

SWD 8/4/00 783

CLAYTON WILLIAMS ENERGY, INC.

July 19, 2000

Via Federal Express Overnight Service

JUL 2 0 2000

Mr. Mark Ashley
State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: **Application for Authorization to Inject – Form C108**

Clayton Williams Energy, Inc. Green B Federal #9 Eddy County, New Mexico

Mr. Ashley:

Please find enclosed our Application for Authorization to Inject for the above captioned well.

Please note I will forward "Proof of Notice" to the surface owner (Bureau of Land Management), tenant (Bogle Farms, Inc.), and offset leaseholders, and the "Proof of Publication" from the Artesia Daily Press to you within the next several days.

We certainly appreciate all your assistance in getting this application approved. Should you require further, please call either Matt Swierc or myself. My office phone number is (915) 688-3240 and Matt's is 688-3251.

Sincerely yours,

Betsy Luna

Engineering Technician

Extry Luna

Enclosures

Cc: OCD - Artesia

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

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
· I	I.	OPERATOR: Clayton Williams Energy, Inc.
		ADDRESS: Six Desta Drive, Suite 3000, Midland, Texas 79705
		CONTACT PARTY: PHONE: (915) 688-3251
/ I	II.	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
I	V.	Is this an expansion of an existing project? Yes X No If yes, give the Division order number authorizing the project:
/1	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
. 1	VII.	Attach data on the proposed operation, including: Attachment 4
		 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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
/ <u>]</u>	IX.	Describe the proposed stimulation program, if any. Attachment 6
<i>)</i> 1	*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
1	*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
. J	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: TITLE: Production Superintendent
		SIGNATURE:
	*	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:

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.

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(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, it 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.

OPERATOR:

Clayton Williams Energy, Inc.

WELL NAME & NUMBER:

WELL LOCATION:

WELLBORE SCHEMATIC

H³ Ħ3 RANGE \mathfrak{t}^3 Method Determined: circulation Method Determined: Bond Log Casing Size: 5-1/2" @ 10,870' Method Determined: circulation Casing Size: 11-3/4" @ 429' Casing Size: 8-5/8" (a) 3000" 29E 9,100' perforated WELL CONSTRUCTION DATA TOWNSHIP 17S Intermediate Casing Production Casing Injection Interval Surface Casing or or or feet to_ SX. SX. 19 SECTION SX. surface Top of Cement: surface 325 10870 Top of Cement: 7800' 15" Cemented with: 1250 Cemented with: 740 11" Top of Cement: 8,800 Cemented with: Total Depth: Hole Size: Hole Size: Hole Size: UNIT LETTER Green B-9 (API # 30-015-22930) 9 1980' FNL & 2310' FEL FOOTAGE LOCATION

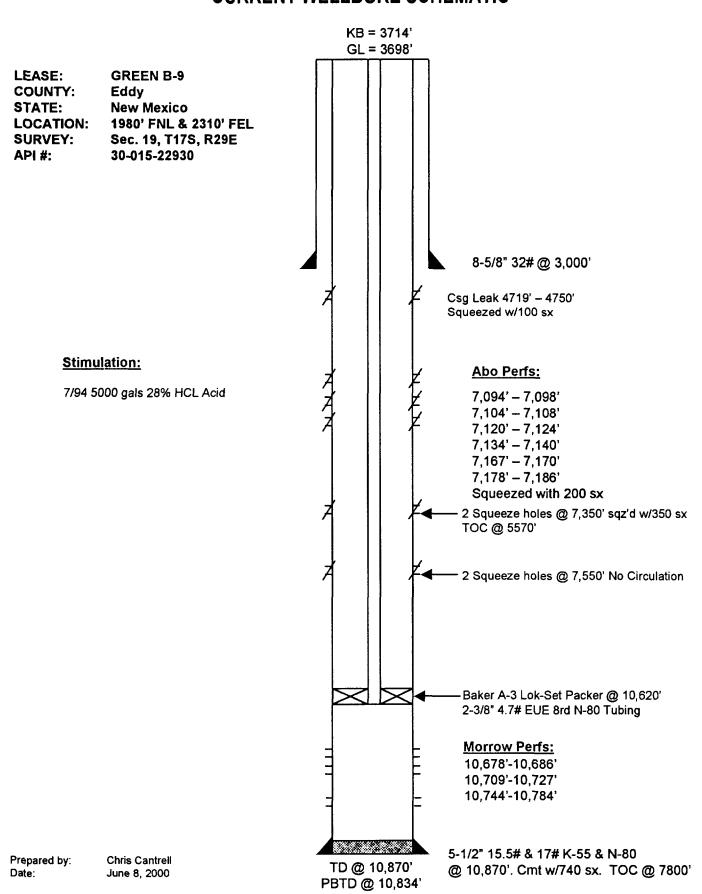
(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

