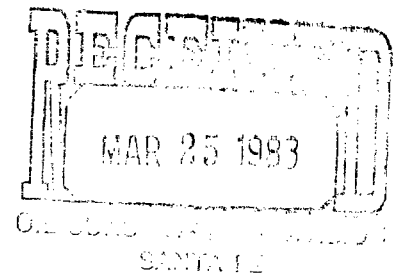


**HIXON DEVELOPMENT COMPANY**

P. O. BOX 2810  
FARMINGTON, NEW MEXICO 87401



March 14, 1983

Mr. Frank Chavez  
Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

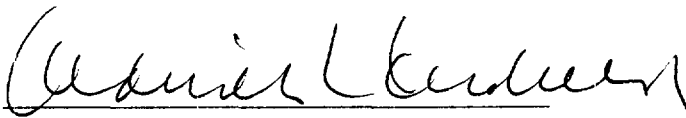
Subject: Carson Unit 31-15  
790' FNL, 1980' FEL  
Section 15, T25N, R12W  
San Juan County, New Mexico

Dear Mr. Chavez:

Attached for your approval is our Application for Authorization  
to Inject for the subject well.

Very truly yours,

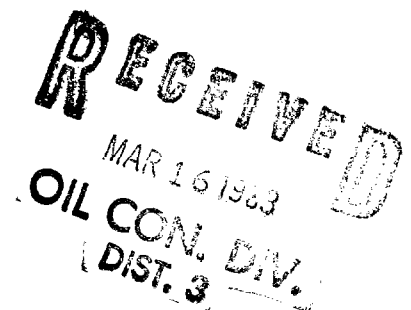
Hixon Development Company

by 

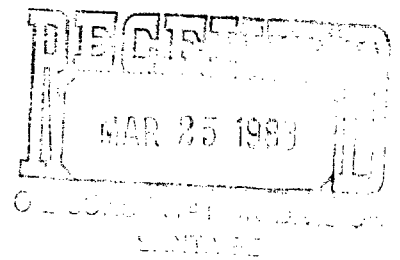
Aldrich L. Kuchera  
Executive Vice President

ALK:cb

Attachments



HIXON DEVELOPMENT COMPANY  
P. O. BOX 2810  
FARMINGTON, NEW MEXICO 87401



March 14, 1983

Bureau of Indian Affairs  
Navajo Area Office  
Minerals Department  
Box 146  
Window Rock, Arizona 86515

Subject: Carson Unit No. 31-15  
790' FNL, 1980' FEL  
Section 15, T25N, R12W  
San Juan County, New Mexico

Gentlemen:

Attached is our Application for Authorization to Inject for the subject well. We are required by the Oil Conservation Division to furnish a copy of this application to the surface owner.

Very truly yours,

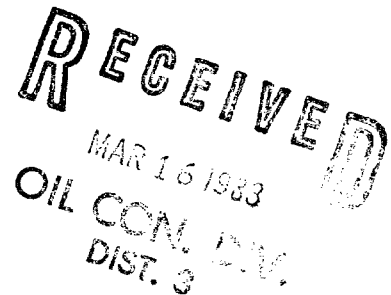
Hixon Development Company

by Aldrich L. Kuchera

Aldrich L. Kuchera  
Executive Vice President

ALK:cb

Attachments

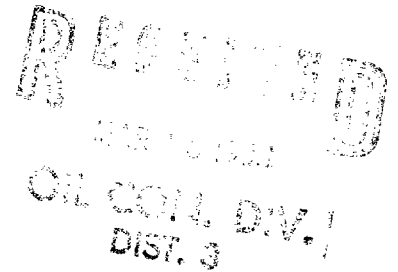


HIKON DEVELOPMENT COMPANY  
APPLICATION FOR AUTHORIZATION TO INJECT  
FORM C-108 SUPPLIMENTAL INFORMATION

CARSON UNIT WELL NO. 31-15  
790' FNL, 1980' FEL  
SECTION 15, T25N, R12W  
SAN JUAN COUNTY, NEW MEXICO

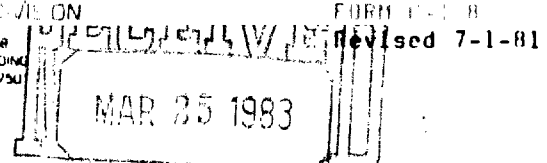
- I. Shown on application.
- II. Shown on application.
- III. Tabular and schematic Wellbore data are attached.
- IV. This well is located in a Federal and State approved water flood project operational since February 1962.
- V. Area of review is shown on attached map.
- VI. Information for well's located in the area of review are attached as follows:

