

Case 8603

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no

II. Operator: Sage Energy Company

Address: P. O. Drawer 3068, Midland, Texas 79702

Contact party: Jay Hardy/Jerry Littlefield Phone: 915 683 5271

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. Attached.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Jay H. Hardy Title Vice President - Engineering

Signature: *Jay H. Hardy* Date: Feb. 26, 1985

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

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.

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

days.

- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (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;
- (1) The name, address, phone number, and contact party for the applicant;

must include:
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 is to be located and to each leasehold operator within one-half mile of the well location. 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.

XIV. PROOF OF NOTICE

- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.
- (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.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (2) The injection interval and whether it is perforated or open-hole.
- (1) The name of the injection formation and, if applicable, the field or pool name.

8. 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.

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.

- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (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.
- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

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:

III. WELL DATA

Attached to and made a part of the Form C-108 dated February 26, 1985 signed by Jay H. Hardy, Vice President - Engineering, for Sage Energy Company, P. O. Drawer 3068, Midland, Texas 79702

DATA ON THE PROPOSED OPERATIONS

- VII. 1. The average and maximum daily rate and volume of fluids to be injected will be at the rate of 500 BWPD.
2. The system is open
 3. Water to be disposed of on vacuum.
 4. Water analysis attached.
 5. Not applicable
- VIII. The injection zone is:
- 9777'- 9795' Top of the Bough "C", thickness of 18', cretaceous at 375±.
- IX. No stimulation program needed.
- X. Logs and test data on file with the division.
- XI. Not applicable.
- XII. I have no knowledge of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

AFFIDAVIT OF PUBLICATION

State of New Mexico,

County of Lea.

I, _____

Robert L. Summers

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period

of _____

Two weeks.

Beginning with the issue dated

February 18, 1985

and ending with the issue dated

February 25, 1985

Robert L. Summers
Publisher.

Sworn and subscribed to before

me this 26 day of

February, 1985

Vera Murphy
Notary Public.

My Commission expires _____

Nov. 14, 1988

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
February 22, 1985
Sage Energy Company,
P.O. Drawer 3068, Midland,
Texas 79702, has applied to
convert its Canal State No. 1
well, located 1349' F.S. and
1968' F.N.L. of Section 32, T-2-S,
R-36-E, Roosevelt County, New
Mexico to a water disposal
facility. The operator wishes
to inject formation water into
the Bough "C" at a depth of
9777' to 9795' at the approx-
imate rate of 500 BWPD on
vacuum. Interested parties
must file objections or request
for hearing with the Oil Con-
servations Commission, P.O.
Box 2088, Santa Fe, New Mex-
ico, 87501 within 15 days to
today's date."

ILLEGIBLE

Halliburton Services - Hobbs, NM

Water Analysis for Sage
Energy Company - Midland, Tx.

Date: April 18, 1985

Water analysis from water well located approximately 2000' to the east of the Cabot State #4

Res.	3.4 Ohm Meters at 75°
S.G.	1.003 at 60°
PH	7.0
CA	200 mg l liter
M9	nil
CI	1000 mg l liter
SO ₄	nil
Bicarb	280 mg l Liter
Fe.	nil

Various company names and addresses at the top of the page, including 'Diamond Crandall', 'Franklin Atlantic', and 'C.E. Boyd III'.

Section 7: Contains entries for 'Belnorth, et al', 'Amoco', 'C.E. Boyd III', 'Liberty Pet', and 'S.P. Yates'.

Section 8: Contains entries for 'Paulette Williamson', 'Amoco', 'Marathon', 'C.E. Boyd III', and 'Breck Oper'.

Section 9: Contains entries for 'Dorothy Langley', 'Conquest Expl', 'Amoco', 'C.E. Boyd III', and 'Enserch Expl'.

Section 10: Contains entries for 'Amoco', 'Conquest Expl', 'Petrold Part'shp', 'Sage Ener', and 'Enserch Expl'.

Section 11: Contains entries for 'TXO', 'J.O. Neill Jr', 'Petrold Part'shp', 'Sage Ener', and 'Enserch Expl'.

Section 12: Contains entries for 'MEG OIL', 'Tenneco', 'Amoco', 'C.E. Boyd III', and 'Enserch Expl'.

Section 13: Contains entries for 'Coquina', 'Amoco', 'Pioneer Prod', 'Enserch', and 'Fred Baldridge'.

Distances must be from the outer boundaries of the section.