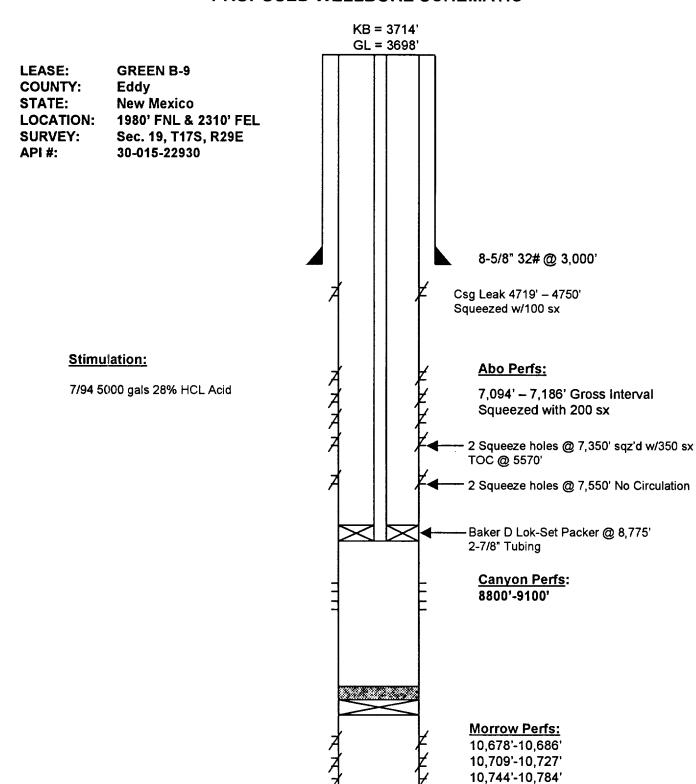
Tu	Tubing Size: 2-7/8"	Lining Material:	Plastic coating	
T_{y_i}	Type of Packer: Loc-Set			
Pa(Packer Setting Depth: 8775'			
Otl	Other Type of Tubing/Casing Seal (if applicable):	upplicable): N/A		
		Additional Data		
<u></u>	Is this a new well drilled for injection?	ion? Yes	No No	
	If no, for what purpose was the w	purpose was the well originally drilled? Morrow Gas		
			· .	
5.	Name of the Injection Formation:	Canyon Limestone	9	
3.	Name of Field or Pool (if applicable):	le):	N/A	
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.	in any other zone(s)? List all suci.e. sacks of cement or plug(s) us	th perforated ed.	
	Form C-103 attached			
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:	oil or gas zones underlying or ove	rlying the proposed	
	Atoka below 11,000'; Abo ±6000'	±6000°		

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CLAYTON WILLIAMS ENERGY, INC. CURRENT WELLBORE SCHEMATIC



CLAYTON WILLIAMS ENERGY, INC. PROPOSED WELLBORE SCHEMATIC



Prepared by: Date: Chris Cantrell June 8, 2000 5-1/2" 15.5# & 17# K-55 & N-80

Squeezed

TD @ 10,870'

PBTD @ 10,834'

@ 10,870'. Cmt w/740 sx. TOC @ 7800'

Clayton Williams Energy, Inc. Green B-9 Re-Entry

WELL STATUS

Spud Date:

5/29/75

Status:

Currently Producing from Morrow Formation.

