

devon
ENERGY CORPORATION

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

Telephone: 405/235-3611
FAX 405/552-4667

WFX 4.22.96
683

March 26, 1996

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505
ATTN: Mr. Ben Stone

- 8

RE: Devon Energy Corporation
East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

Devon Energy Corporation
East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

Mr. Stone:

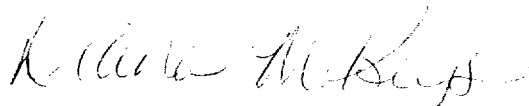
Please find enclosed Applications for Authority to Inject on the three above referenced wells.

Depths for the tops of cement for the casing strings have been obtained from well records, or calculated using a 1.32 cubic foot per sack yield and a 30% excess. If hole sizes were unavailable, they were assumed to be 12-1/4" for 8-5/8" casing, 8-3/4" for 7" casing (or 7-7/8" hole for 7" casing inside 8-5/8" casing) and 7-7/8" for 5-1/2" casing.

Please advise if additional information is required and direct questions regarding this matter to Ernie Buttross at (405) 552-4509, or Diana Keys at (405) 552-4511.

Sincerely,

Devon Energy Corporation



Diana M. Keys
Engineering Technician

/dmk
enclosures

xc: Well Files

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 North Broadway, Ste 1500, Oklahoma City, OK 73102
Contact party: E.L. Buttross, Jr. (Ernie) Phone: (405) 552-4509
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☒ yes ☐ no
If yes, give the Division order number authorizing the project 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. Refer to Attachment V
- * 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. Refer to Attachment VI
- VII. Attach data on the proposed operation, including: Refer to Attachment VII
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval. Refer to Attachment VIII
- IX. Describe the proposed stimulation program, if any. Plan to Acidize Queen perforations with approximately 5000 gals of 15% NEFE acid.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) On file with the OCD
- * 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. NA. There are no fresh water wells within a one mile radius.
- 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. Refer to Attachment XII
- 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. (Ernie) Title: District Engineer
- Signature: E.L. Buttross Jr. Date: 3/26/96
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

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 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

ATTACHMENT III (tabular)

Well Data

- A. (1) East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM
- (2) Please refer to the wellbore schematic labeled Attachment III - (schematic)
10" (12-1/4" hole) @ 903' w/50 sxs cmt, Est TOC 733'
6-5/8" @ 3000' w/100 sxs cmt, TOC 1993 by CBL
3/4" tbg was run between 6-5/8" and 10" csg string & cmt'd w/250 sxs cmt, @ 1065'. Circ to surf.
5-1/2" Liner f/2930-3327' (6" hole) TOC @ liner top. Cmt volume estimated @ 100 sxs.
(Also see schematic for any existing tbg and/or liner used)
- (3) A string of 4" and 4-1/2" casing will be set @ + 4000' and 3325', cmt'd to surface. Tbg will be 2-3/8" fiberglass or internally coated, set @ 3325'.
- (4) A 4" x 2-3/8" Loc-set Pkr will be set @ 3325'
- B. (1) The injection formations will be the Queen Sands in the Shugart field. (Y-SR-Q-G)
- (2) The proposed interval will be approximately 3400-3900'. The injection interval will be through proposed perforations 3400-3900'.
- (3) This well was originally drilled and completed as an oil well. It produced from the Yates and Queen Formations.
- (4) Please refer to the wellbore schematic labeled Attachment III (schematic) for depths of other perforated intervals and detail on the sacks of cement of BP used to seal off perforations.
- (5) The Top of the Queen Formation is approximately 3400', there are no known lower oil formations.

Attachment VII

Devon Energy Corporation
East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

Proposed Operation:

1. Plans are to inject 500-700 barrels of produced water per day.
2. The Injection system will be a closed system.
3. The proposed injection pressure is 1350 psig. Maximum pressure will be 1800 psig.
4. The injection fluid will be primarily reinjected produced water; Some additional water may come from offset leases.
5. NA.

Attachment VIII

Devon Energy Corporation
East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

Geology and Lithology

Injection zones are sand lenses within the Queens formation from 3404-3895 feet.
Specifically they are:

Upper Queen 1,2, & 3
Lower Queen 1,2,3, & 4

Fresh Water Zones

Base of near surface aquifer 950'. No fresh water zones exist below the proposed injection interval.

Attachment XII

Devon Energy Corporation
East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

No evidence of fault communication between the shallow aquifers and the proposed injection zones has been encountered as the result of detailed studied of formations in East Shugart Unit.

Proof of Notice

Devon Energy Operating Corporation operates the East Shugart Unit in Sections 34, 35, 36, 26, 25 of 18S-31E, and Sections 2 and 3 of T17S-31E, Eddy County, NM. Operators operating in area of review:

Enerloc Resources Inc. (Tom Boyd)

Ozark Expl Inc.

Ray Westall

General New Mexico Inc.

Each of these operators were provided a letter and a copy of our application by certified mail. Proof of notice is enclosed. The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Proof of Publication

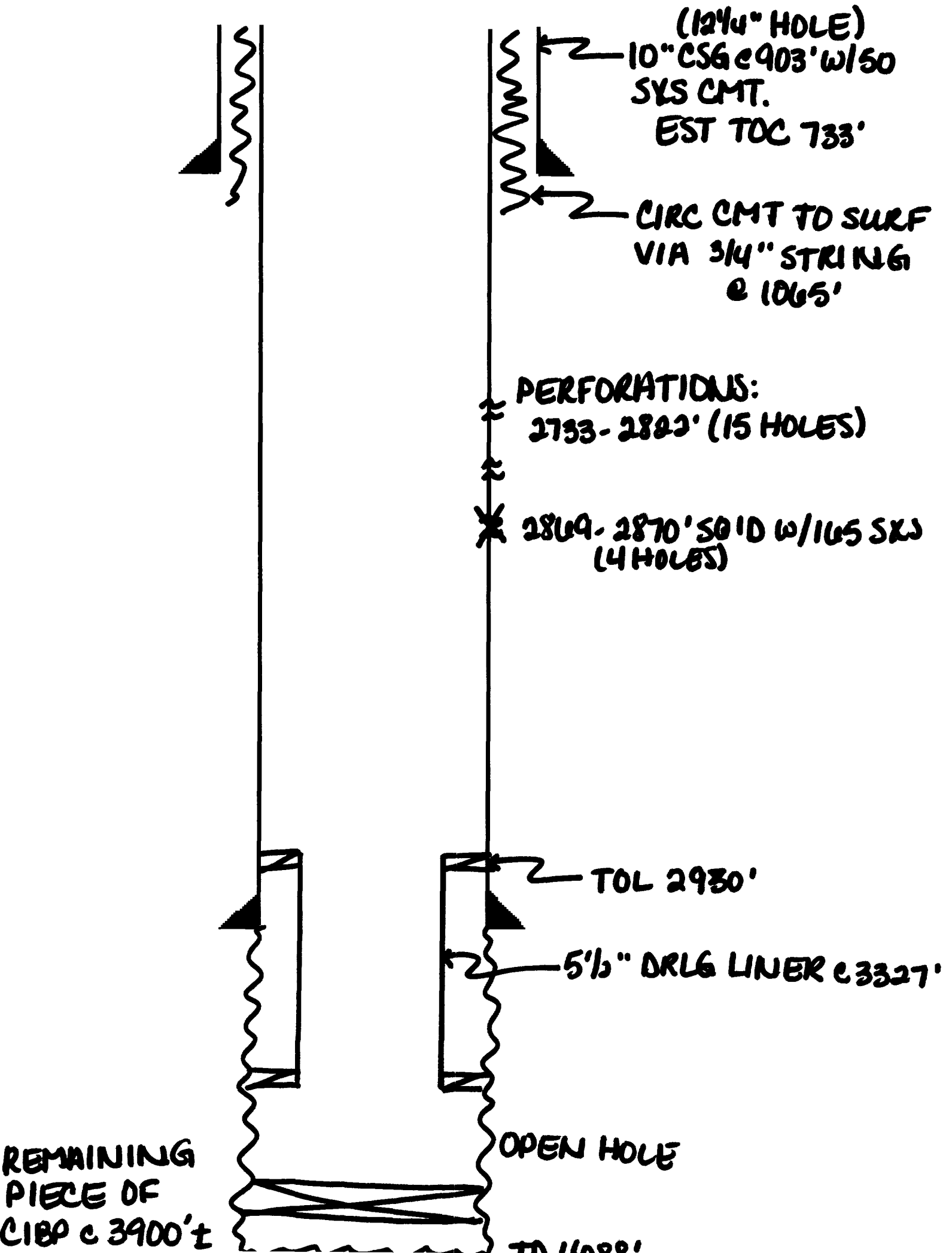
Proof of Publication from the Carlsbad Current-Argus is enclosed.

