

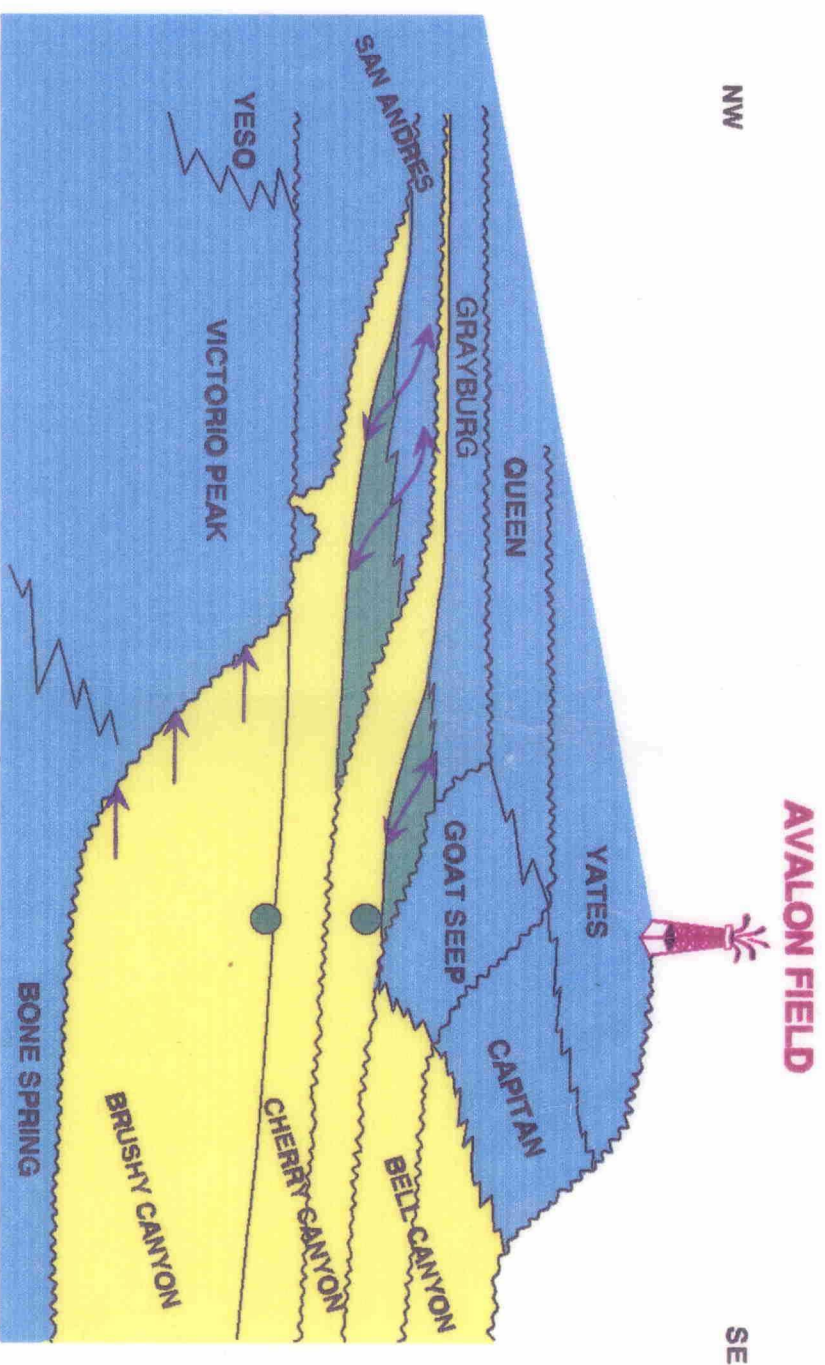
AVALON (DELAWARE) FIELD

EDDY COUNTY, NEW MEXICO

REPORT OF THE TECHNICAL COMMITTEE FOR THE

WORKING INTEREST OWNERS

VOLUME II - MAPS AND CROSS SECTIONS



EXXON COMPANY, USA
SOUTHWESTERN PRODUCTION DIVISION
RESERVOIR TECHNOLOGY GROUP

AUGUST, 1992

AVALON (DELAWARE) FIELD
Eddy County, New Mexico

REPORT OF THE TECHNICAL COMMITTEE
FOR THE WORKING INTEREST OWNERS

VOLUME II - TEXT AND EXHIBITS

With Contributions By:

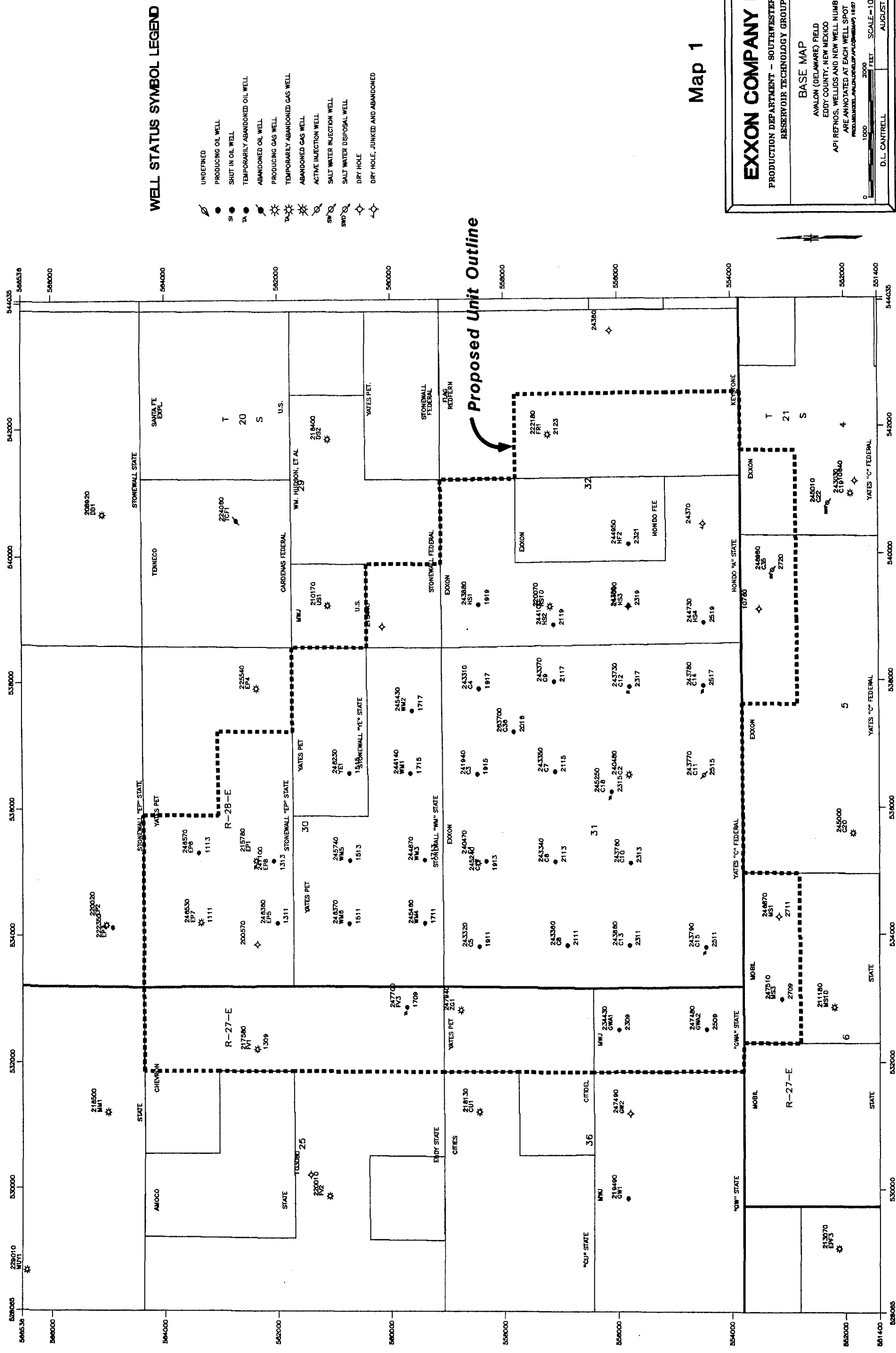
G. G. Beuhler
T. W. Brannon
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D. L. Cantrell
J. M. Goodwin
F. M. Haynes
T. V. Kane
R. M. Stuart

August 1992

VOLUME II - MAPS ANDS CROSS SECTIONS

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 - Map 2 Lower Cherry/Upper Brushy Canyon Top Reservoir (LCHT) Structure Map
 - Map 3 Top Bone Spring - Base Delaware (BSPG) Structure Map
 - Map 4 Lower Cherry/Upper Brushy Canyon Gross Thickness
 - Map 5 Upper Cherry Canyon - Top Reservoir (UCH-DLS) Structure Map
 - Map 6 Upper Cherry Canyon - Base Reservoir (UCHB) Structure Map
 - Map 7 Upper Cherry Canyon - Gross Thickness
 - Map 8 Lower Cherry/Upper Brushy Canyon - Net to Gross Ratio
 - Map 9 Lower Cherry/Upper Brushy Canyon - Net Thickness
 - Map 10 Lower Cherry/Upper Brushy Canyon - Average Porosity
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 - Map 18 Upper Cherry Canyon - Porosity Thickness
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 - North-South Structural Cross Section 1
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 - Northwest-Southeast Structural Cross Section 3
 - Northwest-Southeast Structural Cross Section A3
 - Northwest-Southeast Structural Cross Section B3
 - Northwest-Southeast Structural Cross Section 4