Perforations:

10,678'-10,686' 10,709'-10,727'

10,744'-10,784'

Downhole Equipment:

Baker A-3 Lok-Set Packer @ 10,620'

2-3/8" 4.7# EUE 8rd N-80 Tubing

Surface Casing:

11-3/4" 42# H-40 set at 429'

Cemented to surface

Intermediate Casing:

8-5/8" 32# K-55 set at 3000'

Cemented to surface

Production Casing:

5-1/2" 15.5# & 17# N-80 and K-55 and 15.5# K-55 set at

10,870'

TOC @ 7800' f/temp survey

Procedure:

- 1. MIRU pulling unit. Kill well as required with brine or produced water. NU 11" 3000 psi hydraulic BOP.
- 2. Release packer, circulate hole and POOH laying down tubing.
- 3. RU electric line and run GR/JB to +-10,650'. POOH.
- 4. PU CIBP and RIH and set at +-10,650'. POOH. RIH and dump bail 20' cement on top of CIBP.
- 5. Load hole and test casing to 500 PSI for 30 minutes.

- 6. RU electric line and GIH and perforate from 8800'-9100' as per recommendation. POOH. RD electric line.
- 7. PU plastic coated Loc-Set packer and TIH w/2 7/8" 6.5# J-55 plastic coated tubing to 8775'. Circulate packer fluid. Set packer and test casing. Space out.
- 8. ND BOP and NU and test wellhead. RD and release rig.
- 9. Pump 100 bbls of produced water into well and monitor pressure. If necessary, acidize with 3000 gallons of 15% HCL as recommended.

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

III. Well Data

- A. (1) Green B-9 Section 19 T17S R29E N/2, Eddy County 1980' FNL and 2310' FEL
 - (2) 11 3/4" 42# H-40 @ 429', 325 sacks Cement, 15" hole, cement to surface, circulated to surface 8 5/8" 32# K-55 @ 3,000', 1250 sacks Cement, 11" hole, cement to surface, circulated to surface 5 1/2"@ 10,870', 740 sacks Cement, 7 7/8" hole, TOC @ 7,800'.
 - (3) 2 3/8" 4.7# EUE 8rd N-80 Tubing set at +/-10,620'
 - (4) Baker Model "A-3" Lok-set Packer at +/-10,620"
- B. (1) Canyon Limestone Formation
 - (2) Proposed Perforated Interval 8800'-9100' (Gross Interval)
 - (3) Originally drilled as a Morrow gas producer.
 - (4) Cement squeeze above at 4,719'-4,750', squeezed with 100 sx cement.

Perforations above at 7,094'-7186' gross interval, squeezed with 200 sx cement.

Squeeze holes at 7,350' squeezed with 350 sx cement. TOC 5570'.

Squeeze holes at 7,550' Could not break down.

Perforations below at 10,678'-10,784' gross interval.

(5) Atoka below at +/-10,900'-11,000' and Abo above at +/-6,000'-6,300'.

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Clayton Williams Energy, Inc.
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VI. Tabulation of wells that penetrate the proposed injection zone within the area of review:

No wells penetrate the proposed injection zone within the area of review.

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

VII. Data on the proposed operation

- 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 1760 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

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

VIII. Geological Data

The proposed disposal interval is within the Canyon Limestone Formation at a depth of 8,800'-9,100'. The Canyon Limestone Formation is a porous carbonate free of any silica (sand) admixture and has a thickness of +/-600'. There are known aquifers overlying the proposed disposal area.

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IX. Describe the proposed stimulation program, if any:

If necessary, 3000 gallons of 15% hydrochloric acid

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.

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

XI. Fresh water analysis...

There are no fresh water wells within one mile.

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

XII. Affirmative Statement

Re: Green B-9 Well

Section 19 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: June 8, 2000

Production Supt.

Clayton Williams Energy, Inc.