Devon Energy Operating Corporation

Attachment III - Schematic

EXISTING WELLBORE

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM



Devon Energy Operating Corporation

Attachment III - Schematic

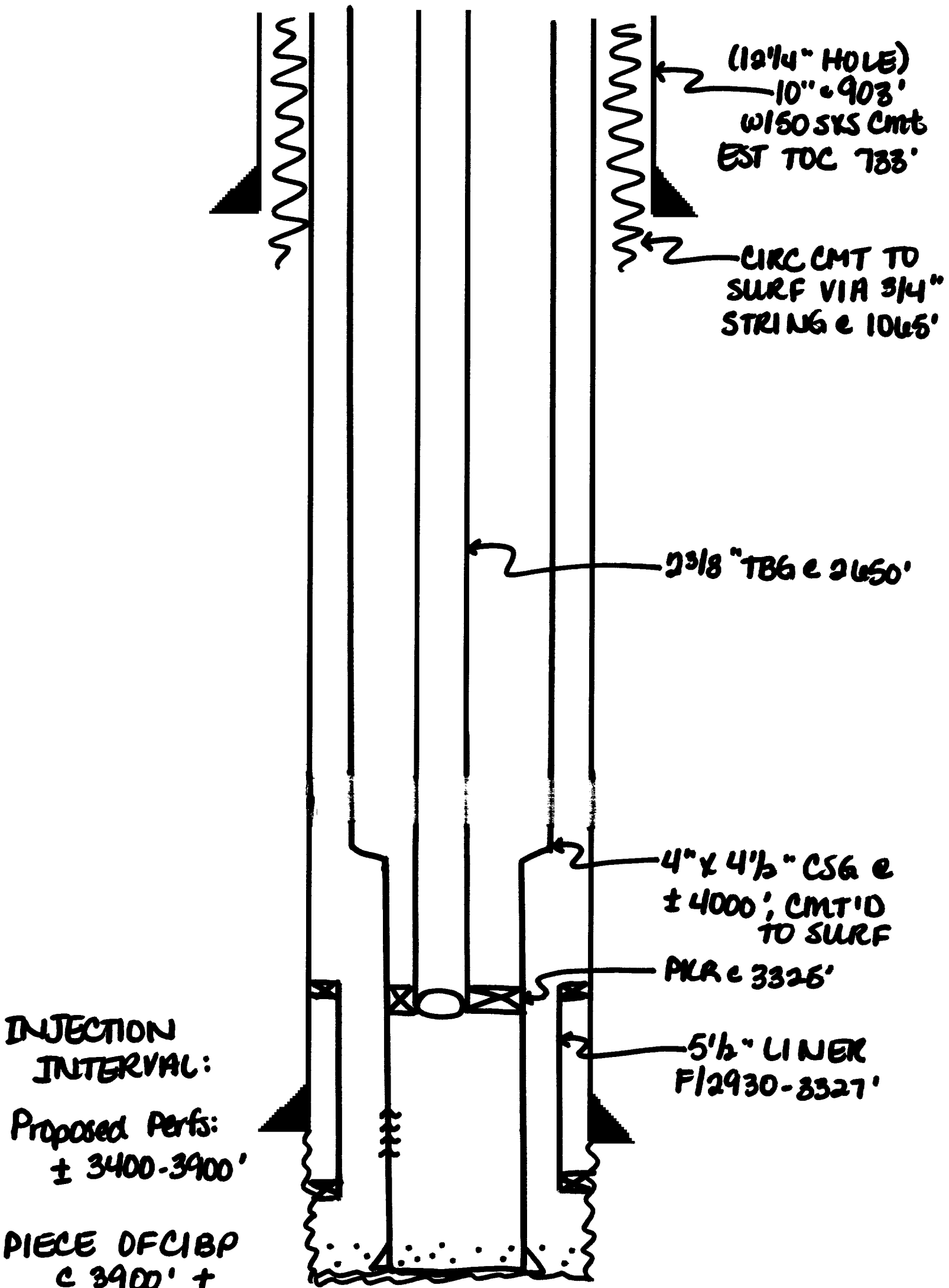
PROPOSED WELLBORE

East Shugart Unit #20

1980' FSL 660' FWL

Section 35-18S-31E

Eddy County, NM



ATTACHMENT III (tabular)

Well Data

- A.
- (1) East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM
 - (2) Please refer to the wellbore schematic labeled Attachment III - (schematic)
8-5/8" 24# csg @ 949' w/500 sxs cmt, TOC Surf
5-1/2" 15.5# csg @ 4035' w/975 sxs cmt, TOC Surf
(Also see schematic for any tbg and / or liner used)
 - (3) Tubing will be 2-3/8" plastic coated, set @ 3625'
 - (4) A 5-1/2" x 2-3/8" Loc-set Pkr will be set @ 3625'
- B.
- (1) The injection formations will be the Queen Sands in the Shugart field. (Y-SR-Q-G)
 - (2) The proposed interval is 3701-3875'. The injection interval will be through existing perforations 3701-3875'.
 - (3) This well was originally drilled and completed as an oil well. It produced from the Queen Formation.
 - (4) Please refer to the wellbore schematic labeled Attachment III (schematic) for depths of other perforated intervals and detail on the sacks of cement of BP used to seal off perforations.
 - (5) The Top of the Queen Formation is approximately 3400', there are no known lower oil formations.

Attachment VII

Devon Energy Corporation
East Shugart Unit #52
330' DNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

Proposed Operation:

1. Plans are to inject 500-700 barrels of produced water per day.
2. The Injection system will be a closed system.
3. The proposed injection pressure is 1350 psig. Maximum pressure will be 1800 psig.
4. The injection fluid will be primarily reinjected produced water; Some additional water may come from offset leases.
5. NA.

Attachment VIII

Devon Energy Corporation
East Shugart Unit #52
330' DNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

Geology and Lithology

Injection zones are sand lenses within the Queens formation from 3404-3895 feet.
Specifically they are:

Upper Queen 1,2, & 3
Lower Queen 1,2,3, & 4

Fresh Water Zones

Base of near surface aquifer 950'. No fresh water zones exist below the proposed injection interval.

Attachment XII

Devon Energy Corporation
East Shugart Unit #52
330' DNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

No evidence of fault communication between the shallow aquifers and the proposed injection zones has been encountered as the result of detailed studied of formations in East Shugart Unit.

Proof of Notice

Devon Energy Operating Corporation operates the East Shugart Unit in Sections 34, 35, 36, 26, 25 of 18S-31E, and Sections 2 and 3 of T17S-31E, Eddy County, NM. Operators operating in area of review:

Enerloc Resources Inc. (Tom Boyd)

Ozark Expl Inc.

Ray Westall

General New Mexico Inc.

Each of these operators were provided a letter and a copy of our application by certified mail. Proof of notice is enclosed. The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Proof of Publication

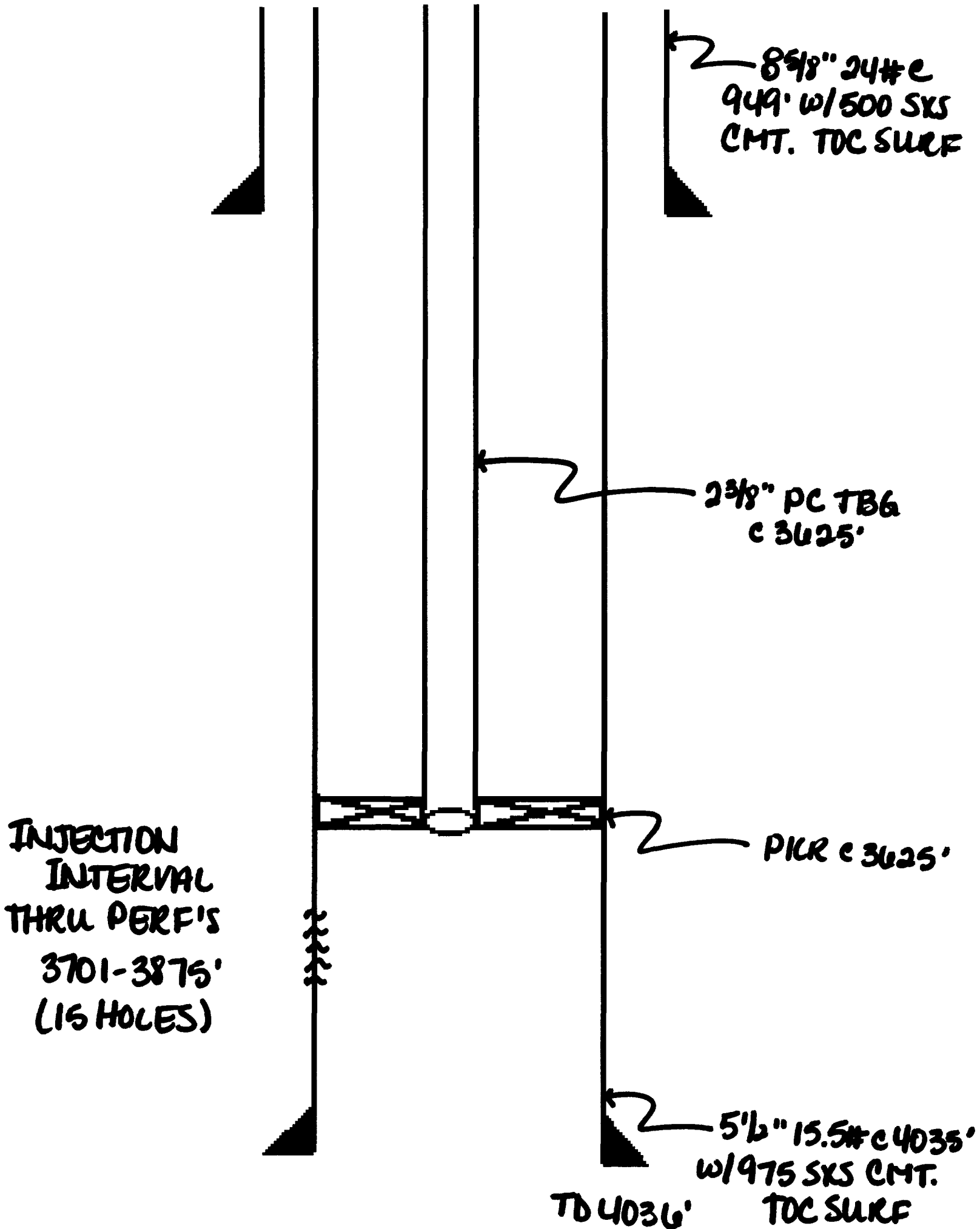
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Devon Energy Operating Corporation

