06/09/09 W. Jones 06/09/09 SWD pKAA0916051659

ABOVE THIS LINE FOR DIVISION USE ONLY 827A

30-025-34593
Goodwin State #1
HRC, Inc.
131652

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Larry R. Scott	Larry R. Scott	Consultant	6/9/09
Print or Type Name	Signature	Title	Date

lynxpet@leaco.net
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance __x__Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: HRC, Inc.

ADDRESS: P.O. Box 5102, Hobbs, NM 88244

CONTACT PARTY: Gary Schubert PHONE: 575-393-3194

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: Larry R. Scott TITLE: Consultant

SIGNATURE: Larry R Scott DATE: 06-04-09

E-MAIL ADDRESS: lrscott@leaco.net

* 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

Side 2

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, 1220 South St. Francis Dr., 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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: HRC, Inc.

WELL NAME & NUMBER: Goodwin State No. 1

WELL LOCATION:					
330'FNL & 330' FWL	D	6	19-S	37-E
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

See Attached

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8"

Cemented with: 790 sx. *or* _____ ft³

Top of Cement: 0' Method Determined: Circ 213 sx

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 5 ½"

Cemented with: 400 sx. *or* _____ ft³

Top of Cement: 5350' Method Determined: CBL

Total Depth: 7510'

Injection Interval

5110 feet to 6040'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8" Lining Material: IPC

Type of Packer: Baker Model R or equivalent

Packer Setting Depth: 5000'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____ Yes x No

   If no, for what purpose was the well originally drilled? Goodwin Drinkard/Abo producer

2. Name of the Injection Formation: San Andres, Delaware, Bone Springs

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. _____

   See Attached Schematic

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Eumont Yates/Seven Rivers/Queen @ 3700-4000' Goodwin Drinkard/Abo@6676-7510'

GOODWIN STATE NO. 1
FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

VI. DATA ON WELLS IN THE AREA OF REVIEW

1. XTO ENERGY, INC.
   Monument '36' State No. 1
   384' FSL & 1216' FEL of Section 36, T-18S, R-36E
   Spud: 1/27/1999 Elevation: 3752' KB TD: 7512'
   14-3/4" Hole; 11-3/4" Csg. @ 425' w/300 sx. circulated
   11" Hole; 8-5/8" Csg. @ 2852' w/900 sx. circulated
   7-7/8" Hole; 5-1/2" Csg. @ 7283' w/710 sx.; TOC @ 2250'
   Open Hole Completion: 7283'-7512'
   Active Producer

2. XTO ENERGY, INC.
   Monument '36' State No. 2
   1632' FSL & 1298' FEL of Section 36, T-18S, R-36E
   Spud: 4/07/1999 Elevation: 3742' GL TD: 7509'
   11" Hole; 8-5/8" Csg. @ 1515' w/465 sx. circulated
   7-7/8" Hole; 5-1/2" Csg. @ 7251' w/1470 sx.; TOC @ 820'
   Open Hole Completion: 7260'-7509'
   Active Producer

3. SAHARA OPERATING COMPANY
   Indiana '1' No. 1
   1682' FNL & 1975' FEL of Section 1, T-19S, R-36E
   Spud: 6/08/1998 Elevation: 3738' GL TD: 7480'
   12-1/4" Hole; 8-5/8" Csg. @ 1550' w/800 sx. circulated
   7-7/8" Hole; 5-1/2" Csg. @ 7480' w/1530 sx. circulated
   Perforations: 7459'-7468', 7472'-7476', 7276'-82', 7284'-88', 7292'-95', 7297'-7302', 7307'-12', 7315'-22', 7326'-30', 7336'-42', 7353'-60', 7369'-73', 7378'-90', 7404'-12', 7429'-41', & 7446'-47'
   Active Producer

4. SAHARA OPERATING COMPANY
   Indiana '1' No. 2
   744' FNL & 1653' FEL of Section 1, T-19S, R-36E
   Spud: 8/21/1998 Elevation: 3745' KB TD: 7480'
   12-1/4" Hole; 8-5/8" Csg. @ 1593' w/790 sx. circulated
   7-7/8" Hole; 5-1/2" Csg. @ 7205' w/1288 sx.; TOC @ 1330'
   Open Hole Completion: 7205'-7480'
   Perforations: 6566'-86', 6592'-97' and 6602'-17' Squeezed w/25 sx. Class 'C' cmt.
   Active Producer

5. XTO ENERGY, INC.
   Goodwin '10' State SWD No. 1
   2160' FSL & 330' FWL of Section 31, T-18S, R-36E
   Spud: 11/24/1999 Elevation: 3746' KB TD: 7794'
   12-1/4" Hole; 8-5/8" Csg. @ 1298' w/605 sx. circulated
   8-3/4" Hole, 5-1/2" Csg. @ 7792' w/2010 sx. circulated
   Perforations: Abo from 7634'-59' and 7679'-99' Squeezed
   Abo from 7383'-96' and 7575'-95'
   CIBP @ 7350' w/35' cmt. cap.
   PBTD: 7315'
   Perforations: 5380'-84', 5420'-60', 5546'-64', 5864'-83', 6890'-6920', 6820'-32', 6842'-55', 6976'-96', and 7003'-47'
   Active Salt (Produced) Water Disposal Well

VII. PROPOSED OPERATIONS

1. Average Daily Rate: 700 BWPD
   Maximum Daily Rate: 1400 BWPD
2. Closed System
3. Average Injection Pressure: 600 psig
   Maximum Injection Pressure: 1000 psig
4. Source of water will be produced water from various formations in the immediate area which may include Abo, Drinkard, Bone Springs, Delaware, San Andres, Penrose/Queen, and Yates-Seven Rivers.
5. Water sample analysis from two offset producing wells are attached.