Offset Operators Within 1/2 Mile Radius

Mack Energy Corporation PO BOX 960 Artesia, New Mexico 88211-0960 (505) 748-1288

Southwest Royalties, Inc. PO BOX 11390 Midland, Texas 79702 (915) 686-9927

Ray Westall PO BOX 4 Loco Hills, New Mexico 88255

Phillips Petroleum Company 4001 Penbrook Street Odessa, Texas 79762 (915) 368-1488

State of New Mexico Land Office Oil & Gas Division P. O. Box 1148 Santa Fe, New Mexico 87504

Surface Tenant

Bogle Farms, Inc. PO BOX 358 Dexter, New Mexico 88230

Surface Owner

United States Department Of The Interior Bureau of Land Management 2909 West Second Street Roswell, New Mexico 88201-1287

Legal Notice

Application for Authorization to Inject

Notice is hereby given that Clayton Williams Energy, Inc., 6 Desta Drive, Suite 3000, Midland, Texas 79705, has made an Application for Authorization to Inject with the Oil Conservation Division of the State of New Mexico Energy and Minerals Department. The intention of the applicant is to convert the Green B-9 well and dispose of produced water into the Canyon Limestone formation, 8,800'-9,100'. The well is located 1980' FNL and 2310' FEL of Section 19, Township 17 South, Range 29 East, in Eddy County, New Mexico. The expected maximum injection rate will be 8000 barrels per day and the expected maximum injection pressure is 1760 PSIG. Any interested party must file objections or requests for hearing with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days of the last date of publication. Interested parties can contact the applicant's agent, Paul Owen, at Campbell, Carr, Berge and Sheridan, P.A., Jefferson Place, Suite 1, 110 North Guadalupe, P.O. Box 2208, Santa Fe, New Mexico 87504-2208 or 505-988-4421.

Affidavit of Publication

	NO.	17055						
STATE OF NEW MEX	ICO							
County of Eddy:								
Gary D. Scott		. 	being duly					
swom,says: That he is	the	Publisher	of The					
Artesia Daily Press, a daily newspaper of general								
circulation, published in English at Artesia, said county								
and county and state, and that the here to attached								
Legal Notice								
was published in a regular and entire issue of the said								
Artesia Daily Press,a	laily newsp	aper duly qu	alified					
for that purpose within	the meani	ng of Chapte	r 167 of					
the 1937 Session Laws of the state of New Mexico for								
1 consecutive weeks/days on the same								
day as follows:								
First Publication	Jul	/ 19	2000					
Second Publication								
Third Publication			/1					
Fourth Publication		/ 1/						
X/a.	n h	1/2	A					
Subscribed and sworn to before me this								
19TH day of	July	2000						
Babue Ama Bazno								
Notary Public, Eddy County, New Mexico								
My Commission expire	es	September	23, 2003					

Copy of Publication:

LEGAL NOTICE

APPLICATION FOR AUTHORIZATION TO INJECT Notice is hereby given that Notice is hereby given that Clayton Williams Energy, Inc. 6
Desta Drive, Soine 3000, Midland, Texas 79705 has made an Application for Authorization to Inject with the Oil Conservation Division of the State of New Mexico Energy and Minerals Department. The intention of the applicant is to convert the Green B-9 well and dispose of produced water into the Canyon Limestone formation, \$,800, 9,100. The well is located 1980 FNL and 2310 FEL of Section 19, Township 17 South Range 29 East, in Eddy County, New Mexico. Mexico. The expected maximum injection rate will be 8000 barrels per day and the expected maximum injection pressure is 1760. PSIG. Any interested party must file objections or requests for hearing with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico, 87505, within 15 days of the last date of publication. Interested parties can contact the applicant's agent, Paul Owen, at Campbell, Carr, Berge and Sheridan, P.A., Jefferson Place, Suite 1, 110 North Guadalupe, P.O. Box 2208, Santa Fe, New Mexico 87504-2208 or 505-988-4421.

Published in the Artesia Daily Press, Artesia, N.M. July 19,

Legal 17055

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