Attachment III - Schematic

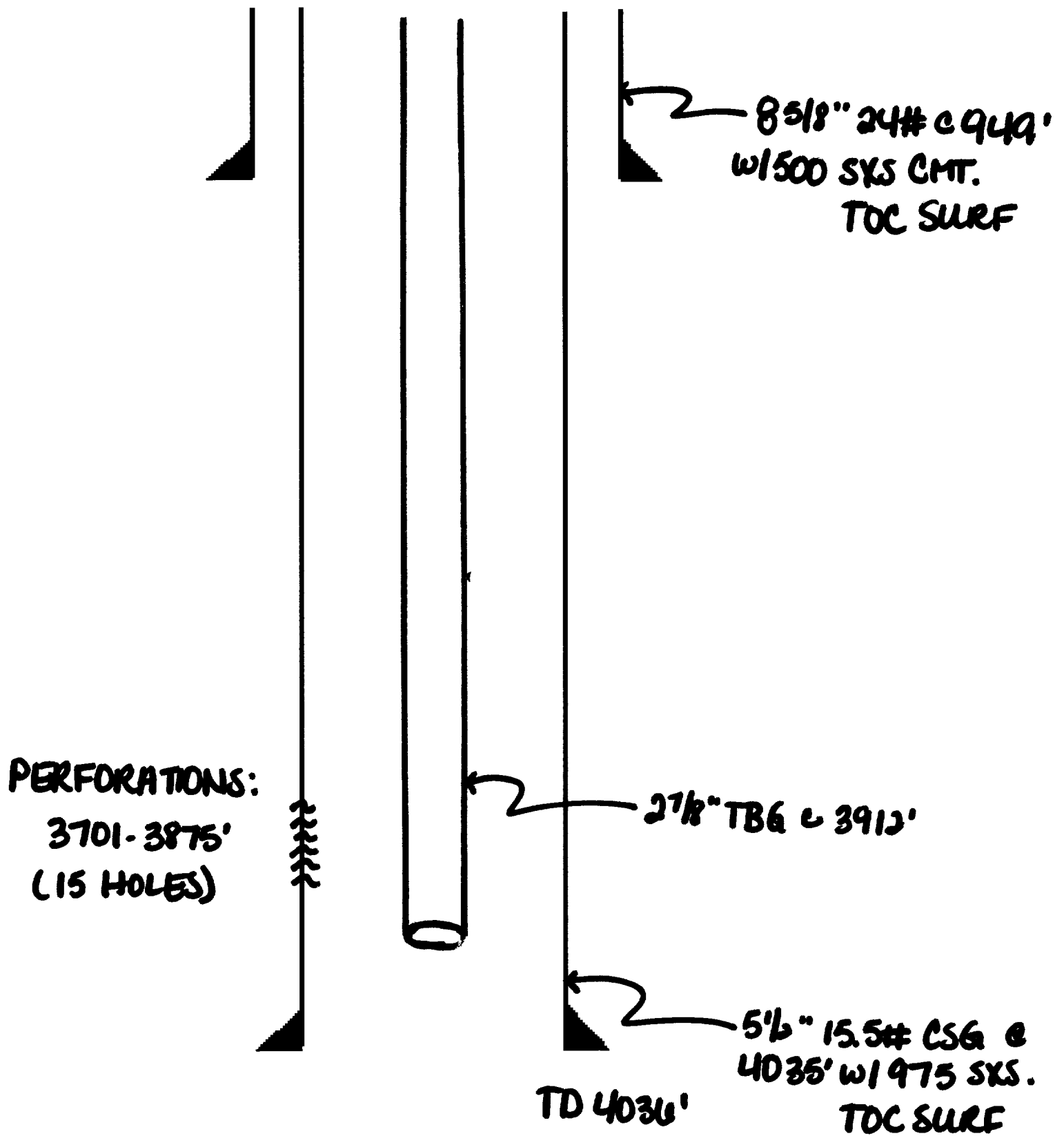
PROPOSED WELLBORE

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E,
Eddy County, NM



Devon Energy Operating Corporation
Attachment III - Schematic
EXISTING WELLBORE

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM



ATTACHMENT III (tabular)

Well Data

- A. (1) East Shugart Unit #76
 1990' FNL and 1940' FWL
 Section 35-18S-31E
 Eddy County, NM
- (2) Please refer to the wellbore schematic labeled Attachment III -
 (schematic)
 8-5/8" 24# csg @ 945' w/500 sxs cmt, TOC surf.
 5-1/2" 15.5# @ 4049' w/1230 sxs cmt, TOC surf.
 2-7/8" tbg @ 3918'.
- (3) Tubing will be 2-3/8" fiberglass or internally coated, set @ 3450'
 No liner is anticipated.
- (4) A 5-1/2" x 2-3/8" Loc-set Pkr will be set @ 3450'
- B. (1) The injection formations will be the Queen Sands in the Shugart field.
 (Y-SR-Q-G)
- (2) The proposed interval is 3525-3902' . The injection interval will be
 through existing perforations 3525-3902'.
- (3) This well was originally drilled and completed as an oil well. It produced
 from the Queen Formation.
- (4) Please refer to the wellbore schematic labeled Attachment III (schematic)
 No additional perforations are expected at this time.
- (5) The Top of the Queen Formation is approximately 3400', there are
 no known lower oil formations.

Attachment VII

Devon Energy Corporation
East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

Proposed Operation:

1. Plans are to inject 500-700 barrels of produced water per day.
2. The Injection system will be a closed system.
3. The proposed injection pressure is 1350 psig. Maximum pressure will be 1800 psig.
4. The injection fluid will be primarily reinjected produced water; Some additional water may come from offset leases.
5. NA.

Attachment VIII

Devon Energy Corporation
East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

Geology and Lithology

Injection zones are sand lenses within the Queens formation from 3404-3895 feet.
Specifically they are:

Upper Queen 1,2, & 3
Lower Queen 1,2,3, & 4

Fresh Water Zones

Base of near surface aquifer 950' No fresh water zones exist below the proposed injection interval.

Attachment XII

Devon Energy Corporation
East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

No evidence of fault communication between the shallow aquifers and the proposed injection zones has been encountered as the result of detailed studied of formations in East Shugart Unit.

Proof of Notice

Devon Energy Operating Corporation operates the East Shugart Unit in Sections 34, 35, 36, 26, 25 of 18S-31E, and Sections 2 and 3 of T17S-31E, Eddy County, NM. Operators operating in area of review:

Enerloc Resources Inc. (Tom Boyd)

Ozark Expl Inc.

Ray Westall

General New Mexico Inc.

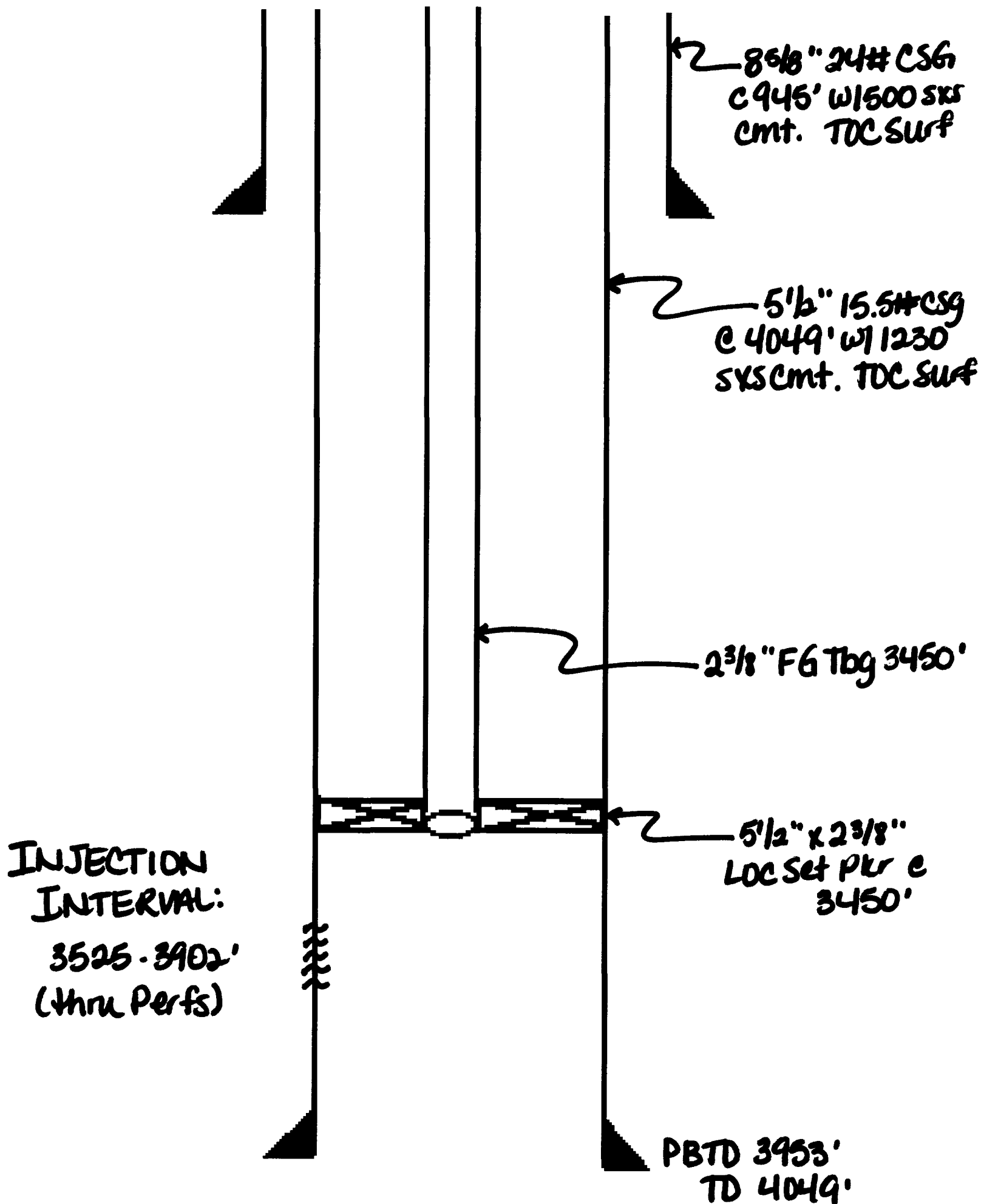
Each of these operators were provided a letter and a copy of our application by certified mail. Proof of notice is enclosed. The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Proof of Publication

