

WFX 7/29/97

721

**devon**

**ENERGY CORPORATION**

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 10, 1997

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 88505

12

Attention: Ben Stone

**RE: East Shugart Unit #'s 56 & 58  
Section 35-T18S-R31E  
Eddy County, New Mexico**

Gentlemen:

Enclosed please find our Application for Authorization to Inject for each of the above captioned wells.

Devon Energy Corporation also requests that the maximum injection pressures for these wells be higher than .2 psi per foot of depth to the uppermost injection perforation. This request is based on the data in Table I which shows the frac gradients obtained from stimulation treatments on wells in the area. Figure I is a map showing the location of the proposed injectors and the wells used in this study.

The frac gradient is used to calculate the maximum surface injection pressure (injection wellhead pressure gradient x depth to the uppermost perforation = maximum surface injection pressure) that can be attained without fracturing the formation. Provided the calculated wellhead pressure gradient is not exceeded, the formation cannot be fractured and injection fluids will be contained in the formation. This has been confirmed through injection surveys run on existing injection wells in the unit.

Based on the attached information, Devon respectfully request that the **maximum wellhead pressure gradient for the proposed injection wells be .49 psi per foot of depth to the uppermost perforation.** This is the average for the eight wells in the area of interest. We will also periodically run injection surveys to ensure that injection is confined to the Queen formation.

If you have any questions, please give me a call at 405-552-4509.

Sincerely,



Ernie Buttross  
District Engineer

c:\esuijmt

**TABLE I  
INJECTION WELLHEAD PRESSURE GRADIENTS  
EAST SHUGART UNIT**

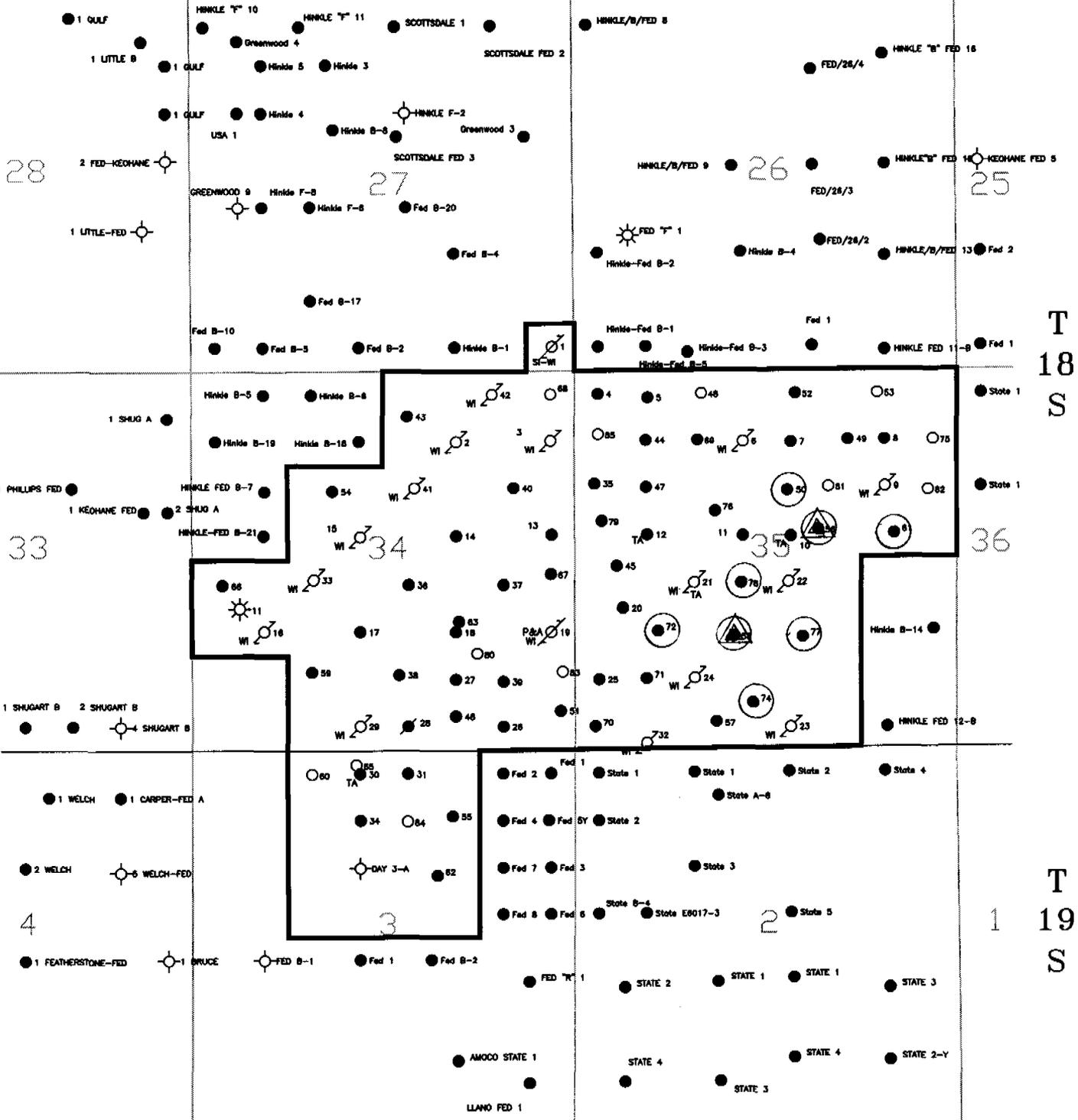
<b>PROPOSED INJECTORS</b>	<b>OFFSET WELLS</b>	<b>TREATMENT ISIP</b>	<b>TOP PERF</b>	<b>FRAC GRADIENT PSI/FT</b>	<b>WELLHEAD PRESSURE GRADIENT PSI/FT</b>
<b>East Shugart Unit #56</b>		1300	3591	0.82	0.35
	<b>ESU #50</b>	1760	3578	0.95	0.48
	<b>ESU #61</b>	2050	3563	1.04	0.57
	<b>ESU #78</b>	1247	3460	0.82	0.35
<b>East Shugart Unit #58</b>		1580	3686	0.89	0.42
	<b>ESU #72</b>	1927	2744	1.16	0.69
	<b>ESU #74</b>	1380	3457	0.86	0.39
	<b>ESU #77</b>	2312	3274	1.17	0.70

**Average**

**3419**

**0.96**

**0.49**



**EAST SHUGART UNIT**  
EDDY COUNTY, NEW MEXICO

**FIGURE 1**

- △ PROPOSED INJECTOR
- FRAC GRADIENT INFORMATION





20 North Broadway, Suite 1500 Telephone:405/235-3611  
Oklahoma City, Oklahoma 73102-8260

**CERTIFIED MAIL # P 240 501 627**

July 10, 1997

Re: Application for Authorization to Inject  
East Shugart Unit #'s 56 & 58  
Eddy County, NM

State of New Mexico  
Oil Conservation Division  
Attn: Ben Stone  
2040 S. Pacheco St.  
Santa Fe, NM 87505

Enclosed are the original and 1 copy of our Application for Authorization to Inject (Form C-108) for the above referenced wells in Eddy County. I also sent a copy of this application to the Artesia district office and the Bureau of Land Management office in Carlsbad. Please direct any inquiries concerning this application to our area district engineer, Ernie Buttross at (405) 552-4509.

Sincerely yours,

Devon Energy Corporation (Nevada)

A handwritten signature in cursive script that reads "Karen Byers".

