

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT..." for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well  
Oil ☐ Gas ☐  
☐ Well ☒ Well ☐ Other

2. Name of Operator  
Samson Resources Company

3. Address and Telephone No.  
2 West 2nd Street Tulsa, OK 74103 (918) 583-1791

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NE SE Sec. 4 T21S R32E NMP

5. Lease Designation and Serial No.  
NM 14791

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

New Mexico Federal "C" #1

9. API Well No.  
300252543000

10. Field and Pool, or Exploratory Area

Morrow

11. County or Parish, State

Lea

12 CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Request approval for the disposal of produced water.

Name of formation producing water on lease. Morrow

Amount of water produced from all formations in barrels per day. 4

How water is stored on the lease. Fiberglass storage tank

How water is moved from facility. By truck

Disposal facility:

Operators name. Chaparral Service, Inc.  
Well name. Chaparral  
Well type and number. SWDW #1  
Location. NW4 NE4 Sec. 17-T23S-R37E

\* Copy of Underground Injection Control Permit and water analysis is attached.

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct

Signed Brad R. [Signature]

Title Environmental Technician

Date 4/13/99

(This space for Federal or State office use)

Approved by [Signature]

Title NAMEED

Date MAY 27 1999

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\* See Instruction on Reverse Side



**Saturation Index Calculations**  
Champion Technologies, Inc.  
(Based on the Tomson-Oddo Model)

**Site Information**

Company	Samson Resources
Field	Federal "D"
Point	wellhead
Date	12/12/97

**Water Analysis (mg/L)**

Calcium	1,604
Magnesium	534
Barium	0
Strontium	0
Sodium*	16774
Bicarbonate Alkalinity	414
Sulfate	26
Chloride	30,000

\* - Calculated Value

**Appended Data**

Dissolved CO2	131 mg/L
H2S	0.0 mg/L
Iron	3.0 mg/L
Resistivity	N/A value
Specific Gravity	1.035 value
TDS	49384 mg/L
Total Hardness	6200 mg/L
Well head pH	6.43 value

**Physical Properties**

Ionic Strength*	0.92
pH*	6.23
Temperature	100°F
Pressure	100 psia

\* - Calculated Value

**Calcite Calculation Information**

Calculation Method	Value
CO2 in Brine	131 mg/L
Bicarbonate Alkalinity Correction(s)	Value
None Used	---

**SI & PTB Results**

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	-0.65	N/A
Gypsum (Calcium Sulfate)	-2.30	N/A
Hemihydrate (Calcium Sulfate)	-2.28	N/A
Anhydrite (Calcium Sulfate)	-2.43	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A

*Ch. well head*  
*2.43*  
*6.43*



TONY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

ORDER SWD-292

50 YEARS



1935 - 1985

POST OFFICE BOX 288  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

THE APPLICATION OF CHAPARRAL SERVICE, INC.

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Chaparral Service, Inc. made application to the New Mexico Oil Conservation Division on October 22, 1985, for permission to complete for salt water disposal its Lea No. 1 well located in Unit B of Section 17, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

The Division Director finds:

- (1) That application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- (3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.
- (4) That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Chaparral Service, Inc. is hereby authorized to complete its Lea No. 1 well, located in Unit B of Section 17, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4,000 feet to approximately 5,000 feet through 2 7/8 inch plastic lined tubing set in a packer located at approximately 4025 feet.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 800 psi.

That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the San Andres formation. That such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.


That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER, That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 13th day of November, 1985.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
R. L. STAMETS,  
Director

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