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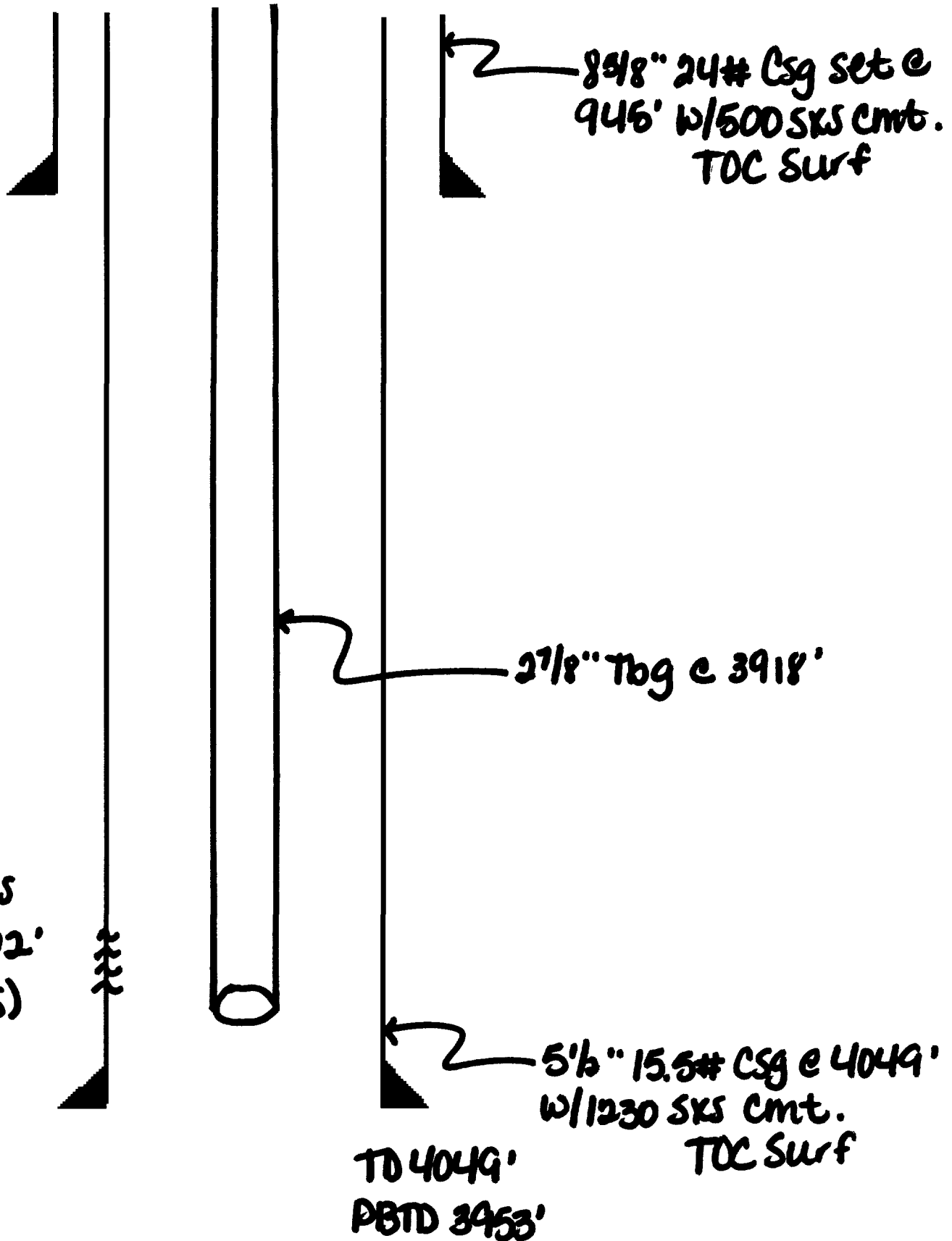
Devon Energy Operating Corporation
Attachment III - Schematic
PROPOSED WELLBORE

East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM



Devon Energy Operating Corporation
Attachment III - Schematic
EXISTING WELLBORE

East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM



Affidavit of Publication

Nº 18076

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:

February 23, 19 96
_____, 19 ____
_____, 19 ____
_____, 19 ____
_____, 19 ____
_____, 19 ____

That the cost of publication is \$ 32.71,
and that payment thereof has been made and will
be assessed as court costs.

Amy McKay
Subscribed and sworn to before me this

28th day of February, 1996

Donna Crump

My commission expires 08/01/98

Notary Public

February 23, 1996

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

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

and

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

and

East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

The intended purpose of this
well is to inject produced waters
into the Queen formation
to enhance oil production
through secondary recovery.
Maximum injection rates of
800 bwpd and a maximum
pressure of 1800 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

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

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	"A"	8/9/58	11/17/58	Oil	4117'	8-5/8" @ 910 w/50 sxs cmt, TOC Est @ 800'. 7" @ 4117' w/200 sxs cmt, Est TOC 1858'. Perf record 3822-90' (72 holes)
Unit #3	330' FEL & 990' FNL Section 34-18S-31E		2/26/65	Oil		Sq'd @ 2794' thru 2 holes w/75 sxs, Drilg out BP, Left Perfs 3822-90',
			5/22/66	WIW	PBTD 3480'	added perfs 2632-2735'. (12 holes)
			8/26/69		PBTD 3870'	Set CIBP @ 3480'. Perf'd 2804-3330'. Ran 2-3/8" w/pkr @ 2582.
			1/8/90			Set 7" CIBP @ 3870'. Added Queen perfs 3538-3662'. Ran dual strings of 2-3/8" tbg w/pkr @ 2870' & dual pkr @ 2559'.
East Shugart	"D"	6/21/57	8/28/57	Oil	2785'	Perf'd 3324-3844' (44). Ran tbg & pkr 3203'. Pkr @ 3208'.
Unit #4	Section 35-18S-31E					8-5/8" @ 895' w/50 sxs cmt, Est TOC @ 780
						7" @ 2785' w/100 sxs cmt, Est TOC @ 1655'
						Perf 2653-2719'.
East Shugart	"D"	9/29/61	11/6/61	Oil	2832'	9-5/8" @ 190' w/70 sxs cmt, TOC @ surf
Unit #5	380' FNL & 990' FWL Section 35-18S-31E		5/18/64			7" @ 2823' w/365 sxs cmt, Est TOC @ surf. Perfs: 2650-64' 3670-78'.
			10/1/64			Perf'd 2703-2821' (46 holes)
			4/13/89		4360'	Perf'd 2620-28" (1 spf). Ran 2" tbg to 2640'.
						Perf'd 4192-4246' (8), 4020-58" (10), 3318-3893' (55) PBTD 4145'.
East Shugart	"C"	6/27/58	6/27/58	Oil	4292'	8-5/8" csg @ 898' w/50 sxs cmt, EST TOC @ 738', 7" 20# csg @ 4115', cmt'd w/225 sxs cmt, TOC @ 2370' prior to squeeze job (SEE BELOW)
Unit #6	990' FNL & 2310' FWL Section 35-18S-31E		5/25/66	Converted to		Perfs: 26649-2817' (Yates); 3360-3877' (Queen)
				Dual WIW		Perf'd 2814-3468' (8), Acid w/1500 gals w/BS, Set Baker pkr @ 2855'.
			1/15/81	Converted to		Set Lwr 2-3/8" tbg, SA & dual pkr @ 2862.14'. Set Up'r 2-3/8" tbg @ 2633.84'.
				Single WIW		Start water inj down both strings
						Sqz'd Yates Perf @ 2649'-2817' w/4215 sxs cmt, Perf'd 7" csg @ 2220' w/2 JFPF
						Sqz'd w/951 sxs cmt, TOC @ 2110' (temp surv), Perf'd 7" csg w/2 JSPF @
						972'. Pmp'd 200 sxs & circ cmt to surf. Ran 92 jts 2-3/8" tbg w/seal assbly
						& stung into Baker model "D" pkr @ 2850'. Resumed injection into Queen @
						3360-3877'.
East Shugart	"B"	11/3/57	2/2/8/58	Oil	3885'	8-5/8" 28# csg @ 914' w/100 sxs cmt, TOC 362'. 7" 20# csg @ 3875' w/100
Unit #7	990' FNL & 2310' FEL Section 35-18S-31E		9/1/66			sxs cmt, TOC @ 2570'. OH 3872-3995'.
						Perf'd Queen 3369-3813'. Perf Yates 2710-2839'. Set 2-3/8" tbg w/SN @ 3879'.
						Well Pmpg.
East Shugart	"A"	9/15/58	1/21/59	Oil	3935'.	8 5/8" @ 850' w/50 sxs cmt EST TOC @ 738'. , 7" @ 3935' w/100 sxs cmt,
Unit #8	990' FNL & 990' FEL					TOC @ 2200' by CBL. Perfs 3400-3901' Queen.

