75	2742	500	907
Oxy													7	8.75	3929	300	2115
													4.5	6.25	4270	750	3788 CBL
29341	30-025-	07445	29	-18S	-38E	O	10//30	P	4090	4050	4146	4010-4035	13.375	15	210	150	CIRC**
Oxy									PBTD				9.625	12	2750	700	CIRC**
													7	8.75	3934	300	3430-CBL
													5	6.25	4162	350	CIRC
29342	30-025-	28884	29	-18S	-38E	O	11//84	I	4375	4083	4250	NONE	13.375	17.5	40	NA	NA
Oxy													8.625	12.25	1520	620	CIRC
													5.5	7.875	4375	875	CIRC
29411	30-025-	07454	29	-18S	-38E	A	10//30	I	4335	4200	4335	4102-4137	12.5	16	245	250	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Oxy											4057-4091	9.625	11.75	2750	650	365**
											4154-4158	7	8.75	4045	300	2231**
												5.5	6.25	3941-4223	30	3941**
29431	30-025-07458	29	-18S	-38E	I	10//30	P	4227	4155	4225	4010	15.5	18	228	200	CIRC**
Oxy								PBTD			4075	9.625	12.25	2720	600	978**
												7	8.75	3900	400	2086**
												5.5	6.25	3209-4229	120	3209**
29441	30-025-07444	29	-18S	-38E	P	10//30	P	4211	4058	4266	4020-4028	13.375	18	232	150	CIRC**
Oxy								PBTD				9.625	12	2743	1400	CIRC**
												7	8.75	3950	300	3240-CBL
												5	6.5	4172	22	4020
29442	30-025-28885	29	-18S	-38E	P	2//85	I	4237	4065	4210	4031	13.375	17.5	40	NA	CIRC
Oxy								CIBP			4036	9.625	12.25	1536	575	CIRC
												7	7.875	4370	1100	CIRC
29544	30-025-34644	29	-18S	-38E	P	7//99	P	4359	4124	4256	NONE	14	18	40	50	CIRC
Oxy								PBTD				8.625	12.25	1565	725	CIRC
												5.5	7.875	4400	775	CIRC
29111	30-025-23919	29	-18S	-38E	D	12//71	P	4287	4183	4287	3905-4250	8.625	11	310	150	CIRC
Oxy								PBTD				5.5	7.875	3905	300	2427**
29121	30-025-07449	29	-18S	-38E	E	3//47	P	4275	3924	4275	4070-85	9.625	12.25	2739	650	890
Oxy											4110-20	7	8.75	3104	100	2640 CBL
											4130-50	4.5 Lnr	6.25	2900-4201	100	2900
29421	30-025-07459	29	-18S	-38E	H	11//30	PA	308	3880	4232	NONE	12.5	16	220	200	CIRC**
Oxy								CICR				9.625	11.75	2720	600	518**
												7	8.75	3880	300	2914-CBL
												5.5	6.25	3796-4236	50	3866
29122	30-025-28953	29	-18S	-38E	E	2//85	I	4215	4154	4211	NONE	13.375	17.5	40	NA	CIRC
Oxy								(CIBP)				8.625	11	1510	785	CIRC
												5.5	7.875	4370	435	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

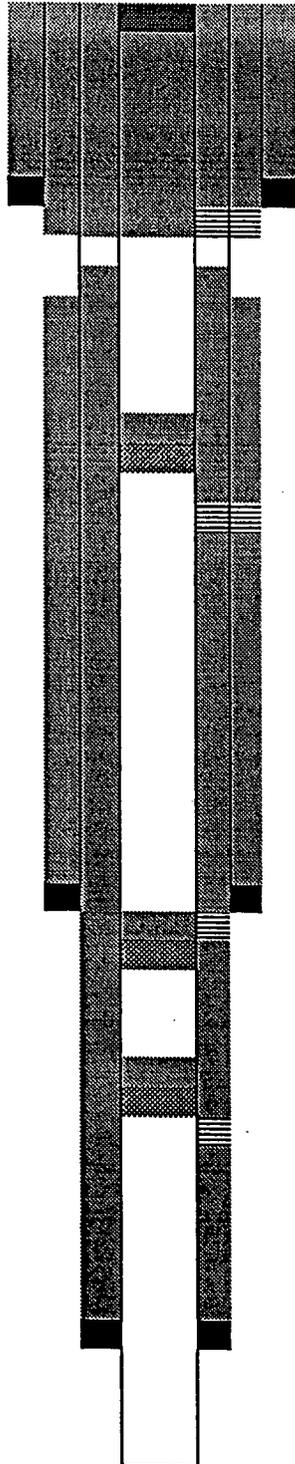
FOR WELLS 28332,29231,29321,30223,32312,32431																		
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of			
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC		
State B #5	30-025-07434	29	-18S	-38E	G	12//48	P	3224	3136	3224	1680-1682	10.75	13.75	220	200	CIRC**		
Collins & Ware												7.625	9.875	1665	300	CIRC**		
												5.5	6.75	3136	300	CIRC**		
State B #6	30-025-07435	29	-18S	-38E	F	1//47	P	3219	3137	3219	NONE	7.625	9.875	414	200	390		
Collins & Ware												5.5	6.75	3137	394	CIRC**		
St I #5	30-025-23173	29	-18S	-38E	O	7//69	P	6970	6648	6930	NONE	8.625	12.25	3808	300	3418**		
Texland Pet.												6.625	8.75	3575	530	CIRC**		
												5.5	7.875	7022	NA	NA		
State A #7	30-025-22934	29	-18S	-38E	N	2//69	P	6050	5823	5941	NONE	11.75	15	360	250	CIRC**		
Conoco												8.625	11	3800	240	2515-TS		
												5.5	7.875	6050	405	3300-TS		
State A #8	30-025-23048	29	-18S	-38E	K	4//69	TA	3567	3652	5787	5824-5924	11.75	15	360	250	CIRC**		
Conoco								CIBP				8.625	11	3800	240	3064**		
												5.5	7.875	5960	405	4309**		

** Denotes calculated TOC with 50% efficiency

**WELL SCHEMATIC:
OF TX- STATE #1**

WELL PLUGGED:
11/25/89

Size: 13 3/8"
Depth: 217'
200 SX
TOC: SURF (C)
TOC: Circ. - Calc.
With 50% effc.



Weld 1/2" plate on top.

Perf 6 5/8" and 9" at 267'.
Pumped 170 sx cmt down
Prod csg, circ cmt out
Intermediate and surf csg
Annuli. Cut off 6 5/8" csg 3'
Below GL. Cap w/ 1/2" plate
And valve wellbore.

Set cir at 1404'.

Perf 6 5/8" and 9" at 1500'.
Sqzd perfs w/200 sx cmt.

Size: 9"
Depth: 2735'
Hole size: 12.25"
Cmt: 500 sxs
TOC: 1200'- Calc.
With 50% effc.

Perfd 6 5/8" csg at 2785'.
Sqzd perfs w/55 sx cmt.
Set cast iron cmt ret at 2681'.
Cap cmt ret w/35' cmt.

Size: 6 5/8"
Depth: 3907'
Hole size: 7.875"
Cmt: 357 sxs
TOC: Circ. - Calc.
With 50% effc.

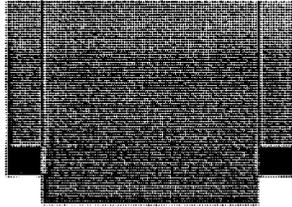
Capped CICR w/35' cmt to
3000'.
Set cast iron cmt ret at 3060'
Sqzd perfs w/106 sx to 3000'
Perfs at 3138' to 3241'

TD: 4191'

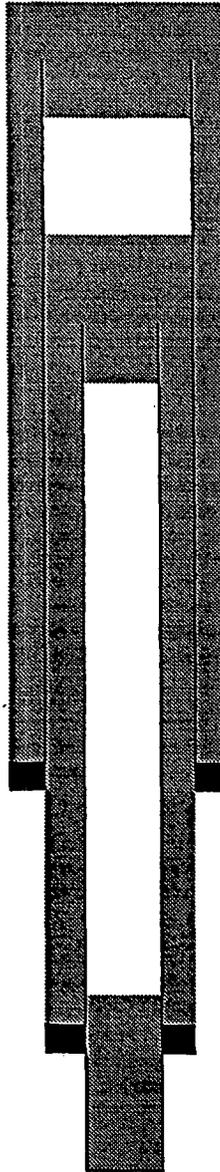
Grimes #3
Tidewater Oil Co.
Unit H, 1650 FNL & 990 FEL
Sec. 29, T-18S, R-38E

WELL PLUGGED:
3/17/81

Size: 12.5"
Depth: 214'
Hole Size: 17.5"
Cmt: 325 sxs
TOC: Circ.



Spotted 500 sxs at 400' to surface



9.625" top at 1198

Spotted 100 sxs at 1249'

7" top at 1750'

Spotted 100 sxs at 1800'

Size: 9.625"
Depth: 2715'
Hole Size: 12.25"
Cmt: 600 sxs
TOC:

Size: 7"
Depth: 3911'
Hole size: 8.75"
Cmt: 400 sxs
TOC:

Spotted 100 sxs at 4107

TD: 4200'

W.D. Grimes #2
Tidewater Oil Co.
Unit H, 990 FEL & 2310 FNL
Sec 29, T-18S, R-38E

WELL PLUGGED:
2/18/82

Size: 15.5"
Depth: 230'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
50% efficiency

Circ. 15335 sxs from 1361 to surface

Cut off 9.625" at 1200'

25 sxs cmt. Plug

Cut off 7 and 5.5" at 2030'

Size: 9.625"
Depth: 2718'
Hole size: 12.25"
Cmt: 600 sxs
TOC:

Size: 5.5"
Depth: 3350
Hole size: 7"
Cmt: 100
TOC: 3088' - Calc
with 50% effc.

15 sxs plug

Perfs 3086-88, sqz'd w/ 100 sxs

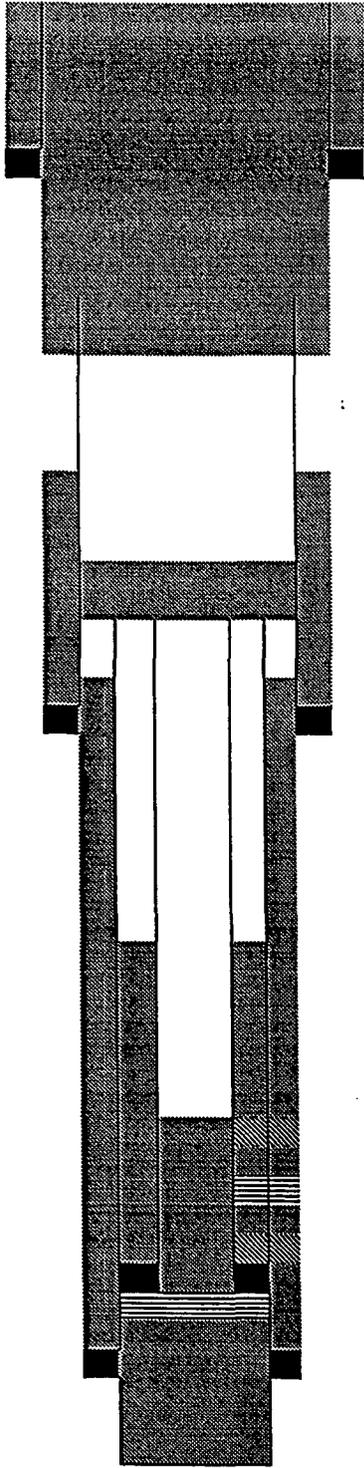
Perfs 3148-3255

Perfs 3270-72, sqz'd w/ 50 sxs

Cmt Ret. 3350'

Size: 7"
Depth: 3880'
Hole size: 8.75"
Cmt: 300 sxs
TOC:

TD: 4176



**WELL SCHEMATIC:
DEWATER WD GRIMES #1**

WELL PLUGGED:
7/25/68

Size: 12 1/2"
Depth: 236'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Laid 10 sx plug at surface.

Laid 25 sx cmt at bottom of
12 1/2" csg.

Laid 25 sx over 7" stub.
Shot at 787' and pulled.
Shot at 899'.

Shot at 1044'.
Shot at 1193'.

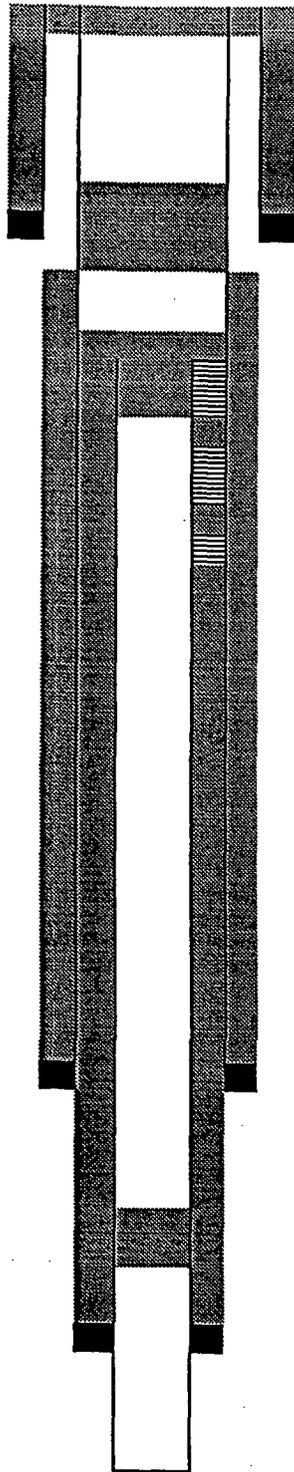
Shot at 1404'.

Size: 9 5/8"
Depth: 2712'
Hole size: 12.25"
Cmt: 600 sxs
TOC: 273'- Calc.
With 50% effic.

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 800' FP

TD:4160'

Spotted 25 sx cmt plug from
3599' to 3467'.



**WELL SCHEMATIC:
ALTURA NHU 29-421**

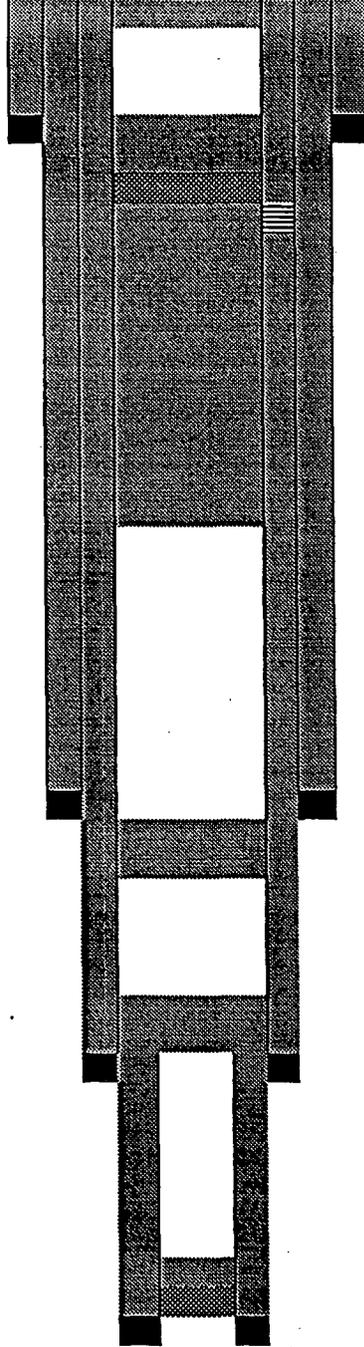
WELL PLUGGED:
12/3/97

12.5"
220'
200 SX
TOC: CIRC

9.625"
2720'
600 SX
TOC: 518'

7"
3880'
300 SX
TOC: 2914 CBL

5.5"
3796'-4236'
50 SX
TOC: 3866'



10 sx cmt from 62' to surf.

Stung out and left 60' cmt on
Top of ret.

Perf at 500'. Set CIRC at 308'

Squeeze 100 sx cmt below
Ret. to surf in 7" csg. x 9.625"
Csg.

Pumped 20 sx cmt from 1868
To 1748'.

Pumped 20 sx cmt from 2862
To 2742'.

Pumped 20 sx cmt from 3873
To 3722'.

Set CIBP at 4100'. Cap w/40'
Cmt.

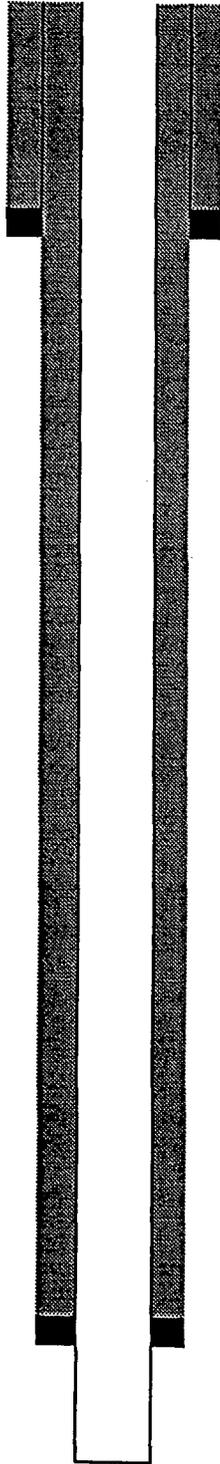
W. D. Grimes #2
Humble Oil & Refining Co.
Unit A, NE/4 of NE/4
Sec 29, T-18S, R-38E

WELL PLUGGED:
3/23/48

Size: 8.625"
Depth: 242'
Hole size: 11"
Cmt: 150 sxs
TOC: Circ.- Calc.
50% efficiency

Size: 5.5"
Depth: 3140'
Hole size: 7.375"
Cmt.: 450 sxs
TOC: Circ.- Calc.
50% efficiency

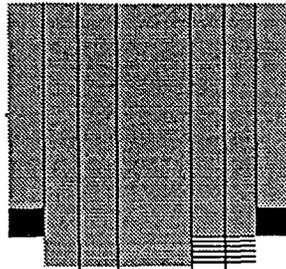
TD: 4045'



**WELL SCHEMATIC:
D OF TX STATE #2**

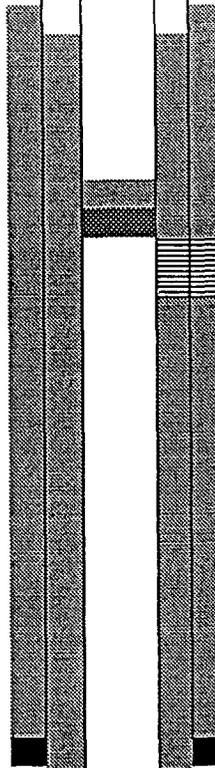
WELL PLUGGED:
12/5/89

Size: 13"
Depth: 225'
Hole size: 17.5"
Cmt: 150 sxs
TOC: Circ. - Calc.
With 50% effc.



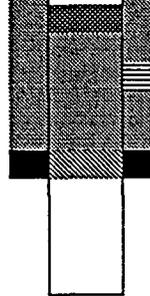
Sqzd perms at 292' with 220
sx. Circ to surface

Size: 9 5/8"
Depth: 2810'
Hole size: 12.25"
Cmt: 725 sxs
TOC: Circ. - Calc.
With 50% effc.



Set cir at 1404' and capped
With cmt.
Perf'd at 1500'.
Sqzd perms at 1500' with 300
sx

Size: 7"
Depth: 3951'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 1240'- Calc.
With 50% effc.



Set cir at 2744'.