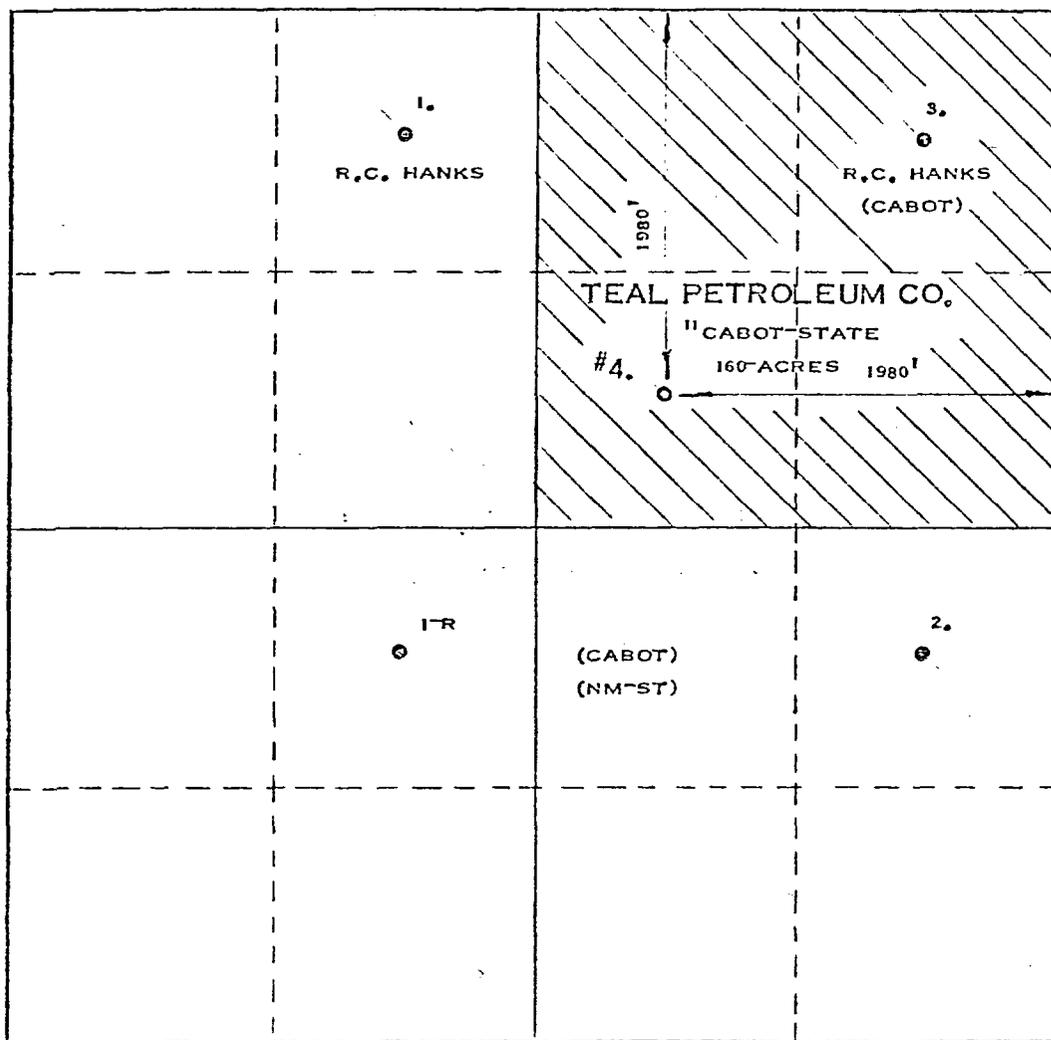
Operator TEAL PETROLEUM CO.		Lease CABOT-STATE		Well No. 4
Unit Letter "G"	Section 32	Township 8-S	Range 36-E	County ROOSEVELT
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 1980 feet from the NORTH line and 1980 feet from the EAST line </div>				
Ground Level Elev. 4102	Producing Formation PENNSYLVANIAN	Pool VADA-PENN.	Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: *Stephenson*
 Position: *Agent*

Company: Teal Petroleum Company

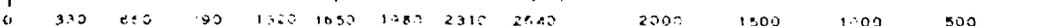
Date: October 28, 1974

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: OCTOBER 26, 1974

Registered Professional Engineer and Land Surveyor:
Max A. Schumann Jr.
MAX A. SCHUMANN JR.

Certificate No. **1510**



<p>1000 LOWER SAN MURPHY OPER. CO. (OPER)</p> <p>T.A. W. L. M.I. A. A. W. L. M.I.</p> <p>State</p>	<p>6</p> <p>First Nat'l Bk Dallas Dallas, TX 75201 B-26-HR R. Standish</p> <p>Ann Nat'l Bk Dallas, TX 75201 M. C. Corp. Vt R. Standish</p> <p>State</p>	<p>5</p> <p>Rep Nat'l Bk Dallas, TX 75201 R.N. Ainsworth, (S)</p> <p>U.S.</p>	<p>4</p> <p>Rep Nat'l Bk Dallas, TX 75201 Minnie Bow</p> <p>U.S.</p>	<p>3</p> <p>I.M.C. Corp, etal R.N. Ainsworth, etal</p>	<p>2</p> <p>Pratt S. W. 438 DIA 10 B 65 State Vot. - 10/1</p>
<p>12</p> <p>Huber Corp Reid TD 5025 DIA B B 67</p> <p>Florence Hall</p>	<p>7</p> <p>First Nat'l Bk Dallas Dallas, TX 75201 Osmond Crawford W. W. Ainsworth, etal</p> <p>Ann Nat'l Bk Dallas, TX 75201 First Nat'l Bnk, Dallas II - B - 85</p> <p>Franklin Atlantic TD 5013 DIA 11-13-65</p> <p>I.M.C. Corp. Olivier Morrell T.E. Parkerson (S)</p> <p>State</p>	<p>8</p> <p>C.E. Boyd III 6-1-83 R.T. BURDICK</p> <p>U.S.</p>	<p>9</p> <p>Coyman J. Tr. 1/2 M.I. C. Maxwell Minnie Bow</p> <p>S.P. Yates HBP 060 521</p> <p>U.S.</p>	<p>10</p> <p>NRM Pet 108 2110-3-83</p> <p>Celsius Ener/V J.S. Sprinkle, etal 11-1-83</p> <p>M.C. Corp, etal J. Ainsworth</p> <p>Liberty Pet. R-1-32 14561</p> <p>U.S.</p>	<p>J.F. Kelly 6-1-83 55979</p> <p>J. Kelly J. Kelly 14561</p> <p>U.S.</p>
<p>13</p> <p>Amoco A-11-86</p> <p>Rep Nat'l Bk, Dallas Tr. 1/2 M.I. H.L. Marshall etal A.L. Crawford, etal</p> <p>J.S. Sprinkle 3-1-84 20075</p> <p>U.S.</p>	<p>18</p> <p>Holly Energy, etal I.B. Lucas M.E. Barnes, etal</p> <p>Joy Amrogge II-1-82 54003</p> <p>State</p>	<p>17</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>16</p> <p>A.P. Co HBP E. BB75</p> <p>U.S.</p>	<p>15</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>
<p>14</p> <p>Paulette Williamson 5-1-87 25834</p> <p>U.S.</p>	<p>18</p> <p>Readen Oil Fed Silver TD9761</p> <p>U.S.</p>	<p>17</p> <p>Huber Corp Coastal (S)</p> <p>U.S.</p>	<p>16</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>15</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>
<p>15</p> <p>Paulette Williamson 5-1-87 25834</p> <p>Celeste Grynsberg Hwy Reid (S)</p> <p>U.S. Mins Realist (S)</p>	<p>19</p> <p>Amoco 7-7-86</p> <p>Readen Oil Fed Silver TD9761</p> <p>U.S.</p>	<p>20</p> <p>Huber Corp Lonestar Fed TD 2025 1012-25</p> <p>U.S.</p>	<p>19</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>18</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>
<p>24</p> <p>Turner Prop 4-17-83 4-25-84 7-26-87 3-10-82</p> <p>U.S. M.I.</p> <p>J.B. Thomas etal Ego Preston</p>	<p>29</p> <p>Read Lewis Fed TD9802</p> <p>U.S.</p>	<p>20</p> <p>Huber Corp Lonestar Fed TD 2025 1012-25</p> <p>U.S.</p>	<p>19</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>18</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>
<p>25</p> <p>Amoco M. J. C. S. C. S. Ashmun Carter P372-1-1-83</p> <p>James Robinson Co</p> <p>U.S.</p>	<p>30</p> <p>Featherstone TD 1851 DIA 11-29-82</p> <p>U.S.</p>	<p>29</p> <p>Huber Corp Lonestar Fed TD 2025 1012-25</p> <p>U.S.</p>	<p>19</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>18</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>

