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SANTA FE, NEW MEXICO 87501

April 7, 2006

HAND DELIVERED

Case 13705

2006 APR 7 PM 4 41

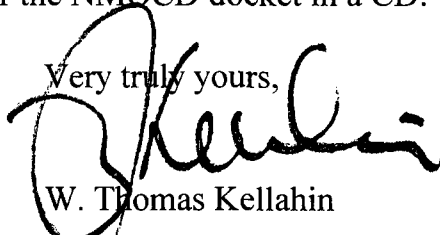
Mr. Mark E. Fesmire, Director
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: East Loving-Delaware Leasehold Waterflood Project
Application of Range Operating New Mexico, Inc.
for approval of its East Loving-Delaware Leasehold
waterflood project, including six injection wells and
unorthodox well locations and qualification
of the Project Area for the Recovered Oil Tax
Rate pursuant to the Enhanced Oil Recovery Act
Lea County, New Mexico

Dear Mr. Fesmire:

On behalf of Range Operating New Mexico, Inc., find enclosed our referenced application which we request be set for hearing on the Examiner's docket now scheduled for May 11, 2006. Also enclosed is our proposed advertisement of this case for the NMOCD docket in a CD.

Very truly yours,



W. Thomas Kellahin

cc: Range Operating New Mexico, Inc.
Attn: Bobby Ebeier

ADVERTISEMENT FOR May 11, 2006 DOCKET

CASE: ¹³⁷⁰⁵-----Application of Range Operating New Mexico, Inc. for approval of its East Loving-Delaware Leasehold waterflood project including six injection wells to be located at unorthodox well locations and qualification of the Project Area for the Recovered Oil Tax rate pursuant to the Enhanced Oil Recovery Act, Lea County, New Mexico. Applicant seeks approval of its East Blinbry-Drinkard Unit Waterflood Project including the injection of produced water into the following interval:

From an upper limit being the top of the Lower Brushy Canyon formation to a lower limit being the base of the Delaware Mountain Group as found in the South Culebra Buff #4B well, located 560 feet FEL and 660 feet FSL (Unit A) Section 23, T23S, R28E being points at a depth of 5737 feet for the top marker and 6249 feet for the bottom marker

through 6 injection wells at unorthodox well locations within Section 23 as follows

SCB 23-15 Well	1430 feet FNL and 1150 feet FEL (Unit H)
SCB 23-17 Well	2440 feet FSL and 1500 feet FWL (Unit K)
SCB 23-18 Well	Surface: 1815 feet FNL and 1200 feet FWL (Unit D) Bottomhole: 1300 feet FWL and 1000 feet FNL (Unit E)
SCB 23-19 Well	Surface: 1950 feet FNL and 2470 feet FWL (Unit F) Bottomhole: 2620 feet FEL and 1300 feet FNL (Unit F)
SCB 23-20 Well	2520 feet FSL and 2460 feet FEL (Unit J)
SCB 23-21 Well	2531 FSL and 1252 FEL (Unit I)

within the following described area:

Township 23 South, Range 28 East, NMPM

Section 23:

- Tract 1: W/2NW/4; SE/4NW/4 and SW/4NE/4 (160-acres)
- Tract 2: NE/4NW/4 and NW/4NE/4 (80-acres)
- Tract 3: E/2NE/4 (80) acres)
- Tract 4: N/2SW/4 (80-acres)
- Tract 5: N/2SE/4 (80-acres)
- Tract 6: S/2SE/4 (80-acres)

Applicant also requests that the Division, in accordance with Division Rule 701 and pursuant to the New Mexico "Enhanced Oil Recovery Act," approve this project for the recovered oil tax rate for enhanced oil recovery. Applicant requests that the Division establish procedures for the administrative approval of additional injection wells within the unit area without the necessity of further hearings and the adoption of any provisions necessary for such other matters as may be appropriate for the waterflood operations.

This Unit is located approximately 2 miles East of Loving, New Mexico.

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

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

2006 APR 17
PM 4 41
CASE NO. 13-705

**APPLICATION RANGE OPERATING NEW MEXICO, INC.
FOR APPROVAL OF ITS EAST LOVING-DELAWARE
LEASEHOLD WATERFLOOD PROJECT INCLUDING
SIX INJECTION WELLS TO BE LOCATED AT UNORTHODOX
WELL LOCATIONS AND TO QUALIFY THIS PROJECT FOR
THE RECOVERED OIL TAX RATE PURSUANT TO THE
"NEW MEXICO ENHANCED OIL RECOVERY ACT,"
LEA COUNTY, NEW MEXICO**

APPLICATION

Range Operating New Mexico, Inc. ("Range"), in accordance with Division Rule 701 and pursuant to the New Mexico "Enhanced Oil Recovery Act," applies to the New Mexico Oil Conservation Division for an order approving its East Loving-Delaware Leasehold Waterflood Project including six injection wells to be located at unorthodox well locations and for the recovered oil tax rate for enhanced oil recovery and in support states:

(1) Range is the operator of wells within the proposed Project Area that consists of 840 total acre of fee lands, consisting of 6 different oil and gas leases, described as follows:

Township 23 South, Range 28 East, NMPM
Section 23:

- Tract 1: W/2NW/4; SE/4NW/4 and SW/4NE/4 (160-acres)
- Tract 2: NE/4NW/4 and NW/4NE/4 (80-acres)
- Tract 3: E/2NE/4 (80) acres)
- Tract 4: N/2SW/4 (80-acres)
- Tract 5: N/2SE/4 (80-acres)
- Tract 6: S/2SE/4 (80-acres)

See Locator Map attached as Exhibit "A"

(2) Range proposes that this waterflood project will be limited to the following interval:

From an upper limit being the top of the Lower Brushy Canyon formation to a lower limit being the base of the Delaware Mountain Group as found in the South Culebra Buff #4B Well, located 560 feet FEL and 660 feet FSL (Unit A) Section 23, T23S, R28E. NMPM being points at a depth of 5737 feet for the top marker and 6249 feet for the bottom marker

(3) The Project Area is within the boundaries of the East Loving-Brushy Canyon Pool (formerly East Loving-Delaware Pool).

(4) Range proposes to institute a waterflood project by the injection of produced water from the Brushy Canyon formation of the Delaware Group in and around the pilot area, and in addition water as needed from a Cherry Canyon formation source well into the Brushy Canyon portions of the East Loving-Brushy Canyon Pool pursuant to a plan of operations that is more completely set forth in Division Form C-108, attached as Exhibit "B"

(5) Applicant requests that the Division establish procedures for the administrative approval of additional injection wells within the Leasehold Project Area without the necessity of further hearings and the adoption of any provisions necessary for such other matters as may be appropriate for the waterflood operations.

(6) The following data is provided in accordance with procedure requirements (Order R-9708) for a Certificate of Qualification for an Enhanced Oil Recovery Project to qualify this project for the recovered oil tax rates pursuant to the "Enhanced Oil Recovery Act," NMSA 1978, Sections 7-29A-1 through 7-29A-5, as amended.

a. Operators name and address: Range Operating New Mexico, Inc.
777 Main Street, Suite 800
Fort Worth, Texas 76102

b. Description of the project area:

1. Plat outlining the project area:
See Exhibit "A" attached

2. Description of the project area:
Township 21 South, Range 37East, NMPM
Section 23: Northern 3/4th (480-acres)

3. Total acres: The current project is flooding approximately 480 acres.

4. Name of subject pool and formation:

The Brushy Canyon formation of the East Loving-Brushy Canyon Pool

c. Status of operations in the project area:

1. N/A

2. N/A

3. If not unitized:

This is a leasehold waterflood project approved by the two working interest owners being Range Resources Operating Company and Chesapeake Oil Company.

d. Method of recovery to be used:

1. Fluids to be injected.

Range will inject water and associated fluids produced from the Canyon and Cherry Canyon formations.

2. Division Order approving the project: not yet

2. If the project has not been approved by the Division, provide the date the application with form C-108 was filed:

April 7, 2006 (date application was filed)

e. Description of the project:

1. A list of producing wells.

See Exhibit "C" for a list of the 14 producing wells in the project area.

2. A list of injection wells.

See Exhibit "D" for a list of the 6 injection wells, including unorthodox well locations, in the project area.

3. Capital cost of additional facilities: estimated \$ 420M

4. Estimated total project Costs: estimated \$5.415MM

5. Estimated total value of incremental production to be recovered from the project. \$30MM

6. Anticipated injection commencement date: July 1, 2006

b. Anticipate injection volumes: not to exceed 5,000 bwpd

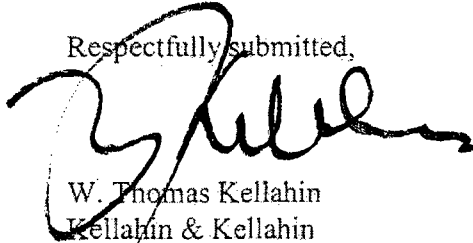
f. Production data: Provide graphs, charts and other supporting data to show the production history and production forecast of oil, gas, casinghead gas and water from the project area.

See Exhibit "E" attached

(7) A copy of this application including notice of hearing will be sent to all mineral interest owners, including royalty and overriding royalty owners, within Section 23, as set forth on Exhibit "F" attached.

Wherefore, Applicant requests that this application be set for hearing and that after said hearing, the Division enter its order approving this application.

Respectfully submitted,



W. Thomas Kellahin
Kellahin & Kellahin
P. O. Box 2265
Santa Fe, NM 87504
Attorney for Applicant

VERIFICATION

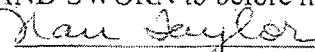
STATE OF TEXAS)

) SS
COUNTY OF Tarrant)

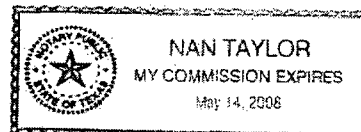
Dwayne Bryant, being duly sworn upon his oath, deposes and states: He is a petroleum engineer employed by Range Operating New Mexico, Inc, that he is familiar with the matters set forth in this application and the statements therein are true and correct to the best of his knowledge.