Carson Unit No. 24-10  
Carson Unit No. 34-10  
Carson Unit No. 44-10  
Carson Unit No. 21-15  
Carson Unit No. 41-15  
Carson Unit No. 32-15  
Carson Unit No. 42-15  
Central Bisti Unit No. WI-7  
Central Bisti Unit No. WI-6



- VII. 1. Proposed average injection rate is 600 BWPD expected maximum injection rate 1200 BWPD.
- 2. The injection system will be closed.
- 3. Average injection pressures are expected to be in the 600-1000 psi range. Maximum injection pressure will be 1500 psi.
- 4. Refer to the attached water analysis report. Since the formation water to be encountered is primarily previously injected water no problems are expected in mixing the two waters.
- 5. This well is part of an extensive waterflood project active in the Carson Unit since 1962. All produced water is re-injected into the oil productive Lower Gallup sand to maintain pressure. Injection into the Lower Gallup Sand is for waterflooding not disposal.

- VIII. The injection zone is the upper bench of the Lower Gallup sandstone. This zone is shown to be 28' in thickness with a top of 4720' as shown on SP log previously submitted. No known sources of underground drinking water exist in this area. Water well drilling in the area has shown the Ojo Alamo to be dry.
- IX. The well will be acidized as required to maintain injection rate and pressure.
- X. Logs were previously submitted.
- XI. No known sources of drinking water exist in this area.
- XII. This well is part of the existing approved waterflood operation for the Central Bisti Lower Gallup Sand Unit, it is not a disposal well.
- XIII. Proof of Notification attached.
- XIV. Certification shown on Application.



## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Hixon Development Company  
Address: P.O. Box 2810, Farmington, New Mexico 87499  
Contact party: Aldrich L. Kuchera Phone: (505) 325-6984
- 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 ☐ no  
If yes, give the Division order number authorizing the project R-1414 B.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \* VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Aldrich L. Kuchera Title Executive Vice President  
Signature: *Aldrich L. Kuchera* Date: March 14, 1983
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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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.

WELL NAME Carson Unit Well No. 31-15

LOCATION 790' FNL, 1980' FEL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6213.5'

RBM 6222.0'

DF 6220.8'

KB 8.5'

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# J-55

Casing set @ 94' with 94 sacks  
containing 2% CaCl

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1040'</u>
Lewis	<u>1263'</u>
Cliffhouse	<u>1447'</u>
Menefee	<u>1946'</u>
Point Lookout	<u>3545'</u>
Mancos	<u>3712'</u>
Upper Gallup	<u>4623'</u>
Lower Gallup	<u>4713'</u>

CEMENT TOP 3848' (calculated)

### PERFORATIONS

4726'-44'

4802'-14'

4819'-30'

PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5#

Casing set @ 4848' w/ 150 sx  
containing 4% gel

TD 4850'

\_\_\_\_\_Packer Corrosion Fluid

\_\_\_\_\_2-3/8" EUE 8rd 4.7# J-55

### WELL HISTORY

Spud date: 8/19/57

Original owner: Shell

IP \_\_\_\_\_ BOPD 176 BWPD 0

GOR \_\_\_\_\_

Completion treatment: \_\_\_\_\_

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing \_\_\_\_\_

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

4726'-44'

PBD4780'

4802'-14'

4819'-30'