VIII. GEOLOGIC DATA

The proposed injection zones include the lower San Andres, Delaware, and Bone Springs formations in the interval 5110'-6040'. The zones consist of limestons, dolomites, and sands. Regionally the area is considered to be on the western edge of the Central Basin Platform transitioning to the Delaware Basin. The Ogallala aquifer overlies the proposed location. Maximum well depth within one mile is

180 feet with average depth to water of 52 feet. Attached is the Water Column Report from the New Mexico State Engineer's Office for a radius of one mile around the proposed location.

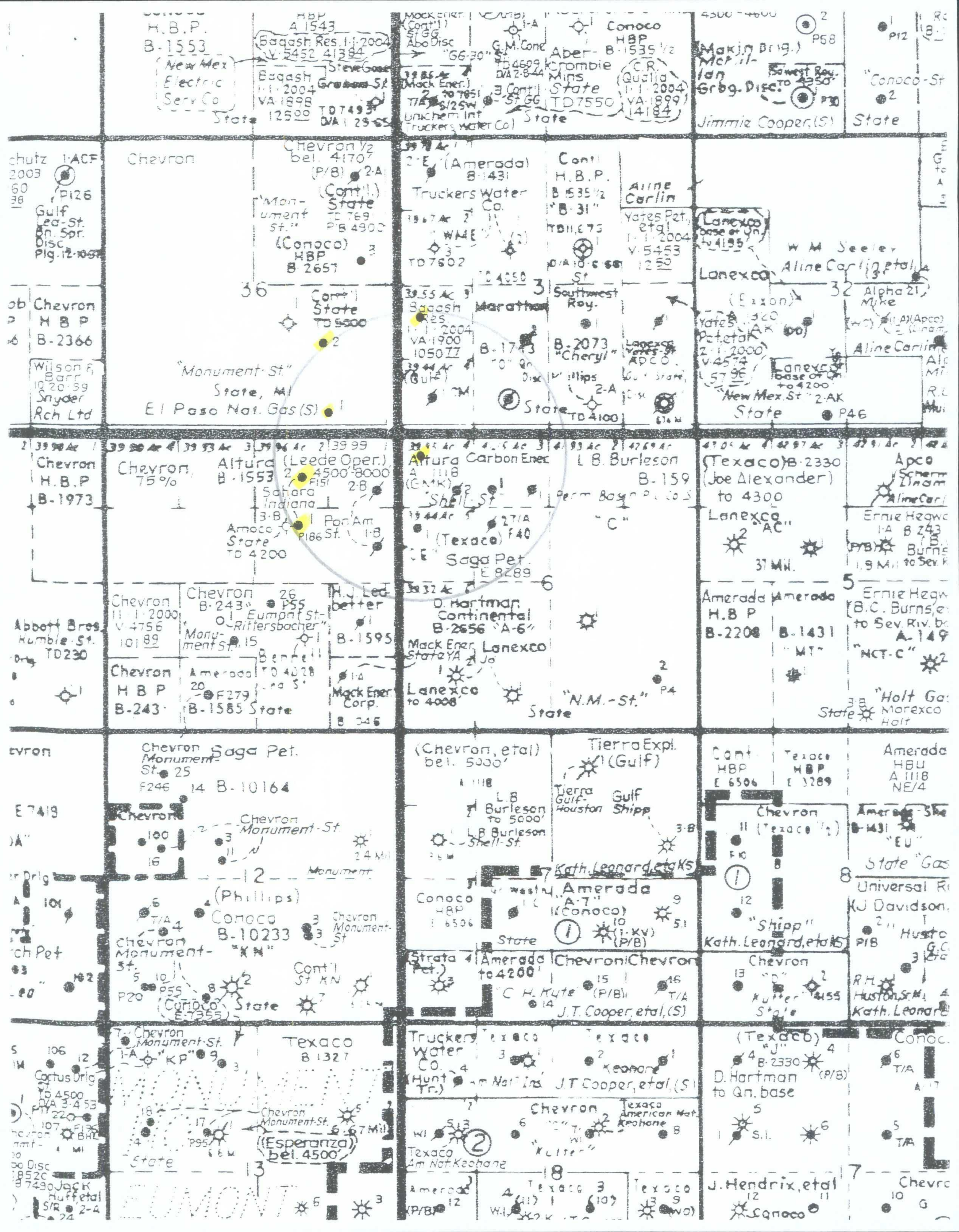
IX. Perforated intervals will be acidized as required with up to a total of 10,000 gallons of 15% HCL-NE-FE acid.

X. Well logs have been previously submitted.

XI. The six wells located in the vicinity of the wellbore are in service with the local electric utility company. No sample taps are installed and we were unable to obtain water samples for analysis.