AVALON (DELAWARE) FIELD BASEMAP



Map 1

EXXON COMPANY USA

**PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP**

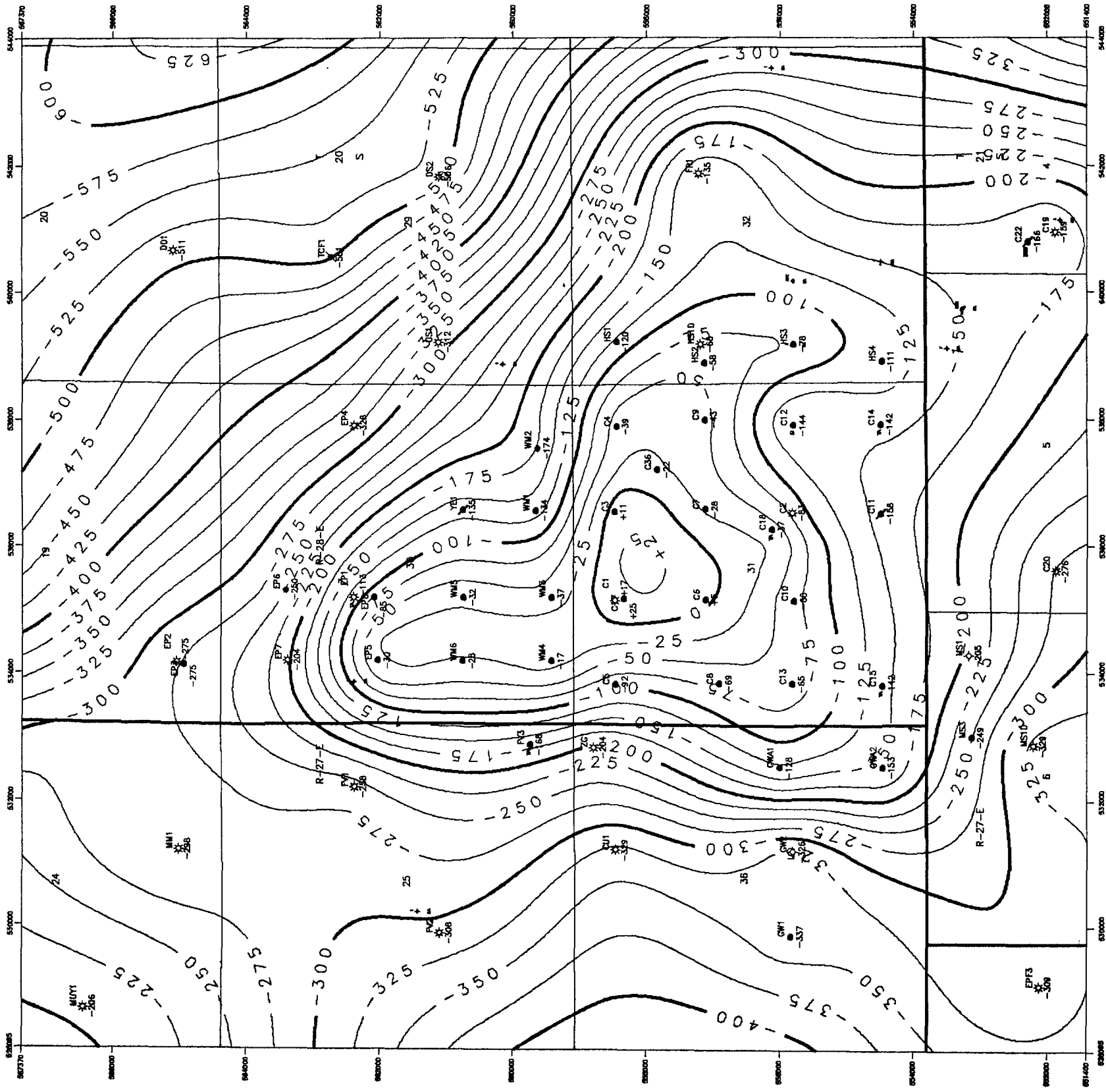
BASE MAP

API REFNOs, WELLIDS AND NEW WELL NUMBERS
ARE ANNOTATED AT EACH WELL SPOT

D.L. CANTRELL
AUGUST 18, 1992

1000
FEET SCALE = 1000 FEET / INCH

LOWER CHERRY/UPPER BRUSHY CANYON Top Reservoir (LCHT)



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

COMMENT CODE LEGEND

NA : PICK NOT AVAILABLE

Map 2

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURE (FT) MAP, DATUM = MSL
LOWER CHERRY CANYON TOP
ANALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
FIELD MAP NO. 1000
SCALE = 1:1000
JULY 30, 1982

- PRODUCING OIL WELL.
- SHUT IN OIL WELL.
- TEMPORARILY ABANDONED OIL WELL.
- ABANDONED OIL WELL.
- PRODUCING GAS WELL.
- TEMPORARILY ABANDONED GAS WELL.
- ACTIVE INJECTION WELL.
- SALT WATER INJECTION WELL.
- SALT WATER DISPOSAL WELL.
- DRY HOLE.
- DRY HOLE, JUNKED AND ABANDONED.

COMMENT CODE LEGEND

Map 3

EXXON COMPANY USA

PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION

RESERVOIR TECHNOLOGIST GROUP - CROOKLEY

STRUCTURE (FT) MAP, DATUM = MSL

BONE SPRINGS TOP

ANULON (DELAWARE) FIELD

EDDY COUNTY, NEW MEXICO

PRODUCTION MODEL DEVELOPMENT (CROOKLEY) 01618

GMT = 25 GMT = 400

SCALE = 1000 FEET / INCH

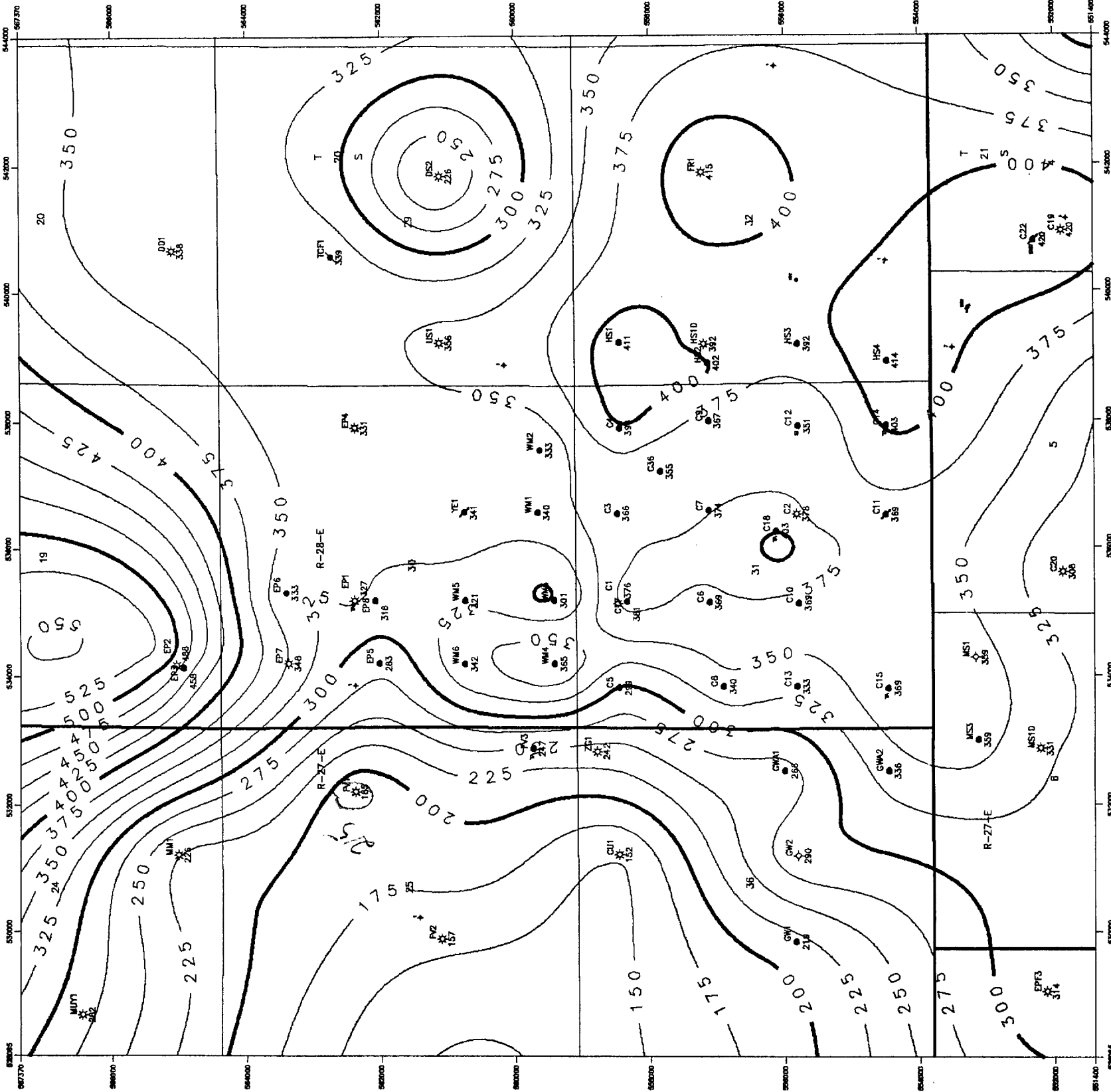
0 1000 2000 FEET

THE BRANDELL D. CONTRELL, IV FIRM

JULY 29, 1982

LOWER CHERRY/UPPER BRUSHY CANYON

Gross Thickness



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- ◐ SHUT IN OIL WELL
- ◑ TEMPORARILY ABANDONED OIL WELL
- ◒ ABANDONED OIL WELL
- ★ PRODUCING GAS WELL
- ✱ TEMPORARILY ABANDONED GAS WELL
- ✱ ACTIVE INJECTION WELL
- ☒ SALT WATER INJECTION WELL
- ☒ SALT WATER DISPOSAL WELL
- ✱ DRY HOLE
- ✱ DRY HOLE, JUNKED AND ABANDONED
- ◑ ABANDONED LOCATION

