

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ Yes ☒ No
- II. OPERATOR: KC Resources
ADDRESS: P.O. Box CO 81165
CONTACT PARTY: Elizabeth Kramer PHONE: (970) 927-7764
- 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: _____
- 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: Elizabeth Kramer TITLE: Petroleum Engineer
SIGNATURE: [Signature] DATE: _____
E-MAIL ADDRESS: ekramer@crystalriveroil.com
- * 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

OCD Case# 14907
KC Resources, Inc.
December 13, 2012
Ex# 1

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.

Rogers, (S)

2

Harling

Marilyn

Starling

Walker

Marilyn

D. Fasken Higgins-Cahoon

E. Mary Higgins

Cahoon, et al

Devon Ener Fanning	Devon Ener Fanning	Devon Ener Fanning	Devon Ener Fanning
Devon Ener Fanning	Devon Ener Fanning	Devon Ener Fanning	Devon Ener Fanning

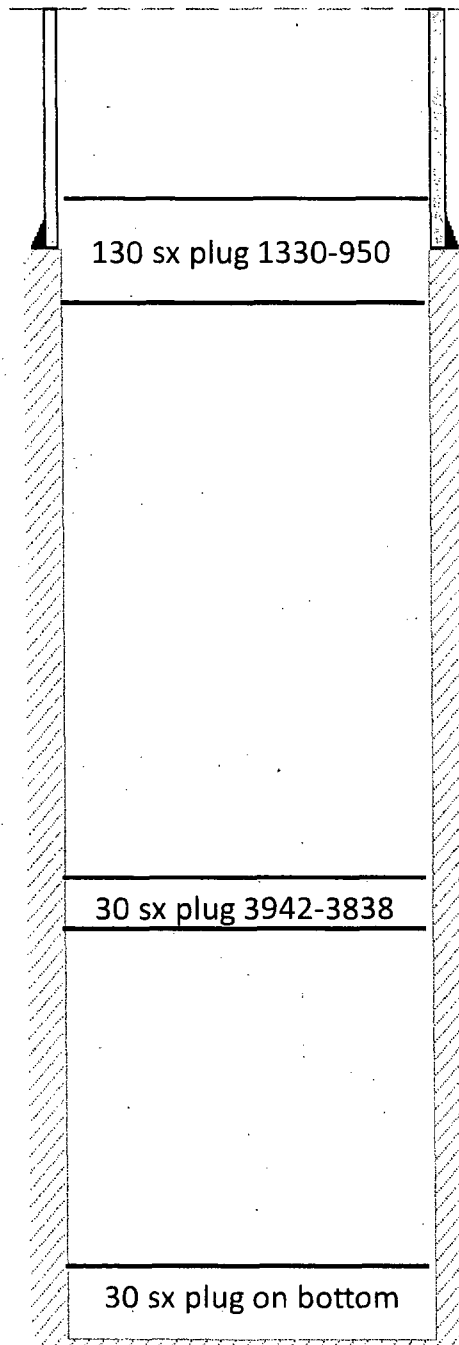
TO 1962. Fed. HBC 1
025605 3/2
EAST DAYTON
U.S. U.S. TXO
Neerburg

1/2 Mile
Radius

KC Resources Hearing
Jones D #5
2310' FSL & 330' FWL
Sec 18 18S 27E
Eddy Co., NM

TO K A GRBG UNIT
Tr. 230 103 139 140
VON (OPER. 103 139 140
Breck 103 139 140
Tr. 103 139 140