<p>36</p> <p>TXO 4-1-88 V-700 7-5-89</p> <p>J.O. Neill Jr State TD 9850 DIA 12-3-81</p> <p>State</p>	<p>31</p> <p>BTA TD 5836 Stone 688 Ltd.</p> <p>U.S.</p>	<p>32</p> <p>R.C. Honk K-3724 (Cobot) W.M. S. I. TD9840</p> <p>U.S.</p>	<p>33</p> <p>BTA TD 5836 Stone 688 Ltd.</p> <p>U.S.</p>	<p>34</p> <p>McBil HBP 065309</p> <p>U.S.</p>	<p>35</p> <p>Curry & Thornton 7-1-88 56726 1282 KGS</p> <p>Atlantic Fed. Co.</p>
<p>37</p> <p>Amoco M. J. C. S. C. S. Ashmun Carter P372-1-1-83</p> <p>James Robinson Co</p> <p>U.S.</p>	<p>38</p> <p>Featherstone TD 1851 DIA 11-29-82</p> <p>U.S.</p>	<p>29</p> <p>Huber Corp Lonestar Fed TD 2025 1012-25</p> <p>U.S.</p>	<p>19</p> <p>Amoco 5-5-85 6-11-86</p> <p>U.S.</p>	<p>18</p> <p>Liberty Pet 6-1-82 53251</p> <p>S.P. Yates HBP 060 521</p> <p>Roswell-LoSalle</p> <p>U.S.</p>	<p>J.D. Williams II-1-85</p> <p>Amoco 4-30-86</p> <p>H. Beebe, etal</p>
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LOVINGTON

INJECTION WELL DATA SHEET

SIDE 1

SAGE ENERGY COMPANY
OPERATOR

Cabot State
LEASE

T8S

TOWNSHIP

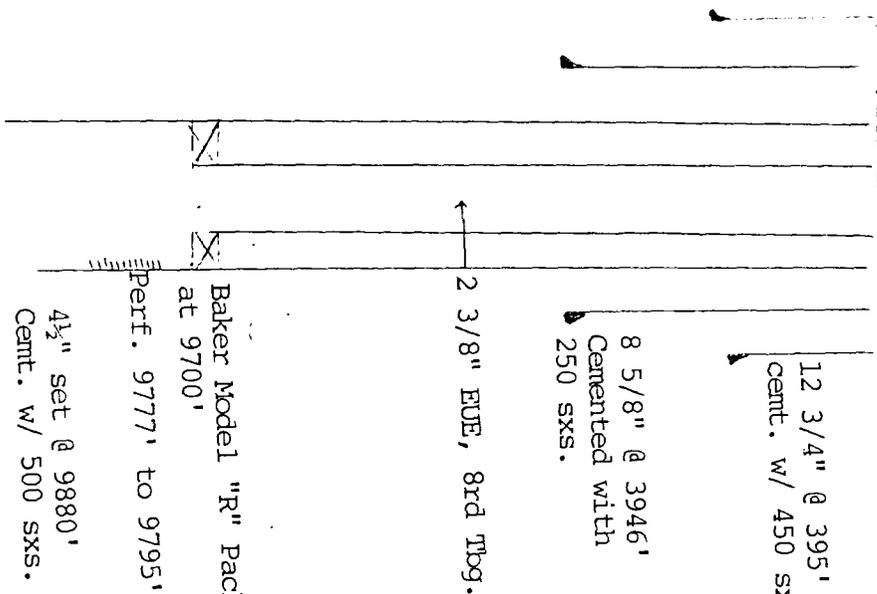
R36E
RANGE

NO. 4 WELL NO. FOOTAGE LOCATION 1980' FNL and 1980' FNL

SECTION 32

Roosevelt County, New Mexico

Schematic



Tabular Data

Surface Casing	Size	12 3/4"	"	Cemented with	450 sxs	sx.
	TOC	Ground Level		feet determined by	circulation	
	Hole size	17"				
Intermediate Casing	Size	8 5/8"	"	Cemented with	250 sxs	sx.
	TOC	3946'		feet determined by		
	Hole size	11"				
Long string	Size	4 1/2"	"	Cemented with	500 sxs	sx.
	TOC	9880'		feet determined by		
	Hole size	7 7/8"				
	Total depth	9880'				
Injection Interval		9777'		feet to	9795'	feet
		(perforated or open-hole, indicate which)				

