



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX _____ **X** _____
PMX _____

Gentlemen:

I have examined the application for the:

Arch Petroleum Inc *W Dellarhide Devonian Ut #122-L*
Operator Lease & Well No. Unit S-T-R *33-245-38e*
30-025-34903

and my recommendations are as follows:

OK

Yours very truly,

Chris Williams
Supervisor, District 1

BILL F. HALEPESKA

PETROLEUM ENGINEER

Texas #58052
P. O. Box 80064
915/694-5945

GEOLOGIST

Cert #2941
Midland, Texas 79708

December 15, 2000

New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504
Att: Mr. David R. Catanach

Re: West Dollarhide Devonian Unit Project - NM MI
Lea County, New Mexico
Application for Administrative Approval to Inject
into the WDDU No. 122 Well, Located 2225' FSL &
875' FWL Section 33, T-24-S, R-38-E,

Gentlemen:

Arch Petroleum respectfully submits two (2) original Applications for Authorization to Inject (Form C-108) pertaining to the captioned well and requests that same be given Administrative Approval.

Persuant thereto, please find enclosed the following:

- (1) Copy of Notification Letter sent to all offset Leasehold Operators within one-half (1/2) mile radius of the proposed injection well and to the surface owner upon which well is located, along with copies of proof of mailing; and
- (2) Proof of Legal Publication.

If you have any questions, please contact the undersigned.

Very truly yours,



Bill F. Halepeska, P.E.
Agent

Enclosure(s)

✓cc w/encl. : New Mexico Oil Conservation Division; Hobbs, NM

Arch Petroleum
WDOU No. 122

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: ARCH PETROLEUM
Address: P. O. BOX 10340, Midland, Texas 79702
Contact party: Richard L. Wright Phone: 915/685-8100
- 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 R-2248.
- 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: Bill F. Halepeska Title: Agent
Signature: *Bill F. Halepeska* Date: 12-08-00
- * If the information required under Sections II, 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 Division district office.

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) 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

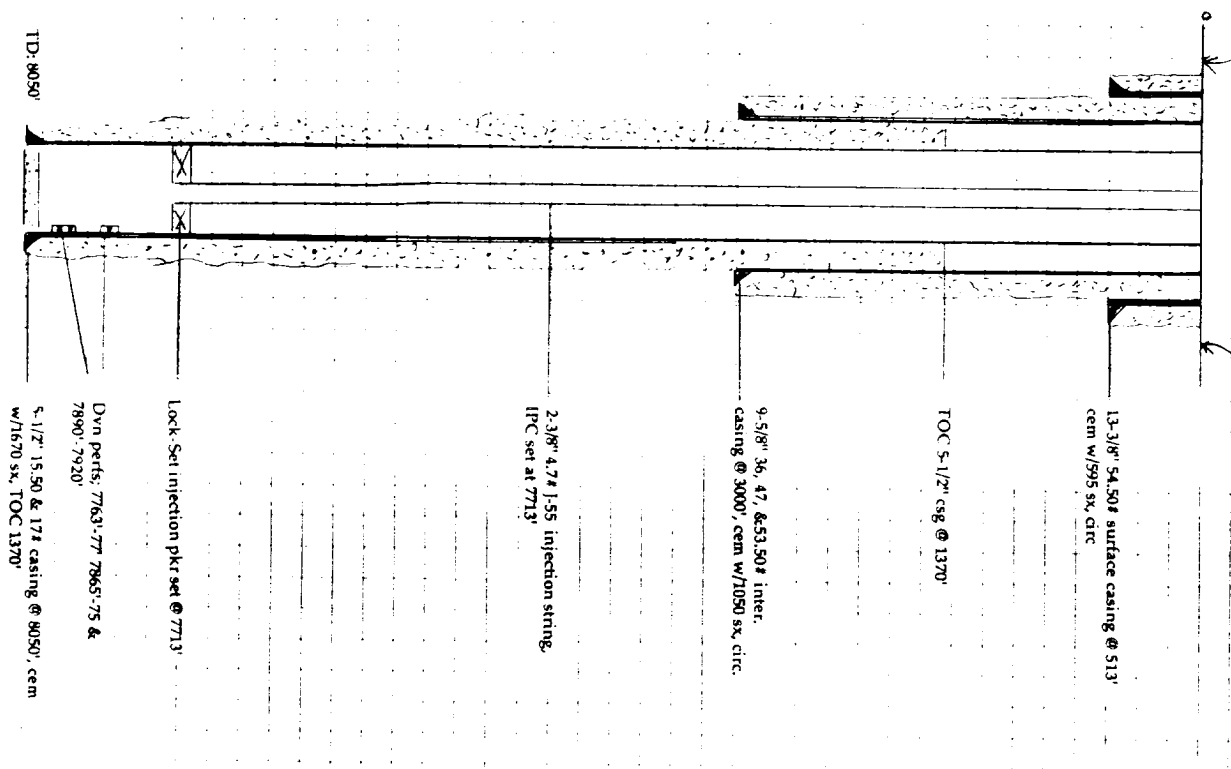
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.

INJECTION WELL DATA SHEETSCHEMATICTABULAR DATA(1). LEASE: West Dollardside Devonian Unit WELL # 122LOCATION: Sec. 33 TWP 24S Range 38ECounty LeaFootage 2225' FSL & 875' FML of Section 33

(2). CASING STRINGS:

Surface Casing

Size 13-3/8" Depth 513' Cemented w/ 595 sx.TOC surface Determined by circ.Hole size 17-1/2"

Intermediate Casing

Size 9-5/8" Depth 3000' Cemented w/ 1050 sx.TOC surface Determined by circulatedHole size 12-1/4"

Long String

Size 5-1/2" Depth 8050' Cemented w/ 1670 sx.TOC 1370' Determined by CBLHole size 8-1/2" (3000'-7350') & 7-7/8" (7350'-TD)Injection interval, from 7763 to 7920 ft.

(3). INJECTION TUBING STRING:

Size 2-3/8 in., coated/lined with polySetting depth 7713 ft.

(4) INJECTION PACKER:

Size 5-1/2 in.; Make/Model Lock-Set or equiv.Setting depth 7713 ft.

FORM C-108

ITEM III-B

INJECTION WELL DATA

- (1). Injection formation: Devonian
Field/Pool: West Dollarhide Devonian
- (2). Injection interval; from 7763 ft. to 7920 ft.
Perforated XX Open Hole
- (3). Original purpose well drilled as Devonian producer
- (4). Other perforated intervals; Yes XX No
Squeezed with sx., or isolated by
- (5). Oil or gas productive zone(s):
Next higher Abo 6637'
Next lower Fusselman 8710'

DRINKARD UNIT
TEXACO
Group 1 (OPER.)

F M C-108, Item V

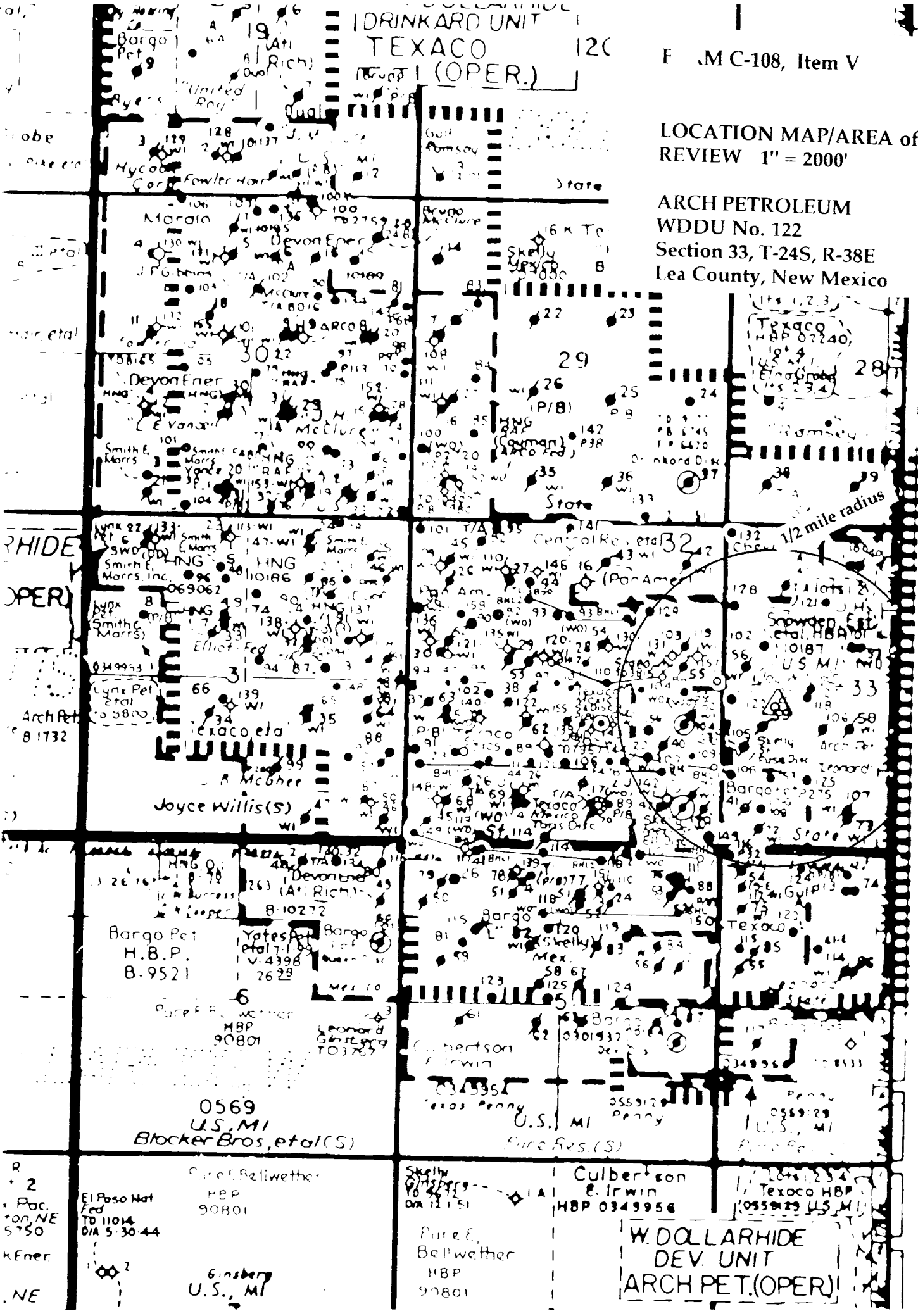
LOCATION MAP/AREA of
REVIEW 1" = 2000'

ARCH PETROLEUM
WDDU No. 122
Section 33, T-24S, R-38E
Lea County, New Mexico

ONLY ALSO

32°10'

Lots 4 &
U.S. M
ST. Crown



FORM C-108

ITEM VI

WELL DATA - AREA OF REVIEW

(1). Location: Unit H, Sect. 32, 1980' FNL & 660' FEL, TWP 24S, 38E
Operator: Stanolind O & G
Lease: State "Y" Well No. 1 (103)
Well type: Oil XX Gas T.D. 8935'
Date drilled: spud 3-10-52 comp. 6-20-52
Completion data: 13-3/8" @ 311' w/325 sx; 9-5/8" @ 4277' w/550 sx,
TOC 900'; 7" @ 8019' w/250 sx, TOC (TL) 6570'; perf Dvn 7885'-7905',
7751'-64', 1000 gal acid, 3000 gal frac, 1ppg sd; A 2-57 w/7500 gal;
conv. to WIW 5-3-63; csg collapse, P & A 5-23-74, Re-plg 3-3-75 and
again 11-17-79; data sheets att.

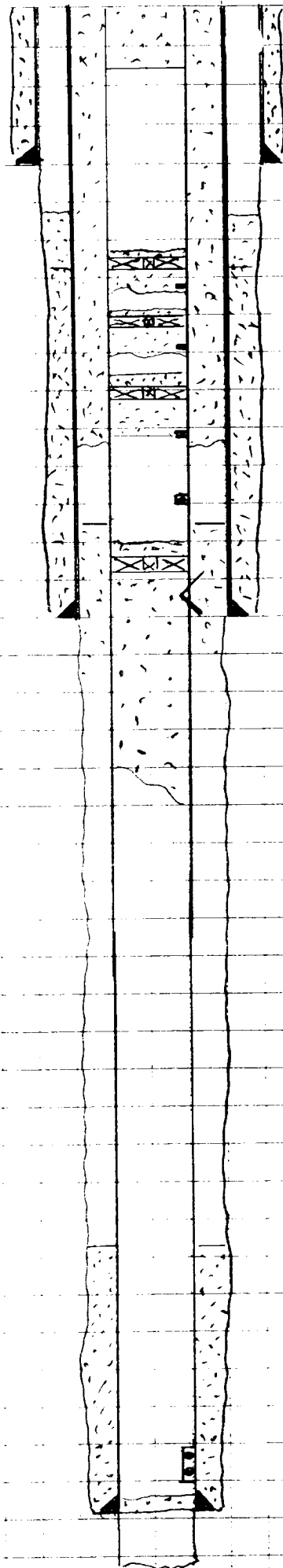
Plugged XX Date 5-23-74 & 11-17-79 (diagram att.)

(2). Location: Unit H, Sect. 32, T-24S, R-38E, 2180' FNL, 450' FEL
Operator: (Gulf Oil), Arch Pet.
Lease: West Dollarhide Dvn. Unit Well No. 119 WI
Well type: XXXXX WIW Gas T.D. 8000'; PBTD 7955'
Date drilled: spud 2-25-75, comp. 3-26-75
Completion data: 13-3/8" @ 1200' w/1130 sx, circ; 8-5/8" @ 3953',
w/340 sx, TOC 2500'; 5-1/2" @ 8000' w/550 sx, TOC 3400'; perf DVN
7740'-7888', A/8000 gal 15%; remed 4-18-80 repair csg, perf 5-1/2" @
3200', cmt w/700 sx, circ 110 sx out 8-5/8"; sq w/1000 sx, DO, A w/
6700 gal; resume wtr inj; 1984 CO to 7955', A w/6000 gal; ret to inj;
re-acid 10-2-87 w/4750 gal, ret to inj; chg opr. 1995 to Arch Pet;
re-acid 4000 gal, ret to inj

Plugged _____ Date _____ (diagram att.)