Karen Byers  
Engineering Technician

/kb  
Enclosures

cc: OCD - Artesia District Office  
BLM - Carlsbad Office

7/14/97 - 8/29/97 - BS - KW - WFX

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling
[ ] NSL [ ] NSP [ ] DD [ ] SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
[ ] DHC [ ] CTB [ ] PLC [ ] PC [ ] OLS [ ] OLM
[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
[X] WFX [ ] PMX [ ] SWD [ ] IPI [ ] EOR [ ] PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or [ ] Does Not Apply

- [A] [ ] Working, Royalty or Overriding Royalty Interest Owners
[B] [X] Offset Operators, Leaseholders or Surface Owner
[C] [X] Application is One Which Requires Published Legal Notice
[D] [ ] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[E] [X] For all of the above, Proof of Notification or Publication is Attached, and/or,
[F] [ ] Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

E. L. Buttross, Jr.
Print or Type Name

E. L. Buttross Jr.
Signature

District Engineer
Title

7/3/97
Date

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  Yes  No
- II. OPERATOR: Devon Energy Corporation (Nevada)  
ADDRESS: 20 N. Broadway, Suite 1500, Oklahoma City, OK 73102  
CONTACT PARTY: E. L. Buttross, Jr. PHONE: (405) 552-450
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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 WFX-664
- 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 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 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 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: E. L. Buttross, Jr. TITLE: District Engineer  
SIGNATURE: E. L. Buttross Jr. DATE: 7/3/97
- \* 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 circumstance of the earlier submittal. \_\_\_\_\_

# DEVON ENERGY CORPORATION

## APPLICATION FOR AUTHORITY TO INJECT

### III Proposed Water Injection Well Data:

#### A.

1. East Shugart Unit #56  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM
2. Surface Casing: 8 5/8", 24#/ft, set @ 949', cement to surface w/500 sxs.  
Production Casing: 5 1/2", 15.5#/ft, set @ 4072', cement to surface w/1050 sxs.

**(Also see current & proposed wellbore schematics)**

3. Tubing: 2 3/8" plastic coated, set @ 3500'.
4. Packer: 5 1/2" x 2 3/8" Loc-set pkr will be set @ 3500'.

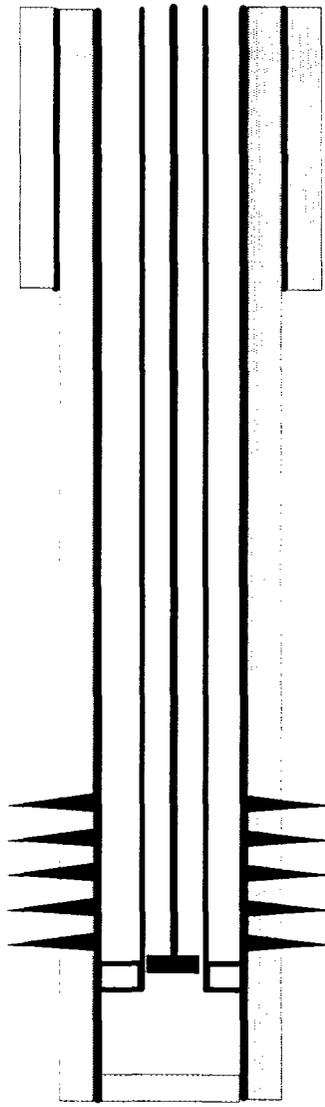
#### B.

1. Injection formation: Queen sands in the Shugart field (Y-SR-Q-G).
2. Injection interval: (current perms 3591'-3932').
3. Original purpose of well: Oil producer from the Queen sands
4. Other perms: none
5. Depths & names of higher and lower oil or gas zones: The top of the Queen formation is approximately 3400'. There are no known upper or lower oil formations.

# DEVON ENERGY CORPORATION CURRENT WELLBORE SCHEMATIC

WELL NAME: EAST SHUGART UNIT #56	FIELD: Shugart (Y-SR-Q-G)
LOCATION: 2250' FNL & 1910' FEL, Sec. 35-18S-31E	COUNTY: Eddy County STATE: NM
ELEVATION: 3642' GL	SPUD DATE: 10/10/95 COMP DATE: 10/17/95
API #: 30-015-27949	PREPARED BY: KAREN BYERS DATE: 5/22/97

	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0'-949'	8 5/8"	24#	J-55		12 1/4"
CASING:	0'-4072'	5 1/2"	15.5#	J-55		7 7/8"
CASING:						
TUBING:	0'-3946'	2 7/8"	6.5#	J-55	8 rd	
TUBING:						



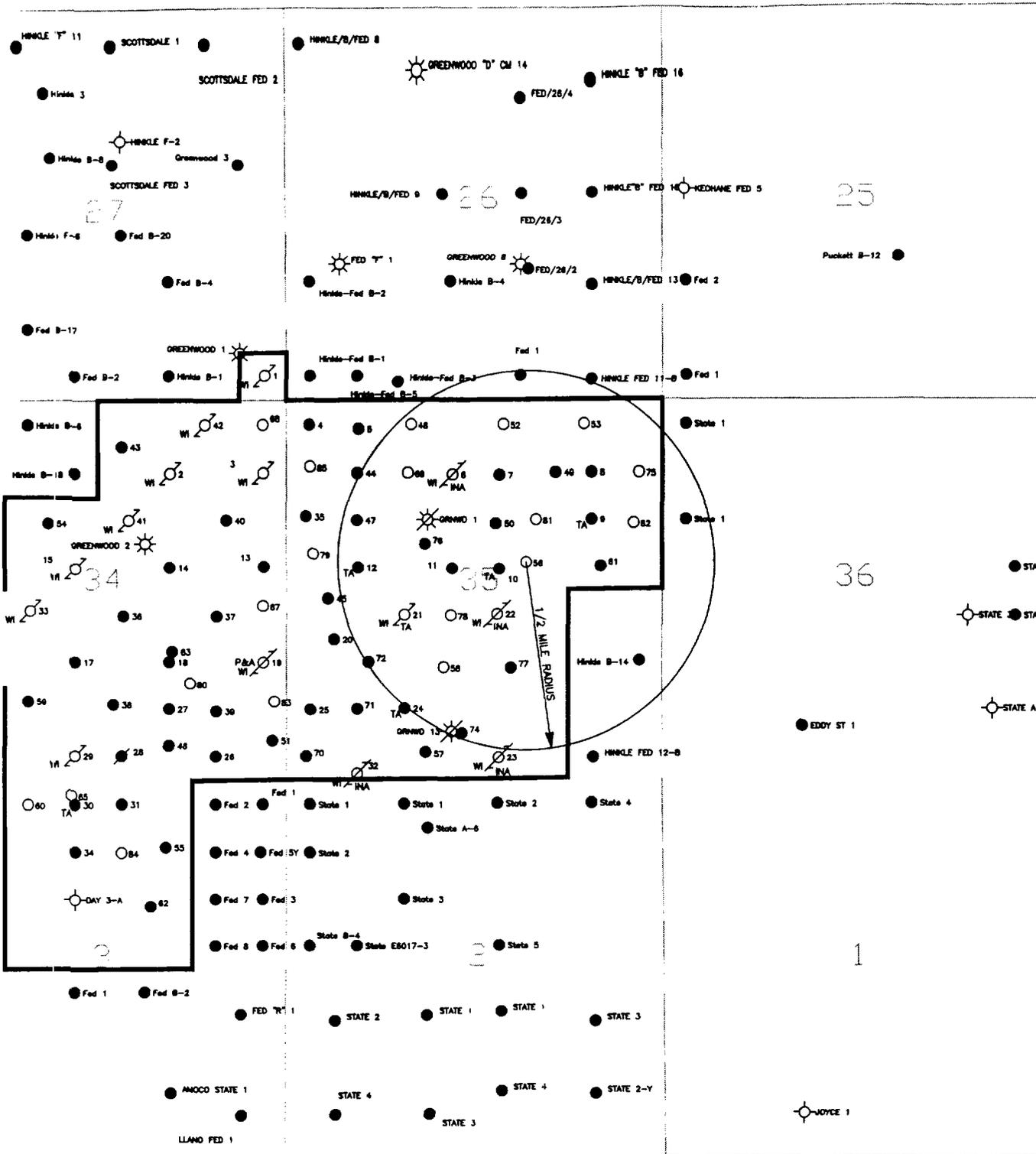
CURRENT       PROPOSED

8 5/8" casing @ 949' w/500 sxs cmt, circ'd cmt to surface

- Perforations:**
- UQ3 - 3591'-3601' (11 holes)
  - LQ1 - 3704'-3721' (4 holes)
  - LQ2 - 3831'-3835' (5 holes)
  - LQ4 - 3898'-3906' (9 holes)
  - LQ5 - 3930'-3932' (3 holes)

5 1/2" casing @ 4072', 1050 sxs cmt, circ'd cmt to surface

TD 4073', PBTD @ 4009'

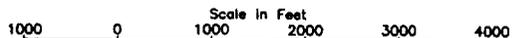


# EAST SHUGART UNIT

EDDY COUNTY, NEW MEXICO

WELLS WITHIN A 1/2 MILE RADIUS

ESU #56



FILE: ES-56

## East Shugart Unit #56 con't

### VII Proposed Operation Data:

- (1) Average daily injection rates - 500 - 700 BWPD  
Maximum daily injection rates - 700 BWPD
- (2) Type of injection system - closed system
- (3) Average injection pressure - 1350 psig  
Maximum injection pressures - 1800 psig
- (4) Injection water will be produced water from the East Shugart lease. Some additional water may come from offset leases.
- (5) Injection is not for disposal purposes.