Perfs sqzd at 2852', sqzd
With 55 sx.
Dumped 35' cmt onto CIBP.
CIBP at 3072'

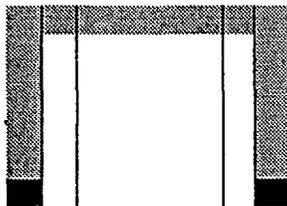
PBTD: 3072'

WELL SCHEMATIC
-O-TEX HOBBS STATE #5

WELL PLUGGED:
5/11/73

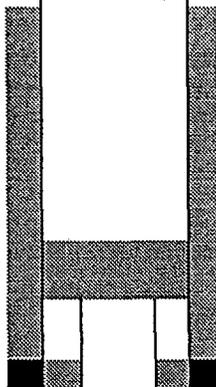
Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.



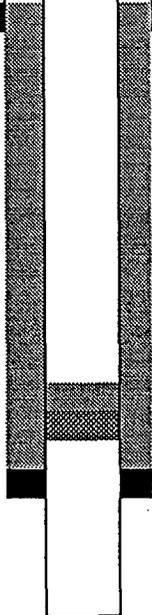
Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.



Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effic.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.



PBTD: 5959'

TD: 5986'

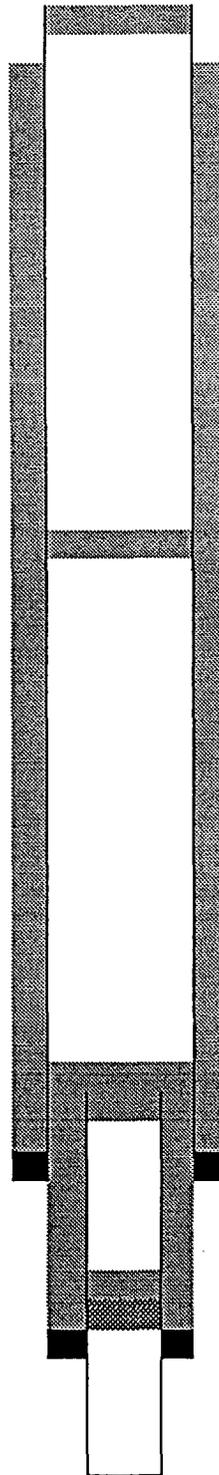
WELL SCHEMATIC:
GETTY G.O. MCKINLEY #3

WELL PLUGGED:
8/26/75

Size: 9 5/8"
Depth: 2755'
Hole size: 12.25"
Cmt: 600 sxs
TOC: 337' - Calc.
With 50% effic.

Size: 7"
Depth: 3166'
Hole size: 8.25"
Cmt: 100 sxs
TOC: 2595' - Calc.
With 50% effic.

TD: 3199'



Laid 10 sx cmt plug in top.

Laid 37 sx cmt plug from
1575' to 1475'.

Ran 2 3/8" tbg to 3000'.
Circulated hole with 123 bbls.
Brine water w/23 sx salt gel.
Pulled tbg.
Shot csg at 2547'. Pulled and
Laid down 84 joints(2555') 7"
Csg. Ran tbg to 2616' and
Laid 28sx cmt plug from
2616' to 2516'.

Set Titan CIBP at 3095'.
Dumped 7 sx cmt on top of
CIBP.

**WELL SCHEMATIC:
EXXON BOWERS A FED #33**

WELL PLUGGED:
10/3/72

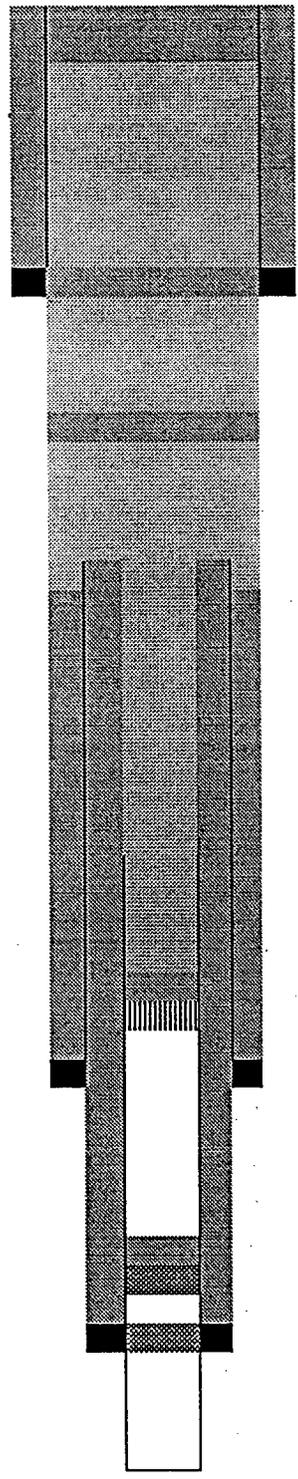
Size: 13 3/8"
Depth: 416'
Hole size: 17"
Cmt: 400 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 9 5/8"
Depth: 3836'
Hole size: 12.25"
Cmt: 350 sxs
TOC: 2555' T.S.

CIBP at 3970'

Size: 7"
Depth: 5988'
Hole size: 8.75"
Cmt: 550 sxs
TOC: 2900' - T.S.

TD: 6000'



Spot 20' cmt plug at surf

Spot 100' cmt plug at 416'

Run tbg to 1400' & spot 100'
cmt plug

Cut & pull 9 5/8" csg from
1889'

Cut & pull 7" csg from 2560'

Spot 100' cmt on top of CIBP

Set CIBP at 5800' and
Capped with cmt.

Set CIBP at 5900'.

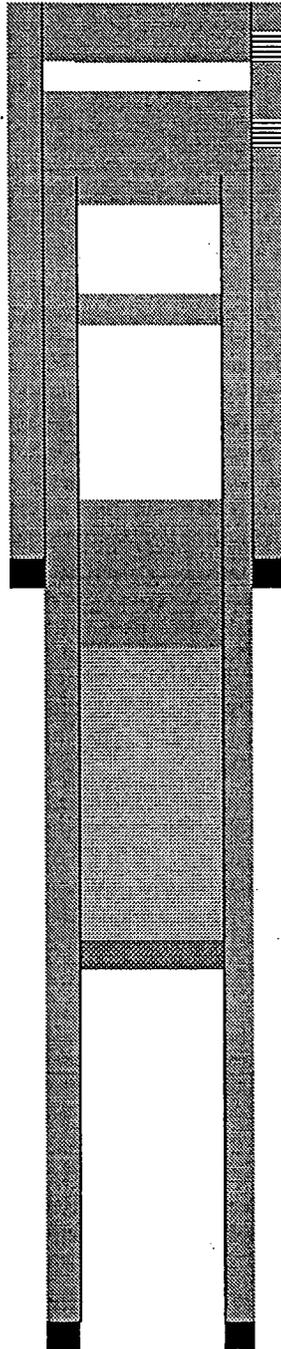
WELL SCHEMATIC:
EXXON BOWERS A FED #31

WELL PLUGGED:
8/30/90

Size: 8 5/8"
Depth: 3836'
Hole size: 11"
Cmt: 500 sxs
TOC: 1858' Calc.
With 50% effc.

Size: 5 1/2"
Depth: 7038'
Hole size: 7.875"
Cmt: 650 sxs
TOC: 3125' Calc.
With 50% effc.

TD: 7050'



Perf'd @ 450'. Pump 211 sx
Down 8 5/8" csg to surf.
Spot 77 sx from 1490-1200'
Perf'd at 1485'.
Cut off 5 1/2" csg at 1500'.

Spotted 25 sx cmt plug at
2716'.

Spot 50 sx cmt from 4100' to
3600'.

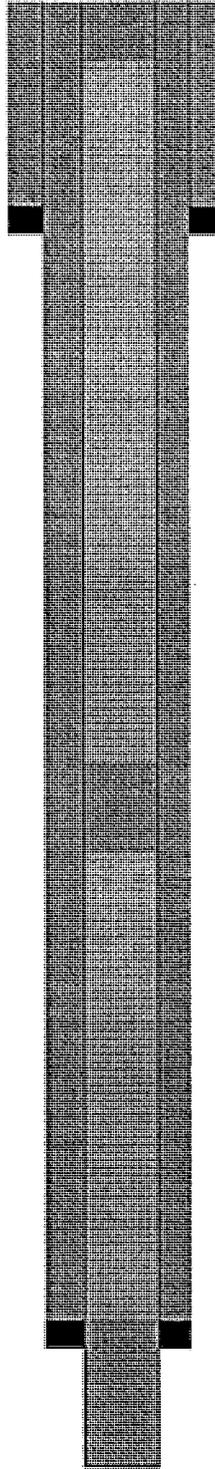
Displaced hole with salt gel
Mud.

Tagged CIBP w/35' cmt cap
At 5710'.

WELL SCHEMATIC:
EXXON BOWERS AB FED #1

WELL PLUGGED:
11/26/48

Size: 8 5/8"
Depth: 260'
Hole size: 11"
Cmt: 150 sxs
TOC: Circ. - Calc.
With 50% effc.



Spotted 20 sx cmt plug from
160' to surface.

All intervals between plugs
Was filled with mud laden
Fluid.

Size: 5 1/2"
Depth: 3179'
Hole size: 7.625"
Cmt: 1050 sxs
TOC: Circ. - Calc.
With 50% effc.

Spotted 40 sx cmt plug from
1800' to 1480'.

TD: 3238'

Spotted 15 sx cmt plug from
3238' to 3136'.

WELL SCHEMATIC:
EXXON BOWERS A FED #9

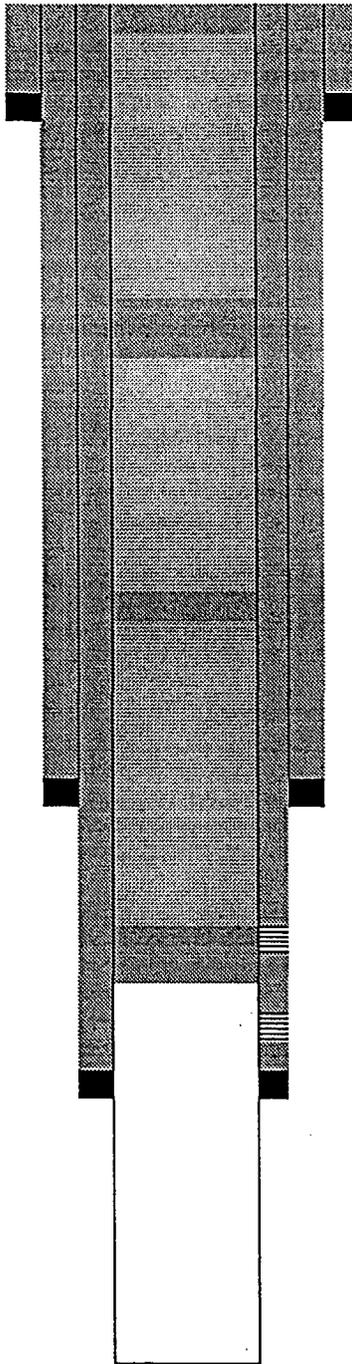
WELL PLUGGED:
12/3/70

12.5"
213'
650 SX
TOC: SURF (C)

9 5/8"
2736'
650 SX
TOC: SURF (C)

7"
3970'
300 SX
TOC: 2000(C)

TD: 4259'



Spotted 10 sx cmt plug from
0' to 25'.

Hole was loaded with mud
Laden fluids.

Spotted 20 sx cmt plug from
1400' to 1550'.

Spotted 40 sx cmt plug from
2300' to 2400'.

Perf's at 3220'-3227'.

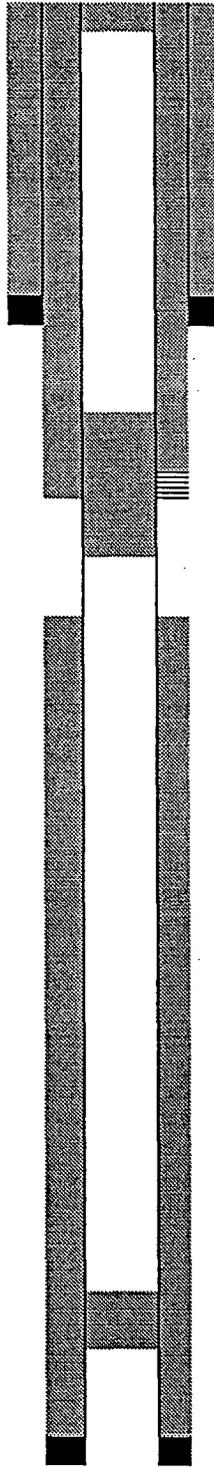
Spotted 50 sx cmt plug from
3000' to 3250'.

Squeezed perf's at 3726'
To 3741'.

WELL SCHEMATIC:
EXXON BOWERS A #12

WELL PLUGGED
11/21/80

8 5/8"
222'
100 sxs.
TOC:N.A.



8 5/8 and 5 5/2 csg cut off
7' below GL.. 1/2" plate
welded on top.
10' cmt plug at surface.

Cmt. Ret. set at 350'

Sqzd. Perfs at 390' with 100
sxs. cmt from 500' to 350'.
Circ. to surface.

5 5/8"
3132'
575 sxs.
TOC: 880' TS

PBTD: 3088'

10 sxs. Cmt plug 3088-2988

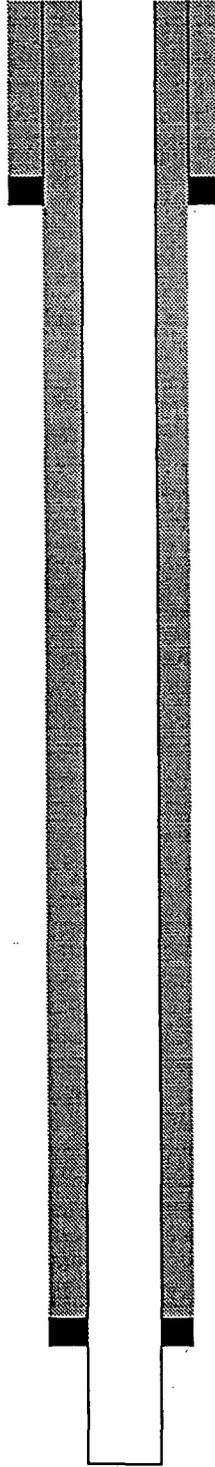
Exxon
Unit O, 660 FSL & 660 FWL
Sec. 29, T-18S, R-38E

WELL PLUGGED:
12/21/70

Size: 8.625"
Depth: 496'
Hole size: 11"
Cmt: 400 sxs
TOC: CIRC- Calc.
with 50% effic.

Size: 5.5"
Depth: 3120'
Hole size: 7.625"
Cmt: 1350 sxs.
TOC: CIRC- Calc.
With 50% effic.

TD: 3207'



WELL SCHEMATIC:
CONOCO STATE A #4

WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 200'
Hole size: 15"
Cmt: 250 sxs
TOC: Circ. - Calc.
With 50% effic.

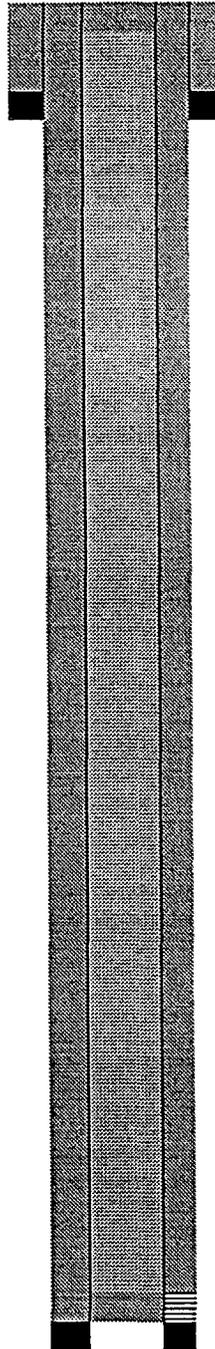
Spotted a 10 sx cmt plug at
Surface.

Filled well bore with 10# mud.

Size: 5 1/2"
Depth: 3215'
Hole size: 7.875"
Cmt: 600 sxs
TOC: Circ. - Calc.
With 50% effic.

TD: 3215'

Set a 40 sx cmt plug over
Perfs from 3164' to 3197'.



WELL SCHEMATIC:
CONOCO STATE A #5

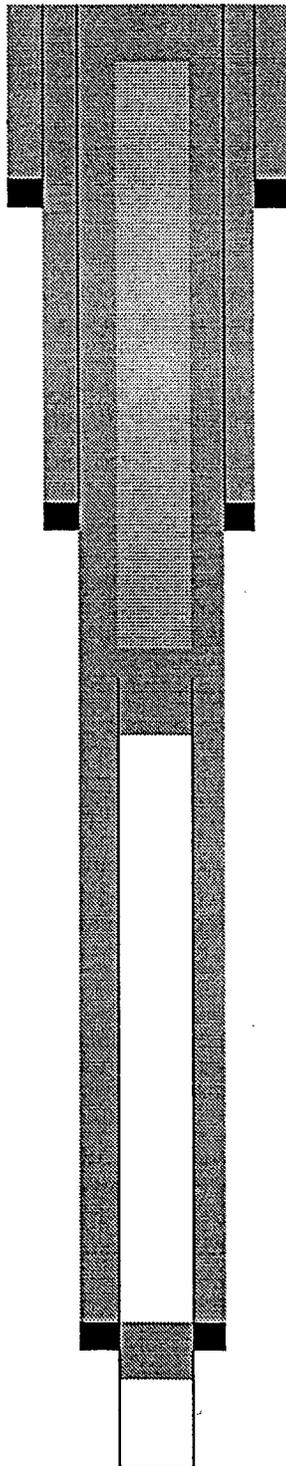
WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 272'
Hole size: 15"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 7 5/8"
Depth: 999'
Hole size: 9.875"
Cmt: 425 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 5 1/2"
Depth: 3206'
Hole size: 7.875"
Cmt: 450 sxs
TOC: Circ. - Calc.
With 50% effc.

PBTD:3168'



Spotted a 10 sx cmt plug
At surface.

Filled well bore with 10# mud

Cut 5 1/2" csg at 1570' and
Pulled out of hole. Set a 55
Sx cmt plug in and out of
5 1/2" stub.

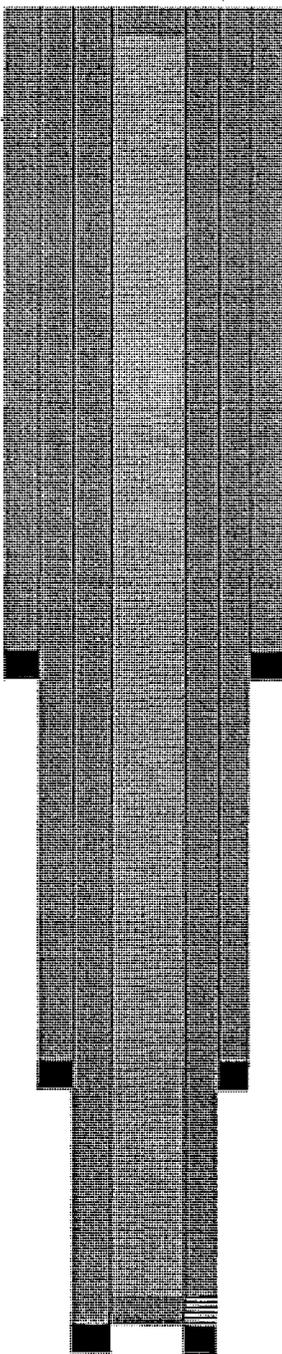
Spotted 40 sx cmt plug over
Perfs from 3188' to 3168'.