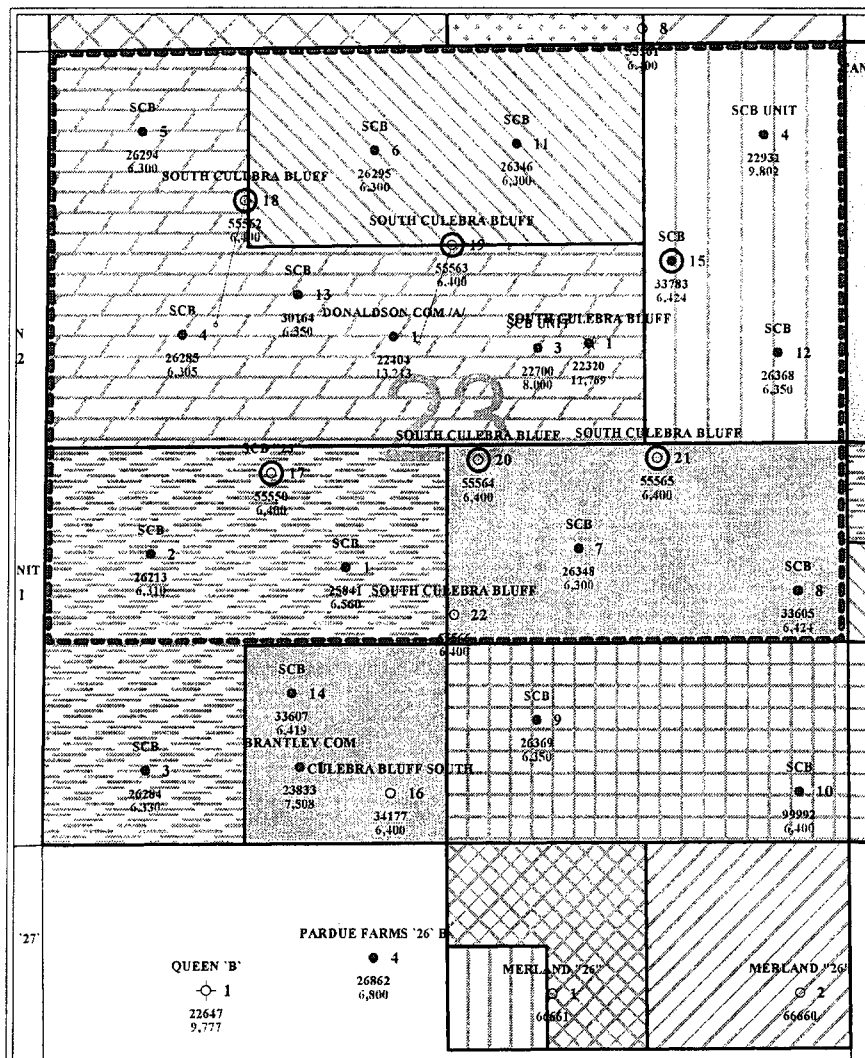

Dwayne Bryant

SUBSCRIBED AND SWORN to before me this ___ day of April 2006, by Dwayne Bryant


Notary Public

My commission expires: 5-14-08





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R RANGE OPERATING NEW MEXICO, INC.

MINERAL OWNERSHIP



SYMBOL HIGHLIGHT
○ INJECTION WELLS

WELL SYMBOLS
○ Location Only
● Oil Well
✱ Oil & Gas Well
✧ Dry Hole
△ Service Well

REMARKS
PROPOSED LEASE FLOOD OUTLINE
IN RED DASH LINE

April 6, 2006



APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage _____
Application qualifies for administrative approval? _____ Yes _____ X No
- II. OPERATOR: Range Operating New Mexico, Inc.
- ADDRESS: 777 Main Street Suite 800 Fort Worth TX 76102
- CONTACT PARTY: Andrew Tullis PHONE: 817/509-1505
- 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: Andrew Tullis TITLE: District Engineer

SIGNATURE: DATE: 4-6-2006

E-MAIL ADDRESS: atullis@rangeresources.com

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be repeated. 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

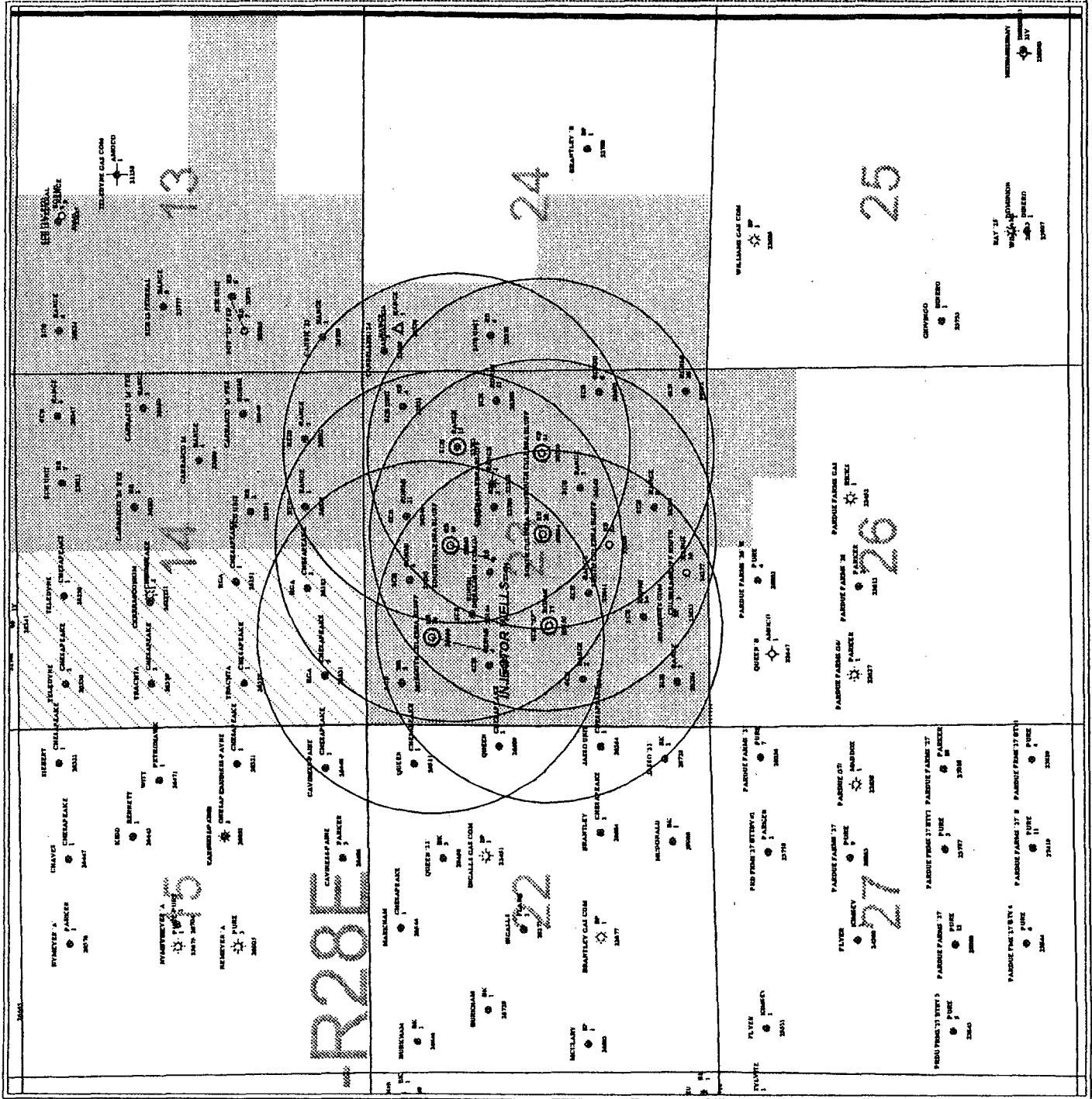
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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, 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.



RANGE RESOURCES

EDDY COUNTY, NEW MEXICO

ONE HALF MILE RADIUS
AROUND INJECTOR WELLS

0 1,500 3,000
FEET

POSTED WELL DATA

SYMBOL HIGHLIGHT

INJECTOR WELLS SEC 23

WELL SYMBOLS

- Location Only
- Oil Well
- Gas Well
- Oil & Gas Well
- Dry Hole
- Service Well
- Abandoned Oil Well

April 8, 2008

Proposed Injector Wells

South Culebra Bluff #23-18

*Wells within area of review

Well Name	Well Type	Construction	Location	Completion Date	Depth
Caviness-Paine #2	Oil	Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 522' Cementing Record- 310' sx Class C Tbg Size- 7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1st sig 650' sx 50-50 Poz H+ 200' sx Class C 2nd sig- 475' sx lite + 100' sx Class C Hole Size- 7-7/8" Depth Set- 6035' Hole Size- 18-1/2" Csg Size-15" Weight LB/FT- 55# Depth Set- 465' Cementing Record- 370' sx Class C Hole Size- 12-1/4" Csg Size- 10-3/4" Weight LB/FT- 40.3# Depth Set- 3037' Cementing Record- 1200' sx HLC & Class C Hole Size- 8-1/2" Csg Size- 7-5/8" Weight LB/FT- 33.2# & 2# Depth Set- 1000' Cementing Record- 2870' sx T1C & Class H Liner- Hole Size- 6-1/2" Csg Size- 4-1/2" Top- 10585' Bottom- 13204' Cementing Record- 350' sx Tbg Size- 2-7/8" Depth Set- 10197' Packer Set- 10204' Hole Size- 2-3/8" Depth Set- 11404'	760 FSL & 630 FEL Sec 15-T23S-28E	9/6/1990	6300
Donaldson A Comm #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 513' Cementing Record- 410' sx Class C Tbg Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6250' Cementing Record- 2760' sx 50-50 Poz Hole Size- 7-7/8" Depth Set- 6030'	1930 FNL & 2303 FWL Sec 23-T23S-R28E	1/16/1978	13213
RGA #2	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 515' Cementing Record- 410' sx Class C Tbg Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6250' Cementing Record- 2760' sx 50-50 Poz Hole Size- 7-7/8" Depth Set- 6030'	990 FSL & 2080 FWL Sec 14-T23S-R28E	10/15/1989	6252
RGA #3	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 515' Cementing Record- 410' sx Class C Tbg Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6250' Cementing Record- 2760' sx 50-50 Poz Hole Size- 7-7/8" Depth Set- 6030'	760 FSL & 760 FWL Sec 14-T23S-R28E	9/9/1990	6250
South Culebra Bluff #23-1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 527' 88" Cementing Record- 447' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 17# Depth Set- 6560' Cementing Record- 1578' sx Tbg Size- 2-7/8" Depth Set- 6030' Packer Set- Baker Model R @ 6023'	1830 FSL & 1980 FWL Sec 23-T23S-R28E	1/4/1988	6560
South Culebra Bluff #23-2	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 552' Cementing Record- 945' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1400' sx Tbg Size- 2-7/8" Depth Set- 6018' Packer Set- Aerosol I @ 6018'	1920 FSL & 660 FWL Sec 23-T23S-R28E	11/1/1989	6310
South Culebra Bluff #23-3	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 535' Cementing Record- 425' sx Class C Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300' sx "C" Tbg Size- 2-7/8" Depth Set- 6072'	510 FSL & 660 FWL Sec 23-T23S-R28E	2/19/1990	6330
South Culebra Bluff #23-4	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 450' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6305' Cementing Record- 2000' sx Tbg Size- 2-7/8" Depth Set- 6050' Packer Set- 6050'	894 FWL & 1890 FNL Sec 23-T23S-R28E	3/25/1990	6305
South Culebra Bluff #23-5	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 450' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' sx Tbg Size- 2-7/8" Depth Set- 6017' Packer Set- 6017'	540 FNL & 611 FWL Sec 23-T23S-R28E	3/15/1990	6300
South Culebra Bluff #23-6	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 350' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' sx Tbg Size- 2-7/8" Depth Set- 6105' Packer Set- 6105'	678 FNL & 2170 FWL Sec 23-T23S-R28E	3/28/1990	6300
South Culebra Bluff #23-11	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 542' Cementing Record- 350' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1950' sx Tbg Size- 2-7/8" Depth Set- 6000' Packer Set- 6000'	660 FNL & 2140 FEL Sec 23-T23S-R28E	4/23/1990	6300
South Culebra Bluff #23-13	Oil	Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90' sx BJ Lite, 250' class "C" + 2% CaCl2 Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6340' Cementing Record- 960' sx Class "C" + 5# Salt + 4% FL-S2 1200' sx BJ Lite Tbg Size- 2-7/8" Depth Set- 6170'	1650 FNL & 1650 FWL Sec 23-T23S-R28E	5/7/1998	6350
South Culebra Bluff Unit #1	Gas	Csg Size- 20" Depth Set- 34' Cementing Record- 5 cubic yards Hole Size- 12-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 418' Cementing Record- 500' sx Hole Size- 12-1/4" Csg Size- 9-5/8" Weight LB/FT- 36.40# Depth Set- 6355' Cementing Record- Stage 1-10655' Stage 2-1640' sx Tbg Size- 4-1/2" Depth Set- 4176#	1980 FNL & 1650 FEL Sec 23-T23S-R28E	11/6/1977	11769
Queen #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 521' Cementing Record- 300' Class C Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6250' Cementing Record- 1200' sx Lite + 150' sx Class C Tbg Size- 2-7/8" Depth Set- 5986	580 FNL & 580 FEL Sec 22-T23S-28E	10/27/1990	6290
Queen #2	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 410' Cementing Record- 265' sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6350' Cementing Record- 685' sx Lite, 350' sx "C" Tbg Size- 2-7/8" Depth Set- 6045'	1880 FNL & 330 FEL Sec 22-T23S-R28E	9/23/1991	6350