C108 Schematic for P&A Well



8 5/8" Csg

7 7/8" Open Hole

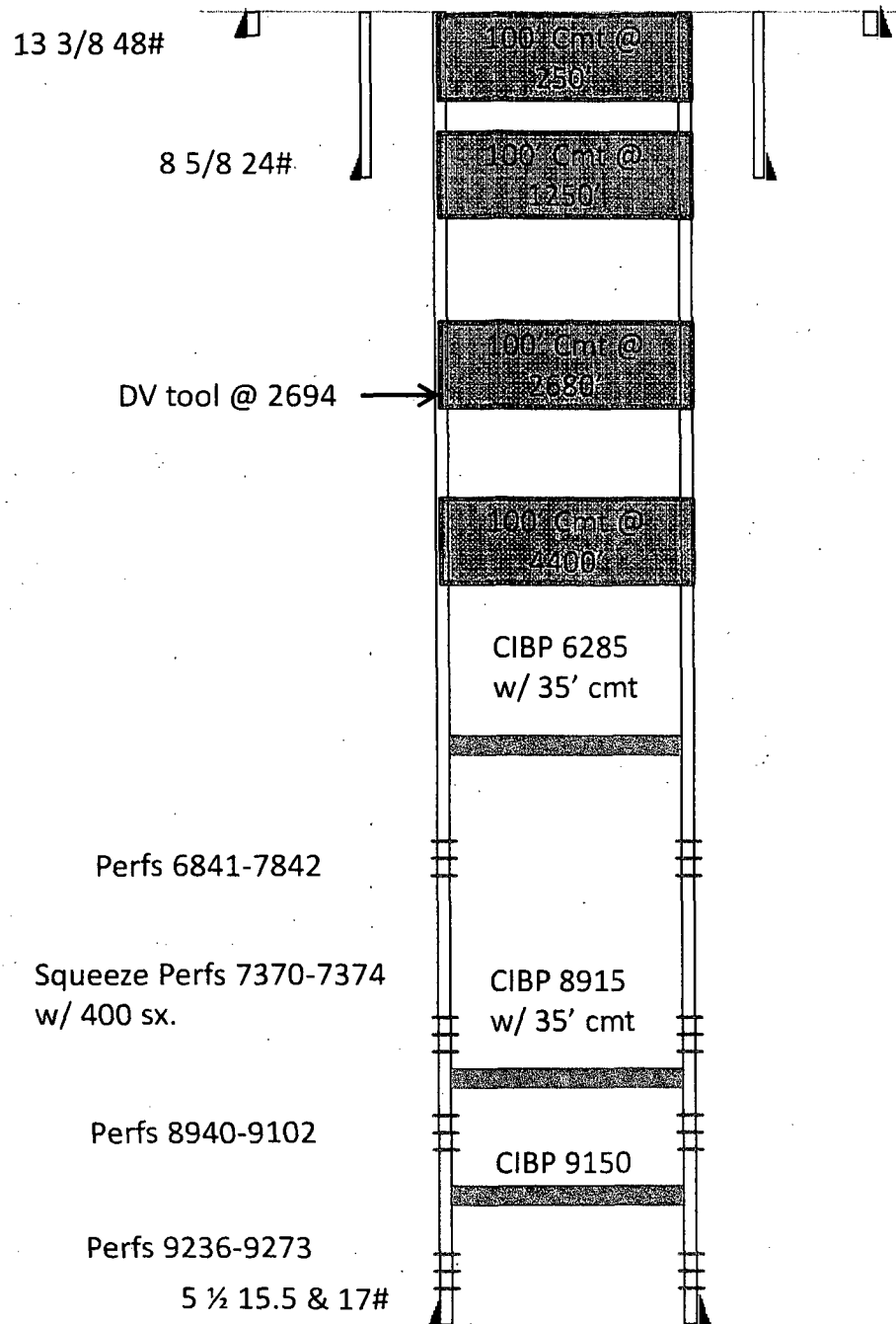
API Number: 300-15-00922
 Well Name & No: Betty Sue #1
 Operator: Resler & Sheldon
 Surface Loc: 990 FSL & 1650 FWL
 Sec - Twp - Rng: 18 T18S R27E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud: 7/62
 TD: 5700'
 Status & Date: P&A 9/62

Casing Record

	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	1028	900	12 1/2	Surf	Circ
Inter 1						
Inter 2						
Prod						
Liner						

DH marker &
10' surface plug.