WELL SCHEMATIC:
CONOCO STATE A #6

WELL PLUGGED:
1/12/71

Size: 8 5/8"
Depth: 1562'
Hole size: 10.75"
Cmt: 475 sxs
TOC: Circ. - Calc.
With 50% effc.

Set a 10 sx cmt plug at surf.



Filled well bore with 10# mud.

Size: 7"
Depth: 2721'
Hole size: 8.25"
Cmt: 350 sxs
TOC: Circ. - Calc.
With 50% effc.

Size: 5"
Depth: 3168'
Hole size: 6.25"
Cmt: 500 sxs
TOC: Circ. - Calc.
With 50% effc.

Set a 40 sx cmt plug over
Perfs from 3166' to 3158'.

TD: 3172'

LIST OF OFFSET OPERATORS & SURFACE OWNERS

Offset Operators

Occidental Permian Limited Partnership
P.O. Box 4294
Houston, TX 77210-4294

Lewis B. Burleson, Inc.
P.O. Box 2479
Midland, TX 79705

Marcum Drilling Co.
P.O. Box 3699
Midland, TX 79705

Chevron USA, Inc.
15 Smith Rd., Caydesta Plaza
Midland, TX 79705

Apache Corp.
2000 Port Oak Blvd., Ste. 100
Houston, TX 77056-4400

Conoco Inc.
10 Desta Dr. West, Suite 100W
Midland, TX 79705

HRC, Inc.
P.O. Box 5102
Hobbs, NM 88241

Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Exxon Corp.
Box 4697
Houston, TX 77210

Texland Petroleum
500 Throckmorton St., Ste. 3100
Fort Worth, TX 76102

Surface Owner

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

**H.R.C. INC.
P.O. Box 5102
Hobbs, NM 88241
(505)393-3194**

**RE: Brine Extraction Well
Hobbs State #10
Unit F, Sect. 29, Tws. 18S, Rng. 38E., Lea Co., NM**

Dear Sir:

As per the Rules and Regulations of the Oil Conservation Division of New Mexico, you are being provided a copy of the Application for the construction of a brine extraction facility at the above location.

If you have any questions, please call Gary Schubert at (505)393-3194. Any objections or request for hearing must be filed with the Oil Conservation Division within fifteen (15) days. Objections and request for hearing should be addressed to Oil Conservation Division, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 or call (505)476-3440.

Thank you,

Gary M. Schubert

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

HOBBS, NM 88241

Postage	\$ 1.95	UNIT ID: 0640 
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.55	

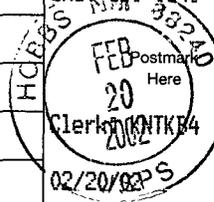
Sent To **HRC Inc.**
P.O. Box 5102
Hobbs, NM 88241
City, State, ZIP+4

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 1017

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

MIDLAND, TX 79705

Postage	\$ 1.95	UNIT ID: 0640 
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.55	

Sent To **Conoco Inc.**
10. Desta Dr. West
Midland, TX 79705
City, State, ZIP+4

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 1024

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

HOUSTON, TX 77056

Postage	\$ 1.95	UNIT ID: 0640 
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.55	

Sent To **Apache Corp.**
2000 Port Oak Blvd., Ste. 100
Houston, TX 77056-4400
City, State, ZIP+4

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 0997

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

HOUSTON, TX 77210

Postage	\$ 1.95	UNIT ID: 0640 
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.55	

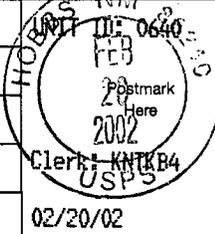
Sent To **Exxon Corp.**
Box 4697
Houston, TX 77210
City, State, ZIP+4

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 1000

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

FORT WORTH, TX 76102

Postage	\$ 1.95	UNIT ID: 0640 
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.55	

Sent To **Texland Petroleum**
500 Throckmorton St., Ste. 3100
Ft. Worth, TX 76102
City, State, ZIP+4

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 0980

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

HOUSTON, TX 77210

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Occidental Permian L.P.**
 Street, Apt. No., or PO Box No. **PO Box 4294**
 City, State, ZIP+4 **Houston, TX 77210-4294**

PS Form 3800, January 2001 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

MIDLAND, TX 79705

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Chevron USA, Inc.**
 Street, Apt. No., or PO Box No. **15-Smith Rd., Caydesta Plaza**
 City, State, ZIP+4 **Midland, TX 79705**

PS Form 3800, January 2001 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

HOBBS, NM 88240

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Rice Operating Co.**
 Street, Apt. No., or PO Box No. **122 West Taylor**
 City, State, ZIP+4 **Hobbs, NM 88240**

PS Form 3800, January 2001 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

MIDLAND, TX 79705

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Lewis B. Burleson, Inc.**
 Street, Apt. No., or PO Box No. **PO Box 2479**
 City, State, ZIP+4 **Midland, TX 79705**

PS Form 3800, January 2001 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

MIDLAND, TX 79705

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Marcum Drilling Co.**
 Street, Apt. No., or PO Box No. **P.O. Box 3699**
 City, State, ZIP+4 **Midland, TX 79705**

PS Form 3800, January 2001 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

HOBBS, NM 88241

Postage	\$ 1.95
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.55

UNIT ID: 0640
 FEB 20 2002
 Postmark Here
 Clerk: KNTKB4
 02/20/02

Sent To **Grimes Land Company**
 Street, Apt. No., or PO Box No. **P.O. Box 5102**
 City, State, ZIP+4 **Hobbs, NM 88241**

PS Form 3800, January 2001 See Reverse for Instructions

7001 2510 0007 4767 1062 1048

7001 2510 0007 4767 1079 1055 1031

LEGAL NOTICE

Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of Hobbs, NM, is filing application for brine extraction well and facility. The well is the Hobbs State #10, located 2565 FNL and 2330 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co., NM. The well and facility will be producing brine water from the Salado formation at approximately 1700' to 2400'. Production will be 10 to 15 thousand bbls. per month with an operating pressure of 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, P.O. Box 5102, Hobbs, NM 88241, (505)393-3194, or any request for hearing or objections should be directed to the Oil Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505)476-3440, within fifteen (15) days.

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising 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
was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of February 17, 2002 and ending with the issue of February 17, 2002.

And that the cost of publishing said notice is the sum of \$ 21.01 which sum has been (Paid) as Court-Costs.

Joyce Clemens

Subscribed and sworn to before me this 17th day of February 2002

Debbie Schilling
Debbie Schilling
Notary Public, -Lea County, New Mexico
My Commission Expires June 22, 2002

Hobbs, NM, is filing application for brine extraction well and facility. The well is the Hobbs State #10, located 2565 FNL and 2330 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co., NM. The well and facility will be producing brine water from the Salado formation at approximately 1700' to 2400'. Production will be 10 to 15 thousand bbls. per month with an operating pressure of 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, P.O. Box 5102, Hobbs, NM 88241, (505) 393-3194, or any request for hearing or objections should be directed to the Oil Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505) 476-3440, within fifteen (15) days.

LEGAL NOTICE
Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of H

Published in the Lovington Daily Leader February 17, 2002.

Drilling App.

ORIGINAL SENT TO DISTRICT
-wp-
S

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

COPY

Form C-101
Revised March 17, 1999
Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address H.R.C. P.O. Box 5102 Hobbs, NM 88241		² OGRID Number	
³ Property Code		³ API Number 30 -	
Hobbs State ⁵ Property Name		⁶ Well No. 10	

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	29	18S	38E		2565	N	2330	W	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
⁹ Proposed Pool 1					¹⁰ Proposed Pool 2				

¹¹ Work Type Code N	¹² Well Type Code M	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3655.3
¹⁶ Multiple NO	¹⁷ Proposed Depth 1700	¹⁸ Formation Salt	¹⁹ Contractor Unknown	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	28#	450	150 sx "c"	circulate
8 5/8	7	23#	1700	300 sx "c"	circulate
6 1/2	3.5 tubing	10.5	+ or - 2000		

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

Plan to drill a brine extraction well, will set 450' of 9 5/8" surface casing into the redbed and circulate cement to surface. We plan to run 7" casing to the top of the salt formation and cement it to surface. All cementing will be done by Halliburton. All casing tests and logs will be run as OCD requires.
BOP Schematic attached.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Eddie W. Seay*
Printed name: Eddie W. Seay
Title: Agent

Date: 2/14/2002

Phone: (505) 392-2236

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
2000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96173		³ Pool Name BSW Salado	
⁴ Property Code		⁵ Property Name Hobbs State			⁶ Well Number 10
⁷ OGRID No. 131652		⁸ Operator Name H. R. C. Inc.			⁹ Elevation 3655.3

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	29	18S	38E		2565	North	2330	West	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶ 	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> Signature Gary M. Schubert Printed Name Owner Title 2/12/02 Date	
	¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Date of Survey 02-09-02 Signature and Seal of Professional Surveyor: Certificate Number 6541	

INJECTION WELL DATA SHEET

OPERATOR: H.R.C.

WELL NAME & NUMBER: Hobbs State #10

WELL LOCATION: 2565/N 2330/W
FOOTAGE LOCATION

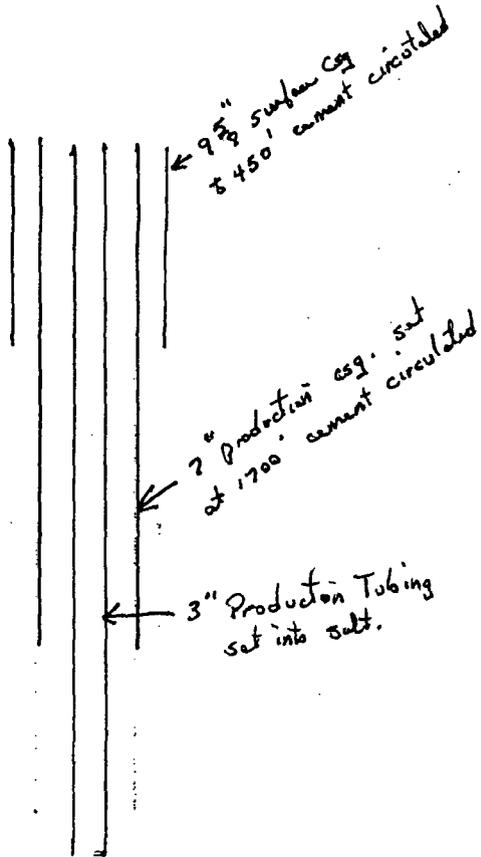
F
UNIT LETTER

29
SECTION

18 S
TOWNSHIP

38 E
RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"
Cemented with: 150 sx sx. or _____ ft³
Top of Cement: class C Method Determined: circulate

Intermediate Casing

Hole Size: _____ Casing Size: _____
Cemented with: _____ sx. or _____ ft³
Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 8 5/8" Casing Size: 7"
Cemented with: 300 sx. or _____ ft³
Top of Cement: class C Method Determined: circulate
Total Depth: 1700'

Injection Interval

1700 feet to 2400'

(Perforated or Open Hole indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 3 1/2" Lining Material: IPC

Type of Packer: NA

Packer Setting Depth: NA

Other Type of Tubing/Casing Seal (if applicable): tubing will be set into salt section.

Additional Data

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

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

2. Name of the Injection Formation: salt or Salado

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

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. NA

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

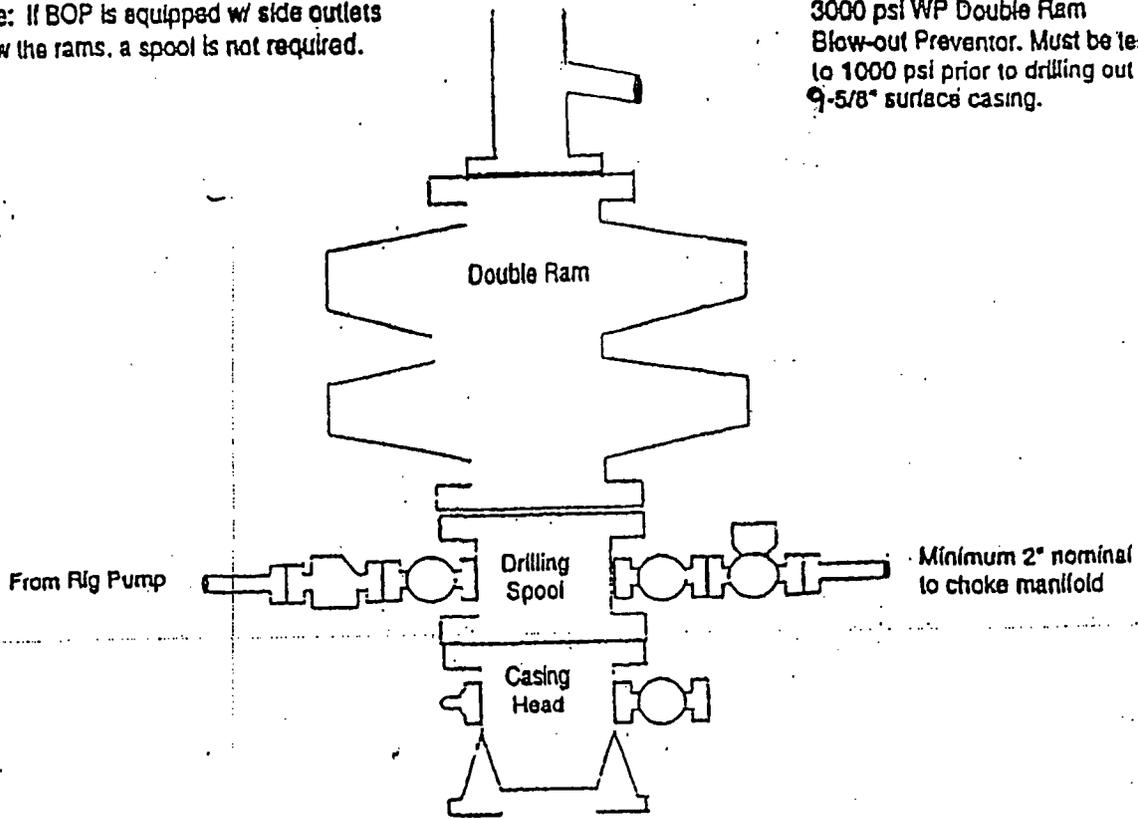
Yates is below

No oil or gas zone above the salt.

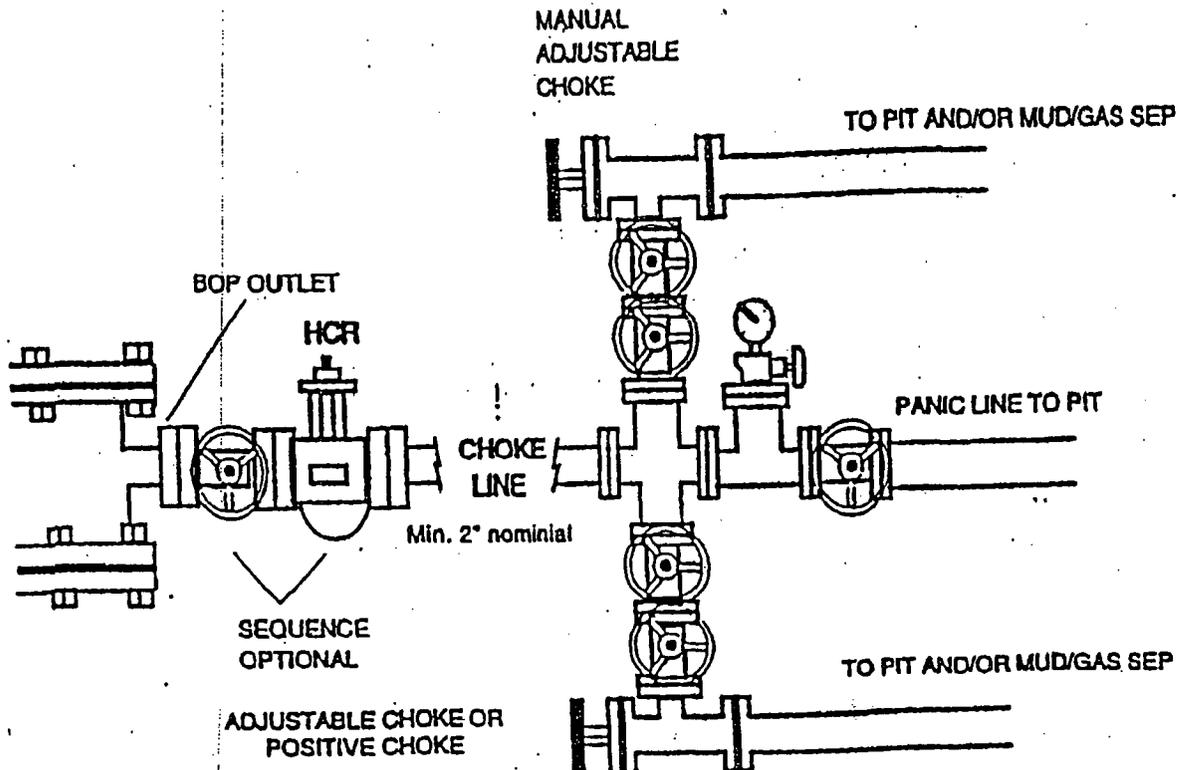
BOP Schematic

*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram Blow-out Preventor. Must be tested to 1000 psi prior to drilling out 9-5/8" surface casing.



Choke Manifold Schematic



Discharge

February 20, 2002

Mr. Wayne Price
NMOCD Environmental Bureau
P.O. Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

RE: HRC
Brine and Discharge Plan
Sect. 29, T. 18 S., R. 38 E.

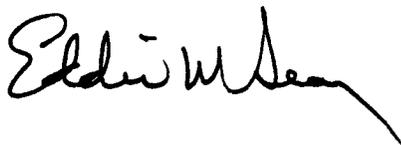
Mr. Price:

Find attached additional information for discharge plan. Much of the well information is attached to the new C-108.

- 1) Find lithology logs of two wells in this section drilled by Shell Oil Co. The top of the salt is at approximately 1580' and the base of the salt and top of Yates is at approximately 2600'.
- 2) Wellhead diagram and associated information including metering.
- 3) Liner information.
- 4) Groundwater monitoring and plat.
- 5) The legal description for the brine storage and process area is 990/N 1650/E Sect. 29, T. 18 S., R. 38 E. The well is in 2565/N 2330/W Sect. 29, T. 18 S., R. 38 E. The loading facility will be at the process area. Note map.
- 6) Bond needs to be transferred to new well.

If you need any additional information, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

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

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U.S.G.S.	
LAND OFFICE	
OPERATOR	

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

API #30-025-28413

5a. Indicate Type of Lease
State Fee

5. State Oil & Gas Lease No.

7. Unit Agreement Name

N. HOBBS (G/SA) UNIT

8. Farm or Lease Name

SECTION 29

9. Well No.

242

10. Field and Pool, or Wildcat

HOBBS (G/SA)

12. County

LEA

1. TYPE OF WELL

OIL WELL GAS WELL DRY OTHER _____

2. TYPE OF COMPLETION

NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESVR. OTHER _____

3. Name of Operator

SHELL WESTERN E&P INC.