Tubing size 2 3/8" lined with _____ (material) _____ set in a _____

Baker Model "R" packer at 9700' feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Bough "C"

2. Name of Field or Pool (if applicable) Vada Penn Field

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

If no, for what purpose was the well originally drilled? Exploration for oil and gas.

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)

No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

None

INJECTION WELL DATA SHEET

SIDE 1

SAGE ENERGY COMPANY
OPERATOR

Cabot State
LEASE

No. 4 WELL NO. 1980' FEL and 1980' FNL
FOOTAGE LOCATION

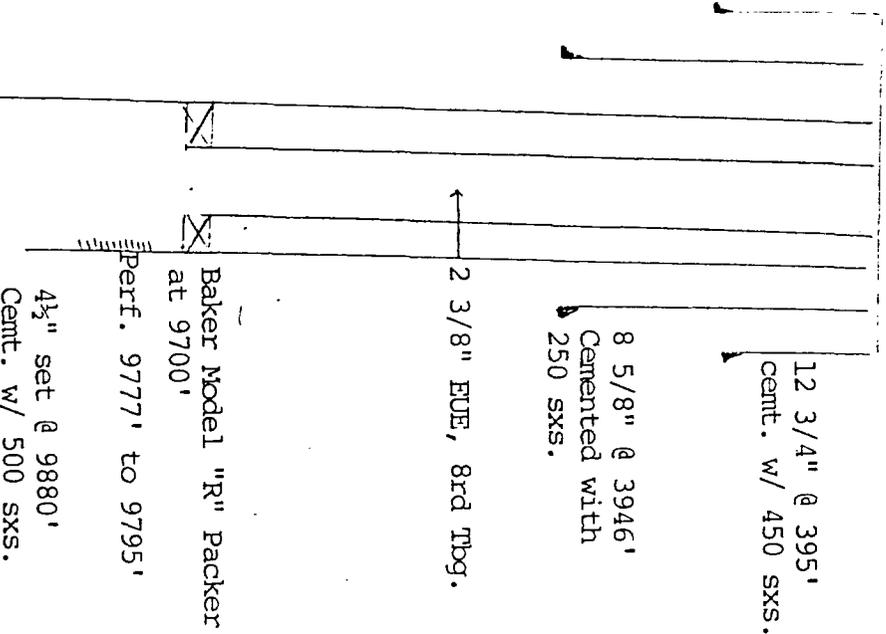
SECTION 32

T8S
TOWNSHIP

R36E
RANGE

Roosevelt County, New Mexico

Schematic



Tabular Data

<u>Surface Casing</u>		<u>Tabular Data</u>	
Size	12 3/4"	"	Cemented with 450 sxs.
TOC	Ground Level	feet determined by	circulation
Hole size	17"		
<u>Intermediate Casing</u>			
Size	8 5/8"	"	Cemented with 250 sxs.
TOC	3946'	feet determined by	
Hole size	11"		
<u>Long string</u>			
Size	4 1/2"	"	Cemented with 500 sxs.
TOC	9880'	feet determined by	
Hole size	7 7/8"		
Total depth	9880'		
<u>Injection interval</u>			
	9777'	feet to	9795'
(perforated or open-hole, indicate which)			
		feet	

Baker Model "R" packer at 9700'
Perf. 9777' to 9795'
4 1/2" set @ 9880'
Cemt. w/ 500 sxs.

2 3/8" EUE, 8rd Tbg.
8 5/8" @ 3946'
Cemented with 250 sxs.

12 3/4" @ 395'
cent. w/ 450 sxs.

INJECTION WELL DATA SHEET

SIDE 1

SAGE ENERGY COMPANY
THORNTON

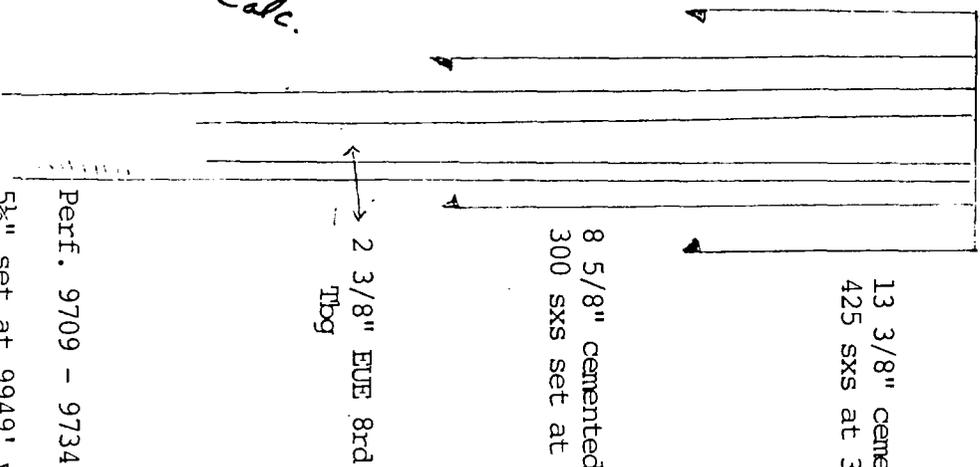
CABOT STATE
LEASE

WELL NO. 3
FOOTAGE LOCATION 660' ENL and 660' FEL

SECTION 32
TOWNSHIP T-8-S

RANGE R-36-Q

Schematic



Tabular Data

Surface Casing
 Size 13 3/8" " Cemented with 425 sxs.
 Hole size 397 feet determined by Calc.