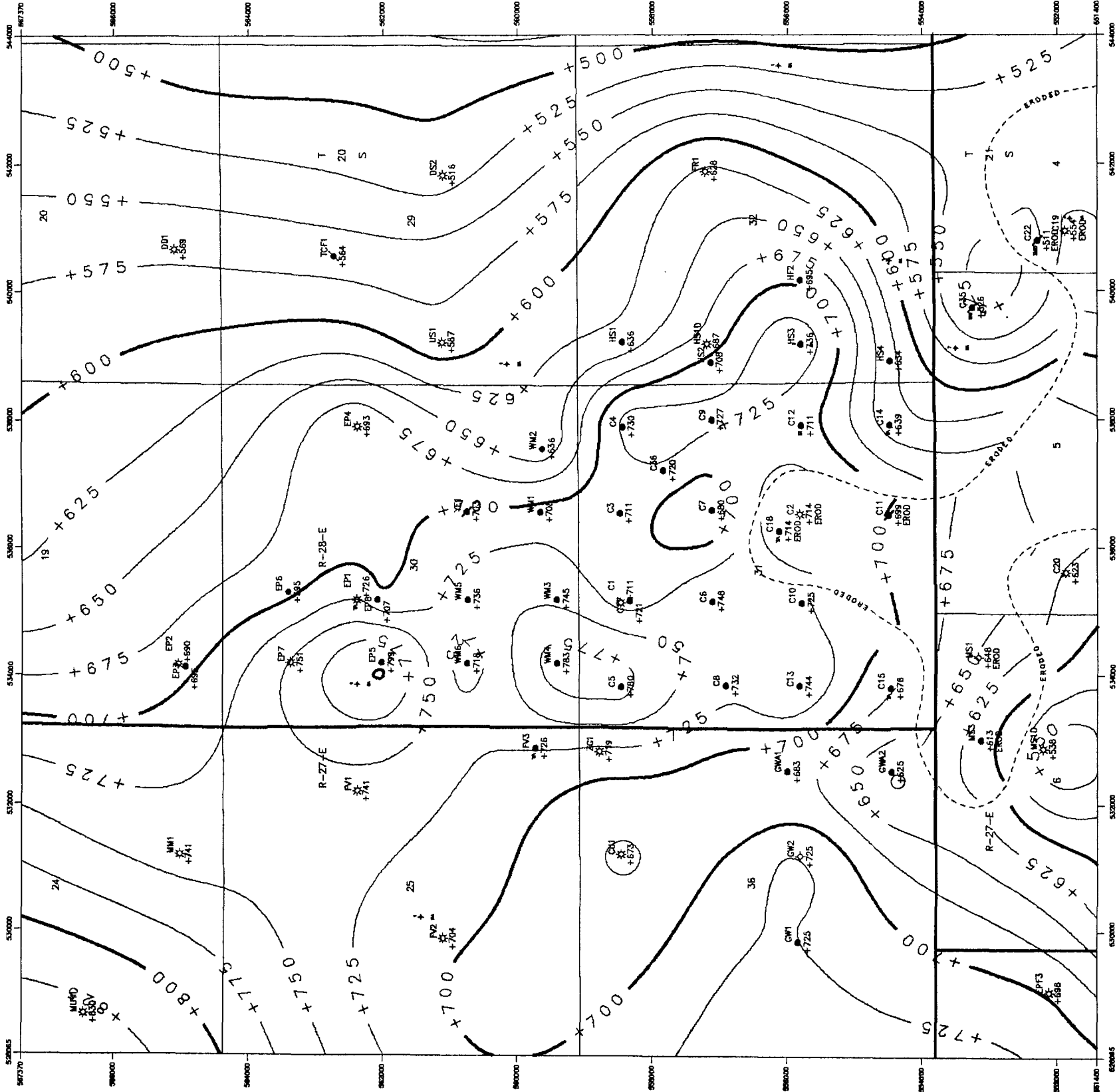
NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTINUING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

Map 4

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

TOTAL GROSS THICKNESS MAP
ANALOGATION OF ZONES LOST BITUM BARBS
ANALOG (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
ANALOGATIONS WELLS, THICKNESS (FT)
1000 2000 3000
CONT = 25 GINT = 400
SCALE = 1000 FEET/INCH
JULY 30, 1982

UPPER CHERRY CANYON - Top Reservoir (UCH-DLS)



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTINUING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

COMMENT CODE LEGEND

EROD : PICK MISSING DUE TO EROSION, DEPTH OF UNCONFORMITY POSTED
NA : PICK NOT AVAILABLE

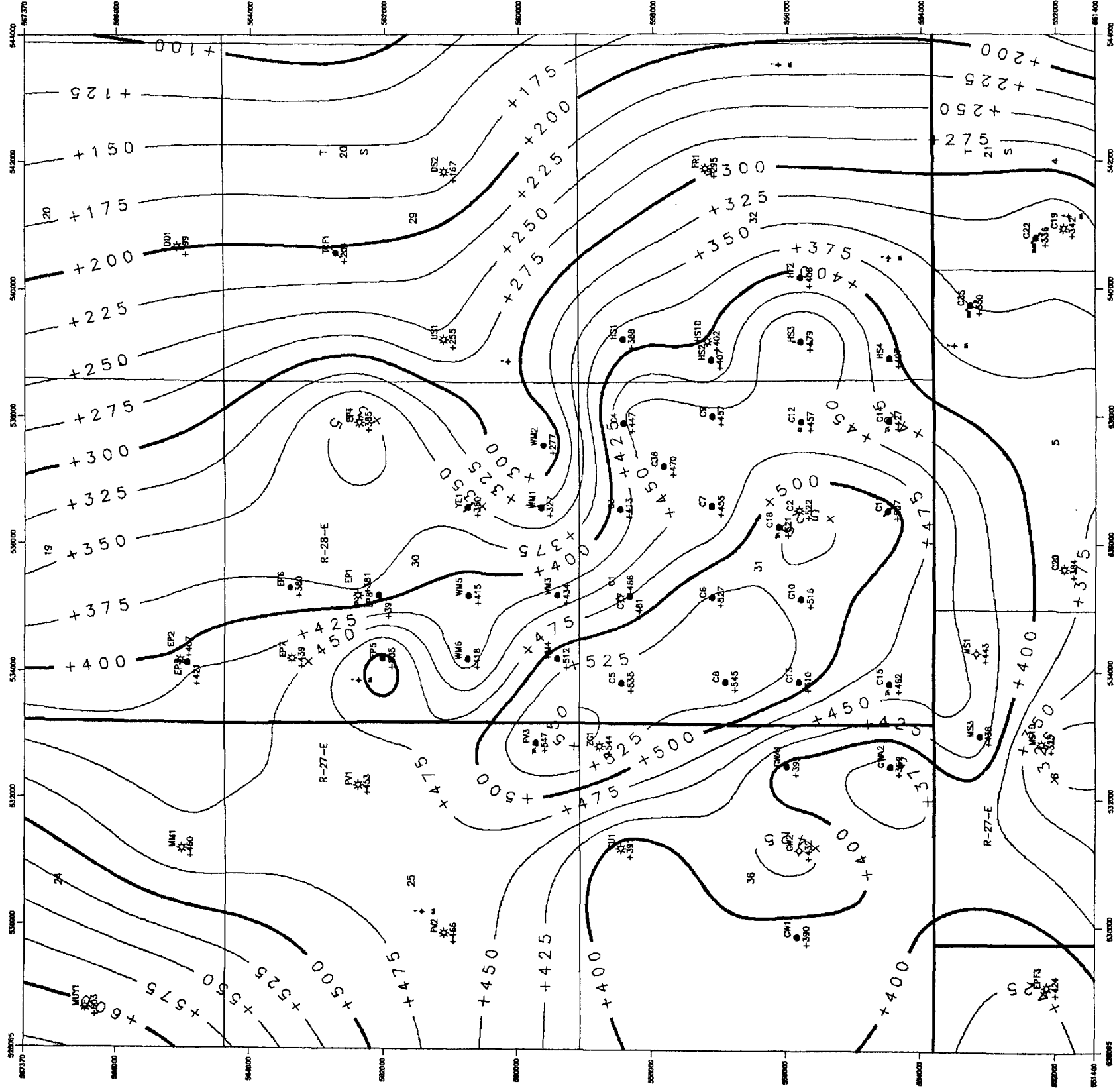
Map 5

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURE (FT) MAP, DATUM = MSL
UPPER CHERRY CANYON DOWNMAP SURFACE
CONTOURS INSIDE ERODED AREAS ARE BASE OF COAT SEEP REEF
ANALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
FIELD MAPS ARE PREPARED BY PETROBRAS/EXXON
1:1000
2:1000
3:1000
4:1000
5:1000
6:1000
7:1000
8:1000
9:1000
10:1000
11:1000
12:1000
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89:1000
90:1000
91:1000
92:1000
93:1000
94:1000
95:1000
96:1000
97:1000
98:1000
99:1000
100:1000

PREPARED BY: J. L. CAMPBELL, JR. DATE: JULY 29, 1982
SCALE: 1:1000 FEET/INCH
CMT-25 CMT-400

UPPER CHERRY CANYON - Base Reservoir (UCHB)



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- ★ PRODUCING GAS WELL
- ★ TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- ⊗ SALT WATER INJECTION WELL
- ⊗ SALT WATER DISPOSAL WELL
- ⊗ DRY HOLE
- ⊗ DRY HOLE, JUNKED AND ABANDONED

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN DETERMINING THIS MAP.