4. Address of Operator

P. O. BOX 991, HOUSTON, TEXAS 77001

6. Location of Well

UNIT LETTER N LOCATED 100 FEET FROM THE SOUTH LINE AND 1400 FEET FROM

11. WEST LINE OF SEC. 29 TWP. 18-S RGE. 38-E NMPM

15. Date Spudded 16. Date T.D. Reached 17. Date Compl. (Ready to Prod.) 18. Elevations (DF, RKB, RT, GR, etc.) 19. Elev. Casinghead

12-16-83 12-23-83 3-12-84 3640.3' GL, 3650.3' DF -----

20. Total Depth 21. Plug Back T.D. 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools Cable Tools

4370' ----- Many ----- X

24. Producing Interval(s), of this completion - Top, Bottom, Name

4019' - 4257' (SAN ANDRES)

25. Was Directional Survey Made

NO

26. Type Electric and Other Logs Run

L/VDL/CCL/GR; CET/GR; RFT/BHCS/SNPL/DLL/MSFL

27. Was Well Cored

NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
16"	CONDUCTOR	30'	20"		
8-5/8"	24#	1511'	12-1/4"	500 SX LITE + 250 SX CL C	
5-1/2"	14#	4368'	7-7/8"	250 SX CL C + 400 SX LITE + 100 SX CL C	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	3797'	

31. Perforation Record (Interval, size and number)

4019' to 4257' (52 - 1/2" holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4019' - 4257'	ACIDIZED W/8400 GALS 15% NEA

33. PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
3-10-84		PUMPING - SUBMERSIBLE				PRODUCING	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
10-24-84	24	----	→	330	116	1689	352
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
100	40	→				35.0	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

LD

Test Witnessed By

35. List of Attachments

C-104(5), C-103(3), C-102(3), LOGS, INCLINATION REPORT(2)

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED A. J. FORE A. J. FORE TITLE SUPERVISOR REG. & PERMITS DATE NOVEMBER 16, 1984

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

API #30-025-28941

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U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease
State Fee
5. State Oil & Gas Lease No.

1. TYPE OF WELL
OIL WELL GAS WELL DRY OTHER _____
2. TYPE OF COMPLETION
NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESVR. OTHER _____

7. Unit Agreement Name
N. HOBBS (G/SA) UNIT
8. Farm or Lease Name
SECTION 29

3. Name of Operator
SHELL WESTERN E&P INC.
4. Address of Operator
P.O. BOX 991, HOUSTON, TEXAS 77001
6. Location of Well

9. Well No.
323
10. Field and Pool, or Wildcat
HOBBS (G/SA)

11. WELL LETTER G LOCATED 2540 FEET FROM THE N LINE AND 2500 FEET FROM

12. County
LEA

14. SEC. E LINE OF SEC. 29 TWP. 18-S RGE. 38-E NMPM

15. Date Spudded 1-18-85 16. Date T.D. Reached 1-26-85 17. Date Compl. (Ready to Prod.) 2-23-85 18. Elevations (DF, RKB, RT, GR, etc.) 3647.5' GL 19. Elev. Casinghead _____

20. Total Depth 4370' 21. Plug Back T.D. 4200' (RBP) 22. If Multiple Compl., How Many _____ 23. Intervals Drilled By: Rotary Tools X Cable Tools _____

24. Producing Interval(s), of this completion - Top, Bottom, Name
3989' - 3995' (GRAYBURG) 4089' - 4095' (SAN ANDRES) 25. Was Directional Survey Made NO

26. Type Electric and Other Logs Run
CHCS/GR, RFT, SNL/GR, DLL/MSFL/GR, CBL/VDL/CCL 27. Was Well Cored NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	CONDUCTOR	40'	17-1/2"		-----
8-5/8"	24, 32#	1542'	12-1/4"	375 SX LITE + 250 SX HE II	-----
5-1/2"	14#	4369'	7-7/8"	450 SX LITE + 250 SX HE II	-----

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	4108'	-----

31. Perforation Record (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
3989' - 4095' (26 - 1/2" holes)	3989' - 3995'	SPOTTED 62 BBLs 15% NEA
4229' - 4272' (8 - 1/2" holes isolated by RBP @ 4200')	4089' - 4095'	ACIDIZED W/1600 GALS 15% NEA
	4229' - 4272'	ACIDIZED W/1200 GALS 15% NEA

33. PRODUCTION

34. Date First Production 2-23-85 Production Method (*Flowing, gas lift, pumping - Size and type pump*) PUMPING - 25 X 200 X RWBC X 20 X 4 X 0 HIGHLAND Well Status (*Prod. or Shut-in*) PRODUCING

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas-Oil Ratio
3-23-85	24	-----	→	15	2	793	133

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)
-----	30	→				35.0

35. Disposition of Gas (*Sold, used for fuel, vented, etc.*) SOLD Test Witnessed By _____

36. List of Attachments
C-104(5), C-102(3), LOGS, INCLINATION REPORT(2)

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief:

SIGNED A. J. FORE TITLE SUPERVISOR REG. & PERMITS DATE APRIL 17, 1985

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt <u>1619'</u>	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
T. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates <u>2640'</u>	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers <u>2885'</u>	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen <u>3402'</u>	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg <u>3738'</u>	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres <u>4023'</u>	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzite _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____

No. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

No. 5, from _____ to _____

No. 6, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____ feet _____

No. 2, from _____ to _____ feet _____

No. 3, from _____ to _____ feet _____

No. 4, from _____ to _____ feet _____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	1542	1542	RED BEDS				
1542	1582	40	ANHYDRITE				
1582	2706	1124	SALT, ANHYDRITE, & SHALE				
2706	3175	469	SHALE & ANHYDRITE				
3175	3530	355	ANHYDRITE, SAND & SHALE				
3530	4370	840	DOLOMITE				

APR 25 1985

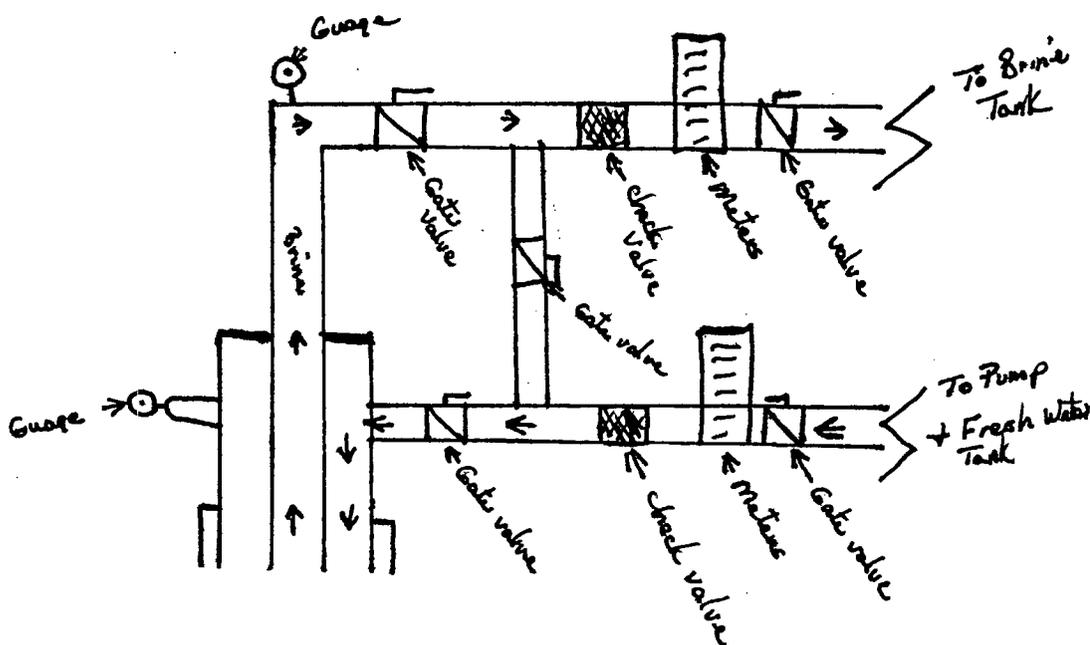
O.C.O.
NORTHWEST DIVISION

Wellhead and Operations

The operations of the well area will be to inject fresh water down 7" casing and produce brine through the 3 1/2" tubing. The fresh water and brine will be measured with totalizing meters at the well. All volumes will be recorded and logged for reporting and billing.

The fresh water will be pumped into a 500 bl. tank prior to pumping down brine well. This will prevent any brine from entering the fresh water system. If an accidental back flow were to occur, the brine would go into the tank and not into the city water system. All lines going to and from the well, the brine storage tank, fresh water tank, and pumps will have check valves.

The well will be equipped with valves so that the flow of fresh water and brine can be reversed, to keep the tubing from having a salt build up. (See diagram below)



PERMALON®

3

Reef Industries, Inc.
P.O. Box 750245
Houston, TX 77275-0245
Tel: (713) 484-6892
Toll Free: 1-800-231-2417
Fax: (713) 947-2053

I wanted to provide you with some weatherability information on our Permalon Ply X-210. This high density, cross-laminated poly is designed to be UV resistant by a state of the art stabilization system. When exposed to harsh weather conditions, including intense sun, X-210 should last in excess of five years. When buried, this material should last indefinitely. X-210 is chemically inert, non-leachable, and is resistant to root penetration, rodents and microbes (it is not a food source). Additionally, it meets ASTM D-3083 (Soil Burial). Ply X-210 is not prone to stress-cracking (ESC), thus, making a very good moisture and Radon barrier.

I hope this information will serve useful to you and please do not hesitate to call if you should have any questions.

Respectfully,

David Dewsnap
Chemist
Reef Industries, Inc.



Reef Industries, Inc.



Roof Industries, Inc.
"Since 1957"

Product Development Group
11/18/1993

Physical Properties of Geomembrane / Geotextile Composite

Material/Property	X1GPET45	X2GPET45
Basis Weight oz/yd ² ASTM D-3776	9.83	15.1
Thickness (mils/mm) ASTM D-2103	31/0.88	39/0.99
Tensile Strength (lb _r) ASTM D - 882 - 3 in. (MD/TD)	190/159	263/222
Tensile Elongation (%) ASTM D - 882 - 3 in. (MD/TD)	63/83	46/54
Grab Tensile Strength (lb _r) ASTM D - 4632 (MD/TD)	194/168	303/250
Grab Elongation (%) ASTM D - 4632 (MD/TD)	70/110	-
Trapezoid Tear Strength (lb _r) ASTM D - 4533 (MD/TD)	91/80	132/135
Puncture Resistance (lb _r) ASTM D - 4833	85	100
Puncture Elongation (in) ASTM D - 4833	0.66	0.63
Mullen Burst (lb _r) ASTM D - 3786	237	333
Puncture Prop. & Tear (lb _r) ASTM D - 2582 (MD/TD)	-	55/57
Dart Impact Strength (lb _r) ASTM D-1709	6.5	9.9

ASTM D - 882 : Tensile strength of thin plastic sheeting (less than 40 mils)

ASTM D - 4632: Breaking Load and Elongation of Geotextiles.

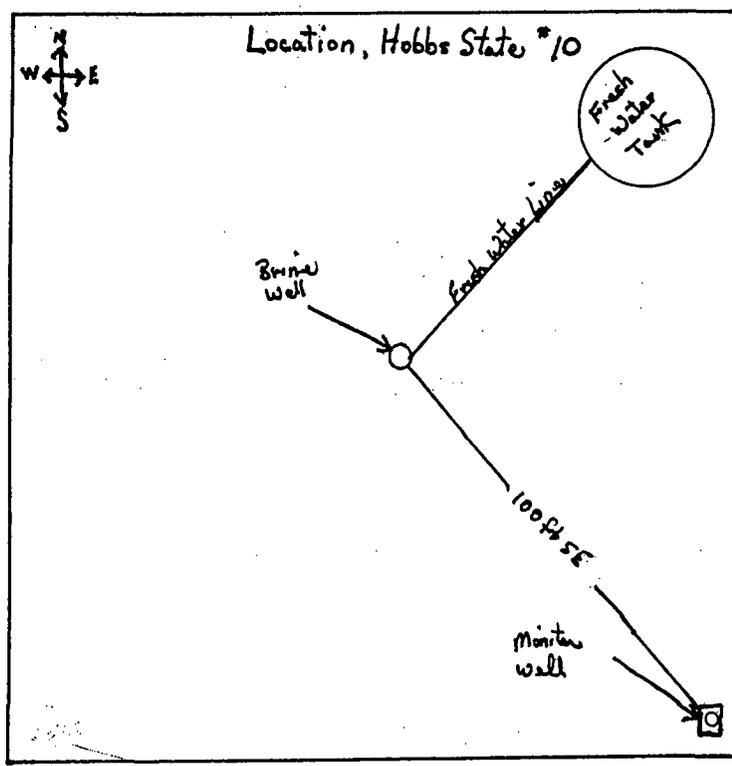
N.B. These are typical values and not be interpreted as specifications. (Average Roll Values will be presented on availability of sufficient data)

GROUNDWATER MONITORING

H.R.C. Inc. proposed to monitor the groundwater at the site by installing a two inch monitor well completed through the Ogallala formation. The well location will be down gradient on the edge of the brine well location, south southeast or along water gradient.

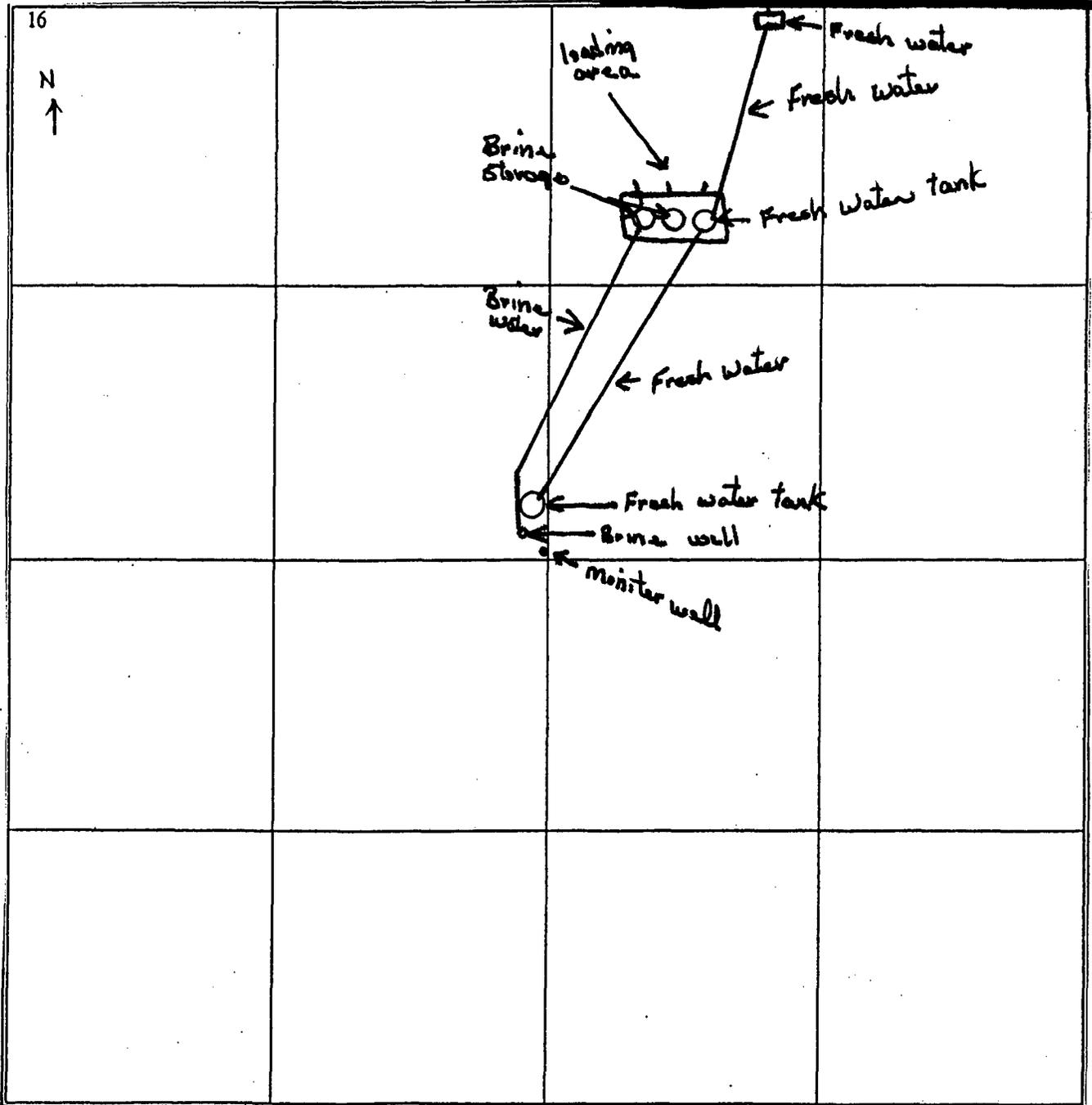
The installation will consist of drilling with an air rotary to the top of the redbed or base of the Ogallala. Running 2 inch schedule 40 pvc well casing to TD with .10 slot well screen across the entire saturated zone. Sand pack well to five feet above upper most perforations. Cap sand with 10 ft. of bentonite, and grout from top of bentonite to surface, installing a locking cover at surface. This will enable us to monitor the entire water area.

It is our proposal to take samples from this well prior to any brine activity, for background purposes. We plan to sample for BTEX, TPH, Cations, Anions, and Metals initially. After starting operations, we plan to sample the well on bi-annual schedule, testing for Cations and Anions. All results will be reported to the OCD as they are obtained.