South Culebra Bluff #23-19

*Wells within area of review

Well Name	Well Type	Construction	Location	Date Drilled	Completion Date	Depth
Donalson A Comm #1	Oil	Hole Size-18-1/2" Cag Size-16" Weight LB/FT- 65# Depth Set- 465' Cementing Record- 370' ex Class C Hole Size-12-1/4" Cag Size-10-3/4" Weight LB/FT- 40.5# Depth Set- 3037' Cementing Record- 1200' ex HLC & Class C Hole Size-9-1/2" Cag Size-7-5/8" Weight LB/FT- 33.2# & 2# Depth Set- 10800' Cementing Record- 2870' ex TLC & Class H Liner- Hole Size-6-1/2" Cag Size-4-1/2" Top- 10585' Bottom- 13204' Cementing Record- 350' ex Tbg Size- 2-7/8" Depth Set- 10197' Packer Set- 10204' Tbg Size- 2-3/8" Depth Set- 11404'	1930 FNL & 2303 FNL Sec 23-T23S-R28E	1/16/1978	9/6/1978	13213
Reid #1	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 510' Cementing Record- 300' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1250' ex Tbg Size- 2-7/8" Depth Set- 5960' Packer Set- 5960'	880 FSL & 1980 FEL Sec 14-T23S-R28E	11/6/1990	12/4/1990	6300
RGA #2	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 23# Depth Set- 513' Cementing Record- 410' ex Class C Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6250' Cementing Record- 2260' ex 50-50 Poz Tbg Size- 2-7/8" Depth Set- 6030'	980 FSL & 2080 FNL Sec 14-T23S-R28E	10/15/1989	11/4/1989	6252
South Culebra Bluff #23-1	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 527' 88' Cementing Record- 447' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 17# Depth Set- 6560' Cementing Record- 1578' ex Tbg Size- 2-7/8" Depth Set- 6030' Packer Set- Baker Model R @ 6023'	1830 FSL & 1980 FNL Sec 23-T23S-R28E	1/4/1988	3/6/1988	6560
South Culebra Bluff #23-3	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 23# Depth Set- 535' Cementing Record- 425' ex Class C Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300' ex "C" Tbg Size- 2-7/8" Depth Set- 6077'	510 FSL & 660 FNL Sec 23-T23S-R28E	2/19/1990	3/10/1990	6330
South Culebra Bluff #23-4	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 450' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 2000' ex Tbg Size- 2-7/8" Depth Set- 6050' Packer Set- 6050'	894 FNL & 1890 FNL Sec 23-T23S-R28E	3/2/1990	3/25/1990	6305
South Culebra Bluff #23-5	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 450' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' ex Tbg Size- 2-7/8" Depth Set- 6017' Packer Set- 6017'	540 FNL & 611 FNL Sec 23-T23S-R28E	3/15/1990	4/8/1990	6300
South Culebra Bluff #23-6	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 350' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' ex Tbg Size- 2-7/8" Depth Set- 6105' Packer Set- 6105'	678 FNL & 2170 FNL Sec 23-T23S-R28E	3/28/1990	5/2/1990	6300
South Culebra Bluff #23-7	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 542' Cementing Record- 350' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1600' ex Tbg Size- 2-7/8" Depth Set- 6052' Packer Set- 6052'	1750 FEL & 1950 FSL Sec 23-T23S-R28E	5/17/1990	6/8/1990	6300
South Culebra Bluff #23-11	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 23# Depth Set- 542' Cementing Record- 350' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1950' ex Tbg Size- 2-7/8" Depth Set- 6000' Packer Set- 6000'	660 FNL & 2140 FEL Sec 23-T23S-R28E	4/23/1990	5/19/1990	6300
South Culebra Bluff #23-12	Oil	Hole Size-12-1/4" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 579' Cementing Record- 1795' ex Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1795' ex Tbg Size- 2-7/8" Depth Set- 6060' Packer Set- 6060'	2140 FNL & 400 FEL Sec 23-T23S-R28E	6/9/1990	7/7/1990	6350
South Culebra Bluff #23-13	Oil	Hole Size-11" Cag Size-8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90' ex BJ Lile 250 class "C" + 2% CaCl2 Hole Size-7-7/8" Cag Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6349' Cementing Record- 960' ex Class "C" + 5# Salt + 4% FL 52 1200' ex BJ Lile Tbg Size- 2-7/8" Depth Set- 6170'	1650 FNL & 1650 FNL Sec 23-T23S-R28E	5/7/1998	6/10/1998	6350
South Culebra Bluff Unit #1	Gas	Cag Size-20" Depth Set-34' Cementing Record-5 cubic yards Hole Size-17-1/2" Cag Size-13-3/8" Weight LB/FT- 48# Depth Set- 418' Cementing Record- 500' ex Hole Size-12-1/4" Cag Size-9-5/8" Weight LB/FT- 36.40# Depth Set- 6355' Cementing Record- Stage 1-1065# Stage 2-1640' ex Tbg Size- 4-1/2" Depth Set- 11769	1980 FNL & 1650 FEL Sec 23-T23S-R28E	11/6/1977	1/27/1978	11769
South Culebra Bluff Unit #4	Oil	Hole Size-17-1/2" Cag Size-13-3/8" Weight LB/FT- 48# Depth Set- 440' Cementing Record- 550' ex Hole Size-12-1/4" Cag Size-7-5/8" Weight LB/FT- 26.4# Depth Set- 6185' Cementing Record- 6200' ex Liner- Hole Size-6-1/2" Cag Size-4-1/2" Top- 5795' Bottom- 9600' Cementing Record- 475' ex Tbg Size- 2-3/8" Depth Set- 7065'	660 FNL & 560 FEL Sec 23-T23S-R28E	8/9/1979	9/4/1980	9802

South Culebra Bluff #23-21

*Wells within area of review

Well Name	Well Type	Construction	Location	Date Drilled	Completion Date	Depth
Donaldson A Comm #1	Oil	Hole Size-18-1/2" Csg Size-16" Weight LB/FT- 65# Depth Set- 465' Cementing Record- 370 sx Class C Hole Size-12-1/4" Csg Size-10-3/4" Weight LB/FT- 40.5# Depth Set- 3037' Cementing Record- 1200 sx HLC & Class C Hole Size-9-1/2" Csg Size-7-5/8" Weight LB/FT- 33.2# & 28# Depth Set- 10900' Cementing Record- 2870 sx TLC & Class H Liner- Hole Size-6-1/2" Csg Size-4-1/2" Top- 10585' Bottom- 13204' Cementing Record- 350 sx Tbg Size- 2-7/8" Depth Set- 10187' Packer Set- 10204' Tbg Size- 2-3/8" Depth Set- 11404' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 527.88' Cementing Record- 447 sx Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 17# Depth Set- 6560' Cementing Record- 1578 sx Tbg Size- 2-7/8" Depth Set- 6030' Packer Set- Baker Model R @ 6023' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 23# Depth Set- 535' Cementing Record- 425 sx Class C Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300 sx "C" Tbg Size- 2-7/8" Depth Set- 6072' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 542' Cementing Record- 350 sx Hole Size-8-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1800 sx Tbg Size- 2-7/8" Depth Set- 6052' Packer Set- 6052' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 300' Cementing Record- 1475 sx Tbg Size- 2-3/8" Depth Set- 6260' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 350 sx Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6350' Cementing Record- 1700 sx Tbg Size- 2-7/8" Depth Set- 6034' Packer Set- 6034' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 557' Cementing Record- 650 sx Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6401' Cementing Record- lead-714 sx tail-700 sx Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 23# Depth Set- 542' Cementing Record- 350 sx Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1950 sx Tbg Size- 2-7/8" Depth Set- 6000' Packer Set- 6000' Hole Size-12-1/4" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 578' Cementing Record- 350 sx Tbg Size- 2-7/8" Depth Set- 6060' Packer Set- 6060' Hole Size-11" Csg Size-8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90 sx BJ Line, 250 class "C" + 2% CaCl2 Hole Size-7-7/8" Csg Size-5-1/2" Weight LB/FT- 15.5# Depth Set- 6349' Cementing Record- 860 sx Class "C" + 5# Salt + 4% FL 52 1200 sx BJ Lile Tbg Size- 2-7/8" Depth Set- 6170' Csg Size-20" Depth Set-34' Cementing Record-5 cubic yards Hole Size-17-1/2" Csg Size-13-3/8" Weight LB/FT-48# Depth Set- 418' Cementing Record- 500 sx Hole Size-12-1/4" Csg Size-9-5/8" Weight LB/FT- 36.40# Depth Set- 6355' Cementing Record-Stage 1-1065sx Stage 2-1640 sx Tbg Size- 4-1/2" Depth Set- 11769 Hole Size-17-1/2" Csg Size-13-3/8" Weight LB/FT- 48# Depth Set- 440' Cementing Record- 550 sx Hole Size-12-1/4" Csg Size-7-5/8" Weight LB/FT- 26.4# Depth Set- 6185' Cementing Record- 6200 sx Liner- Hole Size-6-1/2" Csg Size-4-1/2" Top- 5795' Bottom- 9800' Cementing Record- 475 sx Tbg Size- 2-3/8" Depth Set- 7065' Hole Size-17-1/2" Csg Size-13-3/8" Weight LB/FT- 48# Depth Set- 485' Cementing Record- 600 sx Hole Size-9-1/2" Csg Size-7-5/8" Weight LB/FT- 26.4# Depth Set- 7005' Cementing Record- 3055 sx Liner Size-4-1/2" Top- 6801' Bottom- 9498' Cement- 450 sx Tbg Size- 2-7/8" Depth Set- 6428'	1930 FNL & 2303 FWL Sec 23-T23S-R28E	1/16/1978	9/6/1978	13213
South Culebra Bluff #23-1	Oil		1830 FSL & 1980 FWL Sec 23-T23S-R28E	1/4/1988	3/9/1988	6550
South Culebra Bluff #23-3	Oil		510 FSL & 660 FWL Sec 23-T23S-R28E	2/19/1990	3/10/1980	6530
South Culebra Bluff #23-7	Oil		1750 FEL & 1950 FSL Sec 23-T23S-R28E	5/17/1990	6/8/1990	6530
South Culebra Bluff #23-8	Oil		1650 FSL & 330 FEL Sec 23-T23S-R28E	12/4/2004	1/2/2005	6424
South Culebra Bluff #23-9	Oil		660 FSL & 1980 FEL Sec 23-T23S-R28E	5/28/1990	6/20/1990	6550
South Culebra Bluff #23-10	Oil		330 FSL & 330 FEL Sec 23-T23S-R28E	5/17/2005	7/13/2005	6402
South Culebra Bluff #23-11	Oil		660 FNL & 2140 FEL Sec 23-T23S-R28E	4/23/1990	5/19/1990	6500
South Culebra Bluff #23-12	Oil		2140 FNL & 400 FEL Sec 23-T23S-R28E	6/9/1990	7/7/1990	6350
South Culebra Bluff #23-13	Oil		1650 FNL & 1650 FWL Sec 23-T23S-R28E	5/7/1998	6/10/1998	6350
South Culebra Bluff Unit #1	Gas		1980 FNL & 1650 FEL Sec 23-T23S-R28E	11/6/1977	12/7/1978	11769
South Culebra Bluff Unit #4	Oil		660 FNL & 560 FEL Sec 23-T23S-R28E	8/9/1979	9/4/1980	9802
South Culebra Bluff Unit #6	Oil		1980 FNL & 660 FWL Sec 24-T23S-R28E	7/11/1980	12/19/1980	9506