COMMENT CODE LEGEND

NA : PICK NOT AVAILABLE

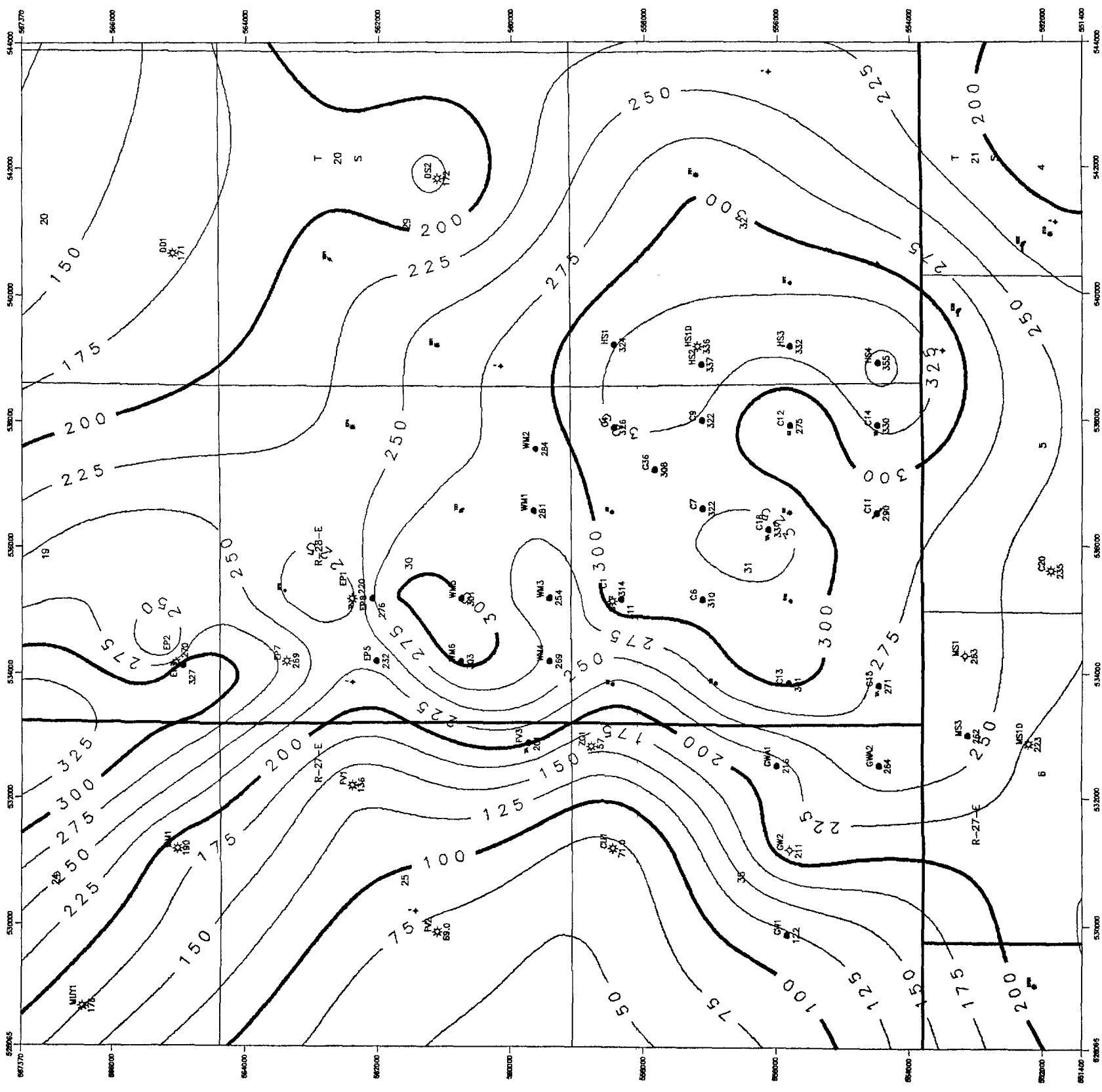
Map 6

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURE (FT) MAP, DATUM = MSL
UPPER CHERRY CANYON BASE
ANALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
PRODUCED UNDER DEVELOPMENT CONTRACT 10487
0 1000 2000 FEET
SCALE = 1000 FEET/INCH
THE ENGINEER, O. CAMPBELL, TV NAME
JULY 29, 1982

LOWER CHERRY/UPPER BRUSHY CANYON

Net Thickness



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- ◐ SHUT IN OIL WELL
- ◑ TEMPORARILY ABANDONED OIL WELL
- ◒ ABANDONED OIL WELL
- ✱ PRODUCING GAS WELL
- ✱ TEMPORARILY ABANDONED GAS WELL
- ✱ ACTIVE INJECTION WELL
- ✱ SALT WATER INJECTION WELL
- ✱ SALT WATER DISPOSAL WELL
- ✱ DRY HOLE
- ✱ DRY HOLE, JUNKED AND ABANDONED
- ✱ ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

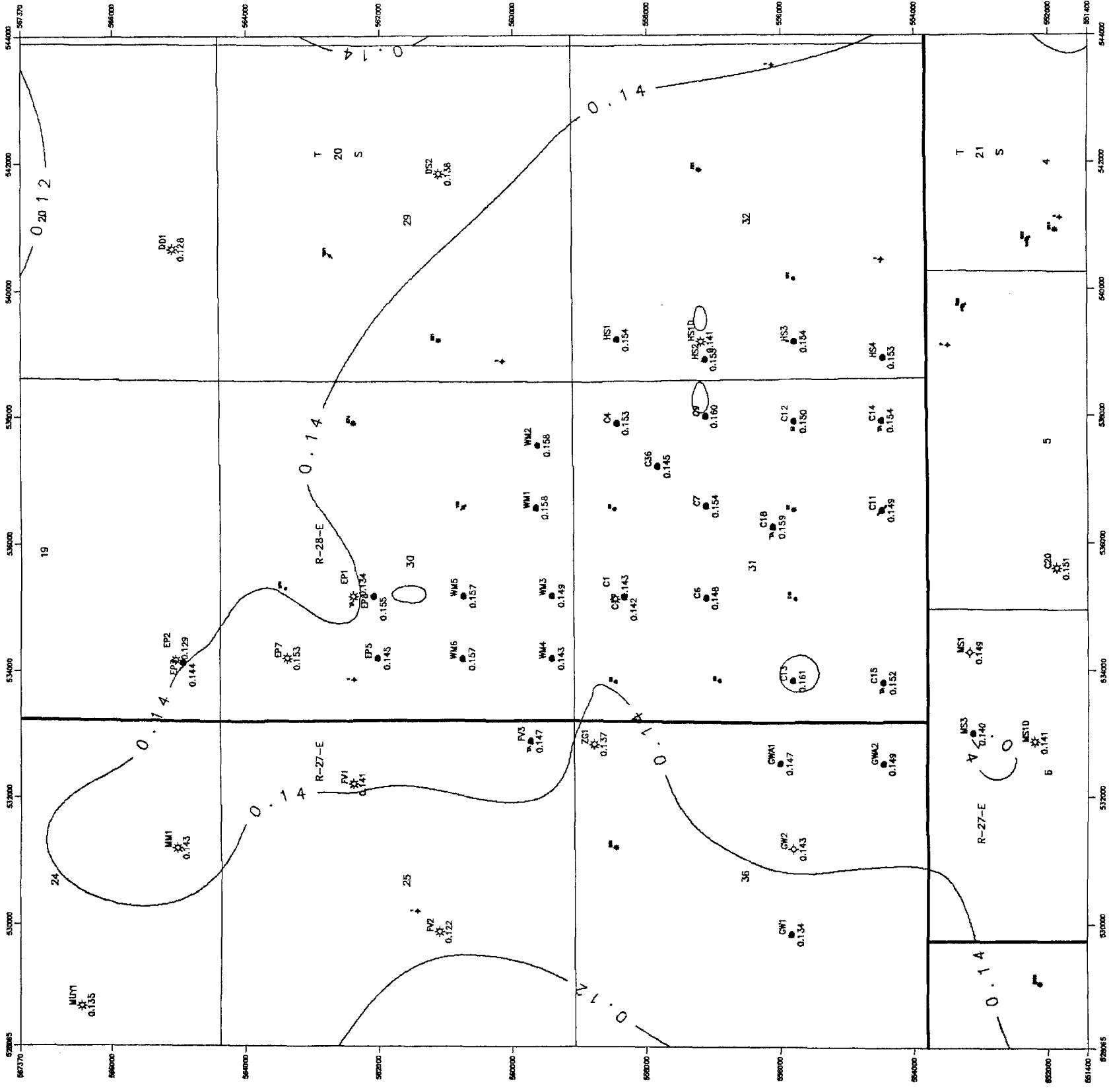
Map 9

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

TOTAL NET THICKNESS MAP
UPPER CHERRY: PM = 10 AND GR = 75, SWRPS = 259
UPPER BRUSHY: PM = 11 AND GR = 75, SWRPS = 260
NET THICKNESS FIELD
CONTOURS: 100 FEET
ANNUAL AVERAGE WELL THICKNESS (FT)
SCALE: 1:100,000
CINT = 25 CINT = 400
AUGUST 1, 1987

LOWER CHERRY/UPPER BRUSHY CANYON

Average Porosity



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED
- ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

Map 10

EXXON COMPANY USA

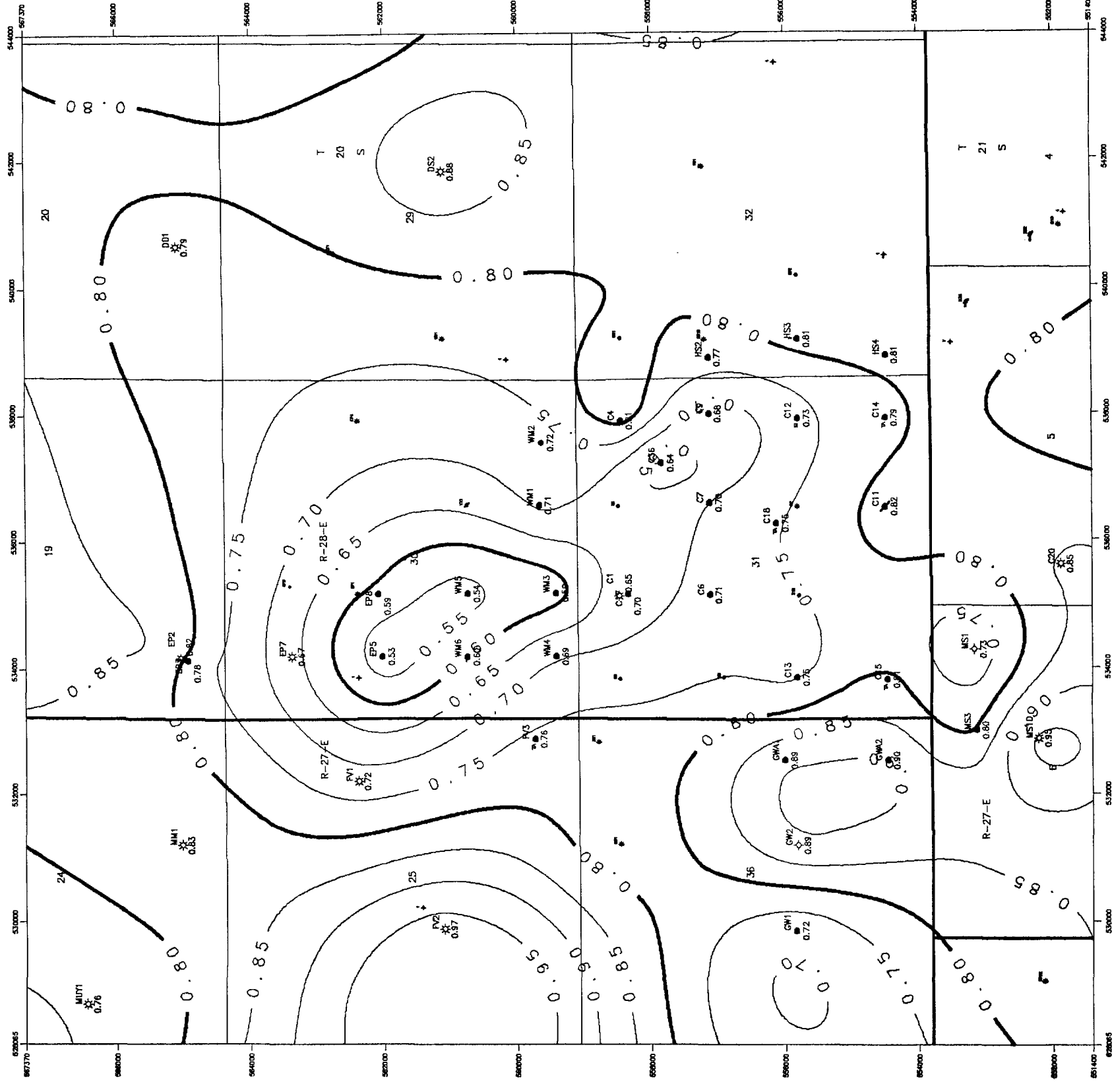
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