C108 Schematic for P&A Well



API Number: 300-15-21356
 Well Name & No: Feathers Com 1
 Operator: Gulf Oil Corp
 Surface Loc: 1980 FSL & 1980 FWL
 Sec - Twp - Rng: 18 T18S R27E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 9/74
 TD: 9400'
 Status & Date: P&A 11/83

Casing Record

	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	194	300	17	Surf	Circ
Inter 1	8 5/8	1200	650	12 1/4	Surf	Circ
Inter 2						
Prod	5 1/2	9395	1 st 400sx 2 nd 250sx	7 7/8	1 st 6282	CBL
Liner						

API Number: 300-15-00192
Well Name & No: Jones D #1
Operator: KC Resources
Surface Loc: 1650 FNL & 990 FEL
Sec - Twp - Rng: 13 T18S R26E
Bottom Hole Loc: Same
Sec - Twp - Rng:
County, State: Eddy, NM
Spud Date: 10/70
TD: 1850'
Status & Date: Inactive 2009

Completion:

Selectively perf 1556-1639

Selectively perf 1663-1816

Acidize and frac with 52K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	1157	600	11	Surf	Circ
Inter 1						
Inter 2						
Prod	4 1/2	1849	460	7 7/8	Surf	Circ
Liner						

API Number: 300-15-20375
 Well Name & No: Jones D #2
 Operator: KC Resources
 Surface Loc: 2310 FSL & 990 FEL
 Sec - Twp - Rng: Sec 13 T18S R26E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 2/71
 TD: 1976'
 Status & Date: Active 8/2012

Completion:

Selectively perf 1734-1896,
acidize, frac w/ 56K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	1100	500	11	Surf	Circ
Inter 1						
Inter 2						
Prod	5 ½	1976	460	7 7/8	Surf	Circ
Liner						

API Number: 300-15-20420
Well Name & No: Jones D #4
Operator: KC Resources
Surface Loc: 1650 FNL & 330 FWL
Sec - Twp - Rng: 18 T18S R27E
Bottom Hole Loc: Same
Sec - Twp - Rng:
County, State: Eddy, NM
Spud Date: 4/71
TD: 1965'
Status & Date: Active 8/2012

Completion:

Selectively perf 1710-1873,
acidize, frac w/ 56K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	955	400	11	Surf	Circ
Inter 1						
Inter 2						
Prod	5 1/2	1963	460	7 7/8	Surf	Circ
Liner						

C108 Tabulation for Wells Not P&A

API Number: 300-15-21707
 Well Name & No: Higgins Trust #1
 Operator: Lime Rock Resources
 Surface Loc: 990 FNL & 990 FEL
 Sec - Twp - Rng: 13 T18S R26E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 12/75
 TD: 9342'
 Status & Date: Active 8/12

Completion:

Perf 9150-9175 complet natural.
 CIBP @ 9010 w/ 35' cmt.
 Perf 9059-9080, CIBP 7320.
 Perf 4 squeeze holes @ 6300 and
 cmt w/ 240 sx. DOC to 6257 and
 perf 6076-82, acidize. Set CIBP
 @ 6030. Selectively perf 2562-3325,
 acidize, frac wi/ 46K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	16	197	250	20	Surf	Ready Mix
Inter 1	11 ¾	950	550	15	Surf	Circ
Inter 2	8 5/8	1944	500	10 5/8	Surf	Circ
Prod	4 ½	9342	450	7 7/8	6890	Calc
Liner						

API Number: 300-15-30131
 Well Name & No: Kaiser B #5
 Operator: Lime Rock Resources
 Surface Loc: 1650 FNL & 2310 FWL
 Sec - Twp - Rng: 18 T18S R27E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 4/98
 TD: 2300
 Status & Date: Active 8/12

Completion:

Selectively perf 1538-1962,
acidize, frac w/ 257K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	192	300	17 ½	Surf	Circ
Inter 1	8 5/8	1010	600	12 ¼	Surf	Circ
Inter 2						
Prod	5 ½	2299	400	7 7/8	Surf	Calc
Liner						