South Culebra Bluff #23-15

*Wells within area of review

Well Name	Well Type	Construction	Location	Date Drilled	Completion Date	Depth
Candelario #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 543' Cementing Record- 350 sx Tg Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 700 sx DV Set- 3491' 1000 sx	860 FNL & 660 FWL Sec 24-T23S-R28E	11/7/1990	12/14/1990	6310
Candelario 24 #2	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 297' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6397' Cementing Record- 1300 sx	330 FNL & 330 FWL Sec 24-T23S-R28E	10/15/2004	11/21/2004	6400
Candela 13 #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 583' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 675 sx 1st stage 820 sx thru DV tool	560 FNL & 660 FSL Sec 13-T23S-R28E	4/13/1991	5/1/1991	6300
Donaldson A Comm #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 465' Cementing Record- 370 sx Class C Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6307' Cementing Record- 1200 sx H/LC & Class C Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 3037' Cementing Record- 2870 sx T1C & Class H Liner- Hole Size- 6-1/2" Csg Size- 4-1/2" Top- 10545' Bottom- 13204' Cementing Record- 350 sx	1930 FNL & 2303 FWL Sec 23-T23S-R28E	1/16/1978	9/6/1978	13213
Reid #1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 510' Cementing Record- 300 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1250 sx	880 FSL & 1080 FEL Sec 14-T23S-R28E	11/6/1990	12/4/1990	6300
Reid #2	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 509' Cementing Record- 310 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1150 sx	888 FSL & 925 FEL Sec 14-T23S-R28E	12/4/1991	2/17/1991	6300
South Culebra Bluff #23-3	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 635' Cementing Record- 425 sx Class C Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300 sx "C"	510 FSL & 660 FWL Sec 23-T23S-R28E	2/19/1990	3/10/1990	6330
South Culebra Bluff #23-6	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 556' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700 sx	678 FNL & 2170 FWL Sec 23-T23S-R28E	3/28/1990	5/2/1990	6300
South Culebra Bluff #23-7	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 542' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1600 sx	1750 FSL & 1950 FSL Sec 23-T23S-R28E	5/17/1990	6/8/1990	6300
South Culebra Bluff #23-8	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 300' Cementing Record- 1475 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6424' Cementing Record- 1950 sx	1650 FSL & 330 FEL Sec 23-T23S-R28E	12/4/2004	1/2/2005	6424
South Culebra Bluff #23-11	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 542' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1850 sx	660 FNL & 2140 FEL Sec 23-T23S-R28E	4/23/1990	5/19/1990	6300
South Culebra Bluff #23-12	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 579' Cementing Record- 350 sx Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1795 sx	2140 FNL & 400 FEL Sec 23-T23S-R28E	6/9/1990	7/7/1990	6350
South Culebra Bluff #23-13	Oil	Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90 sx BJ Lile, 250 class "C" + 2% CaCl2 Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6349' Cementing Record- 960 sx Class "C" + 5# Salt + 4% FL-92 1200 sx BJ Lile	1650 FNL & 1650 FWL Sec 23-T23S-R28E	5/7/1998	6/10/1998	6350
South Culebra Bluff Unit #1	Gas	Hole Size- 20" Depth Set- 34' Cementing Record- 5 cubic yards Hole Size- 17-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 418' Cementing Record- 500 sx Hole Size- 12-1/4" Csg Size- 9-5/8" Weight LB/FT- 36.40# Depth Set- 6355' Cementing Record- Stage 1-1065sx Stage 2-1640 sx	1980 FNL & 1650 FEL Sec 23-T23S-R28E	11/6/1977	12/7/1978	11769
South Culebra Bluff Unit #4	Oil	Hole Size- 17-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 440' Cementing Record- 550 sx Hole Size- 12-1/4" Csg Size- 7-5/8" Weight LB/FT- 26.4# Depth Set- 6185' Cementing Record- 6200 sx Liner- Hole Size- 6-1/2" Csg Size- 4-1/2" Top- 5795' Bottom- 9800' Cementing Record- 475 sx	660 FNL & 560 FEL Sec 23-T23S-R28E	8/9/1979	9/4/1980	9802
South Culebra Bluff Unit #6	Oil	Hole Size- 17-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 485' Cementing Record- 600 sx Hole Size- 9-1/2" Csg Size- 7-5/8" Weight LB/FT- 26.4# Depth Set- 7006' Cementing Record- 3055 sx Liner- Hole Size- 4-1/2" Top- 6801' Bottom- 9498' Cement- 450 sx	1980 FNL & 660 FWL Sec 24-T23S-R28E	7/11/1980	12/19/1980	9506

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South Culebra Bluff #23-20

“Wells within area of review

Well Name	Well Type	Construction	Location	Date Drilled	Completion Date	Depth
Brantley Conn #1	Oil	Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 500' Cementing Record- 550 sx HLC & C	554 FSL & 1874 FWL Sec 23-T23S-R28E	9/22/1961	11/10/1961	7506
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 17# Depth Set- 7200' Cementing Record- 2550 sx HLC & C				
		Thg Size- 2-3/8" Depth Set- 7344'				
Donaldson A Conn #1	Oil	Hole Size- 12-1/8" Csg Size- 10-3/4" Weight LB/FT- 65# Depth Set- 486' Cementing Record- 370 sx Class C	1930 FNL & 2303 FWL Sec 23-T23S-R28E	1/16/1978	9/6/1978	13213
		Hole Size- 12-1/4" Csg Size- 10-3/4" Weight LB/FT- 40.5# Depth Set- 3037' Cementing Record- 1200 sx HLC & Class C				
		Hole Size- 9-1/2" Csg Size- 7-5/8" Weight LB/FT- 33.2# & 2# Depth Set- 10800' Cementing Record- 2870 sx T2C & Class H				
		Linear- Hole Size- 6-1/2" Csg Size- 4-1/2" Top- 10585 Bottom- 13204' Cementing Record- 350 sx				
		Thg Size- 2-7/8" Depth Set- 10197' Packer Set- 10204'				
South Culebra Bluff #23-1	Oil	Thg Size- 2-3/8" Depth Set- 11404'	1830 FSL & 1980 FWL Sec 23-T23S-R28E	1/4/1988	3/9/1988	6560
		Hole Size- 12-1/4" Csg Size- 9-5/8" Weight LB/FT- 24# Depth Set- 527.88' Cementing Record- 447 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 17# Depth Set- 6560' Cementing Record- 1578 sx				
South Culebra Bluff #23-2	Oil	Thg Size- 2-7/8" Depth Set- 6000' Packer Set- Baker Model R @ 6023'	1920 FSL & 660 FWL Sec 23-T23S-R28E	11/11/1989	11/25/1989	6310
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 552' Cementing Record- 945 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1400 sx				
South Culebra Bluff #23-3	Oil	Thg Size- 7-7/8" Depth Set- 6018' Packer Set- Arrosel I @ 6018'	510 FSL & 660 FWL Sec 23-T23S-R28E	2/19/1990	3/10/1990	6330
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 635' Cementing Record- 425 sx Class C				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300 sx "C"				
South Culebra Bluff #23-4	Oil	Thg Size- 2-7/8" Depth Set- 6077'	894 FWL & 1890 FNL Sec 23-T23S-R28E	3/3/1990	3/25/1990	6305
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 450 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6305' Cementing Record- 2000 sx				
South Culebra Bluff #23-6	Oil	Thg Size- 2-7/8" Depth Set- 6060' Packer Set- 6050'	678 FNL & 2170 FWL Sec 23-T23S-R28E	3/28/1990	5/21/1990	6300
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 555' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700 sx				
South Culebra Bluff #23-7	Oil	Thg Size- 2-7/8" Depth Set- 6105' Packer Set- 6105'	1750 FEL & 1950 FSL Sec 23-T23S-R28E	5/17/1990	6/8/1990	6300
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 542' Cementing Record- 350 sx				
		Hole Size- 8-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1600 sx				
South Culebra Bluff #23-8	Oil	Thg Size- 2-7/8" Depth Set- 6052' Packer Set- 6052'	1650 FSL & 330 FEL Sec 23-T23S-R28E	12/1/2004	1/2/2005	6424
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 300' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6424' Cementing Record- 1475 sx				
South Culebra Bluff #23-9	Oil	Thg Size- 2-3/8" Depth Set- 6260'	660 FSL & 1980 FEL Sec 23-T23S-R28E	5/28/1990	6/20/1990	6350
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6350' Cementing Record- 1700 sx				
South Culebra Bluff #23-11	Oil	Thg Size- 2-7/8" Depth Set- 6034' Packer Set- 6034'	660 FNL & 2140 FEL Sec 23-T23S-R28E	4/23/1990	5/19/1990	6300
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 542' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1950 sx				
South Culebra Bluff #23-12	Oil	Thg Size- 2-7/8" Depth Set- 6000' Packer Set- 6000'	2140 FNL & 400 FEL Sec 23-T23S-R28E	6/9/1990	7/7/1990	6350
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 579' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1795 sx				
South Culebra Bluff #23-13	Oil	Thg Size- 2-7/8" Depth Set- 6060' Packer Set- 6060'	1650 FNL & 1650 FWL Sec 23-T23S-R28E	5/7/1998	6/10/1998	6350
		Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90 sx BJ Lile, 250 class "C" + 2% CaCl2				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6349' Cementing Record- 960 sx Class "C" + 5# Salt + 4% FL-52 1200 sx BJ Lile				
South Culebra Bluff #23-14	Oil	Thg Size- 2-7/8" Depth Set- 6170'	990 FSL & 1850 FWL Sec 23-T23S-R28E	11/1/2004	12/16/2004	6419
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 335' Cementing Record- 350 sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6419' Cementing Record- 1206 sx				
South Culebra Bluff Unit #1	Gas	Thg Size- 2-7/8" Depth Set- 6001'	1980 FNL & 1650 FEL Sec 23-T23S-R28E	11/6/1977	1/27/1978	11769
		Csg Size- 20" Depth Set- 34' Cementing Record- 5 cubic yards				
		Hole Size- 7-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth				