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart		2/19/59	5/6/59	Oil	3908'	8-5/8" @ 850' w/50 sxs cmt, TOC est @ 730'. 5-1/2" @ 3906' w/100 sxs cmt, TOC est @ 3372'. Perf'd 3404-3895'. CIBP @ 3350'. Sq holes @ 3148-50'. Sq'd w/300 sxs, TOC 2230' by CBL 10/69.
Unit #9	1650' FNL & 990' FWL Section 35-18S-31E					Prep to convert to WIW
East Shugart	"G"	5/2/57	9/15/57	Oil	3933'	8-5/8" @ 925' w/100 sxs cmt TOC est @ 701', Squeezed @ 400' w/50 sxs cmt, 7" @ 3640' w/100 sxs cmt, TOC @ 2350' by CBL 11/89,
Unit #10	2310' FNL & 2310' FEL Section 35-18S-31E					Ran 4-1/2" liner @ 3930-3600', cmt'd w/50 sxs. TOC @ liner top.
						Perfs @ 3381-3925' (Queen)
East Shugart	"F"	3/1/58	5/13/58	Oil	3985'	8-5/8" @ 910' w/50 sxs cmt Est TOC @ 798'. 7" @ 3918' w/125 sxs cmt, TOC calc @ 2291' using 30% excess, Prior to Squeeze Job (SEE BELOW)
Unit #11	2310' FNL & 2310' FWL Section 35-18S-31E		11/4/69			Perf'd 4 holes 2712-14'. Sq cmt perfs w/100 sxs. Perf'd 4 holes 2168-70' & sqzd w/425 sxs. Sq 2168-70' w/200 sxs, DO sq @ 2712-14'. Perf'd Queen 3375-3478
						Perf Yates 2720-2856'
			8/27/71			Sq Yates perfs 2720-2856' w/120 sxs cl "C". Dr'd out sq job. Ran tbg & SN to 3796.85'. Ran rods & pump. Pmpg Queen perfs 3375-3909' on 8/27/71.
East Shugart	"E"	8/30/57	12/3/57	Oil	3925'	8-5/8" @ 904' w/50 sxs cmt, Est TOC @ 792'. 7" @ 3925' w/135 sxs cmt, TOC by CBL 7/68 @ 2572'. Tbg @ 3870'. Perf 3884-70' Perf'd 3554-64',
Unit #12	2310' FNL & 990' FWL Section 35-18S-31E		7/29/69			Ran CBL, TOC @ 2572'. Perf 2540-41' (4). Set BP @ 2608'. Sp'd w/3 sxs cmt, Sq 2540-41' w/25 sxs cl "C". Dr'd out cmt to 2541'. Re-sq w/35 sxs. Dr'd out cmt to 2540'. Perf Queen 3350-57' 2 JSPF, Perf 3425-34', 3440-45', 3459-66', 3460-73'. Perf Yates 2694-2868' Set BP @ 2950'. Ran 2" tbg to 3857'. POOH w/completion assembly. Set BP @ 2650'. Pkd off WH.
East Shugart	"H"	4/19/57	7/15/57	Oil	3855'	8" @ 910' w/50 sxs cmt, TOC est @ 798'. 5-1/2" @ 3850' w/200 sxs cmt, Est TOC 2780'. Perfs: 3832-3855' (10 spd) OH 3850-55'.
Unit #13	2310' FNL & 330' FEL Section 34-18S-31E		10/13/69			Perf'd 2740-41' (4 spd). Set RBP @ 2880' capped w/2 sxs. Cmt'd annulas w/400 sxs cmt, Sq'd perfs 2740-41' w/75 sxs cmt, Perf'd Queen 3335-3438' (8); 2651-2782' (10). Ran 2-3/8" tbg to 3839'.
			12/24/91			Perf'd 3812-19' (8); 3333-3770' (39)
East Shugart	"G"	5/14/58	8/1/58	Oil	3682'	8-5/8" @ 898' w/75 sxs cmt, (10" hole) Est TOC 400'. 5-1/2" @ 3676' w/200 sxs cmt, Est TOC 2600' (7-1/4" hole) Perfs: 3530-52'
Unit #14	2310' FNL & 1650' FEL Section 34-18S-31E		8/14/69			Perf'd 4 hoels @ 2560', Cmt'd 5-1/2" csq thru perfs @ 2560' w/200 sxs. Sq'd w/110 sxs in 3 stages. Perf'd Queen 3635-54' (1 spd), 3336-3421', 2632-56'
					3860'	Dr'd 4-3/4" new hole to 3860' (Queen OH) Perfs: 2632-54'. (527) 2-3/8" @ 3636'.

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart		2/2/45	3/13/45	Oil	2839'	8-5/8" @ 911' w/50 sxs cmt, Est TOC 800'. 7" @ 2655' w/100 sxs, Est TOC 1525'
Unit #18	1650' FSL & 1650' FEL		4/23/91		3905'	Existing Perfs: 2685-3531'. New OH 3550-3905'. 4-1/2" 9.5# @ 3550' w/250 sxs
	Section 34-18S-31E					cmt, 2-3/8" tbg @ 3478'. (new OH 2-7/8")
East Shugart			See Attached Downhole Schematic for Plugged & Abandoned well.			
Unit #19						
East Shugart	"L"	7/30/57	2/20/58	Oil	4088'	10" @ 903' w/25 sxs cmt, Circ 250 sxs cmt to surf via 3/4" string @ 1065'.
Unit #20	1980' FSL & 660' FWL					6-5/8" @ 3000', TOC @ 2190' (CBL) prior to squeeze @ 2869-70'. 5-1/2" liner
	Section 35-18S-31E					f/2930-3327' cmt'd w/est'd 25 sxs, TOC @ liner top by 1/68 CBL, OH 3327-4080'.
			2/15/68	Oil		Ran CBL, indicated TOC @ 1993'. Perf'd 2869-70' (4)
						Sq btm of Yates w/165 sxs cmt, Perf'd Yates 2733-2822' (15)
			6/14/94			Lowered tbg to 3626'. Ran new pump & rods.
East Shugart	"K"	8/6/57	12/14/57	Oil	4018'	8-5/8" @ 915' w/50 sxs cmt, TOC est @ 803'. 7" @ 4000' w/100 sxs cmt,
Unit #21	2310' FSL & 1650' FWL				PBTD 3928'	TOC @ 2622' on 5/66 CBL, Perfs: 3883-98', Perf 3796-3808'
	Section 35-18S-31E					Perf'd 3708-3702, 3734-46' Perf 3600-3564'
			5/24/66	Dual WtW		Set CIBP @ 3510'. Perf Queen 3370-3495'. Re-perf'd 3370-3482'.
						Perf'd Yates 2888-89'. Perf Yates 2750-51' sq w/75 sxs cmt, Perf Yates 2773-2918'
						Dual WtW thru 2 strings of tbg, LS 2960', SS 2705.60'
			8/7/69	Single WtW		Pulled dual tbg strings, dird out pkr & CIBP. Ran prod string 2-3/8" tbg @ 3877.33'.
			2/17/71	TAd		Status of Well: Temporarily Abandoned
			8/16/78	TAd		POOH w/ 2-3/8" tbg. Set CIBP @ 2725'. Circ hole w/125 BFW cont'g 12 gal corr
						inhibitor. Temporarily Abandoned.
East Shugart	"J"	11/25/58	2/14/59	Oil	3945'	8-5/8" @ 940' w/50 sxs cmt TOC est @ 828'. 7" @ 3940' w/150 sxs cmt, TOC @
Unit #22	2310' FEL & 2310' FSL					2461' using 30% excess, Perfs: 2772-90', Perf 3698-3720', Perfs 3834-42'
	Section 35-18S-31E		10/10/69	WtW		Perf'd Queen 3906-12', 3890-96', 3590-96', 3464-81', 3391-3400' & Yates 2360-75'.
East Shugart				Oil	3520'	
Unit #24	990' FSL & 1650' FWL					8-5/8" 24# @ 925' TOC est @ 800'. 7" 20# @ 3392' w/100 sxs, TOC est @ 2262'.
	Section 35-18S-31E					4-1/2" liner 9.5# @ 3930'. CIBP @ 2675' (perfs 2738-2804') TOC @ 1760' after
						squeeze @ 2140-41' (7/69)
						Prep to convert to WtW
East Shugart	"M"	7/23/56	10/11/56	Oil	3900'	8-5/8" @ 950' w/50 sxs cmt, TOC Est @ 7" @ 3400' w/50 sxs cmt,
Unit #25	990' FSL 7 330' FWL					TOC est @ 4-1/2" 9.5# @ 3900' cmt'd w/100 sxs, TOC 2700'.
	Section 35-18S-31E					125 jis tbg w/SN @ 3853'. Perfs: 3328-3869'
						(7" knocked off @ 2700')
East Shugart	"P"	10/18/49	11/28/40	Oil	3637'	8 5/8" @ 970' w/50 sxs, Est TOC @ 858'. 7" @ 3304' w/100 sxs, TOC calc @
Unit #26	330' FSL & 990' FEL				PBTD 3619'	2002', Tbg @ 3433'. Perfs: 2670-2700', 2712-22', 2744-46', OH f/3404-3621'.
	Section 34-18S-31E					

