STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

SWD 763 3/10/00

FORM C-108
Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: **Clayton Williams Energy, Inc.**

ADDRESS: **Six Desta Drive, Suite 3000, Midland, Texas 79705**

CONTACT PARTY: **Matt Swierc** PHONE: **(915) 688-3251**

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. **Attachment 1**

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. **Attachment 2**

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. **Attachment 3**

VII. Attach data on the proposed operation, including: **Attachment 4**

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. **Attachment 5**

IX. Describe the proposed stimulation program, if any. **Attachment 6**

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **Attachment 7**

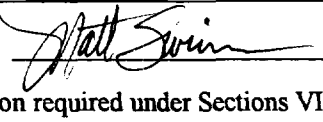
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. **Attachment 8**

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. **Attachment 9**

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: **Matt Swierc** TITLE: **Production Superintendent**

SIGNATURE:  DATE: 2/23/00

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

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

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: **Clayton Williams Energy, Inc.**

WELL NAME & NUMBER: **New Mexico "EO" State Com #1 (API # 30-015-25077)**

WELL LOCATION: **1980' FNL & 660' FWL** | **E** | **20** | **17S** | **29E**

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

ATTACHED

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: **17-1/2"** Casing Size: **13-3/8" @ 453'**

Cemented with: **500** sx. *or* **660** ft^3

Top of Cement: **surface** Method Determined: **circulation**

Intermediate Casing

Hole Size: **12-1/4"** Casing Size: **9-5/8" @ 3000'**

Cemented with: **700** sx. *or* **924** ft^3

Top of Cement: **surface** Method Determined: **circulation**

Production Casing

Hole Size: **8-1/2"** Casing Size: **5-1/2" @ 10,842'**

Cemented with: **2160** sx. *or* **3386** ft^3

Top of Cement: **1300'** Method Determined: **temp. survey**

Total Depth: **10,850'**

Injection Interval

8750' feet to **8950' perforated**

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: **2-7/8"** Lining Material: **Plastic coating**

Type of Packer: **Baker Model "D"**

Packer Setting Depth: **8700'**

Other Type of Tubing/Casing Seal (if applicable): **Bowen Lead Seal Casing Patch @ ±1300'**