Well Name	Well Type	Construction	Location	Date Drilled	Completion Date	Depth
Branley Com #1	Oil	Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 500' Cementing Record- 550' sx HLC & C	554' FSL & 1874' FWL Sec 23-T23S-R28E	9/22/1981	11/10/1981	7508
		Tag Size- 2-3/8" Depth Set- 7344'				
Donaldson A Comm #1	Oil	Hole Size- 18-1/2" Csg Size- 16" Weight LB/FT- 85# Depth Set- 468' Cementing Record- 370' sx Class C	1930' FNL & 2303' FWL Sec 23-T23S-R28E	1/16/1978	9/6/1978	13213
		Hole Size- 12-1/4" Csg Size- 10-3/4" Weight LB/FT- 40.5# Depth Set- 3037' Cementing Record- 1200' sx HLC & Class C				
		Hole Size- 9-1/2" Csg Size- 7-5/8" Weight LB/FT- 33.29' & 28# Depth Set- 10800' Cementing Record- 2870' sx TLC & Class H				
		Liner- Hole Size- 6-1/2" Csg Size- 4-1/2" Top- 10585' Bottom- 13204' Cementing Record- 350' sx				
Jasso Unit #1	Oil	Tag Size- 2-7/8" Depth Set- 10197' Packer Set- 10204'	1864' FSL & 350' FEL Sec 22-T23S-R28E	1/8/1990	2/1/1990	6300
		Tag Size- 2-3/8" Depth Set- 11404'				
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 512' Cementing Record- 550' sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 2230' sx				
Queen #2	Oil	Tag Size- 2-7/8" Depth Set- 6053' Packer Set- 6053'	1880' FNL & 330' FEL Sec 22-T23S-R28E	9/23/1991	10/9/1991	6350
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 15.5# Depth Set- 410' Cementing Record- 265' sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6350' Cementing Record- 685' sx Lite, 350' sx "C"				
		Tag Size- 2-7/8" Depth Set- 6045'				
South Culebra Bufl #23-1	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 527' 88" Cementing Record- 447' sx	1830' FSL & 1980' FWL Sec 23-T23S-R28E	1/4/1988	3/9/1988	6560
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 17# Depth Set- 6660' Cementing Record- 1578' sx				
South Culebra Bufl #23-2	Oil	Tag Size- 2-7/8" Depth Set- 6030' Packer Set- Baker Model R @ 6023'	1920' FSL & 660' FWL Sec 23-T23S-R28E	11/1/1989	11/25/1989	6310
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 552' Cementing Record- 945' sx				
South Culebra Bufl #23-3	Oil	Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6310' Cementing Record- 1400' sx	510' FSL & 660' FWL Sec 23-T23S-R28E	2/19/1990	3/10/1990	6330
		Tag Size- 7-7/8" Depth Set- 6018' Packer Set- Armoat 1 @ 8018'				
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 23# Depth Set- 535' Cementing Record- 425' sx Class C				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6330' Cementing Record- 1300' sx "C"				
South Culebra Bufl #23-4	Oil	Tag Size- 2-7/8" Depth Set- 6072'	894' FWL & 1890' FNL Sec 23-T23S-R28E	3/25/1990	3/25/1990	6305
		Hole Size- 12-1/4" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6305' Cementing Record- 2000' sx				
South Culebra Bufl #23-5	Oil	Tag Size- 2-7/8" Depth Set- 6050' Packer Set- 6050'	540' FNL & 611' FWL Sec 23-T23S-R28E	3/15/1990	4/8/1990	6300
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 450' sx				
South Culebra Bufl #23-6	Oil	Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' sx	678' FNL & 2170' FWL Sec 23-T23S-R28E	3/28/1990	5/2/1990	6300
		Tag Size- 2-7/8" Depth Set- 6017' Packer Set- 6017'				
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 556' Cementing Record- 350' sx				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1700' sx				
South Culebra Bufl #23-7	Oil	Tag Size- 2-7/8" Depth Set- 6105' Packer Set- 6105'	1750' FEL & 1950' FSL Sec 23-T23S-R28E	5/17/1990	6/8/1990	6300
		Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 542' Cementing Record- 350' sx				
		Hole Size- 8-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6300' Cementing Record- 1800' sx				
		Tag Size- 2-7/8" Depth Set- 6052' Packer Set- 6052'				
South Culebra Bufl #23-9	Oil	Hole Size- 12-1/4" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 545' Cementing Record- 350' sx	660' FSL & 1980' FEL Sec 23-T23S-R28E	5/28/1990	6/20/1990	6350
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6350' Cementing Record- 1700' sx				
South Culebra Bufl #23-13	Oil	Tag Size- 2-7/8" Depth Set- 6034' Packer Set- 6034'	1650' FNL & 1850' FWL Sec 23-T23S-R28E	5/7/1998	6/10/1998	6350
		Hole Size- 11" Csg Size- 8-5/8" Weight LB/FT- 24# Depth Set- 550' Cementing Record- 90' sx BJ Lite, 250' class "C" + 2% CaCl2				
		Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6349' Cementing Record- 90' sx Class "C" + 5# Salt + 4% FL-52 1200' sx BJ Lite				
		Tag Size- 2-7/8" Depth Set- 6170'				
South Culebra Bufl #23-14	Oil	Hole Size- 12-1/4" Csg Size- 5-5/8" Weight LB/FT- 24# Depth Set- 335' Cementing Record- 350' sx	990' FSL & 1650' FWL Sec 23-T23S-R28E	11/1/2004	12/16/2004	6419
		Tag Size- 2-7/8" Depth Set- 6170'				
South Culebra Bufl Unit #1	Gas	Hole Size- 7-7/8" Csg Size- 5-1/2" Weight LB/FT- 15.5# Depth Set- 6419' Cementing Record- 1206' sx	1980' FNL & 1650' FEL Sec 23-T23S-R28E	11/6/1977	12/7/1978	11769
		Tag Size- 2-7/8" Depth Set- 6001'				
		Csg Size- 20" Depth Set- 34'				
		Hole Size- 11-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 418' Cementing Record- 500' sx				
South Culebra Bufl #2B	Oil	Hole Size- 12-1/4" Csg Size- 9-5/8" Weight LB/FT- 36.40# Depth Set- 6355' Cementing Record- Stage 1- 10655' Stage 2- 1640' sx	2050' FNL & 1950' FEL Sec 23-T23S-R28E	1/21/1979	3/13/1979	8000
		Tag Size- 4-1/2" Depth Set- 11769				
		Hole Size- 17-1/2" Csg Size- 13-3/8" Weight LB/FT- 48# Depth Set- 485' Cementing Record- 625' sx Class C				
		Hole Size- 11" Csg Size- 7-5/8" Weight LB/FT- 26.4# Depth Set- 6345' Cementing Record- 3690' TLW & 200' Class H				
		Tag Size- 2-3/8" Depth Set- 7000'				

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Range Operating NM, Inc

WELL NAME & NUMBER: South Gulebra Bluff 23-15

WELL LOCATION: 1430' FNL & 1150' FEL

28-E

H

23

23-S

RANGE

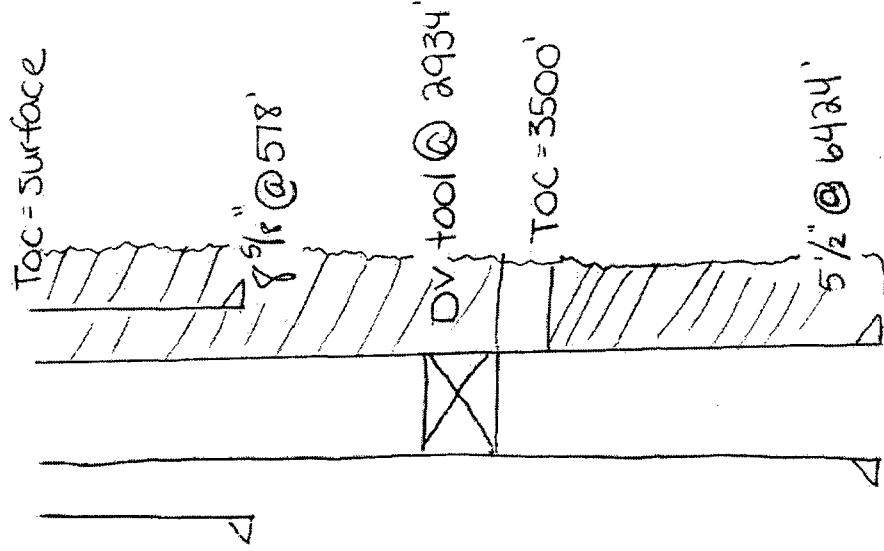
TOWNSHIP

SECTION

UNIT LETTER

FOOTAGE LOCATION

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8"
 Cemented with: 650 sx. or ft
 Top of Cement: Surface Method Determined: Calculated

Intermediate Casing

Hole Size: Casing Size:
 Cemented with: sx. or ft
 Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: Stage 1- 650
Stage 2- 625 sx. or ft
Stage 1- 3500
 Top of Cement: Stage 2- 2934-Surface Method Determined: Calculated

Total Depth:

Injection Interval

5724 feet to 6234

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2 7/8", 65#, J-55 Lining Material: PlasticType of Packer: Baker arrowset permanent pkrPacker Setting Depth: 5000'Other Type of Tubing/Casing Seal (if applicable): N/AAdditional Data1. Is this a new well drilled for injection? Yes X No If no, for what purpose was the well originally drilled? The well was drilled as a Brushy Canyon (Delaware) Producer2. Name of the Injection Formation: Delaware3. Name of Field or Pool (if applicable): 403504. 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. No5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above-Below- Bone Springs