AVERAGE NET AVERAGE POROSITY MAP

DATE: 1982
UPPER CHERRY: P45 - J1 AND 8H - T5, 8895 - 308
UPPER BRUSHY: P45 - J1 AND 8H - T5, 8895 - 308
ANALYSIS OF ZONES LEFT BY THE BRUSHY
AND CHERRY FORMATIONS
ANALYSTS: M. J. BELL, D. J. BELL, D. J. BELL
REVIEWED: M. J. BELL, D. J. BELL, D. J. BELL
SCALE: 1:100,000 GNT-400
1000 FEET
T. J. BELL, D. J. BELL, D. J. BELL
AUGUST 4, 1982

LOWER CHERRY / UPPER BRUSHY CANYON

Average Water Saturation



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
 ●● SHUT IN OIL WELL
 ●●● TEMPORARILY ABANDONED OIL WELL
 ●●● ABANDONED OIL WELL
 ☼ PRODUCING GAS WELL
 ☼● TEMPORARILY ABANDONED GAS WELL
 ☼●● ACTIVE INJECTION WELL
 ☼●●● SALT WATER INJECTION WELL
 ☼●●● SALT WATER DISPOSAL WELL
 ◇ DRY HOLE
 ◇● DRY HOLE, JUNKED AND ABANDONED
 ◇●● ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

Map 12

EXXON COMPANY USA

PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
PLASTER TECHNOLOGY GROUP - CROLOGY

AVERAGE NET AVERAGE WATER SATURATION MAP

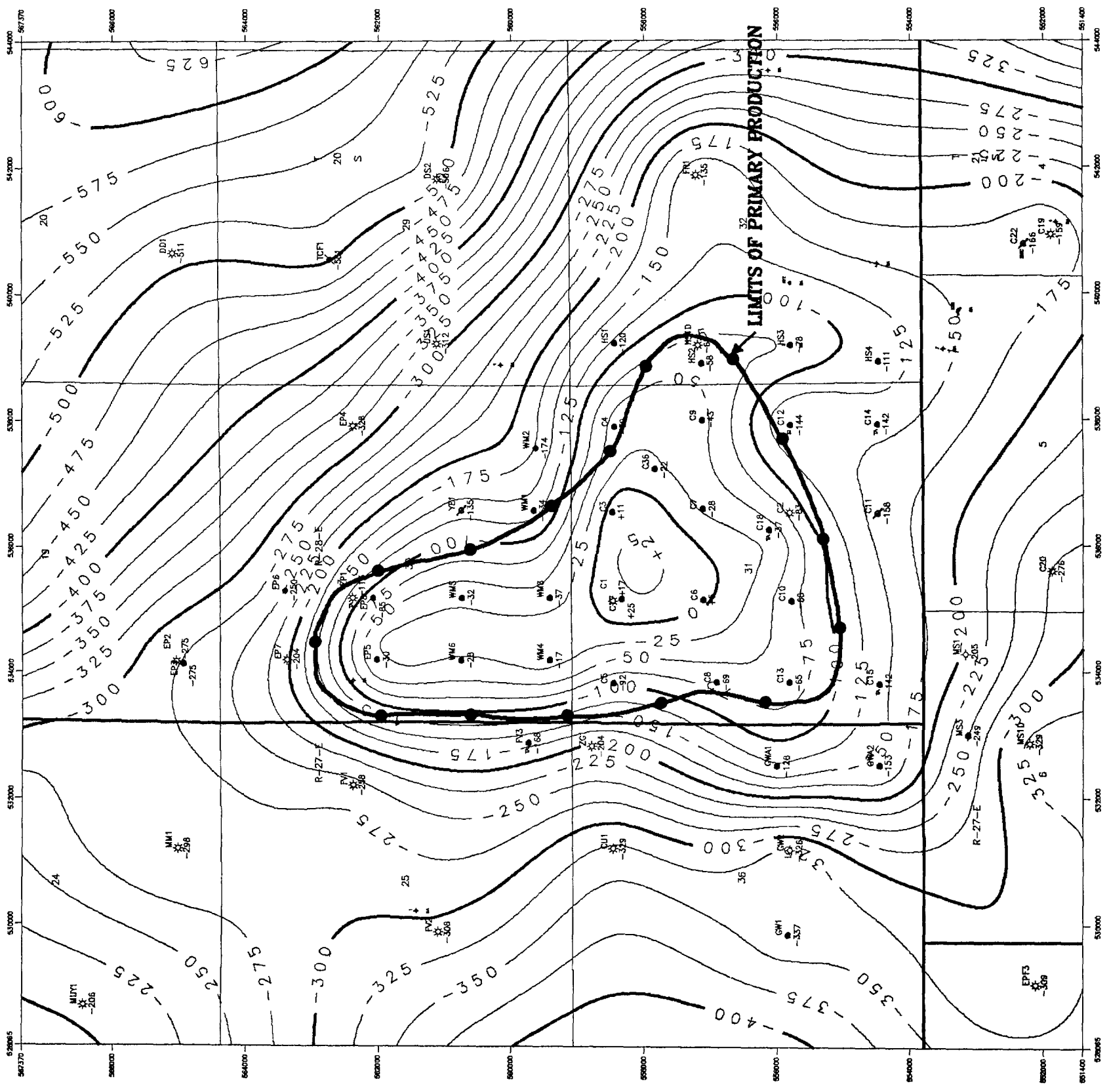
CASE -- 4074L
UPPER CHERRY; PH -- 10 AND GR -- 75, 80000 -- 230
UPPER BULSH; PH -- 11 AND GR -- 75, 80000 -- 300

ARLON (CLARK) FELD
ESSEX COUNTY, NEW MEXICO
ANNUITY: WELLER, FRANKLIN

1000
GINT=0.050000000 GINT=4000

LOWER CHERRY/UPPER BRUSHY CANYON

Top Reservoir (LCHT)



WELL STATUS SYMBOL LEGEND

- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- ▲ PRODUCING GAS WELL
- △ TEMPORARILY ABANDONED GAS WELL
- ◆ ACTIVE INJECTION WELL
- ◇ SALT WATER INJECTION WELL
- ★ SALT WATER DISPOSAL WELL
- ☆ DRY HOLE
- ✱ DRY HOLE, JUNKED AND ABANDONED

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

COMMENT CODE LEGEND

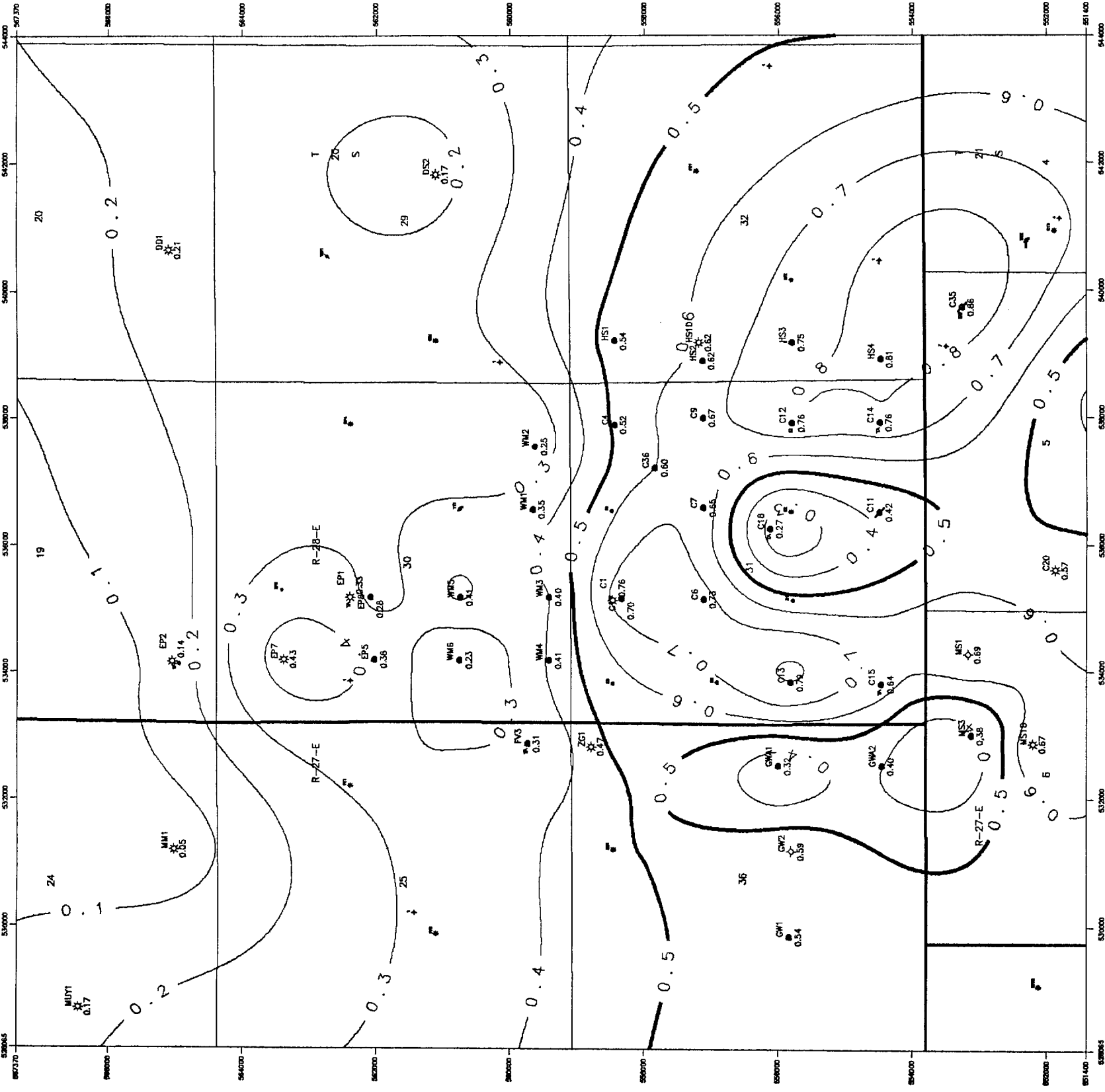
NA : PICK NOT AVAILABLE

Map 14

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURE (FT) MAP, DATUM = MSL
LOWER CHERRY CANYON TOP
AVALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
PRODUCTION DEVELOPMENT AND COMMUNITY RELATIONS
CMT# 25 GWT# 400
SCALE=1000 FEET/INCH
TR. BRANNAN, D.L. CANTRELL, T.V. WANE
AUGUST 4, 1982