(3). Location: Unit I, 1980' FSL & 660' FEL Sec. 32, T-24S, R-38E
Operator: (Skelly Oil) Arch Pet.
Lease: (Mexico "J") WDDU Well No. (3) 104
Well type: Oil XX Gas T.D. 10,320' PB 7860'
Date drilled: spud 10-23-51 comp 2-25-52
Completion data: 13-3/8" @ 300' w/300 sx; 9-5/8" @ 3055' w/1800
sx, circ cmt; 5-1/2" @ 10,320' w/1653 sx; TOC 3315'; perf 10,280'-
292', 10,236'-264'; sq perfs: PB 8790', perf 8710'-44, A/500 gal;
IPF 1996 BOPD; sq Fuss 1958, perf Dvn 7656'-7736', A/500 gal; 1963, perf
7758'-7802'; 1970, PB 7860'; perf 7798'-7808'; current producer

Plugged _____ Date _____ (diagram att.)



surface plug ,0 to 130' (20 sx)

13-3/8" csg @ 311', cem w/325 sx

TOC 9-5/8" @ 900'

perfs 3050'; set cmt ret @ 2918'; squeeze w/250 sx; left 5' cmt on ret; perf 7" 2570'; set ret @ 2461'; squeeze w/385 sx, lv 8' cmt on ret., spot 20 sx surf plug; 11-17-79

cement retainer @ 3494'; pmp 500 sx cmt down tbg, circ; 12' cmt on ret.; 3-3-75

squeeze perfs @ 3640'

squeeze perfs @ 3810', DNC

cement retainer @ 4000'; sq 1250 sx cmt, TOC behind 7" @ 3900' (TL); 5-22-74

7" casing collapsed below 4000'

9-5/8" casing @ 4277' w/550 sx
TOC 900'

FORM C-108, Item VI, 1

PLUGGING DIAGRAM
WDDU No. 103

ARCH PETROLEUM
WDDU No. 122
Section 33, T-24S, R-38E
Lea County, New Mexico

Dvn perfs 7751'-7905'

7" casing @ 8019', cem w/250 sx
TOC 6570' (TL)

TD 8935'

FORM C-108

ITEM VI

WELL DATA - AREA OF REVIEW

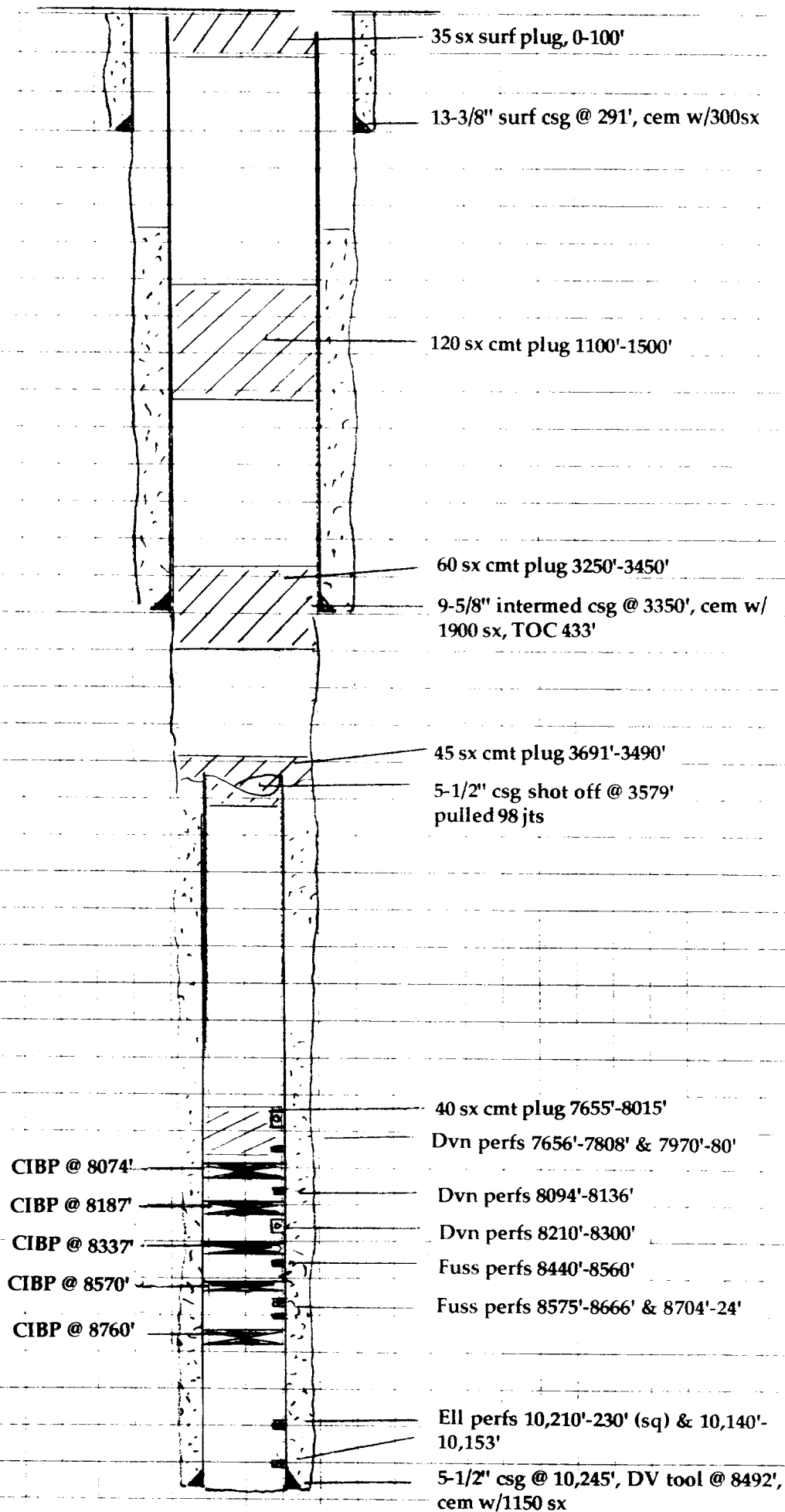
- (4). Location: Unit P. 660' FS & EL Sec. 32, T-24S, R-38E
Operator: Skelly Oil
Lease: Mexico - State "J" Well No. 1
Well type: Oil XX Gas T.D. 10,245'
Date drilled: spud 5-4-51 comp 8-24-51
Completion data: 13-3/8" @ 291' w/300 sx; 9-5/8" @ 3350' w/1900
sx, TOC 433'; 5-1/2" @ 10,245' w/1150 sx, DV tool @ 8492'; perf 10,210'-
230'; IPF 583 BOPD Ell; sq perfs, re-perf 10,140'-153'; CIBP @ 8760'
perf 8704'-24' Fuss, perf 8575'-8666'; BP @ 8570', perf 8440'-8560';
CIBP @ 8337' cap w/cmt to 8322'; perf 8210'-8300'; CIBP @ 8187' cmt cap
8177'; perf 8094'-8136'; CIBP @ 8074', cmt cap 8064'; perf 7970'-80';
TA 6-27-73; 10-88, perf 7656'-7808', ret to prod; plq 1976
Plugged XX Date 2-17-76 (diagram att.)
- (5). Location: Unit P. 660' FSL & 330' FEL Sec. 32, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Mexico "J") WDDU Well No. (24) 109 WI
Well type: XXXXX WIW Gas T.D. 8700'
Date drilled: spud 1-1-56
Completion data: 8-5/8" @ 3139' w/2000 sx, circ; 5-1/2" @ 8689'
w/1530 sx, DV tool @ 4620'; perf Dvn 7640'-7740'; conv to wtr inj
4-10-63; 10-23-75, csg 1k, perf 4620', circ cmt to surf, sq 100 sx
into fmn., perf 7578'-95', ret to inj; 9-16-77, csg 1k, sq 300 sx
4596'-4627'; 1984, CO to 7765', A/8000 gal; active inj well

Plugged _____ Date _____ (diagram att.)
- (6). Location: Unit C. 660' FNL & 779' FEL Sec. 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (17-D) 100 WI
Well type: Oil XX Gas T.D. 8184'
Date drilled: spud 9-28-52 comp 12-1-52
Completion data: 13-3/8" @ 295' w/325 sx; 8-5/8" @ 2899' w/1735 sx;
7" @ 7958' w/220 sx, CT 5728'; comp OH7958'-8184'; IPF 684 BOPD, Dvn,
conv to wtr inj 1963; sq csg 1k 5465'-96' w/600 sx, A w/1000 gal,
1972; active inj well

Plugged _____ Date _____ (diagram att.)

PLUGGING DIAGRAM
Mexico State "J" No. 1

ARCH PETROLEUM
WDDU No. 122
Section 33, T-24S, R-38E
Lea County, New Mexico



FORM C-108
ITEM VI

WELL DATA - AREA OF REVIEW

(7). Location: Unit D, 990' FN & WL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Texaco
Lease: (Harry Leonard "A") WD Drk. U Well No. (28) 41
Well type: Oil XX Gas T.D. 8170' PB 6945'
Date drilled: spud 5-17-53 comp 8-3-53
Completion data: 13-3/8" @ 327' w/350 sx; 9-5/8" @ 2903' w/850 sx;
7" @ 6959' w/750 sx; A OH 8120' w/1355 gal; PB 6945'; perf 6765'-6896';
A w/4000 gal, perf 6555'-6725', A w/7000 gal; IPF 460 BOPD; currently
T/A (Miscellaneous Reports on Wells/Plug Back) attached

Plugged _____ Date _____ (diagram att.)

(8). Location: Unit C, 1285' FNL & 1650' FEL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: West Dollarhide Devonian Unit Well No. 121
Well type: Oil XX Gas T.D. 8133'
Date drilled: spud 8-26-84 comp 1-18-85
Completion data: 13-3/8" @ 380' w/400 sx; 8-5/8" @ 4200' w/1500
sx, circ cmt; 5-1/2" @ 8133' w/1300 sx, TOC 800'; perf Dvn 7877'-
8088'; A w/6200 gal, F w/50,000# sd; Pmp 45 BO + 163 BWPD;
current producer

Plugged _____ Date _____ (diagram att.)

(9). Location: Unit E, 1980' FNL & 660' FWL, Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (21) 102
Well type: Oil XX Gas T.D. 7990'
Date drilled: spud 12-9-52 comp 1-28-53
Completion data: 13-3/8" @ 279' w/325 sx; 9-5/8" @ 2899' w/2525
sx; 7" @ 7797' w/570 sx, comp Dvn OH 7797'-7990'; IPF 512 BOPD;
1976, sq csg lk @ 4350' w/1400 sx, TOC 2900'; 1987, swage out coll csg,
run 5-1/2" to 7613', cmt w/450 sx, circ cmt; current producer

Plugged _____ Date _____ (diagram att.)

FORM C-108

ITEM VI

WELL DATA - AREA OF REVIEW

(10). Location: Unit F, 1980' FNL & 779' FEL, Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (15) 101 WIW
Well type: Oil XX Gas T.D. 8062'
Date drilled: spud 6-22-52 comp 9-21-52
Completion data: 13-3/8" @ 306' w/350 sx; 9-5/8" @ 2899' w/950 sx,
TOC 1450'; 7" @ 7841', TOC 5300'; comp from OH in Dvn, IPF 876 BOPD;
conv. to wtr inj 6-15-63, 1000 BWPD @ 0 TP; 1976, CO to 8056'; perf 7"
@ 5190', sq w/700 sx; run 5" lnr, perf 7836'-48', resume inj; 1989,
repair csg leak 6084'-6179', sq w/263 sx, ret to inj
currently WIW

Plugged Date (diagram att.)

(11). Location: Unit E, 1980' FNL & 660' FWL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (21) 102
Well type: Oil XX Gas T.D. 7990'
Date drilled: spud 12-09-52 comp 1-28-53
Completion data: 13-3/8" @ 279' w/325 sx; 9-5/8" @ 2899' w/2525 sx;
7" @ 7797' w/570 sx; comp fr Dvn OH 7797' - 7990', IPF 512 BOPD; 1976,
sq csg lk 4350' w/1400 sx, TOC 2900'; 1987, swage csg, run 5-1/2" lnr
to 7613, cmt w/450 sx, circ cmt; currently producing

Plugged Date (diagram att.)

(12). Location: Unit K, 2540' FSL, 1420' FWL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: WDDU Well No. 118
Well type: Oil XX Gas T.D. 8050'
Date drilled: spud 3-10-73, comp 4-10-73
Completion data: 13-3/8" @ 303' w/335 sx; 8-5/8" @ 3947' w/300 sx,
TOC 2598'; 5-1/2" @ 8049' w/260 sx, TOC 5800'; perf 7794'-8016'; A/6000
Dvn, IPP 95 BOPD & 7 BW; 1976, perf 5700', circ cmt w/1125 sx; 1979,
perf add'l Dvn 7810'-14', 7862'-66', 7906'-10', A/8700 gal, ret to
prod, 51 BOPD and 124 BW; current producing well

Plugged Date (diagram att.)

