



ENERGY CORPORATION

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

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

35 NO 4 11 52

October 13, 1995

Certified Number Z 731 697 607

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Devon Energy Corporation
East Shugart Unit #24
Section 35-18S-31E
Eddy County, NM

Devon Energy Corporation
East Shugart Unit #9
Section 35-18S-31E
Eddy County, NM

Gentlemen

Please find enclosed our applications and attachments to convert the above referenced wells to water injection wells.

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

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: 10/13/95
- * 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.

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: DEVON ENERGY CORP. Well: EAST SWEET Nos. 9 & 24

Contact: DIANA KEYS Title: ENG. TECH. Phone: 405.552.4509

DATE IN 11.2.95 RELEASE DATE 11.16.95 DATE OUT 11.29.95

Proposed Injection Application is for: ☒ **WATERFLOOD** ☒ Expansion ☐ Initial

Original Order: R- ☐ Secondary Recovery ☐ Pressure Maintenance

SENSITIVE AREAS

☐ **SALT WATER DISPOSAL** ☐ Commercial Well

☐ WIPP ☐ Capitan Reef

Data is complete for proposed well(s)? YES Additional Data Req'd ☐

AREA of REVIEW WELLS

55 Total # of AOR

7 # of Plugged Wells

43 7/29/95 3760

YES Tabulation Complete

YES Schematics of P & A's

YES Cement Tops Adequate

NO AOR Repair Required ?

INJECTION FORMATION

Injection Formation(s) QUEEN Compatible Analysis YES

Source of Water or Injectate QUEEN (V-SR-Q-GSA)

PROOF of NOTICE

YES Copy of Legal Notice

YES Information Printed Correctly

YES Correct Operators

YES Copies of Certified Mail Receipts

NO Objection Received

☐ Set to Hearing ☐ Date

NOTES: ☐

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES ?

COMMUNICATION WITH CONTACT PERSON:

1st Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	<input type="checkbox"/> Date	Nature of Discussion
2nd Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	<input type="checkbox"/> Date	Nature of Discussion
3rd Contact:	<input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	<input type="checkbox"/> Date	Nature of Discussion

ATTACHMENT III (tabular)

Well Data

- A.
- (1) East Shugart Unit #9
990' FEL and 1650' FNL
Section 35-18S-31E
Eddy County, NM
 - (2) Please refer to the wellbore schematic labeled Attachment III - (schematic) Cement was circulated back to surface on the surface string and the production string. (Also see schematic for any existing tbg and/or liner used)
 - (3) Tubing will be 2-3/8" fiberglass or internally coated, set @ 3310'. No additional liner material is anticipated.
 - (4) A 5-1/2" x 2-3/8" Loc-set Pkr will be set @ 3310'.
- B.
- (1) The injection formations will be the Queen Sands in the Shugart field. (Y-SR-Q-G)
 - (2) The proposed interval is 3404-3895'. The injection interval will be through existing perforations.
 - (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 III (Schematic)

East Shugart Unit #9
990' FEL and 1650' FNL
Section 35-18S-31E
Eddy County, NM

Logs GR/N 4/25/59

Cemented 10/13/69
GR/CCL - 10/13/69



ENGINEERING CHART

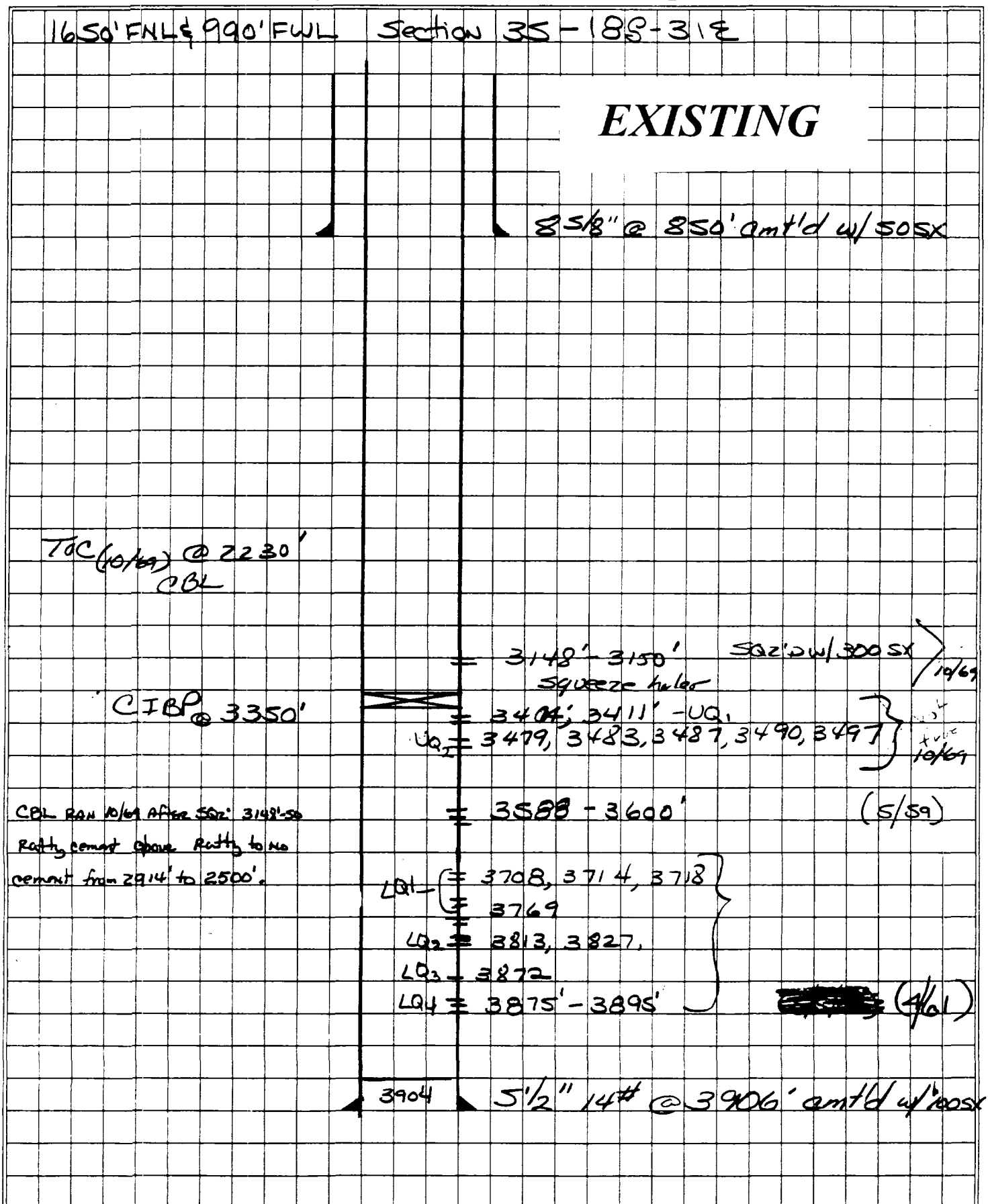
SHEET NO. OF

FILE

DATE 9/21/92

BY LSPowell

SUBJECT: East Shugart #9 (Hinkle B 4-3S)



ATTACHMENT III (Schematic)

East Shugart Unit #9
990' FEL and 1650' FNL
Section 35-18S-31E
Eddy County, NM



SUBJECT: East Shugart Unit #9
1650' FNL + 990' FNL
Section 35-18S-31E

SHEET NO. _____ OF _____

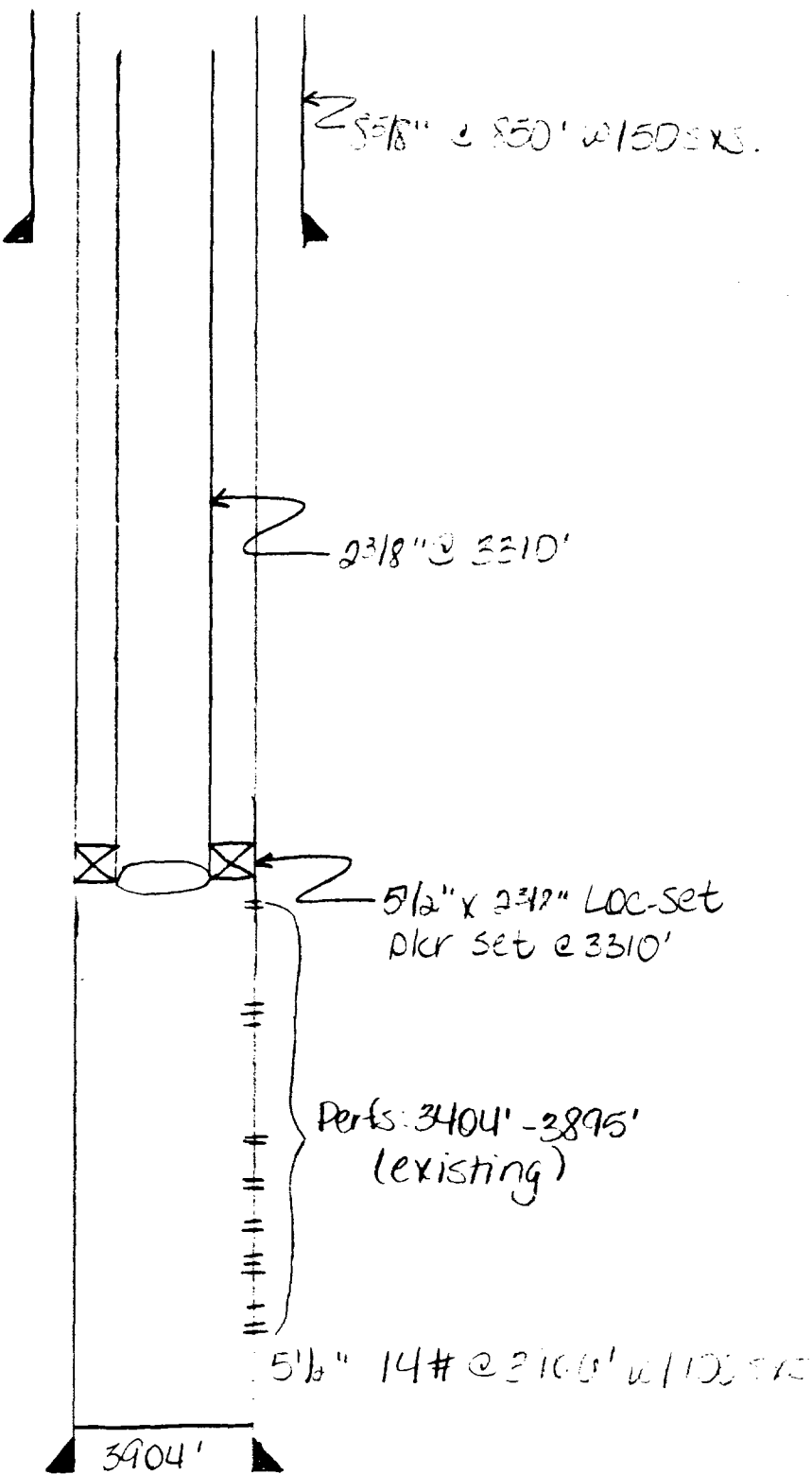
FILE _____

DATE _____ BY _____

PROPOSED

TOC @ 2230'
(by CBL)

Note: CIBP @ 3350'
will be drilled out.



R 31 E

Wells In "Area of Review" (within 1/2 mile Radius)

East Shugart Unit #9		East Shugart Unit #24	
Federal 1	"O" 26-18S-31E	ESU 47	
Hinkle Fed 11-B	"P" 26-18S-31E	GRNWD 1	
Federal 1	"M" 25-13S-31E	ESU 79	
ESU 52		ESU 76	
ESU 53		ESU 12	
State 1	"D" 36	ESU 11	
ESU 69		ESU 10	
ESU 6		ESU 67	
ESU 7		ESU 45	
ESU 49		ESU 21	
ESU 8		ESU 78	
ESU 75		ESU 22	
GRDWD 1	"F" 35	ESU 20	
ESU 50		ESU 19	
ESU 81		ESU 72	
State 1	"E" 36	ESU 58	
ESU 76		ESU 77	
ESU 11		ESU 39	
ESU 10		ESU 83	
ESU 56		ESU 25	
ESU 61		ESU 71	
ESU 78		ESU 51	
ESU 22		GRNWD 13	"N" 35-19S-31E
ESU 77		ESU 74	
Hinkle B-14	"I" 35	ESU 26	
		ESU 70	
		ESU 57	
		ESU 23	
		Hinkle Fed 12-B	"P" 35-19S-31E
		ESU 32	
		Federal 1	"A" 3-19S-31E
		State 1	"D" 2-19S-31E
		State 1	"C" 2-19S-31E
		State 2	"B" 2-19S-31E
		State 2	"D-E" 2-19S-31E
		State A-6	"C" 2-19S-31E
		State 3	"F" 2-19S-31E

Attachment VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #7	"B" 990' FNL & 2310' FEL Sec. 35-18S-31E	1/13/57	2/28/58 9/1/66	Oil	3885'	8-5/8" 28# csg @ 914' w/100 sxs cmt, 7" 20# csg @ 3875' w/100 sxs cmt, OH 3872-3995' sd frac'd w/30,000# sd and 10,000 gals oil. Perf Queen 3369-3813' (13). Treated 3811' and 3813' w/630 gals acid. Treated 3369-3706' w/1500 gals & BS w/25,000 gals wrt & 17,000# sd. Perf Yates 2710-2839' (6) Acid w/750 gals 15%. Frac'd w/15,000 gals wrt w/13,500# sd. Set 2-3/8" tbg w/SN @ 3879'. Well Pmpg.
East Shugart Unit #50	"G" 1700' FNL & 2325' FEL Section 35-18S-31E	6/30/94	7/23/94 3/19/95	Oil	4062' PBTD 3995'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4060' w/1010 sxs cmt TOC @ 494'. 2-7/8" OET @ 3962'. Perf 3871-78' (8); 3886-96' (11), Acid 3871-96' w/2000 gals & 38 BS. Frac same w/500 gals prepaid & 14,500 gals 30# XL & 45,000# 20/40 + 16,000# RC sd. Perf'd 3692-3768' (11) - LQ1 and 3819-22' (4) - LQ2. Acid LQ 1 w/1500 gals. Frac'd w/10,000 gals 30# + 39,000# sd. Perf'd UQ3 f/3578-92' (15), acid UQ3 w/1000 gals & 30 BS. Frac'd w/10,000 gals 20# XL + 39,000# sd. Ran 132 jis tbg, pump & rods. SN @ 3933'.
East Shugart Unit #76	"F" 1990' FNL & 1940' FWL Section 34-18S-31E	6/24/95	7/21/95 8/18/95	Oil	4049' PBTD 3953'	8-5/8" 24# @ 945' w/500 sxs cmt, 5-1/2" 15.5# @ 4049' w/1230 sxs cmt, 2-7/8" OET @ 3918'. Perf 3812-3902' (15), acid w/1500 gals. Frac'd w/15,000 gals 30# XL & 60,000# sand. Perf UQ3 and LQ1 3525-3704' (15), acid w/1500 gals & 30 BS. Frac'd w/10,000 gals 30# XL & 39,000# sd. Ran tbg, set SN @ 3918'.
East Shugart Unit #77	"J" 1550' FSL & 2120' FEL Section 34-18S-31E	6/15/95	7/16/95	Oil	4100' PBTD 4023'	8-5/8" 24# @ 939' w/500 sxs cmt, 5-1/2" 15.5# @ 4104' w/925 sxs cmt, 2-7/8" @ 3933'. Perf'd 3485-3612' (15), acid w/1500 gals & 30 BS. Frac'd w/10,000 gals 30# XL & 39,000# sd. Perf 3716-3955' (15), acid w/1500 gals & 30 BS. Frac'd w/19,000 gals 30# XL & 73,000# sd.
East Shugart Unit #10	"G" 2310' FNL & 2310' FEL Section 35-18S-31E	5/2/57	9/15/57 4/3/63 10/28/69 5/6/89 11/16/89	Oil	3933'	8-5/8" @ 925' w/100 sxs cmt, 7" @ 3640' w/100 sxs cmt, Tbg @ 3750'. OH 3640-3933'. Treated 3678-3712' w/20,000# sd & 5000 gals oil. Treated 3805-3933' w/30,000# sd & 10,000 gals oil. Perf'd thru 4-1/2" csg f/3900-15' 3 spf. Treated w/20,000# sd & 500 BO Perf'd Queen 3381-3485' (8), acid w/1000 gals. Frac'd w/35,000 gals & 22,000# sd. Ran 2-3/8" tbg, pump & rods. SI Pending Evaluation (4-1/2" liner 3590-3925'), Cind out to 3894'. Perf'd 4 holes @ 3894'. Acid w/ 50 bbls acid. Perf'd 3380-3892' w/58 shots. Acid w/8000 gals & 8000# rock salt. Ran 2-3/8" tbg w/SN set @ 3838'.

Attachment VI

Well Name		Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart	Unit #1	"F" 2310' FNL & 2310' FWL Section 35-18S-31E	3/1/58	5/13/58	Oil	3985'	8" @ 910' w/50 sxs cmt, 7" @ 3918' w/125 sxs cmt, Tbg @ 3906', Perfd 3812-22', 3905-09', 3962-76', 3980-92', Sd frac'd f/3905-92' w/34,000# sand & 1000 BO. Sd Frac'd f/3812-3822' w/28,000# sd & 1030 BO. Perfd 4 holes 2712-14'. Sq cmt perfs w/100 sxs. Perfd 4 holes 2168-70' & cmt w/425 sxs. Drid out & PIF w/1200#. Sq 2168-70' w/200 sxs. DO sq @ 2712-14'. Perfd Queen 3375-3478' (14). Treated w/1500 gals acid & 20,000 gals FW & 20,000# sd. Perf Yates 2720-2856' 912). Treated w/2700 gals acid & 40,000 gals FW & 40,000# sd. Sq Yates perfs 2720-2856' w/120 sxs cl "C". Drid out sq job. Ran tbg & SN to 3796.85'. Ran rods & pump. Pmpg Queen perfs 3375-3909' on 8/27/71. CO to 3909', Acid w/250 gals zylene & 1000 gals 15%.
				11/4/69			
				8/27/71			
				4/8/90			
East Shugart	Unit #22	"J" 2310' FEL & 2310' FSL Section 35-18S-31E	11/25/58	2/14/59	Oil	3945'	8-5/8" @ 940' w/50 sxs cmt, 7" @ 3940' w/150 sxs cmt, Perfs: 2772-90', treated w/ 986 BO & 50,000# sd. Perf 3698-3720', treated w/920 BO & 73,000# sd. Perfs 3834-42', treated w/1053 BO & 55,000# sd. CO sand 3889-3924'. Perfd Queen 3906-12', 3890-96', 3590-96', 3464-81', 3391-3400' & Yates 2360-75'. Treated Queen 3890-96' & 3906-12' w/1000 gals acid. Trtd Queen 3391-3912' w/12,000 gals fresh wr & 21,000# sd & 1800# rock salt. Trtd Yates 2860-75' w/1500 gals 15%. Treated Yates & Queen 2772-2875' & 3391-3912' w/29,000 gals wr & 20,000# sd. Set 7" pkr @ 2920'. Ran long string 2-3/8" tbg (w/mod "K" dual pkr @ 2714'), short string 2-3/8" set in dual pkr.
				10/10/69			
East Shugart	Unit #61	"H" 2310' FNL & 865' FEL Section 35-18S-31E	1/26/95	3/5/95	Oil	4068' PBTD 3991'	8-5/8" 24# @ 950' w/500 sxs, 5-1/2" 15.5# @ 4067' w/1060 sxs, 2-7/8" OET @ 3937'. Perf UQ2 3563-69' (7), Acid w/1000 gals, Perf UQ3 3600-32' (7), acid w/1000 gals, LQ2 3839-43' (5), LQ3 3888-94' (4), LQ4 3905-11' (7) Acid 3839-3911' w/1500 gals 15%. Frac'd w/20,000 gals XL & 79,000# sand. Frac 3563-3632' w/10,000 gals XL & 39,000# sd.
East Shugart	Unit #45	"L" 2550' FNL & 580' FWL Section 35-18S-31E	6/21/94	9/1/94	Oil	4017' PBTD 3930'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4016' w/940 sxs cmt, 2-7/8" OET at 3929'. Perf: 2710-2806' (15), acid w/2500 gals & 30 BS, Frac w/1000 gal pre-pad and 20,000 gals 30# XL & 64,000# sd. Perf 3428-40' (13), acid 1500 gals. Perf 3556-66' (11), acid w/1500 gals, Perf 3803-09' (13), acid w/1500 gals, 3862-81' (14) acid w/1500 gals, Frac w/10,500 gals XL & 40,000# sand.

Well Name		Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #47	"E"	1650' FNL & 990' FWL Section 35-18S-31E	9/14/94	1/4/95	Oil	4040'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4025' w/1410 sxs cmt, 2-7/8" OET @ 3877'. Perf 2731-2782' (14), acid w/1500 gals & 28 BS. Frac'd w/ 10,000 gals 30# XL & 36,000# sd. Perf 3678-91' (14), acid w/1500 gals & 28 BS. Frac'd 10,000 gals XL & 36,000# sd. Perf 3797-3800', 3850-52', & 3862-70' (16), acid w/1500 gals & 32 BS. Frac'd w/19,000 gals 30# XL & 74,000# sd.
						PBTD 3955'	
East Shugart Unit #21	"K"	2310' FSL & 1650' FWL Section 35-18S-31E	8/6/57	12/14/57	Oil	4018'	8-5/8" @ 915' w/50 sxs cmt, 7" @ 4000' w/100 sxs cmt, no tbg. Perfs: 3883-98' (90) Frac'd w/31,000# sd & 1000 BO. Perf 3796-3808' (7), Frac'd w/31,000# sd & 1025 BO. Perf'd 3708-3702, 8734-46' (114), Frac'd w/33,000# sd & 1000 BO. Perf 3600-3564' (31), Frac'd w/31,000# & 1010 BO.
						PBTD 3928'	Set CIBP @ 3510'. Ref Queen 3370-3495. Re-perf'd 3370-3482'. acid w/1500 gals 15% & Frac'd w/38,000 gals slick wtr w/37,000# sd. Perf'd Yates 2888-89'. Set pkr @ 2960'. Perf Yates 2750-51' sq w/75 sxs cmt, drd out cmt, Perf Yates 2773-2918' (9), Treated w/1500 gals acid, 23,000 gals slick wtr & 15,000# sd.
							Dual W/W thru 2 strings of tbg, LS 2960', SS 2705.60'. Pulled dual tbg strings, drd out pkr & CIBP. Ran prod string 2-3/8" tbg @ 3877.33'. Status of Well: Temporarily Abandoned
							POOH w/ 2-3/8" tbg. Set CIBP @ 2725'. Circ hole w/125 BFW cont'g 12 gal corr inhibitor. Temporarily Abandoned.
East Shugart Unit #12	"E"	2310' FNL & 990' FWL Section 35-18S-31E	8/30/57	12/3/57	Oil	3925'	8-5/8" @ 904' w/50 sxs cmt, 7" @ 3925' w/135 sxs cmt, Tbg @ 3870'. Perf 3884-70' 6 spf, Sd Frac'd w/30,000# sd, 30,000 gals oil. Perf'd 3554-64', 6 spf, Frac'd w/11,000# sd & 20,000 gals oil.
							Ran CBL, TOC @ 2572'. Perf 2540-41' (4), Set BP @ 2608'. Sp'd w/3 sxs cmt, Pmp'd 500 gals 15% & 100 BFW. M&D 300 sxs cl "C". Sq 2540-41' w/25 sxs cl "C" Drd out cmt to 2541'. Sp'd 100 gals 15% across 2540-41'. Re-sq w/35 sxs. Drd out cmt to 2540'. Perf Queen 3350-57' 2 JSPF, Perf 3425-34', 3440-45', 3459-66', 3460-73'. Treated 33600-3684' w/54,000 gals w/1000 gals & 54,000# sd. Perf'd Yates 2694-2868' (11). Set BP @ 2950'. Sp'd 350 gals acid f/2694-2868'. Treated Yates 2694-2868' w/750 gals, Frac'd w/40,000# sd & 40,000 gals F.W.
							Ran 2" tbg to 3857'. POOH w/completion assembly. Set BP @ 2650'. Pkd off WH.
				8/7/78	TA'd		

Attachment VI

Well Name		Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #20	"L" 1980' FSL & 660' FWL Section 35-18S-31E		7/30/57	2/20/58	Oil	4088'	10" @ 903' w/25 sxs cmt, 6-5/8" @ 3000'. 5-1/2" liner f/2930-3327'. Formation: Upper Grayburg (Top @ 3400') OH.
				2/15/68	Oil		Perf'd 2869-70' (4). Sq btm of Yates w/165 sxs cmt. Perf'd Yates 2733-2822' (15)
				6/14/94			acidized w/2000 gals. Frac'd down 2-1/2" tbg w/32,000 gals SW & 32,000# sd. Lowered tbg to 3626'. Ran new pump & rods.
East Shugart Unit #39	"P" 990' FSL & 990' FEL Section 34-18S-31E		5/17/93	7/31/93	Oil	4400' PBTD 4346'	8-5/8" 24# @ 985' w/480 sxs cmt, 5-1/2" 15.5# @ 4400' w/1020 sxs cmt, 2-7/8" @ 3954' w/pkr. Perf'd 3398-3850' (100), acid w/3150 gals 15%. Frac'd w/28,500 gals gelled 2% & 65,000# sd.
				3/31/95			Frac'd 3398-3497' w/10,000 gals XL & 29,000# sd & 2218 gals flush. Perf'd UQ1 3312-26' (15), acid w/1000 gals 15% & 30 BS. & 823 flush. Frac'd w/ 10,000 gals 30# XL & 39,000# sd & 3234 gals flush. Set SN @ 3955'.
East Shugart Unit #72	"L" 1650' FSL & 1150' FWL Section 35-18S-31E		1/18/95	2/22/95	Oil	4040' PBTD 3975'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4039' w/1150 sxs cmt, 2-7/8" @ 3933'. Perf'd 3426-34' (17), acid w/1000 gals 15% & 34 BS. Frac'd w/5500 gals 30# XL & 21,000# sd. Perf 3515-36' (15), acid w/1000 gals. Frac'd w/5500 gals 30# XL & 21,000# sd. Perf 3673-97' (14), acid w/1000 gals & 20 BS, Frac'd w/10,000 gals 30# XL & 36,000# sd. Perf 3812-14' (3), 3869-71' (3), 3874-76' (3), 3888-93' (6), F/3812-93'. acidized w/1500 gals & 30 BS, Frac'd w/15,000 gals 30# XL & 60,000# sd.
				6/12/95			Perf'd 7 Rivers 3182-3263' (15), acid w/1000 gals & 30 BS. Frac'd w/8000 gals 30# XL & 33,000# sd. Perf Yates 2744-2818' (15), acid w/1000 gals & 30 BS. Frac'd w/12,000 gals 30# XL & 60,000# sd.
East Shugart Unit #71	"M" 990' FSL & 990' FWL Section 35-18S-31E		1/9/95	3/31/95	Oil	4055' PBTD 3987'	8-5/8" 24# @ 947' w/500 sxs cmt, 5-1/2" 15.5# @ 4050' w/1238 sxs cmt, 2-7/8" @ 3953'. Perf 3152-3255' (17), acid w/1500 gals & 32 BS. Frac'd w/15,000 gals XL & 60,000# sd. Perf'd 3344-58' (15), acid w/1500 gals. Frac'd w/10,000 gals & 39,000# sd. Perf'd 3416-71' (16), acid w/1500 gals. Frac'd w/15,000 gals & 59,500# sd. Perf'd 3806-86' (15), Acid w/1500 gals. Frac'd w/16,000 gals 30# XL gel & 59,500# sand.
East Shugart Unit #26	"P" 330' FSL & 990' FEL Section 34-18S-31E		10/18/49	11/28/40	Oil	3637' PBTD 3619'	8" @ 970' w/50 sxs, 7" @ 3304' w/100 sxs, Tbg @ 3433'. Perfs: 2670-2700', 2712-22', 2744-46'. OH f/3404-3621'. Frac'd w/11,400 gals oil & 22,800# sd. NOTE: Application to Deepen filed, csg had collapsed and may deepen at a later date?

Attachment VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #51	"P" 550' FSL & 200' FEL Section 34-18S-31E	7/8/94	7/31/94	Oil	4030' PBTD 3966'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4030' w/953 sxs cmt, 2-7/8" @ 3962'. Perf'd 3862-70' (9), 3872-74' (3), Acid 3862-74' w/1500 gals & 15 BS, Frac'd w/500 gals prepap, 14,800 gals 30# XL & 51,400# sand.
East Shugart Unit #71	"M" 990' FSL & 990' FWL Section 35-18S-31E	1/9/95	3/31/95	Oil	4055' PBTD 3987'	8-5/8" 24# @ 947' w/500 sxs, 5-1/2" 15.5# @ 4050' w/1238 sxs cmt, 2-7/8" @ 3953'. Perf 3152-3255' (17), acid w/1500 gals & 32 BS, Frac'd w/15,000 gals XL & 60,000# sd. Perf 3344-58' (15), acid w/1500 gals, & 30 BS, Frac'd w/10,000 gals 30# & 39,000# sd. Perf 3416-71' (16), acid w/1500 gals & 32 BS, Frac'd w/15,000 gals & 59,500# sd. Perf 3806-10' (5), 3862-66' (5), 3882-86' (5), Acid 3806-86' w/1500 gals & 30 BS, Frac'd w/16,000 gals 30# XL & 59,500# sd.
East Shugart Unit #70	"M" 330' FSL & 280' FWL Section 35-18S-31E	1/2/95	5/12/95	Oil	4045' PBTD 3936'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4043' w/1400 sxs cmt, 2-7/8" @ 3904'. (OET), Perf 3150-3262' (15), acid w/1500 gals & 30 BS, Frac'd w/10,000 gals & 39,000# sd. Perf 3409-57' (15), acid w/1500 gals & 30 BS, Frac'd w/10,000 gals & 35,000# sd. Perf 3783-91' (17), acid w/1000 gals Frac'd w/10,000 gals brine, 10,000 gals 30# XL & 39,000# sd. Perf 3860-69' (10) and 3881-89' (9) acid both w/2000 gals 15% & 38 BS, Frac'd w/10,000 gals 30# and 36,000# sd.
East Shugart Unit #57	"N" 375' FSL & 1950' FWL Section 35-18S-31E	9/30/94	11/13/94	Oil	4073' PBTD 3990'	8-5/8" 24# @ 949' w/500 sxs cmt, 5-1/2" 15.5# @ 4072' w/1310 sxs cmt, 2-7/8" @ 3906' (OET), Perf 3795-3802' (8) & 3812-17' (6), acid w/1500 gals & 28 BS, Frac'd w/18,000 gals 30# XL & 57,000# sd. Perf 3870-77' (8) & 3890-97' (8) acid w/1500 gals & 34 BS, Frac'd w/15,000 gals 30# XL & 59,500# sd.
East Shugart Unit #32	"M" 100' FSL & 990' FWL Section 35-18S-31E	9/23/69	10/9/69	WIW	3978' PBTD 3943'	8-5/8" 24# @ 929.67' w/400 sxs cmt, 4-1/2" 9.5# @ 3978.16' w/450 sxs, 2-7/8" tbg w/pkr @ 2833.19'. Perfs 3352-3891' (22), acid w/1600 gals, Frac'd w/40,000 gals & 40,000# sd. Perf: 2744-2829' (10), acid w/750 gals, Frac'd w/23,000 gals & 25,000# sd. Set RBP @ 2900' w/2 sx sd. Pkr @ 2400'. Cmt sq Yales 2744-2829' w/300 sxs, Found leak in 4-1/2" csq @ 1985'. Perf'd 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. Hole in 75th ft tbg. Set pkr @ 2879.11'. SI, Temporarily Abandoned.
		2/24/95		TA'd		

Attachment VI

Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #74	"N" 510' FSL & 2455' FWL Section 35-18S-31E	7/4/95	8/27/95	Oil	4070' PBTD 4000'	8-5/8" 24# @ 950' w/500 sxs cmt, 5-1/2" 15.5# @ 4070' w/1115 sxs cmt, 2-7/8" @ 3944' (OET), Perfs: 3457-3814' (17), acid w/2000 gals, Frac'd w/25,000 gals XL & 93,000# sd. Perfs: 3905-16' (23), acid w/1000 gals, Frac'd w/15,000 gals XL & 46,000# sd. (Queen Formation)
East Shugart Unit #23	"O" 330' FSL & 2329' FEL Section 35-18S-31E	3/7/60	7/15/60	Oil	4095'	8" @ 783' w/50 sxs cmt, 7" @ 3530' w/100 sxs cmt, 4-1/2" liner f/3000-4080' w/90 sxs cmt, OH 4084-93', treated w/69,000# sd, 1000 BO & 250 gals acid Set CIBP @ 3950' TOC @ 2302', Perf'd Queen 3362-3911' (13), Repert'd (18) Treated w/900 gals, Frac'd w/35,000 gals wr & 35,000# sd. Perf'd Yates 2773-2838' (11), Repert'd. Acid w/600 gals, Frac'd w/18,000 gals, 18,000# sd. Set 7" Bkr "D" pkr @ 2855', Ran LS w/pkr @ 2732' Ran SS set in dual pkr.
East Shugart Unit #19						
See Attached Downhole Schematic for Plugged & Abandoned well.						

Attachment VI

Well Name	Operator	Location	Spud Date	Completion Date	Type of Well	Depth/PBD	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, 5-1/2" @ 4040' w/125 sxs cmt, Perfs: 3840-58'. Frac'd w/31,710 gals, IP: 40 BO, 50 BW.
State CK #1	Texaco	"E" 1650' FNL & 330' FWL Section 36-18S-31E	10/22/59	12/7/59	Oil	4000'	8-5/8" @ 940' w/500 sxs cmt, 5-1/2" @ 4000' w/300 sxs cmt, Perfs: 3622-3936', acid w/1000 gals, Frac' w/40,000 gals & 40,000# sd. IP: 40 BO.
Federal 26 #1	Ozaik Expl. Inc	"O" 330' FSL & 1980' FEL Section 26-18S-31E	1/10/75	5/17/76	Oil	4100'	8-5/8" @ 790' w/400 sxs cmt, 4-1/2" @ 4100' w/550 sxs cmt, Perfs: 2677-2752', acid w/3000 gals, Frac'd w/20,000 gals & 20,000# sd. IP: 21 BOPD.
Keohane-Federal #1	Enerloc Resources	"M" 330' FSL & 330' FWL Section 25-18S-31E	11/30/57	3/3/58 7/13/64	Oil	2911' 3960'	8-5/8" @ 955' w/50 sxs cmt, 7" @ 2911' w/200 sxs cmt, Perfs: 2840-58'. Frac'd w/15,000 gals, IP: 20 BOPD. Perfs: 3615-3908'. Frac'd w/27,840 gals & 38,000# sd. IP 8 BO. 4-1/2" @ 3925' w/35 sxs cmt,
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, 4-1/2" @ 4186' w/500 sxs, Perfs: 3460-3586'. Acid w/500 gals, Frac'd w/40,000 gals & 40,000# sd. IP: 60 BOPD, 3 BW.
Greenwood UT Fed 12	Westall	"F" 1650' FNL & 1980' FWL Section 35-18S-31E	2/21/79	6/20/79	Gas	11,800'	13-3/8" @ 765' w/800 sxs cmt, 9-5/8" @ 4600' w/1750 sxs cmt, 5-1/2" @ 11,800' w/2700 sxs cmt, Perfs: 11,054-080' acid w/4000 gals, f/9192-9300' acid w/6000 gals, IP 11,492-11,581' 4500 MCFD FTP 1350 psi. Perfs: 11492-11,508', 11566-581'.

Attachment VI

Well Name	Operator	Location	Spud Date	Completion Date	Type of Well	Depth/PBD	Completion Record
Hinkle Federal 12-B	Ray Westall	"P" 330' FSL & 990' FEL Section 35-18S-31E	5/15/80	7/23/80	Oil	4200'	8-5/8" @ 672' w/250 sxs cmt, 4-1/2" @ 4200' w/150 sxs cmt, Perfs: 3580-3770'. Acid w/500 gals, Frac'd w/40,000 gals & 40,000# sd. IP: 15 BOPD, 25 BW.
Greenwood Fed "G" #13	Amoco Prod	"N" 660' FSL & 2310' FWL Section 35-18S-31E	8/1/79	9/28/79	Oil	12,000'	13-3/8" @ 795' w/845 sxs cmt, 9-5/8" @ 4800' w/2000 sxs cmt, 5-1/2" @ 12,000' w/2000 sxs cmt, Perfs: 11,684-11,788' acid w/300 gals, IP 10 500 MC/D.
				6/11/84	D&A WO	12,000'	8210-8310' acid w/3500 gals, 7210-7311' w/4000 gals acid.
State #2	Westall	"B" 330' FNL & 2310' FEL Section 2-19S-31E	10/13/59	11/29/59	Oil	3587'	8-5/8" @ 920' w/50 sxs cmt, 5-1/2" @ 3585' w/120 sxs cmt, Perfs: 3443-83', acid w/250 gals, Frac'd w/44,080 gals & 81,000# sd. IP 90 BOPD, 10 BW.
				9/6/61	Oil WO	4121'	4-1/2" @ 4121' w/60 sxs cmt, Perf: 4092-4104' frac'd w/1000 bbls & 90,000# sd.
Ohio State #1	Ray Westall	"C" 330' FNL & 1650' FWL Section 2-19S-31E	10/1/45	12/10/45 6/12/59	D&A Oil WO	3953'	8-1/4" @ 910' w/50 sxs cmt, 7" @ 3337', 4-1/2" @ 3890' w/250 sxs cmt, Acid f/3804-3853' w/250 gals, frac w/16,800 gals, Acid f/3414-3470' w/16,800 gals, IP: 117 BOPD, 3 BW.
State "A" #6	Westall	"C" 660' FNL & 1980' FWL Section 2-19S-31E	10/3/79	10/24/82	Oil	11,970'	13-3/8" @ 804' w/845 sxs cmt, 9-5/8" @ 4797' w/2225 sxs cmt, 5-1/2" @ 11,952' w/2425 sxs cmt, 2-3/8" @ 3900'. Perfs: 3892-3922' & 4101-4110' acid 3892-4110' w/500 gals acid, frac'd w/40,000 gals, PTD Treatment: 11,747-11,792 6500 gals acid, 11,664-728' 6000 gals acid, 9936-10,004' 5000 gals acid, 7918-32' 11,416 gals acid. IP 3892-4110 15 BO, 15 BW
State #2	Westall	"D" 990' FNL & 330' FWL Section 2-19S-31E	3/18/52	4/30/52 5/5/61	TA Oil WO	3220' 4121'	8-5/8" @ 921' w/50 sxs cmt, 4-1/2" @ 4121' w/160 sxs cmt, f/3408-3889' frac'd w/82,000 lbs frac sd. IP: 3408-3889' 240 BOPD.
State #2	Westall	"D" 330' FNL & 330' FWL Section 2-19S-31E	5/4/39	9/18/39	Oil	3685'	8-1/4" @ 774' w/50 sxs cmt, 7" @ 2935', 5" @ 3275', 4" liner f/3262-3680'. Perfs: 3275-3680', 3636-75' treated w/400 qts XPLO IP: 3275-3680' 30 BOPD.
State #3	Westall	"F" 1650' FNL & 1650' FWL Section 2-19S-31E	9/13/60	10/7/60	Oil	4500'	8-5/8" @ 323' w/80 sxs cmt, 5-1/2" @ 4217' w/300 sxs cmt, acid 4094-4106' w/250 gals acid, frac'd w/42,000 gals, IP: 240 BOPD, 24 BW.
McFadden - Federal #1	Jack Piemons	"A" 330' FNL & 330' FEL Section 3-19S-31E	8/7/38	12/12/38	Oil	2748'	8" @ 900' w/50 sxs cmt, 7" @ 2635' w/100 sxs cmt, Perfs: 2673-93' w/40 qtr XPLO, IP: 54 BOPD.
				7/30/58 12/19/59	Oil WO Oil WO	2775' 3850'	2635-2690' - frac'd w/13,000 gals, IP: 20 BOPD 3398-3806' frac'd w/25,200 gals, IP 75 BOPD.

PEA 12/02/80



ENGINEERING CHART

SHEET NO

OF

FILE

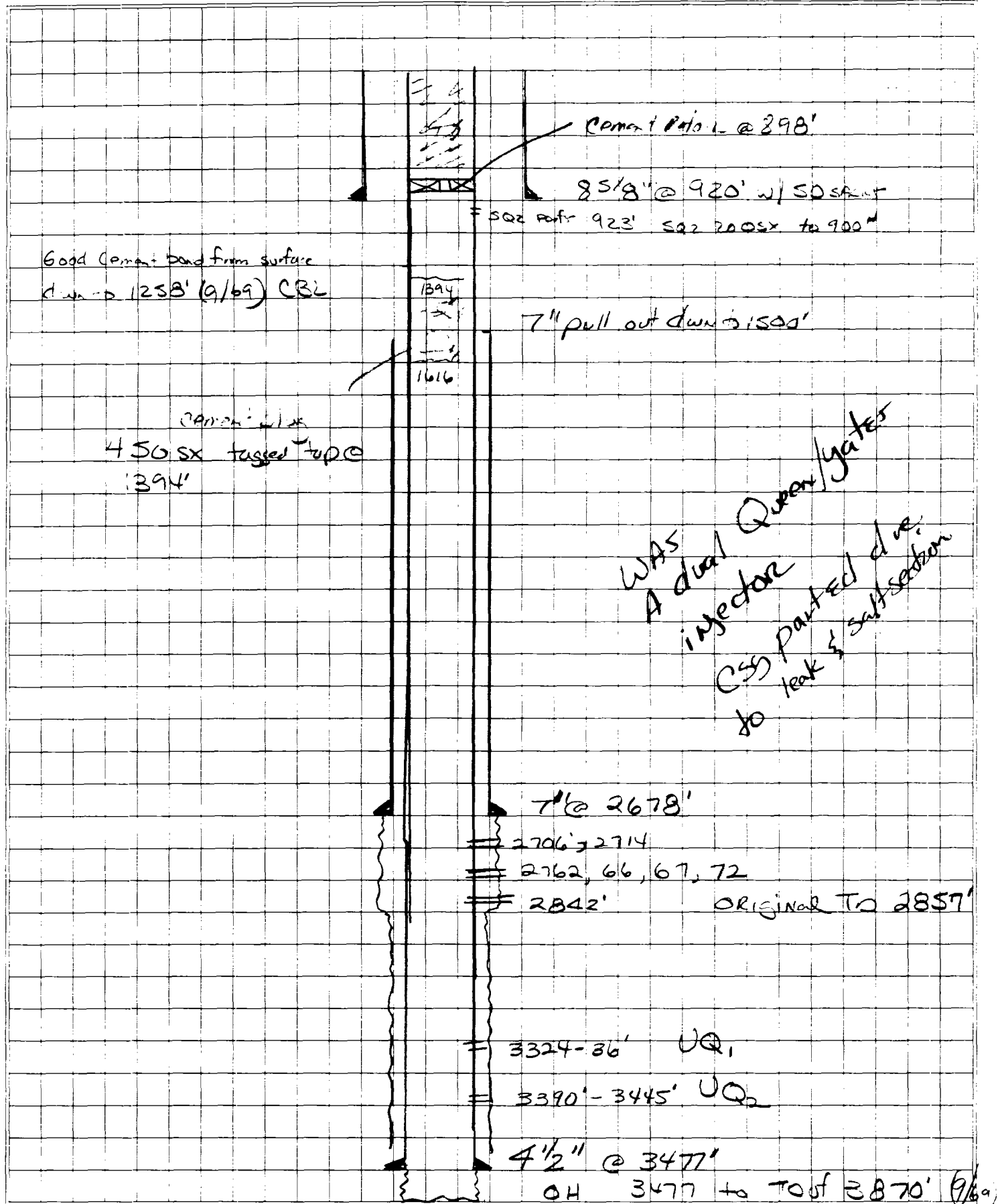
DATE

9/23/92

BY

LSF/ma

SUBJECT: EAST Street # 19



Well Name	Location	Spud Date	Completion Date	Type of Well	Depth/PBTD	Completion Record
East Shugart Unit #6	"C" 990' FNL & 2310' FWL Section 35-18S-31E	6/27/58	6/27/58	Originally Oil, converted to Wtr Inj	4292'	Perfs: 2698-3877'. Sd frac'd 50,000# sd and 1175 BO f/3801-3877'. Sd frac'd w/50,000# sd and 712 BO f/3698-2774'. Set CIBP @ 3510'. Perf'd 2814-3468'. (8). Acid w/1500 gals w/BS. Frac'd 3360-3468' w/26,880 gals wtr & 21,000# sd. Set Baker pkr @ 2855'. Set Lwr 2-3/8" tbg. SA & dual pkr @ 2862.14'. Set Up'r 2-3/8" tbg @ 2633.84'. Start water inj down both strings Drid out pkr & CIBP @ 3510'. Cind out to 4000'. Perf'd Queen 3683-98' & 3572-78' w/2 spf. Perf'd Yates 2649-58'. Treated 3683-88' w/2000 gals 15%. Treated 3572-78' w/2000 gals 15%. Set pkr @ 2850'. Ran dual string @ 2850' & 2600'. Resumed wtr injection POOH w/pkr. Set plug in pkr @ 2850'. Spot 4 sx sd on top. Set cmt retr @ 2595'. Sq Yates 2649-2817' w/700 sxs cmt, Sq #2 w/500 sxs, Sq #3 w/1000 sxs, Sq #4 w/1075 sxs. Spot 370 sxs cmt on top of retr. Drid out cmt to 2587'. Perf'd 2220' (2). Set cmt retr @ 2156'. Pmpd 375 sxs cmt. Perf'd 972' (2). Set cmt retr @ 946'. Pmpd 300 sxs cmt. Drid out cmt retrs. Set pkr @ 2200'. Set pkr @ 2178'. Cmt retr @ 2177' 100 sxs. Re-sq w/130 sxs. Drid out retr @ 2177'. Spot acid @ 2220'. Cmt retr @ 2180'. Sq 2220' w/216 sxs. Drid out cmt retr @ 2180'. Sq Perfs @ 972' w/130 sxs. Drid out cmt. Drid retr @ 2595 & cmt to 2719'. Cmt 2760-2820'. Set pkr @ 2580'. Re-sq 2649-2817' w/500 sxs. Drid out cmt. Set pkr @ 2526. Pmpd 150 sxs cl "C". Pmpd 110 sxs. Drid out cmt to 2823'. Set pkr @ 2526. Pmpd 150 sxs cmt. 2-7/8" OE tbg to 2815'. Pmpd 30 sxs cl "C". Set pkr @ 2526'. Drid out cmt. Set tbg in pkr @ 2850'. SWIW thru Queen 3360-3877'.
East Shugart Unit #8	"A" 990' FNL & 990' FEL Section 35-18S-31E	9/15/58	1/21/59	Oil	3935'	8" @ 850' w/50 sxs cmt. 7" @ 3935' w/100 sxs cmt. Tbg @ 3900'. Perf 3890-3900'. Sd frac'd w/55,000# of sand and 20,000 gals of oil Perf Queen 3400-3718' (11). Treated w/1000 gals 15%. Frac'd w/40,000 gals wtr & 40,000# sd. Ran 2-3/8" prod string, pump & rods. Pmpd load wtr. Acid w/250 gals zylene & 1000 gals 15% to cin up well. Return to production.
East Shugart Unit #9	"B" 990' FNL & 1500' FEL Section 35-18S-31E	9/22/94	12/8/94	Oil	4044' PBTD 3990'	8-5/8" 24# @ 949' w/500 sxs. 5-1/2" 15.5# @ 4043' w/900 sxs. 2-7/8" OET @ 3889' Perfs (a) 3712-20' (7); (b) 3823-29' (13); 3870-73' (7); 3876-3880' (9). Acid (a) w/2000 gals. Frac'd w/15,000 gals XL & 59,500# sd. Acid 3870-80' w/2000 gals 15%. Frac w/1000 gals 2% + 9500 gals 30# XL 38,160# sd. Acid (b) w/1500 gals 15%. Frac'd w/1000 gals 2% KCL & 9500 gals XL & 36,000# sd.

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

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.

85.0258%

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.

VEPR APPROVAL
District Production Supervisor

L. Troop

11/18/80
Date

Land (Include Acreage Being Released, if any):

No loss of interest involved.

By: C. J. McClain for C. K. Date: 11/18/80

Geology:

No prospective zones above damaged casing. Concur with engineering.

By: D. E. Daugherty 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: J. H. Howard Date: 11/18/80

Administrative (Salvage Estimated and Disposition Recommendation):

By:

Date:

Production:

Rec. P & A.

By: K. J. Jensen

Date: 11-19-80

Recommendation and/or Approval:

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

K. J. Jensen for C. E. Cardwell

District Manager

Region Manager

Exploration and Producing Operations
Vice-President

Date

Date

Date

AR3B-771-B

Executive Vice-President

Date

Attachment VII

Devon Energy Corporation
East Shugart Unit #9
990' FEL and 1650' FNL
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 #9
990' FEL and 1650' FNL
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 #9
990' FEL and 1650' FNL
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:

Apache Corporation

Tom Boyd Drilling Co. Inc.

Ozark Expl Inc.

Ray Westall

Amoco Production Co.

Keohane & 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.

ATTACHMENT III (tabular)

Well Data

- A.
- (1) East Shugart Unit #24
990' FSL and 1650' FWL
Section 35-18S-31E
Eddy County, NM
 - (2) Please refer to the wellbore schematic labeled Attachment III - (schematic) Cement was circulated back to surface on the surface string and the production string. (Also see schematic for any existing tbg and/or liner used)
 - (3) Tubing will be 2-3/8" fiberglass or internally coated, set @ 3270'. No additional liner material is anticipated.
 - (4) A 5-1/2" x 2-3/8" Loc-set Pkr will be set @ 3270'.
- B.
- (1) The injection formations will be the Queen Sands in the Shugart field. (Y-SR-Q-G)
 - (2) The proposed intervals are 3350-3897' . The injection interval will be through existing perforations. (See Schematic)
 - (3) This well was originally drilled and completed as an oil well producing from the Yates-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 3350', there are no known lower oil formations.

ATTACHMENT III (Schematic)

East Shugart Unit #24
990' FSL and 1650' FWL
Section 35-18S-31E
Eddy County, NM

devon

ENERGY CORPORATION

SUBJECT: East Shugart Unit #24
990' FSL + 1650' FWL
Section 35-18S-31E

SHEET NO. _____ OF _____

FILE _____

DATE _____ BY _____

PROPOSED

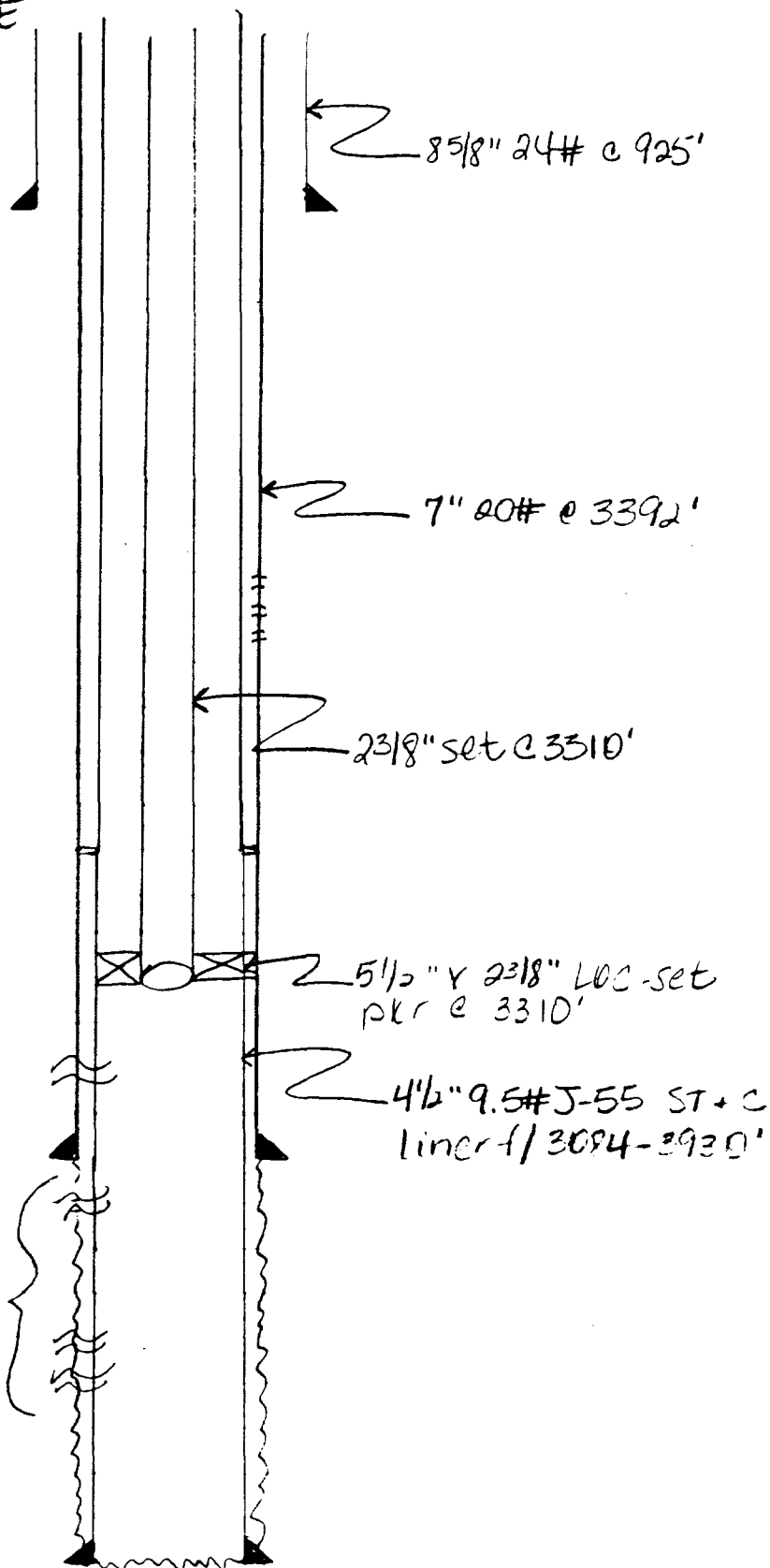
Drill out CIBP @ 2075',
Tie back liner to
surface.

Perfs: 3355'-62'

Perfs: 3430-66

Perfs: 3561-92'

Perfs: 3574-97'



ATTACHMENT III (Schematic)

East Shugart Unit #24
990' FSL and 1650' FWL
Section 35-18S-31E
Eddy County, NM

Logs: GR/N 3-30-57
GR/N 7-17-69

14.8/78 Caliper Log 7-17-69



ENGINEERING CHART
deepened 7/69

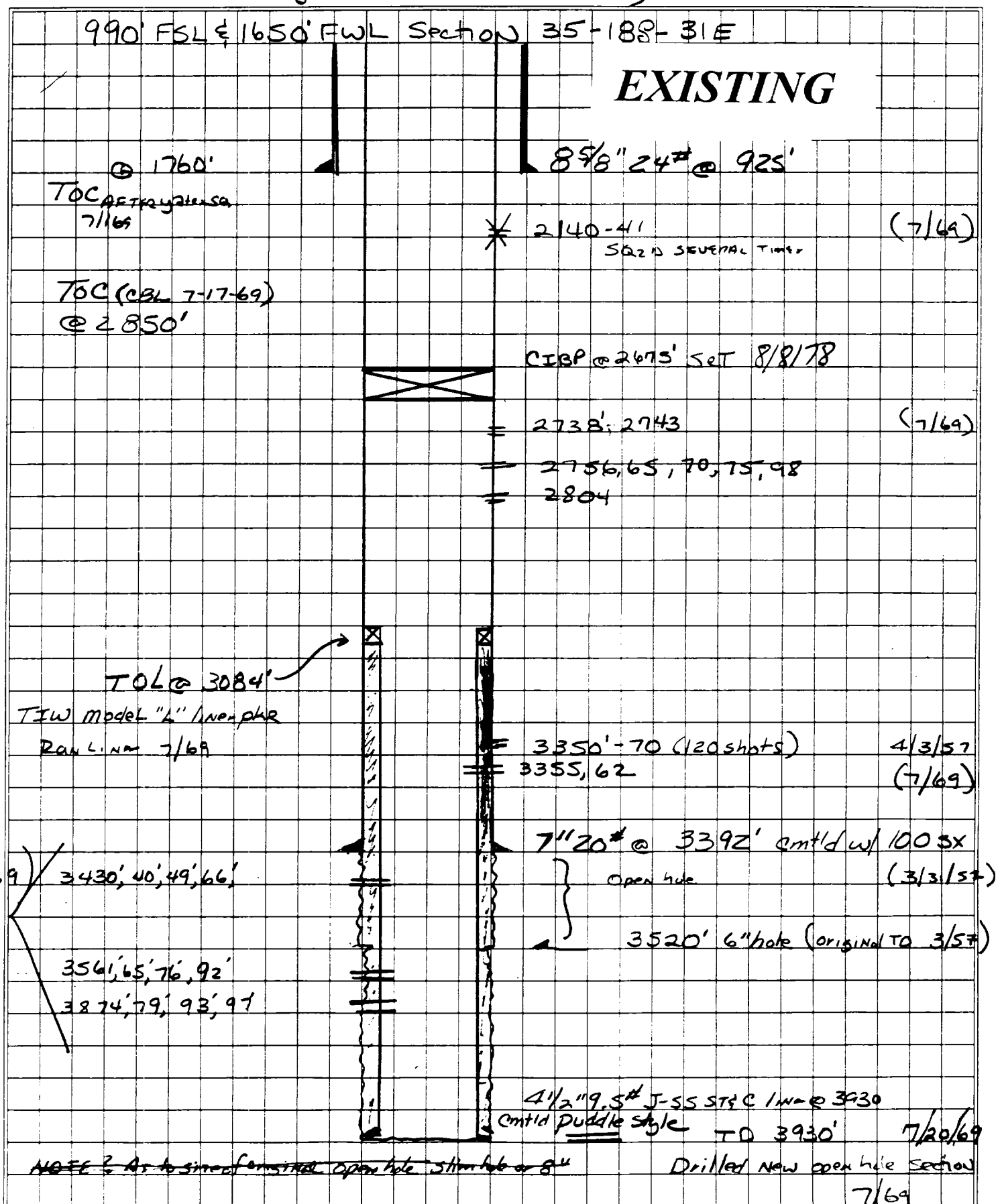
SHEET NO. OF

FILE

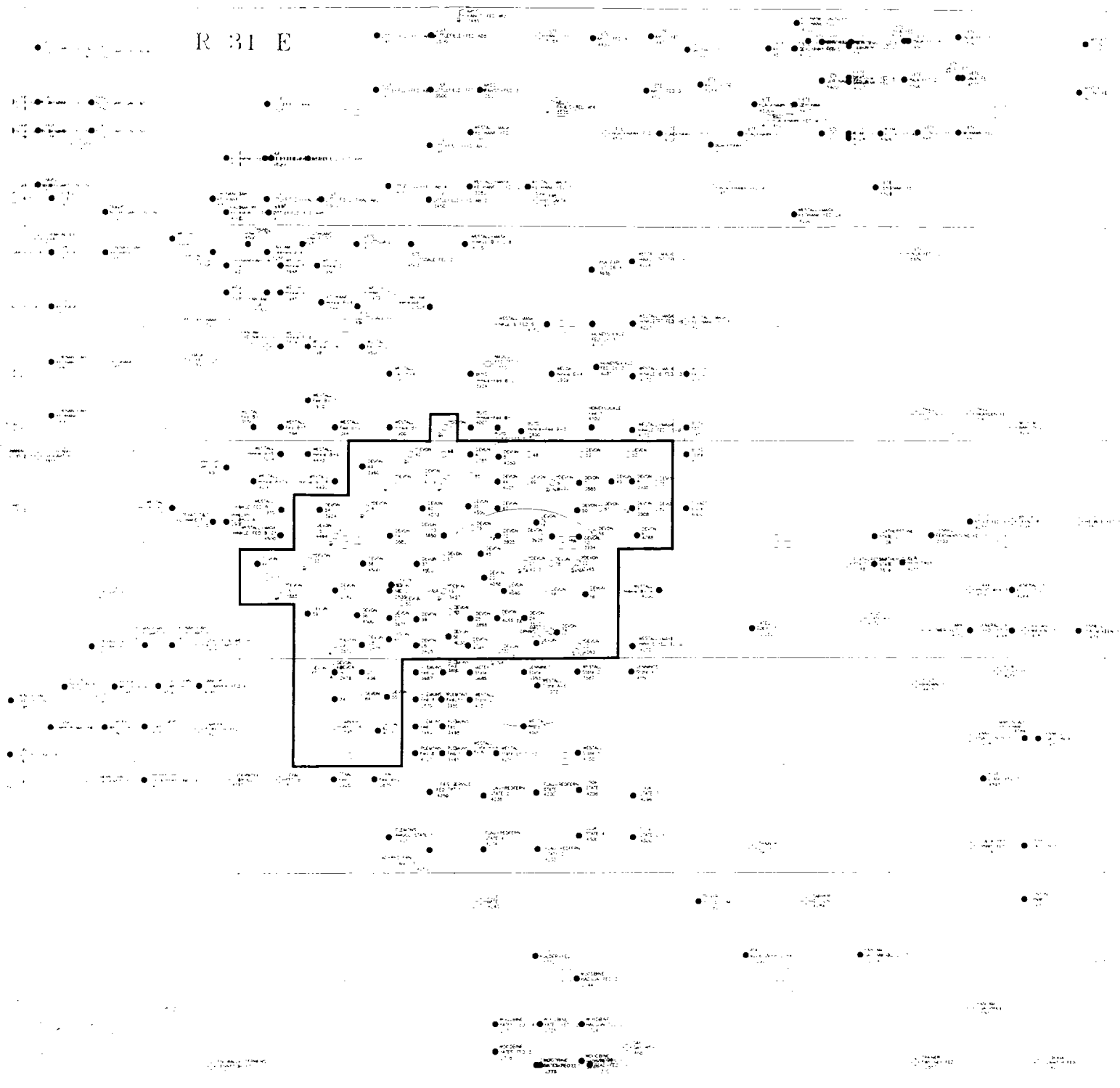
DATE 9/24/92

BY L.S. Powell

SUBJECT: EAST Shugart #24 (Hinkle #5 "A")



Attachment V



Attachment VII

Devon Energy Corporation
East Shugart Unit #24
990' FSL and 1650' 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 #24
990' FSL and 1650' FWL
Section 35-18S-31E
Eddy County, NM

Geology and Lithology

Injection zones are sand lenses within the Queens formation from 3350-3897 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 #24
990' FSL and 1650' 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:

Apache Corporation

Tom Boyd Drilling Co. Inc.

Ozark Expl Inc.

Ray Westall

Amoco Production Co.

Keohane & 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.

Affidavit of Publication

No 17636

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:

September 30, 1995
_____, 19____
_____, 19____
_____, 19____
_____, 19____
_____, 19____

That the cost of publication is \$ 28.62,
and that payment thereof has been made and will be assessed as court costs.

Amy McKay
Subscribed and sworn to before me this

5th day of October, 1995

Donna Crump

My commission expires 08/01/98
Notary Public

September 30, 1995

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 #24
990' FSL & 1980' FWL
Section 35-T18S-R31E
Eddy County, NM

and

East Shugart Unit #9
990' FEL & 1650' FNL
Section 35-T18S-R31E
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) 552-4508

Is your RETURN ADDRESS completed on the reverse side?

ESU 24 and 9 waterflood **POST 44**

SENDER:

- 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.

3. Enertec Resources Inc.
616 Mechem Drive
Ruidoso, NM 88340
Attention: Tom Boyd
State 36 #1

4a. Article Number **2 253 345 724**

4b. Service Type ☐ Registered ☐ Insured ☒ Certified ☐ COD

7. Date of Delivery **10-16-95**

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

6. Signature (Agent) *[Signature]*

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

DOMESTIC RETURN RECEIPT

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Texaco, Inc.
Post Office Box 730
Hobbs, NM 88240
Attention: Russell Pool
Keohane-Federal #1
State CK #1

4a. Article Number **2 253 345 726**

4b. Service Type ☐ Registered ☐ Insured ☒ Certified ☐ COD

7. Date of Delivery **10-17-95**

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6. Signature (Agent) *[Signature]*

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3. Article Addressed to:

Ray Westall
Post Office Box 4
Loco Hills, NM 88255

4a. Article Number **2 253 345 721**

4b. Service Type ☐ Registered ☐ Insured ☒ Certified ☐ COD

7. Date of Delivery **10-16-95**

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

6. Signature (Agent) *[Signature]*

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3. Article Addressed to:

Ozark Exploration Inc.
1525 Two Turtle Creek Village
Dallas, TX 75219
Federal 26 #1

4a. Article Number **2 253 345 725**

4b. Service Type ☐ Registered ☐ Insured ☒ Certified ☐ COD

7. Date of Delivery **10-16-95**

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

6. Signature (Agent) *[Signature]*

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3. Article Addressed to:

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

4a. Article Number
2731697591

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
10-25-95

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

Signature (Agent)
Signature (Addressee)

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

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3. Article Addressed to:

Amoco Producing Company
P.O. Box 3092
Houston, TX 77253
Greenwood Fed "G" #3

4a. Article Number
263345722

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

7. Date of Delivery
OCT 16 1995

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

Signature (Agent)
Signature (Addressee)

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3. Article Addressed to:

Bureau of Land Management
P.O. Box 1778
Carlsbad, NM 88221-1778
ATTN: Mr. Shannon Shaw

4a. Article Number
2253345728

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

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Signature (Agent)
Signature (Addressee)

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

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3. Article Addressed to:

Bureau of Land Management
P.O. Box 1778
Carlsbad, NM 88221-1778

4a. Article Number
2781292885

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
OCT 16 1995

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Signature (Agent)
Signature (Addressee)

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

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800 bwpd and a maximum
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pected.

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jections or requests for hear-
ing within 15 days to the fol-
lowing 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