Intermediate Casing
 Size 8 5/8" " Cemented with 300 sxs.
 Hole size 11" feet determined by Calc.

Long string
 Size 2 3/8" " Cemented with 400 sxs.
 Hole size 7 7/8" feet determined by Calc.

Total depth 9961
 Injection Interval
 Perf. 9709 - 9734

*Yoc
7224
Calc.*

5 1/2" set at 9949' with 400 sxs cement
 9709 feet to 9734 feet
 (perforated or open-hole, indicate which)

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 OPR ROGER C. HANKS
 LSE CABOT STATE WELL NO. 3
 LOC Sec 32, T-8-S, R-36-E (A)
660 FNL & FEL of Sec

UNIQUE NO. 30-041-20200
 MAPS _____ CO-ORD _____
 F. R. 5-8-69 OBJ 10,000' RT SPUD 5-2-69
 CTR Ard Drlg. LAHEE CLASS _____ ELEV D. F. 4112' L/S
 LOGS _____ SPLS _____ GL _____
 TD 9961' PBD 9940' ABD LOC. _____ P & A _____

PAY ZONE	PROD INTERVAL	IP	BO	W	HRS	CHK	TEST BASIS
Penn	9709-34	P	348	1032	24		

GOR	GTY	CP	TP	BHP	POT DATE	TREATMENT
861	47				6-12-69	A/1000

CSG 13 3/8 - 397 - 425
8 5/8 - 4050 - 300
5 1/2 - 9949 - 400

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 WELL: ROGER C. HANKS #3 CABOT STATE ELEV 4112' DF

DATE	WELL RECORD	REACHED T. D.	SPL (LOG) MARKERS
	TD 9961' PBD 9940'		Yates (2790)
	DST 9900-40, pkrs failed, Rec 150'		SA (3990)
	mud, 6000' salt water		Glor (5494)
	Perf 100/9709-34; A/1000		Tubb (6928)
			Abo (8010)
		(6-26-69)	Wlfc XX (9116)
			Bo C (9738)

The Subsurface Library
 P. O. Box 942
 Midland, Texas

INJECTION WELL DATA SHEET

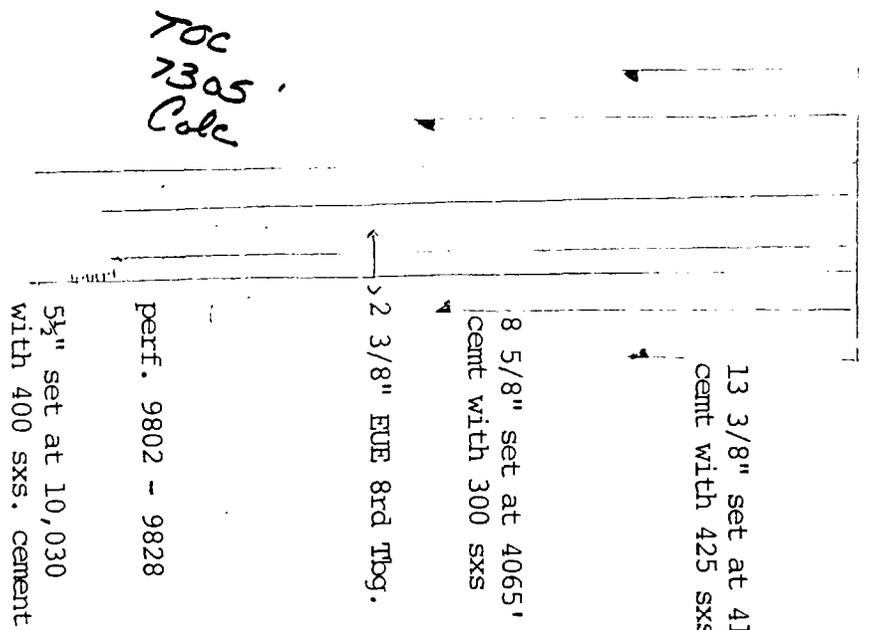
SIDE 1

SAGE ENERGY COMPANY
OPERATOR

Midwest State
LEASL

1 660' FNL and 1980' FWL
WELL NO. FOOTAGE LOCATION SECTION 32 T-8-S TOWNSHIP R-36-E RANGE

Schematic



Tabular Data

Surface Casing
 Size 13 3/8" " Cemented with 425 sxs.
 TOC 416' feet determined by calc.
 Hole size 17"

Intermediate Casing
 Size 8 5/8" " Cemented with 300 sxs.
 TOC 4065' feet determined by calc.
 Hole size 11"

Long string
 Size 5 1/2 " Cemented with 400 sxs.
 TOC 10,030 feet determined by calc.
 Hole size 7 7/8"

Total depth 10,030

Injection Interval
9802 feet to 9828 feet
 (perforated or open-hole, indicate which)

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 OPR ROGER C. HANKS
 .SE MIDWEST STATE WELL NO. 1
 LOC Sec 32, T-8-S, R-36-E (C)
660 FNL & 1980 FWL of Sec