FORM C-108
ITEM VI

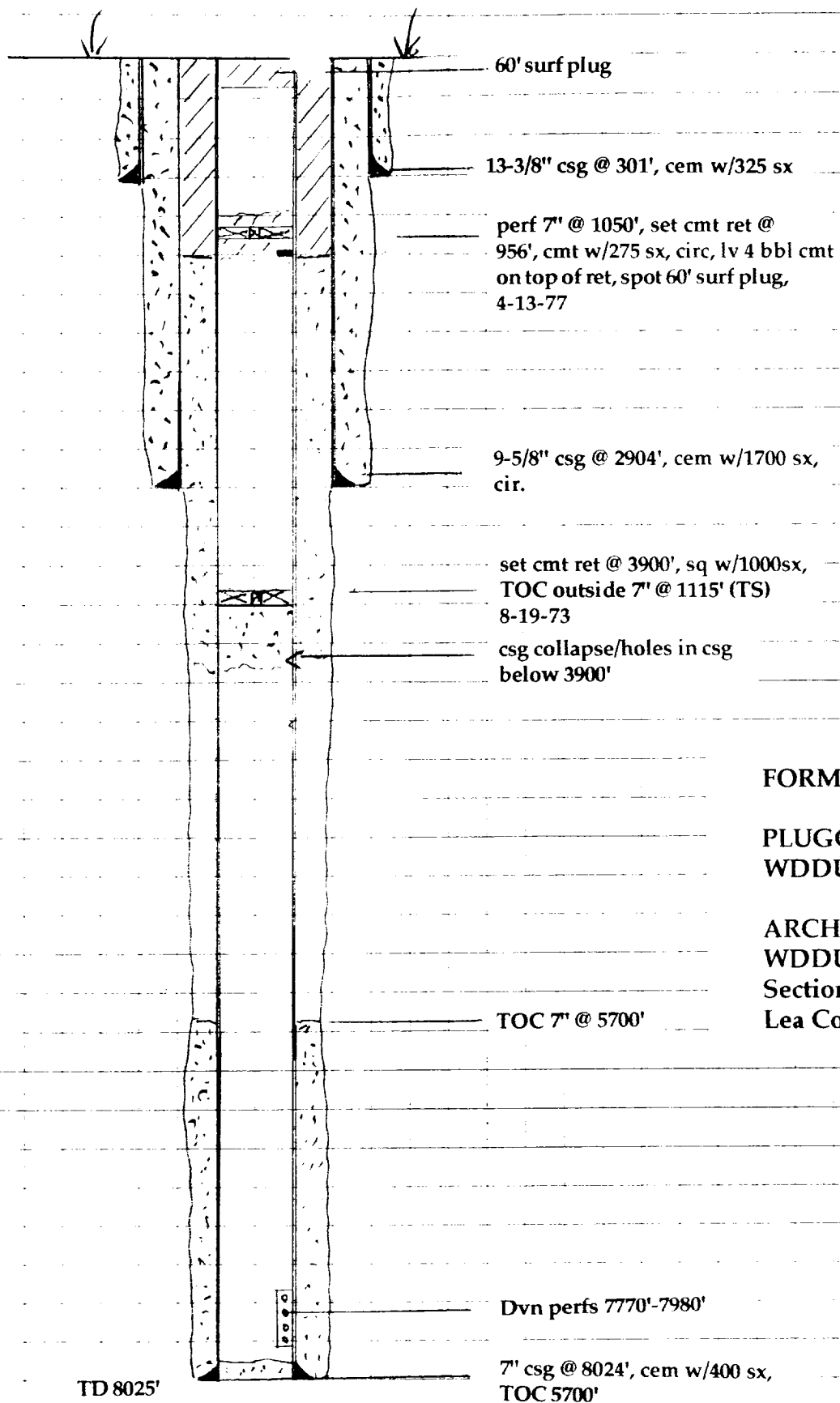
WELL DATA - AREA OF REVIEW

- (13). Location: Unit K, 1980' FSL & 781' FEL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (11) 106
Well type: Oil XX Gas T.D. 8025'
Date drilled: spud 4-14-52 comp 6-18-52
Completion data: 13-3/8" @ 301' w/325 sx; 9-5/8" @ 2904' w/1700
sx, circ; 7" @ 8024' w/400 sx, TOC 5700'; perf Dvn 7770'-7980'; IPF
352 BOPD; P & A 1973; re-plg 4-13-77

Plugged XX Date 8-22-73/4-13-77 (diagram att.)
- (14). Location: Unit L, 1650' FSL & 330' FWL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (19) 105 WIW
Well type: Oil XX Gas T.D. 8780'
Date drilled: spud 11-2-52, comp 3-17-53
Completion data: 13-3/8" @ 282' w/325 sx; 8-5/8" @ 2900' w/1450 sx,
TOC 1335'; 5-1/2" @ 8779' w/1500 sx, circ cmt; perf Fuss 8695'-8750';
A/8000 gal; IPP 147 BOPD + 35% SW; 7-8-60CIBP @ 8633', perf Dvn 7870'-
7886', A/2500 gal; conv to inj 3-8-63 7842'-7874'; 1-13-76, perf 5250',
sq w/900 sx; perf Dvn 7704'-7736' ret to inj; 11-1-91, sq csg Tk 3658'-
3719' w/650 sx, unsuccessful; TA

Plugged _____ Date _____ (diagram att.)
- (15). Location: Unit M, 660' FS & WL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (7) 108
Well type: Oil XX Gas T.D. 10,310'
Date drilled: spud 9-4-51 comp 12-27-51
Completion data: 13-3/8" @ 306' w/325 sx; 9-5/8" @ 2877' w/1300 sx,
7' @ 10,308' w/200 sx; perf E11 10,260'-295'; A/2500 gal, IPF 488 B0/6hrs;
1954, set CIBP @ 7950' w/cmt cap; perf Dvn 7650'-90', A/2000 gal, IPF
355 BOPD; 1963, perf 7810'-60', A w/2000; TA in 1971; ret to prod in
11-85; 5-89 side track w/new hole to 7950', 4-1/2" lnr; perf 7654'-97'

Plugged _____ Date _____ (diagram att.)



FORM C-108, Item VI, 13

PLUGGING DIAGRAM
WDDU No, 106

ARCH PETROLEUM
WDDU No. 122
Section 33, T-24S, R-38E
Lea County, New Mexico

FORM C-108

ITEM VI

WELL DATA - AREA OF REVIEW

(16). Location: Unit N, 660' FSL & 781' FEL Sec 33, T-24S, R-38E
Operator: (Gulf Oil) Arch Pet.
Lease: (Harry Leonard "A") WDDU Well No. (16) 107 WIW
Well type: Oil XX Gas T.D. 7965'
Date drilled: spud 8-17-52 comp 10-20-52
Completion data: 13-3/8" @ 305' w/330 sx; 9-5/8" @ 2899' w/1100
sx, perf 9-5/8" @ 1685' and sq w/375 sx; 7" @ 7750' w/475 sx; comp
Dvn from OH, A/22,000 gal; 5-29-63, run 5" lnr, cmt w/50 sx & sq lnr
top w/55 sx; perf 7894'-7934'; a/250 gal; conv to inj; sq 7" 5295' w/
150 sx, perf 4115'-4535', circ 150 sx, sq w/200 sx 8-6-64; 3-6-73, CO
to 7926', perf 7756'-76' A/2000 gal; 12-29-75, CO junk to 7936', perf
7743'-49', ret to inj; ran CBL, TOC 3080'; 1-1-99, well plugged w/scale
Plugged TA Date (diagram att.)

(). Location:
Operator:
Lease: Well No.
Well type: Oil Gas T.D.
Date drilled:
Completion data:

Plugged Date (diagram att.)

(). Location:
Operator:
Lease: Well No.
Well type: Oil Gas T.D.
Date drilled:
Completion data:

Plugged Date (diagram att.)

FORM C-108

ITEM VII

OPERATIONAL DATA

- (1). Average expected injection rate: 500 BWPB; maximum anticipated rate: 1000 BWPB
- (2). Closed system
- (3). Estimated average injection pressure: 1500 psi.
Estimated maximum pressure: 2000 psi.
- (4). Source of injection water: produced water from Devonian wells in the Unit
- Analysis of waters attached EXHIBIT I & II
- (5). Analysis of injection zone water attached
Data source: NA

ITEM VIII

GEOLOGICAL DATA

INJECTION ZONE

Lithological description: lime and cherty lime

Geological name: Devonian
Zone thickness: 157 ft; Depth: 7763'-7920'

FRESH WATER SOURCE(S)

Geological name of aquifer: Ogallala and Santa Rosa
Depth to bottom of zone Ogallala - 200'; Santa Rosa - 900'

FORM C-108

ITEM IX

STIMULATION PROGRAM

ACIDIZE

Volume: 2500 gal Type acid: 15% HCl
Rate: 3-5 BPM; Misc.: _____

FRACTURE

Fluid volume: NA gal.; Type: _____
Prop type: _____ Volume (lb): _____
Rate: _____ BPM; Conductor: _____
Misc: _____

ITEM X

LOGGING PROGRAM

Logging program included: GR, Litho Density, Comp Neutron

Copy of GR/CND log(s) included with
attachments

ITEM XI

FRESH WATER DATA

Fresh water well within 1 mile radius: XX Yes No

Chemical analysis from well located: 35-23-37

Date sampled: 1-4-98 **EXHIBIT III**

Chemical analysis from well located: _____

Date sampled: _____

ITEM XII

HYDROLOGY

Engineering data and area well logs reveal no evidence that hydrologic connection might exist between intended injection zone and fresh water zone(s) above 900'

EXHIBIT I
Endura Products Corp.

P.O. Box 3394 Midland, Texas 797
 Phone (915) 684-4233 * Fax (915) 684

ORM C-108, Item VII, 4

**ANALYSIS OF DEVONIAN
 INJECTION WATER**

WATER ANALYSIS

Date: **7/31/00** Endura Rep.: **Roddy Long**
 Sampling Point/Date: **Wellhead 07/25/00**
 Company: **Arch Petroleum, Inc.**
 Lease: **WDDU**

**ARCH PETROLEUM
 WDDU No. 122
 Section 33, T-24S, R-38E
 Lea County, New Mexico**

Well: **108**

DISSOLVED SOLIDS

	mg/l	me/l
<u>CATIONS</u>		
Sodium, Na+ (Calc.)	32,522	1,414
Total Hardness as Ca++	3,600	0
Calcium, Ca++	2,800	140
Magnesium, Mg++	488	41
Barium, Ba++	0	0
Iron (Total) Fe+++*	8	0

ANIONS

Chlorides, Cl-	54,500	1,535
Sulfate, SO4-	2,450	51
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	536	9
Sulfide, S-*	0	0
Total Dissolved Solids (Calc.)	93,304	

OTHER PROPERTIES

pH*	6.935
Specific Gravity, 60/60 F.	1.056
Turbidity	217

SCALING INDICIES

<u>TEMP, F.</u>	<u>CA CO3</u>	<u>CA SO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.3460	-0.1450	-0.3402	-29.1345
120	0.6631	-0.1479	-0.1627	-29.3594
160	1.1524	-0.1447	0.0232	-29.5864

PERFORATIONS

EXHIBIT II

FORM C-108, Item VII, 4

Endura Products Corp.

P.O. Box 3394 Midland, Texas 797

Phone (915) 684-4233 * Fax (915) 684

**ANALYSIS OF DEVONIAN
INJECTION WATER**ARCH PETROLEUM
WDDU No. 122Section 33, T-24S, R-38E
Lea County, New Mexico**WATER ANALYSIS**

Date: **7/31/00** Endura Rep.: **Roddy Long**
 Sampling Point/Date: **Wellhead 07/25/00**
 Company: **Arch Petroleum, Inc.**
 Lease: **WDDU**

County: **Lea**
 Well: **111**

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	49,657	2,159
Total Hardness as Ca++	5,400	0
Calcium, Ca++	4,800	240
Magnesium, Mg++	366	31
Barium, Ba++	0	0
Iron (Total) Fe+++*	1	0

ANIONS

Chlorides, Cl-	84,500	2,380
Sulfate, SO4-	1,950	41
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	366	6
Sulfide, S-*	48	3
Total Dissolved Solids (Calc.)	141,688	

OTHER PROPERTIES

pH*	6.581
Specific Gravity, 60/60 F.	1.086
Turbidity	59

SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO3</u>	<u>CASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.2548	-0.0723	-0.3009	-29.2588
120	0.6043	-0.0774	-0.1257	-29.4668
160	1.1451	-0.0886	0.0459	-29.6969

PERFORATIONS

FORM C-108, Item XI

ANALYSIS OF SANTA ROSA
WATER

ARCH PETROLEUM

WDDU No. 122

Sectio 33, T-24S, R-38E

Lea County, New Mexico

LAB. NO.

DATE REC 1-5-98

RR

E. C. Hill Federal #7

79701

b.

League

FIELD

SEC 35

B&K-23S-37 SURVEY

CO.

Lea, NM

NO. 1

Santa Rosa water - taken from E. C. Hill Federal #7 (water supply well wellhead). 1-4-98

NO. 2

NO. 3

NO. 4

REMARKS:

Specific Gravity @ 60°F.

1.0035

pH When Sampled

pH When Received

7.60

Bicarbonate, as HC03

176

Supersaturated, as CaC03

Undersaturated, as CaC03

Total Hardness, as CaC03

320

Calcium, as Ca

41

Magnesium, as Mg

53

Sodium and/or Potassium

524

Sulfate, as SO4

717

Chloride, as Cl

405

Iron, as Fe

3.9

Barium, as Ba

Turbidity

Color

Total Solids, Calc.

1915

Temperature, °F.

Carbon Dioxide

Oxygen

Hydrogen Sulfide

0.0

Resistivity, ohms/m @ 77°F.

3.47

Suspended Oil

Filtrable Solids

Volume Filtered, ml

Remarks: Please feel free to contact us if we can be of any assistance in interpreting these results.

RESULTS REPORTED AS MILLIGRAMS PER LITER
MARTIN WATER LABS., INC.

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Conservation

EXHIBIT IV

5a. Indicate Type of Lease
State ☒ Fee ☐

5. State Oil & Gas Lease No.
43520

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☐ OTHER- Water Injection Well	7. Unit Agreement Name West Dollarhide Devonian Unit
2. Name of Operator Gulf Oil Corporation	8. Farm or Lease Name
3. Address of Operator Box 670, Hobbs, New Mexico 88240	9. Well No. 103
4. Location of Well UNIT LETTER H 1980 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 32 TOWNSHIP 24-S RANGE 38-E NMPM.	10. Field and Pool, or Wildcat Dollarhide Devonian
15. Elevation (Show whether DF, RT, GR, etc.) 3183' GL	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	

Plugged and abandoned.

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

7920' PB.