Additional Data

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

   If no, for what purpose was the well originally drilled? **Morrow Gas**

2. Name of the Injection Formation: **Cisco**

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

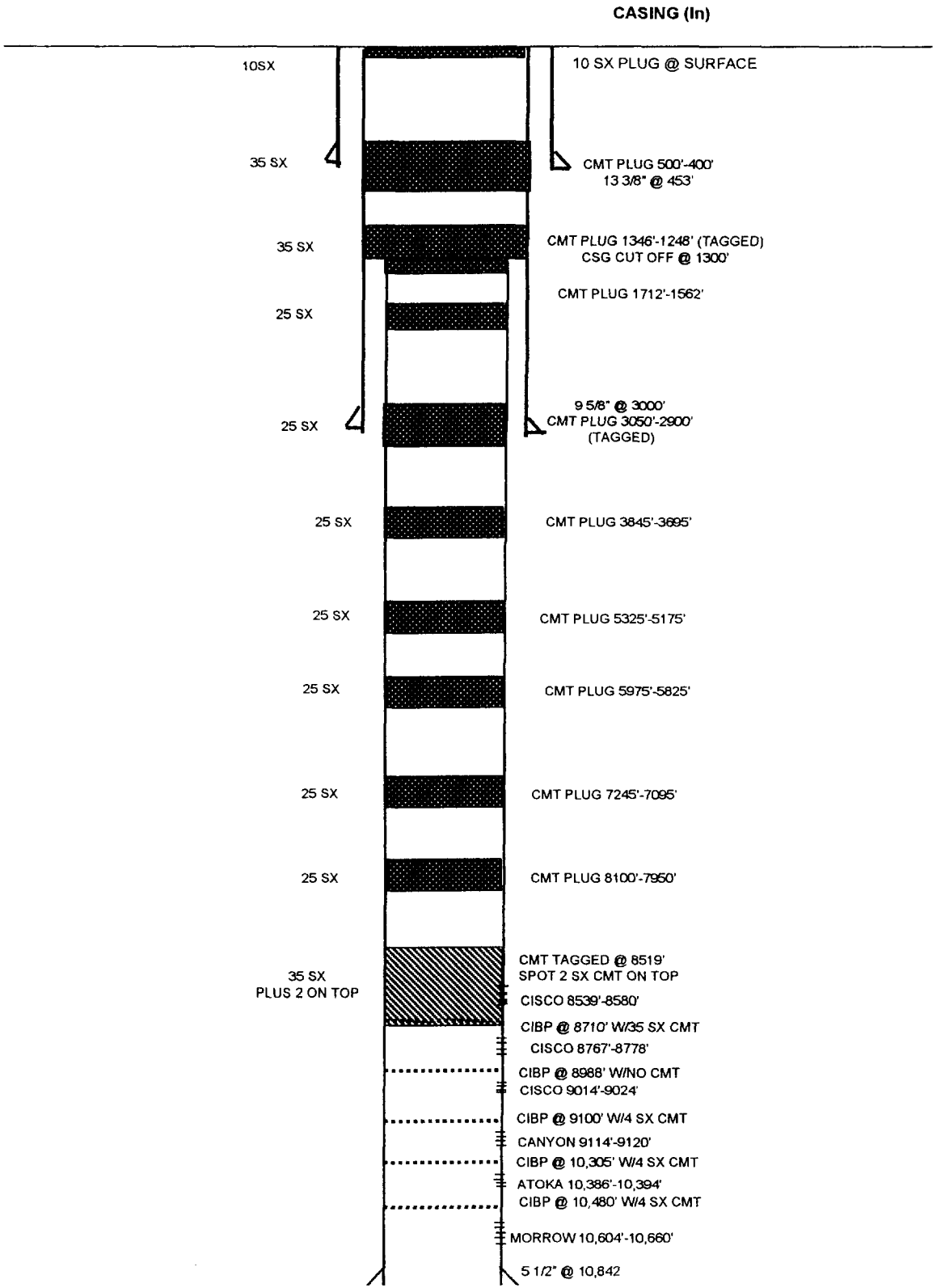
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____

   Plugging report attached

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   Morrow & Atoka below 10,100'; Grayburg – San Andres – Yeso ±2200' - ±4300'

NEW MEXICO "EO" STATE COM #1
SEC. 20 T 17S R 29E
EDDY COUNTY, NM
WELLBORE SCHEMATIC



Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED
APR 16 1993
O. C. D.

WELL API NO.
30-015-25077

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No.
E-742

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
New Mexico "EO" State Com

1. Type of Well: OIL WELL [ ] GAS WELL [X] OTHER

2. Name of Operator
Mewbourne Oil Company ✓

8. Well No.
1

3. Address of Operator
P.O. Box 5270 Hobbs, New Mexico 88241

9. Pool name or Wildcat
South Empire Morrow Gas

4. Well Location
Unit Letter F : 1980 Feet From The North Line and 660 Feet From The West Line

Section 20 Township 17S Range 29E NMPM Eddy County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
3637.60' G.R.

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[X]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER:	[ ]			OTHER:			[ ]

12. Describe Proposed or Completed Operations *(Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)* SEE RULE 1103.

1. Set 5-1/2" CIBP @ 8740'. Cap w/35 sx. cement.
2. Tagged cement @ 8519'. Spotted 2 sx. cement.
3. Set 25 sx. plug @ 8100'
4. Set 25 sx. plug @ 7245'.
5. Set 25 sx. plug @ 5975'.
6. Set 25 sx. plug @ 5325'.
7. Set 25 sx. plug @ 3845'.
8. Set 25 sx. plug @ 3050'.
9. Tagged plug @ 2900'.
10. Set 25 sx. plug @ 1712'.
11. Cut casing off 1300'. Lay down casing.
12. Set 35 sx. plug @ 1346'.
13. Tag plug @ 1248'.
14. Set 35 sx. plug @ 500'.
15. Cut off casing head.
16. Spot 10 sx. surface plug.
17. Install P & A marker & clean location.