### VIII Geological Data:

Geological Name: Queen formation

Lithological Detail: Sand & dolomite

Formation Top: 3392'

Thickness: 560'

Geological Data of Drinking Water Zone: No fresh water zones exist.

### IX Stimulation Program:

The proposed injection interval will be acidized with 15% NEFE acid prior to initial injection.

### X Well Logs:

Copies of current well logs are on file with Oil Conservation Division.

## East Shugart Unit #56 con't

### XI Chemical Analysis of Fresh Water:

There are no known producing fresh water wells within one mile of a proposed injection well.

### XII Affirmative Statement of Open Faults:

Upon examination of the available geologic and engineering data, no evidence of fault communication between the shallow aquifers and the proposed injection zones has been encountered in the East Shugart Unit.

### XIII "Proof of Notice" and "Proof of Publication":

The Bureau of Land Management is the surface owner. They have been notified of our application by certified letter with a copy of this application attached. Proof of notice to follow.

Offset operators in the "area of review" are as follows:

Operator	Well Name	Unit Letter	Location S-T-R
Headington Oil	Federal "26" #1	O	26-18S-31E
Keohane Saunders, etal	Hinkle Federal "B" #7	O	35-18S-31E
Westall-Mask	Hinkle Federal #11-B	P	26-18S-31E
	Hinkle Federal #12-B	P	35-18S-31E
	Hinkle Federal B #14	I	35-18S-31E
	State A #6	C	2-19S-31E
Amoco Production	Greenwood PGU Fed G #13	N	35-18S-31E
	Greenwood UT Fed #12	F	35-18S-31E
Ray Westall	State #1	C	2-19S-31E
	State #2	B	2-19S-31E
Keohane & Westall	State "2" #1	D	2-19S-31E
Texaco, Inc	State CK #1	E	36-18S-31E

Each of the offset operators was provided a copy of the application by certified mail. Proof of notice is attached.

"Proof of Publication" from the Carlsbad Current-Argus to follow.

# DEVON ENERGY CORPORATION

## APPLICATION FOR AUTHORITY TO INJECT

### III Proposed Water Injection Well Data:

#### A.

1. East Shugart Unit #58  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM
2. Surface Casing: 8 5/8", 24#/ft, set @ 949', cement to surface w/300 sxs.  
Production Casing: 5 1/2", 15.5#/ft, set @ 4087', cement to surface w/975 sxs.

**(Also see current & proposed wellbore schematics)**

3. Tubing: 2 3/8" plastic coated, set @ 3300'.
4. Packer: 5 1/2" x 2 3/8" Loc-set pkr will be set @ 3300'.

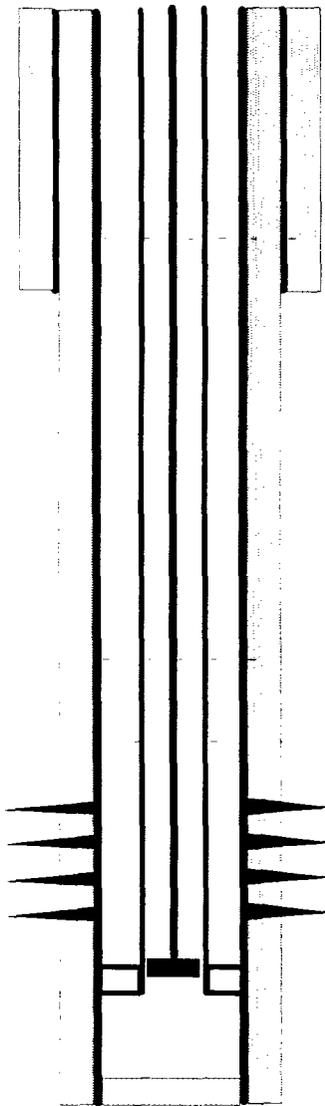
#### B.

1. Injection formation: Queen sands in the Shugart field (Y-SR-Q-G).
2. Injection interval: (perfs 3362'-3908').
3. Original purpose of well: Oil producer from the Queen sands
4. Other perfs: none
5. Depths & names of higher and lower oil or gas zones: The top of the Queen formation is approximately 3360'. There are no known upper or lower oil formations.

# DEVON ENERGY CORPORATION CURRENT WELLBORE SCHEMATIC

WELL NAME: EAST SHUGART UNIT #58	FIELD: Shugart (Y-SR-Q-G)
LOCATION: 1575' FSL & 2200' FWL, Sec. 35-18S-31E	COUNTY: Eddy County STATE: NM
ELEVATION: 3632' GL	SPUD DATE: 11/7/95 COMP DATE: 11/14/97
API #: 30-015-27951	PREPARED BY: KAREN BYERS DATE: 5/22/97

	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0'-949	8 5/8"	24#	J-55		12 1/4"
CASING:	0'-4087'	5 1/2"	15.5#	J-55		7 7/8"
CASING:						
TUBING:	0'-3930'	2 7/8"	6.5#	J-55	8rd	
TUBING:						



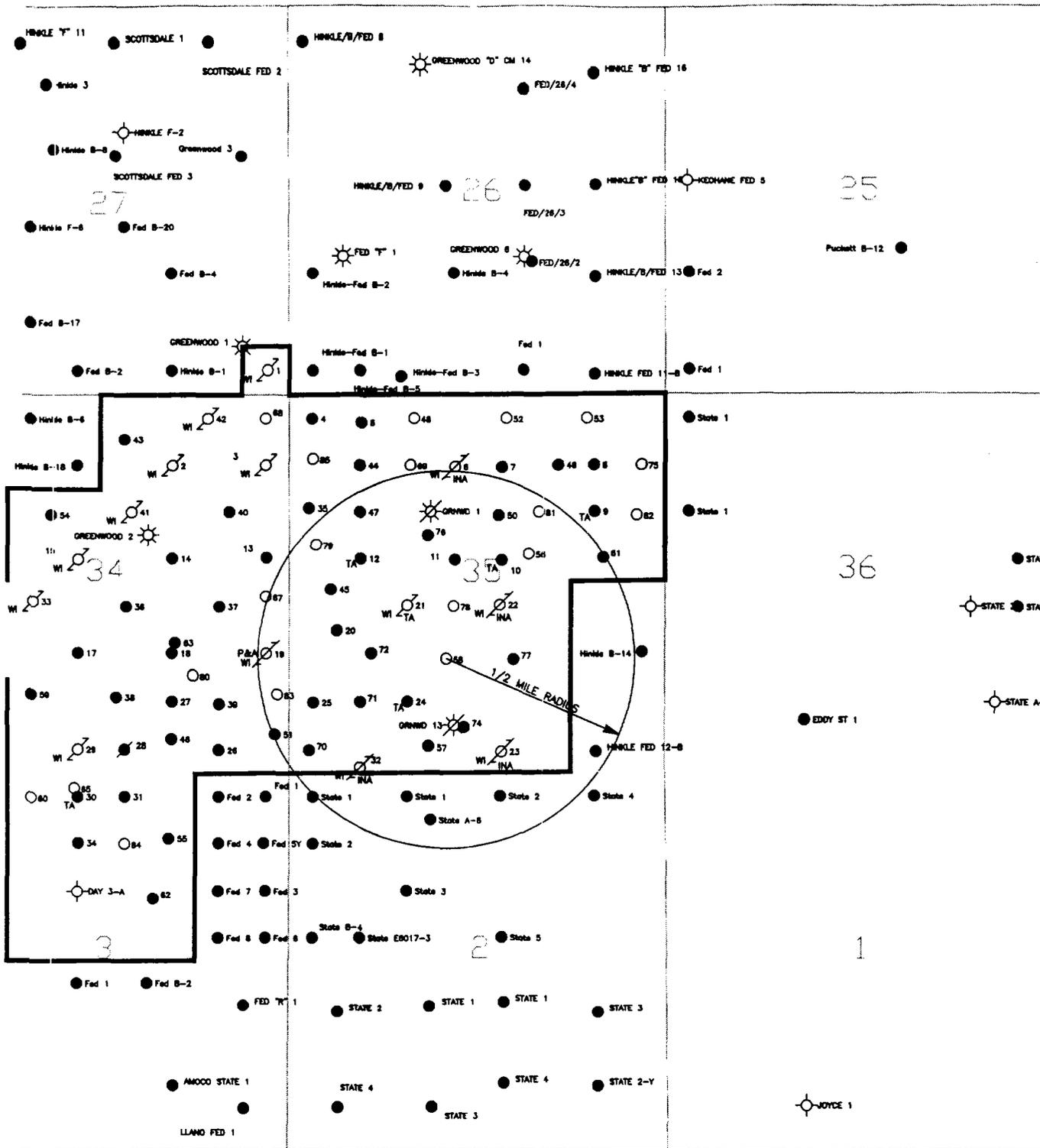
CURRENT
  PROPOSED

8 5/8" casing @ 949' w/500 sxs cmt, circ'd cmt to surface.