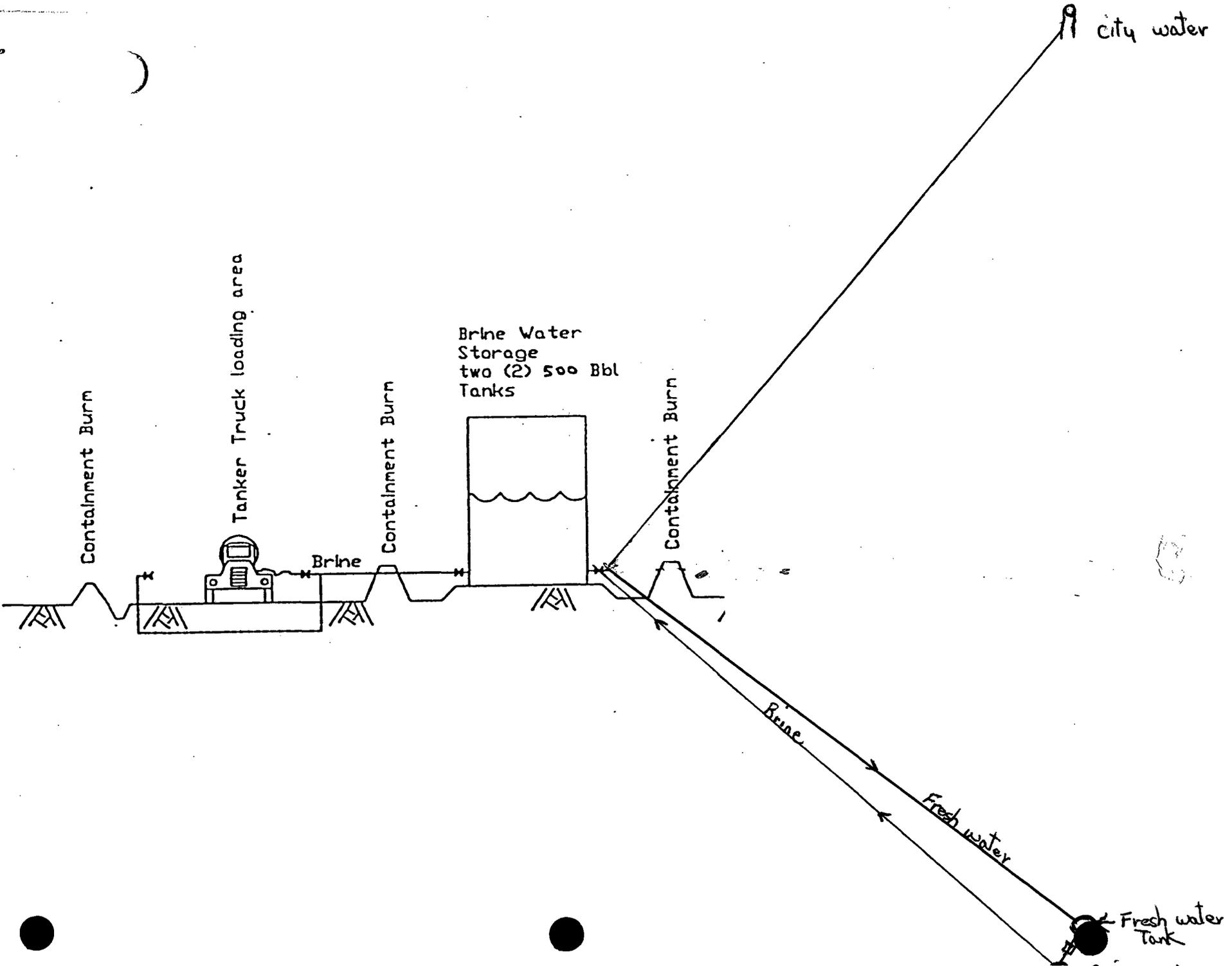


Section 29

city of Hobbs water line



~~5~~



ASSIGNMENT OF CASH COLLATERAL DEPOSIT

H.R.C. Inc. (OPERATOR) of P.O. Box 5102 (address) has deposited with the First National Bank (name of state or national bank or savings association, which must be a federally-insured bank or savings institution in the State of New Mexico) of 600 West Bender, Hobbs, NM (address) (FINANCIAL INSTITUTION), the sum of \$5,000.00 dollars in Certificate of Deposit or Savings Account No. 2802198-30 (FUND).

To comply with NMSA 1978, Section 70-2-14, OPERATOR hereby assigns and conveys all right, title and interest in the FUND to the FINANCIAL INSTITUTION in trust for the Oil Conservation Division of the Energy, Minerals and Natural Resources Department or successor agency of the State of New Mexico (DIVISION).

OPERATOR and the FINANCIAL INSTITUTION agree that as to the FUND:

- a. The DIVISION acquires by this assignment the entire beneficial interest in the FUND, with the right to order the FINANCIAL INSTITUTION in writing to distribute the FUND to persons determined by the DIVISION to be entitled thereto, including the DIVISION itself, in amounts determined by the DIVISION, or to the OPERATOR upon sale or proper plugging, in compliance with the rules and orders of the DIVISION, of the well(s) covered by this assignment.
- b. OPERATOR retains no legal or beneficial interest in the FUND and has only the right to interest, if any, thereon, and to return of the FUND upon written order of the DIVISION.
- c. The FINANCIAL INSTITUTION agrees that the FUND may not be assigned, transferred, pledged or distributed except upon written order of the DIVISION or a court of competent jurisdiction made in a proceeding to which the DIVISION is a party. The FINANCIAL INSTITUTION waives all statutory or common law liens or rights of set-off against the FUND.

OPERATOR agrees that the FINANCIAL INSTITUTION may deduct from interest due OPERATOR any attorney fees incurred by the FINANCIAL INSTITUTION if claim or demand via writ, summons or other process arising from OPERATOR'S business is made upon the FINANCIAL INSTITUTION.

[Signature]
Signature of OPERATOR
Personally or by Authorized Officer

[Signature]
Signature of Authorized Officer
of FINANCIAL INSTITUTION

Gary Schubert, President
Title

Zane S. Bergman, President
Title

State of New Mexico
County of Lea) ss.

On this 3rd day of December, 20 01, before me personally appeared Gary Schubert and Zane S. Bergman, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

My Commission Expires:
10-7-04

6

ONE-WELL CASH BOND

KNOW ALL MEN BY THESE PRESENTS THAT H.R.C. Inc. (an individual) (a partnership) (a corporation organized in the State of New Mexico with its principal office at P.O. Box 5102 in the City of Hobbs, State of New Mexico and authorized to do business in the State of New Mexico) is held and firmly bound to the Oil Conservation Division of the Energy, Minerals and Natural Resources Department of the State of New Mexico (or its successor agency), as DIVISION in the sum of \$ 5,000.00.

The conditions of this obligation are such that:

The PRINCIPAL desires to drill a well or purchase or operate an existing well, the depth of which does not exceed 5000 feet, to prospect for and produce oil or gas, carbon dioxide gas, helium gas or brine minerals on property in the State of New Mexico, the particular identification and footage location of said well being as follows:
(well name and footage) Hobbs State #5 2280/FNL/1980 FWL in Section 29 Township 18S Range 38E, NMPM, Lea County, New Mexico.

The PRINCIPAL has deposited on behalf of the DIVISION \$ 5,000.00, in the manner indicated on the Assignment, attached to this bond, being the principal sum intended to be secured. PRINCIPAL pledges this sum as a guarantee that it, its executors, assigns, heirs or administrators shall plug the well described above if dry, or when abandoned, in accordance with the rules and orders of the DIVISION in such way as to confine the oil, gas and water in the strata in which they are found, and to prevent same from escaping to other strata. If the PRINCIPAL does not so properly plug and abandon said well upon order of the DIVISION, the total sum of the bond shall be forfeited to the DIVISION, and such amount as is necessary may be used to properly plug said well. If the principal sum of this bond is less than the actual cost incurred by the DIVISION in plugging said well, the PRINCIPAL, its successors, assigns, heirs or administrators shall be liable under the provisions of NMSA 1978, Section 70-2-38 of the Oil and Gas Act, and the DIVISION may take action to recover any amounts expended over and above the principal sum of the bond.

NOW THEREFORE, if the PRINCIPAL or its successors, assigns, heirs, or administrators or any of them shall plug the above-described well when dry or abandoned, in accordance with the rules and orders of the DIVISION, in such a manner as to confine the oil, gas, and water in the strata in which they naturally occur, and to prevent them from escaping into other strata, and further to clean up the surface location of said well, then therefore, this obligation shall be null and void and the principal sum shall be paid to the PRINCIPAL or its successors, heirs, or administrator, otherwise it shall remain in full force and effect.

H.R.C. Inc.
PRINCIPAL
P.O. Box 5102 Hobbs N.M. 88241
Address City State Zip
By Gary Schubert By _____
Signature
Gary Schubert, President
Title

If PRINCIPAL is a corporation, affix corporate seal here.

6

ACKNOWLEDGMENT FORM FOR INDIVIDUALS OR PARTNERSHIPS

STATE OF _____)

ss.

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

My Commission Expires

ACKNOWLEDGMENT FORM FOR CORPORATION

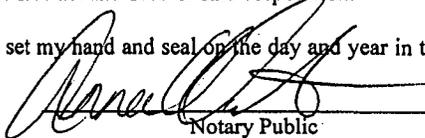
STATE OF New Mexico)

ss.

COUNTY OF Lea)

On this 3rd day of December, 2001, before me personally appeared Gary Schubert, to me personally known who, being by me duly sworn, did say that he is President of H.R.C. Inc. and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.



Notary Public

10-7-04
My Commission Expires

APPROVED BY:

Oil Conservation Division of New Mexico

By _____

Date _____

Chaves, Eddy, Lea, McKinley, Rio Arriba, Roosevelt, Sandoval, and San Juan Counties, New Mexico:

<u>Projected Depth of Proposed Well or Actual Depth of Existing Well</u>	<u>Amount of Bond</u>
Less than 5,000 feet	\$ 5,000
5,000 feet to 10,000 feet	\$ 7,500
More than 10,000 feet	\$10,000

All Other Counties in the State:

<u>Projected Depth of Proposed Well or Actual Depth of Existing Well</u>	<u>Amount of Bond</u>
Less than 5,000 feet	\$ 7,500
5,000 feet to 10,000 feet	\$10,000
More than 10,000 feet	\$12,500

OLD LOCATION
STATE #5

December 10, 2001

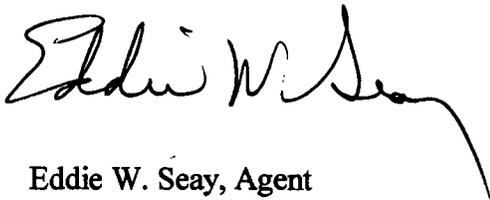
NMOCD Environmental Bureau
ATTN: Wayne Price
P.O. Box 6429
1220 South Saint Francis Drive
Santa Fe, NM 87504

RE: H.R.C. Brine

Mr. Price:

Find within additional information as requested. If you have any questions or need any additional information, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

TABLE OF CONTENTS

- I. Completed C-108**
- II. Groundwater Monitoring**
- III. C-104**
- IV. Bond**

C-108

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: H.R.C. Inc.

ADDRESS: P.O. Box 5102 Hobbs, NM 88241

CONTACT PARTY: Gary M. Schubert PHONE: (505) 393-3194

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 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 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).

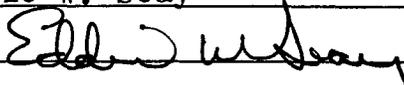
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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: Eddie W. Seay TITLE: Agent

SIGNATURE:  DATE: 12/10/2001

* 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

- VI. List of wells within.
- VII. Fresh water will be used to produce brine by injecting fresh water down the back side of the tubing at 200# to 250# and producing brine out the tubing. Based on activity at the facility, productions could be 10 to 15 thousand bls. per month.

VIII. HYDROLOGY

Underground aquifers in this area are the Ogallala and Quaternary Alluvium formations. The groundwater in these formation is unconfined where the underlying red beds are relatively impermeable. This underlying layer prevents further downward or upward movement. From information reviewed, the groundwater flow from the Ogallala formation flows to the south southeast, the water level for this area ranges from 50' to 70' below ground level and the average depth of the wells are 150'. Find within State Engineers list of water wells in the general area and analytical from two of the wells.

GEOLOGY

The proposed site is located on the Central basin Platform of the Permian Basin. The sub-surface formations are in transitional area between Delaware Basins back reef or shelf area and the platform. The brine product is from the Salado Formation of the Ochoa series. The series is of upper Permian Age, and extends across the Delaware Basin, Central Basin Platforms, thins and pinches out on the eastern shelf. This series layers are predominately evaporates which contain strings of dolomite, shale, siltstone, and sandstone. The thickness of this salt section averages about 1000 ft. The Triassic rock overlying the Permian formation is the Dockem group, and is divisible into the Santa Rosa sandstone and the Chinle formation. The Tertiary rocks are represented by the Ogallala formation. This formation ranges in thickness from 0' to 300'. It is chiefly calcareous, unconsolidated sand, clay, silt and gravel. This is the formation most of Lea Co. obtains its drinking water from.

- IX. No stimulation needed.
- X. Logs on file with OCD.
- XI. Attached.
- XII. I, Eddie W. Seay, as agent, have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the salt section and any underground source of drinking water near this site.
- XIII. Proofs of Notice attached.

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-101
Revised February 10, 1994

District I
PO Box 1940, Hobbs, NM 88241-1940
District II
PO Drawer DD, Aztec, NM 88211-0719
District III
1000 Rio Grande Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, (RE-ENTER), DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: H. R. C. Inc. P. O. Box 5102 Hobbs, NM 88241		OGRID Number 131652
Property Code 992279		API Number 30-025-23662
Property Name Hobbs State		Well No. 5

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
F	29	18S	38E		2280	North	1980	West	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
Proposed Pool 1 BSW - Salado					Proposed Pool 2				

Work Type Code	Well Type Code	Cable/Rotary Workover	Lease Type Code	Grossed Level Elevations 3655
Multiple	Proposed Depth	Formations Salt	Contractor	Spud Date

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	36#	364	200	
8 3/4	7	23#	3826	140	
6 1/4	4 1/2	11.6 #	5986	120	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Gary M. Schubert</i> Print name: GARY M. SCHUBERT Title: PRES.Date: 7/9/01		OIL CONSERVATION DIVISION Approved by: Title: Approval Date: Expiration Date:	
Phone: 505-393-3194		Conditions of Approval: Attached <input type="checkbox"/>	

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.	
HEAD OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State Fee

5. State Oil & Gas Lease No.
A-1469-Z

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL GAS WELL OTHER

2. Name of Operator
E S. H Corporation

3. Address of Operator
P. O. Box 774 , Midland, Texas 79701

4. Location of Well
UNIT LETTER F 2280 FEET FROM THE North LINE AND 1980 FEET FROM
THE West LINE, SECTION 29 TOWNSHIP 18 S RANGE 38 E NMPM.

7. Unit Agreement Name

8. Farm or Lease Name
Hobbs State

9. Well No.
5

10. Field and Pool, or Wildcat

15. Elevation (Show whether DF, RT, GR, etc.)
3655 GL

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

5-11-73 - Set 4 1/2" Bridge Plug at 5757' with 35' of cement.
Estimated top of cement at 5722'

Shot and pulled Casing at 3744'

Pumped 25 sack plug at 3744' to 3644'

Spotted 10' plug at surface

Installed dry hole marker

Cleaned and leveled location

Location is clear and ready for inspection.

E.S. HITCHCOCK 915-694-7461
2809 EXETER 79705

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED E. S. Hitchcock TITLE President DATE 22 October 1973

APPROVED BY John W. Runyan TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

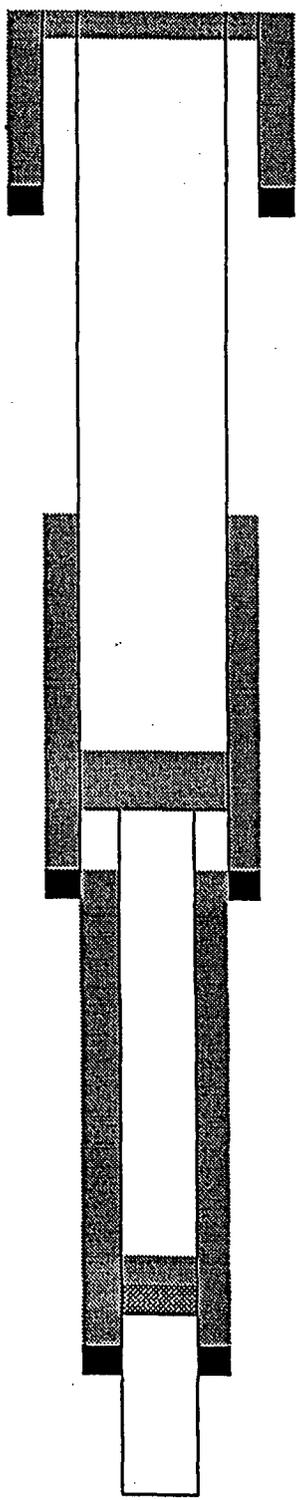
NE-O-TEX HOBBS STATE #5

WELL PLUGGED:
5/11/73

Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.

*Existing condition
of well # 5*



Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

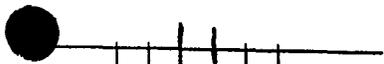
Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800' - Calc.
With 50% effic.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

TD: 5986'

Proposed completion for
HRC # 5 Brine well



9 $\frac{5}{8}$ " surface casing set at 364'
cement circ to surface

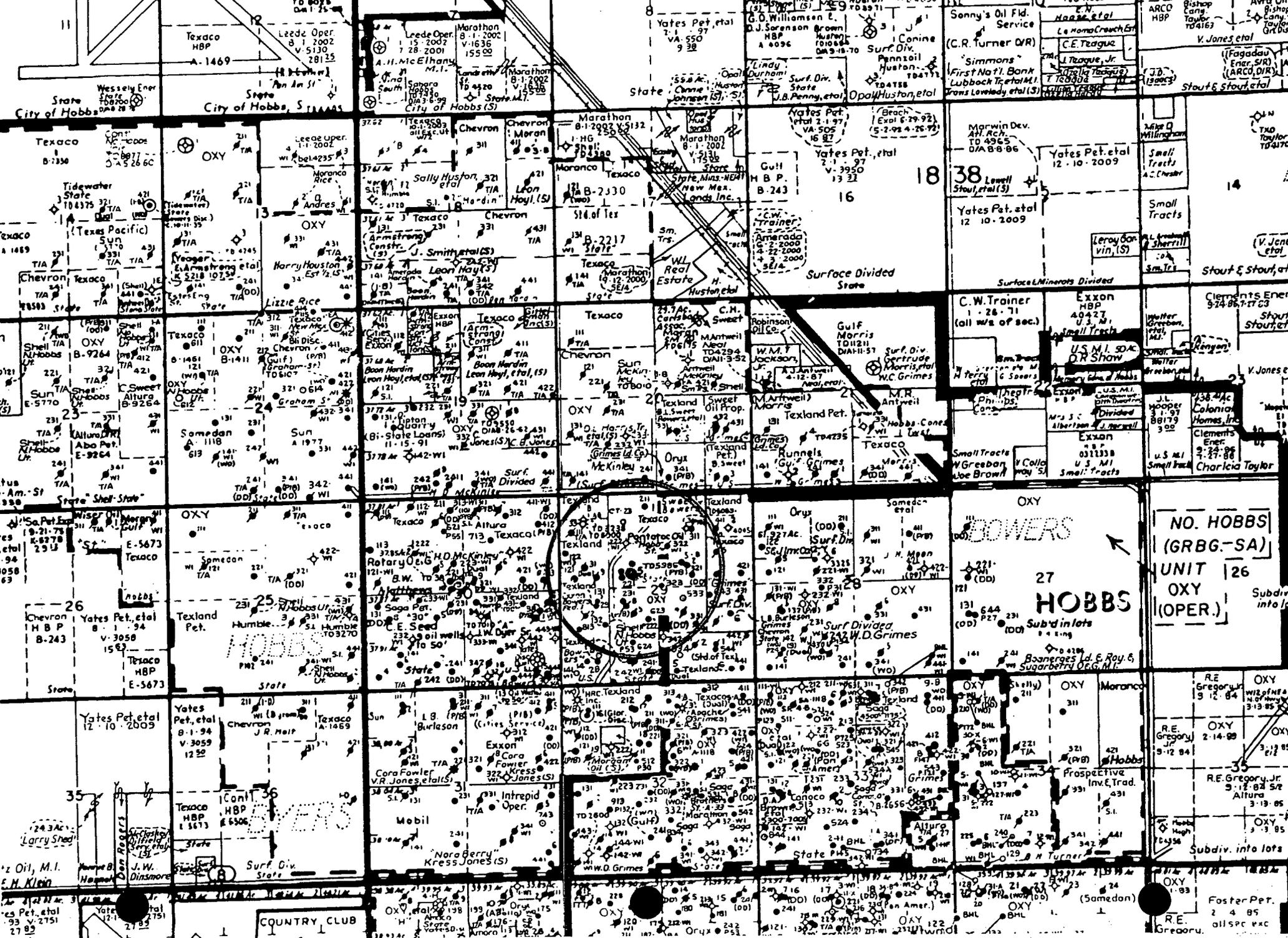
7" casing set at 1600'
cement circulated to surface

2 $\frac{7}{8}$ " production tubing set
into salt at approx. 2000'