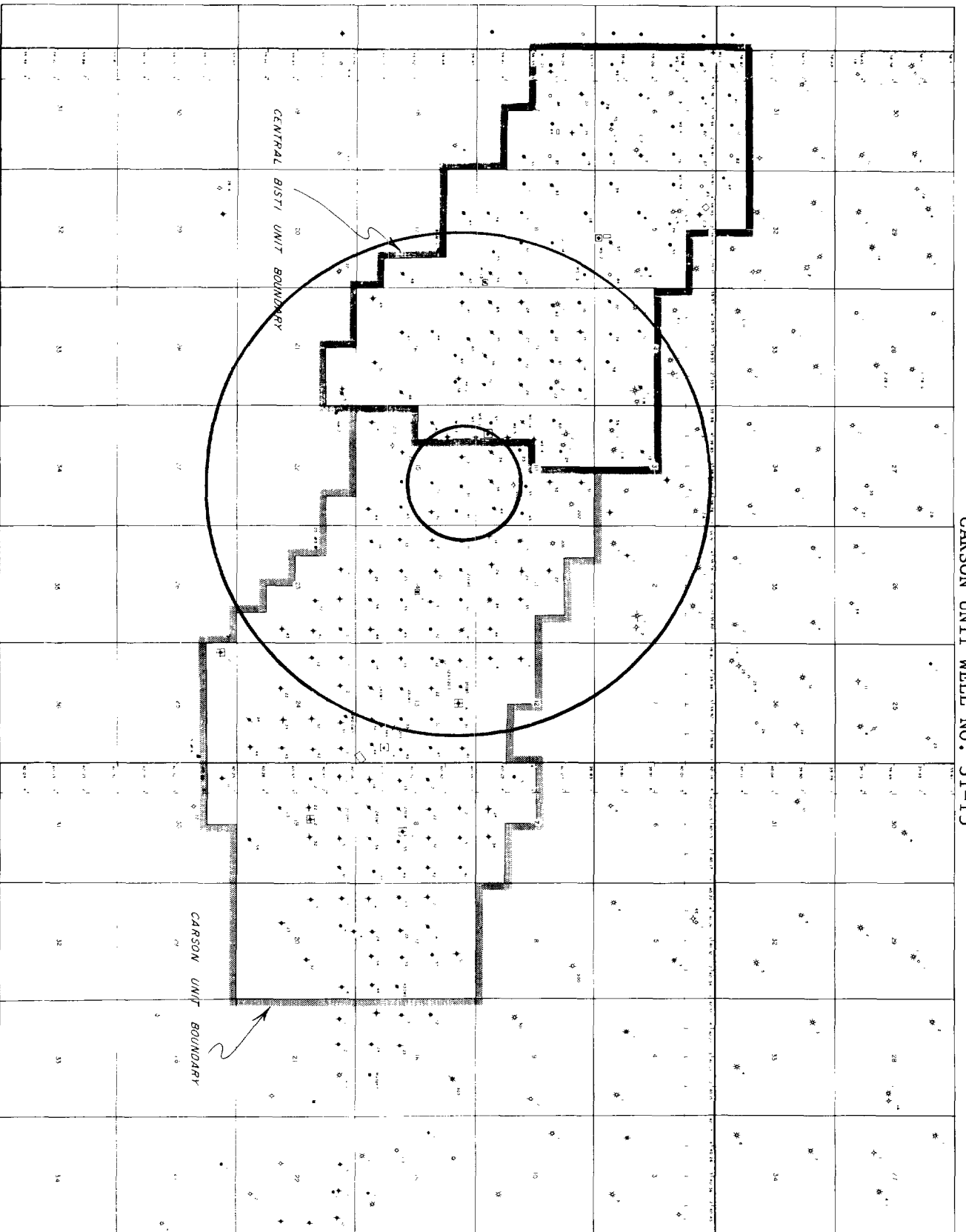
R 12 W

CARSON UNIT WELL NO. 31-15

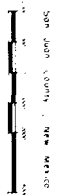
R 11 W

T 26 N

T 25 N



HIKON DEVELOPMENT COMPANY  
CENTRAL BISTI - CARSON UNIT AREA





WELL NAME Carson Unit Well No. 24-10

LOCATION 530' FSL. 1979' FWL SECTION 10 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6210.6'

RBM 6219.4'

DF 6218.2'

KB 8.8'

### SURFACE CASING

Hole size: 12-1/4"