Loaded 7" casing with 16# mud. Ran cement retainer and set at 4000'. Pumped 1250 sacks of Class C cement down tubing. Flushed with 14.5 BW. WOC 16 hours. TS indicated TOC at 3900', 377' above 9-5/8" casing shoe at 4277'. Spotted cement plug from 120' to surface. Installed dry hole marker and cleaned location. Completed plugging and abandoning on May 22, 1974.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED *B. J. Barbieri* TITLE Area Engineer DATE May 23, 1974

APPROVED BY *John W. Runyan* TITLE Geologist DATE SEP 12 1974

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
1-1-65

EXHIBIT V

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)		5a. Indicate Type of Lease State ☒ Fee ☐
1. OIL WELL ☐ GAS WELL ☐ OTHER- Water Injection Well		7. Unit Agreement Name West Dollarhide Devonian Unit
2. Name of Operator Gulf Oil Corporation		8. Farm or Lease Name
3. Address of Operator Box 670, Hobbs, New Mexico 88240		9. Well No. 103
4. Location of Well UNIT LETTER H 1980 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 32 TOWNSHIP 24-S RANGE 38-E NMPM.		10. Field and Pool, or Wildcat Dollarhide Devonian
15. Elevation (Show whether DF, RT, GR, etc.) 3183' GL		12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	
OTHER ☐ Plugged and abandoned			

7. Describe the Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Removed dry hole marker. Ran 6-1/8" bit and drilled cement from surface to 130'. Ran tubing to bottom at 3930' and circulated hole clean. Pulled tubing and bit. Ran packer and tubing. Set packer at 185' and pressured above and below packer with 1000# overnight. Released pressure on 9-5/8" casing and 7" pressure decreased. Perforated 7" casing with 5, 1/4" holes at 3810'. Could not circulate. Perforated 7" casing at 3640' and circulated at 8/10 BPM. Set cement retainer at 3494'. Pumped 500 sacks of Class C cement down tubing thru perforations 3640' and cement circulated to surface outside 7" casing. Pulled tubing. Left 12' cement plug on top of retainer. Spotted 25 sack cement plug from 125' to surface. Installed dry hole marker. P A complete on March 3, 1975. Will advise when location is ready for inspection.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED <u>B. J. Barbary</u>	TITLE <u>Area Engineer</u>	DATE <u>March 3, 1975</u>
APPROVED BY <u>Eddie Seay</u>	TITLE <u>OIL & GAS INSPECTOR</u>	DATE <u>JUL 1 1975</u>

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5a. Indicate Type of Lease	
State ☒	Fee ☐
5. State Oil & Gas Lease No.	
43520	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER: Water Injection Well	7. Unit Agreement Name West Dollarhide Devonian
2. Name of Operator GULF OIL CORPORATION	8. Farm or Lease Name Unit
3. Address of Operator P.O. Box 670, Hobbs, NM 88240	9. Well No. 103
4. Location of Well UNIT LETTER H 1980 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 32 TOWNSHIP 24S RANGE 38E N.M.P.M.	10. Field and Pool, or Wildcat Dollarhide Devonian
11. Elevation (Show whether DF, RT, GR, etc.) 3183' GL	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
-------------------------	-----------------------

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	
OTHER _____		OTHER <u>Re-enter & re-cement 7" csg in P&A well</u> ☒	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Removed dry hole marker. Cleaned out to 3100'. Perf 7" csg @ 3050' w/(4) ½" JHPF. Ran cmt rtnr on 2-3/8" tbg & set @ 2918'. Squeezed perf 3050' w/250 sx Class "C" cmt. Left 5' cmt on top of rtnr. Max pres 2500#. Final pres 1600#. WOC 65 hrs. CP (9-5/8") 150#; CP (7") 0#. Perf 7" csg @ 2570' w/(4) ½" JHPF. Ran cmt rtnr & set @ 2461'. Squeeze below rtnr w/385 sx Class "C" cmt. Left 8' cmt on rtnr. WOC over 24 hours. CP (9-5/8") 20#. This work performed 1-16-78 through 3-7-78. Well transferred to inactive report while being monitored.

Spotted 20 sx cmt for surface plug. Installed well marker. Cleaned location. Work performed 11-17-79.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED <u>M.B. Sikes, Jr.</u>	TITLE <u>Area Engineer</u>	DATE <u>11-20-79</u>
APPROVED BY <u>Eddie Dean</u>	TITLE <u>OIL & GAS INSPECTOR</u>	DATE <u>JUL 14 1980</u>
CONDITIONS OF APPROVAL, IF ANY:		

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NEW MEXICO OIL CONSERVATION COMMISSION

EXHIBIT VII

Form C-103
Supersedes Old
C-102 and C-101
Effective 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
B-9311

SUNDY NOTICES AND REPORTS ON WELLS
DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT TO DRILL" (FORM C-101) FOR SUCH PROPOSALS.

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name -----
2. Name of Operator Skelly Oil Company	8. Name of Lease Name Mexico "J"
3. Address of Operator P. O. Box 1351, Midland, Texas 79701	9. Well No. 1
4. Location of Well UNIT LETTER P 660 FEET FROM THE South LINE AND 660 FEET FROM THE East LINE, SECTION 32 TOWNSHIP 24S RANGE 38E N.M.P.M.	10. Field and Pool, or Well at Dollarhide Fusselman
15. Elevation (Show whether DF, RT, GR, etc.) 3180'	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER ☐

ALTERING CASING ☐
PLUG AND ABANDONMENT ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 1) Moved in workover rig January 27, 1976.
- 2) Set 40 sack cement plug 7655-8015'.
- 3) Shot off 5-1/2" OD casing at 3598', pulled 98 joints (3579') 5-1/2" OD casing.
- 4) Set 45 sack cement plug 3691-3490'.
- 5) Set 60 sack cement plug 3250-3450'.
- 6) Set 120 sack cement plug 1100-1500'.
- 7) Set 35 sack cement plug surface-100'.
- 8) Installed dry hole marker.

NOTE: All intervals not cemented were filled with 10.2# mud. The 13-3/8" OD casing surface-291', the 9-5/8" OD casing set surface-3350', and the portion of the 5-1/2" OD casing 3579-10,245' were left in the well.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

(Signed) **D. R. Crow** **D. R. Crow** TITLE **Lead Clerk** DATE **2-12-76**
SIGNED
Orig. Signed by **John Runyan**
Geologist
APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TRIPPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico

EXHIBIT VIII

MISCELLANEOUS REPORTS ON WELLS

RECEIVED

Submit this report in TRIPPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. See instructions in the Rules and Regulations of the Commission.

Indicate Nature of Report by Checking Below

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF PLUGGING WELL		REPORT ON RECOMPLETION OPERATION		REPORT ON (Other) Plugging Back	XXX

July 24, 1953

(Date)

Hobbs, New Mexico

(Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Gulf Oil Corporation

(Company or Operator)

Harry Leonard

(Lease)

Gardner Brothers Drilling Co.

(Contractor)

Well No. 28 in the NW 1/4 NW 1/4 of Sec. 33

T. 24S, R. 38E, NMPM, Dollarhide West Division Pool, Lea County.

The Dates of this work were as follows: July 16-17, 1953

Notice of intention to do the work ~~(was)~~ (was not) submitted on Form C-102 on _____, 19 _____, (Cross out incorrect words)

and approval of the proposed plan ~~(was)~~ (was not) obtained.

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Went in hole with 2-3/8" tubing open end to 7950', spotted 65 sacks regular cement plug from 7950-7800'. Spotted 65 sacks regular cement plug from 7100-6960'.

After waiting on cement 12 hours, went in hole and found top of cement plug at 6925'. Drilled cement to 6960', circulated and conditioned hole to run 7" casing.

Witnessed by W. G. Cagle

(Name)

Gulf Oil Corporation

(Company)

Drilling Foreman

(Title)

Approved:

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name

Position Asst. Area Production Superintendent

Representing Gulf Oil Corporation

Address Box 2167, Hobbs, New Mexico

Oil & Gas Inspector

(Title)

JUL 27 1953

(Date)

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MEXICO OIL CONSERVATION COMMISSION

Form C-101
Supersedes Old
C-102 and C-103
Effective 1-1-65

EXHIBIT IX

Lease Type of Lease

State ☒ Fee ☐

5. State Oil & Gas Lease No.
27197

SUNDRY NOTICES AND REPORTS ON WELLS DO NOT USE THIS FORM FOR REPORTS TO BE FILED IN THE PUBLIC RECORDS AS TO A DIFFERENT RESERVOIR. USE APPLICATION FOR PERMIT TO DRILL OR RE-DRILL FOR A DIFFERENT RESERVOIR

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

7. Unit Agreement Name

West Dollarhide Devonian Unit

8. Farm or Lease Name

9. Well No.
106

10. Field and Pool, or Wildcat
Dollarhide Devonian

UNIT LETTER K 1930 FEET FROM THE South LINE AND 781 FEET FROM
East THE LINE, SECTION 33 TOWNSHIP 24-S RANGE 38-E

11. Elevation (Show whether DF, RT, GR, etc.)
3173' G L

12. County
Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER ☐ Reentered abandon well and plugged and abandon

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Removed dry hole marker. Drilled out 50' cement plug. Cleaned out to 1120'
Perforated 7" casing at 1050' with 5--1/2" circulation holes.
Set cement retainer at 956' and cemented with 275 sacks class C with 2% CaCl_2 .
Cement circulated to surface.
Spotted 4 Bbls cement on top of retainer.
Spotted 60' cement plug from 60' to surface.
Installed dry hole marker. Cleaned location.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED D. F. Berlin

TITLE Area Engineer

DATE 4-13-77

APPROVED BY R. A. Linder
Agent
Recorder

TITLE

DATE

APR 15 1977

ADDITIONS OF APPROVAL, IF ANY

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NEW MEXICO OIL CONSERVATION COMMISSION

EXHIBIT X

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER- ☐	5a. Indicate Type of Lease State ☒ Fee ☐
2. Name of Operator Gulf Oil Corporation	5. State Oil & Gas Lease No. 27197
3. Address of Operator Box 670, Hobbs, New Mexico 88240	7. Unit Agreement Name Dollarhide Devonian U
4. Location of Well UNIT LETTER <u>K</u> <u>198C</u> FEET FROM THE <u>South</u> LINE AND <u>781</u> FEET FROM THE <u>East</u> LINE, SECTION <u>33</u> TOWNSHIP <u>24-S</u> RANGE <u>38-E</u> NMPM.	8. Farm or Lease Name Dollarhide Devonian
15. Elevation (Show whether DF, RT, GR, etc.) 3173' GL	9. Well No. 106
	10. Field and Pool, or Wildcat Dollarhide Devonian
	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING TEST AND CEMENT JOBS ☐

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

OTHER ☐

Plugged and abandoned

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

7995' PB, 8025' TD.

Ran CI cement retainer and set at 3900'. Squeezed with 1000 sacks of Class C cement containing .75% CFR-2 and 8# salt per sack. Maximum pressure 800#. ISIP 0#. WOC 12 hours. TS indicated TOC outside 7" casing at 1115'. Loaded hole with 14.2# mud. Spotted cement plug from 50' to surface. Installed dry hole marker. Plugged and abandoned August 19, 1973. (Will advise when location is ready for inspection).

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

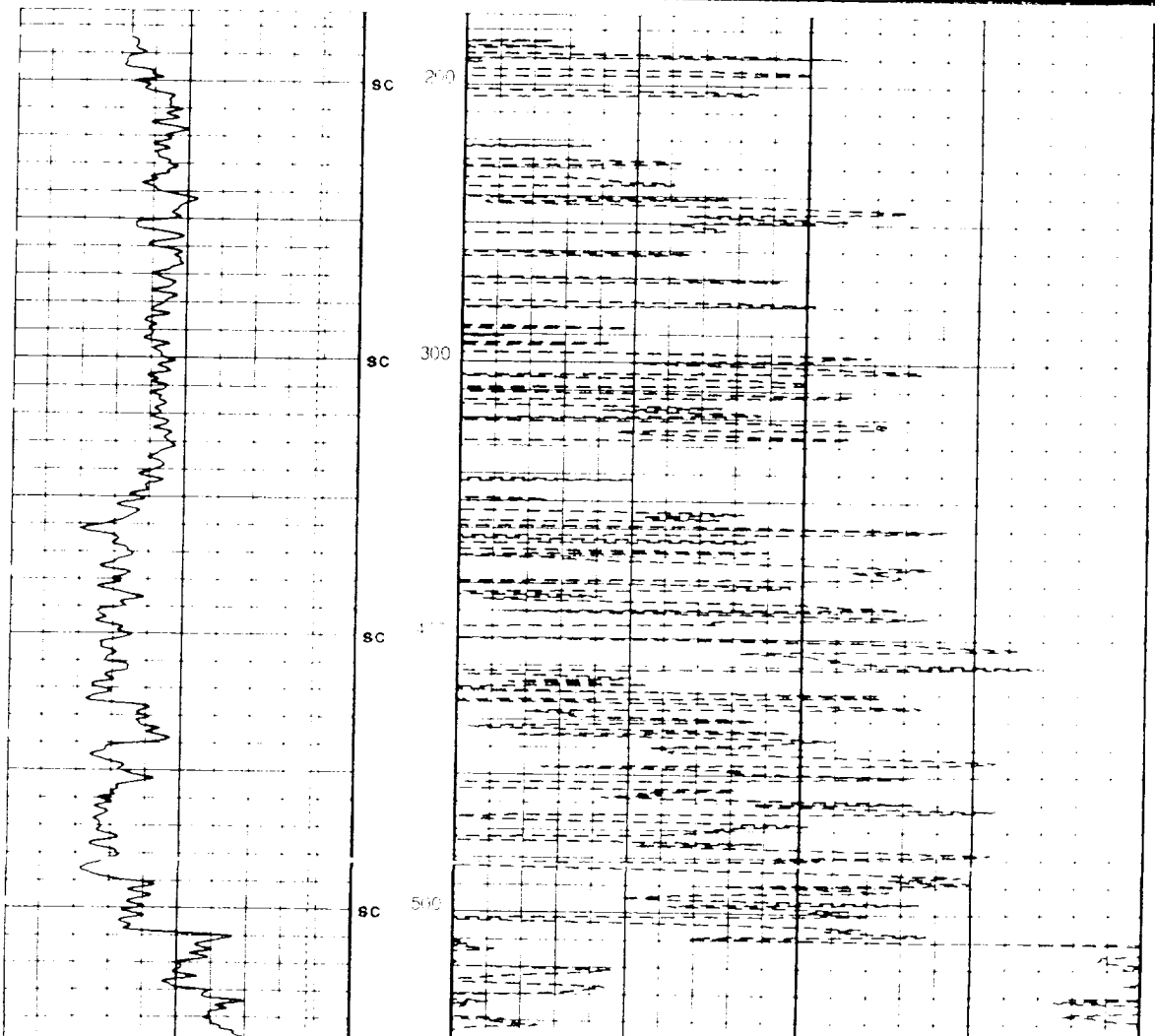
SIGNED H. J. Breazeal TITLE Area Engineer DATE August 22, 1973