Salt Section



HOBBS AIRPORT



City of Hobbs, State of New Mexico

Texaco B-7330
Tidewater State 104375
Chevron 75503

Texaco A-1469
Chevron 75503

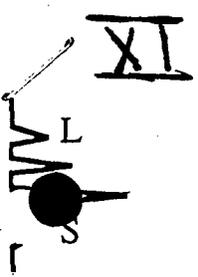
Texaco 211
Shell TIA
Sun TIA

**NO. HOBBS
(GRBG-SA)
UNIT 126
OXY
(OPER.)**
Subdiv. into lots

DOWERS
HOBBS
Subdiv. into lots

COUNTRY CLUB

Foster Per. 2 4 85
R.E. Gregory



Laboratory Services, Inc.
4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well for Wells 29321, 29231, 32312

SAMPLED BY _____

DATE TAKEN 8/8/00

REMARKS T18S-R38E-Sec29; Otr Sec 4,1,2

Barium as Ba	0	
Carbonate alkalinity PPM	68	
Bicarbonate alkalinity PPM	260	
pH at Lab	7.21	
Specific Gravity @ 60°F	1	
Magnesium as Mg	32	
Total Hardness as CaCO3	56	
Chlorides as Cl	325	
Sulfate as SO4	130	
Iron as Fe	0	
Potassium	0.1	
Hydrogen Sulfide	0	
Rw	12	@ 23° C
Total Dissolved Solids	841	
Calcium as Ca	24	
Nitrate	2.2	

Results reported as Parts per Million unless stated

Langelier Saturation Index -54

Analysis by: Vickie Walker
Date: 8/11/00

VI



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Wells 33111 & 28131 + 29231

SAMPLED BY _____

DATE TAKEN 5/9/00

REMARKS T18S-R38E-Sec 29, Qtr Sec. 4,2,1

Barium as Ba	0
Carbonate alkalinity PPM	40
Bicarbonate alkalinity PPM	216
pH at Lab	7.63
Specific Gravity @ 60°F	1
Magnesium as Mg	174
Total Hardness as CaCO3	300
Chlorides as Cl	155
Sulfate as SO4	115
Iron as Fe	0.1
Potassium	0.09
Hydrogen Sulfide	0
Rw	9.4 @ 25° C
Total Dissolved Solids	850
Calcium as Ca	126
Nitrate	7.5

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.05

Analysis by: Vickie Walker
Date: 6/6/00

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Oxy								PBTD				7	8.75	4000	500	976**
28331	30-025-07412	28	-18S	-38E	J	5/35	P	4280	4015	4268	4081-4093	10.75	13.5	245	150	CIRC
Oxy												7.625	9.625	1635	300	186
												5.5	6.25	4015	300	2662-CBL
												4.5	6.5	3987-4280	100	3987
28411	30-025-07419	28	-18S	-38E	A	4/36	P	4223	4133	4225	15	12.5	16	227	160	CIRC**
Oxy								PBTD			17	7	8.75	4133	750	2550-CBL
											475					
28421	30-025-07418	28	-18S	-38E	H	5/35	TA	4262	4020	4262	NONE	12.5	16	235	150	CIRC
Oxy												7	8.75	4020	200	2677-CBL
28422	30-025-27243	28	-18S	-38E	H	5/48	I	4470	4239	4268	4222-4228	16	20	40	40	CIRC
Oxy											4242-4244	8.625	12.25	1600	850	CIRC
											4252-4256	5.5	7.875	4503	1050	CIRC
											4269-4271					
28431	30-025-07413	28	-18S	-38E	I	8/35	P	4225	3993	4218	2660	10.75	13.5	225	150	CIRC**
Oxy												7.625	9.625	1640	400	CIRC**
												5.5	7.875	3993	400	2698-CBL
28441	30-025-07411	28	-18S	-38E	P	1/35	I	4272	4102	4257	NONE	10.75	13.5	243	150	CIRC
Oxy								PBTD				7.625	9.625	1634	300	185
												5.5	6.25	4015	300	CIRC
29111	30-025-23919	29	-18S	-38E	D	12/71	P	4287	4183	4287	3905-4250	8.625	11	310	150	CIRC
Oxy								PBTD				5.5	7.875	3905	300	2427**
29121	30-025-07449	29	-18S	-38E	E	3/47	P	4275	3924	4275	4070-85	9.625	12.25	2739	650	890
Oxy											4110-20	7	8.75	3104	100	2640 CBL
											4130-50	4.5 Lnr	6.25	2900-4201	100	2900
29122	30-025-28953	29	-18S	-38E	E	2/85	I	4215	4154	4211	NONE	13.375	17.5	40	NA	CIRC
Oxy								(CIBP)				8.625	11	1510	785	CIRC
												5.5	7.875	4370	435	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBSD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
29131 Oxy	30-025-07447	29	-18S	-38E	L	10//30	P	4168 PBSD	4050	4210	NONE	12.5 9.625 7 5	18 12 8.75 6.125	225 2750 3976 3870-4220	250 650 300 50	CIRC 660** 1504-CBL 3930-CBL
29132 Oxy	30-025-26917	29	-18S	-38E	L	12//80	I	4470 PBSD	4025	4245	NONE	16 8.625 5.5	20 12.25 7.875	40 1595 4510	40 785 900	CIRC CIRC CIRC
29141 Oxy	30-025-07448	29	-18S	-38E	M	8//30	I	4238 PBSD	3690	4228	3960-4108 4033-4053	12.5 9.625 7 5.5 4.5	18 12 8.75 7.875 6.25	203 2736 3960 3941 3417-4238	200 650 300 250 50	CIRC 1000** 1850** 3460-CBL 3774-CBL
29211 Oxy	30-025-07433	29	-18S	-38E	C	11//30	TA	4003 CIBP	4217	4270	4053-4150 4180-4200 4211-4215	12.5 9.625 7 5.5	18 12 8.75 6.25	243 2796 4007 3957-4238	250 400 500 50	CIRC CIRC 3014** 3957
29221 Oxy	30-025-07430	29	-18S	-38E	F	9//30	P	4210 PBSD	4118	4176	4154-4162 4175-4185 4185-4200 4213-4267	12.5 9.625 7 4.5	18 12 8.75 6.125	210 2704 3979 3910-4213	200 400 500 50	CIRC 1236 2753 3910
29222 Oxy	30-025-26934	29	-18S	-38E	F	4//81	I	4465	4175	4265	NONE	16 8.625 5.5	20 12.25 7.875	40 1605 4510	40 950 1050	CIRC CIRC CIRC
29231 Oxy	30-025-07438	29	-18S	-38E	K	10//30	P	4255	4106	4255	NONE	15.5 9.625 7 5	18 12.25 8.75 6.25	252 2729 3953 3906-4220	1000 600 300 50	CIRC** CIRC 2718* 3906
29241 Oxy	30-025-07437	29	-18S	-38E	N	10//30	I	4255	4076	4239	NONE	12.5 9.625 7	18 12 8.75	217 2730 3929	160 500 350	CIRC 895 1850

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
												5.5	7.875	3822-4299	60	3822
29242 Oxy	30-025- 28413	29	-18S	-38E	N	3/84	P	4370	4005	4257	4019 4037 4040	16 8.625 5.5	20 12.25 7.875	30 1511 4368	NA 750 750	CIRC CIRC 2330
29311 Oxy	30-025- 07432	29	-18S	-38E	B	10/30	P	4269	4044	4269	4090-4110 4171	12.5 9.625 7 5.5	16 11.75 8.75 6.25	241 2776 4008 3921-4234	250 400 500 350	113 2750 2949 3786
29321 Oxy	30-025- 07431	29	-18S	-38E	G	9/30	P	4301 PBTD	4137	4271	3895 4100	12.5 9.625 7 5	16 11.75 8.75 6.25	211 2756 3995 3812-4308	250 250 300 100	CIRC 921 2930-CBL 3894-CBL
29322 Oxy	30-025- 28883	29	-18S	-38E	G	11/84	I	4342 PBTD	4160	4256	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1520 4384	NA 620 850	CIRC CIRC CIRC
29323 Oxy	30-025- 28941	29	-18S	-38E	G	1/85	P	4180 PBTD	3089	4272	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1542 4370	NA 375 450	CIRC CIRC 575-CBL
29331 Oxy	30-025- 07436	29	-18S	-38E	J	9/30	I	4261	4100	4258	4044-4065	9.625 7 4.5	11.75 8.75 6.25	2742 3929 4270	500 300 750	907 2115 3788 CBL
29331 Oxy	30-025- 07445	29	-18S	-38E	O	10/30	P	4090 PBTD	4050	4146	4010-4035	13.375 9.625 7 5	15 12 8.75 6.25	210 2750 3934 4162	150 700 300 350	CIRC** CIRC** 3430-CBL CIRC
29332 Oxy	30-025- 28884	29	-18S	-38E	O	11/84	I	4375	4083	4250	NONE	13.375 8.625 5.5	17.5 12.25 7.875	40 1520 4375	NA 620 875	NA CIRC CIRC
29411	30-025- 07454	29	-18S	-38E	A	10/30	I	4335	4200	4335	4102-4137	12.5	16	245	250	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	Depth	No. of	TOC
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size		Sxs.	
											4057-4091	9.625	11.75	2750	650	365**
											4154-4158	7	8.75	4045	300	2231**
											5.5	6.25	3941-4223	30	3941**	
29431	30-025-07458	29	-18S	-38E	I	10//30	P	4227	4155	4225	4010	15.5	18	228	200	CIRC**
Oxy								PBTD			4075	9.625	12.25	2720	600	978**
											7	8.75	3900	400	2086**	
											5.5	6.25	3209-4229	120	3209**	
29441	30-025-07444	29	-18S	-38E	P	10//30	P	4211	4058	4266	4020-4028	13.375	18	232	150	CIRC**
Oxy								PBTD				9.625	12	2743	1400	CIRC**
											7	8.75	3950	300	3240-CBL	
											5	6.5	4172	22	4020	
29442	30-025-28885	29	-18S	-38E	P	2//85	I	4237	4065	4210	4031	13.375	17.5	40	NA	CIRC
Oxy								CIBP			4036	9.625	12.25	1536	575	CIRC
											7	7.875	4370	1100	CIRC	
29544	30-025-34644	29	-18S	-38E	P	7//99	P	4359	4124	4256	NONE	14	18	40	50	CIRC
Oxy								PBTD				8.625	12.25	1565	725	CIRC
											5.5	7.875	4400	775	CIRC	
30112	30-025-29063	30	-18S	-38E	D	3//85	TA	4000	4034	4264	NONE	13.375	17.5	40	NA	NA
Oxy								CIBP				9.625	12.25	1520	250	CIRC
											7	8.75	4369	675	CIRC	
30113	30-025-29064	30	-18S	-38E	D	1//85	P	4310	4042	4285	NONE	13.375	17.5	55	NA	CIRC
Oxy								CIBP				8.625		1495	620	CIRC
											5.5	7.875	4370	990	CIRC	
30121	30-025-07464	30	-18S	-38E	E	9//30	I	4115	4160	4271	4042-4096	12.5	16	212	200	CIRC**
Oxy								PBTD				9.625	11.75	2749	400	1281**
											7	8.75	3994	425	2738-CBL	
											5	6.125	3841-4312	40	CIRC-CBL	
30131	30-025-07481	30	-18S	-38E	L	10//30	P	4256	4082	4270	4006-70	9.625	11.75	2751	550	733
Oxy								CIBP			4116-40	7	8.75	3900	350	1783

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

FOR WELLS 28332,29231,29321,30223,32312,32431																		
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	No. of				
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC		
St A #4	30-025-23076	32	-18S	-38E	B	4/1/69	TA	5325	5375	5966	NA	11.75	15	380	350	CIRC		
Amerada								CIBP				8.625	11	3810	590	2400		
												5.5	7.875	5998	325	5281**		
St A #5	30-025-23116	32	-18S	-38E	A	6/1/69	P	6954	6674	6936	NA	11.75	15	385	400	CIRC**		
Amerada												8.625	11	3798	590	1099**		
												5.5	7.875	7000	501	4772**		
State B #5	30-025-07434	29	-18S	-38E	G	12/1/48	P	3224	3136	3224	1680-1682	10.75	13.75	220	200	CIRC**		
Collins & Ware												7.625	9.875	1665	300	CIRC**		
												5.5	6.75	3136	300	CIRC**		
State B #6	30-025-07435	29	-18S	-38E	F	1/1/47	P	3219	3137	3219	NONE	7.625	9.875	414	200	390		
Collins & Ware												5.5	6.75	3137	394	CIRC**		
St I #5	30-025-23173	29	-18S	-38E	O	7/1/69	P	6970	6648	6930	NONE	8.625	12.25	3808	300	3418**		
Texland Pet.												6.625	8.75	3575	530	CIRC**		
												5.5	7.875	7022	NA	NA		
State A #7	30-025-22934	29	-18S	-38E	N	2/1/69	P	6050	5823	5941	NONE	11.75	15	360	250	CIRC**		
Conoco												8.625	11	3800	240	2515-TS		
												5.5	7.875	6050	405	3300-TS		
State A #8	30-025-23048	29	-18S	-38E	K	4/1/69	TA	3567	3652	5787	5824-5924	11.75	15	360	250	CIRC**		
Conoco								CIBP				8.625	11	3800	240	3064**		
												5.5	7.875	5960	405	4309**		
State A-33 # 12	30-025-23195	33	-18S	-38E	L	9/1/69	P	6985	6686	6946	NONE	13.375	17.5	422	375	CIRC		
Conoco/Brothers Prod.								PBTD				9.625	12.5	3750	325	2850		
												7	8.75	7018	525	3700		

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A Fed. #28	30-025-23022	29	-18S	-38E	M	4/1/69	P	5345	5856	5928	NONE	11.75	15	374	300	CIRC**
Exxon								CIBP				8.625	11	3850	500	1879**
												5.5	7.875	5989	450	3838**
Bowers A Fed. #29	30-025-23131	29	-18S	-38E	L	5/1/69	P	6000	5808	5889	NONE	11.75	15	370	300	CIRC**
Exxon												8.625	11	3849	500	1877**
												4.5	7.875	6000	450	5087**
Bowers A Fed. #38	30-025-28580	30	-18S	-38E	I	4/1/84	P	7006	6764	6962	NONE	13.375	17.5	1476	1220	CIRC
Exxon												10.75	12.25	4491	1650	CIRC
												5.5	7.875	7000	660	4985
WD Grimes #6	30-025-23400	29	-18S	-38E	I	2/1/70	P	7018	6631	6984	NONE	13.375	17.5	377	400	CIRC**
Lewis B. Burleson								PBTD				9.625	12.25	3847	2300	CIRC**
												7	8.75	7049	540	3458**
HD McKinley #8	30-025-23151	30	-18S	-38E	H	6/1/69	P	5615	3676	3754	NONE	13.375	17.5	360	340	CIRC
Getty												8.625	11	3842	1400	CIRC
												5.5	7.875	6057	650	3300
HD McKinley #9	30-025-23221	30	-18S	-38E	G	8/1/69	TA	6961	5761	6965	NONE	13.375	17.5	378	400	CIRC**
Getty								CIBP				9.625	12.25	3851	1748	CIRC**
												7	8.75	6999	650	1933**
Grimes A #4	30-025-07522	32	-18S	-38E	C	9/1/30	P	3884	3604	3700	270	15.5	20	220	200	CIRC**
Gulf								PBTD				9.625	12.25	2742	600	318**
												6.625	7.875	3931	400	CIRC**
Grimes NCT-A #17	30-025-22792	32	-18S	-38E	C	11/1/68	P	6051	5780	5996	NONE	13.375	17.5	366	370	CIRC
Gulf/Chevron								PBTD				9.625	12.25	3399	1450	CIRC**
												7	8.75	6149	545	2510
Grimes NCT-A #18	30-025-22915	32	-18S	-38E	F	2/1/69	P	6000	5772	5928	NONE	13.375	17.5	351	335	CIRC

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Marathon												5.5	7	3116	1000	CIRC
State #8	30-025-07542	32	-18S	-38E	I	7/48	P	3192	3124	3192	NONE	8.625	11	300	125	CIRC
Marathon												5.5	7	3124	1000	CIRC
St #8	30-025-07486	30	-18S	-38E	L	4/48	P	3180	3223	3271	NA	8.625	11	295	125	CIRC
Marathon									OH			5.5	7	3173	900	CIRC
Hobbs State #1	30-025-23585	29	-18S	-38E	F	10/70	P	7032	6680	6992	NONE	12.75	17.5	356	400	CIRC
Marcum Drilling								PBTD				8.625	11	3795	300	2600
												5.5	7.875	7050	150	3839-CBL
Conoco-State #2	30-025-23856	33	-18S	-38E	K	11/71	P	7075	5830	6533	NONE	13.375	17	402	410	CIRC
Penroc												9.625	12.25	3797	350	998
												7	8.75	7075	600	3503
Hobbs State #2	30-025-23620	29	-18S	-38E	G	1/71	P	6397	6705	7031	6318-6350	9.625	12.75	358	200	CIRC
Marcum Drilling								PBTD				7	8.75	3850	250	2481**
												4.5	6.125	7075	425	1672**
Hobbs SWD F #WB29	30-025-12802	29	-18S	-38E	F	2/60	I	5050	4469	5050	NA	9.625	12.25	400	300	CIRC**
Rice										OH		7	8.75	4700	700	CIRC**
State Land S32 #9	30-025-23309	32	-18S	-38E	J	1/70	P	6710	5954	6560	NONE	13.375	17.5	364	160	90**
Saga								CIBP				9.625	12.25	3799	1140	CIRC**
												7	8.75	573-6998	490	CIRC**
Seed St 30 #1	30-025-22994	30	-18S	-38E	K	2/69	P	45	10	45	NONE	7	8.5	10	2	CIRC**
C.E. Seed																