Casing: 119' 8-5/8" 24# J-55

Casing set @ 129' with 100 sx  
containing 2% CaCl

— Packer corrosion fluid

— 2-3/8" EUE 8rd 4.7# J-55

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1185'</u>
Lewis	<u>1270'</u>
Cliffhouse	<u>1447'</u>
Menefee	<u>1948'</u>
Point Lookout	<u>3559'</u>
Mancos	<u>3731'</u>
Upper Gallup	<u>4640'</u>
Lower Gallup	<u>4728'</u>

CEMENT TOP 3877' (calculated)

### PERFORATIONS

	<u>4742'-4763'</u>	<u>4742'-63'</u>
squeezed	<u>4775'-4788'</u>	
	<u>4817'-4828'</u>	PBD <u>4770'</u>
	<u>4833'-4848'</u>	<u>4775'-88'</u>
		<u>4817'-4828'</u>
		<u>4833'-4848'</u>
	PBD <u>4852'</u>	

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4869' 4-1/2" 9.5# J-55

Casing set @ 4877' with 150 sx  
containing 4% gel

TD 4880'

### WELL HISTORY

Spud date: 11/25/57

Original owner: Shell

IP \_\_\_\_\_ BOPD 503 BWPD 1

GOR 334

Completion treatment: 50,000# 20-40  
with 50,000 gallons oil

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing \_\_\_\_\_

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

WELL NAME CARSON UNIT 34-10

LOCATION 660' FSL, 1980' FEL SECTION 10 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6276'

RBM 6287'

DF 6285'

KB 11'

### SURFACE CASING

Hole size: \_\_\_\_\_

Casing: 8 5/8" 24# J-55

Casing set @ 134'  
w/85 sacks cement containing  
2% CaCl

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1122'</u>
Lewis	<u>1342'</u>
Cliffhouse	<u>1520'</u>
Menefee	<u>2014'</u>
Point Lookout	<u>3626'</u>
Mancos	<u>3794'</u>
Upper Gallup	<u>4703'</u>
Lower Gallup	<u>4791'</u>

### CEMENT TOP

Calc. TOC 3990'

### PERFORATIONS

4805'-4827'  
4837'-4842'  
4880'-4890'  
4896'-4903'

PBD 4943'

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4 1/2" 9.5"

Casing set @ 4943' TD 4950'  
w/150 sx cement containing 4% gel (yield 1.52)

### WELL HISTORY

Spud date: \_\_\_\_\_

Original owner: \_\_\_\_\_

IP 691 BOPD 690 BWPD 1

GOR \_\_\_\_\_

Completion treatment: 50,000# 20-40  
w/tracer & 200 ball sealers

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing \_\_\_\_\_

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks Records indicate well  
may be equipped with packer, no  
depth or type listed.

WELL NAME Carson Unit 44-10

LOCATION 790' FSL, 790' FEL SECTION 10 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE \_\_\_\_\_

RBM \_\_\_\_\_

DF 6218.9 KB

**SURFACE CASING**

Hole size: \_\_\_\_\_

Casing: 8 5/8" 24#

Casing set @ 89' w/85 sx

**FORMATION TOPS**

Fruitland	_____
Pictured Cliffs	<u>1067'</u>
Lewis	<u>1280'</u>
Cliffhouse	<u>1455'</u>
Menefee	<u>1930'</u>
Point Lookout	<u>3573'</u>
Mancos	<u>4470'</u>
Upper Gallup	_____
Lower Gallup	<u>4646'</u>

**CEMENT TOP**

**PERFORATIONS** 4747'-68', 4779'-86',  
4821'-31', 4837'-45'.

PBD \_\_\_\_\_

**PRODUCTION CASING**

Hole size: \_\_\_\_\_

Casing: 4 1/2" 9/5 #

Casing set @ 4887' w/150 sx TD 4890

**WELL HISTORY**

Spud date: 8/28/57

Original owner: Shell Oil

IP 1/31/58 BOPD 703 BWPD 1

GOR 120

Completion treatment: SOF w/500,000 gal  
oil & 1 #1 gal 20-20 sand

**CURRENT DATA**

Pumping Unit Lufkin 320

Tubing \_\_\_\_\_

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

WELL NAME Carson Unit 21-15

LOCATION 660' FNL, 2109' FWL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6250'