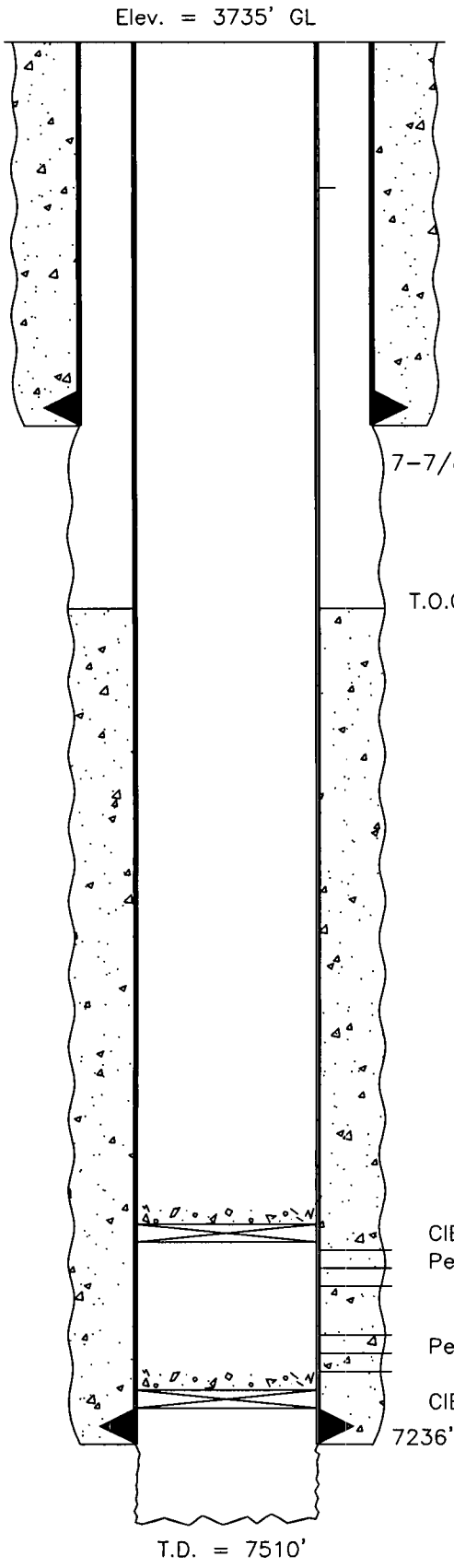
XII. Examination of the available geologic and engineering data reveals no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. "Proof of Notice" advertisement and return receipts are attached.


H.B.P.
B-1553
New Mex Electric Serv Co
State
HBP
A 1543
Baqash Res. 1-1-2004
V-5452 41384
Steve Gose
Graham St.
Baqash
1-1-2004
VA 1898
125 00
TD 7493
D/A 1-25-65
Mack Ener.
Abo Disc
"GG-30"
G.M. Cont
TD 4699
D/A 2-8-44
Cont'l St GG
Unichem Int
Truckers Water Co
State
Conoco
HBP
B-1535 1/2
Aber-crombie
Mins
State
TD 7550
C.R. Qualia
1-1-2004
VA-1899
14184
Makin Drlg.
McMillan
Grbg. Disc.
Jimmie Cooper (S)
State
P58
P12
P30
"Conoco-St
Chevron
Chevron 1/2
bel. 4170'
(P/B)
2-A
(Cont'l.)
State
"Monument St."
TD 7691
P/B 4900
(Conoco)
HBP
B-2657
36
Cont'l
State
TD 5000
"Monument-St."
State, MI
El Paso Nat. Gas (S)
(Amerada)
B-1431
Truckers Water Co.
WME
TD 7602
Cont'l
H.B.P.
B-1535 1/2
"B-31"
Aline Carlin
Yates Pet. etal
1-1-2004
V-5453
12 50
TD 4050
3
Southwest Roy.
Marathon
Baqash Res.
1-1-2004
VA-1900
105077
B-1743
"0" Qn Disc
B-2073
"Cheryl"
Phillips
2-A
State
TD 4100
Lanexco
Yates-St
APCO
Lanexco
base of Qn to 4155
W M Seeley
Aline Carlin etal
Lanexco
32
(Exxon)
Alpha 21 Mike
Yates Pet. etal
2-1-2000
V-4574
57 96
Lanexco
base of Qn to 4200
New Mex. St.
2-AK
State
P46
Aline Carlin
Gulf
Lea-St.
Bn. Spr. Disc
Plg. 12-10-57
P126
Chevron
HBP
B-2366
Wilson & Barr
10-20-59
Snyder Rch Ltd
Chevron
H.B.P
B-1973
Chevron
75%
Altura
B-1553
(Leede Oper.)
4500-8000
Sahara Indiana
F151
2-B
Amoco
State
TD 4200
P186
Pan Am St.
1-B
Altura
A-1118
(GMK)
Carbon Ener.
Shell-St.
(Texaco)
F40
Saga Pet.
E 8289
6
L.B. Burleson
B-159
Perm Basin
"C"
(Texaco) B-2330
(Joe Alexander)
to 4300
Lanexco
"AC"
3.7 Mil.
Apco
Ernie Hegwer
B-243
B.C. Burns
to Sev. Riv.
5
Abbott Bros.
Humble-St.
TD 230
Chevron
11-1-2000
V-4756
101 89
Chevron
B-243
P55
Eumont St.
"Rittersbacher"
Monument St.
15
H.J. Ledbetter
B-1595
Bennett
TD 4028
Lea St.
Chevron
HBP
B-243
Amerada
20
F279
B-1585 State
Mack Ener. Corp.
B-046
D. Hartman
Continental
B-2656 "A-6"
Mack Ener.
State YA
Lanexco
Lanexco
to 4008'
"N.M.-St."
State
P4
Amerada
H.B.P
B-2208
Amerada
B-1431
"MT"
Ernie Hegwer
B.C. Burns, etal
to Sev. Riv.
A-149
"NCT-C"
"Holt Gas"
Morexco
Holt
State
Chevron
Monument-St.
Saga Pet.
25
F246
14 B-10164
E 7419
Chevron
Chevron
Monument-St.
100
16
2.4 Mil
Monument
12
(Phillips)
Conoco
B-10233
"KN"
Chevron
Monument-St.
Chevron
Monument-St.
Cont'l
St KN
P20
P55
(Conoco)
E-7355
State
(Chevron, etal)
bel. 5000'
A-1118
L.B. Burleson
to 5000'
L.B. Burleson
Shell-St.
Tierra Expl.
(Gulf)
Tierra
Gulf-Houston
Gulf
Shipp
3-B
Kath. Leonard, etal(S)
Conoco
HBP
E-6506
State
Amerada
"A-7"
(Conoco)
(1-KV)
(P/B)
(Strata Pet.)
Amerada
to 4200'
Chevron
Chevron
"C.H. Kute"
(P/B)
T/A
J.T. Cooper, etal, (S)
Cont'l
HBP
E 6506
Texaco
HBP
E 3289
Chevron
(Texaco 1/2)
F10
8
"Shipp"
Kath. Leonard, etal(S)
Chevron
"D"
"Kutter"
State
Amerada
HBU
A 1118
NE/4
Amerada-Shell
B-1431
"EU"
State "Gas"
Universal R
(J Davidson)
Huston
P/B
R.H. Huston, Sr.
Kath. Leonard
Chevron
Monument-St.
"KP"
Cactus Drlg
to 4500
D/A 3-4-53
Texaco
B-1327
Chevron
Monument-St.
6.7 Mil
(Esperanza)
bel. 4500'
State
13
EUMONT
Truckers Water Co.
(Hunt Tr.)
Texaco
Texaco
Am Nat Ins
Keohane
J.T. Cooper, etal, (S)
Chevron
Texaco
American Nat.
Keohane
Texaco
Am Nat Keohane
"Kutter"
18
Amerada
(P/B)
Texaco
Texaco
(Texaco)
"J"
B-2330
(P/B)
D. Hartman
to Qn. base
S.I.
J. Hendrix, etal
Conoco
17
Conoco
T/A
Chevron