- Perforations:**
- LQ1 - 3686'-3708' (5 holes)
  - LQ2 - 3831'-3833' (3 holes)
  - LQ3 - 3884'-3889' (3 holes)
  - LQ4 - 3901'-3908' (5 holes)

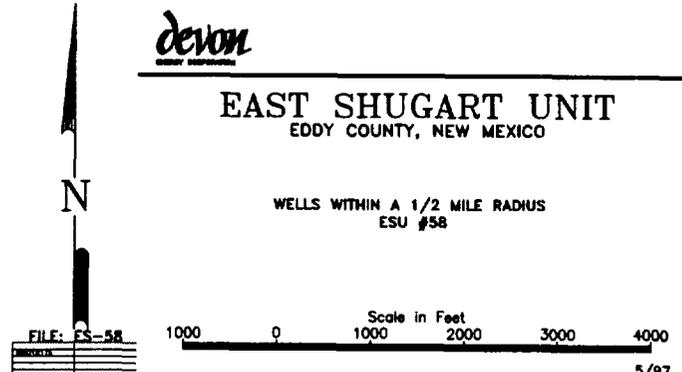
5 1/2" casing @ 4087' w/975 sxs cmt, circ'd cmt to surface

TD @ 4088', PBSD @ 4027'



**EAST SHUGART UNIT**  
EDDY COUNTY, NEW MEXICO

WELLS WITHIN A 1/2 MILE RADIUS  
ESU #58



## East Shugart Unit #58 con't

### VII Proposed Operation Data:

- (1) Average daily injection rates - 500 - 700 BWPD  
Maximum daily injection rates - 700 BWPD
- (2) Type of injection system - closed system
- (3) Average injection pressure - 1350 psig  
Maximum injection pressures - 1800 psig
- (4) Injection water will be produced water from the East Shugart lease. Some additional water may come from offset leases.
- (5) Injection is not for disposal purposes.

### VIII Geological Data:

Geological Name: Queen formation

Lithological Detail: Sand & dolomite

Formation Top: 3368'

Thickness: 585'

Geological Data of Drinking Water Zone: No fresh water zones exist.

### IX Stimulation Program:

The proposed injection interval will be acidized with 15% NEFE acid prior to initial injection.

### X Well Logs:

Copies of current well logs are on file with Oil Conservation Division.

**East Shugart Unit #58 con't**

**XI Chemical Analysis of Fresh Water:**

There are no known producing fresh water wells within one mile of a proposed injection well.

**XII Affirmative Statement of Open Faults:**

Upon examination of the available geologic and engineering data, no evidence of fault communication between the shallow aquifers and the proposed injection zones has been encountered in the East Shugart Unit.

**XIII "Proof of Notice" and "Proof of Publication":**

The Bureau of Land Management is the surface owner. They have been notified of our application by certified letter with a copy of this application attached. Proof of notice to follow.

Offset operators in the "area of review" are as follows:

Operator	Well Name	Unit Letter	Location S-T-R
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Westall-Mask	Hinkle Federal #11-B	P	26-18S-31E
	Hinkle Federal #12-B	P	35-18S-31E
Amoco Production	Hinkle Federal B #14	I	35-18S-31E
	State A #6	C	2-19S-31E
	Greenwood PGU Fed G #13	N	35-18S-31E
Ray Westall	Greenwood UT Fed #12	F	35-18S-31E
	State #1	C	2-19S-31E
Keohane & Westall	State #2	B	2-19S-31E
	State "2" #1	D	2-19S-31E
Texaco, Inc	State CK #1	E	36-18S-31E

Each of the previous operators was provided a copy of the application by certified mail. Proof of notice is attached.

"Proof of Publication" from the Carlsbad Current-Argus to follow.

ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMP DATE</u>	<u>WELL TYPE</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
East Shugart WSW #1 Oper: Devon Energy Corp.	1650' FNL & 1980' FWL Sec. 35-18S-31E	2/21/79	6/20/79	Gas	11,800'/11,755'	13 3/8" csg @ 765' w/800 sxs cmt. Est. TOC @ surface. 9 5/8" csg @ 4600' w/1750 sxs cmt. Est. TOC @ surface. 5 1/2" csg @ 11,800' w/2700 sxs cmt. Est. TOC @ surface. Perfs 11,491'-11,581' Perf'd 9192'-9300', 11,054'-11,080', & 11,694'-11,732' ?
				P & A		
			5/3/97	WSW	11,800'/6169'	Drilled out cmt plugs & cleaned out to 6169'. Perf'd 4060'-4078', 4092'-4110' & 5218'-5955'
East Shugart Unit #6 Oper: Devon Energy Corp.	990' FNL & 2310' FWL Sec. 35-18S-31E	6/28/58	12/18/58	Oil	4292'/4093'	8" csg @ 898' w/50 sxs cmt. Est. TOC @ 738'. 7" csg @ 4115' w/225 sxs cmt. TOC 2370' (before Yates squeeze). Perfs 2698'-2774' & 3081'-3877'. Set CIBP @ 3510'. Added perfs 2814'-3468'. Began inj 5/25/66. Drld out CIBP @ 3510' & cleaned out to 4000'. Perf'd 2649'-2658' & 3572'-3698'. Squeezed Yates perfs 2649'-2817'. Single injector thru Queen perfs. TOC @ 2110' after squeeze (temp svy).
			5/15/66	Dual WIW	4292'/3510' 4292'/4093'	
			12/26/80	Single WIW	4292'/4093'	
East Shugart Unit #7 Oper: Devon Energy Corp.	990' FNL & 2310' FEL Sec. 35-18S-31E	11/3/57	2/19/58	Oil	3885'	8 5/8" 28# csg @ 914' w/100 sxs cmt. Est. TOC @ 362'. 7" 20# csg @ 3875' w/150 sxs cmt. Est. TOC @ 2570'. Open hole completion 3875'-3885'. Added perfs 2710'-2839' & 3369'-3706'.
			1/21/59	Oil	3935'/3915'	8" 24# csg @ 850' w/50 sxs cmt. Est. TOC @ 738'. 7" 20# csg @ 3935' w/100 sxs cmt. TOC @ 2200' (CBL). Perf'd 3890'-3901'. Added perfs 3809'-3829'. Added perfs 3400'-3718'

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBID	COMPLETION RECORD
East Shugart Unit #9 Oper: Devon Energy Corp.	1650' FNL & 990' FWL Sec. 35-18S-31E	2/19/59	5/6/59	Oil	3908'	8 5/8" @ 800' w/50 sxs cmt. Est. TOC @ 730' 5 1/2" @ 3906' w/100 sxs cmt. Est TOC @ 3372' Perf'd 3404'-3895'. Squeezed 3148'-3159'. TOC @ 2230' (CBL). Perf'd 3404'-3497'. Set CIBP # 3350'. Converted to WW. Pkr @ 3330'.
East Shugart Unit #10 Oper: Devon Energy Corp.	2310' FNL & 2310' FEL Sec. 35-18S-31E	5/2/57	9/15/57	Oil	3908'/3350' 3908'	8 5/8" @ 925' w/100 sxs cmt. Est TOC @ 701'. Squeezed @ 400' w/50 sxs cmt. 7" @ 3640' w/100 sxs cmt. TOC @ 2350' (CBL 11/89). 4 1/2" liner @ 3600'-3930', cmt'd w/50 sxs. TOC @ liner top. Perfs 3381'-3925'.
East Shugart Unit #11 Oper: Devon Energy Corp.	2310' FNL & 2310' FEL Sec. 35-18S-31E	3/1/58	5/13/58	Oil	3985'	8 5/8" csg @ 910' w/50 sxs cmt. Est TOC @ 798'. 7" csg @ 3918' w/125 sxs cmt. Calc. TOC @ 2291' (30% excess) before squeeze. Perf'd 3812'-3909'. Squeezed 2712'-2714' w/100 sxs. Squeezed 2168'-2170' w/425 sxs. Added perfs 2720'-2856' & 3375'-3478'. Squeezed perfs 2720'-2856'.
East Shugart Unit #12 Oper: Devon Energy Corp.	2310' FNL & 990' FWL Sec. 35-18S-31E	8/30/57	12/3/57	Oil	3925'	8 5/8" @ 904' w/60 sxs cmt. Est TOC @ 792' 7" @ 3925' w/135 sxs cmt. TOC @ 2572' (CBL 7/68). Perf'd 3554'-3564' & 3870'-3884'. Squeezed 2540'-2541' w/60 sxs cmt. Perf'd 2694'-2868' & 3350'-3473'. Set BP @ 2950'. Set BP @ 2650'.