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	"O"	4/28/52	8/6/52	Oil	3675'	7" 20# @ 2570' (mudded) cut & pulled 1/2570'.
Unit # 27	990' FSL & 1650' FEL Section 34-18S-31E		10/1/69			5" 15.5# @ 3448' w/25 sxs cmt, Est TOC 3300'
						2-3/8" @ 3354'. Perfs: 3398-3416'. OH 3448-3671'.
						Perfd 5-1/2" w/4 holes 2498-2500'. Circ annulas thru holes w/300 sxs cl "C" cmt.
						Cmt csg leaks 455-597' w/250 sxs cl "C". Sq'd leaks w/50 sxs cl "C". Added
						Queen perfs 3297-3372' (7). Ran 2" to 3635'.
			11/25/71			Perfd Yates 2634-2838' (9)
			6/30/85		3845'	Perf 3297-3416' (9), 2-3/8" @ 3645'. Cmt'd 5-1/2" csg f/70-75 w/75 sxs; 2634-2838
						and 2498-2500' w/200 sxs cmt, 455-595' w/30 sxs cmt, 90-30' w/10 sxs cmt.
East Shugart	"M"	9/23/69	10/9/69	WIW	3978'	8-5/8" 24# @ 929.67' w/400 sxs cmt TOC Surf, 4-1/2" 9.5# @ 3978.16' w/450 sxs,
Unit #32	100' FSL & 990' FWL Section 35-18S-31E		5/20/82	WIW	PBTD 3943'	TOC 1969' by Temp Surv. TOC 1100' by temp surv 5/82, after 950 sxs cmt sq @
						1987'. 2-7/8" tbg w/pkr @ 2833.19'. Perfs 3352-3891' Perf: 2744-2829'
						Set RBP @ 2900' w/2 sx sd. Pkr @ 2400'. Cmt sq Yates 2744-2829' w/300 sxs,
						Found leak in 4-1/2" csg @ 1985'. Perfd 4-1/2" @ 1987' (4), Set cmt retr @ 1914'
						Sq perfs @ 1987' w/200 sxs cmt, Drid out retr @ 1914' & cmt to 1990'. Set Cmt
						retr @ 1915'. Sq cmt thru retr w/950 sxs TOC 1100'. Cmt w/500 sxs to surf. Drid
						out cmt to 2831'. Set pkr @ 2600'. Set cmt ret 2600'. Sq cmt perfs 2744-2829' w/
						200 sxs. Drid out retr & cmt to 2830'. Set pkr @ 2946' & acid 3352-3891' w/5000 gal.
			2/24/95	WIW		Hole in 75th ft tbg. Set pkr @ 2879.11'. Ran MIT Test
East Shugart	"E"	6/14/93	6/24/93	Oil	4500'	8-5/8" 24# @ 942' w/480 sxs cmt, TOC surf, 5-1/2" 15.5# @ 4495' w/985 sxs
Unit #35	1650' FNL & 330' FWL Section 35-18S-31E		5/31/95	Oil	PBTD 4449'	cmt, TOC surf, 2-7/8" @ 3918' w/pkr. Perfd 3779-3856' w/53 holes.
						Perfd 3540-3672' w/15 holes.
East Shugart	"I"	6/28/93	8/19/93	Oil	4500'	8-5/8" 24# @ 965' w/480 sxs cmt, TOC surf, 5-1/2" 15.5# @ 4500' w/110 sxs
Unit #37	2270' FSL & 840' FEL Section 34-18S-31E		11/17/94	Oil	PBTD 4427'	cmt, TOC surf, 2-7/8" @ 3950'. Perfs 3765-3844' w/34 holes.
						Perfd 3652-3658' w/13 holes. Perfd 3413-40 w/13 holes.
East Shugart	"P"	5/17/93	7/31/93	Oil	4400'	8-5/8" 24# @ 985' w/480 sxs cmt, TOC Surf, 5-1/2" 15.5# @ 4400' w/1020
Unit #39	990' FSL & 990' FEL Section 34-18S-31E				PBTD 4346'	sxs cmt, TOC surf, 2-7/8" @ 3954' w/pkr. Perfd 3398-3850'
						Perfd UQ1 3312-26'
			3/31/95			

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	"H"	11/20/93	7/20/94	Oil	4013'	8-5/8" @ 973' w/478 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4009' w/1113 sxs cmt,
Unit #40	1650' FNL & 840' FEL Section 34-18S-31E				PBTD 3883'	TOC surf. 2-7/8" @ 3890' Perf'd 2736-3853' w/ 80 holes.
East Shugart	"D"	11/9/93	1/10/94	Oil	4025'	8-5/8" 24# @ 956' w/478 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4025' w/916 sxs
Unit #44	990' FNL & 990' FWL Section 35-18S-31E				PBTD 3958'	cmt, Circ to surf. 2-7/8" @ 3890'. Perf'd 3794-3870' w/51 holes.
East Shugart	"L"	6/21/94	9/1/94	Oil	4017'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC @ Surf. 5-1/2" 15.5# @ 4016'
Unit #45	2550' FNL & 580' FWL Section 35-18S-31E				PBTD 3930'	w/940 sxs cmt, TOC @ Surf. 2-7/8" OET @ 3929'. Perf: 2710-2806' Perf 3428-40', Perf 3556-66' Perf 3803-09' 3862-81'
East Shugart	"E"	9/14/94	1/4/95	Oil	4040'	8-5/8" 24# @ 949' w/500 sxs cmt TOC @ surf, 5-1/2" 15.5# @ 4025' w/1410
Unit #47	1650' FNL & 990' FWL Section 35-18S-31E				PBTD 3955'	sxs cmt, TOC @ Surf. 2-7/8" OET @ 3877'. f/2930-3327', No record of cmt vol. Formation: Upper Grayburg (Top @ 3400') OH.
East Shugart	"B"	9/22/94	12/8/94	Oil	4044'	8-5/8" 24# @ 949' w/500 sxs, TOC Surf. 5-1/2" 15.5# @ 4043' w/900 sxs,
Unit #49	990' FNL & 1500' FEL				PBTD 3990'	TOC Surf. 2-7/8" OET @ 3889' Perfs (a) 3712-20'; (b) 3823-29', 3870-73', 3876-3880', (Queen)
East Shugart	"G"	6/30/94	7/23/94	Oil	4062'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 14.5.5# @ 4049' w/1230 sxs
Unit #50	1700' FNL & 2325' FEL Section 35-18S-31E		3/19/95		PBTD 3995'	cmt, TOC @ 494'. 2-7/8" tbg @ 3962'. Perfs: 3871-3896' Perf'd 3694-3592'. Ran tbg, pump & rods, SN @ 3933'.
East Shugart	"B"	10/1/95	10/18/95	Oil	4036'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4035' w/975 sxs cmt,
Unit #52	330' FNL & 2230' FEL Section 35-18S-31E				PBTD 3972'	TOC surf. 2-7/8" tbg @ 3912'. Perf'd 3701-3875' (15 holes).

ATTACHMENT VI

Well Name		Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart		"F"	7/30/94	9/29/94	Oil	3924'	8-5/8" 24# @ 954' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 3923' w/1050 sxs
Unit #54		1690' FNL & 1940' FWL				PBTD 3873'	cmt, TOC surf. 2-7/8" @ 3860'. Perf'd 2670-3834' w/40 holes.
		Section 34-18S-31E					
East Shugart		"H"	10/10/95	11/30/95	Oil	4073'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4072' w/1150 sxs
Unit #56		2250' FNL & 1910' FEL				PBTD 4009'	cmt, TOC surf. 2-7/8" tbq @ 3946'. Perf'd 3591-3932' (43 holes)
		Section 35-18S-31E					
East Shugart		"N"	9/30/94	11/13/94	Oil	4073'	8-5/8" 24# @ 949' w/500 sxs cmt TOC Surf , 5-1/2" 15.5# @ 4072' w/1310
Unit #57		375' FSL & 1950' FWL				PBTD 3990'	sxs cmt, TOC Surf. 2-7/8" @ 3906' (OET) Perf 3795-3897'
		Section 35-18S-31E					
East Shugart		"K"	11/7/95	12/3/95	Oil	4088'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4087' w/975 sxs
Unit #58		1575' FSL & 2200' FWL				PBTD 4027'	cmt, TOC surf. 2-7/8" csg 3961'. Perf'd 3686-3908' (16 holes)
		Section 35-18S-31E					
East Shugart		"N"	10/15/94	2/4/95	Oil	4020'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC Surf. 5-1/2" 15.5# @ 4009' w/1190 sxs
Unit #59		1100' FSL & 1650' FWL				PBTD 3993'	cmt, TOC surf. 2-7/8" @ 3886' (OET). Perf'd 2670-3842'. (59 holes)
		Section 34-18S-31E					
East Shugart		"H"	1/26/95	3/5/95	Oil	4068'	8-5/8" 24# @ 950' w/500 sxs, TOC @ Surf, 5-1/2" 15.5# @ 4067' w/1060
Unit #61		2310' FNL & 865' FEL				PBTD 3991'	sxs cmt, TOC @ surf. 2-7/8" OET @ 3937'.
		Section 35-18S-31E					Perf UQ2 3563-69', Perf UQ3 3600-32', LQ2 3839-43', LQ3 3888-94', LQ4 3905-11'

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	"J"	12/16/94	1/18/95	Oil	4010'	8-5/8" 24# @ 950' w/500 sxs cmt, TOC Surf. 5-1/2" 15.5# @ 4010' w/1170 sxs cmt, TOC surf. 2-7/8" @ 3869'. Perfs: 3752-3834' total of 29 holes.
Unit #63	1800' FSL & 1600' FEL Section 34-18S-31E				PBTD 3950'	
East Shugart	"I"	9/1/1/95	10/6/95	Oil	4000'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC Surf. 5-1/2" @ 3999' w/950 sxs cmt,
Unit #67	2450' FSL & 330' FEL Section 34-18S-31E				PBTD 3954'	TOC Surf. 2-7/8" @ 3880'. Perf'd 3768-3846' w/18 holes.
East Shugart	"C"	9/22/95	10/15/95	Oil	4030'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC Surf. 5-1/2" 15.5# @ 4029' w/950
Unit #69	990' FNL & 1700' FWL Section 35-18S-31E				PBTD 3978'	sxs cmt, TOC surf. 2-7/8" @ 3909'. Perfs: 3676-3874' w/16 holes.
East Shugart	"M"	1/2/95	5/12/95	Oil	4045'	8-5/8" 24# @ 949' w/500 sxs cmt TOC Surf, 5-1/2" 15.5# @ 4043' w/1400
Unit #70	330' FSL & 280' FWL Section 35-18S-31E				PBTD 3936'	sxs cmt, TOC surf. 2-7/8" @ 3904' (OET), Perf 3150-3886',
East Shugart	"M"	1/9/95	3/31/95	Oil	4055'	8-5/8" 24# @ 947' w/500 sxs TOC Surf, 5-1/2" 15.5# @ 4050' w/1238 sxs cmt
Unit #71	990' FSL & 990' FWL Section 35-18S-31E				PBTD 3987'	TOC Surf, 2-7/8" @ 3953'. Perf 3152-3255', Perf 3344-58', Perf 3416-71'
						Perf 3806-10', 3862-66', 3882-86',
East Shugart	"L"	1/18/95	2/22/95	Oil	4040'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4039' w/1150 sxs
Unit #72	1650' FSL & 1150' FWL Section 35-18S-31E				PBTD 3975'	cmt, TOC surf. 2-7/8" @ 3933'. Perfs: 3426-3893' w/43 holes.
East Shugart	"N"	7/4/95	8/27/95	Oil	4070'	8-5/8" 24# @ 950' w/500 sxs cmt TOC Surf, 5-1/2" 15.5# @ 4070' w/1115 sxs cmt,
Unit #74	510' FSL & 2455' FWL Section 35-18S-31E				PBTD 4000'	TOC Surf