RBM \_\_\_\_\_

~~XXX~~ 6210' KB

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# J-55

Casing set @ 117' with 85 sacks

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1030'</u>
Lewis	<u>1248</u>
Cliffhouse	<u>1428'</u>
Menefee	<u>1933'</u>
Point Lookout	<u>3543'</u>
Mancos	<u>3707'</u>
Upper Gallup	_____
Lower Gallup	<u>4617'</u>

CEMENT TOP \_\_\_\_\_

PERFORATIONS 4719-40', 4752-65'  
4781-89', 4795' 4806'  
4812-22'

PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5#

Casing set @ 4837' with 150 sx TD 4840'

### WELL HISTORY

Spud date: 8/10/57

Original owner: Shell Oil

IP 1/22/57 BOPD 264 BWPD 0

GOR 310 (818 MCFD)

Completion treatment: 50,000 gal crude & 1#/gal 20-40 sand

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing 2-3/8" set at 4712'

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

WELL NAME Carson Unit 21-15

LOCATION 660' FNL, 2109' FWL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6250'

RBM \_\_\_\_\_

~~XXX~~ 6210' KB

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# J-55

Casing set @ 117' with 85 sacks

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1030'</u>
Lewis	<u>1248</u>
Cliffhouse	<u>1428'</u>
Menefee	<u>1933'</u>
Point Lookout	<u>3543'</u>
Mancos	<u>3707'</u>
Upper Gallup	_____
Lower Gallup	<u>4617'</u>

### CEMENT TOP

PERFORATIONS 4719-40', 4752-65'  
4781-89', 4795'4806'  
4812-22'

PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5#

Casing set @ 4837' with 150 sx

TD 4840'

### WELL HISTORY

Spud date: 8/10/57

Original owner: Shell Oil

IP 1/22/57 BOPD 264 BWPD 0

GOR 310 (818 MCFD)

Completion treatment: 50,000 gal crude & 1#/gal 20-40 sand

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing 2-3/8" set at 4712'

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

WELL NAME CARSON UNIT Well No. 41-15

LOCATION 860' ENL. 700' FEL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6249'

RBM 6261'

DF 6259'

*KB 12'*

### SURFACE CASING

Hole size: 12 1/4"

Casing: 8 5/8" 24# J-55

Casing set @ 133' w/85 sx

Construction Cement and 2%  
CaCl. Circulated

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1111</u>
Lewis	<u>1302</u>
Cliffhouse	<u>1465</u>
Menefee	<u>2008</u>
Point Lookout	<u>3567</u>
Mancos	<u>3751</u>
Upper Gallup	<u>4658</u>
Lower Gallup	<u>4745</u>

### CEMENT TOP

Calc. TOC 4096'

### PERFORATIONS

4759-4778

4834-4844

4850-4859

w/4 1/2" JSPF

PBD 4900

### PRODUCTION CASING

Hole size: 7 7/8"

Casing: 4 1/2" 9.5# J-55

Casing set @ 4900 w/150 TD 4905'  
sx Construction Cement with 4% Gel

### WELL HISTORY

Spud date: 6-19-57

Original owner: Shell Oil Company

IP 212 BOPD 0 BWPD \_\_\_\_\_

GOR 460

Completion treatment: NONE

Frac all zones N/50,000# sand in 19

### CURRENT DATA

Pumping Unit M-320D-213-120

Tubing \_\_\_\_\_

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks Well was TA by Shell in  
1978 after finding 112' mud  
in casing.

WELL NAME Carson Unit 32-15

LOCATION 1980' FNL, 1980' FEL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE \_\_\_\_\_

RBM \_\_\_\_\_

DF \_\_\_\_\_

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# 8rd

Casing set @ 138' with 85 sacks

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1058'</u>
Lewis	<u>1252'</u>
Cliffhouse	<u>1415'</u>
Menefee	<u>1972'</u>
Point Lookout	<u>3523'</u>
Mancos	<u>3703'</u>
Upper Gallup	_____
Lower Gallup	<u>4611'</u>

### CEMENT TOP

PERFORATIONS 4712-30', 4754-60',  
4771-77', 4789-98',  
4805-10'.