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/IP/BTD	COMPLETION RECORD
East Shugart Unit #19 Oper: Devon Energy Corp.	1650' FSL & 330' FEL Sec. 34-18S-31E	5/12/45	7/15/45	Oil	2857'	8 5/8" @ 920' w/50 sxs cmt. Est. TOC @ 760'. 7" @ 2695' w/100 sxs cmt. Est. TOC @ 1287'. Open hole 2695'-2857'. Deepened. 4 1/2" @ 3477' w/100 sxs cmt. Perfd 3390'-3445'.
			1/22/57	Oil	3477'	
			5/1/66	Dual WW		Converted to WI. Perfd Yates 2706'-2842' & Queen 3324'-3336'.
			9/1/69	Oil	3870'	Deepened. Open hole 3477'-3870'.
			12/2/80	P&A'd		Plugged & abandoned due to csg leak.
East Shugart Unit #20 Oper: Devon Energy Corp.	1980' FSL & 660' FWL Sec. 35-18S-31E	7/30/37	2/20/38	Oil	4088'	10" @ 903' w/50 sxs cmt. TOC @ surface. 6 5/8" @ 3000' w/100 sxs. TOC @ 2190' (CBL) before squeeze. 5 1/2" liner f/2930'-3327' w/est. 25 sxs. TOC @ top of liner (CBL) Open hole 3327'-4088'.
			2/15/69	Oil		Squeezed 2869'-2870' w/165 sxs cmt. TOC @ 1993 (CBL). Perfd Yates 2733'-2822'.
East Shugart Unit #21 Oper: Devon Energy Corp.	2310' FSL & 1650' FWL Sec. 35-18S-31E	8/6/57	10/26/57	Oil	4018'/3928'	8 5/8" @ 915' w/50 sxs cmt. Est. TOC @ 803'. 7" @ 4000' w/100 sxs cmt. TOC @ 2622' (CBL 5/66) Perfd 3564'-3898'.
			5/27/66	Dual WW	4018'/3510'	Set CIBP @ 3510'. Perfd 3370'-3495'. Squeezed @ 2888'-2889' w/75 sxs cmt. Squeezed @ 2750'-2751' w/70 sxs cmt. Perfd 2773'-2918'. Completed as Dual WW.
			8/15/69	Oil	4018'/3913'	Drilled out CIBP @ 3510' & cleaned out to 3913'. Converted back to oil producer.
			2/1/71	TA		Temporarily abandoned.
			8/16/79	TA	4018'/2725'	Set CIBP @ 2725'.

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
East Shugart Unit #22 Oper: Devon Energy Corp.	2310' FSL & 2310' FEL Sec. 35-18S-31E	11/25/58	2/13/59	Oil	3945'	8 5/8" @ 940' w/50 sxs. Est TOC @ 828' 7" @ 3940' w/150 sxs. Calc. TOC @ 2461' (30% excess). Perfs 2772'-3842'. Perfs 2860'-2875' & 3391'-3912'. Set CIBP @ 3332'. Set 4 1/2" 10.5# liner @ 3332' w/325 sxs. Circ'd cmt to surface. Drid out cmt & CIBP @ 3332'. Injecting into perfs 3391'-3912'.
East Shugart Unit #23 Oper: Devon Energy Corp.	330' FSL & 2329' FEL Sec. 35-18S-31E	3/7/60	7/13/60	Oil	4093'	8 5/8" @ 783' w/50 sxs. Est. TOC @ 671'. 7" @ 3530' w/100 sxs. TOC @ 2302' (CBL). 4 1/2" liner f/3000' to 4080' w/90 sxs. TOC @ top of liner. Open hole 4080'-4093'. Perfs 2773'-2838' & 3362'-3911'. 4 1/2" tie-back liner @ 2990' w/250 sxs. Circ'd cmt to surface. Pushed CIBP to 3949'. Perfd 3561'-3914'. Inj interval 3362'-3914'.
East Shugart Unit #24 Oper: Devon Energy Corp.	990' FSL & 1650' FWL Sec. 35-18S-31E	2/2/57	4/8/57	Oil	3520'/3480'	8" @ 923' w/50 sxs. Est. TOC @ 800'. 7" @ 3400' w/100 sxs. Est. TOC @ 2194' (CBL). Perfs 3350'-3370'. 4 1/2" liner f/3084'-3930' w/100 sxs. TOC @ top of liner. Squeezed 8 5/8" x 7" annulus w/200 sxs cmt. Perfd 2756'-2804' & 3355'-3897'. CIBP @ 2675'. Drid out CIBP @ 2675'. Ran CIBP @ 3150', ran 4 1/2" tie-back liner to 3084' w/300 sxs, circ'd cmt to surface. Pushed CIBP to 3928'. Perfd 3815'-3897'. Inj interval 3355'-3879'.
				TA		
				MW		

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBID	COMPLETION RECORD
East Shugart Unit #25 Oper: Devon Energy Corp.	990' FSL & 330' FWL Sec. 35-18S-31E	7/23/56	10/11/56	Oil	3900'	8" @ 907' w/50 sxs. Est. TOC @ 766'. 7" @ 2700' w/50 sxs. Est. TOC @ 1770'. Knocked off @ 2700' & pulled. 4 1/2" @ 3900' w/100 sxs. TOC @ 2700' (CEL). Perfd 3857'-3869'. Set plug @ 3472' & perfd 3400'-3460'. Perfd @ 2697' & squeezed 8 5/8" x 4 1/2" annulus w/500 sxs. Perfd 3535'-3668' & 2697'-2772'.
East Shugart Unit #32 Oper: Devon Energy Corp.	100' FSL & 990' FWL Sec. 35-18S-31E	9/23/69	10/9/69	Dual WW	3978'/3943'	8 5/8", 24# @ 630' w/400 sxs. Circ'd cmt to surface. 4 1/2", 9.5# @ 3978' w/450 sxs. TOC @ 2050' (temp svy) Perfd 2744'-2829' & 3352'-3891'. Squeezed perfs 2744'-2829' w/500 sxs cmt. Squeezed annulus f/1987' w/1150 sxs cmt. Cemented behind 4 1/2" via 3/4" tbg w/500 sxs. TOC @ surface. Perfd 3794'-3895'. CIBP @ 3288'. 3 1/2" liner @ 3287' w/100 sx. Circ'd cmt to surface. Drid out cmt & CIBP.
East Shugart Unit #44 Oper: Devon Energy Corp.	990' FNL & 990' FWL Sec. 35-18S-31E	11/9/93	1/10/94	Oil	4025'/3958'	8 5/8", 24# @ 956' w/478 sxs. TOC @ surface. 5 1/2", 15.5# @ 4025' w/916 sxs. TOC @ surface. Perfd 3794'-3870'.
East Shugart Unit #45 Oper: Devon Energy Corp.	2550' FSL & 580' FWL Sec. 35-18S-31E	6/21/94	9/1/94	Oil	4017'/3930'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4016' w/940 sxs. TOC @ surface. Perfd 2710'-3881'.
East Shugart Unit #46 Oper: Devon Energy Corp.	480' FSL & 1650' FEL Sec. 34-18S-31E	7/16/94	12/18/94	Oil	3952'/3885'	8 5/8", 24# @ 946' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 3951' w/1058 sxs. TOC @ 1515'. Perfd 3393'-3844'.