ATTACHMENT VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	"F"	6/24/95	7/21/95	Oil	4049'	8-5/8" 24# @ 945' w/500 sxs cmt, TOC Surf. 5-1/2" 15.5# @ 4049' w/1230
Unit #76	1990' FNL & 1940' FWL Section 34-18S-31E		8/18/95		PBTD 3953'	sxs cmt, TOC Surf. 2-7/8" OET @ 3918'. Perf 3812-3902' Perf UQ3 and LQ1 3525-3704'; Ran tbg, set SN @ 3918'.
East Shugart	"J"	6/15/95	7/16/95	Oil	4100'	8-5/8" 24# @ 939' w/500 sxs cmt, TOC Surf. 5-1/2" 15.5# @ 4104' w/925
Unit #77	1550' FSL & 2120' FEL Section 34-18S-31E				PBTD 4023'	sxs cmt, TOC Surf. Perfs @ 3525-3902' (Queen)
East Shugart	"K"	10/19/95	11/11/95	Oil	4091'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4090' w/1200 sxs
Unit #78	2300' FSL & 2300' FWL Section 34-18S-31E				PBTD 3635'	cmt, TOC Surf. 2-7/8" @ 3918'. Perfs: 3831-3928' w/15 holes.
East Shugart	"E"	10/29/95	12/16/95	Oil	4066'	8-5/8" 24# @ 949' w/500 sxs cmt, TOC surf. 5-1/2" 15.5# @ 4065' w/950 sxs
Unit #79	2120' FNL & 375' FWL Section 35-18S-31E				PBTD 4003'	cmt, TOC surf. 2-7/8" @ 3903'. Perfd 2800-3878' w/50 holes.

Well Name	Operator	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
State 36 #1	Tom Boyd	"D" 330' FNL & 330' FWL Section 36-18S-31E	4/29/58	6/20/58	Oil	4100'	8-5/8" @ 974' w/50 sxs cmt, Est TOC 682'. 5-1/2" @ 4040' w/125 sxs cmt, Est TOC @ 3374'. Perfs: 3840-58'. IP: 40 BO, 50 BW.
Hinkle Federal 11-B	Westall	"P" 330' FSL & 990' FEL Section 26-18S-31E	6/4/80	8/23/80	Oil	4200'	8-5/8" @ 650' w/250 sxs cmt, TOC est @ 90'. 4-1/2" @ 4186' w/500 sxs, Est TOC surf. Perfs: 3460-3586'.
McFadden - Federal #1	Jack Plemmons	"A" 330' FNL & 330' FEL Section 3-19S-31E	8/7/38	12/12/38	Oil	2748'	8" @ 900' w/50 sxs cmt, TOC est @ 788'. 7" @ 2635' w/100 sxs cmt, TOC est @ 1968'. Perfs:2673-93'
Hinkle Federal B-26 #5	Tom Boyd	"N" 330' FSL & 990' FWL Sec. 26-18S-31E	5/6/61	6/6/61	Oil	2805'	8-5/8" csq @ 793' w/72 sxs cmt, TOC est @ 632'. 7" @ 2805' w/200 sxs cmt, TOC est @ 546'. IP f/2730-54' 78 BOPD.
Hinkle Federal B #4	Tom Boyd	"K" 1650' FSL & 2310' FWL Sec. 26-18S-31E	1/15/61	3/9/61	Oil	3939'	8-5/8" @ 932' w/50 sxs cmt, TOC est @ 820'. 5-1/2" @ 3876' w/100 sxs cmt, TOC est @ 3342'. IP 3761-71' 288 BOPD
Hinkle-Federal B #3	Tom Boyd	"N" 330' FSL & 1650' FWL Sec. 26-18S-31E	11/24/60	1/3/60	Oil	2800'	8-5/8" @ 853' w/50 sxs cmt, Est TOC @ 741'. 7" @ 2800' w/100 sxs cmt, TOC est @ 1670'. IP f/2746-68' 386 BOPD
State #1	Mask Jennings et al	"C" 330' FNL & 1650' FWL Sec. 2-19S-31E	10/1/45	12/10/51	D&A Oil - WO	3953' 3953'	8-1/4" @ 910' w/50 sxs cmt, TOC Est @ 798'. 7" @ 3337'. no cmt record. 4-1/2" @ 3890' w/250 sxs cmt, Est TOC @ 2876'. IP f/3414-3853' 117 BOPD, 3 BW.
State 2 #1	Keohane-Westall	"D" 330' FNL & 330' FWL Sec. 2-19S-31E	5/4/39	9/18/39	Oil	3685'	8-1/4" @ 774' w/50 sxs cmt, Est TOC @ 662'. 7" @ 2935' no cmt record, 5" @ 3275' no cmt record. 4" liner f/3262-3680' no cmt record. IP f/3275-3680' 30 BOPD
Federal 26 #2	Honeysuckle (Ozark)	"J" 1880' FSL & 1880' FEL Sec. 26-18S-31E	7/26/76	8/17/76	Oil	4085'	8-5/8" @ 897' w/575 sxs cmt, TOC @ surf, 4-1/2" @ 4084' w/500 sxs cmt, Est TOC @ 2055'. IP f/2656-82' 39 BOPD.
Hinkle B Fed #13	Westall-Mask	"I" 1650' FSL & 990' FEL Sec. 26-18S-31E	1/24/81	4/25/81	Oil	4170'	8-5/8" @ 671' w/300 sxs cmt, Est TOC @ surf. 4-1/2" @ 4170' w/500 sxs cmt, Est TOC 2140'. IP 3450-3698' 15 BOPD.

12H 12/04/00

SHEET NO

OF



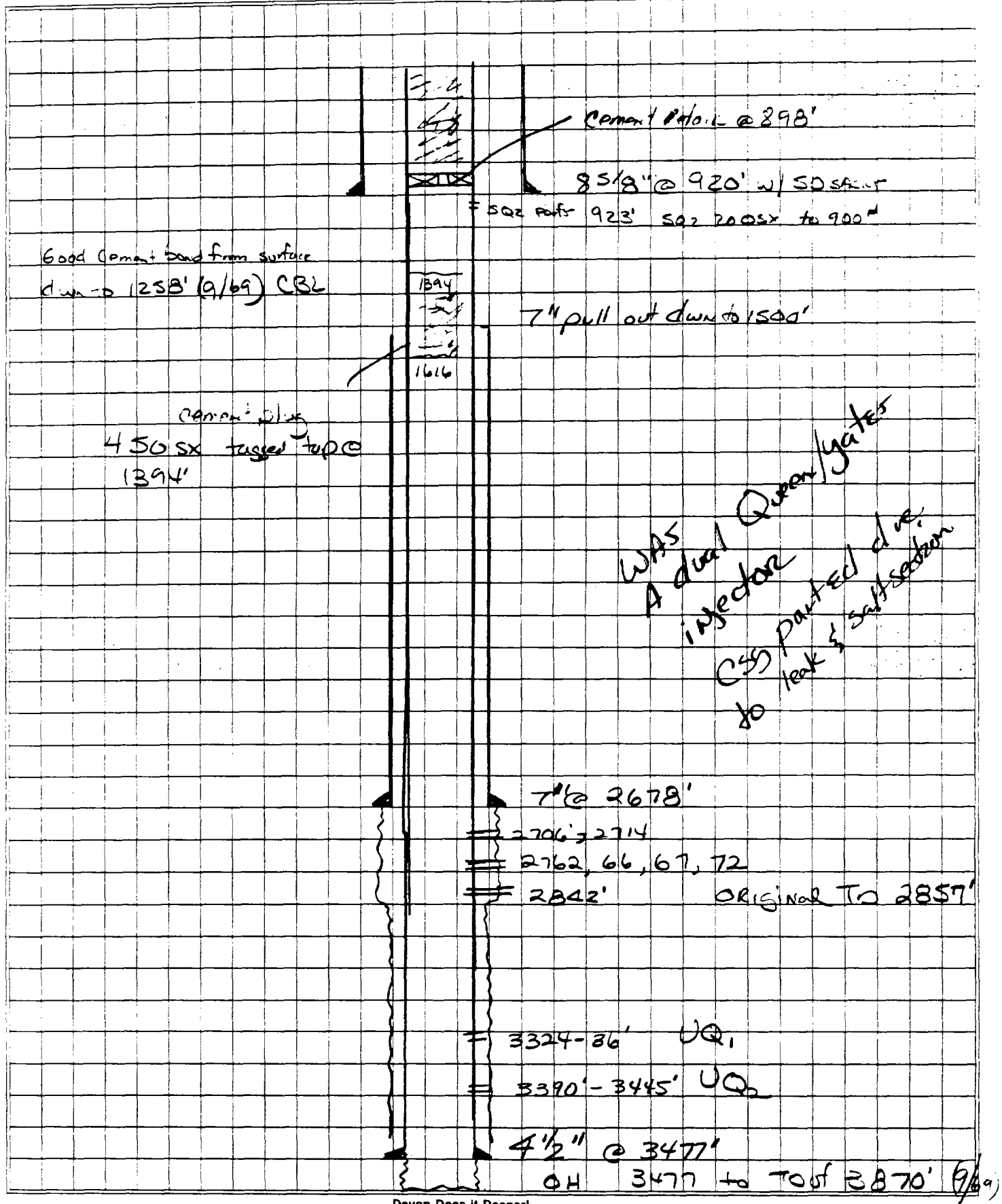
ENGINEERING CHART

FILE

DATE 9/23/92

BY L S Foy

SUBJECT: EAST Shogart # 19



This form is to be completed for each well which is drilled, reworked, or abandoned. It is to be completed by the operator or his representative. The "Final Report" form may be used for reporting the entire history of a well.

Accounting cost center no. 6432948	
County or Parish Pecos - West Area	State New Mexico
Field Shugart	Well no. 19
Lease or Unit East Shugart Unit	
Title Repair Tbg, Csg Lea' or Pkr Failure	
A 614327	

Operator ARCO	A.R. Co. W.I. 85.0258%	Total number of wells (active or inactive) on the cost center prior to plugging and abandonment of this well
Specimen or W.O. begun W.O.	Date	Hour
Date and depth of 8.00 gpm		After status of W.O.

Complete record for each day reported
12/15/80 3870' TD FINAL REPORT, Well P&A 12/02/80.

RU, inst BOP, rel pkr, pld 99 jts corroded tbg, hold down & no pkr. RIH to rec pkr, could not get bols below 1426'. Ran impression block, indicated csg parted @ 1401'. RIH w/CCL log from 1150-1318', ran out of csg @ 1318'. Logging tools stopped @ 1391'. RIH w/CBL-VDL-GR log 1294-0'. Log indicated csg bond from 1258' to surface. On 11/15/80 RIH w/3-1/8" hill-side shoe, tagged TOF @ 1401'. Ran tool inside 4 1/2" csg to 1432'. POH w/tool. RIH w/mill, tagged TOF @ 1401', milled inside 4 1/2" csg to 1635'. PUH to 1616'. Spot 450 sx Cl H cmt cont'g 3/4 of 1% CFR-2 w/15% salt/sk @ 1616'. POH w/tbg & mill. RIH w/hill-side shoe, tagged TOC @ 1394'. POH w/shoe. RIH w/4 1/2" pkr, set @ 1264'. Press tstd tbg/csg annulus to 500# 30 mins OK. POH w/pkr. RIH w/EZ-BP set BP @ 1264'. Perf 4 JS @ 923-25'. RIH w/pkr, set pkr @ 898'. Inj rate thru perfs @ 1 BPM @ 700#. POH w/pkr. RIH w/cmt retr, set @ 898'. Squeeze cmt perfs 923-25' w/ 200 sx Cl C cont'g 19.5% salt/sk, squeeze press 900#. Spot 55 sx Cl C cmt 898-7' fr surf. Cut off 4 1/2" csg below CL, inst reg dry hole marker, clean & level location.

Old TD	New TD	PB Depth
Released rig	Date	Kind of rig
Classifications (oil, gas, etc.) P&A	Type completion (single, dual, etc.)	
Producing method	Official reservoir name(s)	
Potential test data		
Well no.	Date	Reservoir
Producing interval	Oil or gas	Test time
Production	Oil on test	Water cut
Pump size, SPM X length	Choke size	T.P.
C.P.	Water %	GOR
Gravit. corrected	Allowable	Effective date
The above is correct		
Signature J. W. Schmidt	Date 1/15/81	Title Dist Drlg. Supt.

For form preparation and distribution, see Procedures Manual, Section 10, Drilling, Pages 86 and 87.

received
1/22/81
Centralfile

Change of Well Status and/or Abandonment Request



To: District Manager

Mr. C. E. Cardwell, Jr.

Lease-Unit (Name and Well Number):

East Shugart Unit No. 19

Accounting Cost Center Code

Lease Number

NM-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.

85.0258%

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.

VEPRM 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:

D. E. O'Quinn

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:

C. E. Cardwell, Jr.

Date:

11/18/80

Administrative (Salvage Estimated and Disposition Recommendation):

Production:

By:

Date:

Rec. P & A.

By:

K. V. Jener

Date:

11-19-80

Recommendation and/or Approval:

APPROVED FOR
P & A - due to in-hole condition

K. V. Jener for C. E. Cardwell

District Manager

Region Manager

Exploration and Producing Operations
Vice-President

Date

11-19-80

Date

Date

11-20

AR3B-771-B

Executive Vice-President

Date

devon

ENERGY CORPORATION

20 North Broadway, Suite 15
Oklahoma City, Oklahoma 73102

February 23, 1996



Ray Westall
Post Office Box 4
Loco Hills, NM 88255

Ray Westall
Post Office Box 4
Loco Hills, NM 88255

RE: East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

PS Form 3800, March 1993

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date ESU 20, 52, 76 2/4 2-23-96	

Gentlemen:

Please consider this letter as official notification that Devon Energy Corporation is in the process of filing applications to convert the above referenced wells to water injection wells. Our records indicate that you are an offset operator. As an offset operator you must be notified by Devon and you must file any objections or requests for hearing of administrative applications with the Oil Conservation Division of New Mexico within fifteen (15) days of receiving this notification.

Please direct questions regarding this matter to Ernie Buttross at (405) 552-4509.

Sincerely,

Devon Energy Corporation

Diana M. Keys
Diana M. Keys
Engineering Technician

/dmk
enclosures

xc: Well Files

SENDER: ESU 20, 52, 76 Offset Notification with 2/4 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: 8-23-96 Ray Westall Post Office Box 4 Loco Hills, NM 88255	4a. Article Number 4b. Service Type <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
5. Signature (Addressee) 6. Signature (Agent) <i>[Signature]</i>	7. Date of Delivery: 2-26-96 8. Addressee's Address (Only if request and fee is paid)

your RETURN ADDRESS completed on the reverse side?

devon

ENERGY CORPORATION

20 North Broadway, Suite 15
Oklahoma City, Oklahoma 73102

Z 731 677 027

February 23, 1996

General New Mexico, Inc.
P.O. Box 385
Artesia, NM 88211-0385

RE: East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

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Sincerely,

Devon Energy Corporation

Diana M. Keys

Diana M. Keys
Engineering Technician

/dmk
enclosures

xc: Well Files



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

General New Mexico, Inc.
P.O. Box 385
Artesia, NM 88211-0385
ATTN: Jack Plemons

Certified Mail	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
ESU 20, 62.7U Offset Notification 314 2-23-96	

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

SENDER: ESU 20, 62.7U Offset Notification 314 WH • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • 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: 2-23-96 General New Mexico, Inc. P.O. Box 385 Artesia, NM 88211-0385 ATTN: Jack Plemons		4a. Article Number Z-731 677 027	
4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise		7. Date of Delivery	
5. Signature (Addressee) <i>[Signature]</i>		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) <i>[Signature]</i>			

PS Form 3811, December 1991

U.S. GPO: 1993-362-714

DOMESTIC RETURN RECEIPT

devon
ENERGY CORPORATION

20 North Broadway, Suite 150
Oklahoma City, Oklahoma 73102



Z 731 677 029

**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

February 23, 1996

Ozark Exploration Inc.
1525 Two Turtle Creek Village
Dallas, TX 75219

RE: East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #52
330' FNL and 2230' FEL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

Ozark Exploration Inc.
1525 Two Turtle Creek Village
Dallas, TX 75219

	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date WILCO-ESU 20, 52, 76 OFFSET NOTIFICATION 4/4 2-23-96	

PS Form 3800, March 1993

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Sincerely,

Devon Energy Corporation

Diana M. Keys
Diana M. Keys
Engineering Technician

/dmk
enclosures

xc: Well Files

SENDER: ESU 20, 52, 76 Offset Notification WILCO 4/4

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to: 2-23-96

Ozark Exploration Inc.
1525 Two Turtle Creek Village
Dallas, TX 75219

4a. Article Number

4b. Service Type

☐ Registered ☐ Insured

☐ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery: FEB 26 1996

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)

your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

devon
ENERGY CORPORATION

20 North Broadway, Suite 150
Oklahoma City, Oklahoma 731

February 23, 1996

Z 731 677 026



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Enerloc Resources Inc.
616 Mechem Drive
Ruidoso, NM 88340
Attention: Tom Boyd

Enerloc Resources Inc.
616 Mechem Drive
Ruidoso, NM 88340
Attention: Tom Boyd

RE: East Shugart Unit #76
1990' FNL and 1940' FWL
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #52
330' FNL and 2230' FEI
Section 35-18S-31E
Eddy County, NM

East Shugart Unit #20
1980' FSL 660' FWL
Section 35-18S-31E
Eddy County, NM

PS Form 3800, March 1993

Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date ESU 20, 52, 76 Will Appl to Off 200 1/4 2-23-96	

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Sincerely,

Devon Energy Corporation

Diana M. Keys

Diana M. Keys
Engineering Technician

/dmk
enclosures

xc: Well Files

SENDER: ESU 20, 52, 76 Will Appl to Off 200 1/4

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to: 2-23-96

Enerloc Resources Inc.
616 Mechem Drive
Ruidoso, NM 88340
Attention: Tom Boyd

4a. Article Number: 2 731 677 026

4b. Service Type

☐ Registered ☐ Insured

☐ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery: 3-18-96

8. Addressee's Address (Only if required and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 DOMESTIC RETURN RECEIPT