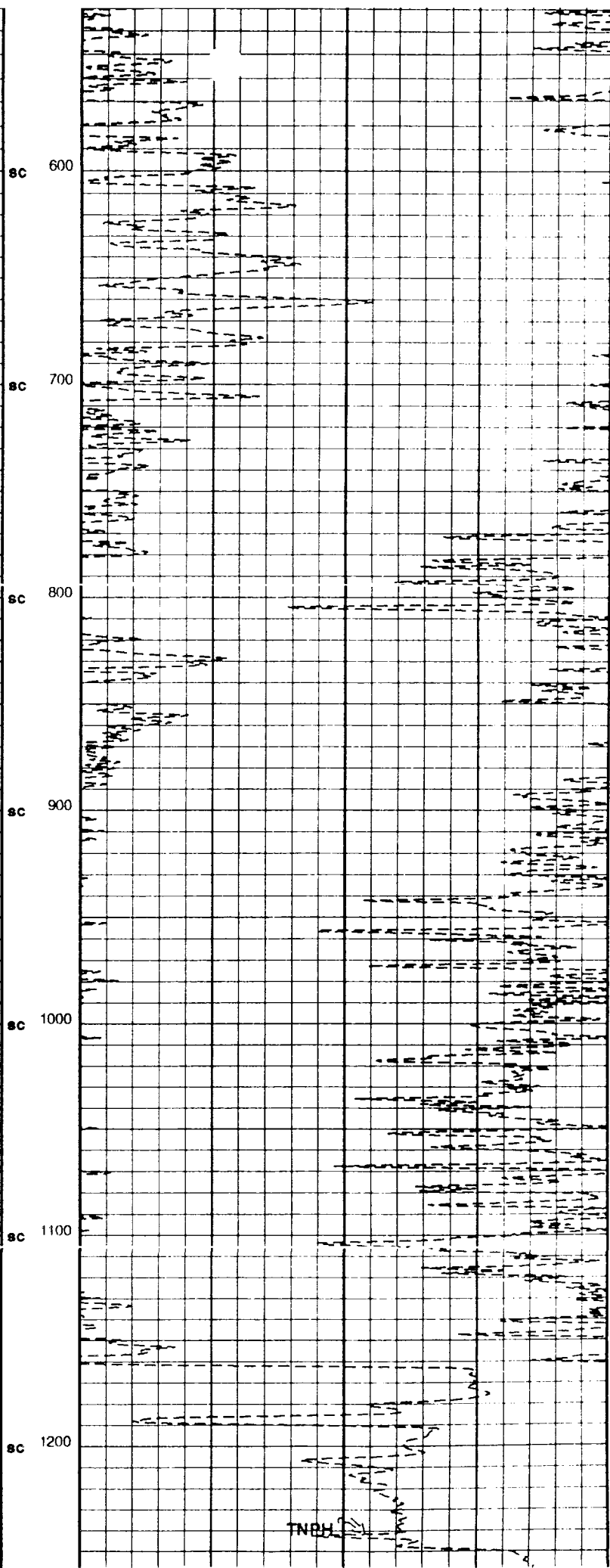
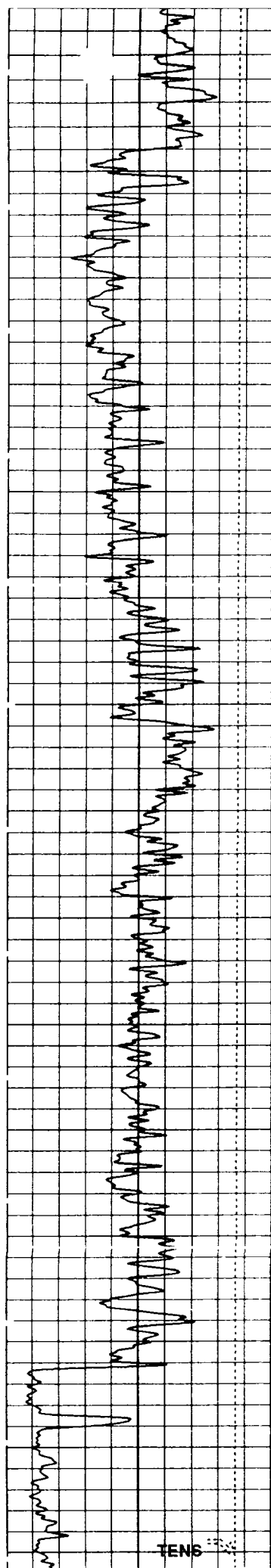
APPROVED BY Geologist TITLE Geologist DATE

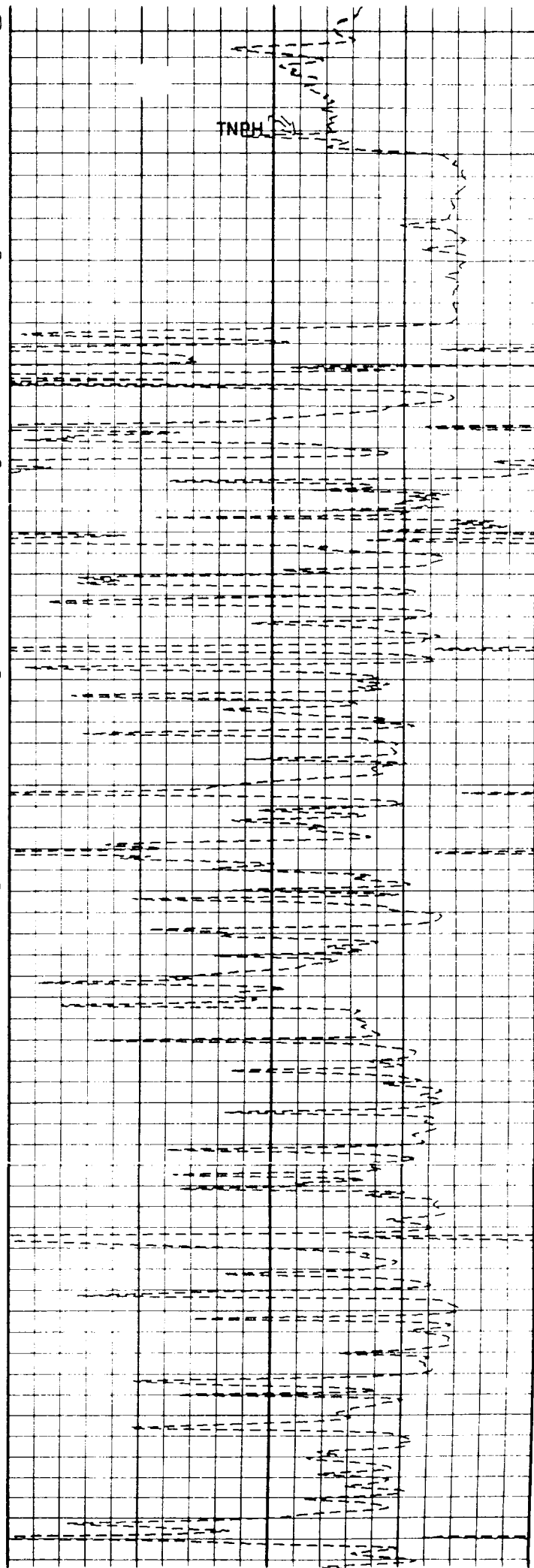
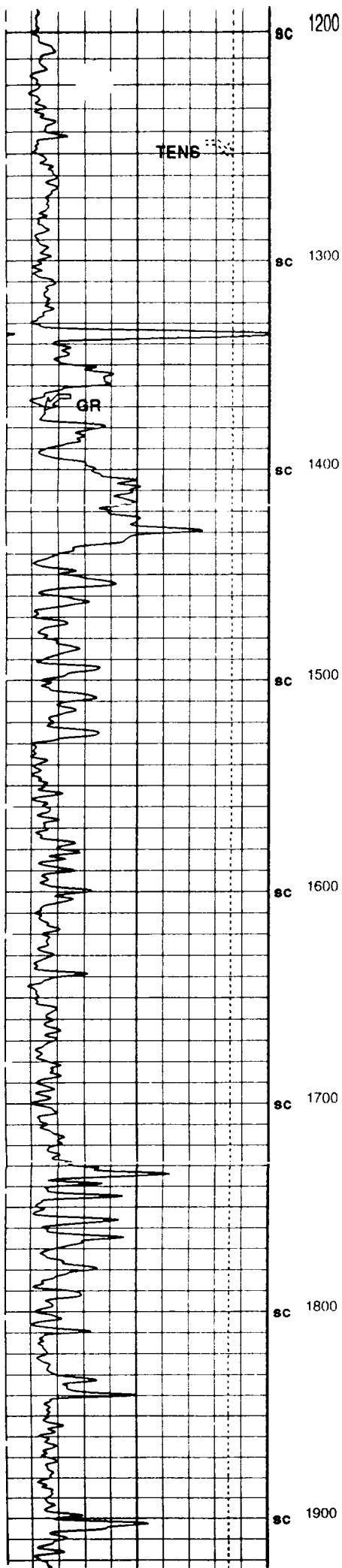
CONDITIONS OF APPROVAL, IF ANY:

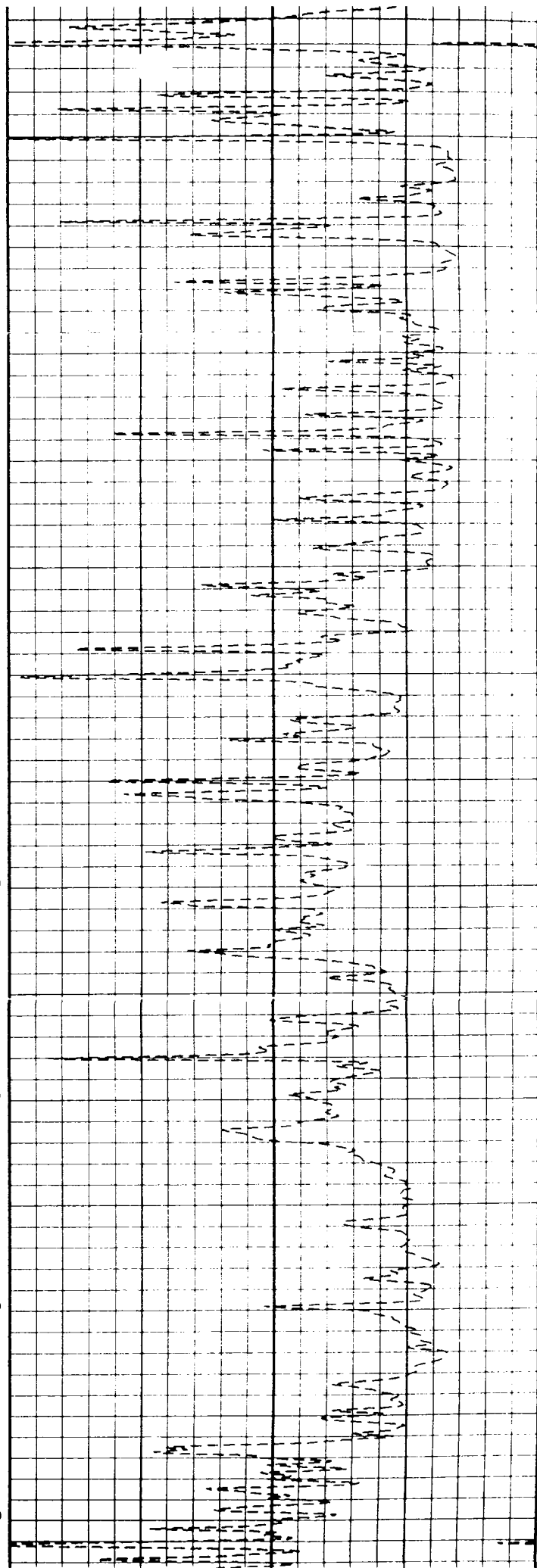
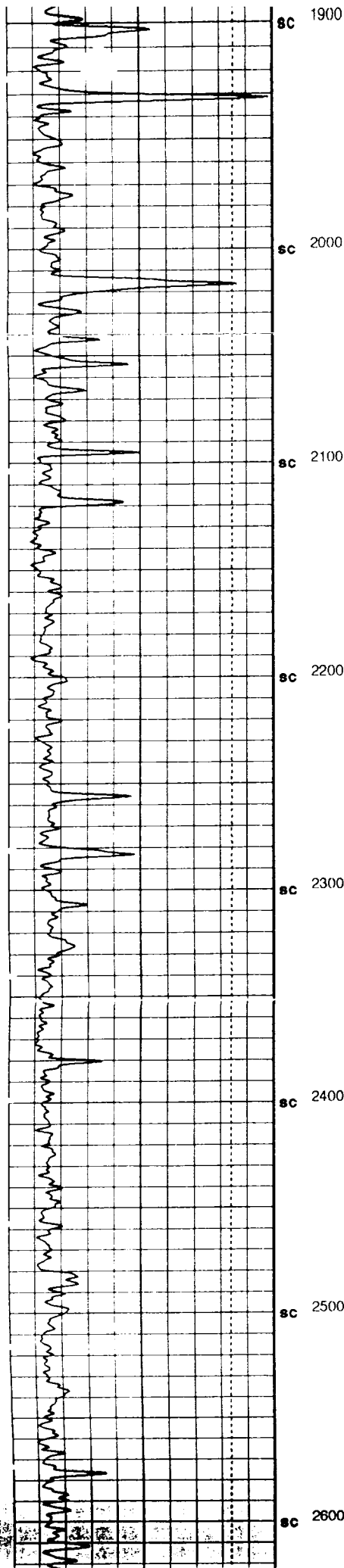
STATE: **New Mexico**