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Bowers A #14	30-025-07451	29	-18S	-38E	O	8/1/47	PA	3207	3162	3207	NONE	8.625	11	496	400	CIRC**
Exxon												5.5	7.625	3120	1350	CIRC**
Bowers A-B #1	30-025-07453	29	-18S	-38E	D	9/1/48	PA	3238	3179	3238	NA	8.625	11	260	150	CIRC**
Exxon									OH			5.5	7.625	3179	1050	CIRC**
Bowers A Fed #9	30-025-07446	29	-18S	-38E	E	8/1/30	PA	4259	NA	NA	NA	9.625	12	2750	650	CIRC**
Exxon												7	8.75	3976	300	2011**
												5	6.25	4259	NA	NA
Bowers A Fed. #13	30-025-07476	30	-18S	-38E	J	7/1/47	PA	3189	3148	3189	NA	8.625	11	225	200	CIRC**
Exxon									OH			5.5	7.625	3150	1350	CIRC**
Bowers A Fed. #17	30-025-21900	30	-18S	-38E	J	10/1/66	PA	50	10	50	NONE	7	8	12	6	CIRC**
Exxon																
Bowers A Fed. #31	30-025-23176	29	-18S	-38E	E	6/1/69	PA	7050	6075	6991	NONE	8.625	11	3836	500	1858**
Exxon												5.5	7.875	7038	650	3125**
												2	7.875	7005	NA	NA
Bowers A Fed. #33	30-025-23222	29	-18S	-38E	D	7/1/69	PA	3970	4144	5953	4258-66	13-375	17	416	400	CIRC**
Exxon									CIBP			9.625	12.25	3836	350	2555-TS
												7	8.75	5988	550	2900-TS
Bowers A Fed. #34	30-025-23260	30	-18S	-38E	J	8/1/69	PA	7010	5822	6979	5848-98	9.625	12.25	3850	550	2296**
Exxon											6932-75	3.5 B	7.875	6088	895	2600**
												3.5 D	7.875	6098	895	2615**
Bowers A Fed. #CT24	30-025-21963	29	-18S	-38E	E	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Humble																
Bowers A Fed. #CT25	30-025-21964	29	-18S	-38E	E	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Exxon																
Bowers A Fed. #CT26	30-025-21969	30	-18S	-38E	J	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Exxon																
Bowers A Fed. #CT27	30-025-21970	30	-18S	-38E	H	1/1/67	PA	35	NA	NA	NA	NA	NA	NA	NA	NA
Exxon																
WD Grimes #2	30-025-07455	29	-18S	-38E	A	2/1/48	PA	4045	NA	NA	NA	8.625	11	242	150	CIRC**
Humble												5.5	7.375	3205	450	CIRC**
G.O. Mckinley #3	30-025-07481	30	-18S	-38E	H	7/1/30	PA	3199	NA	NA	NA	9.625	12.25	2755	600	337**
Marathon/Getty												7	8.25	3166	100	2995**
G.O. Mckinley #6	30-025-07488	30	-18S	-38E	G	6/1/47	PA	3200	1453	NA	NA	8.625	11	1474	400	CIRC**
Marathon/Getty												5.5	5.875	3178	200	CIRC**
G.O. Mckinley #7	30-025-07489	30	-18S	-38E	B	7/1/47	PA	3224	NA	NA	NA	8.625	11	1504	400	CIRC**
Marathon/Getty												5.5	6.5	3192	200	CIRC**
Hobbs State #5	30-025-23662	29	-18S	-38E	F	1/1/71	PA	5959	5813	5879	NA	9.625	12.25	364	200	CIRC
Ne-O-Tex												7	8.75	3826	200	2250
												4.5	6.25	5986	120	3800 (C)
State-Northrup #1	30-025-07535	32	-18S	-38E	J	6/1/30	PA	3227	3140	3203	NONE	12.5	16	1482	175	1046**
Ohio Oil								PBTD				10.75	12.25	2776	200	2050**
												7	8.75	3850	275	CIRC
												5	7	3244	500	CIRC
WD Grimes #6	30-025-07428	28	-18S	-38E	F	11/1/47	PA	3325	NONE	NONE	NONE	9.625	13	441	300	CIRC**
Repollo/Sinclair												7	9	3185	800	CIRC**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTORS

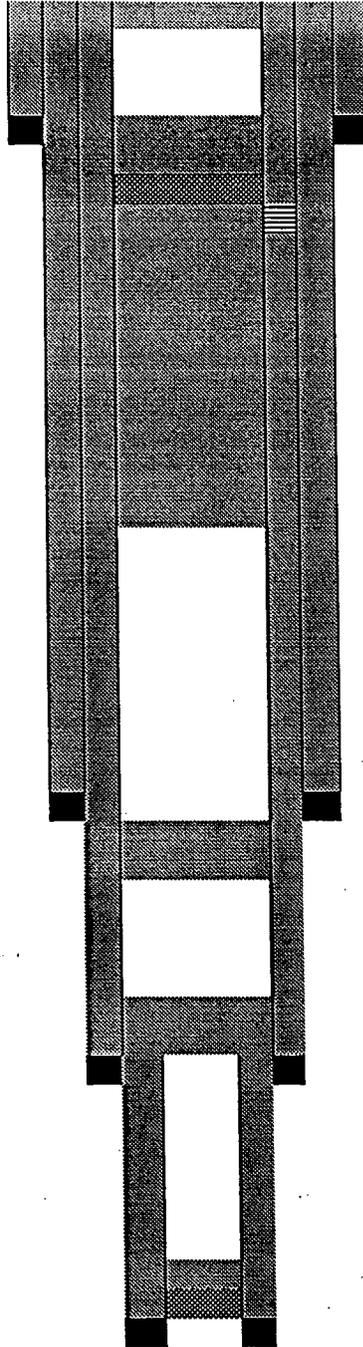
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg:	Hole		No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
WD Grimes #5	30-025-07424	28	-18S	-38E	L	7//47	PA	3150	3191	3197	NONE	8.625	11	409	195	CIRC**
Shell								CMT				4.5	7.875	1958	600	CIRC**
WD Grimes #6	30-025-12500	28	-18S	-38E	M	7//47	PA	3090	3155	3161	NONE	8.625	11	411	200	CIRC**
Shell								CMT				5.5	7.875	2778	1400	CIRC**
Grimes #8	30-025-07423	28	-18S	-38E	L	9//47	PA	3120	3215	3221	NONE	8.625	11	402	200	CIRC**
Shell								CMT				4.5	7.875	2108	850	CIRC**
McKinley A #9	30-025-12492	19	-18S	-38E	N	8//47	PA	3247	3205	3247	NA	8.625	11	407	200	CIRC**
Shell												4.5	7.875	3168	850	CIRC**
WD Grimes #5	30-025-07426	28	-18S	-38E	E	10//47	PA	3222	3212	3222	NONE	9.625	13	441	300	CIRC**
Sinclair												7	9	3185	600	CIRC**
St #1	30-025-07442	29	-18S	-38E	P	8//30	PA	4191	3150	4191	NA	13.375	17.5	217	200	CIRC**
Std of Tx										OH		9	12.25	2735	500	1473**
												6.625	7.875	3907	174	2374**
St #2	30-025-07443	29	-18S	-38E	O	9//30	PA	4171	3155	4156	NA	13	17.5	225	150	CIRC**
Std of Tx												9.625	12.25	2810	725	CIRC**
												7	8.75	3951	300	1973**
WD Grimes #11	30-025-07456	29	-18S	-38E	I	8//30	PA	4160	3168	3189	3259-81	12.5	17.5	236	200	CIRC**
Tidewater											3049-50	9.625	12.25	2712	600	273**
												6.625	8.75	3826	300	2404**
Grimes #9	30-025-07457	29	-18S	-38E	H	10//30	PA	4176	3148	3255	3086-3088	15.5	18	230	200	CIRC**
Tidewater											3270-3272	9.625	12.25	2718	600	282**
												7	8.75	3880	300	1867**
												5.5	7.875	3350	100	3086**
Grimes #5	30-025-07460	29	-18S	-38E	H	12//30	PA	4196	NA	NA	NA	12.5	16	214	250	CIRC

** Denotes calculated TOC with 50% efficiency

**WELL SCHEMATIC:
TURA NHU 29-421**

WELL PLUGGED:
12/3/97

12.5"
220'
200 SX
TOC: CIRC



10 sx cmt from 62' to surf.

Stung out and left 60' cmt on
Top of ret.

Perf at 500'. Set CICR at 308'

Squeeze 100 sx cmt below
Ret. to surf in 7" csg. x 9.625"
Csg.

Pumped 20 sx cmt from 1868
To 1748'.

Pumped 20 sx cmt from 2862
To 2742'.

Pumped 20 sx cmt from 3873
To 3722'.

Set CIBP at 4100'. Cap w/40'
Cmt.

9.625"
2720'
600 SX
TOC: 518'

7"
3880'
300 SX
TOC: 2914 CBL

5.5"
3796'-4236'
50 SX
TOC: 3866'

**WELL SCHEMATIC:
XON BOWERS A FED #9**

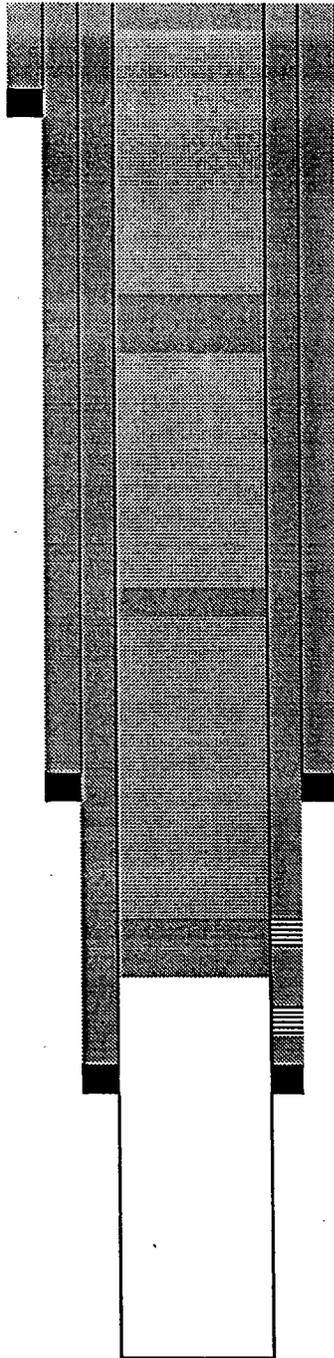
WELL PLUGGED:
12/3/70

12.5"
213'
650 SX
TOC: SURF (C)

9 5/8"
2736'
650 SX
TOC: SURF (C)

7"
3970'
300 SX
TOC: 2000(C)

TD: 4259'



Spotted 10 sx cmt plug from
0' to 25'.

Hole was loaded with mud
Laden fluids.

Spotted 20 sx cmt plug from
1400' to 1550'.

Spotted 40 sx cmt plug from
2300' to 2400'.

Perf's at 3220'-3227'.

Spotted 50 sx cmt plug from
3000' to 3250'.

Squeezed perf's at 3726'
To 3741'.

**WELL SCHEMATIC:
DEWATER WD GRIMES #1**

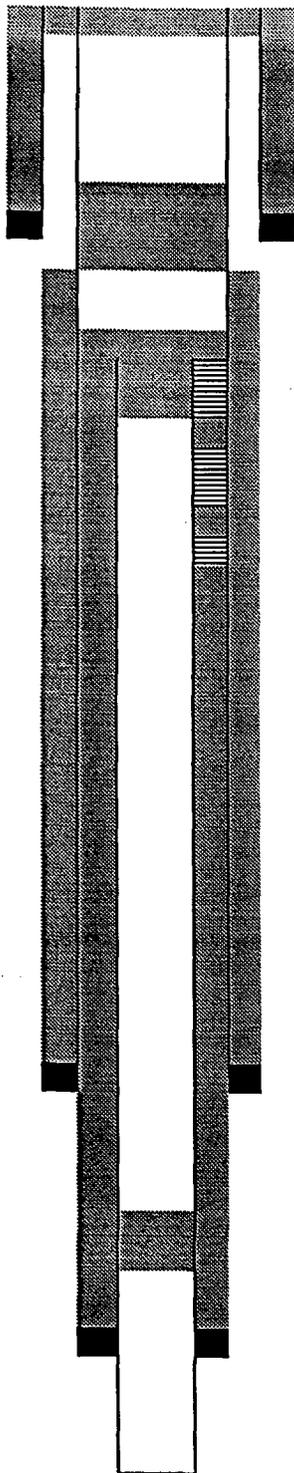
WELL PLUGGED:
7/25/68

Size: 12 1/2"
Depth: 236'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Size: 9 5/8"
Depth: 2712'
Hole size: 12.25"
Cmt: 600 sxs
TOC: 273' - Calc.
With 50% effic.

Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 800' FP

TD:4160'



Laid 10 sx plug at surface.

Laid 25 sx cmt at bottom of
12 1/2" csg.

Laid 25 sx over 7" stub.
Shot at 787' and pulled.
Shot at 899'.

Shot at 1044'.
Shot at 1193'.

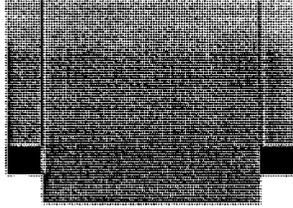
Shot at 1404'.

Spotted 25 sx cmt plug from
3599' to 3467'.

Grimes #3
Tidewater Oil Co.
Unit H, 1650 FNL & 990 FEL
Sec. 29, T-18S, R-38E

WELL PLUGGED:
3/17/81

Size: 12.5"
Depth: 214'
Hole Size: 17.5"
Cmt: 325 sxs
TOC: Circ.



Spotted 500 sxs at 400' to surface

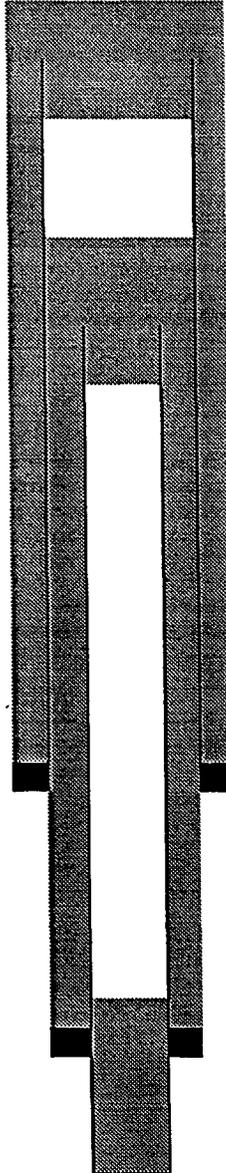
9.625" top at 1198

Spotted 100 sxs at 1249'

7" top at 1750'

Spotted 100 sxs at 1800'

Size: 9.625"
Depth: 2715'
Hole Size: 12.25"
Cmt: 600 sxs
TOC:



Size: 7"
Depth: 3911'
Hole size: 8.75"
Cmt: 400 sxs
TOC:

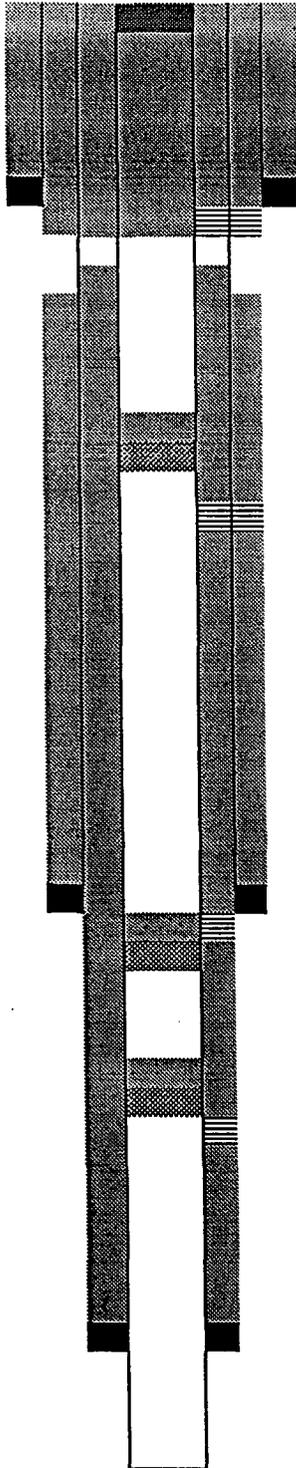
Spotted 100 sxs at 4107

TD: 4200'

**WELL SCHEMATIC:
OF TX- STATE #1**

WELL PLUGGED:
11/25/89

Size: 13 3/8"
Depth: 217'
200 SX
TOC: SURF (C)
TOC: Circ. - Calc.
With 50% effic.



Weld 1/2" plate on top.

Perf 6 5/8" and 9" at 267'.
Pumped 170 sx cmt down
Prod csg, circ cmt out
Intermediate and surf csg
Annuli. Cut off 6 5/8" csg 3'
Below GL. Cap w/ 1/2" plate
And valve wellbore.

Set cir at 1404'.

Perf 6 5/8" and 9" at 1500'.
Sqzd perfs w/200 sx cmt.

Size: 9"
Depth: 2735'
Hole size: 12.25"
Cmt: 500 sxs
TOC: 1200' - Calc.
With 50% effic.

Perfd 6 5/8" csg at 2785'.
Sqzd perfs w/55 sx cmt.
Set cast iron cmt ret at 2681'.
Cap cmt ret w/35' cmt.

Size: 6 5/8"
Depth: 3907'
Hole size: 7.875"
Cmt: 357 sxs
TOC: Circ. - Calc.
With 50% effic.

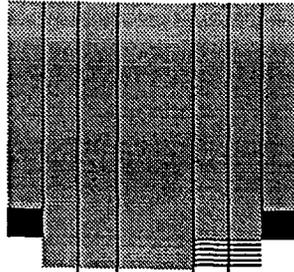
Capped CICR w/35' cmt to
3000'.
Set cast iron cmt ret at 3060'
Sqzd perfs w/106 sx to 3000'
Perfs at 3138' to 3241'

TD: 4191'

**WELL SCHEMATIC:
D OF TX STATE #2**

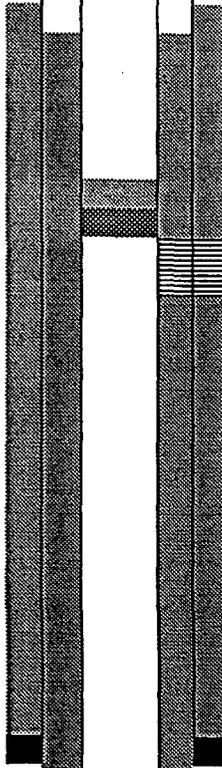
WELL PLUGGED:
12/5/89

Size: 13"
Depth: 225'
Hole size: 17.5"
Cmt: 150 sxs
TOC: Circ. - Calc.
With 50% effc.



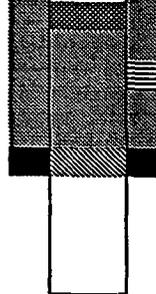
Sqzd perfs at 292' with 220
sx. Circ to surface

Size: 9 5/8"
Depth: 2810'
Hole size: 12.25"
Cmt: 725 sxs
TOC: Circ. - Calc.
With 50% effc.



Set cicr at 1404' and capped
With cmt.
Perf'd at 1500'.
Sqzd perfs at 1500' with 300
sx

Size: 7"
Depth: 3951'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 1240' - Calc.
With 50% effc.



Set cicr at 2744'.

Perfs sqzd at 2852', sqzd
With 55 sx.
Dumped 35' cmt onto CIBP.
CIBP at 3072'

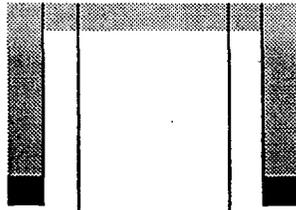
PBTD: 3072'

**WELL SCHEMATIC:
O-TEX HOBBS STATE #5**

WELL PLUGGED:
5/11/73

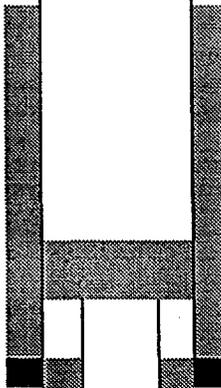
Size: 9 5/8"
Depth: 364'
Hole size: 12.25"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Spotted 10' cmt plug at surf.



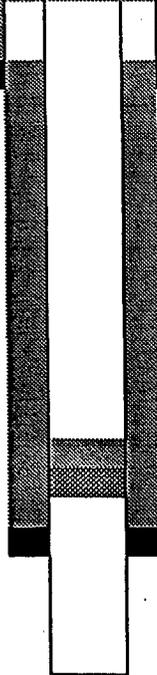
Size: 7"
Depth: 3826'
Hole size: 8.75"
Cmt: 200 sxs
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.



Size: 4 1/2"
Depth: 5986'
Hole size: 6.25"
Cmt: 120 sxs
TOC: 3800'- Calc.
With 50% effic.

Set 4 1/2" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.