OPERATOR: ~~Range Operating NM, Inc~~

WELL NAME & NUMBER: South Culebra Bluff 23-17

WELL LOCATION: 2440' FSL & 1500' FWL

28-13

23-5

3.6

22

3

;

7

5

11

—

FOOTAGE LOCATION

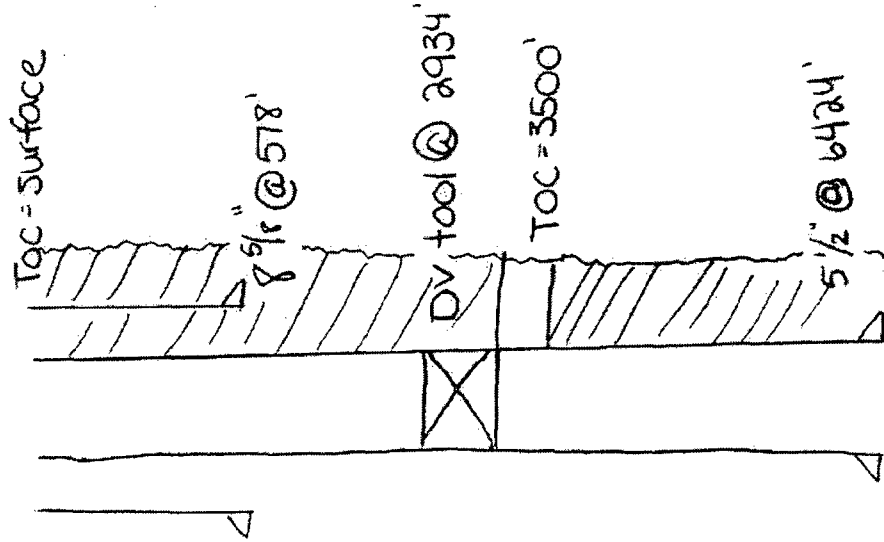
UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA
Surface Casing

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

Cemented with: 650 sx. or A:

Top of Cement:	Surface	Method Determined:	Calculated
100	100	100	100
90	90	90	90
80	80	80	80
70	70	70	70
60	60	60	60
50	50	50	50
40	40	40	40
30	30	30	30
20	20	20	20
10	10	10	10
0	0	0	0

Intermediate Casing

Hole Size: _____

Casing Size: _____

Cemented with: _____ Sx. of _____ ft

Top of Cement: _____

Method Determined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"

Cemented with:	Stage 1 - 650	Stage 2 - 625	or	st.

Stage 1- 3500
Top of Cement: Stage 2 - 2934=Surface Method Determined: Calculated

Total Depth: _____

Injection Interval

5680	6205
------	------

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

SCB 23-17

Tubing Size: 2 7/8", 65#, J-55 Lining Material: PlasticType of Packer: Baker arrowset permanent pkrPacker Setting Depth: 5000'Other Type of Tubing/Casing Seal (if applicable): N/AAdditional Data1. Is this a new well drilled for injection? X Yes NoIf no, for what purpose was the well originally drilled? N/A2. Name of the Injection Formation: Delaware3. Name of Field or Pool (if applicable): 403504. 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: _____

Above-Below- Bone Springs

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Range Operating NM, Inc.

WELL NAME & NUMBER: South Culebra Bluff 23-18

WELL LOCATION: BHL=1300' EWL & 1000' ENL

28-E

23-S

23

E

FOOTAGE LOCATION

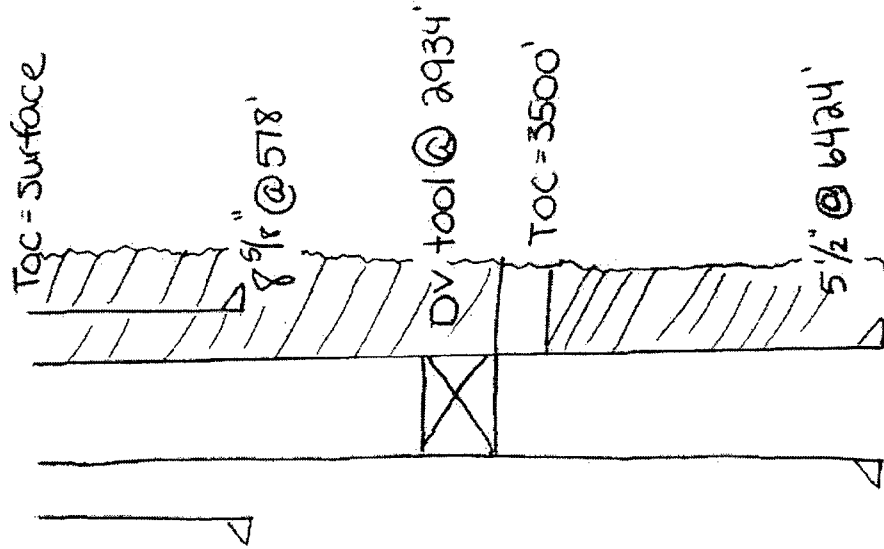
UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Hole Size: 12 1/4" Casing Size: 8 5/8"
 Cemented with: 650 sx or ft
 Top of Cement: Surface Method Determined: Calculated

Intermediate Casing

Hole Size: Casing Size:
 Cemented with: sx or ft
 Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: Stage 1- 650 sx or ft
 Stage 2- 625
 Top of Cement: Stage 1- 3500 Method Determined: Calculated
 Stage 2- 2934-Surface

Total Depth:

Injection Interval

5695 feet to 6215

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

SCB 23-18

Tubing Size: 2 7/8", 65#, J-55 Lining Material: PlasticType of Packer: Baker arrowset permanent pkrPacker Setting Depth: 5000'Other Type of Tubing/Casing Seal (if applicable): N/AAdditional Data1. Is this a new well drilled for injection? X Yes NoIf no, for what purpose was the well originally drilled? N/A2. Name of the Injection Formation: Delaware3. Name of Field or Pool (if applicable): 403504. 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: _____

Above-Below- Bone Springs

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Range Operating NM, Inc

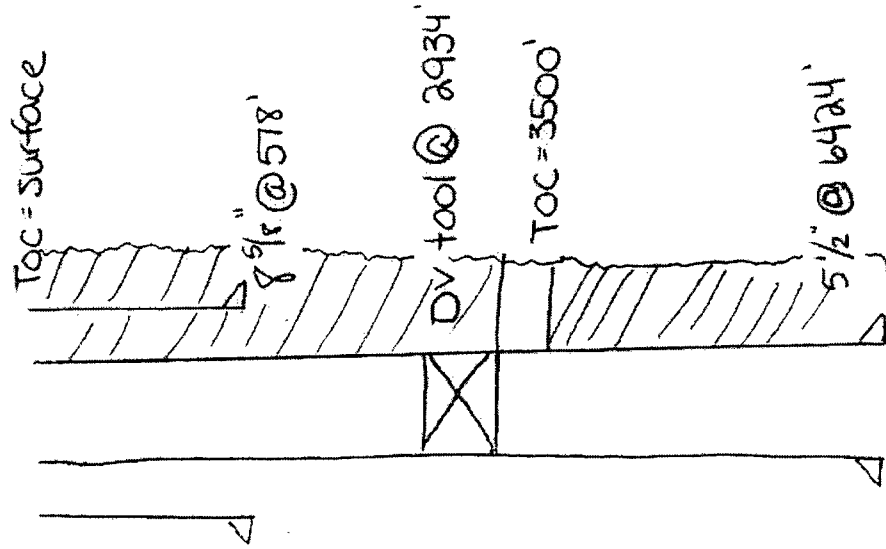
WELL NAME & NUMBER: South Culebra Bluff 23-19

WELL LOCATION: BHL = 2620' FEL & 1300' FNL F UNIT LETTER SECTION TOWNSHIP RANGE

23 23-S 28-E

FOOTAGE LOCATION

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Hole Size: 12 1/4" Casing Size: 8 5/8"
 Cemented with: 650 sx. or ft
 Top of Cement: Surface Method Determined: Calculated

Intermediate Casing

Hole Size: Casing Size:
 Cemented with: sx. or ft
 Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: Stage 1 - 650 or ft
Stage 2 - 625 sx.
 Top of Cement: Stage 1 - 3500 Method Determined: Calculated
Stage 2 - 2934-Surface

Total Depth:

Injection Interval

5720 feet to 6235

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

SCB 23-19

Tubing Size: 2 7/8", 65#, J-55 Lining Material: PlasticType of Packer: Baker arrowset permanent pkrPacker Setting Depth: 5000'Other Type of Tubing/Casing Seal (if applicable): N/AAdditional Data1. Is this a new well drilled for injection? X Yes NoIf no, for what purpose was the well originally drilled? N/A2. Name of the Injection Formation: Delaware3. Name of Field or Pool (if applicable): 403504. 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:

Above-Below- Bone Springs

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Range Operating NM, Inc

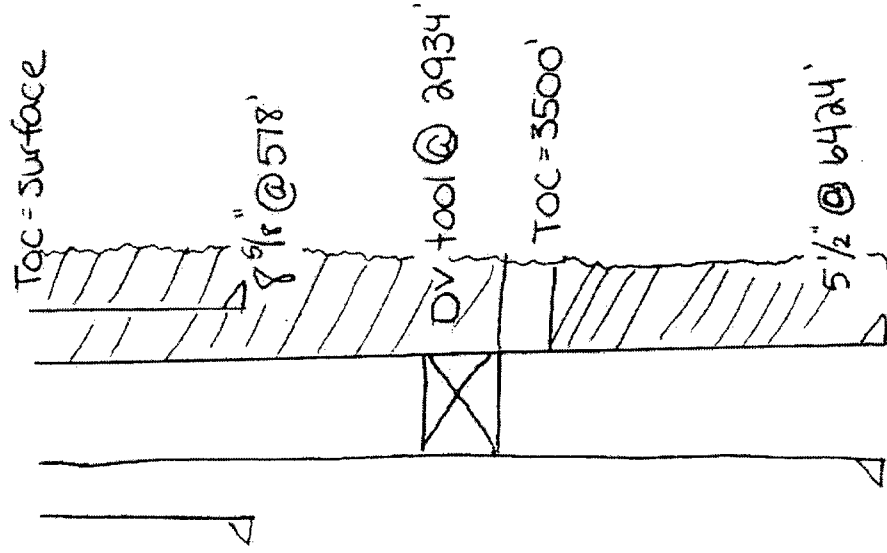
WELL NAME & NUMBER: South Culebra Bluff 23-20

WELL LOCATION: 2520' FSL & 2460' FEL

UNIT LETTER: J SECTION: 23 TOWNSHIP: 23-S RANGE: 28-E

FOOTAGE LOCATION

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Hole Size: 12 1/4" Casing Size: 8 5/8"
 Cemented with: 650 sx. or ft
 Top of Cement: Surface Method Determined: Calculated