UPPER CHERRY CANYON - Net To Gross Ratio



WELL STATUS SYMBOL LEGEND

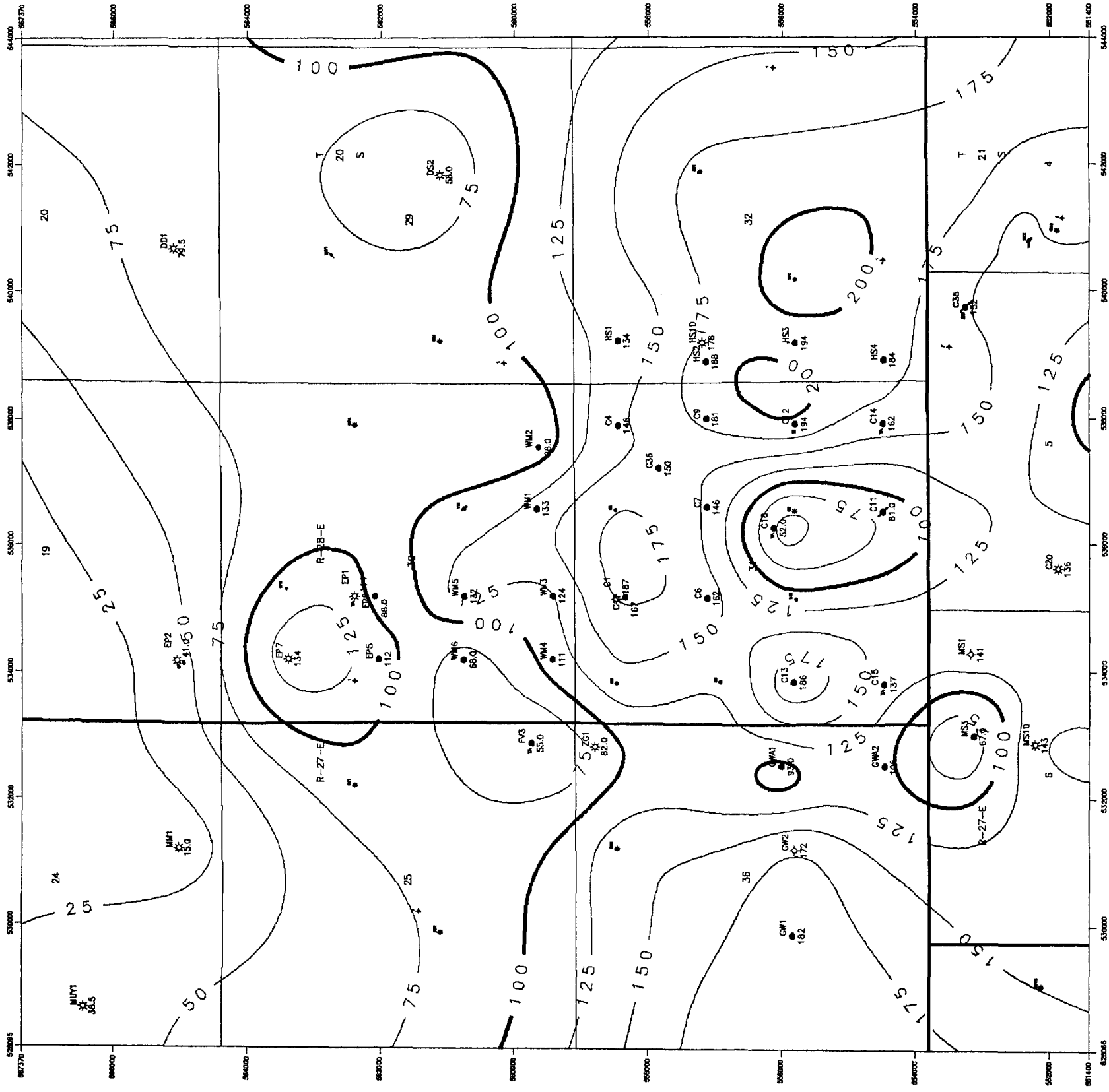
- UNDEFINED
- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED
- ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

AVERAGE NET TO GROSS RATIO MAP
MAP - 15746
UPPER CHERRY: PH - 11 AND 26 - 75, 28W - 22N
LOWER CHERRY: PH - 11 AND 26 - 75, 28W - 22N
ABANDONMENT OF UPPER CHERRY GAS
RESERVOIR, UPPER CHERRY GAS
GEO. COUNTY, NEW MEXICO
ANNEBORO, WELLS, NEW
CONT=0.1000000 GINT=400
1000 FEET
SCALE=1000 FEET/INCH
TIN BRANSON, TX 75416
DATE 25, 1992

UPPER CHERRY CANYON - Net Thickness



WELL STATUS SYMBOL LEGEND

- UNDEFINED
- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED
- ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

Map 16

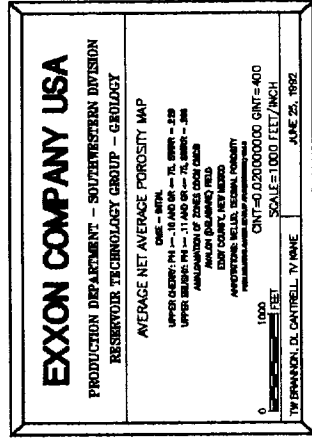
EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

TOTAL NET THICKNESS MAP
UPPER CHERRY: P1 = 10 AND G1 = 75, SHIR = 228
UPPER CHERRY: P1 = 11 AND G1 = 75, SHIR = 230
APPLICATION OF ZONES COOK OILS
P1 = 10 AND G1 = 75, SHIR = 228
P1 = 11 AND G1 = 75, SHIR = 230
P1 = 12 AND G1 = 75, SHIR = 232
P1 = 13 AND G1 = 75, SHIR = 234
P1 = 14 AND G1 = 75, SHIR = 236
P1 = 15 AND G1 = 75, SHIR = 238
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P1 = 17 AND G1 = 75, SHIR = 242
P1 = 18 AND G1 = 75, SHIR = 244
P1 = 19 AND G1 = 75, SHIR = 246
P1 = 20 AND G1 = 75, SHIR = 248
P1 = 21 AND G1 = 75, SHIR = 250
P1 = 22 AND G1 = 75, SHIR = 252
P1 = 23 AND G1 = 75, SHIR = 254
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P1 = 25 AND G1 = 75, SHIR = 258
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P1 = 34 AND G1 = 75, SHIR = 276
P1 = 35 AND G1 = 75, SHIR = 278
P1 = 36 AND G1 = 75, SHIR = 280
P1 = 37 AND G1 = 75, SHIR = 282
P1 = 38 AND G1 = 75, SHIR = 284
P1 = 39 AND G1 = 75, SHIR = 286
P1 = 40 AND G1 = 75, SHIR = 288
P1 = 41 AND G1 = 75, SHIR = 290
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P1 = 90 AND G1 = 75, SHIR = 388
P1 = 91 AND G1 = 75, SHIR = 390
P1 = 92 AND G1 = 75, SHIR = 392
P1 = 93 AND G1 = 75, SHIR = 394
P1 = 94 AND G1 = 75, SHIR = 396
P1 = 95 AND G1 = 75, SHIR = 398
P1 = 96 AND G1 = 75, SHIR = 400
P1 = 97 AND G1 = 75, SHIR = 402
P1 = 98 AND G1 = 75, SHIR = 404
P1 = 99 AND G1 = 75, SHIR = 406
P1 = 100 AND G1 = 75, SHIR = 408

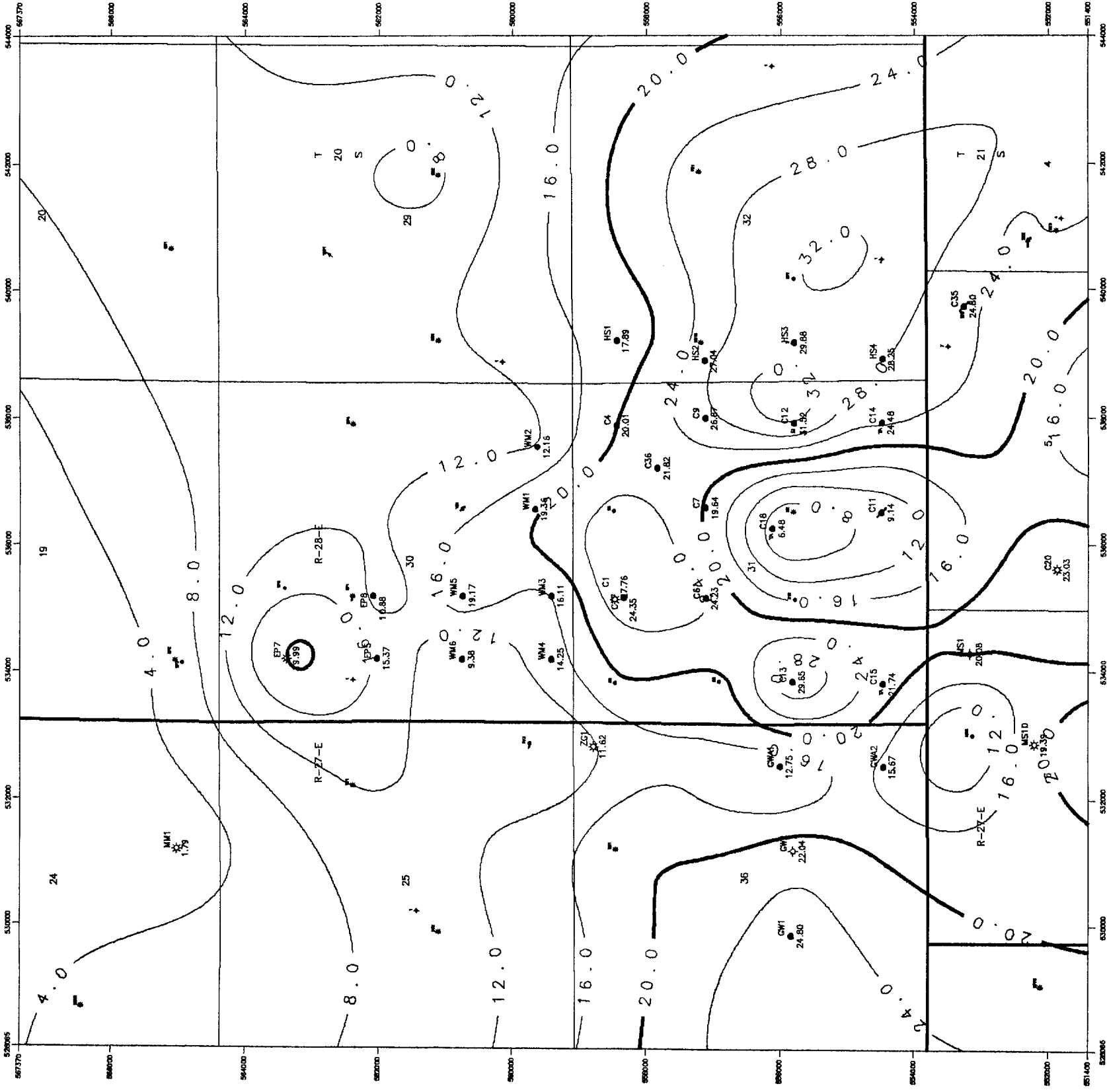
0 1000 2000 3000 4000
THE BRANIFF CO. CANTRELL, TY. 1912
SCALE = 1000 FEET/INCH
JUNE 25, 1912