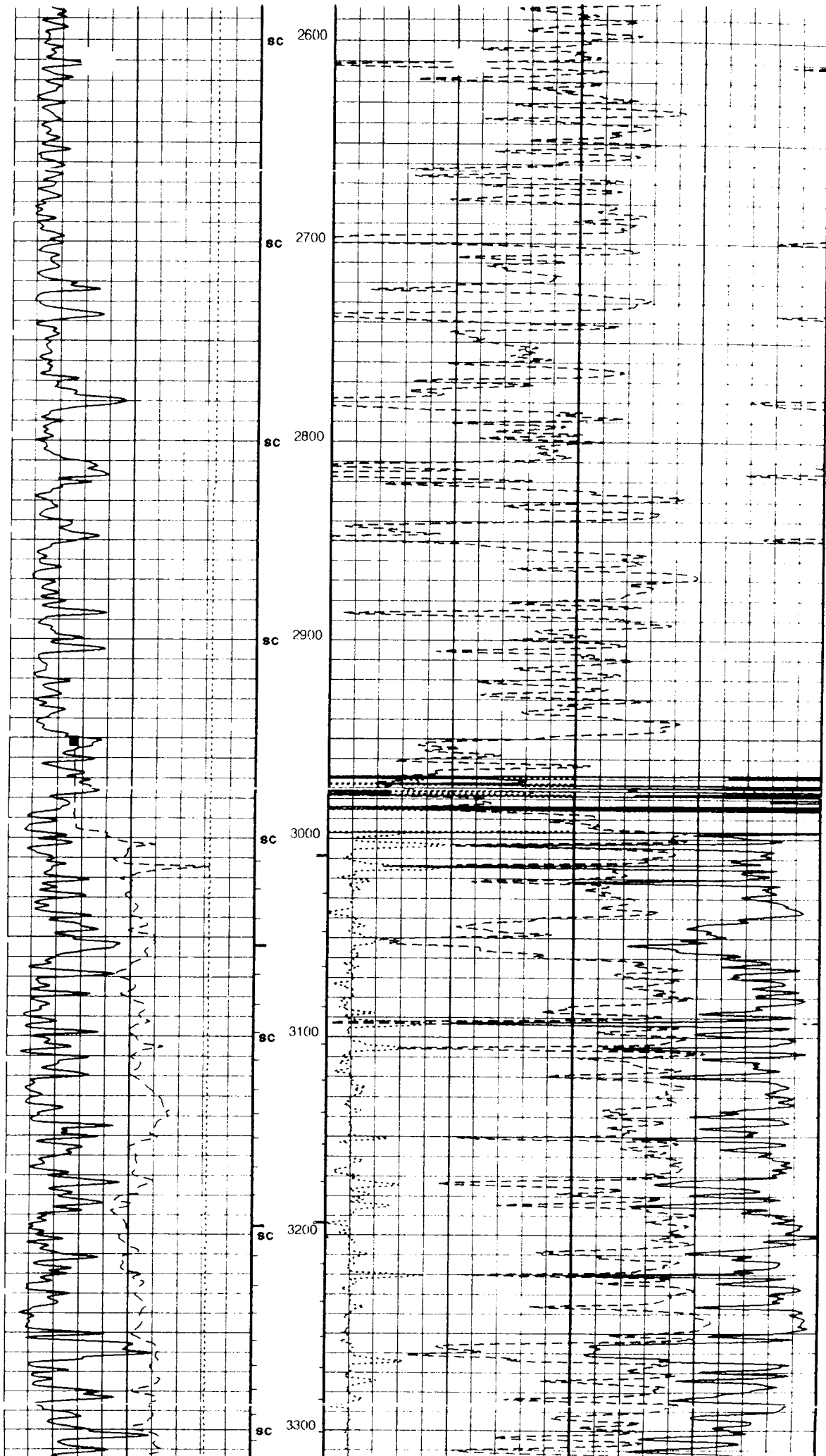
PLATFORM EXPRESS
Three Detector Litho-Density
Compensated Neutron / GR

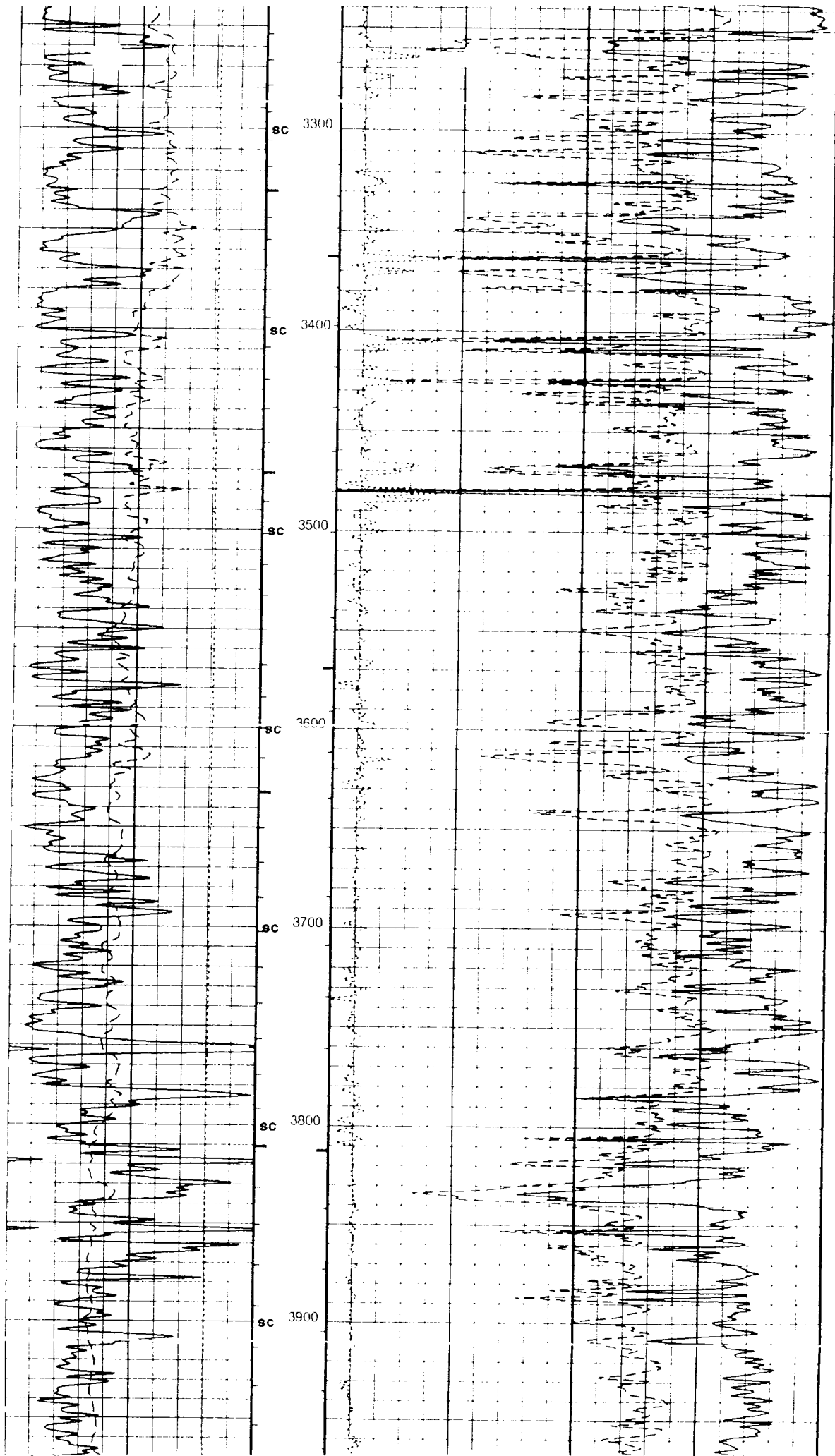
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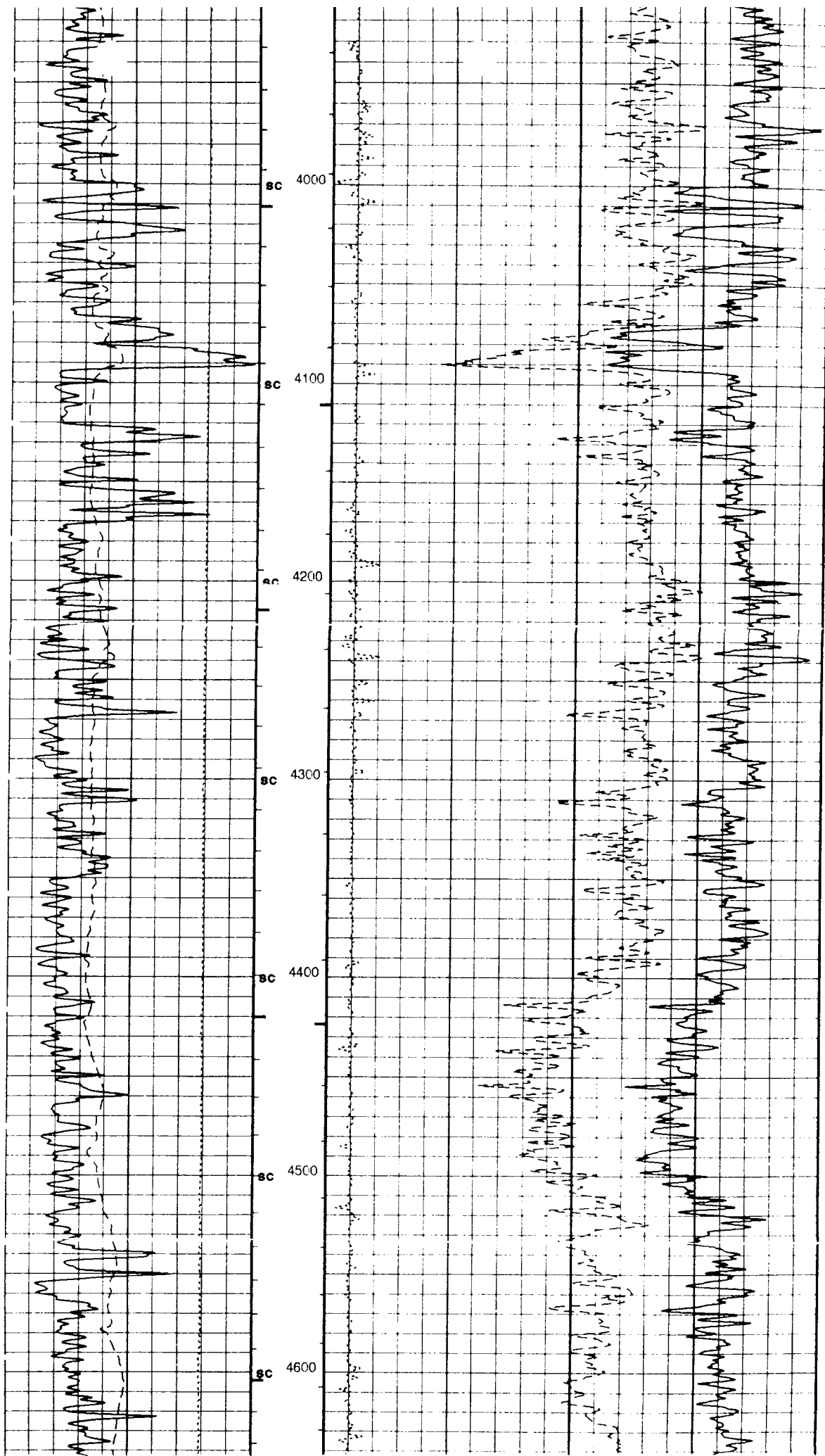