UNIQUE NO. 30-041-20208
 MAPS _____ CO-ORD _____
 F. R. 5-22-69 OBJ 10,000' RT SPUD 6-7-69
 CTR Ard Drlg. LAHEE CLASS _____ ELEV D. F. 4124' L/S
 LOGS _____ SPLS _____ GL _____
 TD 10,030' PBD _____ ABD LOC. _____ P & A _____
 PAY ZONE _____ PROD INTERVAL _____ IP _____ BO _____ W _____ HRS _____ CHK _____ TEST BASIS _____

Penn	9802-28	P	304	1032	24			
------	---------	---	-----	------	----	--	--	--

GOR	GTY	CP	TP	BHP	POT DATE	TREATMENT
	47				8-4-69	Ac/1000

CSG 13 3/8" @ 416 w/425
8 5/8" @ 4065 w/300
5 1/2" @ 10030 w/400

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 WELL: ROGER C. HANKS #1 MIDWEST STATE ELEV 4124' DF L/S

DATE	WELL RECORD	REACHED T. D.	SPL (LOG) MARKERS
	TD 10,030'		Anhy (2280)
	c 9775-9823, R/48' lmy shale & lm, vugy frac.		Yates (2814)
	Perf. 104/9802-28. Ac/1000		SA (4075)
	P/137 BO, 120 W, 24 hrs.		Glor (5520)
			Tubb (6970)
			Abo (7800)
			Wlfc (9200)
		(8-14-69)	Bo C (9800)
			Cyn (9882)

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 Midland, Texas

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 OPR ROGER C. HANKS
 SE CABOT STATE WELL NO. 2
 LOC Sec 32, T-8-S, R-36-E (I)
1980 FSL & 660 FEL of Sec

UNIQUE NO. 30-041-20181
 MAPS _____ CO-ORD _____
 F. R. 1-30-69 OBJ 10,000' RT SPUD 1-30-69
 CTR _____ LAHEE CLASS _____ ELEV D. F. _____
 LOGS _____ SPLS _____ GL 4103 DF Op
 TD 9856' PBD 9855' ABD LOC. _____ P & A _____

PAY ZONE	PROD INTERVAL	IP	BO	W	HRS	CHK	TEST BASIS
Penn	9760-9784	P	288	664	24		

GOR	GTY	CP	TP	BHP	POT DATE	TREATMENT
1040	46				3-21-69	Ac/1000

CSG 13 3/8-400-w/450
8 5/8-4090-w/370
5 1/2-9855-w/500

COUNTY ROOSEVELT, N.M. FIELD MIDDLE ALLISON (PENN)
 WELL: ROGER G. HANKS #2 CABOT STATE ELEV _____

DATE	WELL RECORD	REACHED T. D.	SPL (LOG) MARKERS
TD 9856'	PBD 9855'		Anhy (2235)
DST 9763-9829, Op. 1', GTS 14", @ 750,			Salt (2618)
000 CFGPD, R/90' HCCM, 225' oil, 2100			B/Salt (2780)
XW, 30" ISIP/2113, FF 345-971, 60" FSIP/			Yates (2798)
2113			SA (3988)
Perf. 22/9760-84. Ac/1000			Glor (5503)
			Tubb (6942)
			Abo (7770)
	(5-15-69)		Wlfc (8900)
			Bo C (9760)

The Subsurface Library
 P. O. Box 942
 Midland, Texas

CLC COLLEGE OF LAW
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COUNTY ROOSEVELT, NM FIELD WILDCAT (BOUGH "C") DISCOVERY
 OPER ROGER C. HANKS, LTD.
 SE CABOT STATE WELL NO. 1
 LOC Sec 32, T-8-S, R-36-E (K)
1980 FSL & FWL of Sec
OWWO-Orig. Cabot #1 N.M. "R" State, OTD 9840'

MAPS _____ CO-ORD _____
 F. R. 2-29-68 OBJ 9840' METHOD RT RESPUD 2-24-68
 CTR Ard Drlg. C. R. _____ ELEV D. F. 4113'
 LOGS _____ SPLS _____ GI _____
 TD 9850' PBD _____ ABD LOC _____ P & A _____

PAY ZONE	TOP PAY	PRODUCING INTERVAL	IP	BO	W	BS&W	HRS	TEST BASIS
Bo "C"	9800	9800-14	P	20	900		24	

CHOKE	GOR	GTY	CP	TP	POT DATE	TREATMENT
	TSTM	46			7-15-68	A/500

CSG-TBG-PKR RECORD	REACHED T. D.
13 3/8 - 452 - 450	5 1/2 - 9840 - 400
8 5/8 - 4075 - 380	

COUNTY ROOSEVELT, NM FIELD WILDCAT (BOUGH "C") DISCOVERY
 WELL: ROGER C. HANKS, LTD. #1 CABOT STATE ELEV 4113' DF _____

DATE	WELL RECORD	SPL (LOG) MARKERS
	TD 9850'	Anhy (2250)
	Perf 2/9800-01; 12/9804-10; 4/9812-14.	Yates (2805)
	A/500	Queen (3510)
	Swbd 16 BFPH 10 hrs. (3-10% oil 90-97% XW)	S.A. (4040)
		Glor (5516)
	Pmpd 60 BO 900 BW 24 hrs. (9800-14)	Tubb (6960)
	Pmpd 16 BO 900 BXW 24 hrs. (9800-14)	Abo (7760)
	Pmpd 22 BO 900 BXW 24 hrs. (9800-14)	Bo C (9797)
	Pmpd 14 BO 1000 BW 24 hrs. (9800-14)	
	Pmpd 22 BO 960 BW 24 hrs. (9800-14)	
	Pmpd 25 BO 1000 BW 24 hrs.	
	Pmpd 22 BO 1000 BXW 24 hrs.	
	Pmpd 14 BO 1000 BXW 24 hrs.	
	Pmpd 11 BO 1000 BXW 24 hrs.	
	Pmpd 10-15 BO 1000 BWPD	
	Pmpd 60 BO 1000 BXW 24 hrs. (9800-14)	
	(8-1-68)	
	The Subsurface Library	
	P. O. Box 942	
	Midland, Texas	