*Note: Plugged as per MNOCD field representative.

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

SIGNATURE E. W. Nelson TITLE Engineer DATE April 8, 1993

TYPE OR PRINT NAME Erick W. Nelson TELEPHONE NO.

(This space for State Use)

APPROVED BY Johnny Robinson TITLE Field Rep I DATE SEP 20 1993

CONDITIONS OF APPROVAL, IF ANY:

Submit 3 Copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DEC - 7 1992

O. C. D.

Form C-103
Revised 1-1-89

WELL API NO.
30-015-25077

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No.
E-742

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
New Mexico "EO" State

1. Type of Well:
OIL WELL [ ] GAS WELL [X] OTHER

2. Name of Operator
Mewbourne Oil Company ✓

8. Well No.
1

3. Address of Operator
P.O. Box 5270 Hobbs, New Mexico 88240

9. Pool name or Wildcat
South Empire Morrow Gas Pool

4. Well Location
Unit Letter E : 1980 Feet From The North Line and 660 Feet From The West Line

Section 20 Township 17S Range 29E NMPM Eddy County

10. Elevation (*Show whether DF, RKB, RT, GR, etc.*)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[X]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER:	[ ]			OTHER:			[ ]

12. Describe Proposed or Completed Operations *(Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)* SEE RULE 1103.

09/24/92 RIH w/CIBP & set CIBP @ 10,480' KB over Morrow perf. Dump 4 sx. cement on CIBP.
09/26/92 Perforated Atoka Formation (10,386'-10,394')
10/07/92 Acidize Atoka perfs. w/2500 gal. 7 1/2% HCL acid.
10/09/92 Set CIBP @ 10,305' over Atoka perfs. Dump 4 sx. cement.
10/10/92 Perforated Canyon formation (9114'-9120')
10/11/92 Acidize Canyon perfs. w/1500 gal 15% HCL acid
10/15/92 Set CIBP @ 9100' over Canyon formation. Dump 4 sx. of cement.
10/16/92 Perforated Cisco formation (9014'-9024')
10/17/92 Acidize Cisco perfs. w/3500 gal. of 15% HCL acid
10/20/92 Set CIBP @ 8988' over Cisco perfs.
10/21/92 Perforated Cisco formation (8767'-8787')
10/29/92 Acidize Cisco perfs. w/3500 gal. 15% HCL acid
11/18/92 Set RBP @ 8702. Dump 2 sx. sand
11/19/92 Perf. Upper Cisco from 8539'-8580'
11/20/92 Acidize Cisco w/ 4000 gal. 15% HCL acid.
11/25/92 Pulled RBP @ 8702' RIH w/tbg.

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

SIGNATURE Brent Thurman TITLE Engineer DATE 12/03/92

TYPE OR PRINT NAME Brent Thurman TELEPHONE NO. 505 393-5905

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY MIKE WILLIAMS SUPERVISOR, DISTRICT II TITLE DATE DEC 12 1992

CONDITIONS OF APPROVAL, IF ANY:

Attachment 1

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

III. Well Data

A. (1) New Mexico "EO" State Com #1
Section 20 T17S R29E Unit E, Eddy County
1980' FNL and 660' FWL

(2) 13 3/8"@ 453', 500 sacks Cement, 17 ½" hole, cement to surface, circulated to surface
9 5/8"@ 3,000', 700 sacks Cement, 12 ¼" hole, cement to surface, circulated to surface (DV tool at 1930')
5 ½"@ 10,842', 2,160 sacks Cement, 8 ½" hole, cement to 1,300', temperature survey (DV tool at 8,199')
Note: 5 ½" casing cut off at 1,300' when plugged and abandoned

(3) 2 7/8" Plastic Coated Tubing set at +-8,700'

(4) Baker Model "D" plastic coated set at +-8,700'

B. (1) Cisco Formation

(2) Proposed Perforated Interval 8750'-8950'

(3) Originally drilled as a Morrow gas producer.