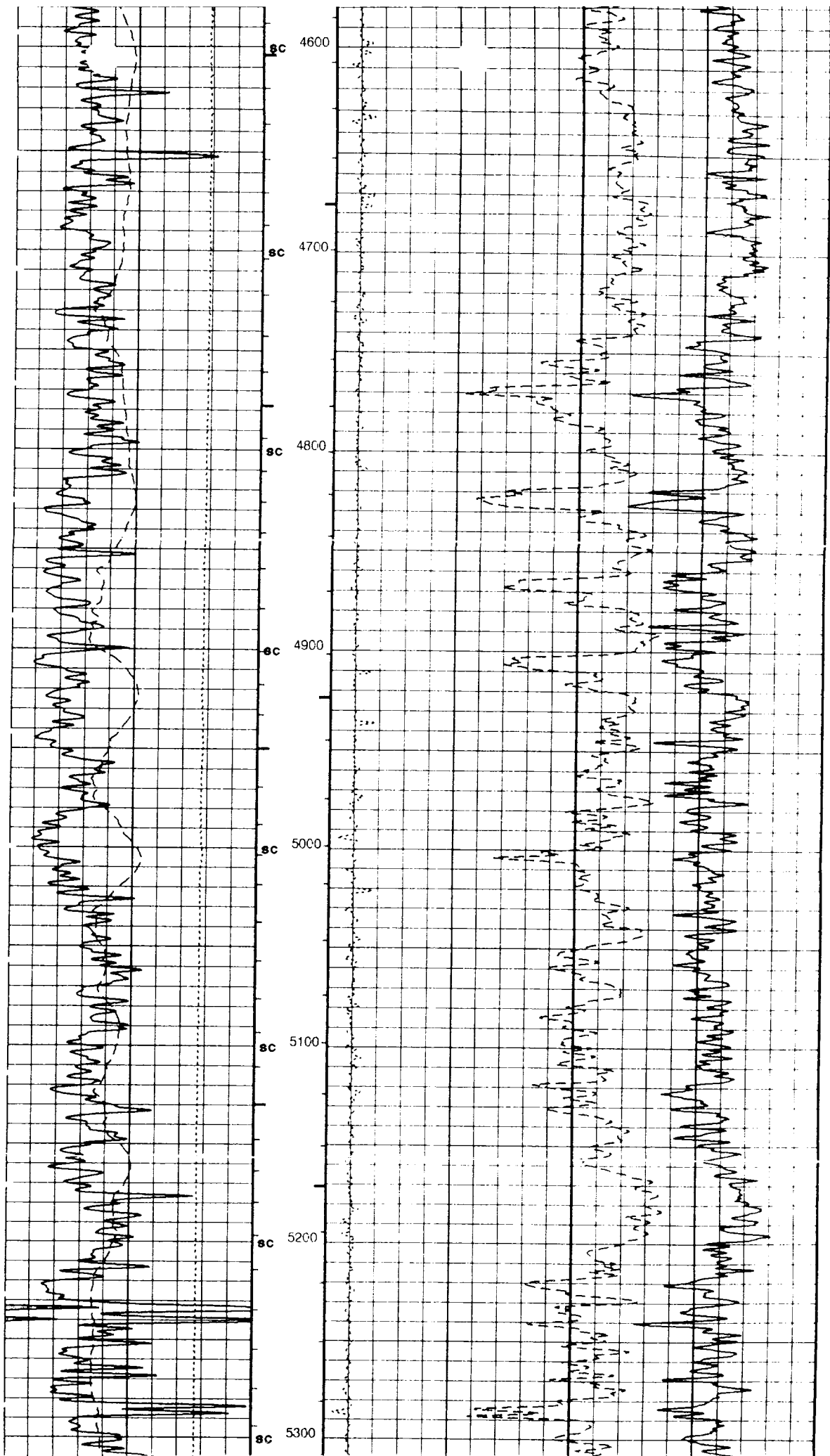


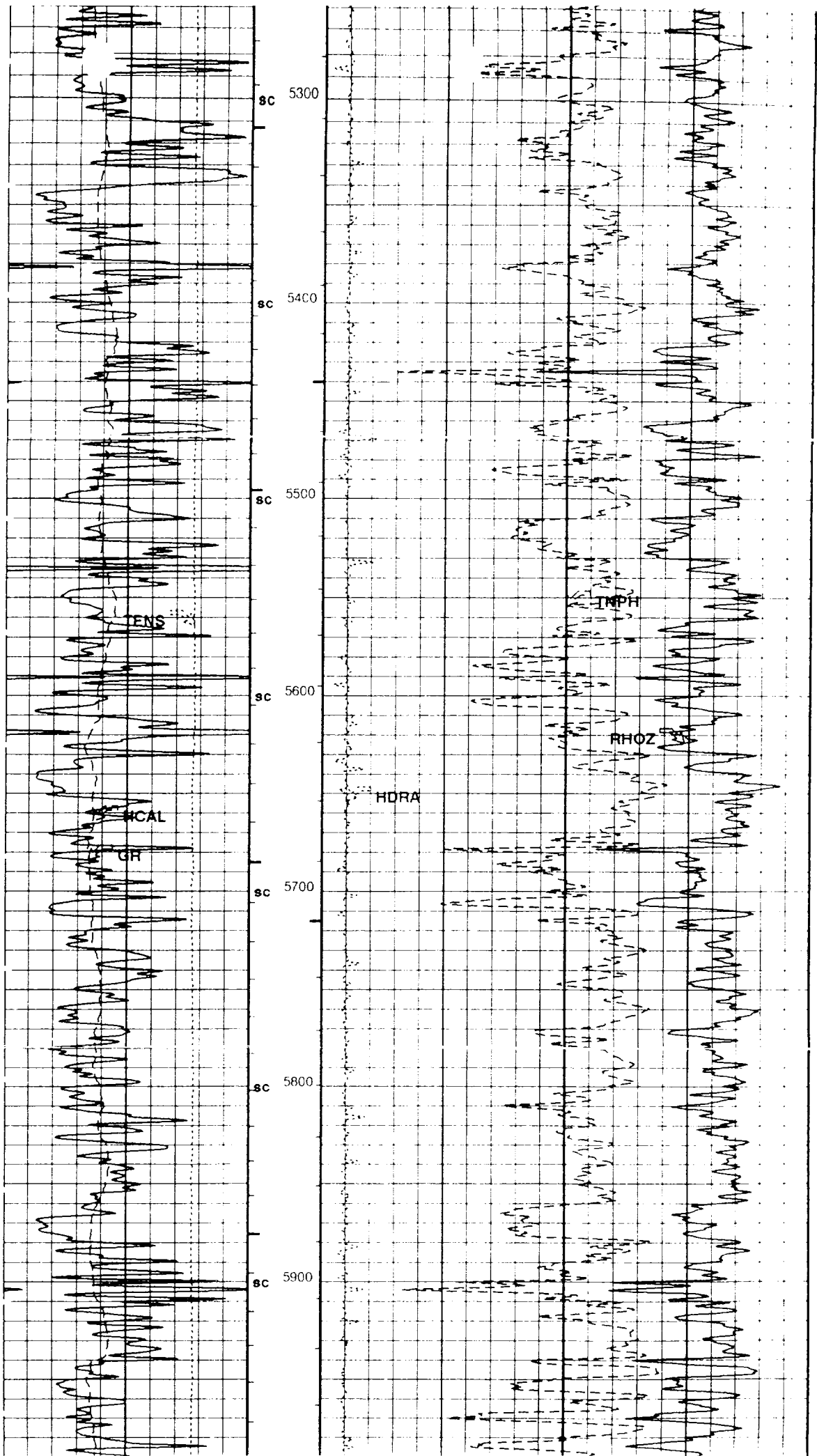


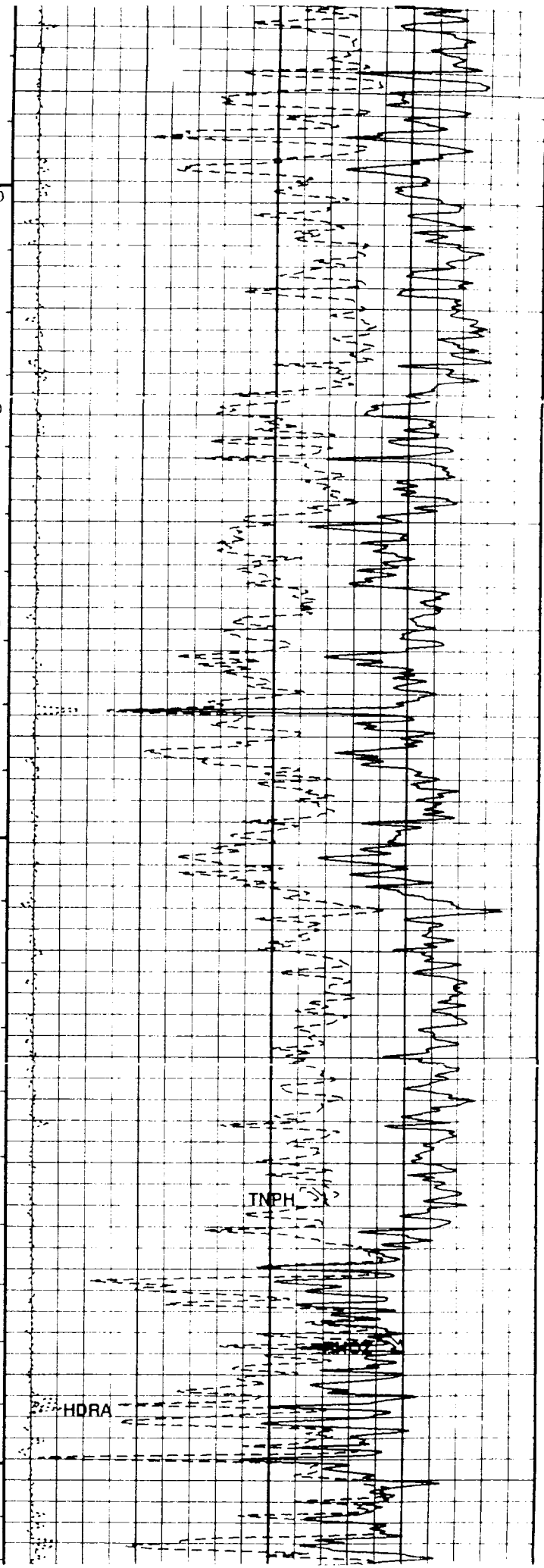
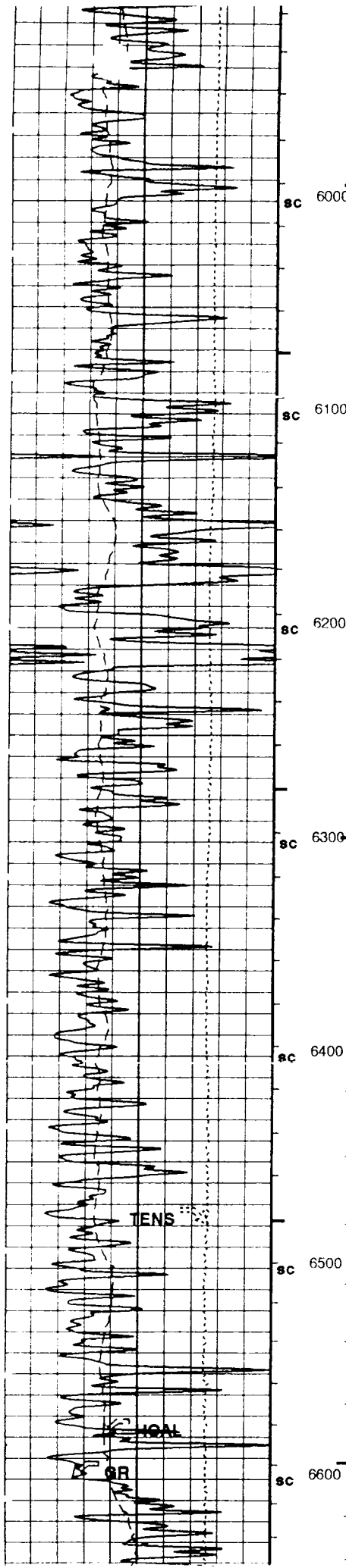