C108 Tabulation for Wells Not P&A

API Number: 300-15-30132
 Well Name & No: Kaiser B #6
 Operator: Lime Rock Resources
 Surface Loc: 2310 FNL & 1650 FWL
 Sec - Twp - Rng: 18 T18S R27E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 12/98
 TD: 3198
 Status & Date: Active 8/12

Completion:

Selectively perf 2716-3024,
 acidize, frac w/ 115K# sand.
 Selectively perf 1624-1987,
 acidize, frac w/ 93K# sand.
 Commingle zones.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	202	300	17 ½	Surf	Circ
Inter 1	8 5/8	1000	650	12 ¼	Surf	Circ
Inter 2						
Prod	5 ½	3197	639	7 7/8	Surf	Circ
Liner						

API Number: 300-15-34176
Well Name & No: Kaiser B #7
Operator: Lime Rock Resources
Surface Loc: 2310 FNL & 2310 FWL
Sec - Twp - Rng: 18 T18S R27E
Bottom Hole Loc: Same
Sec - Twp - Rng:
County, State: Eddy, NM
Spud Date: 7/05
TD: 3500
Status & Date: Active 8/12

Completion:

Selectively perf 2797-3369,
acidize, frac w/ 157K# sand.
Selectively perf 1740-2396,
acidize, frac w/ 160K# sand.
Commingled zones.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	180	235	17 1/2	Surf	Circ
Inter 1	8 5/8	1010	650	12 1/4	Surf	Circ
Inter 2						
Prod	5 1/2	3500	947 ft3	7 7/8	Surf	Calc
Liner						

C108 Tabulation for Wells Not P&A

API Number: 300-15-34630
 Well Name & No: Kaiser B #8
 Operator: Lime Rock Resources
 Surface Loc: 1500 FNL & 1725 FWL
 Sec - Twp - Rng: 18 T18S R 27E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 7/2006
 TD: 3504
 Status & Date: Active 8/12

Completion:

Selectively perf 2685-3001,
 acidize, frac w/ 160K# sand.
 Selectively perf 1557-2359,
 acidize, frac w/ 160K# sand.
 Commingle zones.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	210	300	17 1/2	Surf	Circ
Inter 1	8 5/8	1209	715	12 ¼	Surf	Circ
Inter 2						
Prod	5 ½	3504	800	7 7/8	Surf	Circ
Liner						

API Number: 300-15-36733
Well Name & No: Osprey 13 #2H
Operator:
Surface Loc: 2030 FSL & 330 FEL
Sec - Twp - Rng: 13 T18S R26E
Bottom Hole Loc:
Sec - Twp - Rng:
County, State:
Spud Date:
TD:
Status & Date:

Completion:

LOCATION NOT YET DRILLED.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf						
Inter 1						
Inter 2						
Prod						
Liner						

API Number: 300-15-39429
 Well Name & No: Waldrop 13P #1
 Operator: Lime Rock Resources
 Surface Loc: 990 FSL & 330 FEL
 Sec - Twp - Rng: 13 T18S R26E
 Bottom Hole Loc: Same
 Sec - Twp - Rng:
 County, State: Eddy, NM
 Spud Date: 1/12
 TD: 4288
 Status & Date: Active 8/12

Completion:

Selectively perf 3920-4226,
 acidize, frac w/ 98K# sand.
 Selectively perf 3700-3869,
 acidize, frac w/ 54K# sand.
 Selectively perf 3453-3650,
 acidize, frac w/ 75K# sand.
 Selectively perf 3050-3383,
 acidize, frac w/ 104K# sand.
 Commingle all zones.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	13 3/8	255	400	17 ½	Surf	Circ
Inter 1	8 5/8	1565	800	12 ¼	Surf	Circ
Inter 2						
Prod	5 ½	4272	910	7 7/8	Surf	Circ
Liner						

API Number: 300-15-40091
Well Name & No: Jones D #6
Operator: KC Resources
Surface Loc: 2310 FNL & 990 FEL
Sec - Twp - Rng: 13 T18S R26E
Bottom Hole Loc: Same
Sec - Twp - Rng:
County, State: Eddy, NM
Spud Date: 4/12
TD: 1901
Status & Date: Active 8/12