Intermediate Casing

Hole Size: Casing Size:
 Cemented with: sx. or ft
 Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: Stage 1- 650 sx. or ft
Stage 2- 625
 Top of Cement: Stage 1- 3500 Method Determined: Calculated
Stage 2- 2934-Surface

Total Depth:

Injection Interval

5710 feet to 6225

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET SCB 23-20

Tubing Size: 2 7/8", 65#, J-55 Lining Material: Plastic

Type of Packer: Baker arrowset permanent pkr

Packer Setting Depth: 5000'

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

Additional Data

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

If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Delaware

3. Name of Field or Pool (if applicable): 40350

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:

Above-

Below- Bone Springs

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Range Operating NM, Inc

WELL NAME & NUMBER: South Culebra Bluff 23-21

WELL LOCATION: 2531' EST & 1252' REL

28-E

23-S

23

UNIT LETTER

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8"
 Cemented with: 650 sx. or ft
 Top of Cement: Surface Method Determined: Calculated

Intermediate Casing

Hole Size: Casing Size:
 Cemented with: sx. or ft
 Top of Cement: Method Determined:

Production Casing

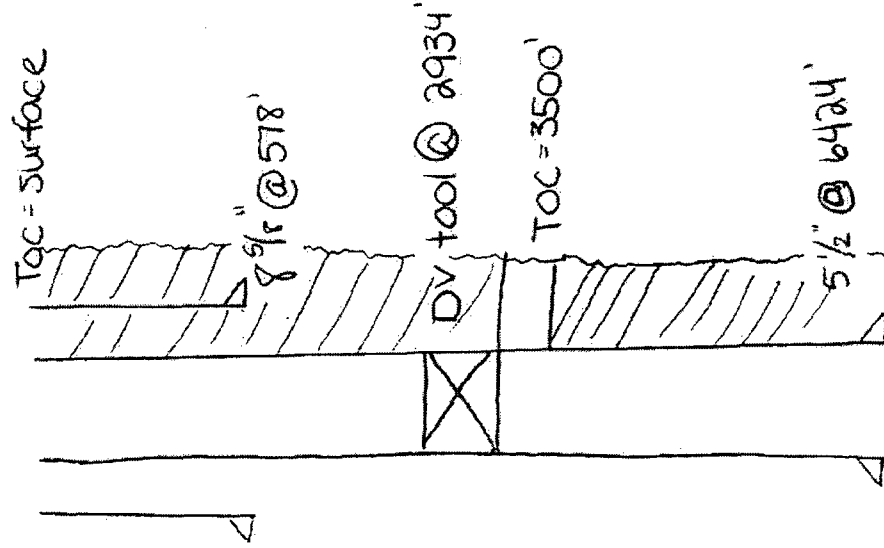
Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: Stage 1- 650
Stage 2- 625 sx. or ft
 Top of Cement: Stage 1- 3500
Stage 2- 2934-Surface Method Determined: Calculated

Total Depth:

Injection Interval

5725 feet to 6235

(Perforated or Open Hole; indicate which)



INJECTION WELL DATA SHEET SCB 23-21

Tubing Size: 2 7/8", 65#, J-55 Lining Material: Plastic

Type of Packer: Baker arrowset permanent pkr

Packer Setting Depth: 5000'

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

Additional Data

1. Is this a new well drilled for injection? X Yes No
 If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Delaware

3. Name of Field or Pool (if applicable): 40350

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:

Above-

Below- Bone Springs

III. WELL DATA

- A. See attached Injection Well Data sheet and schematics.
- B. (1). Inject produced and fresh water into the lower Brushy Canyon member of the Delaware formation in the East Loving Delaware Pool.

(2). The approximate injection interval will be perforated from 5700' to 6300' overall. Specific intervals are provided on attached Injection Well Data Sheets for each well.

(3). The wells will be drilled as injectors for waterflood except the SCB 23-15 will be converted from a producer to an injector.

(4). The wells have not been drilled but will contain a permanent packer with 2 7/8", 6.5 lb/ft, plastic lined tubing set approximately 50' above the perforations.

(5). There are no oil or gas producing intervals above the Delaware and the Bone Spring is below the base of the Delaware at +/- 6400'.

VII. Data on Proposed Operation

- (1). The proposed average daily injection rate is 500 bwpd per well and 1000 bwpd per well maximum.
- (2). The system will be a closed system.
- (3). The proposed average and maximum injection pressure is 500 psi and 1000 psi respectively.
- (4). The source of the water for injection is produced water from the Brushy Canyon member of the Delaware formation and or fresh water. A water analysis is attached.
- (5). The injection is for waterflood and produced water from the Brushy Canyon will be injected back into the Brushy Canyon.

IX. Proposed Stimulation Program

A hydraulic fracture treatment will be performed on each new injection well in the lower "C" section of the Brushy Canyon. Estimated size will be 150,000 lbs of proppant in crosslinked gel.

X. Open-Hole Logs

The open-hole well logs were previously filed for the SCB 23-15 and the other injection wells have yet to be drilled.

XI. Fresh Water Analysis

See Attached.

XII. No Evidence of Hydrologic Connection

Review of the existing geologic and engineering data do not indicate hydrologic connection between the proposed disposal interval and shallow, freshwater aquifers. No available data suggest connection between the two zones by conductive faults. The thick evaporate section between 500 and 2637 ft affords an impervious seal separating the freshwater zones and the disposal zone.



North Permian Basin Region

P.O. Box 740

Sundown, TX 79372-0740

(806) 229-8121

Lab Team Leader - Sheila Hernandez

(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	RBO OPERATING INC	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY FRUIT (505) 910-9388
Area:	LOVING, NM	Sample #:	35599
Lease/Platform:	SCB UNIT	Analysis ID #:	43324
Entity (or well #):	6 B	Analysis Cost:	\$40.00
Formation:	UNKNOWN - <i>Brushy Canyon</i>		
Sample Point:	WATER TANK		

Summary		Analysis of Sample 35599 @ 75 °F					
Sampling Date:	5/20/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/21/04	Chloride:	187000.0	5274.59	Sodium:	78232.3	3402.91
Analyst:	CURRY FRUIT	Bicarbonate:	366.0	6	Magnesium:	4356.0	389.84
TDS (mg/l or g/m3):	300080.3	Carbonate:	0.0	0	Calcium:	29604.0	1477.25
Density (g/cm3, tonne/m3):	1.2	Sulfate:	5.0	0.1	Strontium:		
Anion/Cation Ratio:	1	Phosphate:			Barium:		
		Borate:			Iron:	25.0	0.9
		Silicate:			Potassium:		
Carbon Dioxide:	275 PPM	Hydrogen Sulfide:		<5 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		5.5	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		5.5	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.30	19.98	-2.00	0.00	-1.93	0.00	0.00	0.00	0.00	0.00	5.01
100	0	0.38	24.97	-2.09	0.00	-1.95	0.00	0.00	0.00	0.00	0.00	5.81
120	0	0.48	29.70	-2.16	0.00	-1.94	0.00	0.00	0.00	0.00	0.00	6.54
140	0	0.55	34.43	-2.22	0.00	-1.91	0.00	0.00	0.00	0.00	0.00	7.17

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.



North Permian Basin Region
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Sundown, TX 79372-0740
(808) 229-9121
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(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	RBO OPERATING INC	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY FRUIT (505) 910-9388
Area:	LOVING, NM	Sample #:	35600
Lease/Platform:	SCB UNIT	Analysis ID #:	43325
Entity (or well #):	23 -1/2	Analysis Cost:	\$40.00
Formation:	UNKNOWN - BRUSHY CANYON		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 35600 @ 75 °F					
Sampling Date:	5/20/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/21/04	Chloride:	161000.0	4841.22	Sodium:	67888.3	2957.37
Analyst:	CURRY FRUIT	Bicarbonate:	37.0	0.81	Magnesium:	4250.0	349.82
		Carbonate:			Calcium:	24720.0	1233.61
TDS (mg/l or g/m3):	258058.3	Sulfate:	15.0	0.31	Strontium:		
Density (g/cm3, tonnes/m3):	1.2	Phosphate:			Barium:		
Anion/Cation Ratio:	1	Borate:			Iron:	45.0	1.63
		Silicate:			Potassium:		
Carbon Dioxide:	600 PPM	Hydrogen Sulfide:		<5 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		5.5	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculations:		5.5	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.88	0.00	-1.84	0.00	-1.58	0.00	0.00	0.00	0.00	0.00	0.56
100	0	-0.78	0.00	-1.71	0.00	-1.60	0.00	0.00	0.00	0.00	0.00	0.86
120	0	-0.70	0.00	-1.77	0.00	-1.58	0.00	0.00	0.00	0.00	0.00	0.78
140	0	-0.62	0.00	-1.82	0.00	-1.54	0.00	0.00	0.00	0.00	0.00	0.85

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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PRODUCT WARRANTY, DISCLAIMER AND LIMITATION OF LIABILITY ARE FOUND ON THE BACK OF THIS SHEET



North Permian Basin Region

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Sundown, TX 79672-0740

(806) 226-8121

Lab Team Leader - Shelia Hernandez

(815) 485-7240

Water Analysis Report by Baker Petrolite

Company:	R. B. OPERATING INCORPORATED	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY FRUIT (505) 910-9388
Area:	HOBBS, NM	Sample #:	35632
Lease/Platform:	SCB UNIT	Analysis ID #:	43582
Entity (or well #):	WATER WELL 1 Reid House <i>Reid House</i>		Analysis Cost
Formation:	UNKNOWN - FRESH WATER		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 35632 @ 75 °F					
Sampling Date:	6/1/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	6/2/04	Chloride:	3216.0	88.71	Sodium:	316.3	13.78
Analyst:	CURRY FRUIT	Bicarbonate:	82.0	1.02	Magnesium:	417.0	34.3
TDS (mg/l or g/m ³):	4998.3	Carbonate:	0.0	0.	Calcium:	908.0	45.31
Density (g/cm ³ , tonne/m ³):	1	Sulfate:	79.0	1.64	Strontium:		
Anion/Cation Ratio:	1.0000001	Phosphate:			Barium:		
		Borate:			Iron:	0.0	0.
		Silicate:			Potassium:		
Carbon Dioxide:	0.0 PPM	Hydrogen Sulfide:		0.0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7.1	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7.1	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.03	0.00	-1.32	0.00	-1.39	0.00	0.00	0.00	0.00	0.00	0.06
100	0	0.08	0.70	-1.33	0.00	-1.33	0.00	0.00	0.00	0.00	0.00	0.07
120	0	0.20	1.74	-1.32	0.00	-1.24	0.00	0.00	0.00	0.00	0.00	0.09
140	0	0.32	2.78	-1.30	0.00	-1.13	0.00	0.00	0.00	0.00	0.00	0.11