CURRENT WELLBORE

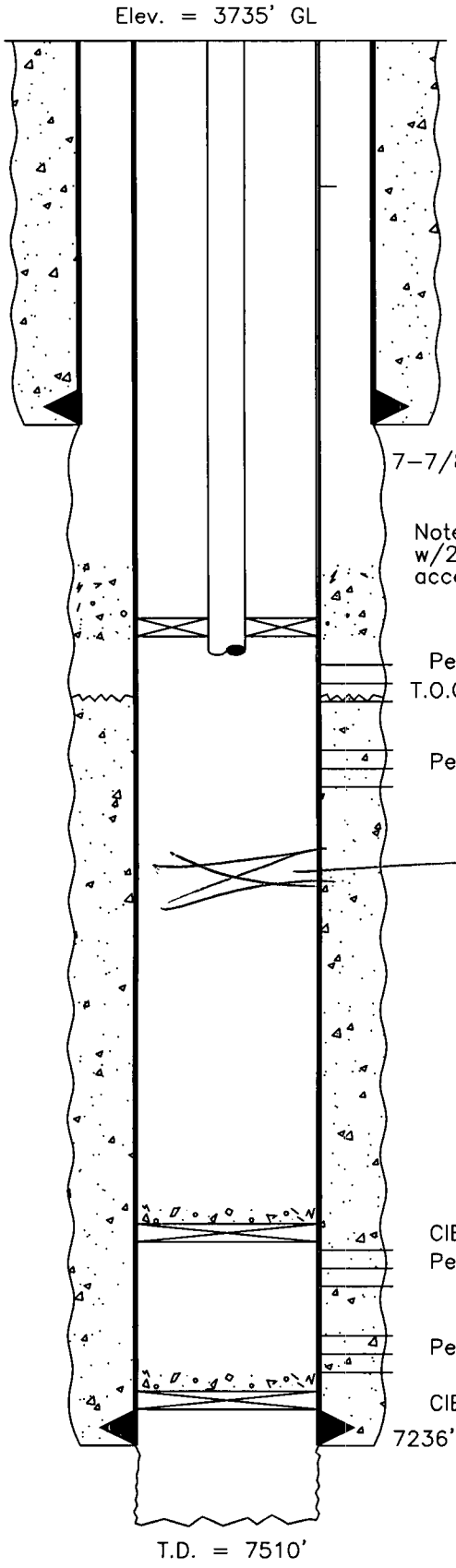
5/26/2009



HRC, Inc.
Goodwin State No. 1
330' FNL & 330' FWL
Sec. 6, T–19S, R–37E
Lea County, New Mexico