Completion:

Selectively perf 1612-1785,
acidize, frac w/ 82K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	425	277	12 ¼	Surf	1"
Inter 1						
Inter 2						
Prod	4 ½	1896	345	7 7/8	Surf	1"
Liner						

API Number: 300-15-40306
Well Name & No: Jones D #7
Operator: KC Resources
Surface Loc: 1650 FNL & 330 FEL
Sec - Twp - Rng: 13 T18S R26E
Bottom Hole Loc: Same
Sec - Twp - Rng:
County, State: Eddy, NM
Spud Date: 6/12
TD: 1910
Status & Date: Active 8/12

Completion:

Selectively perf 1643-1790 &
1802-1856, acidize, frac w/
80K# sand.

Casing Record						
	Size	Depth	Cmt Sx	Hole	TOC	By
Surf	8 5/8	425	270	12 ¼	Surf	Circ
Inter 1						
Inter 2						
Prod	4 ½	1900	455	7 7/8	Surf	Circ
Liner						

Attachment to KC Resources C108 Application

Jones D #5

2310 FSL & 330 FWL

Sec 18 T18S R27E

Eddy Co., NM

VII.

1. Proposed average injection rate is 90 BWPD and the maximum is 200 BWPD.
2. This is a closed system.
3. Proposed injection pressure is 150 psi, with a maximum of 370 psi.
4. The source water is re-injected produced water.

VIII. The injection zone is the San Andres formation at an approximate depth of 1,850' and approximately 300' thick. The lithology is a gray, tan, and white dolomite, finely crystalline to dense with intergranular porosity. There are several fresh water wells per the records of the State Engineers Office to the southwest in section 24 that report depth to water less than 20'. Red beds, anhydrite, and gravel are reported in the area to approximately 900'.

IX. There is no proposed stimulation program.

X. Logs previously submitted.

XI. Chemical analysis of producing fresh water wells in the area are unavailable.

INJECTION WELL DATA SHEET

OPERATOR: KC Resources

WELL NAME & NUMBER: Jones D #5

WELL LOCATION: 2310 FSL & 330 FWL, Unit L, Sec. 18 T18S R27E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented with: 500 sx. *or* ft³

Top of Cement: Surface Method Determined: Circ

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 1/2

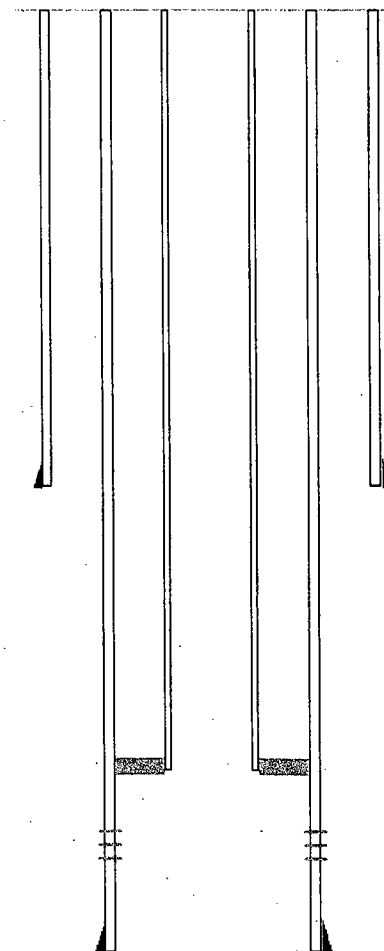
Cemented with: 500 sx. *or* ft³

Top of Cement: Surface Method Determined: Circ

Total Depth: 1963

Perforated Injection Interval

1779 feet to 1934



INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Internally Plastic Coated

Type of Packer: Nickel Plated Tension Packer

Packer Setting Depth: 1679

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? _____

2. Name of the Injection Formation: San Andres

3. Name of Field or Pool (if applicable): Atoka

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. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Yeso is approximately 800' below the top of the San Andres and

there are no known producing intervals above the San Andres in the area of review.