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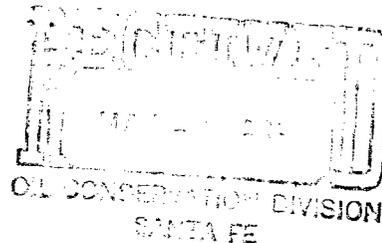
SAGE ENERGY COMPANY

P. O. DRAWER 3068

MIDLAND, TEXAS 79702

915/683-5271

April 30, 1985



Oil Conservation Commission
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Re: Cabot State No. 4, Sec. 32, T-8-S, T-36-E, Roosevelt County, New Mexico

Attn: David Catanack

Dear David:

Enclosed for your use and as part of the Form C-108 dated February 26, 1985 is the original and one copy of the laboratory water analysis from the Cabot windmill and two copies of well data sheets, with schematics made from the plugging reports for the Cabot State lease, wells no. 1 and 2. Also enclosed are copies of the receipts for certified mail to the offset lease owners in Section 33 and the S/2 of Section 29. Waivers have been furnished to these lease owners for their approval.

If additional information is required, please notify us as soon as possible. Thanks again for your assistance in this project and hopefully we can complete this matter after the May 22, 1985 hearing.

Very truly yours,

Frances Holzgraf
Clerk - Production Department

Encls.

cc State Land Office
Floyd Prando
P. O. Box 1148
Santa Fe, New Mexico 87501

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240

LABORATORY WATER ANALYSIS

No. W85-285

To Sage

Date 4-18-85

P.O. Drawer 3068

Midland TX, 79702

Attn: Jay Hardy

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____ Date Rec. _____

Well No. Cabot Windmill Depth _____ Formation _____

County SE/4 of Sec. 32 Field _____ Source _____

Resistivity _____ 3.4 @ 75°F _____

Specific Gravity _____ 1.003 @ 60°F _____

pH _____ 7.0 _____

Calcium (Ca) _____ 200 _____ *MPL

Magnesium (Mg) _____ Nil. _____

Chlorides (Cl) _____ 1,000 _____

Sulfates (SO₄) _____ Nil. _____

Bicarbonates (HCO₃) _____ 280 _____

Soluble Iron (Fe) _____ Nil. _____

Remarks: _____ *Milligrams per liter

Respectfully submitted,

Analyst: Lee Hisey

HALLIBURTON COMPANY

cc:

By Lee Hisey
CHEMIST

NOTICE

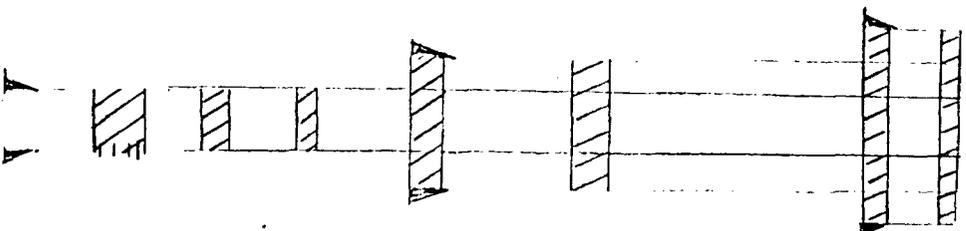
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PSA WELL DATA SHEET

ROGER C. HANKS
 OPERATOR
 Cabot State
 LEASE

2 1980' FSL and 660' FEL Section 32 T-8-S R-36-E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE
 1 Roosevelt County, New Mexico

Schematic



Tabular Data

Surface Casing
 Size 13 3/8" " Cemented with 450 sx.
 TOC circulated feet determined by calculated
 Hole size 17"

Intermediate Casing
 Size 8 5/8" " Cemented with 370 sx.
 TOC 2198' feet determined by calculated
 Hole size 11"

Long string
 Size 5 1/2" " Cemented with 500 sx.
 TOC 6104' feet determined by calculated
 Hole size 7 7/8"
 Total depth 9856, PRTD 9855'

20 sx plug across perforations.

9760 feet to 9784 feet
 (perforated or open-hole, indicate which)

P & A WELL DATA SHEET

Roger Hanks

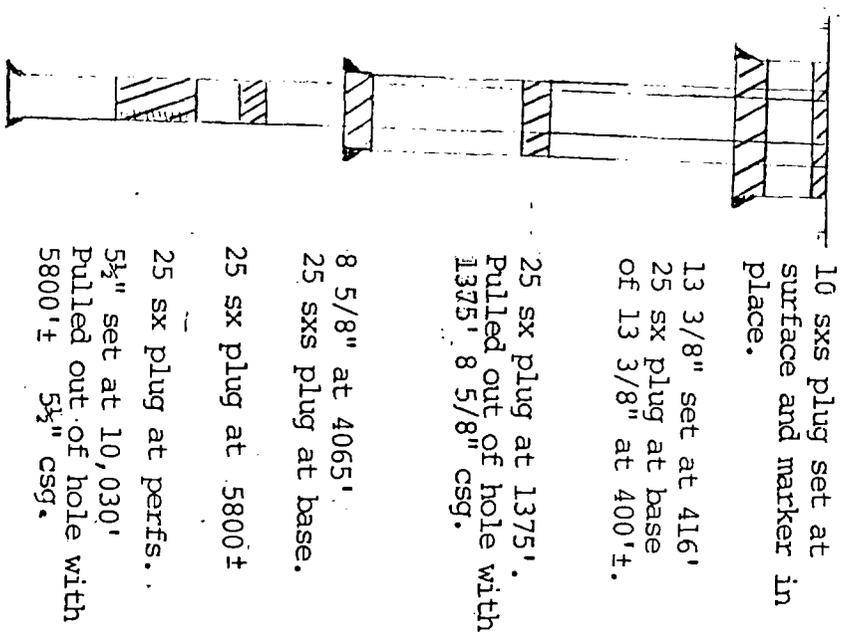
OPERATOR

Cabot State

LEASE

1 1980' FSL and 1980' FWL 32 8S
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE 36E