PROPOSED SWD INJECTOR

5/26/2009



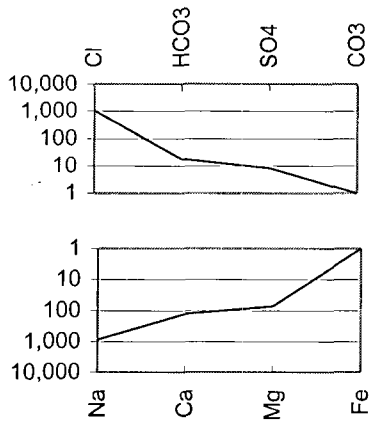
HRC, Inc.
Goodwin State No. 1
330' FNL & 330' FWL
Sec. 6, T-19S, R-37E
Lea County, New Mexico

CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	North Well	Date Sampled	: 06/03/08
Lease Name	:	Capitan Rep.	:
Well Number	:	Company Rep.	:
Location	: Lea County, N.M.		

	ANALYSIS					
1.	pH	7.9				
2.	Specific Gravity @ 60/60 F.	1.048				
3.	CaCO3 Saturation Index @ 80 F.	+1.510	'Calcium Carbonate Scale Possible'			
	@ 140 F.	+2.440	'Calcium Carbonate Scale Possible'			
	Dissolved Gasses					
4.	Hydrogen Sulfide	300	PPM			
5.	Carbon Dioxide	10	PPM			
6.	Dissolved Oxygen	Not Determined				
	Cations	mg/L	/ Eq. Wt.	=	MEQ/L	
7.	Calcium (Ca++)	2,600	/ 20.1	=	129.35	
8.	Magnesium (Mg++)	911	/ 12.2	=	74.69	
9.	Sodium (Na+) Calculated	19,873	/ 23.0	=	864.06	
10.	Barium (Ba++)	Not Determined	/ 68.7	=	0.00	
	Anions					
11.	Hydroxyl (OH-)	0	/ 17.0	=	0.00	
12.	Carbonate (CO3=)	0	/ 30.0	=	0.00	
13.	Bicarbonate (HCO3-)	1,078	/ 61.1	=	17.65	
14.	Sulfate (SO4=)	400	/ 48.8	=	8.20	
15.	Chloride (Cl-)	37,000	/ 35.5	=	1,042.25	
	Other					
16.	Soluble Iron (Fe)	8	/ 18.2	=	0.44	
17.	Total Dissolved Solids	61,863				
18.	Total Hardness As CaCO3	10,250				
	Calcium Sulfate Solubility @ 90 F.	3,241				
20.	Resistivity (Measured)	0.140	Ohm/Meters	@ 76	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

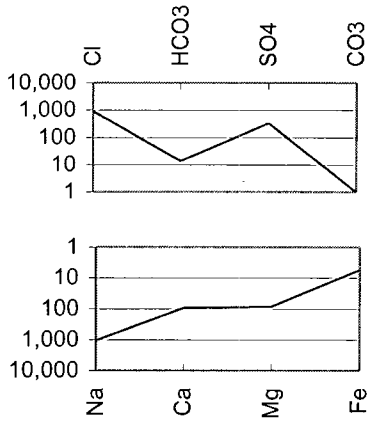
COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	17.65	=	1,430
CaSO4	68.07	X	8.20	=	558
CaCl2	55.50	X	103.51	=	5,745
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	74.69	=	3,557
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	864.06	=	50,513

CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	South Well	Date Sampled	: 06/03/08
Lease Name	:	Capitan Rep.	:
Well Number	:	Company Rep.	:
Location	: Lea County, N.M.		

	ANALYSIS					
1.	pH	8				
2.	Specific Gravity @ 60/60 F.	1.038				
3.	CaCO3 Saturation Index @ 80 F.	+1.370	'Calcium Carbonate Scale Possible'			
	@ 140 F.	+2.300	'Calcium Carbonate Scale Possible'			
	Dissolved Gasses					
4.	Hydrogen Sulfide	240	PPM			
5.	Carbon Dioxide	90	PPM			
6.	Dissolved Oxygen	Not Determined				
	Cations	mg/L	/ Eq. Wt.	=	MEQ/L	
7.	Calcium (Ca++)	1,900	/ 20.1	=	94.53	
8.	Magnesium (Mg++)	1,033	/ 12.2	=	84.65	
9.	Sodium (Na+) Calculated	24,542	/ 23.0	=	1,067.04	
10.	Barium (Ba++)	Not Determined	/ 68.7	=	0.00	
	Anions					
11.	Hydroxyl (OH-)	0	/ 17.0	=	0.00	
12.	Carbonate (CO3=)	0	/ 30.0	=	0.00	
13.	Bicarbonate (HCO3-)	830	/ 61.1	=	13.58	
14.	Sulfate (SO4=)	16,164	/ 48.8	=	331.23	
15.	Chloride (Cl-)	32,000	/ 35.5	=	901.41	
	Other					
16.	Soluble Iron (Fe)	100	/ 18.2	=	5.49	
17.	Total Dissolved Solids	76,468				
18.	Total Hardness As CaCO3	9,000				
	Calcium Sulfate Solubility @ 90 F.	2,364	'Calcium Sulfate Scale Possible'			
20.	Resistivity (Measured)	0.200	Ohm/Meters @ 77 Degrees (F)			