PBTD: 5959'

TD: 5986'

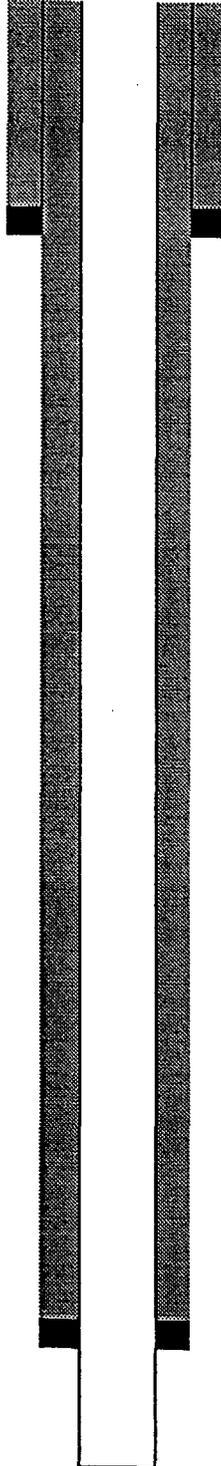
W. D. Grimes #2
Humble Oil & Refining Co.
Unit A, NE/4 of NE/4
Sec 29, T-18S, R-38E

WELL PLUGGED:
3/23/48

Size: 8.625"
Depth: 242'
Hole size: 11"
Cmt: 150 sxs
TOC: Circ.- Calc.
50% efficiency

Size: 5.5"
Depth: 3140'
Hole size: 7.375"
Cmt.: 450 sxs
TOC: Circ.- Calc.
50% efficiency

TD: 4045'



**WELL SCHEMATIC:
CONOCO STATE A #4**

WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 200'
Hole size: 15"
Cmt: 250 sxs
TOC: Circ. - Calc.
With 50% effc.

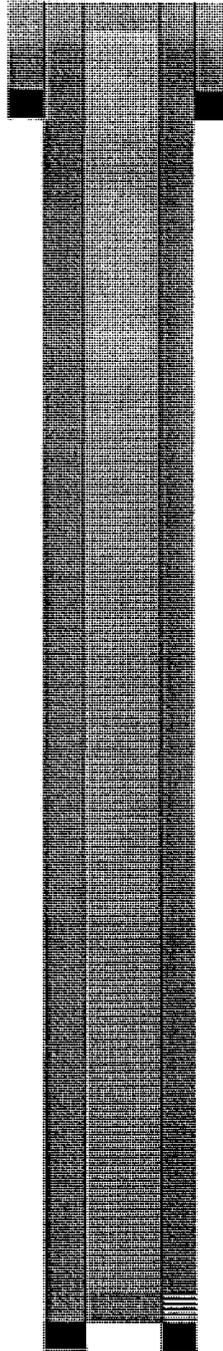
Spotted a 10 sx cmt plug at
Surface.

Filled well bore with 10# mud.

Size: 5 1/2"
Depth: 3215'
Hole size: 7.875"
Cmt: 600 sxs
TOC: Circ. - Calc.
With 50% effc.

TD: 3215'

Set a 40 sx cmt plug over
Perfs from 3164' to 3197'.



**WELL SCHEMATIC:
UNOCO STATE A #5**

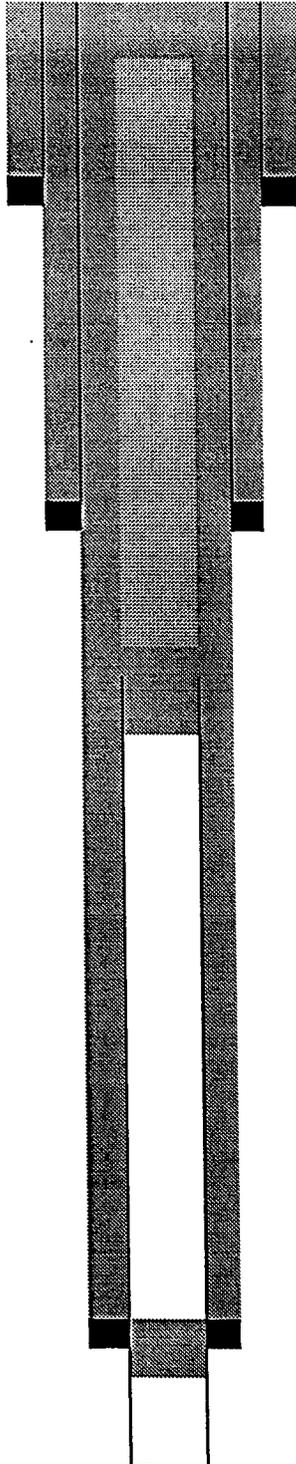
WELL PLUGGED:
1/12/71

Size: 10 3/4"
Depth: 272'
Hole size: 15"
Cmt: 200 sxs
TOC: Circ. - Calc.
With 50% effic.

Size: 7 5/8"
Depth: 999'
Hole size: 9.875"
Cmt: 425 sxs
TOC: Circ. - Calc.
With 50% effic.

Size: 5 1/2"
Depth: 3206'
Hole size: 7.875"
Cmt: 450 sxs
TOC: Circ. - Calc.
With 50% effic.

PBTD:3168'



Spotted a 10 sx cmt plug
At surface.

Filled well bore with 10# mud

Cut 5 1/2" csg at 1570' and
Pulled out of hole. Set a 55
Sx cmt plug in and out of
5 1/2" stub.

Spotted 40 sx cmt plug over
Perfs from 3188' to 3168'.

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 321
Letter G, Section 29, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

Occidental Permian Limited Partnership
P.O. Box 4294
Houston, TX 77210-4294

Lewis B. Burlison, Inc.
P.O. Box 2479
Midland, TX 79705

Collins & Ware, Inc.
508 W. Wall, Suite 1200
Midland, TX 79701

Marcum Drilling Co.
P.O. Box 3699
Midland, TX 79705

Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Conoco Inc.
10 Desta Dr. West
Midland, TX 79705

HRC, Inc.
P.O. Box 5102
Hobbs, NM 88241

Surface Owners

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

**H.R.C. INC.
P.O. Box 5102
Hobbs, NM 88241
(505)393-3194**

**RE: Brine Extraction Well
Hobbs State #5
Unit F, Sect. 29, Tws. 18S, Rng. 38E., Lea Co., NM**

Dear Sir:

As per the Rules and Regulations of the Oil Conservation Division of New Mexico, you are being provided a copy of the Application for the construction of a brine extraction facility at the above location.

If you have any questions, please call Gary Schubert at (505)393-3194. Any objections or request for hearing must be filed with the Oil Conservation Division within fifteen (15) days. Objections and request for hearing should be addressed to Oil Conservation Division, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 or call (505)476-3440.

Thank you,

Gary M. Schubert

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PS Form 3800, July 1999 See Reverse for Instructions

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Lewis B. Burleson, Inc.
 Street, Apt. No., or PO Box No. **P.O. Box 2479**
 City, State, and ZIP+4[®] **Midland, TX 79705**

PS Form 3800, July 1999 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)**

Article Sent To:

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)

Collins & Ware, Inc.
 Street, Apt. No., or PO Box No. **508 W. Wall, Suite 1200**
 City, State, and ZIP+4[®] **Midland, TX 79701**

PS Form 3800, July 1999 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)**

Article Sent To:

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)

Rice Operating Co.
 Street, Apt. No., or PO Box No. **122 West Taylor**
 City, State, and ZIP+4[®] **Hobbs, NM 88240**

PS Form 3800, July 1999 See Reverse for Instructions

7099 3220 0002 3941 0218

7099 3220 0002 3941 0218

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**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)
Grimes Land Company
 Street, Apt. No., or PO Box No.
P.O. Box 5102
 City, State, ZIP+4
Hobbs, NM 88241

PS Form 3800, July 1999 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)
Conoco Inc.
 Street, Apt. No., or PO Box No.
10 Desta Dr. West
 City, State, ZIP+4
Midland, TX 79705

PS Form 3800, July 1999 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)
Marcum Drilling Co.
 Street, Apt. No., or PO Box No.
P.O. Box 3699
 City, State, ZIP+4
Midland, TX 79705

PS Form 3800, July 1999 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

HOUSTON, TX 77210		UNIT ID: 0640 Postmark Here Clerk: KJUVY1 12/12/01
Postage	\$ 1.72	
Certified Fee	2.10	
Return Receipt Fee (Endorsement Required)	1.50	
Total Postage & Fees	\$ 5.32	

Name (Please Print Clearly) (To be completed by mailer)
Occidental Petroleum L.P.
 Street, Apt. No., or PO Box No.
P.O. Box 4294
 City, State, ZIP+4
Houston, TX 77210-4294

PS Form 3800, July 1999 See Reverse for Instructions

LEGAL NOTICE

Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of Hobbs, NM, is filing application for a brine extraction well and facility. The well is the Hobbs State #5 located 2280 FNL and 1980 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co. NM. The well and facility will be producing brine water from the Salado formation at approximately 2000 ft. with productions pressures of from 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, P.O. Box 5102, Hobbs, NM 88241, (505)393-3194, or any request for hearing or objections should be directed to the Oil Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505)476-3440, within fifteen (15) days.

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising 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

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of December 12, 2001 and ending with the issue of December 12, 2001.

And that the cost of publishing said notice is the sum of \$ 19.61 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this 20th day of December 2001.

Debbie Schilling

Debbie Schilling
Notary Public, Lea County, New Mexico
My Commission Expires June 22, 2002

LEGAL NOTICE
Pursuant to the rules and regulations of the State of New Mexico Oil Conservation Commission, Santa Fe, NM, H.R.C. Inc. of Hobbs, NM, is filing application for a brine extraction well and facility. The well is the Hobbs State #5 located 2280 FNL and 1980 FWL, Unit F, Section 29, Township 18 South, Range 38 East, Lea Co. NM. The well and facility will be producing brine water from the Salado formation at approximately 2000' ft. with production pressures of from 200# to 250#. The application can be reviewed at the OCD office, Hobbs, NM. Any questions concerning the application can be directed to Mr. Gary Schubert, R.O. Box 5102, Hobbs, NM 88241, (505) 393-3194, or any request for hearing or objections should be directed to the Oil and Conservation Commission, P.O. Box 6429, 1220 South Saint Francis Drive, Santa Fe, NM 87505, or call (505) 476-3440, within fifteen (15) days of the date published in the Lovington Daily Leader December 12, 2001.

Ground water

GROUNDWATER MONITORING

H.R.C. Inc. proposed to monitor the groundwater at the site by installing a two inch monitor well completed through the Ogallala formation. The well location will be down gradient on the edge of the brine well location, south southeast or along water gradient.

The installation will consist of drilling with an air rotary to the top of the redbed or base of the Ogallala. Running 2 inch schedule 40 pvc well casing to TD with .10 slot well screen across the entire saturated zone. Sand pack well to five feet above upper most perforations. Cap sand with 10 ft. of bentonite, and grout from top of bentonite to surface, installing a locking cover at surface. This will enable us to monitor the entire water area.

It is our proposal to take samples from this well prior to any brine activity, for background purposes. We plan to sample for BTEX, TPH, Cations, Anions, and Metals initially. After starting operations, we plan to sample the well on bi-annual schedule, testing for Cations and Anions. All results will be reported to the OCD as they are obtained.

District I
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 1, 2000

District II
811 South First, Artesia, NM 88210

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address H. R. C., Inc. P. O. Box 5102 Hobbs, NM 88241		² OGRID Number 131652
⁴ API Number 30-0 25-23662		³ Reason for Filing Code/ Effective Date Change Operator
⁵ Pool Name BSW Salado	⁶ Pool Code 96173	
⁷ Property Code 992279	⁸ Property Name Hobbs State	⁹ Well Number 5

II. ¹⁰ Surface Location

Ul or lot no. F	Section 29	Township 18S	Range 38E	Lot Idn	Feet from the 2280	North/South Line North	Feet from the 1980	East/West line West	County Lea
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¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description

IV. Produced Water

²³ POD	²⁴ POD ULSTR Location and Description
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V. Well Completion Data

²⁵ Spud Date	²⁶ Ready Date	²⁷ TD	²⁸ PBTD	²⁹ Perforations	³⁰ DHC, MC
³¹ Hole Size	³² Casing & Tubing Size	³³ Depth Set	³⁴ Sacks Cement		

VI. Well Test Data

³⁵ Date New Oil	³⁶ Gas Delivery Date	³⁷ Test Date	³⁸ Test Length	³⁹ Tbg. Pressure	⁴⁰ Csg. Pressure
⁴¹ Choke Size	⁴² Oil	⁴³ Water	⁴⁴ Gas	⁴⁵ AOF	⁴⁶ Test Method

⁴⁷ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Gary M. Schubert*

Printed name: GARY M. SCHUBERT

Date: 6/29/01

Phone: 505-393-3194

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

⁴⁸ If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature <i>E. S. Hitchcock</i>	Printed Name E. S. Hitchcock	Title President	Date 6/29/01
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Band

ASSIGNMENT OF CASH COLLATERAL DEPOSIT

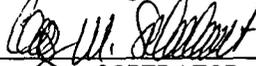
H.R.C. Inc. (OPERATOR) of P.O. Box 5102 (address) has deposited with the First National Bank (name of state or national bank or savings association, which must be a federally-insured bank or savings institution in the State of New Mexico) of 600 West Bender, Hobbs, NM (address) (FINANCIAL INSTITUTION), the sum of \$5,000.00 dollars in Certificate of Deposit or Savings Account No. 2802198-30 (FUND).

To comply with NMSA 1978, Section 70-2-14, OPERATOR hereby assigns and conveys all right, title and interest in the FUND to the FINANCIAL INSTITUTION in trust for the Oil Conservation Division of the Energy, Minerals and Natural Resources Department or successor agency of the State of New Mexico (DIVISION).

OPERATOR and the FINANCIAL INSTITUTION agree that as to the FUND:

- a. The DIVISION acquires by this assignment the entire beneficial interest in the FUND, with the right to order the FINANCIAL INSTITUTION in writing to distribute the FUND to persons determined by the DIVISION to be entitled thereto, including the DIVISION itself, in amounts determined by the DIVISION, or to the OPERATOR upon sale or proper plugging, in compliance with the rules and orders of the DIVISION, of the well(s) covered by this assignment.
- b. OPERATOR retains no legal or beneficial interest in the FUND and has only the right to interest, if any, thereon, and to return of the FUND upon written order of the DIVISION.
- c. The FINANCIAL INSTITUTION agrees that the FUND may not be assigned, transferred, pledged or distributed except upon written order of the DIVISION or a court of competent jurisdiction made in a proceeding to which the DIVISION is a party. The FINANCIAL INSTITUTION waives all statutory or common law liens or rights of set-off against the FUND.

OPERATOR agrees that the FINANCIAL INSTITUTION may deduct from interest due OPERATOR any attorney fees incurred by the FINANCIAL INSTITUTION if claim or demand via writ, summons or other process arising from OPERATOR'S business is made upon the FINANCIAL INSTITUTION.


Signature of OPERATOR
Personally or by Authorized Officer


Signature of Authorized Officer
of FINANCIAL INSTITUTION

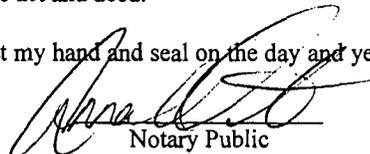
Gary Schubert, President
Title

Zane S. Bergman, President
Title

State of New Mexico
County of Lea ss.

On this 3rd day of December, 20 01, before me personally appeared Gary Schubert and Zane S. Bergman, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.


Notary Public

My Commission Expires:
10-7-04

ONE-WELL CASH BOND

KNOW ALL MEN BY THESE PRESENTS THAT H.R.C. Inc. (an individual) (a partnership) (a corporation organized in the State of New Mexico with its principal office at P.O. Box 5102 in the City of Hobbs, State of New Mexico and authorized to do business in the State of New Mexico) is held and firmly bound to the Oil Conservation Division of the Energy, Minerals and Natural Resources Department of the State of New Mexico (or its successor agency), as DIVISION in the sum of \$ 5,000.00.

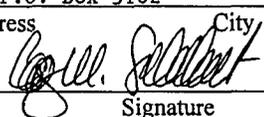
The conditions of this obligation are such that:

The PRINCIPAL desires to drill a well or purchase or operate an existing well, the depth of which does not exceed 5000 feet, to prospect for and produce oil or gas, carbon dioxide gas, helium gas or brine minerals on property in the State of New Mexico, the particular identification and footage location of said well being as follows:

(well name and footage) Hobbs State #5 2280 FNL/1980 FWL in Section 29 Township 18S Range 38E, NMPM, Lea County, New Mexico.

The PRINCIPAL has deposited on behalf of the DIVISION \$ 5,000.00, in the manner indicated on the Assignment, attached to this bond, being the principal sum intended to be secured. PRINCIPAL pledges this sum as a guarantee that it, its executors, assigns, heirs or administrators shall plug the well described above if dry, or when abandoned, in accordance with the rules and orders of the DIVISION in such way as to confine the oil, gas and water in the strata in which they are found, and to prevent same from escaping to other strata. If the PRINCIPAL does not so properly plug and abandon said well upon order of the DIVISION, the total sum of the bond shall be forfeited to the DIVISION, and such amount as is necessary may be used to properly plug said well. If the principal sum of this bond is less than the actual cost incurred by the DIVISION in plugging said well, the PRINCIPAL, its successors, assigns, heirs or administrators shall be liable under the provisions of NMSA 1978, Section 70-2-38 of the Oil and Gas Act, and the DIVISION may take action to recover any amounts expended over and above the principal sum of the bond.

NOW THEREFORE, if the PRICIPAL or its successors, assigns, heirs, or administrators or any of them shall plug the above-described well when dry or abandoned, in accordance with the rules and orders of the DIVISION, in such a manner as to confine the oil, gas, and water in the strata in which they naturally occur, and to prevent them from escaping into other strata, and further to clean up the surface location of said well, then therefore, this obligation shall be null and void and the principal sum shall be paid to the PRINCIPAL or its successors, heirs, or administrator, otherwise it shall remain in full force and effect.

H.R.C. Inc.
PRINCIPAL
P.O. Box 5102 Hobbs, N.M. 88241
Address City State Zip
By  By _____
Signature
Gary Schubert, President
Title

If PRINCIPAL is a corporation, affix corporate seal here.

ACKNOWLEDGMENT FORM FOR INDIVIDUALS OR PARTNERSHIPS

STATE OF _____)
COUNTY OF _____)
ss.

On this _____ day of _____, 20____, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

My Commission Expires

ACKNOWLEDGMENT FORM FOR CORPORATION

STATE OF New Mexico)
COUNTY OF Lea)
ss.

On this 3rd day of December, 20 01, before me personally appeared Gary Schubert, to me personally known who, being by me duly sworn, did say that he is President of H.R.C. Inc. and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

10-7-04
My Commission Expires

APPROVED BY:

Oil Conservation Division of New Mexico

By _____

Date _____

Chaves, Eddy, Lea, McKinley, Rio Arriba, Roosevelt, Sandoval, and San Juan Counties, New Mexico:

Table with 2 columns: Projected Depth of Proposed Well or Actual Depth of Existing Well, Amount of Bond. Rows include Less than 5,000 feet (\$ 5,000), 5,000 feet to 10,000 feet (\$ 7,500), More than 10,000 feet (\$10,000).

All Other Counties in the State:

Table with 2 columns: Projected Depth of Proposed Well or Actual Depth of Existing Well, Amount of Bond. Rows include Less than 5,000 feet (\$ 7,500), 5,000 feet to 10,000 feet (\$10,000), More than 10,000 feet (\$12,500).