(4) Perforations above at **8,539'-8,580' with CIBP set at 8,740'** w/35 sacks cement on top. Cement tagged at 8,519' and 2 more sacks cement spotted on top. Also, cement plug above from 8,100'-7,950'.
Perforations below at **9,014'-9,024' w/CIBP set at 8,988'**, perforations at **9,114'-9,120' w/CIBP set at 9,100'** w/4 sacks cement on top, perforations at **10,386'-10,394' w/CIBP set at 10,305'** w/4 sacks cement on top and perforations at **10,604'-10,660' w/CIBP set at 10,480'** w/4 sacks cement on top.

(5) Morrow and Atoka below at +-10,100'-10,767' and Yeso above at +-3,800'-4,300'.


CLAYTON WILLIAMS ENERGY, INC.
FORM C-108
ATTACHMENT 2
AREA OF REVIEW
1"=2000'
CAVE UNIT ARAPAHO 08G (OPER)
ANDERSON
GRAYBURG-JACKSON
WEST CO-OP UNIT
MACK ENER. (OPER.)
WEBB OIL (OPER)
OLD LOCO UNIT
ARTESIA UNIT
SDX RES. (OPER.)
EMPIRE SO. DEEP UNIT
ALTURA (OPER.)

Attachment 3

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

VI. Tabulation of wells that penetrate the proposed injection zone within the area of review:

Mewbourne Oil Company
Empire "20" State #1 (API #30-015-271350001)
Empire South Pool (Pool code 015812)
Eddy County, New Mexico
Section 20 T17S R29E
Unit F 2,180' FNL and 1,980' FWL
Spud Date **9/25/92** and Completion Date **12/15/92**

13 3/8" set @ 490' cemented with 520 sacks CIRC. 50 SX.
9 5/8' set @ 2,600' cemented with 1,050 sacks " CIRC.
5 ½" set @ 10,920' cemented with 2,965 sacks CIRC. 50 SX.

Perforated from 10,620'-10,757'

Currently Producing

Attachment 4

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

VII. Data on the proposed operation

1. Proposed average and maximum daily rate and volume of fluids to be injected: **Average Daily Rate: 4,000 Barrels per Day**
Maximum Daily Rate: 8,000 Barrels per Day

2. Whether the system is open or closed: **System will be closed**

3. Proposed average and maximum injection pressure:
Maximum injection pressure will be 1754 PSIG
Average injection pressure will be 1000 PSIG

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water:
Water will be reinjected produced water

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:
Not Available

Attachment 5

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

VIII. Geological Data

The proposed disposal interval is within the Cisco Formation at a depth of 8750'-8950'. The Cisco Formation consists of dolomite, sand and lime and has a thickness of +-600'. There are known aquifers overlying the proposed disposal area.

Attachment 6
Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

IX. Describe the proposed stimulation program, if any:

If necessary, 3000 gallons of 15% hydrochloric acid

Attachment 7

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

X. Attach appropriate logging and test data on the well.

Logs are on file. No test data on the proposed disposal zone has been obtained.

Attachment 8

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

XI. Fresh water analysis…

There are no known fresh water wells within one mile.