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
East Shugart Unit #47 Oper: Devon Energy Corp.	1650' FNL & 990' FWL Sec. 35-18S-31E	9/14/94	1/6/95	Oil	4040/3955'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4025' w/1410 sxs. TOC @ surface. Perfd 2731'-3870'.
East Shugart Unit #49 Oper: Devon Energy Corp.	990' FNL & 1500' FEL Sec. 35-18S-31E	9/22/94	12/8/94	Oil	4044/3990'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4043' w/900 sxs. TOC @ surface. Perfd 3712'-3880'
East Shugart Unit #50 Oper: Devon Energy Corp.	1700' FNL & 2335' FEL Sec. 35-18S-31E	6/30/94	7/23/94	Oil	4062/3995'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4060' w/1010 sxs. TOC @ 494'. Perfd 3871'-3896' & 3578'-3822'.
East Shugart Unit #51 Oper: Devon Energy Corp.	550' FSL & 200' FEL Sec. 34-18S-31E	7/8/94	7/31/94	Oil	4030/3966'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4030' w/953 sxs. TOC @ surface. Perfd 3862'-3874' & 3633'-3772'.
East Shugart Unit #52 Oper: Devon Energy Corp.	330' FNL & 2230' FEL Sec. 35-18S-31E	10/1/95	10/18/95	Oil	4036/3972'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4035' w/975 sxs. TOC @ surface. Perfd 3701'-3875'.
East Shugart Unit #56 Oper: Devon Energy Corp.	2250' FNL & 1910' FEL Sec. 35-18S-31E	10/10/95	11/30/95	Oil	4073/4009'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4072' w/1050 sxs. TOC @ surface. Perfd 3591'-3932'.
East Shugart Unit #57 Oper: Devon Energy Corp.	375' FSL & 1980' FWL Sec. 35-18S-31E	9/30/94	11/13/94	Oil	4073/3990'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4072' w/1310 sxs. TOC @ surface. Perfd 3795'-3877' & 3348'-3516'.

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
East Shugart Unit #58 Oper: Devon Energy Corp.	1575' FSL & 2200' FWL Sec. 35-18S-31E	11/7/95	12/3/95	Oil	4088'/4027'	8 5/8", 24# @ 949' w/300 sxs. TOC @ surface. 5 1/2", 15.5# @ 4087' w/975 sxs. TOC @ surface. Perfd 3686'-3908'.
East Shugart Unit #61 Oper: Devon Energy Corp.	2310' FNL & 865' FEL Sec. 35-18S-31E	1/26/95	3/5/95	Oil	4068'/3991'	8 5/8", 24# @ 950' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4067' w/1060 sxs. TOC @ surface. Perfd 3563'-3911'.
East Shugart Unit #63 Oper: Devon Energy Corp.	1800' FSL & 1600' FEL Sec. 35-18S-31E	12/16/94	1/18/95	Oil	4010'/3950'	8 5/8", 24# @ 950' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4010 w/1170 sxs. TOC @ surface. Perfd 3752'-3834' & 3298'-3640'.
East Shugart Unit #67 Oper: Devon Energy Corp.	2450' FSL & 330' FEL Sec. 34-18S-31E	9/11/95	10/6/95	Oil	4000'/3954'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 3999' w/950 sxs. TOC @ surface. Perfd 3768'-3846', 3406'-3659' & 2650'-2692'.
East Shugart Unit #69 Oper: Devon Energy Corp.	990' FNL & 1700' FWL Sec. 35-18S-31E	9/22/95	10/15/95	Oil	4030'/3978'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4029' w/950 sxs. TOC @ surface. Perfd 3676'-3874'.
East Shugart Unit #70 Oper: Devon Energy Corp.	330' FSL & 280' FWL Sec. 35-18S-31E	1/2/95	5/12/95	Oil	4045'/3936'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4043' w/1400 sxs. TOC @ surface. Perfd 3150'-3889'.
East Shugart Unit #71 Oper: Devon Energy Corp.	990' FSL & 990' FWL Sec. 35-18S-31E	1/9/95	3/31/95	Oil	4055'/3987'	8 5/8", 24# @ 947' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4050' w/1238 sxs. TOC @ surface. Perfd 3152'-3886'.

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
East Shugart Unit #72 Oper: Devon Energy Corp.	1650' FSL & 1150' FWL Sec. 35-18S-31E	1/18/95	2/22/95	Oil	4040'/3975'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4039' w/1150 sxs. TOC @ surface. Perfd 3426'-3893', 3182'-3263' & 2744'-2818'.
East Shugart Unit #74 Oper: Devon Energy Corp.	510' FSL & 2455' FWL Sec. 35-18S-31E	7/4/95	8/27/95	Oil	4070'/4000'	8 5/8", 24# @ 950' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4070' w/1115 sxs. TOC @ surface. Perfd 3457'-3916'.
East Shugart Unit #76 Oper: Devon Energy Corp.	1990' FNL & 1940' FWL Sec. 35-18S-31E	6/24/95	7/21/95	Oil	4049'/3953'	8 5/8", 24# @ 945' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4049' w/1230 sxs. TOC @ surface. Perfd 3812'-3902' & 3525'-3704'.
East Shugart Unit #77 Oper: Devon Energy Corp.	1550' FSL & 2120' FEL Sec. 35-18S-31E	6/15/95	7/16/95	Oil	4100'/4023'	8 5/8", 24# @ 939' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4104' w/925 sxs. TOC @ surface. Perfd 3485'-3955' & 3274'-3422'.
East Shugart Unit #78 Oper: Devon Energy Corp.	2300' FSL & 2300' FWL Sec. 35-17S-31E	10/19/95	11/11/95	Oil	4091'/3635'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4090' w/1200 sxs. TOC @ surface. Perfd 3831'-3928' & 3460'-3712'.
East Shugart Unit #79 Oper: Devon Energy Corp.	2120' FNL & 375' FWL Sec. 35-18S-31E	10/29/95	12/16/95	Oil	4066'/4003'	8 5/8", 24# @ 949' w/500 sxs. TOC @ surface. 5 1/2", 15.5# @ 4065' w/950 sxs. TOC @ surface. Perfd 2800'-2816' & 3556'-3878'.
Federal "26" #1 Oper: Headington Oil	330' FSL & 1980' FEL Sec. 26-18S-31E	1/10/75	5/17/76	Oil	4100'	8 5/8" @ 790' w/400 sxs. Est. TOC @ surface. 4 1/2" @ 4100' w/550 sxs. Est. TOC @ 1879'. Perfd 2677'-2752'.



ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBID	COMPLETION RECORD
State #1 Oper: Ray Westall	330' FNL & 1650' FWL Sec. 2-19S-31E	10/1/45	12/10/45	D&A	3953'	8 1/4" @ 910' w/50 sxs. Est. TOC @ 789'. 7" @ 3337', no cement recorded. 4 1/2" @ 3890' w/250 sxs. Est. TOC @ 2876' Perfd 3414'-3853'.
State "2" #1 Oper: Keohane & Westall	330' FNL & 300' FWL Sec. 2-19S-31E	5/4/39	9/18/39	Oil	3685'	8 1/4" @ 774' w/50 sxs. Est. TOC @ 662'. 7" @ 2935', no cmt recorded 5" @ 3275', no cement recorded. 4" liner from 3262'-3680', no cement recorded. Perfd 3275'-3680'.
State #2 Oper: Ray Westall	330' FNL & 2310' FEL Sec. 2-19S-31E	10/13/59	11/29/59	Oil	3587'	8 5/8" @ 920' w/50 sxs. Est. TOC @ 808'. 5 1/2" @ 3585' w/120 sxs. Est. TOC @ 2945'. Perfd 3443'-3483'. 4 1/2" @ 4121' w/60 sxs. Est. TOC @ 3878'. Perfd 4092'-4104'.
State "A" #6 Oper: Westall-Mask	660' FNL & 1980' FWL Sec. 2-19S-31E	10/3/79	10/24/82	Oil	11,970'	13 3/8" @ 804' w/845 sxs. Est. TOC @ surface. 9 5/8" @ 4797' w/225 sxs. Est. TOC @ surface. 5 1/2" @ 11,952' w/2425 sxs. Est. TOC @ surface. Perfd 3892'-4110', 7918'-7932', 9936'-10,004' & 11,664'-11,792'
State CK #1 Oper: Texaco, Inc.	1650' FNL & 330' FWL Sec. 36-18S-31E	10/22/59	12/7/59	Oil	4000'	8 5/8" @ 940' w/500 sxs. Est. TOC @ surface. 5 1/2" @ 4000' w/300 sxs. Est. TOC @ 2400'. Perfd 3622'-3936'.