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	13.58	=	1,100
CaSO4	68.07	X	80.95	=	5,510
CaCl2	55.50	X	0.00	=	0
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	84.65	=	5,095
MgCl2	47.62	X	0.00	=	0
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	165.63	=	11,765
NaCl	58.46	X	901.41	=	52,696

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 03792		PRO	LE		4	2	01	19S	36E	659238	3618348*	587	106	47	59
L 03792 APPRO		PRO	LE		4	2	01	19S	36E	659238	3618348*	587	106	47	59
L 03079		PRO	LE		1	4	36	18S	36E	658813	3619550*	998	122	65	57
L 03079 APPRO		PRO	LE		1	4	36	18S	36E	658813	3619550*	998	122	65	57
L 11573		DOM	LE	2	2	3	31	18S	37E	660123	3619669*	1004	150		
L 03153		PRO	LE				31	18S	37E	660229	3619765*	1144	140	70	70
L 03153 APPRO		PRO	LE				31	18S	37E	660229	3619765*	1144	140	70	70
L 04324		PRO	LE		1	4	01	19S	36E	658843	3617938*	1148	110	40	70
L 04324 APPRO		PRO	LE		1	4	01	19S	36E	658843	3617938*	1148	110	40	70
L 03166		PRO	LE		4	1	31	18S	37E	660016	3619973*	1216	108	35	73
L 03166 APPRO		PRO	LE		4	1	31	18S	37E	660016	3619973*	1216	108	35	73
L 07843		SAN	LE	3	3	2	36	18S	36E	658705	3619852*	1293	181	55	126
L 02601		PRO	LE			3	06	19S	37E	659655	3617548*	1314	115		
L 02695		PRO	LE	3	4	3	06	19S	37E	659946	3617446*	1470	100	50	50
L 02695 APPRO		PRO	LE	3	4	3	06	19S	37E	659946	3617446*	1470	100	50	50
L 05189		PRO	LE		1	1	31	18S	37E	659606	3620371*	1515	120	65	55

Average Depth to Water: **52 feet**
Minimum Depth: **35 feet**
Maximum Depth: **70 feet**

Record Count: 16

Basin/County Search:

Basin: Lea County **County:** Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 659532 **Northing (Y):** 3618857 **Radius:** 1700

***UTM location was derived from PLSS - see Help**

Lynx Petroleum Consultants, Inc.

P.O. Box 1708
3325 Enterprise Drive
Hobbs, New Mexico 88241

505 392-6950 Fax: 505 392-7886

RECEIVED
2009 JUN 24 AM 10 23

MEMO

June 23, 2009

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

From: Larry R. Scott, Consultant for
HRC, Inc.

Re: Authorization to Inject
Goodwin State No. 1
330' FNL & 330' FWL, Section 6, T-19S, R-37E
Lea County, New Mexico

Enclosed please find a copy of the "proof of notice" to the owners of the surface of the land and "proof of publication" of the legal notice, all to be included with the previously submitted Application for Authorization to Inject (Form C-108) in reference to the Goodwin State No. 1.

Thank you.

SLO
POB 1148
Santa Fe, NM
87504-1148

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Lewis B. Burleson, Inc.
POB 2479
Midland, TX 79702

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Julie Truett ☐ Agent ☐ Addressee

B. Received by (Printed Name) Julie Truett C. Date of Delivery 6-8-09

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 2560 0003 0324 0885

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
ConocoPhillips
3300 N. A Street, Bldg 6
Midland, TX 79705

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X K Pratt ☐ Agent ☐ Addressee

B. Received by (Printed Name) K PRATT C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 2560 0003 0324 0908

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Sahara Operating Co
PO Box 4130
Midland, TX
79704

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X George McAlpine ☐ Agent ☐ Addressee

B. Received by (Printed Name) GEORGE McALPINE C. Date of Delivery 6/8/2009

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

MIDLAND TX 797 USPS JUN 8 2009

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 2560 0003 0324 0847

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
SLO
POB 1148
Santa Fe, NM
87504-1148

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

SANTA FE NM 875
JUN 11 2009
USPS

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Sue Royalties
6 Desta Drive,
Suite 2100
Midland, TX
79705

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Marathon Oil Co.
5555 San Felipe St.
Houston, TX
77056

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X L Hadden ☐ Agent ☐ Addressee

B. Received by (Printed Name) L HADDEN C. Date of Delivery 6/08

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

Article Number (Transfer from service label) 7007 2560 0003 0324 0878

Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Oxy USA
PO Box 4294
Houston, TX 77210-
4294

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X James Bear ☐ Agent ☒ Addressee

B. Received by (Printed Name) JAMES BEAR C. Date of Delivery JUN 2 2009

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 2560 0003 0324 0892

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

XTO Energy, Inc.
200 N. Loraine,
Suite 800
Midland, TX 79701

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X S. Garrett ☐ Agent ☐ Addressee

B. Received by (Printed Name) S GARRETT C. Date of Delivery 6-5-09

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 2560 0003 0324 0854

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-15

LEGAL

LEGAL NOTICE
June 17, 24 & July 1, 2009

NOTICE OF WATER DISPOSAL WELL

HRC, Inc., P.O. Box 5012, Hobbs, NM 88241, 575-393-3194, Contact - Gary Schubert, has made application to the New Mexico Oil Conservation Division to convert the Goodwin State No. 1 well from a producer into a commercial salt-water disposal well. The well is located 330' FNL & 330' FWL of Section 6, T-19S, R-37E, Lea County, New Mexico. Disposal will be into the San Andres, Delaware, Bone Springs formations between 5110 and 6040'. Interested parties must file objections or a request for a hearing with the NMOCD, 1220 South St. Francis Dr, Santa Fe, New Mexico, 87505, within 15 days of this notice.