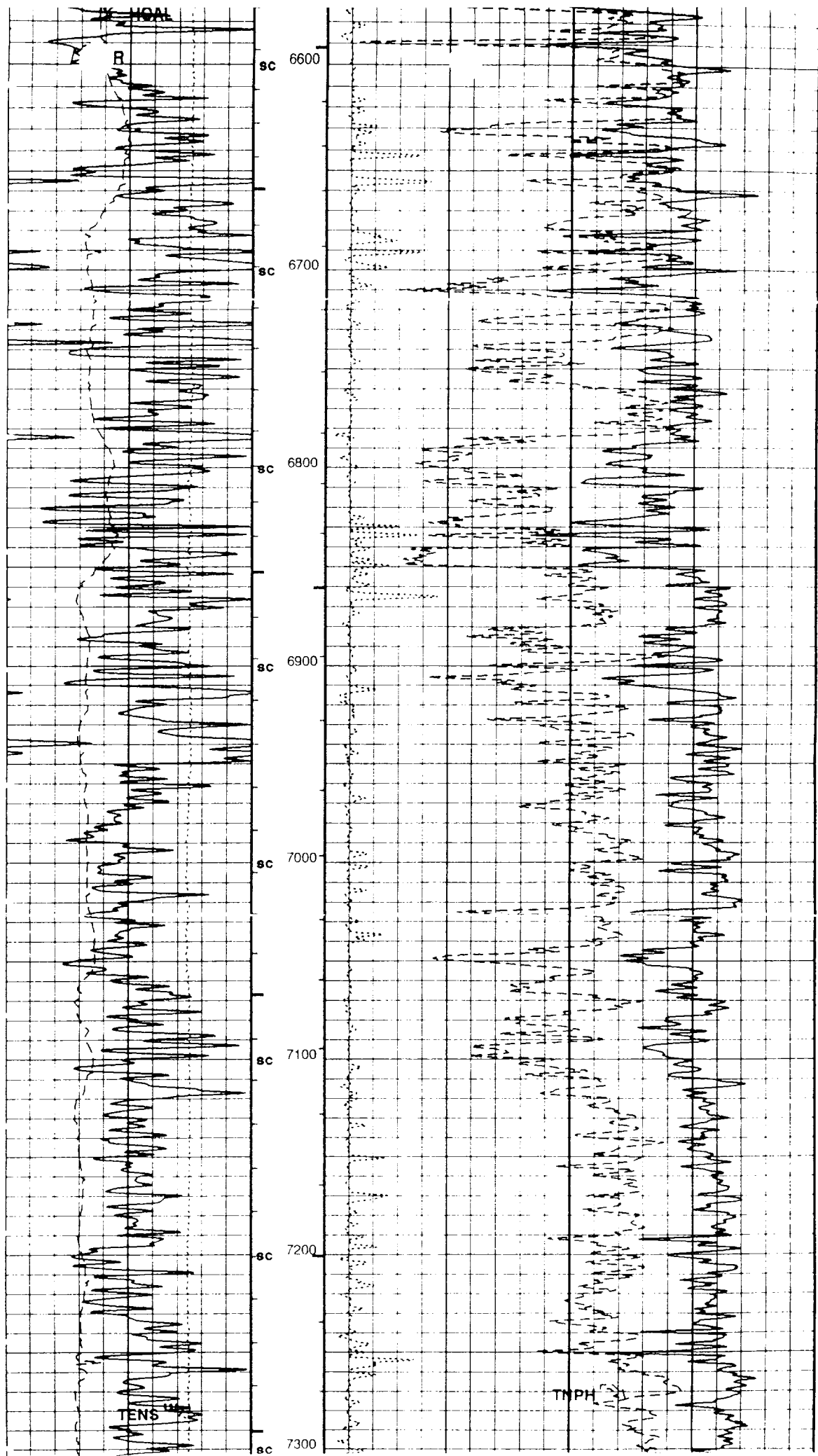


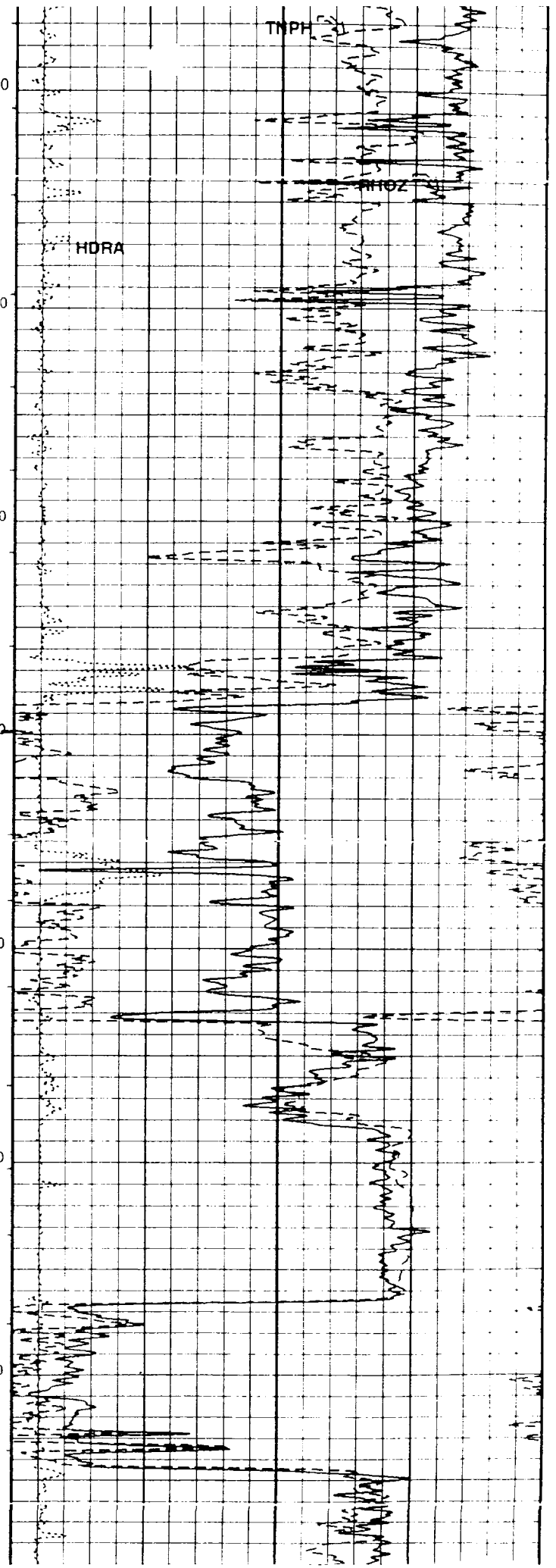
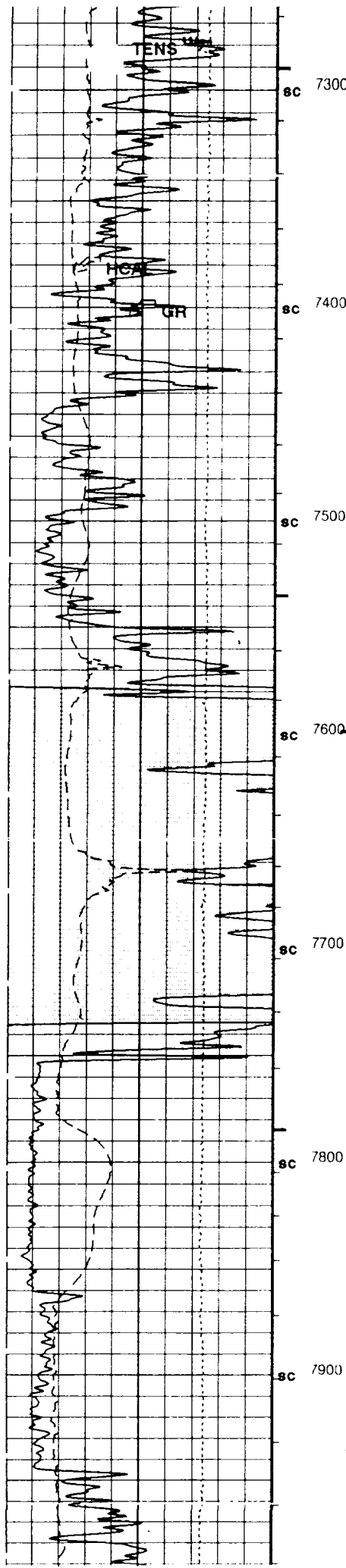


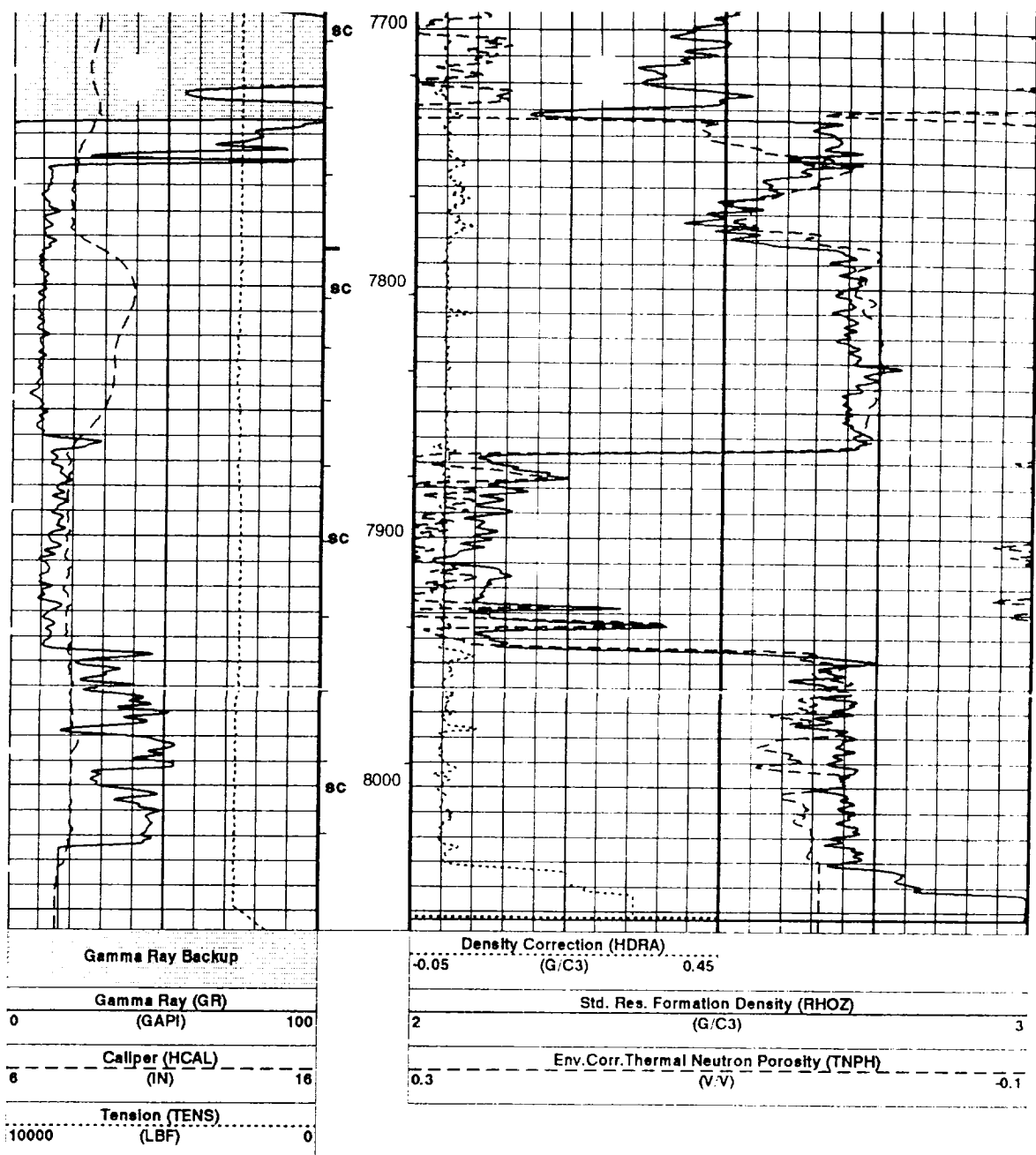












PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHFL	Borehole Fluid Type	WATER
BHS	Borehole Status	OPEN
BS	BH Size	7.875 IN
BSAL	Borehole Salinity	11000.00 PPM
BSCO	Borehole Salinity Correction Option	NO
CCCC	Casing & Cement Thickness Correction Option	NO
CSIZ	Current Casing Size	9.625 IN
CWEI	Casing Weight	24.00 LB/F
DFD	Drilling Fluid Density	8.60 LB/G
DHC	Density Hole Correction	BS
DORL	Depth Offset Repeat Analysis	0.0 FT
FSAL	Formation Salinity	-50000 PPM
FSCO	Formation Salinity Correction Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
HSCM	HILT Speed Correction Mode	TSCD_SPEED_CORRECTION
HSCO	Hole Size Correction Option	YES
HSTI	STI Uses HILT Acceleration	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	NATU
MST	Mud Sample Temperature	82.00 DEGF
MWCO	Mud Weight Correction Option	NO
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	StdRes
NSAR	HRDD Depth Sampling Rate	1 IN

BILL F. HALEPESKA

*Petroleum Engineer
Texas #58052
P. O. Box 80064
915/694-5945*

*Geologist
Cert. #2941
Midland, Texas 79708*

December 08, 2000

To: Offset Leasehold Operators and Surface Owner
(See Attached List)

Re: West Dollarhide Devonian Unit Project, NM MI
Lea County, New Mexico
Application for Administrative Approval to
Inject into the WDDU No. 122 Well, located
2225' FSL & 875' FWL of Sec. 33, T-24S, R-38E

Gentlemen:

Arch Petroleum has applied to the New Mexico Oil Conservation Division for Administrative Approval to inject into the captioned well.

A copy of the Form C-108 submitted by Arch to the Division is enclosed.

If you object to and/or request that a hearing be held pertaining to this Application, you must notify the Division within fifteen (15) days from the date of Arch's Application.

If you have any questions, please contact the undersigned or Mr. Richard Wright.

Very truly yours,



Bill F. Halepeska, P.E.
Agent

Enclosure

Attached to Notification Letter dated December 8, 2000, regarding Arch's Application for Administrative Approval to inject into the WDDU No. 122 Well

Saga Petroleum, LLC
415 West Wall, Suite 1900
Midland, Texas 79701

Texaco, Inc.
500 North Loraine
Midland, Texas 79701
Attention: Mr. Mike Mullins

New Mexico State Land Office
P. O. Box 1148
Santa Fe, New Mexico 87504-1148
Attention: Mr. Joe Lopez/Commercial Resources

Mr. George Willis
P.O. Box 307
Jal, New Mexico 88252

- Complete items 1, 2, and 3. Also item 4 if Restricted Delivery is desired.
 Print your name and address on the reverse so that we can return the card to you.
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

MR. GEORGE WILLIS
 P. O. BOX 307
 JAL., NEW MEXICO 88252

B. Date of Delivery

12-11-00

C. Signature

X *George Willis*

☐ Agent
☐ Addressee

D. Is delivery address different from item 1?

☐ Yes
☐ No

If YES, enter delivery address below:

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise

2. Article

PS Form

- Complete items 1, 2, and 3. Also item 4 if Restricted Delivery is desired.
 Print your name and address on the reverse so that we can return the card to you.
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

SAGA PETROLEUM, LLC
 415 WEST WALL, SUITE 1900
 MIDLAND, TEXAS 79701

C. Signature

X *[Signature]*

☐ Agent
☐ Addressee

D. Is delivery address different from item 1?

☐ Yes
☐ No

If YES, enter delivery address below:

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise

2. Article

PS Form

- Complete items 1, 2, and 3. Also item 4 if Restricted Delivery is desired.
 Print your name and address on the reverse so that we can return the card to you.
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

TEXACO, INC.
 500 NORTH LORAIN
 MIDLAND, TX 79701

Date of Delivery

12/11/00

C. Signature

X *Brian Retana*

☐ Agent
☐ Addressee

D. Is delivery address different from item 1?

☐ Yes
☐ No

If YES, enter delivery address below:

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

CERTIFIED MAIL RECEIPT

(Do not use if delivery is by registered mail or by insured mail)

SANTA FE, NM 87504-1148
 NEW MEXICO STATE LAND OFFICE

Postage

\$	1.21
Certified Fee	1.40
Return Receipt Fee (Endorsement Required)	1.25
Restricted Delivery Fee (Endorsement Required)	3.86
Total Postage & Fees	\$

UNIT ID: 0708

Postmark

Clerk: KORENO

12/08/00

Return Receipt

10256-99-M-1788

Name (Please Print Clearly) (To be completed by mailer)

NEW MEXICO STATE LAND OFFICE

Street, Apt. No., or P.O. Box No.

P. O. BOX 1148

City, State, ZIP+4

SANTA FE, NEW MEXICO 87504-1148

7099 3220 0005 5196 1245

Affidavit of Publication

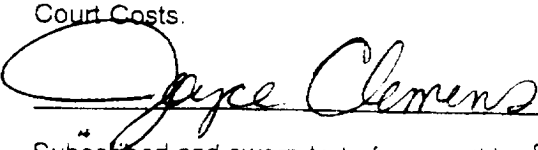
STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

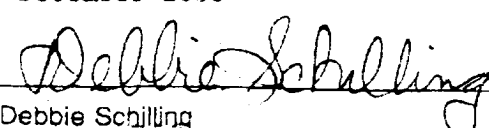
Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Director of **THE LOVINGTON DAILY LEADER**, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled
Legal Notice

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of December 8, 2000 and ending with the issue of December 8, 2000.

And that the cost of publishing said notice is the sum of \$ 21.48 which sum has been (Paid) as Court Costs.


Subscribed and sworn to before me this 8th day of December 2000


Debbie Schilling

Notary Public, Lea County, New Mexico

My Commission Expires June 22, 2002

Legal Notice
PUBLIC NOTICE
APPLICATION FOR
AUTHORIZATION TO
INJECT SALTWATER
ARCH PETROLEUM,
P.O. Box 10340, Midland,
Texas 79702 (Contact -
Richard L. Wright at
815/836-2100). ~~was~~
applied to the New Mexico
Oil Conservation Division
for Administrative
Approval for Authorization
to inject saltwater into its
WDDW No. 122 well,
located 2225 FSL & 875'
FWL of Section 33 T-24
S. R-36-E, Lea County,
New Mexico. The purpose
of such well will be for

pressure maintenance by
injection of saltwater pro-
duced from Arch's nearby
wells. The injection inter-
val will be in the Devonian
Formation between 7783'
and 7920' beneath the
surface, with an expected
maximum injection rate of
~~1000 bbls/day~~ ~~at an~~
expected maximum injec-
tion pressure of 2000 psi.

Any interested parties
must file objections or
requests for a hearing
with the New Mexico Oil
Conservation Division,
P.O. Box 2068, Santa Fe,
New Mexico 87504-2068
within fifteen (15) days

from the date of Arch
Application.
Published in
Lovington Daily Lead
December 8, 2000.