# ENGINEERING CHART

SHEET NO

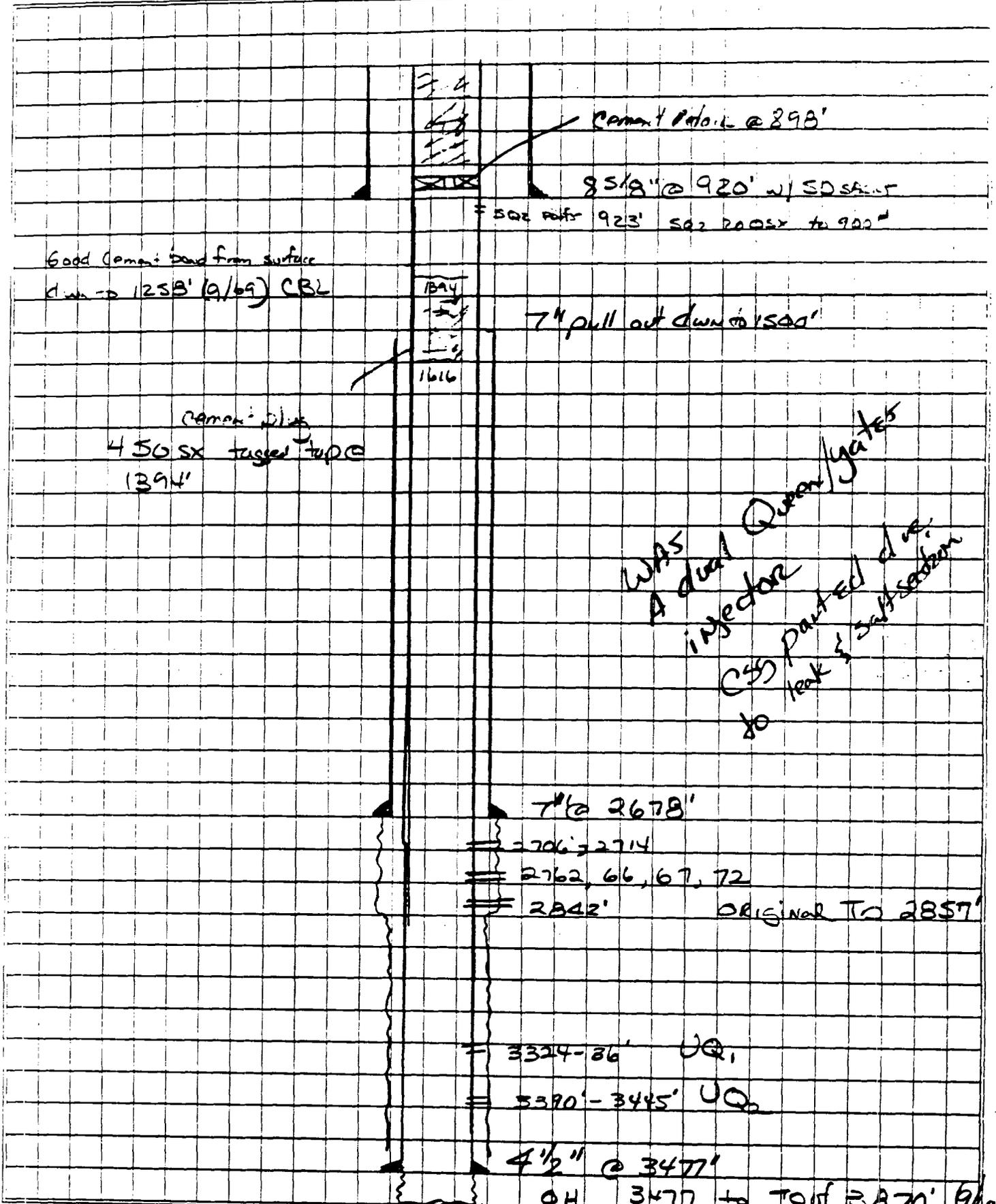
OF

FILE

DATE 9/23/92

BY L. S. J. W.

SUBJECT EAS Sumpact # 9





Process Immediately

# Change of Well Status and/or Abandonment Request



To: District Manager

Mr. C. E. Cardwell, Jr.

Lease-Unit (Name and Well Number): Accounting Cost Center Code

East Shugart Unit No. 19

Lease Number:

11M-3653; NM-4296

Expiration Date(s)

HBP

District

West Permian

County-Parish and State

Eddy County, New Mexico

Field

Shugart

Operator

ARCO Oil and Gas Company

A.R. Co. W.I.

85.02582

Last Produced (Date and Reason Not Producing or If new well, date completed): Converted to WIW 5/22/66. Inj water through 11/10/80. At that time a workover began on the well to repair a casing, tubing, or packer leak that was allowing the annulus to pressure up.

Is this the last or only well on this lease-unit?

Yes

No

Lease Unit is Being Held By:

Production

Brief Well History and Recommendation: This well was drilled in the early 1950's as a producer in the Queen formation of the Shugart field. It has since been deepened twice. The current TD is 3870' and the well is completed through perforations 3324-36' and 3390-3445' and open hole from 3475' to 3870' in the Queen formation and also through perforations in the Yates formation from 2706' to 2842'. The well was completed as a dual injection well; however, all water injection into the Yates zone was discontinued in the early 1970's. A leak resulting in pressure communication between the Queen formation and the production casing was discovered in July of this year. When work began to repair the leak it was found that the casing had parted at about 1325' in the salt section. Repair of the well is not economically feasible and we therefore recommend that the East Shugart Unit No. 19 be plugged and abandoned. Cumulative production from the well is 107 MBO and about 2 MMBW have been injected to date.

VEPPA APPROVAL

District Production Supervisor

L. Troop

11/18/80

Date

Land (Include Acreage Being Released, if any):

No loss of interest involved.

By: C. E. Cardwell, Jr. Date: 11/18/80

Geology:

No prospective zones above damaged casing. Concur with engineering.

By: [Signature] Date: 11/18/80

Engineering:

Recommend that the well be P&A'd. The mechanical condition of the well is such that it is no longer usable.

By: [Signature] Date: 11/18/80

Administrative (Salvage Estimated and Disposition Recommendation):

By: \_\_\_\_\_ Date: \_\_\_\_\_

Production:

Rec. P&A.

By: [Signature] Date: 11-19-80

Recommendation and/or Approval:

APPROVED FOR P&A - due to in-hole condition  
[Signature] for C.E. Cardwell

District Manager

Region Manager

Exploration and Producing Operations Vice-President

11-19-80

Date

Date

# devon

## ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 618

KEOHANE, INC.  
P. O. Box 1120  
Roswell, NM 88202-1120

**RE: East Shugart Unit #56**  
**2250' FNL & 1910' FEL**  
**Sec. 35-18S-31E**  
**Eddy County, NM**

**East Shugart Unit #58**  
**1575' FSL & 2200' FWL**  
**Sec. 35-18S-31E**  
**Eddy County, NM**

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are an offset operator. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP.

*Karen Byers*

Karen Byers  
Engineering Technician

Enclosures

AAI on the EAST SHUGART UNIT #16 56 & 58

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> <ul style="list-style-type: none"> <li>■ Complete items 1 and/or 2 for additional services.</li> <li>■ Complete items 3, 4a, and 4b.</li> <li>■ Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>■ Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>■ Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>■ The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	3. Article Addressed to: KEOHANE, INC. P. O. Box 1120 Roswell, NM 88202-1120	4a. Article Number P 240 501 618	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
5. Received By: (Print Name)	7. Date of Delivery 7-2-97		
6. Signature: (Addressee or Agent) <i>Karen Byers</i>	8. Addressee's Address (Only if requested and fee is paid)		

PS Form 3811, December 1994

Domestic Return Receipt

Form 31 Postmark or Date  
AAI for the East Shugart  
Unit #16 56

Thank you for using Return Receipt Service.



ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 619

RAY WESTALL OPERATING, INC.  
P. O. Box 4  
Loco Hills, NM 88255-0004

RE: **East Shugart Unit #56**  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM

**East Shugart Unit #58**  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are an offset operator. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP

Karen Byers  
Engineering Technician

Enclosures

AAI on East Shugart Unit #'s 56 & 58

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> <ul style="list-style-type: none"> <li>■ Complete items 1 and/or 2 for additional services.</li> <li>■ Complete items 3, 4, and 4b.</li> <li>■ Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>■ Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>■ Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>■ The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	3. Article Addressed to: RAY WESTALL OPERATING P. O. Box 4 Loco Hills, NM 88255-0004	4a. Article Number P 240 501 619	
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
		7. Date of Delivery 7-7-97	
	5. Received By: (Print Name) DORIS JACKSON	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) X Doris Jackson			

PS Form 3811, December 1994

Domestic Return Receipt

Form 3 Postmark or Date  
AAI on East Shugart  
Unit #'s 56 & 58

Thank you for using Return Receipt Service



ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 620

AMOCO PRODUCTION CO.  
P. O. Box 3092  
Houston, TX 77253

RE: East Shugart Unit #56  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM

East Shugart Unit #58  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are an offset operator. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP

*Karen Bye*

Karen Byers  
Engineering Technician

Enclosures

AAI on: East Shugart Unit #'s 56 & 58

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
	<input type="checkbox"/> Complete items 1 and 2 for additional services. <input type="checkbox"/> Complete items 3, 4, and 4b. <input type="checkbox"/> Print your name and address on the reverse of this form so that we can return this card to you. <input type="checkbox"/> Attach this form to the front of the mailpiece, or on the back if space does not permit. <input type="checkbox"/> Write "Return Receipt Requested" on the mailpiece below the article number. <input type="checkbox"/> The Return Receipt will show to whom the article was delivered and the date delivered.			
	3. Article Addressee to:			4a. Article Number
	AMOCO PRODUCTION P. O. Box 3092 Houston, TX 77253			P 240 501 620
	6. Signature: (Addressee or Agent)			4b. Service Type
<i>Chuck Martin</i>		<input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD		
5. Received By: (Print Name)		7. Date of Delivery	8. Addressee's Address (Only if requested and fee is paid)	
		JUL 07 1997		
PS Form 3811, December 1994		Domestic Return Receipt		

PS Form 3811

Postmark or Date  
AAI on East Shugart  
Unit #'s 56 & 58

Thank you for using Return Receipt Service.



ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 621

TEXACO, INC.  
4601 DTC Blvd.  
Denver, CO 80237-2549

RE: **East Shugart Unit #56**  
**2250' FNL & 1910' FEL**  
Sec. 35-18S-31E  
Eddy County, NM

**East Shugart Unit #58**  
**1575' FSL & 2200' FWL**  
Sec. 35-18S-31E  
Eddy County, NM

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are an offset operator. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP

*Karen Bye*

Karen Byers  
Engineering Technician

Enclosures

**AAI on: EAST SHUGART UNIT #'s 56 & 58**

is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> ■ Complete items 1 and 2 for additional services. ■ Complete items 3, 4 and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee):  1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	3. Article Addressee to:  <b>TEXACO, INC.</b> <b>4601 DTC Blvd.</b> <b>Denver, CO 80237-2549</b>	4a. Article Number <b>P 240 501 621</b>	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
	5. Received By: (Print Name)  6. Signature: (Addressee or Agent) <b>X <i>[Signature]</i></b>	7. Date of Delivery <b>7-7-97</b>	
		8. Addressee's Address (Only if requested and fee is paid)	

PS Form 3811, December 1994

Domestic Return Receipt

PS Form 3811

Postmark or Date
<b>AAI on: East Shugart Unit #'s 56 &amp; 58</b>

Thank you for using Return Receipt Service.

**devon**  
ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 622

HEADINGTON OIL  
7557 Rambler Road, Suite 1100  
Dallas, TX 75231-4166

RE: **East Shugart Unit #56**  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM

**East Shugart Unit #58**  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are an offset operator. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP.

*Karen Byers*

Karen Byers  
Engineering Technician

Enclosures

AAI on: <u>East Shugart Unit #'s 56 &amp; 58</u>	
Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> ■ Complete items 1 a, b, and 2 for additional services. ■ Complete items 3, 4, 5, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.
	I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: HEADINGTON, INC. 7557 Rambler Road, Ste. 1100 Dallas, TX 75231-4166	4a. Article Number P 240 501 622 4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
5. Received By: <i>Print Name</i> X <i>Ernie Buttross Jr</i>	7. Date of Delivery 7/2/97
6. Signature: (Addressee or Agent) X <i>Ernie Buttross Jr</i>	8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994

Domestic Return Receipt

PS Form

AAI on: **East Shugart**  
Unit # s 56 & 58

Thank you for using Return Receipt Service.



20 North Broadway, Suite 1500 Telephone: 405/235-3611  
Oklahoma City, Oklahoma 73102-8260

**CERTIFIED MAIL # P 240 501 985**

July 24, 1997

Re: Application for Authorization to Inject  
East Shugart Unit #'s 56 & 58  
Eddy County, NM

New Mexico Oil Conservation Division  
Attn: Ben Stone  
2040 S. Pacheco St.  
Santa Fe, NM 87505

Enclosed are two copies of proof of notice to surface owner and proof of publication for the Application for Authorization to Inject on East Shugart Unit #56 & 58 wells. The original Application for Authorization to Inject was sent to you July 10, 1997 without the proof of notice to surface owner and proof of publication.

If you have any questions, please contact me at (405) 552-4527.

Sincerely yours,

Devon Energy Corporation (Nevada)

A handwritten signature in cursive script that reads "Karen Byers".

Karen Byers  
Engineering Technician

/kb  
Enclosures (4)

# Affidavit of Publication

No 18687

State of New Mexico,  
County of Eddy, ss.

Amy McKay

being first duly sworn, on oath says:

That she is Business Manager of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

July 15, 19 97  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_

That the cost of publication is \$ 29.79, and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

21<sup>st</sup> day of July, 1997

Notary Public

My commission expires 8/1/98  
Notary Public

July 15, 1997

### PUBLIC NOTICE APPLICATION FOR WATER DISPOSAL

Notice is hereby given that Devon Energy Corporation (Nevada) is applying to the New Mexico Oil Conservation Division for administrative approval and authority to convert the following wells to water injection:

~~East Shugart Unit #58  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM~~

&  
East Shugart Unit #58  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM

The intended purpose of the water injection wells is to inject produced waters into the Queen formation to enhance oil recovery through secondary recovery. Maximum injection rates of 700 bwpd & maximum injection pressures of 1800 psig are expected.

Any interested parties may file objections or requests for hearing within 15 days to:

Oil Conservation Division  
2040 South Pacheco St.  
Santa Fe, New Mexico  
87505-5472

By: Ernie Buttross, District  
Engineer  
Devon Energy  
Corporation (Nevada)  
20 N. Broadway,  
Suite 1500  
Oklahoma City, OK  
73102  
(405)552-4509



ENERGY CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

July 2, 1997

Certified Mail No. P 240 501 623

Bureau of Land Management  
2909 West Second Street  
Roswell, NM 88201

RE: East Shugart Unit #56  
2250' FNL & 1910' FEL  
Sec. 35-18S-31E  
Eddy County, NM

East Shugart Unit #58  
1575' FSL & 2200' FWL  
Sec. 35-18S-31E  
Eddy County, NM

Gentlemen:

We have enclosed a copy of our Application for Authorization to Inject for the above referenced wells. Please consider this letter as official notification. Our records indicate that you are the surface owner. Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 552-4509.

Yours truly,

DEVON ENERGY CORP

*Karen Byers*

Karen Byers  
Engineering Technician

Enclosures

**AAI on East Shugart Ut #'s 56 & 58**

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	B. Article Addressed to:  BUREAU OF LAND MANAGEMENT 2909 West Second Street Roswell, New Mexico 88201		4a. Article Number <b>P 240 501 623</b>
			4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
	5. Received By: (Print Name)		7. Date of Delivery <b>7-7-97</b>
	6. Signature: (Addressee or Agent) <i>*Karen Byers</i>		8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994 Domestic Return Receipt

PS Form 3

Postmark or Date

AAI on East Shugart  
Unit #'s 56 & 58

Thank you for using Return Receipt Service