Attachment 9

Clayton Williams Energy, Inc.
Application for Authorization to Inject
Form C-108

XII. Affirmative Statement

Re: New Mexico "EO" State Com #1 Well
Section 20 T17S R29E
Eddy County, New Mexico

Let it be known that Clayton Williams Energy, Inc. has examined all available engineering and geologic data and find no evidence of open faults of any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Clayton Williams Energy, Inc.

Date: February 22, 2000

Matt Swierc
Production Supt.

Clayton Williams Energy, Inc.
New Mexico State "EO" State Com. #1
Re-Entry

WELL STATUS

Spud Date:	4/2/1985
P & A Date:	1993
Surface Casing:	13 3/8" 54.5# K-55 set at 453' Cemented to surface
Intermediate Casing:	9 5/8" 40# K-55 set at 3000' TOC 775' f/temp survey DV tool at 1930'
Production Casing:	5 ½" 17# N-80 and K-55 and 15.5# K-55 set at 10,842' TOC @ 1300' f/temp survey DV tool at 8199'

Procedure:

1. With roustabout crew and backhoe, dig out 9 5/8" casing stub at location of dry hole marker. If necessary, weld on 9 5/8" 40# casing to space out top flange of starting head at GL. Weld on 9 5/8" SOW x 11" 3000 psi starting head. Test weld to 1000 psi.

2. MIRU pulling unit. NU 11" 3000 psi hydraulic BOP w/2 7/8" pipe rams on top. PU 8 ½" bit on 4 ¾" collar. RU swivel. Drill out 10 sk surface plug using 9.0 ppg brine.

3. PU remaining 5-4 ¾" DC's. Drill out cmt plug from 400'-500'. Drill out cmt plug from 1248' to top of 5 ½" casing stub at 1300'. POOH.

4. Stand back 4 ¾" collars and PU 4 ¾" bit on 6-3 1/8" collars. TIH w/2 7/8" WS. Finish drilling out plug inside 5 ½" casing stub. POOH.

5. Stand back 3 1/8" collars. PU 7 5/8" washover pipe rotary shoe w/key stock ID and washover pipe extension on 4 ¾" DCs. TIH and was hover 5 ½" casing stub for a distance of 4'. POOH LD washover tools.

6. PU 6 5/8" crushed carbide concave mill. TIH. Dress off top of 5 ½" casing stub. POOH. LD 4 ¾" collars.

7. PU Bowen lead seal casing patch on 5 ½" 17# N-80 LTC casing. TIH. Slowly rotate over 5 ½" casing stub until casing takes weight. Allow 15-20,000# to be supported by the casing patch to assure good and complete engagement. PU running string to remove the weight form the casing patch while allowing torque to slack from running string.

8. Set lead seal and be elevating the running string. Pull 30,000# to set patch. Reduce the setting load to 15,000# and pressure test the casing patch to 1000 psi.

9. ND BOP's. Set slips. Cut off 5 ½" casing. NU 11" 3000 psi x 7 1/16" 3000psi tubing head and 7 1/16" 3000 psi manual BOP. Test tubing head seals to 1000 psi. Test BOP's to 1000 psi.

10. PU 4 ¾" bit on 3 1/8" DCs and TIH on 2 7/8" WS. Drill out cement plugs and CIBP's to +-8975'. Circulate hole clean with 9.0 ppg brine. Test casing. If necessary, prepare to squeeze perforations from 8539'-8580'.

11. RU electric line and GIH and perforate as per recommendation. POOH. RD electric line.

12. PU packer on WS and GIH and set packer at +-8700'. Break down perforations and establish injection rate. Testing will be done to determine if acidizing is necessary. After satisfactory test, release packer and POOH LD tubing and packer.

13. RU electric line and PU Baker Model "D" plastic coated packer and GIH and set at +-8700'. POOH and RD and release electric line.

14. PU and TIH w/2 7/8" 6.5# J-55 plastic coated tubing to packer. Circulate packer fluid. Latch into packer and test casing. Space out.

15. ND BOP and NU and test wellhead. RD and release rig.