Schematic



Tabular Data

<u>Surface Casing</u>	
Size <u>13 3/8"</u>	" Cemented with <u>450</u> sx.
TOC <u>circulated</u>	feet determined by <u>calculation</u>
Hole size <u>17"</u>	
<u>Intermediate Casing</u>	
Size <u>8 5/8"</u>	" Cemented with <u>380</u> sx.
TOC <u>4065'</u>	feet determined by <u>calculation</u>
Hole size <u>11"</u>	
<u>Long string</u>	
Size <u>5 1/2"</u>	" Cemented with <u>400</u> sx.
TOC <u>10,030</u>	feet determined by <u>calculation</u>
Hole size <u>7 7/8"</u>	
Total depth <u>9850'</u>	

9802' feet to 9828' feet
 (perforated or open-hole, indicate which)

Return to Sender

PS Form 3811, Dec. 1980

SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered —c
 Show to whom, date, and address of delivery.. —c

2. **RESTRICTED DELIVERY** —c
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$1.45

3. ARTICLE ADDRESSED TO:
 Cities Service O&Gas Corp.
 P. O. Box 1919
 Midland, Texas 79702

4. TYPE OF SERVICE: <input type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input type="checkbox"/> CERTIFIED <input type="checkbox"/> COD <input type="checkbox"/> EXPRESS MAIL	ARTICLE NUMBER 397 521 593
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(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE Addressee Authorized agent
Stephane Amore

DATE OF DELIVERY
 APR 26 1985

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

MIDLAND TX
 APR 26 1985
 CITIES SERVICE O&G CORP.

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

M

, TEXAS
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PS Form 3811, Dec. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
- Show to whom and date delivered — 6
 - Show to whom, date, and address of delivery.. — 6
2. **RESTRICTED DELIVERY** — 6
(The restricted delivery fee is charged in addition to the return receipt fee.)
- TOTAL \$1.95**

3. **ARTICLE ADDRESSED TO:**
 Claude C. Kennedy
 6115 Del Campo N.E.
 Albuquerque NM 87109

4. TYPE OF SERVICE: <input type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input type="checkbox"/> CERTIFIED <input type="checkbox"/> COD <input type="checkbox"/> EXPRESS MAIL	ARTICLE NUMBER P 397 521 560
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(Always obtain signature of addressee or agent)

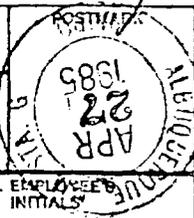
I have received the article described above.

SIGNATURE Addressee Authorized agent

Claude C. Kennedy

5. **DATE OF DELIVERY** *11/23*

6. **ADDRESSEE'S ADDRESS** *(Only if requested)*



7. UNABLE TO DELIVER BECAUSE:	7a. EMPLOYEE'S INITIALS
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RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

EXAS
"n"

M. M. J.

PS Form 3801, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered —
 Show to whom, date, and address of delivery.. —
2. **RESTRICTED DELIVERY** —
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$1.75

3. ARTICLE ADDRESSED TO:
MWJ Producing Properties
1804 First National Bank Building
Midland, Texas 79702

4. TYPE OF SERVICE: REGISTERED INSURED CERTIFIED COD EXPRESS MAIL
ARTICLE NUMBER
P397 521 561

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent
Anne Caldwell

5. DATE OF DELIVERY: 4-26-85 POSTMARK: APR 26

6. ADDRESSEE'S ADDRESS (Only if required)

7. UNABLE TO DELIVER BECAUSE: 7a. ADDRESSEE'S INITIALS

TEXAS
on"

SAGE ENERGY COMPANY

P. O. DRAWER 8068

MIDLAND, TEXAS 79702

915/683-5271

April 18, 1985

W. H. Lovejoy
Milnesand, New Mexico 88125

Dear Mr. Lovejoy;

Enclosed for your information and use is a copy of Sage's application to use the Cabot State No. 4 well for disposal purposes. Please contact Jay H. Hardy of this office if you should have any questions.

Very truly yours,

P 397 521 591

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Frances Holzgraf
Production Clerk

Encl

Sent to W. H. Lovejoy	
Street and No.	
P.O., State and ZIP Code Milnesand, NM 88125	
Postage	\$ 73
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	70
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.18
Postmark or Date April 19, 1985	

PS Form 3800, Feb. 1982

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

SENDER: Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery ..
 2. RESTRICTED DELIVERY
 (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$

3. ARTICLE ADDRESSED TO:
W. H. Lovejoy
Milnesand, NM 88125

4. TYPE OF SERVICE: ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD
 EXPRESS MAIL
 P397 521 591
 (Always obtain signature of addressee or agent)

I have received the article described above.
 SIGNATURE Addressee Authorized agent
 W. H. Lovejoy

5. DATE OF DELIVERY: 88125 1985 AM 23
 POSTMARK: MILNESAND, NM APR 19 1985

6. ADDRESSEE'S ADDRESS (Only if required)

7. UNABLE TO DELIVER BECAUSE: