STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF THE EASTLAND OIL COMPANY FOR APPROVAL OF A SECONDARY RECOVERY UNIT AND WATERFLOOD PROJECT FOR ITS POWER GRAYBURG UNIT, EDDY COUNTY, NEW MEXICO.

CASE: 5257

A P P L I C A T I O N

Comes now THE EASTLAND OIL COMPANY, by and through its attorneys, Kellahin & Kellahin, and applies to the New Mexico Oil Conservation Division for approval of its Power Grayburg Unit and for approval of its secondary recovery waterflood project in the Power Grayburg-San Andres Pool, including a surface injection limitation pressure of 1,000 psi, and in support thereof would show:

1. Applicant is the proposed operator of the Power Grayburg Unit which consists of four federal leases in the following described acreage:

T18S, R30E, NMPM

Section 1: Lots 1 & 2 (N/2NE) and S/2NE/4

T18S, R31E, NMPM

Section 5: N/2NW/4 (Lots 3 & 4)
Section 6: N/2N/2; SW/4NW/4 (lots 1 thru 5)

Containing 427.44 acres, more or less, of federal lease acreage, Eddy County, New Mexico.

2. Applicant operates the following four wells which will be converted to injection wells in the Power Grayburg-San Andres Pool:

Sibyl Federal #2 Well: 330 FEL & 1650 FNL, Section 1, T18S, R30E, perforations: 3302-3428 feet.

Arco Federal #3 Well: 330 FEL & 1980 FWL, Section 5, T18S, R31E, perforations: 3474-3542 feet.

Allied Federal #2 Well: 660 FNL & 1980 FEL, Section 6, T18S, R31E, perforations: 3333-3444 feet.

Kenwood Federal #3 Well: 660 FNL & 660 FWL, Section 6, T18S, R31E, perforations: 3315-3441 feet.

3. Applicant proposes a surface limitation pressure of 1,000 psi (which exceeds the OCD guideline of .2 psi x footage depth) said pressure limitation being below the parting pressure of the formation.

4. That the proposed unit is logically subject to operation under unitization.

5. The proposed Unit is geologically suitable for waterflood operatings.

6. The proposed Unit is appropriate to conserve natural resources by instituting secondary recovery operations.

7. A sufficient number of working interest owners have approved the unit operations in order to give the applicant, as operator, effective control of the unit.

8. Applicant has completed and attached as an Exhibit to this application the New Mexico Oil Conservation Division Form C-108 with attachments.

9. Copies of this application and the Form C-108 are being sent to all offset operators and the surface owner by certified mail as of the date of submittal of this application.

10. Approval of this application is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

Kellahin & Kellahin

By_____
W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

Case 8787

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [ ] yes [X] no

II. Operator: The Eastland Oil Company

Address: P.O.Drawer 3488, Midland,

Contact party: George D. Neal Phone: 915/683/6293

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 [X] no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

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

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

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: George D. Neal Title Vice President - Production

Signature: George D Neal Date: November 20, 1985

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Di[illegible]sion district offi[illegible]

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;

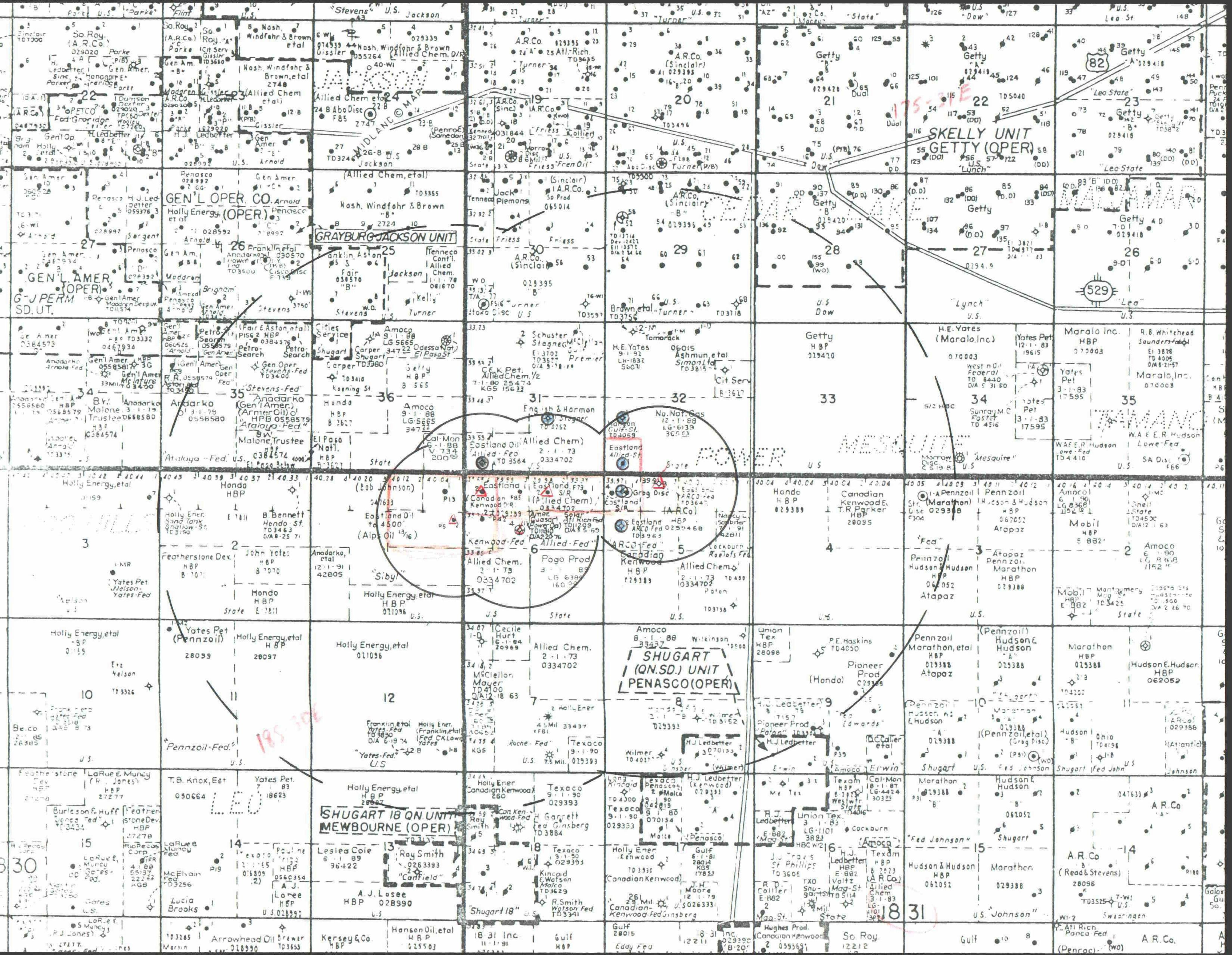
(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

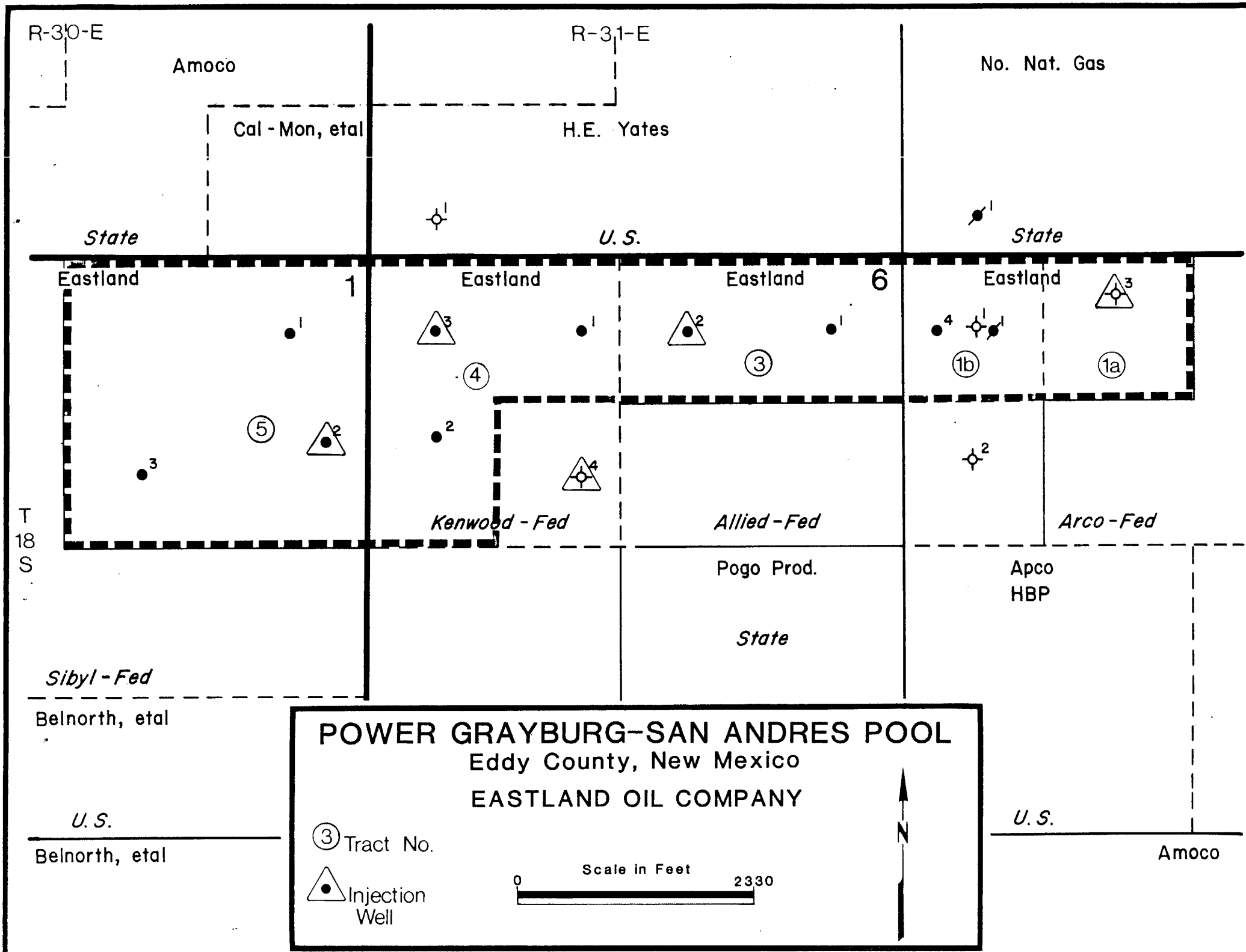
(3) the formation name and depth with expected maximum injection rates and pressures; and

(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.


GRAYBURG JACKSON UNIT
GEN'L OPER. CO. (OPER)
GEN'L AMER (OPER)
G-J PERM SD. UT.
SKELLY UNIT GETTY (OPER)
SHUGART (QN.SD.) UNIT PENASCO (OPER)
SHUGART 18 QN UNIT MEWBOURNE (OPER)
MIDLAND © MAP
18S-31E
17S-31E

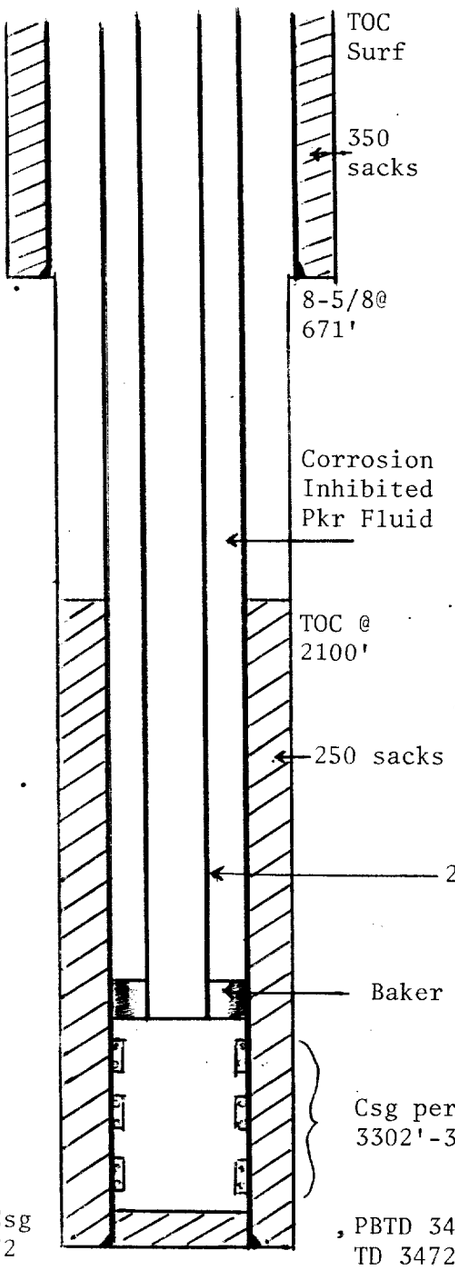

R-30-E
R-31-E
Amoco
No. Nat. Gas
Cal - Mon, etal
H.E. Yates
State
U.S.
State
Eastland
1
Eastland
Eastland
6
Eastland
1b
1a
Kenwood - Fed
Allied - Fed
Arco - Fed
T
18
S
Pogo Prod.
Apco
HBP
State
Sibyl - Fed
Belnorth, etal
U.S.
Belnorth, etal
U.S.
Amoco
POWER GRAYBURG-SAN ANDRES POOL
Eddy County, New Mexico
EASTLAND OIL COMPANY
Tract No.
Injection Well
Scale in Feet
0
2330
N

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
The Eastland Oil Company	Sibyl Federal			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
2	330' FEL & 1650' FNL	1	T18S	R30E

Producing well from Power Grayburg. Completed 9-4-71

Schematic



Tabular Data

Surface Casing

Size 8-5/8" Cemented with 350 sx.

TOC Surface feet determined by Circulation

Hole size 11"

Intermediate Casing

Size _____" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4-1/2" Cemented with 250 sx.

TOC 2100 feet determined by Calc

Hole size 7-7/8

Total depth 3472' 3443'PBTD

Injection interval (perforated)

3428 feet to 3423 feet
(perforated or open-hole, indicate which)

3365 to 3361
3312 to 3302

Tubing size 2-3/8" EUE lined with TK-75 (fusion applied powder epoxy) set in a
(material)

Baker Model AD-1 Tension packer at 3280 feet.
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Grayburg

2. Name of Field or Pool (if applicable) Power Grayburg - San Andres

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Oil & Gas

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

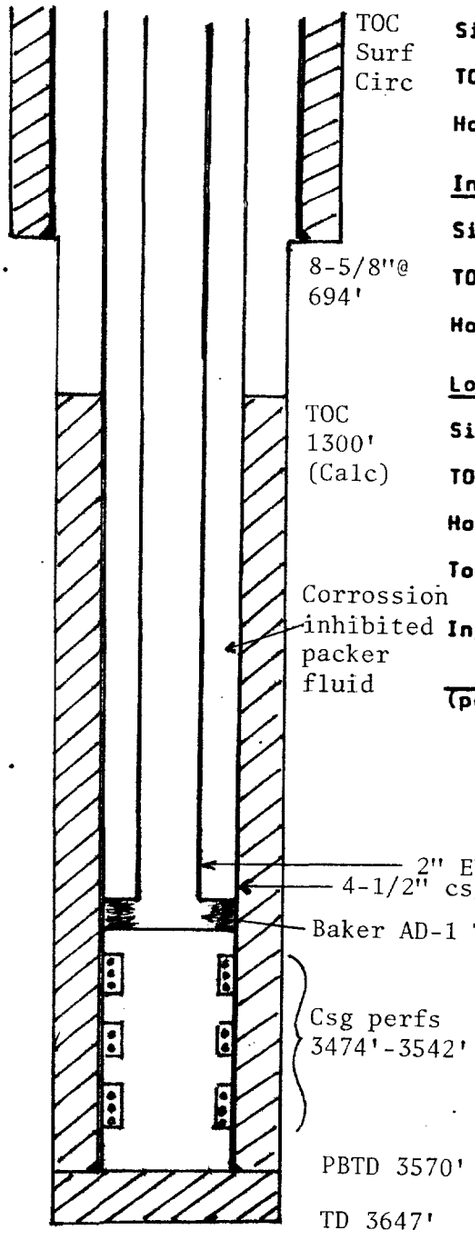
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Harvey E. Yates Co. Power Deep "32" State #1 producing from Bone Springs (7742' - 7926') in undesignated pool. No other producing zones in area.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
The Eastland Oil Company	Arco Federal			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
3	330' FNL, 1980' FWL	5	T18S	R31E

Proposed re-entry and completion as injection well

Schematic



Tabular Data

Surface Casing

Size 8-5/8" **Cemented with** 350 **sx.**

TOC Surface **feet determined by** Circulation

Hole size 11"

Intermediate Casing

Size _____" **Cemented with** _____ **sx.**

TOC _____ **feet determined by** _____

Hole size _____

Long string (Proposed)

Size 4-1/2" **Cemented with** 600 **sx.**

TOC 1300 **feet determined by** Calc

Hole size 7-7/8"

Total depth 3647' (3570'PB)

Injection interval perforated

3542 **feet to** 3536 **feet**
(perforated or open-hole, indicate which)

3504' to 3500'
3486' to 3474'

Tubing size 2-3/8 EUE **lined with** TK-75 (fusion applied powder epoxy) **set in a**
(material)

Baker Model AD-1 Tension **packer at** 3450 **feet**
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. **Name of the injection formation** Grayburg

2. **Name of field or Pool (if applicable)** Power Grayburg - San Andres

3. **Is this a new well drilled for injection?** / **Yes** XX **No**

   If no, for what purpose was the well originally drilled? Oil and gas - Plugged and abandoned 2-28-71

4. **Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)** No zones perforated. 3410-3298 w/40 sx, 2805-2693 w/40 sx, 1710-1598 w/40 sx, 758-646 w/40 sx, 30' surface w/10 sx.

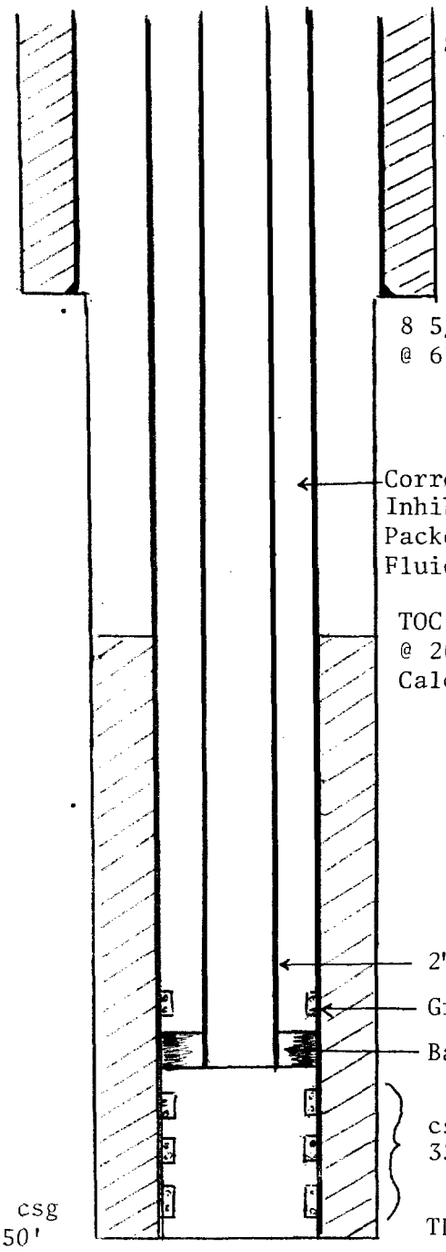
5. **Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.** Harvey E. Yates Co. Power Deep "32" State #1 producing from undesignated Bone Springs (7742-7926') 1/2 mile North. Only other producing zone in area (1 mile radius).

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
The Eastland Oil Company	Allied Federal			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
2	660' FNL, 1980' FEL	6	T18S	R31E

Producing well from Grayburg. Completed 1-17-71

Schematic



Tabular Data

Surface Casing

Size 8 5/8" Cemented with 350 sx.

TOC Surface feet determined by Circulation

Hole size 11"

Intermediate Casing

Size _____" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2" Cemented with 450 sx.

TOC 2000 feet determined by Calculation

Hole size 7 7/8"

Total depth 3550'

Injection interval (perforated)

3444 feet to 3440 feet
(perforated or open-hole, indicate which)

3394' to 3388'
3337' to 3333'

Tubing size 2 3/8" EUE lined with TK-75 (fusion applied powder epoxy) (material) set in a Baker Model AD-1 Tension (brand and model) packer at 3300 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Grayburg
2. Name of Field or Pool (if applicable) Power Grayburg - San Andres
3. Is this a new well drilled for injection? ☐ Yes ☒ No

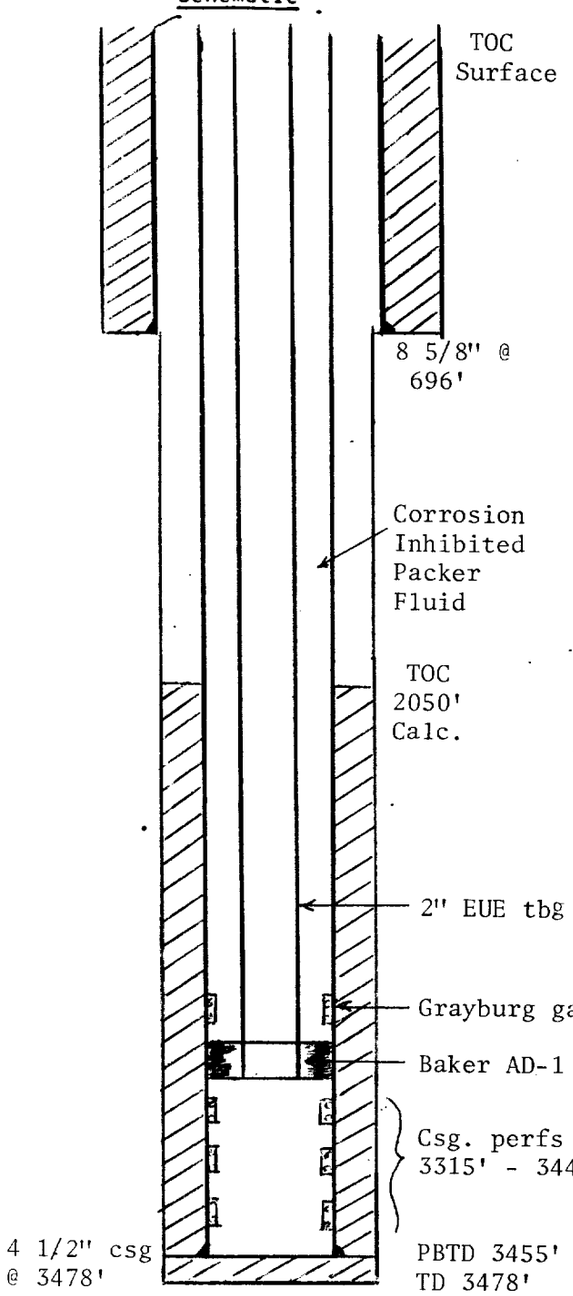
   If no, for what purpose was the well originally drilled? Oil and Gas
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Additionally perforated in Grayburg zone 3164 - 3174'. Presently open to well bore, but will be shut off by packer.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Harvey E. Yates Co. Power Deep 32 State #1 producing from Bone Springs (7742 - 7926') in undesignated pool. No other producing zones in area.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
The Eastland Oil Company	Kenwood Federal			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
3	660'FNL & 660' FWL	6	T18S	R31E

Producing well from Power Grayburg. Completed 4-2-71

Schematic



Tabular Data

Surface Casing

Size 8 5/8" Cemented with 350 sx.

TOC Surface feet determined by Circulation

Hole size 11"

Intermediate Casing

Size _____" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2" Cemented with 250 sx.

TOC 2050 feet determined by Calculation

Hole size 7 7/8"

Total depth 3478'
3455' PB

Injection interval

3441 feet to 3435 feet
(perforated or open-hole, indicate which)

3377 to 3373
3323 to 3315

Tubing size 2 3/8" EUE lined with TD-75 (Fusion applied powder epoxy) (material) set in a Baker Model AD-1 Tension (brand and model) packer at 3280 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Grayburg
2. Name of Field or Pool (if applicable) Power Grayburg - San Andres
3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? Oil and Gas
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Additionally perforated in Grayburg gas zone 3121 - 3139' and open to well bore. Will be shut off by packer.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Harvey E. Yates Co. Power Deep 32 State #1 producing from Bone Springs in undesignated pool. No other producing zones in area.

TABULATION OF WELL DATA
POWER GRAYBURG UNIT
ATTACHMENT TO FORM C-108 ITEM NO. VI

OPERATOR NAME LEASE NAME WELL NO.	LOCATION	TYPE OF WELL	DATE DRILLED	PRESENT STATUS	SIZE CASING	SET AT	SACKS CEMENT	TOP OF CEMENT	DETERMINED BY	COMPLETION INTERVAL	TOTAL DEPTH
The Eastland Oil Company											
ARCO Federal											
No. 1	D-5-18-31	Oil	08-18-70	P&A	8 5/8	712	350	Surface	Circ.	3514-3410	3684
				11-09-78	4 1/2	3684	250	2300	Calc.		3570 PB
No. 2	E-5-18-31	Dry	12-21-70	P&A	8 5/8	713	350	Surface	Circ.	3878-3868	3963
				05-10-75	4 1/2	3963	450	2030	T.S.	3723-3456	
										2663-2653	
										2160-2150	
No. 3	C-5-18-31	Dry	02-28-71	P&A	8 5/8	694	350	Surface	Circ.	None	3647
				02-28-71							
No. 4	D-5-18-31	Oil	06-29-78	Producing	8 5/8	701	350	Surface	Circ.	3524-3502	3560
					4 1/2	3560	350 Lite	Surface	Circ.	3498-3400	3536 PB
							250 "C"				
Allied Federal											
No. 1	A-6-18-31	Oil	10-09-70	Producing	8 5/8	700	350	Surface	Circ.	3831-3803	3870
					4 1/2	3870	250	2400	Calc.	3486-3392	3530 PB
No. 2	B-6-18-31	Oil	01-17-71	Producing	8 5/8	679	350	Surface	Circ.	3444-3333	3550
					4 1/2	3550	450	2000	Calc.		3519 PB
Kenwood Federal											
No. 1	C-6-18-31	Oil	12-20-70	Producing	8 5/8	687	350	Surface	Circ.	3462-3334	3845
					4 1/2	3845	450	1420	T. S.		3827 PB
No 2.	E-6-18-31	Oil	07-02-71	Producing	8 5/8	657	350	Surface	Circ.	3427-3316	3520
					4 1/2	3520	250	2095	Calc.		3497 PB
No. 3	D-6-18-31	Oil	04-02-71	Producing	8 5/8	696	350	Surface	Circ.	3441-3315	3478
					4 1/2	3478	250	2050	Calc.	3139-3121	3455 PB

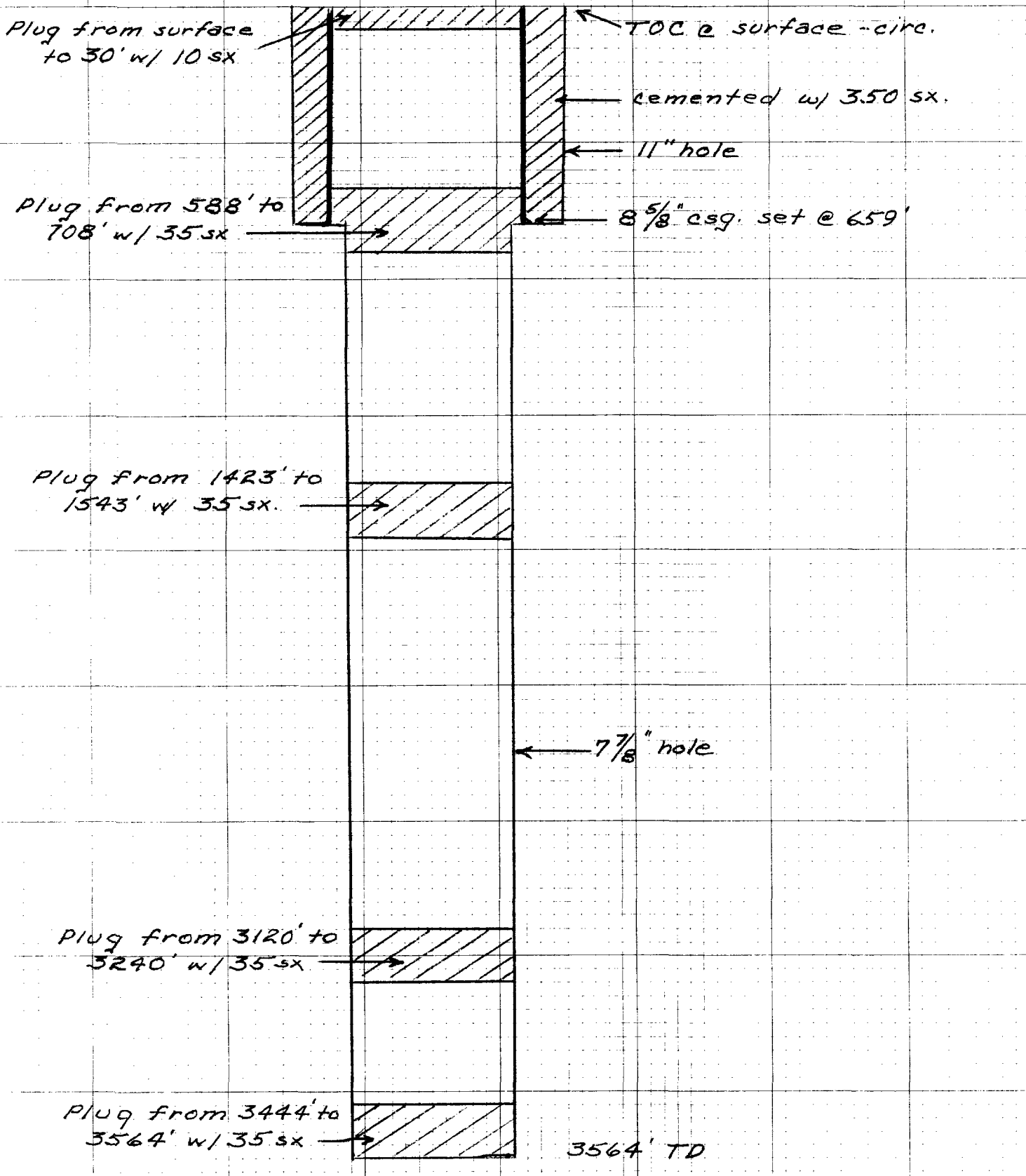
OPERATOR NAME LEASE NAME WELL NO.	LOCATION	TYPE OF WELL	DATE DRILLED	PRESENT STATUS	SIZE CASING	SET AT	SACKS CEMENT	TOP OF CEMENT	DETERMINED BY	COMPLETION INTERVAL	TOTAL DEPTH
No. 4	F-6-18-31	Dry	02-19-76	Water Disp. 08-24-77	13 3/8 8 5/8	720 4200	675 1050	Surface 1300	Circ. T. S.	3598-3506	11,810 4110 PB
Sibyl Federal No. 1	A-1-18-30	Oil	07-09-71	Producing	8 5/8 4 1/2	682 3512	350 250	Surface 2087	Circ. Calc.	3229-3194	3512 3487 PB
No. 2	H-1-18-30	Oil	09-04-71	Producing	8 5/8 4 1/2	671 3472	350 250	Surface 2100	Circ. Calc.	3428-3302	3472 3443 PB
No. 3	G-1-18-30	Oil	09-01-83	Producing	8 5/8 4 1/2	692 3698	350 1050 Lite 350 Poz	Surface Surface	Circ. Circ.	3364-3308	3700 3706 PB
Allied Federal "A" No. 1	M-31-17-31	Dry	07-11-71	P&A 07-11-71	8 5/8	659	350	Surface	Circ.	None	3564
Allied State No. 1	M-32-17-31	Oil	03-21-71	P&A 05-08-75	8 5/8 4 1/2	700 3650	350 250	Surface 2225	Circ. Calc.	3503-3493	3650 3625 PB
Harvey E. Yates Company Power Deep "32" State No. 1	L-32-17-31	Oil	04-08-85	Producing	13 3/8 8 5/8 5 1/2	608 3622 9611	500 1400 550	Surface Surface 6600	Circ. Circ. Calc.	7926-7742	11,700 8000 PB
English & Harmon STAGNER No. 1	J-31-17-31	Dry	12-19-56	P&A 03-21-57	8 1/4 5 1/2	670 4108	50 30	470 3950	Calc. Calc.	2407-2425 60 quarts	4252 2425 PB

OPERATOR NAME / LEASE NAME / WELL NO.	LOCATION	TYPE OF WELL	DATE DRILLED	PRESENT STATUS	SIZE CASING	SET AT	SACKS CEMENT	TOP OF CEMENT	DETERMINED BY	COMPLETION INTERVAL	TOTAL DEPTH
(Re-entry of above well) Ernest A. Hanson STAGNER No. 1	J-31-17-31	Dry	12-19-56	P&A 03-21-57	8 1/4	670	15	Surface Plug	Circ.	----	295 PB
(Could not clean-out below 295')											
Ernest A. Hanson Gulf State No. 1	L-32-17-31	Dry	12-03-56	P&A	8 5/8	706	100	313	Calc.	None	4059
				01-18-57	5 1/2	3814	250	2457	Calc.		3814 PB
Allied Chemical Atlantic Federal No. 1	D-5-18-31	Dry	02-07-69	P&A	11 3/4	719	700	Surface	Circ.	----	11025
					8 5/8	3994	1024	1400	Calc.		
(Re-entry of above well) Solar Oil Company Atlantic Federal No. 1	D-5-18-31	Dry	05-16-69	P&A	5 1/2	9004	200	7924	Calc.	8850	9004 PB

The Eastland Oil Company
Allied Federal "A" No. 1
Schematic of Plugging Detail
Form C-108 Item VI

P&A: 7-11-71

Location: M-31-17-31



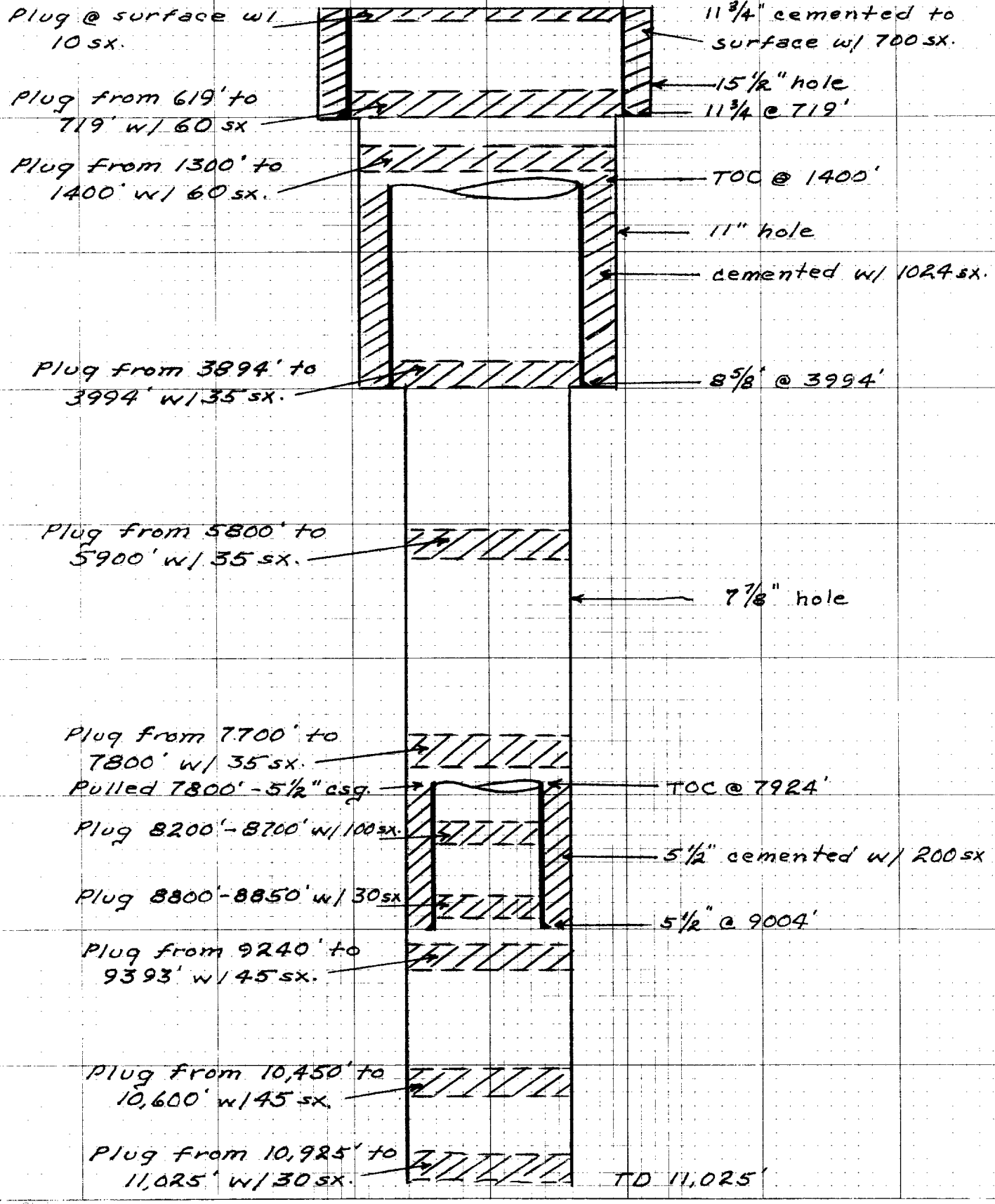
Allied Chemical Corp.

P&A 2-7-69 — Atlantic Federal No 1 — Location:

5-16-69 (Re-entered by Solar Oil Company) — D-5-18-31

Schematic of Plugging Detail

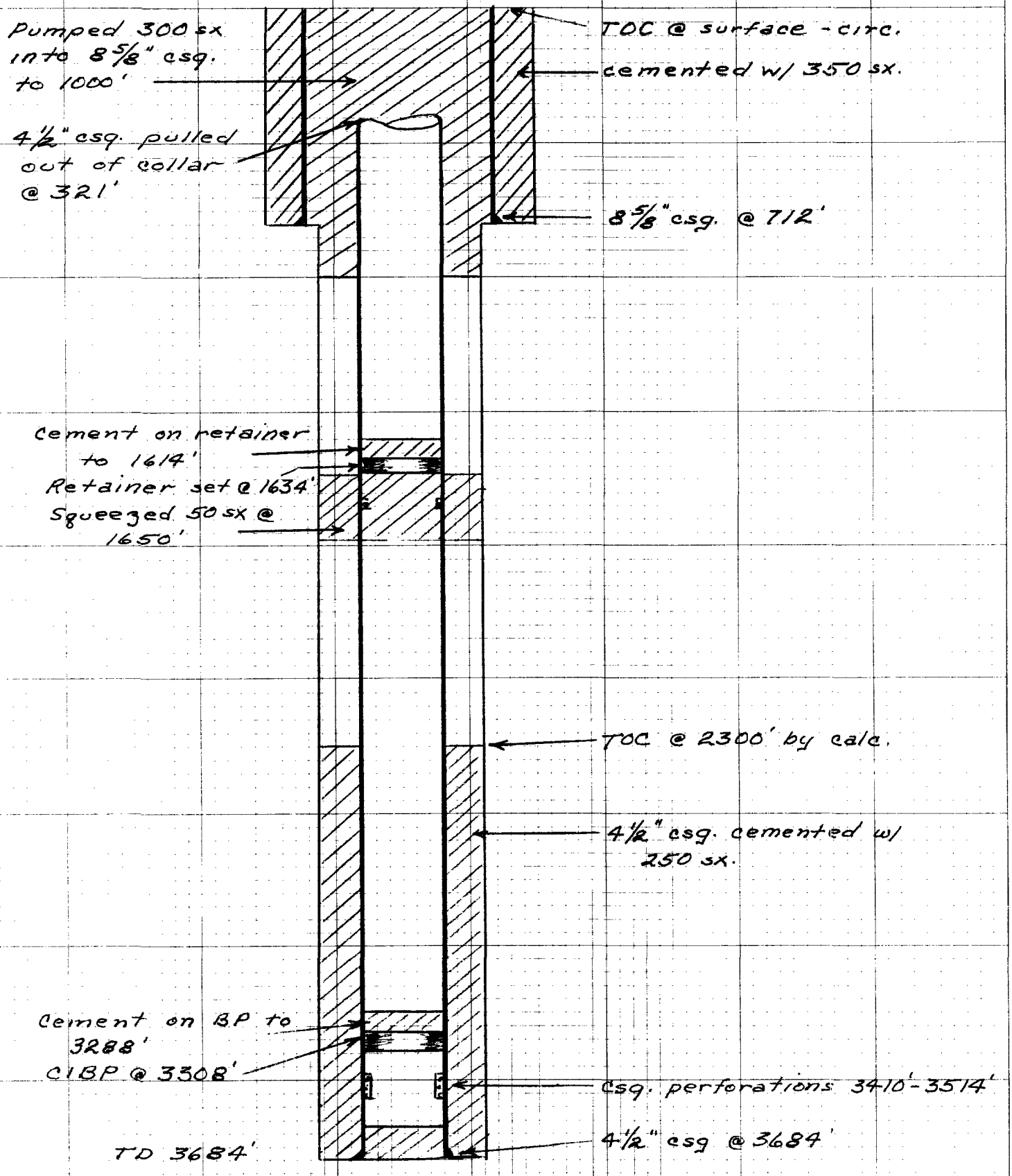
Form C-108 Item VI



The Eastland Oil Company
Arco-Federal No. 1
Schematic of Plugging Detail
Form C-108 Item VI

P+A: 11-9-78

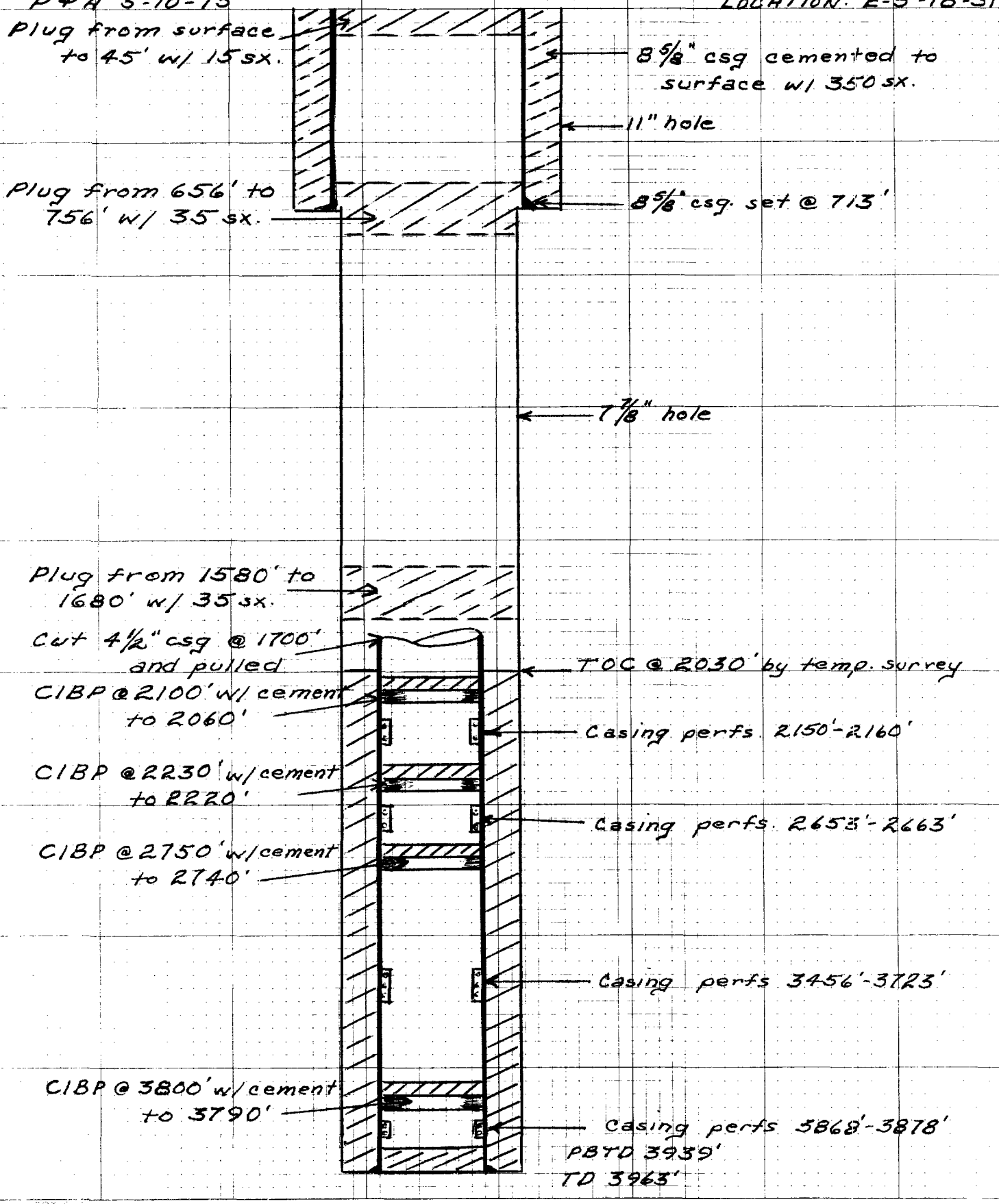
Location: O-5-18-31



The Eastland Oil Company
Arco - Federal No. 2
Schematic of Plugging Detail
Form C-108 Item VI

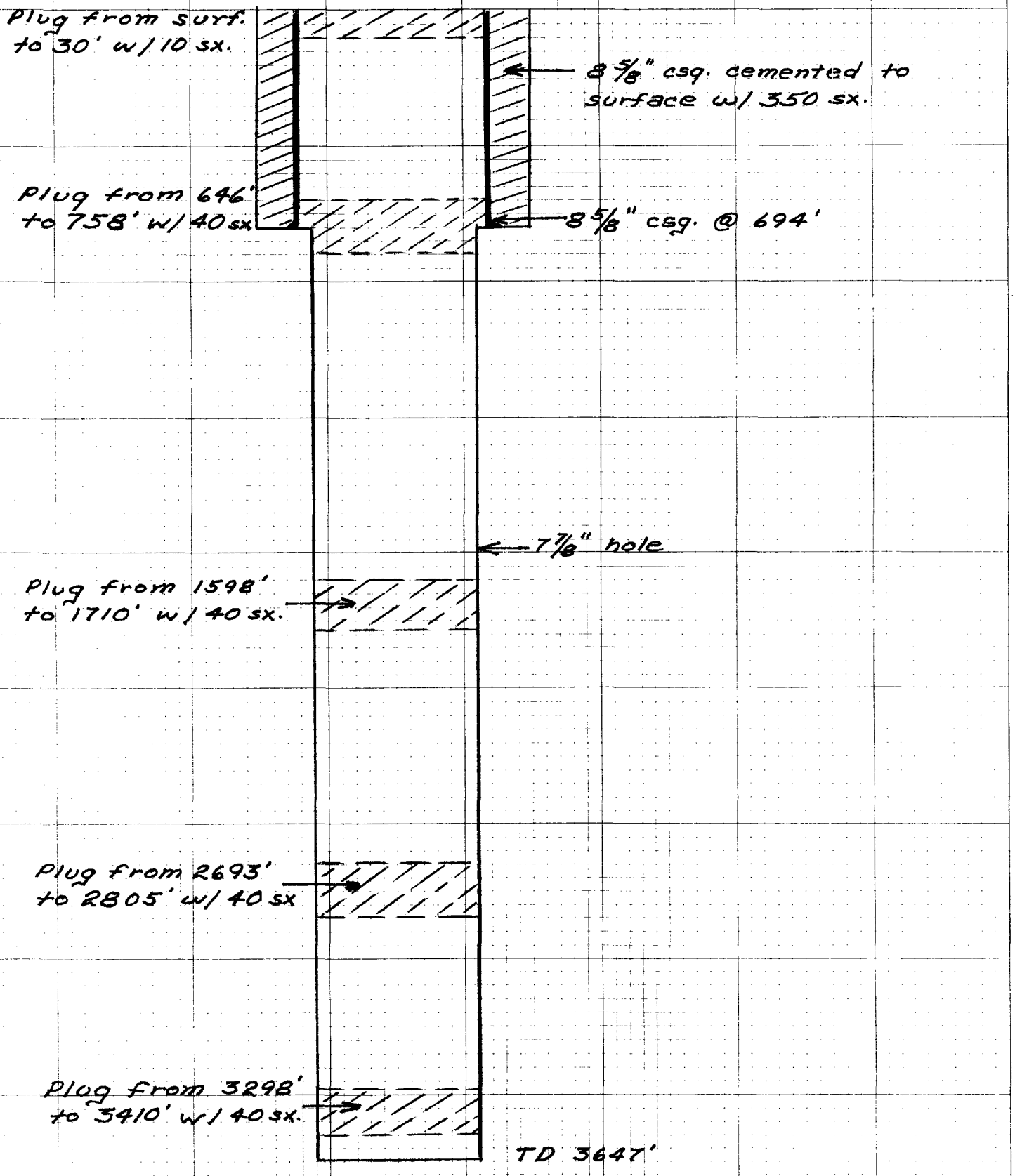
P + A 5-10-75

LOCATION: E-5-18-31



The Eastland Oil Company
Arco Federal No. 3
Schematic of Plugging Detail
Form C-108 Item VI

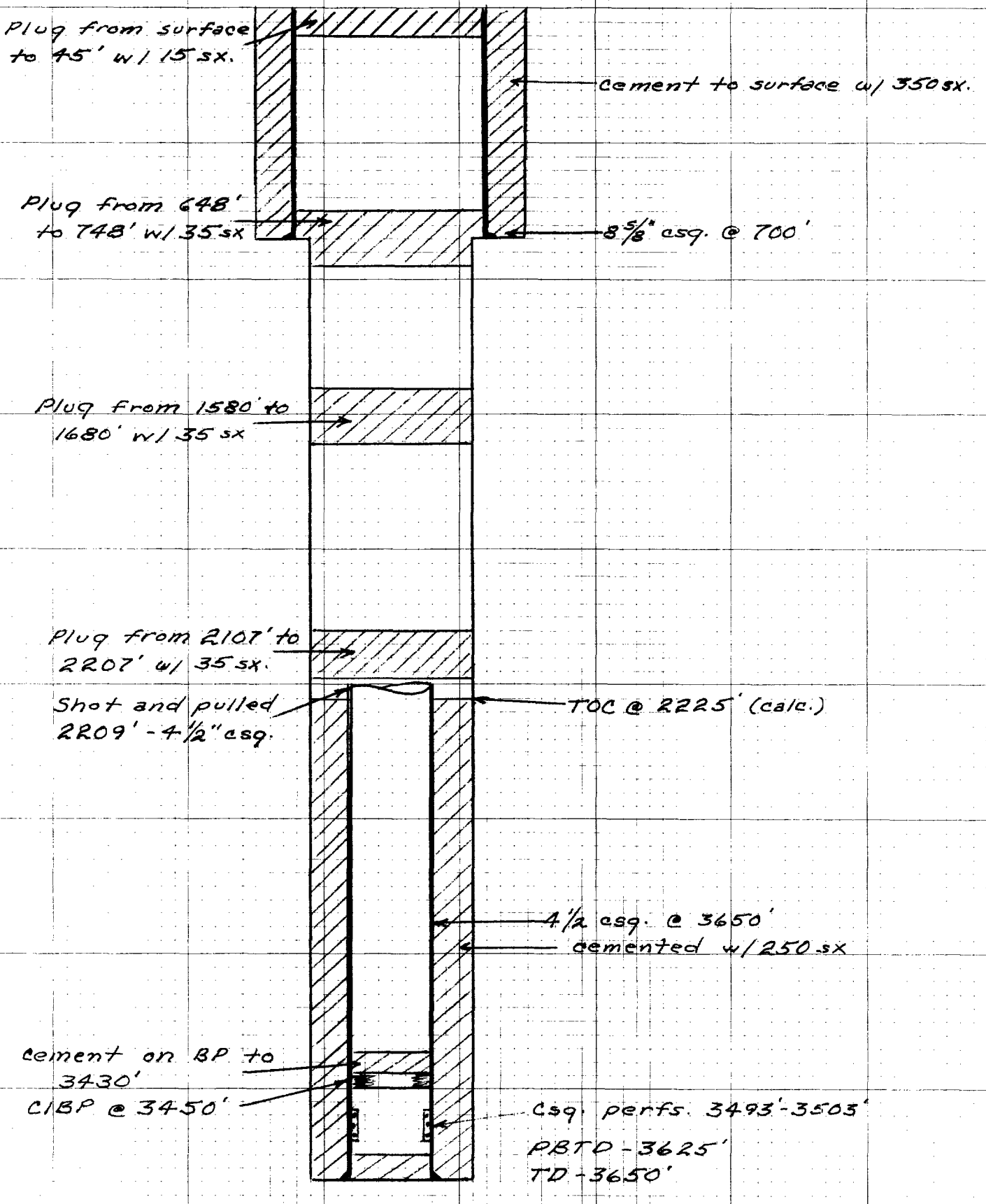
P+A 2-28-71
Location: C-5-18-31



The Eastland Oil Company
Allied State No. 1
Schematic of Plugging Detail
Form C-108 Item VI

P+A: 5-8-75

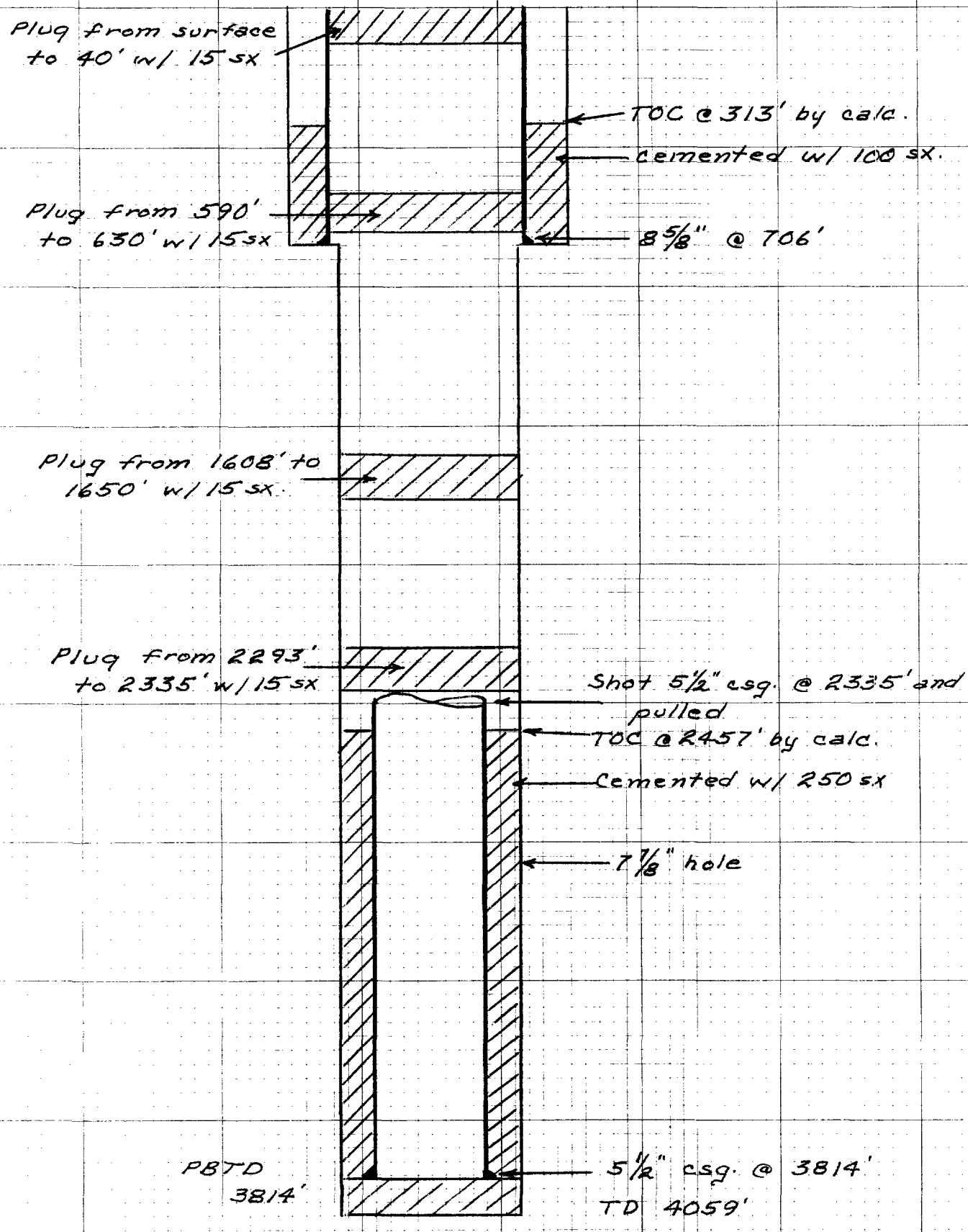
Location: M-32-17-31



Ernest A. Hansen
Gulf State No. 1
Schematic of Plugging Detail
Form C-108 Item VI

P+A 1-18-57

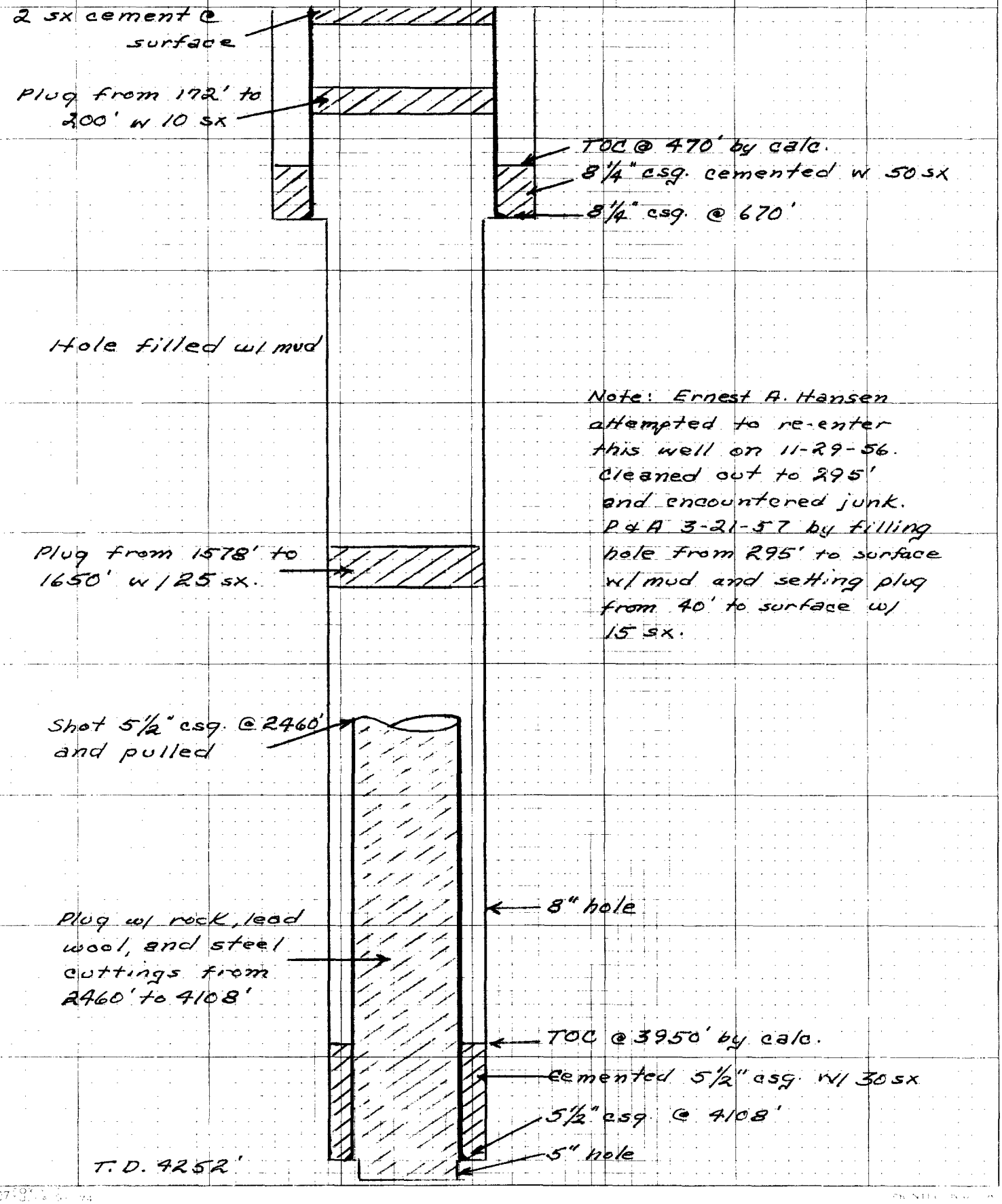
Location: L-32-17-31



English & Harmon
Stagner No. 1
Schematic of Plugging Detail
Form C-108 Item VI

P+A: 10-28-40

Location: J-31-17-31

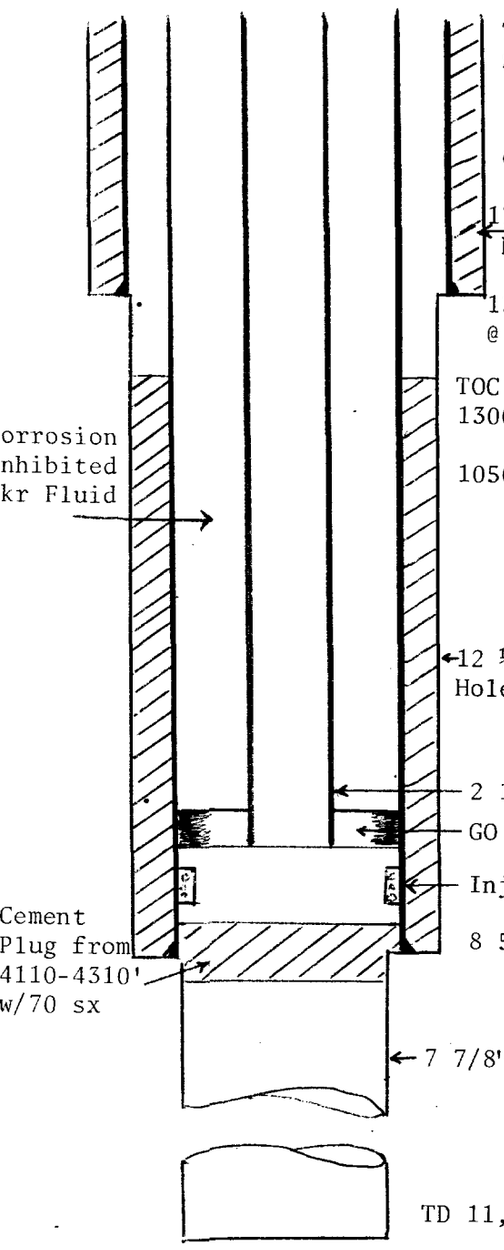


INJECTION WELL DATA SHEET

OPERATOR	LEASE			
The Eastland Oil Company	Kenwood Federal (SWD)			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
4	1980' FNL & 1980" FWL	6	T18S	R31E

Originally drilled as American Quasar Power Deep Unit No. 1

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " **Cemented with** 675 **sx.**

TOC Surface **feet determined by** Circulation

Hole size 17 1/2"

Intermediate Casing

Size 8 5/8 " **Cemented with** 1050 **sx.**

TOC 1300 **feet determined by** Temp Survey

Hole size 12 1/4"

Long string None Set

Size _____ " **Cemented with** _____ **sx.**

TOC _____ **feet determined by** _____

Hole size 7 7/8

Total depth 11,810'

Injection interval

3506 **feet to** 3598 **feet**

(perforated or open-hole, indicate which)

Tubing size 2 7/8" EUE **lined with** TK-75 (fusion applied powder epoxy) **set in a**

(material)

GO G-LOK **packer at** 3443 **feet**

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. **Name of the injection formation** Grayburg

2. **Name of Field or Pool (if applicable)** Power Grayburg - San Andres

3. **Is this a new well drilled for injection?** [ ] **Yes** [X] **No**

   If no, for what purpose was the well originally drilled? Oil and Gas

4. **Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)** No

   Dry as Morrow test by American Quasor Petroleum Co. of New Mexico and plugged back to 4110' on 2-21-76

5. **Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.** No overlying or underlying oil or gas zones productive in this area.

The Eastland Oil Company

Power Grayburg Unit

Eddy County, New Mexico

November 20, 1985

Attachment to Form C-108: Statement of Proposed Maximum Injection Pressure for Water Injection Wells

Based on required injection pressure for Eastland's Kenwood Federal No. 4, a saltwater disposal well in the Power Grayburg Pool, a maximum surface pressure of 1000 psi is proposed for this secondary recovery project. A copy of the letter from the Oil Conservation Division dated July 17, 1980 authorizing this surface pressure is attached.

7-17-80

RECEIVED JUL 2 1 1980

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

July 17, 1980

Eastland Oil Company
P. O. Drawer 3488
560 One Marienfeld Place
Midland, Texas 79702

Attention: George D. Neal

Re: Kenwood Federal (SWD) No. 4
SE/4 SW/4 Section 6,
Township 18 South, Range
31 East, Eddy County,
New Mexico

Gentlemen:

I have reviewed your request to increase injection pressure in your Kenwood Federal No. 4.

We do not allow operators to inject at fracture pressures. Therefore, based on your fracture pressure of 1100 psi, you are hereby authorized to inject at a pressure not to exceed 1000 psi surface pressure.

Very truly yours,

JOE D. RAMEY
Division Director

JDR/MH/og

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Roswell District Office
P. O. Box 1397
Roswell, New Mexico 88201

IN REPLY
REFER TO:
3180(060)

June 5, 1985

Eastland Oil Company
Attention: George Neal
P.O. Drawer 3488
Midland, TX 79702

Re: Designation of Proposed Power Grayburg Secondary Recovery Unit, Eddy, County, New Mexico

Gentlemen:

Your application of May 28, 1985, filed with the Bureau of Land Management, Roswell, New Mexico, requests the designation of the Power Grayburg Unit Area, embracing 427.44 acres, more or less, Eddy County, New Mexico, as logically subject to operation under the unitization provisions of the Minerals Leasing Act as amended.

Pursuant to unit plan regulations 43 CFR 3180, the land requested as outlined on your plat marked "Exhibit "A", Power Grayburg-San Andres Pool, Eddy County, New Mexico" is hereby designated as a logical unit area to more properly conserve natural resources by instituting secondary recovery operations.

If conditions are such that modification of said standard form is deemed necessary three copies of the proposed modifications with appropriate justification must be submitted to this office for preliminary approval.

In the absence of any other type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical with said form will be approved if submitted in approvable status within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreements submitted which, in our opinion, do not have the full commitment of sufficient lands to afford effective control of operations in the unit area.

When the executed agreement is transmitted to the District Manager, Roswell, New Mexico for approval, include the latest status of all acreage. In preparation of Exhibits "A" and "B", follow closely the format of the sample exhibits attached to the standard unit agreement form.

Sincerely yours,

Francis R. Cherry, Jr.
District Manager

POWER GRAYBURG UNIT
ATTACHMENT TO FORM C-108
LIST OF SURFACE OWNERS AND
LEASEHOLD OPERATORS WITHIN ONE-HALF MILE

1. Surface Owners: (All leases in Unit)
Federal Lands
Bureau of Land Management
Roswell District Office
P.O.Box 1397
Roswell, New Mexico 88201

2. Leasehold Operators:
Anadarko Producing Company
Box 2497, 900 Gibralter Savings Center
Midland, Texas 79702

Amoco Production Company
Box 68
Hobbs, New Mexico 88240

APCO Production Company
80 Sierra Cr., C.R. 240
Durango, Colorado 81301

ARCO Oil & Gas Company
Box 1610
Midland, Texas 79702

Belnorth Petroleum Corporation
One Petroleum Center, Bldg. 6
3300 N. "A" Street
Midland, Texas 79705

Cal-Mon Oil Company
P.O.Box 2066
Midland, Texas 79702

El Paso Natural Gas Company
Box 1492
El Paso, Texas 79978

Northern Natural Gas Company
One Petroleum Center, Bldg. 6
3300 N. "A" Street
Midland, Texas 79705

Pogo Producing Company
Box 10340, 300 Midland Tower
Midland, Texas 79702

Union Texas Petroleum Corporation
Division of Allied Chemical Corporation
P.O.Box 200128
Houston, Texas 77216

Harvey E. Yates Company
Box 1933
Roswell, New Mexico 88201