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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North Permian Basin Region

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Water Analysis Report by Baker Petrolite

Company:	R. B. OPERATING INCORPORATED	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY FRUIT (605) 910-9388
Area:	HOEBS, NM	Sample #:	35831
Lease/Platform:	SCB UNIT	Analysis ID #:	43583
Entity (or well #):	WATER WELL 2 WIND MILL NORTH	Analysis Cost:	\$7.00
Formation:	UNKNOWN OF RB VARD		
Sample Point:	WELLHEAD FRESH WATER		

Summary		Analysis of Sample 35831 @ 75 °F					
Sampling Date:	8/1/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	8/2/04	Chloride:	4575.0	122.16	Sodium:	1145.7	49.84
Analyst:	CURRY FRUIT	Bicarbonate:	62.0	1.02	Magnesium:	383.0	31.51
TDS (mg/l or g/m3):	7263	Carbonate:	0.0	0.	Calcium:	1018.0	50.9
Density (g/cm3, tonnes/m3):	1	Sulfate:	95.0	1.98	Strontium:		
Anion/Cation Ratio:	1.0000001	Phosphate:			Barium:		
		Borate:			Iron:	0.3	0.01
		Silicate:			Potassium:		
Carbon Dioxide:	0.0 PPM	Hydrogen Sulfide:		0.0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.13	0.00	-1.25	0.00	-1.32	0.00	0.00	0.00	0.00	0.00	0.07
100	0	-0.02	0.00	-1.26	0.00	-1.26	0.00	0.00	0.00	0.00	0.00	0.09
120	0	0.10	0.70	-1.25	0.00	-1.18	0.00	0.00	0.00	0.00	0.00	0.11
140	0	0.22	2.08	-1.24	0.00	-1.07	0.00	0.00	0.00	0.00	0.00	0.14

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Water Analysis Report by Baker Petrolite

Company:	R. B. OPERATING INCORPORATED	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY PRUIT (505) 910-8388
Area:	HOBBS, NM	Sample #:	35630
Lease/Platform:	SCB UNIT	Analysis ID #:	43584
Entity (or well #):	WATER WELL 3 NEAR SCB #3B	Analysis Cost:	\$7.00
Formation:	UNKNOWN FRESH WATER		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 35630 @ 75°F					
Sampling Date:	5/1/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/2/04	Chloride:	3542.0	102.73	Sodium:	609.1	26.49
Analyst:	CURRY PRUIT	Bicarbonate:	62.0	1.02	Magnesium:	434.0	35.7
TDS (mg/l or g/m3):	5593.1	Carbonate:	0.0	0.	Calcium:	866.0	43.21
Density (g/cm3, tonnes/m3):	1	Sulfate:	80.0	1.67	Strontium:		
Anion/Cation Ratio:	0.9999899	Phosphate:			Barium:		
		Borate:			Iron:	0.0	0.
		Silicate:			Potassium:		
Carbon Dioxide:	0.0 PPM	Hydrogen Sulfide:		0.0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7.2	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7.2	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press.
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.03	0.35	-1.35	0.00	-1.41	0.00	0.00	0.00	0.03	0.00	0.04
100	0	0.14	1.05	-1.35	0.00	-1.35	0.00	0.00	0.00	0.00	0.00	0.06
120	0	0.25	1.74	-1.35	0.00	-1.27	0.00	0.00	0.00	0.00	0.00	0.07
140	0	0.37	2.79	-1.33	0.00	-1.16	0.00	0.00	0.00	0.00	0.00	0.09

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

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EXHIBIT "C"
Loving East Delaware Lease Flood
Current Producers

1. **Donaldson Comm #1**
2. **SCB #3B**
3. **SCB #4B**
4. **SCB 23-1**
5. **SCB 23-2**
6. **SCB 23-4**
7. **SCB 23-5**
8. **SCB 23-6**
9. **SCB 23-7**
10. **SCB 23-8**
11. **SCB 23-11**
12. **SCB 23-12**
13. **SCB 23-13**
14. **SCB 23-15 ***

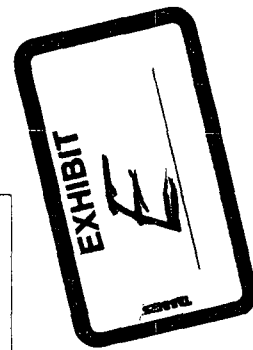
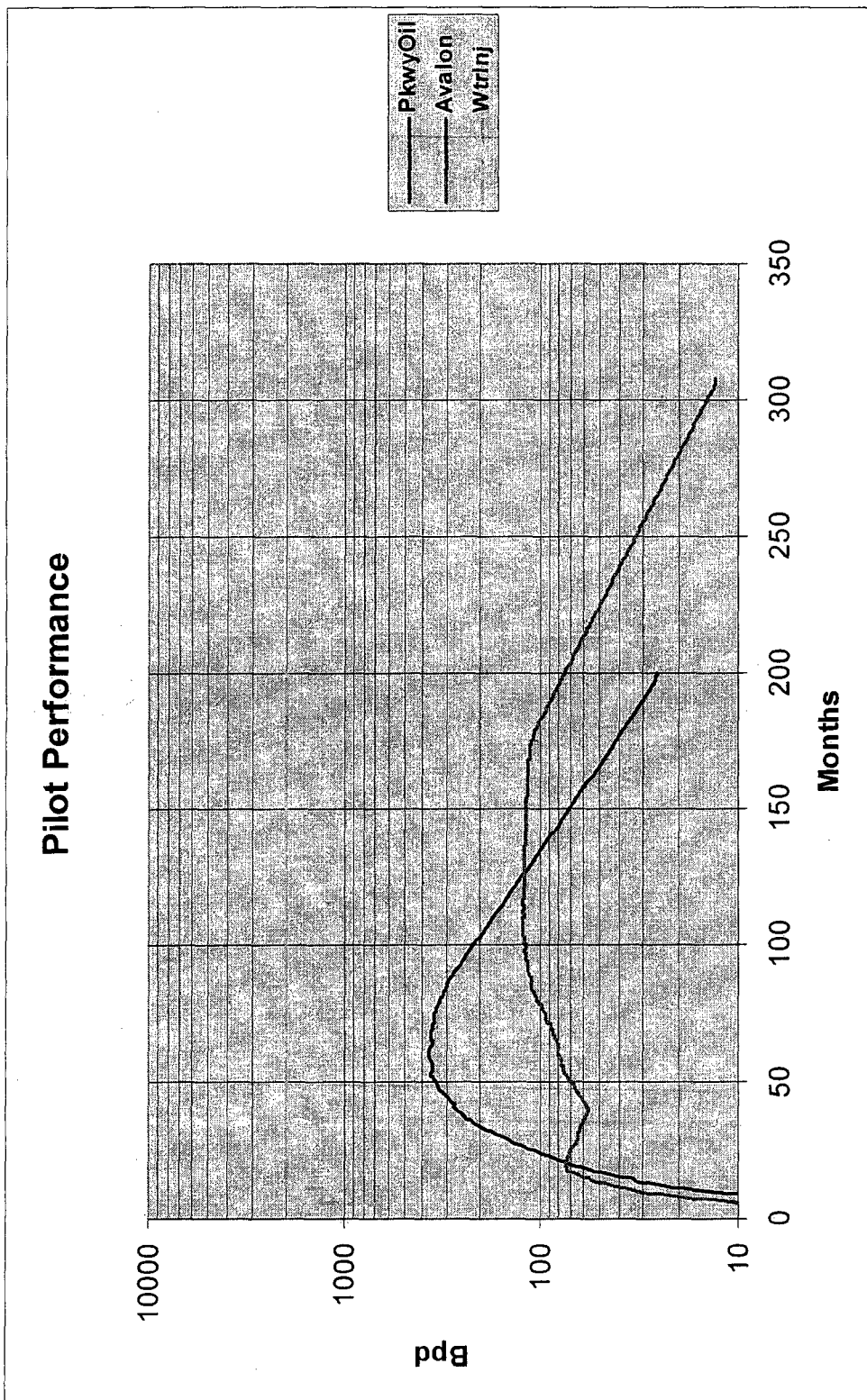
* SCB 23-15 to be converted to injection well

EXHIBIT "D"
EAST LOVING-DELAWARE LEASEHOLD WATERFLOOD PORJECT
PROPOSED INJECTION WELLBORES

1. SCB 23-15 Well 1430 feet FNL and 1150 feet FEL (Unit H)
Section 23, T23S, R28E
2. SCB 23-17 Well 2440 feet ^F~~F~~SL and 1500 feet FWL (Unit K)
Section 23, T23S, R28E
3. SCB 23-18 Well Surface: 1815 feet FNL and ¹²⁰⁰~~1120~~ feet FEL (Unit D)
Bottomhole:
1300 feet FWL and 1000 feet FNL (Unit E)
Section 23, T23S, R28E
4. SCB 23-19 Well Surface: 1950 feet FNL and 2470 feet FWL (Unit F)
Bottomhole:
2620 feet FEL and 1300 feet FNL (Unit F)
Section 23, T23S, R28E
5. SCB 23-20 Well 2520 feet FSL and 2460 feet FEL (Unit J)
Section 23, T23S, R28E
6. SCB 23-21 Well 2531 FSL and 1252 FEL (Unit I)
Section 23, T23S, R28E

Pilot Forecast

Generated from Analog Field Performance



NOTICE LIST

WORKING INTEREST OWNERS

Range Operating New Mexico Inc.
777 Main Street, Ste #800
Fort Worth, TX 76102

Chesapeake Permian LP
P. O. Box 548806
Oklahoma City, OK 73154-8806
Attn: Lynda Townsend

ROYALTY AND SURFACE OWNERS

C.E Estes
221 E. London
Loving, NM 88220

Robert H. Nothington
1370 Sagebrook Drive
Fairview, TX 75069-1252

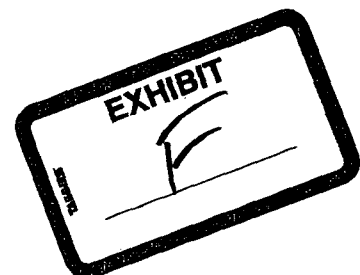
Wells Fargo FBO Donald Paape
P. O. Box 5629
Portland, OR 97228-5629

Lucille Paape
14911 Wunderlich Drive #1807
Houston, TX 77069

Johnny & Jackie L. Reid
245 E. London Rd.
Loving, NM 88250

Stennis Family Trust
Maria Stennis, Trustee
200 Michelle Drive
Santa Fe, NM 87501

Maria Stennis Revocable Trust
200 Michella Drive
Santa Fe, NM 87501



John Draper Brantley
706 West Riverside Drive
Carlsbad, NM 88220

OFFSETTING OPERATORS OTHER THAN RANGE AND CHESAPEAKE

Pure Resources, LP
500 W Illinois
Midland, Texas 79701

BK Exploration Corporation
810 S. Cincinnati-- Suite 208
Tulsa OK 74119