PBD 4850'

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5# 8rd

Casing set @ 4855' with 150 sx

TD 4870'

### WELL HISTORY

Spud date: 6/6/57

Original owner: Shell Oil

IP 8/23/57 BOPD 181 BWPD 0

GOR 690 (125 MCFD)

Completion treatment: Frac w/ 30,000 gal  
crude, 1#/gal 20-40 sand

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing 2-3/8" @ 4696'

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_

WELL NAME Carson Unit 42-15

LOCATION 1980' FNL, 660' FEL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE 6220'

RBM \_\_\_\_\_

DF 6229' KB

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# J-55

Casing set @ 109' w/ 100 sx

### FORMATION TOPS

Fruitland	_____
Pictured Cliffs	<u>1047'</u>
Lewis	<u>1251'</u>
Cliffhouse	<u>1421'</u>
Menefee	<u>1948'</u>
Point Lookout	<u>3500'</u>
Mancos	<u>3683'</u>
Upper Gallup	_____
Lower Gallup	<u>4612'</u>

### CEMENT TOP

PERFORATIONS 4711-31', 4744-54',  
4772-81', 4788-98',  
4804-13'.

PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5#

Casing set @ 4850' w/ 150 sx

TD 4855'

### WELL HISTORY

Spud date: 7/20/59

Original owner: Shell Oil

IP 9/30/59 BOPD 37 BWPD 0

GOR 900 (33 MCFD)

Completion treatment: 200 gal mud acid &  
SOF w/ 10,000 gal crude, 1#/gal sand

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing 2-3/8" @ 4790'

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks \_\_\_\_\_



WELL NAME CBU WI-7  
LOCATION 1315' FNL, 1315' FWL SECTION 15 T 25N R 12W  
CURRENT STATUS: P & A'd

GLE \_\_\_\_\_

RBM \_\_\_\_\_

DF 6268'

### SURFACE CASING

Hole size: 12-1/4"  
Casing: 8-5/8" 24# 8rd  
Casing set @ 372' w/ 250 sx

### FORMATION TOPS

Fruitland \_\_\_\_\_  
Pictured Cliffs \_\_\_\_\_  
Lewis \_\_\_\_\_  
Cliffhouse \_\_\_\_\_  
Menefee \_\_\_\_\_  
Point Lookout \_\_\_\_\_  
Mancos 3729'  
Upper Gallup \_\_\_\_\_  
Lower Gallup 4742'

### CEMENT TOP

PERFORATIONS 4754'-72', 4784'-88'  
4792'-4801', 4812'-24',  
4834'-43', 4850'-61',  
4871'-77', 4855'-59',  
4836'-40'  
PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"  
Casing: 4-1/2" 9.5# 8rd  
Casing set @ 4973' w/ 300 sx

TD 4973'

### WELL HISTORY

Spud date: 9/4/59  
Original owner: Sun Ray-Mid-Continent  
IP \_\_\_\_\_ BOPD \_\_\_\_\_ BWPD \_\_\_\_\_  
GOR \_\_\_\_\_  
Completion treatment: \_\_\_\_\_

### CURRENT DATA

Pumping Unit \_\_\_\_\_  
Tubing 2-3/8"  
Pump size \_\_\_\_\_  
Rod string \_\_\_\_\_  
Remarks WI started 10/2/59

Squeeze perms 4754'-4877' with 15  
sx, spot 10 sx plug across Pt. Lookout  
inside 4-1/2" casing. Cut off 4-1/2"  
casing at 1855', pulled some. Spot  
30 sx plug across stub, 1910'-1800'.  
Spot 40 sx over PC. 10 sx surface  
plug.

WELL NAME CBU WI-6

LOCATION 5' FNL, 1315' FWL SECTION 15 T 25N R 12W

CURRENT STATUS: \_\_\_\_\_

GLE \_\_\_\_\_

RBM \_\_\_\_\_

DF \_\_\_\_\_

### SURFACE CASING

Hole size: 12-1/4"

Casing: 8-5/8" 24# J-55

Casing set @ 310' w/ 225 sx

### FORMATION TOPS

Fruitland \_\_\_\_\_

Pictured Cliffs \_\_\_\_\_

Lewis \_\_\_\_\_

Cliffhouse \_\_\_\_\_

Menefee \_\_\_\_\_

Point Lookout \_\_\_\_\_

Mancos \_\_\_\_\_

Upper Gallup \_\_\_\_\_

Lower Gallup \_\_\_\_\_

CEMENT TOP 3200'

PERFORATIONS 4760'-80', 4792'-4804'  
4823'-29', 4835'-44',  
4850'-64', 4855'-59'.