#25030

Lynx Petroleum Consultants, Inc.
P. O. Box 1708
3325 Enterprise Drive
Hobbs, New Mexico 88241
505 392-6950 Fax: 505 392-7886

FACSIMILE TRANSMISSION

Company: OCD **Fax #:** 505-476-3462

Attention: Will Jones

From: Larry R. Scott for HRC,Inc. **Date:** 07/09/09

Number of pages (including this page): 2

MESSAGE: The following Affidavit of Publication should be attached to and made a part of Form C-108, Application for Authorization to Inject previously mailed to you on behalf of HRC, Inc.

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, July 09, 2009 11:34 AM
To: 'Larry Scott'
Cc: tfh@valornet.com; 'Gary Schubert'; Hill, Larry, EMNRD
Subject: RE: Disposal Application on behalf of HRC INC: Goodwin State #1 30-025-34593 Lower SA, Del, Bone Spring Commercial Disposal

Larry
Thanks for the reply.

No problem, I can write the permit so as to allow injection across the entire requested interval (the pressure limit will be set based on the permitted top) and if you determine on the fly that more than the lower perfs are actually needed - put a requirement to squeeze cement and verify the squeeze placement.

I know, HRC would do this anyway and otherwise our district office would require it, but this covers our UIC requirements.

This way also saves me some time re-visiting this application.

Thank You,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

From: Larry Scott [mailto:lrscott@leaco.net]
Sent: Thursday, July 09, 2009 11:00 AM
To: Jones, William V., EMNRD
Cc: tfh@valornet.com; 'Gary Schubert'
Subject: RE: Disposal Application on behalf of HRC INC: Goodwin State #1 30-025-34593 Lower SA, Del, Bone Spring Commercial Disposal

Will:

We got the cement top via CBL information from the C-101 submitted to the OCD by Xeric on 12/6/99. I don't know why Eddie missed this. Since the perforated interval requested in his application was above the existing TOC, he may have figured they would have to do some remedial cementing anyway, making the original TOC a moot point.

The lower set of perfs (5658'-6040' gross interval) in our app are >200' below the existing 5350' cement top and, if the upper perfs are required, the 200 sx. squeeze should very conservatively bring the TOC all the way to 4350'. With the upper set of perfs at 5110'—5376' we would still be >200' below the new TOC. We should be within your requirements either way.

I would very much like to have the flexibility to squeeze and shoot the upper set of perfs while we're rigged up and doing the conversion. We would have no problem with an amendment process as long as this could be accomplished timely without having to rig down and then come back at a later date. I think there is about a 70% chance that the upper perfs will be needed to obtain acceptable rates and pressures.

Larry

-----Original Message-----
From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Wednesday, July 08, 2009 10:53 AM
To: Larry Scott

Cc: Kautz, Paul, EMNRD; Hill, Larry, EMNRD; Ezeanyim, Richard, EMNRD
Subject: RE: Disposal Application on behalf of HRC INC: Goodwin State #1 30-025-34593 Lower SA, Del, Bone Spring Commercial Disposal

Thanks Larry:
The CBL question was because your well diagram shows a top verified by a CBL. However the application for SWD-827 done years ago by Eddie Seay shows only a calculated top (and his application also showed the P&Aed well). If you find the CBL please send it to Hobbs for Paul Kautz to scan in – we have been asking for copies of logged verification of cement tops on SWD or Injection wells.

You have advertised for injection over the bigger interval, but it seems you want to try only the interval below the cement top first to see if it is enough. We can write the order to allow injection within 200 feet below the cement top and you can apply for an amendment if that is needed without re-advertising or re-noticing. This should speed up any needed amendment. And let me know if you can live with the 200 feet from a verified cement top. If you don't find the reported CBL, but want to perforate closer than 200 feet from this recorded cement top, please run another CBL. If you only find a Temp Survey, please run a CBL. Notwithstanding these statements, for well work, please cover everything with the OCD Hobbs office.

Thank You for this,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

From: Larry Scott [mailto:lrscott@leaco.net]
Sent: Tuesday, July 07, 2009 9:18 AM
To: Jones, William V., EMNRD
Cc: 'Gary Schubert'; tfh@valornet.com
Subject: RE: Disposal Application on behalf of HRC INC: Goodwin State #1 30-025-34593 Lower SA, Del, Bone Spring Commercial Disposal

Will:

1. No business lease (surface use agreement) was ever obtained from the SLO but we have requested one concurrently with this application. SWD-827 has never been utilized. The well has been TA'd since its acquisition from Xeric. The reason this project is being re-activated is the interest of a local trucking company in disposal capacity in the area.
2. I'm in possession of the "well file" with no logs present. I'll ask Gary if he is still holding anything but am not optimistic. We selected the proposed perforation intervals from drilling time on the mudlog but plan to run a GR-N before perforating. It shouldn't cost much to add a CBL if you guys need one.
3. We are planning to test the lower perforations (below existing cement top) for acceptable rates and pressures prior to squeezing. We will only squeeze if the upper perfs are required for suitable capacity. Please see the note on the "as constructed" wellbore diagram. A plug within 200' of the bottom perf shouldn't be a problem.
4. Xeric did not turn up in our land investigation. The base lease appears to belong to Oxy?
5. The P&A well located in L-31-18S-37E is actually an active SWD well in intervals similar to those requested in this application. It is well No. 5 in the "Wells in Area of Review" section but was mistakenly identified in the app as being in 36E rather than 37E.