●	UNDEFINED
●	PRODUCING OIL WELL
■	SHUT IN OIL WELL
●	TEMPORARILY ABANDONED OIL WELL
●	ABANDONED OIL WELL
✱	PRODUCING GAS WELL
✱	TEMPORARILY ABANDONED GAS WELL
✱	ACTIVE INJECTION WELL
✱	SALT WATER INJECTION WELL
✱	SALT WATER DISPOSAL WELL
✱	DRY HOLE
✱	DRY HOLE, JUNKED AND ABANDONED
✱	ABANDONED LOCATION

Map 17



UPPER CHERRY CANYON - Porosity Thickness



WELL STATUS SYMBOL LEGEND

- UNDEFINED
- PRODUCING OIL WELL
- SHUT IN OIL WELL
- TEMPORARILY ABANDONED OIL WELL
- ABANDONED OIL WELL
- PRODUCING GAS WELL
- TEMPORARILY ABANDONED GAS WELL
- ACTIVE INJECTION WELL
- SALT WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- DRY HOLE
- DRY HOLE, JUNKED AND ABANDONED
- ABANDONED LOCATION

NOTE: ABOVE SYMBOLS ARE ACTUAL SIZE FOR WELLS USED FOR CONTOURING. SMALL SYMBOLS REFLECT WELLS NOT USED IN CREATING THIS MAP.

Map 18

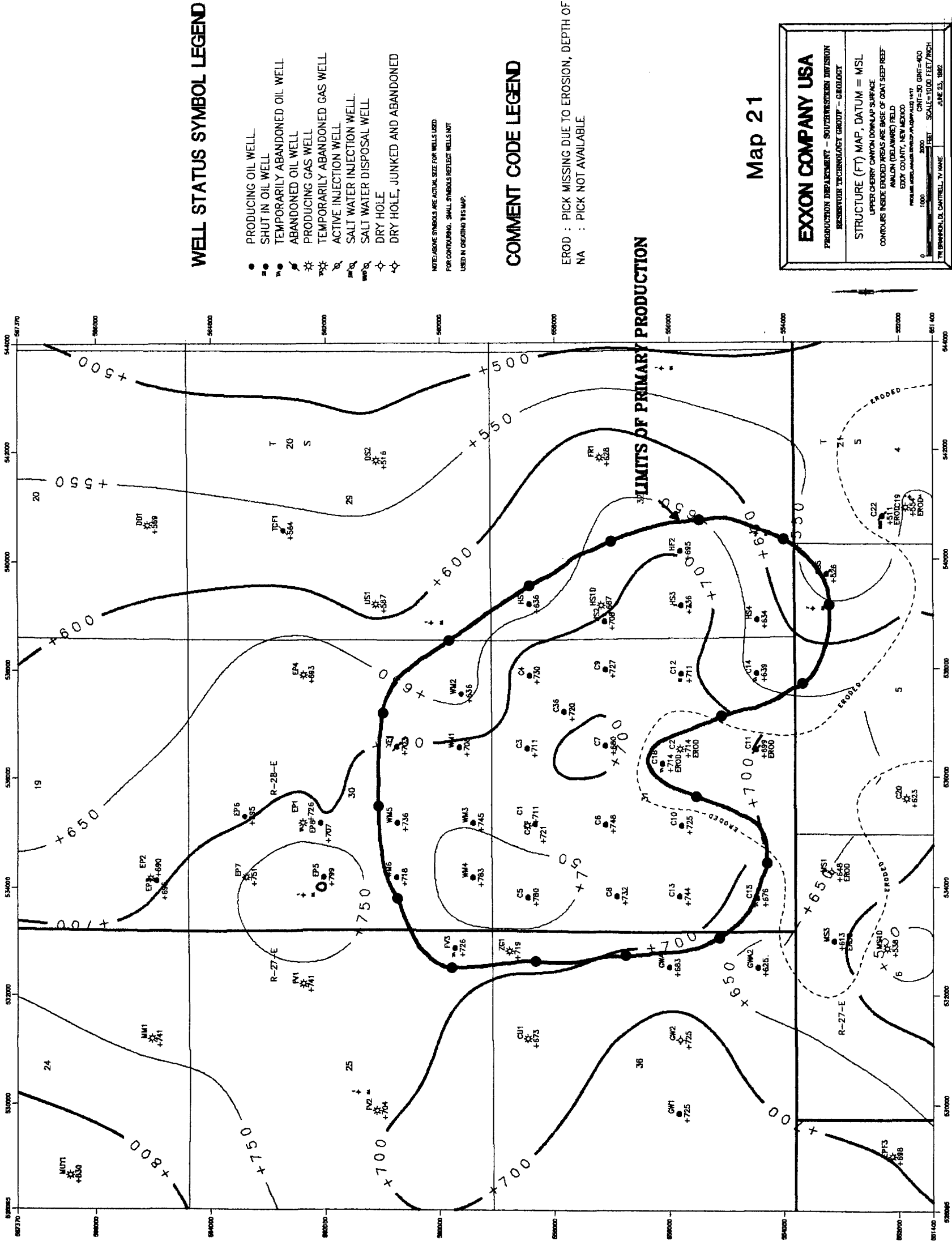
EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

TOTAL NET POROSITY THICKNESS MAP
UPPER CHERRY: PH = .10 AND GR = 73, SWH = 230
UPPER CHERRY: PH = .11 AND GR = 73, SWH = 230
ANALYST: J. D. CHITRELL
DATE: 10/1/82
EAST COUNTY, NEW MEXICO
PROJECT: UPPER CHERRY, RESERVOIR THICKNESS MAP
GRT=4, GNT=400
SCALE=1000 FEET/INCH
JUNE 25, 1992

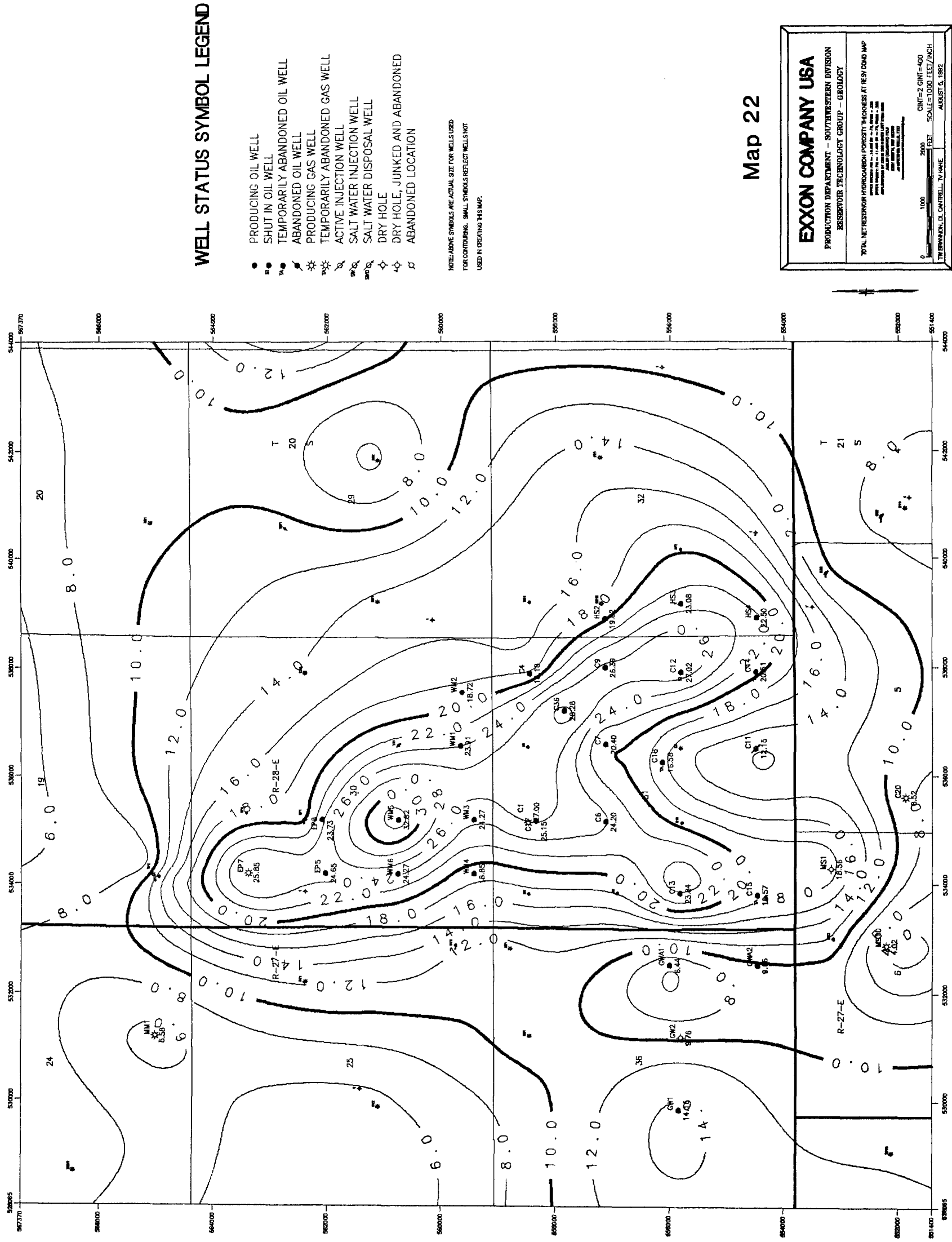
●	UNDEFINED
■	PRODUCING OIL WELL
◼	SHUT IN OIL WELL
◼	TEMPORARILY ABANDONED OIL WELL
◼	ABANDONED OIL WELL
⚡	PRODUCING GAS WELL
⚡	TEMPORARILY ABANDONED GAS WELL
⚡	ACTIVE INJECTION WELL
⚡	SALT WATER INJECTION WELL
⚡	SALT WATER DISPOSAL WELL
⚡	DRY HOLE
⚡	DRY HOLE, JUNKED AND ABANDONED
⚡	ABANDONED LOCATION