PBD \_\_\_\_\_

### PRODUCTION CASING

Hole size: 7-7/8"

Casing: 4-1/2" 9.5# J-55

Casing set @ 4927' w/ 350 sx

TD 4925'

### WELL HISTORY

Spud date: 8/25/59

Original owner: \_\_\_\_\_

IP \_\_\_\_\_ BOPD \_\_\_\_\_ BWPD \_\_\_\_\_

GOR \_\_\_\_\_

Completion treatment: \_\_\_\_\_

### CURRENT DATA

Pumping Unit \_\_\_\_\_

Tubing 167 jts 2-3/8"

Pump size \_\_\_\_\_

Rod string \_\_\_\_\_

Remarks WI started 10/2/59

Squeezed perms 4760-4864' with 15 sx,  
spot 10 sx plug across Pt. Lookout  
inside 4-1/2" casing. Cut 4-1/2" csg  
off at 1797', pulled some. Spot 30  
sx plug across stub 1850'-1750'.  
Spot 40 sx plug over PC, 10 sx surface  
plug.

sa. juan testing labo 10/14, inc.

907 WEST APACHE

P.O. BOX 2079

FARMINGTON, NEW MEXICO

PHONE

327-4966

Date June 10, 1977

Report to Hixon Development Company  
Requested by A. Kuchera, Mgr. Sampled by Hixon Personnel  
Project CBU #5 Location NW NW Sec. 6, T25N, R12W  
Source of Material Lower Gallup Produced Water

Lab No. 24509 Water Analysis for Petroleum Engineering

**TEST RESULTS**

WATER ANALYSIS FOR PETROLEUM  
ENGINEERING

Constituent

Total Solids 2263 ppm  
pH 7.25  
Resistivity 2.94 ohms/meter @70°F  
Conductivity 3,400 micromhos/cm @ 70°F

Constituents

	Meg/L	ppm
Cations		
Sodium	29.3	674
Calcium	2.3	45
Magnesium	0.5	6
Iron	neg.	3
Barium	0	0

Comments

Essentially this is a 0.2% sodium sulfate solution.

Anions

Chloride	4.1	145
Bicarbonate	4.0	244
Carbonate	0	0
Hydroxide	0	0
Sulfate	24.0	1150

Copies to Hixon Development Co. (3)  
P.O. Box 2810  
Farmington, New Mexico 87401

TEST NO. 22096

Certified by:



NOTICE

HIXON DEVELOPMENT COMPANY, P. O. Box 2810, Farmington, New Mexico 87499, (505) 325-6984, whose agent is Aldrich L. Kuchera hereby notifies interested parties that the Carson Unit Well # 31-15 located at 790' FNL, 1980' FEL, Section 15, T25N, R12W is to be converted to a water injection well. Maximum rate will be 1200 BWIPD at less than 1500 psi.

Any request or objection should be filed with Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

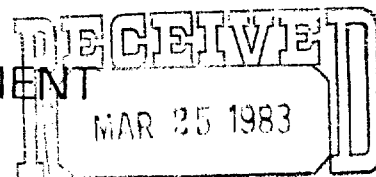
Legal No. 12871 to be published on 3/17/83 in the Farmington Daily Times

*Confirmed by telephone to the Daily Times  
on 5/3/83. Spoke with Ann at 325-4545  
ext. 272.*



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE



OIL CONSERVATION DIVISION

SANTA FE 1600 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

OIL CONSERVATION DIVISION  
BOX 2088  
SANTA FE, NEW MEXICO 87501

DATE 3-24-83

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX ☒ \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated 3-16-83  
for the Hixon Development Co. Carson Unit 31#15 B-15-25N-12W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve with maximum injection pressure of 945 ps.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

Jeff A. Edmister