Thanks for the timely review. Don't hesitate to shout if there are any additional questions.
Larry

-----Original Message-----
From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Monday, July 06, 2009 4:39 PM
To: Larry Scott
Cc: Ezeanyim, Richard, EMNRD; Kautz, Paul, EMNRD

Subject: Disposal Application on behalf of HRC ING: Goodwin State #1 30-025-34593 Lower SA, Del, Bone Spring Commercial Disposal

Hello Larry:
Just a few questions – the application otherwise appears OK:

1) Did Gary Schubert get a surface use agreement from the State Land Office? According to Gary Schubert, this was one of the holdups before to beginning injection. This well was approved for disposal in the upper SA with SWD-827 and the deadline to inject was extended at least once. Apparently the well was never used for injection?
2) Please ask HRC to send a copy of the CBL run to determine the cement top and any elog they have over this intended disposal interval. The only log in the Division's web site is a log over the 7000 foot interval and a Mudlog. It is likely that HRC has some sort of elog over this interval.
3) Any disposal permit will require a plug to be set within 200 feet below the bottom of the intended disposal interval after or before the existing cement top is raised by squeeze operations.
4) Xeric was noticed before but not this time – were they bought out by another company? Thank You for these notices.
5) Is there a Plugged well in Unit L of Section 31 that penetrates this interval and is within ½ mile? If so, please send the well bore diagram.

Thanks for this application.

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

Injection Permit Checklist (7/8/08)

Case ______ R-______ (SWD 827-A) WFX______ PMX______ IPI______ Permit Date ______ UIC Qtr (A.S.O.)

Wells 1 Well Name: Goodwin State #1

API Num: (30-) 025-34593 Spud Date: 1999 New/Old: N (UIC primacy March 7, 1982)

Footages 330 FNL 330 FWL Unit D Sec 6 Tsp 19S Rge 37E County Lea

Operator: HRC, Inc. Contact Larry R. Scott / Gary Schubert

OGRID: 131652 RULE 40 Compliance (Wells) 0/4 (Finan Assur) OK

Operator Address: PO. Box 5102, Hobbs, NM, 88244

Current Status of Well: TA'ED

Planned Work to Well: Commercial SWD. Raise CMT Top, PB, Perf Planned Tubing Size/Depth: 2 7/8 @ 5000'

	Sizes Hole.......Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing ____ Surface	12 1/4 8 5/8	1618	790	CIRC
Existing ____ Intermediate				
Existing ____ Long String	7 7/8 5 1/2	7236	400	5350 CBL

~~DV Tool~~ ______ ~~Liner~~ ______ Open Hole 7236 Total Depth 7510

Well File Reviewed ✓

Diagrams: Before Conversion ✓ After Conversion ✓ Elogs in Imaging File: MUD LOG only of the inter...

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)			
Injection...... Interval TOP:	5110	SA	NO
Injection........... Interval BOTTOM:	6040	Del & B.S.	NO
Below (Name and Top)	6210	Blinebry	

SWD-824 4890-4920 SA exp 10/11/04

1022 PSI Max. WHIP

NO Open Hole (Y/N)

NO Deviated Hole?

5110/2 = 1022

Sensitive Areas: ~~Capitan Reef~~ ______ ~~Cliff House~~ ______ Salt Depths ______

.... ~~Potash Area (R-111-P)~~ ______ ~~Potash Lessee~~ ______ ~~Noticed?~~ ______

Fresh Water: Depths: 0-180' Ogallala Wells(Y/N) Y Analysis Included (Y/N): N Affirmative Statement ✓ — not able to get samples

Salt Water: Injection Water Types: ABO/DR/BS/Del/SA/PR QN/Y TR Analysis? ✓

Injection Interval.....Water Analysis: ✓ Hydrocarbon Potential NO

Notice: Newspaper(Y/N) ✓ Surface Owner SLO Mineral Owner(s) ______

RULE 701B(2) Affected Parties: Burleson / SW Roy / Copan / Sabine / Marathon / OXY / XTO

Area of Review: Adequate Map (Y/N) ✓ and Well List (Y/N) ?

Active Wells 5 Num Repairs 0 Producing in Injection Interval in AOR NO but active inj.

..P&A Wells 0 Num Repairs — All Wellbore Diagrams Included? ______

Questions to be Answered: Raise CMT Top ~~then~~ / Send P&A DIAG State #1 4/31

Set PLUG within 200'

~~Check productivity of new Zone~~

Send LOG over this interval

Required Work on This Well: Send CBL Request Sent ______ Reply: ______

AOR Repairs Needed: ______ Request Sent ______ Reply: ______

______ ? Request Sent ______ Reply: ______

Xeric ?