Map 19

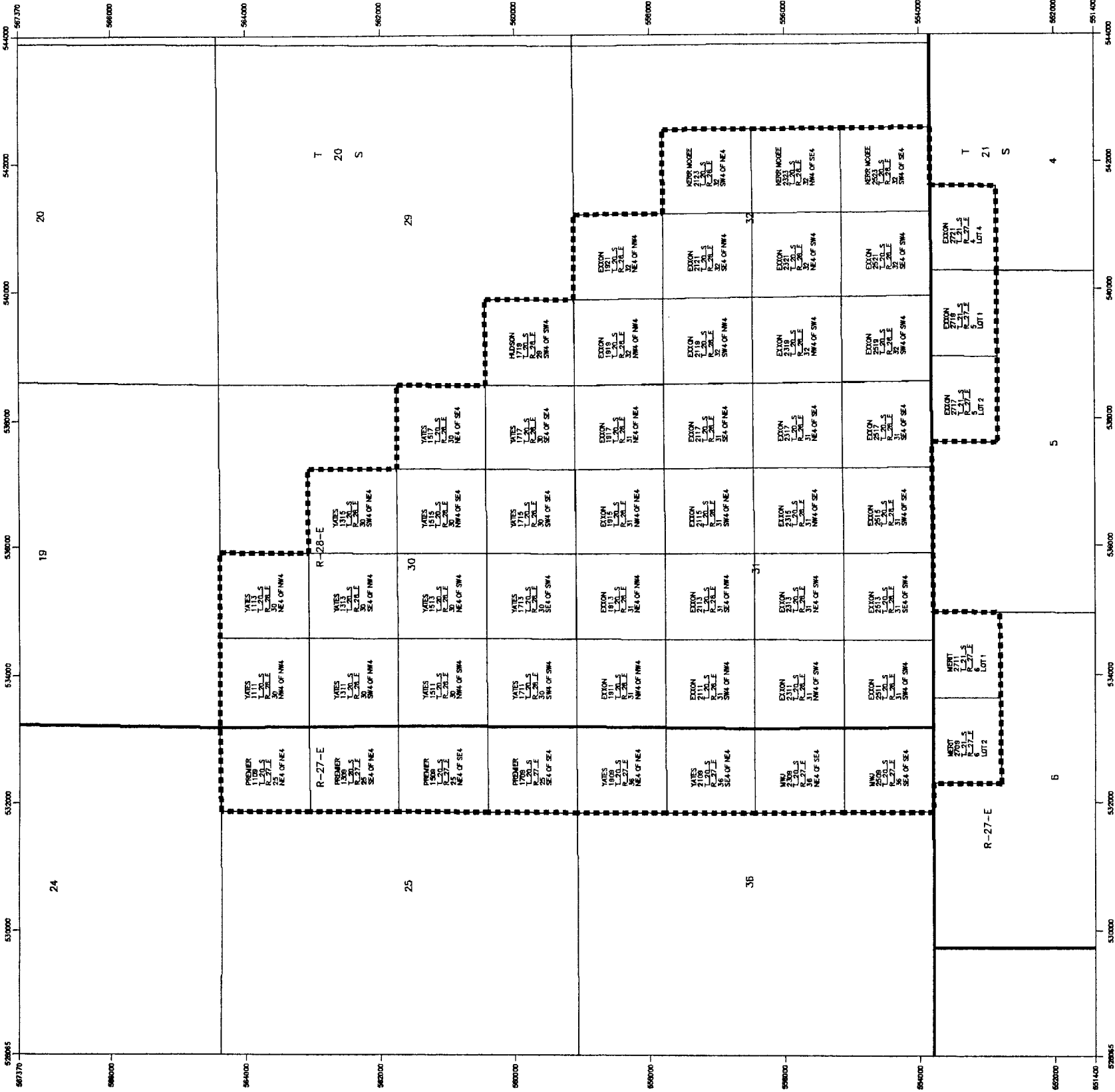
UPPER CHERRY CANYON - Top Reservoir (UCH-DLS)



TOTAL RESERVOIR - Hydrocarbon Porosity Thickness



AVALON FIELD WELL-TRACTS



Map 23

EXXON COMPANY USA
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

PROPOSED UNIT AREA
SHOWING '40-ACRE' WELL-TRACTS
AVALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
PREPARED AND CHECKED BY (PL/MP/MS) R/H
GINT = 400
SCALE = 1000 FEET/INCH
T.M. BRANNON, D.L. CANTRELL, T.V. VANE
AUGUST 15, 1992

NORTH AVALON (DELAWARE) FIELD STRUCTURAL CROSS SECTION B1 SOUTH

GWA1

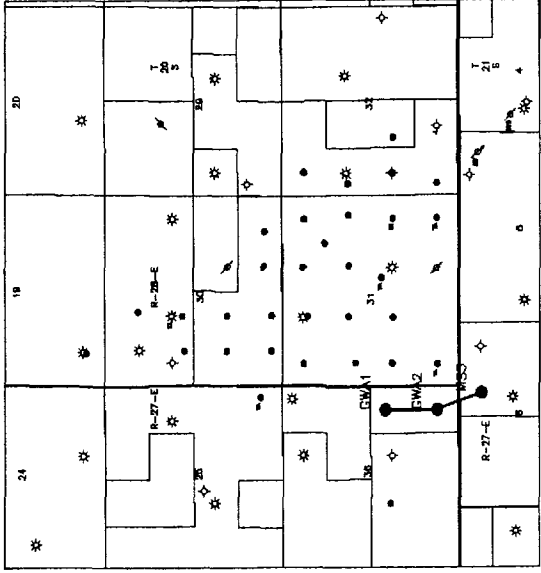
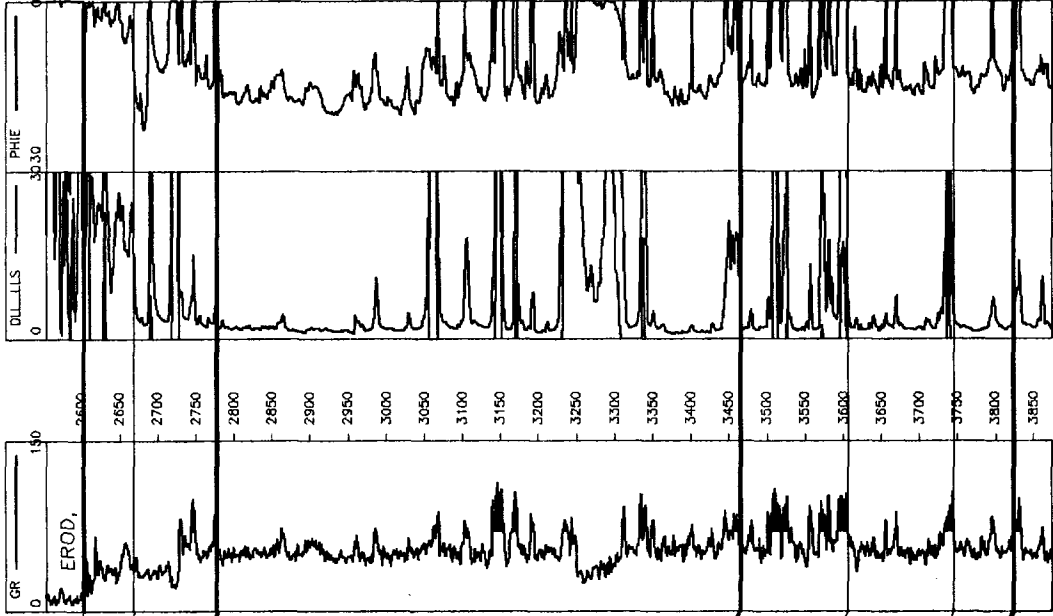
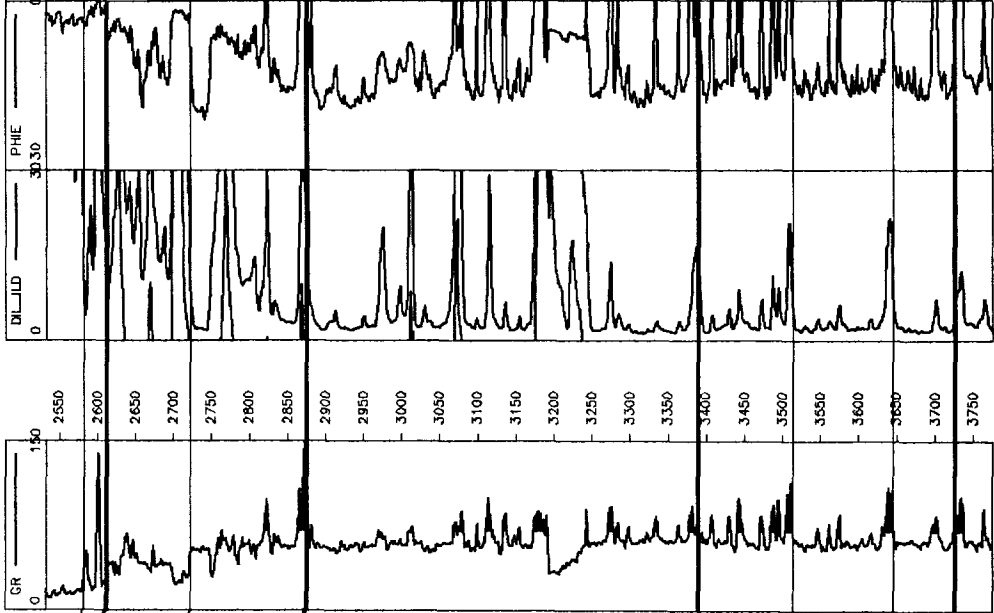
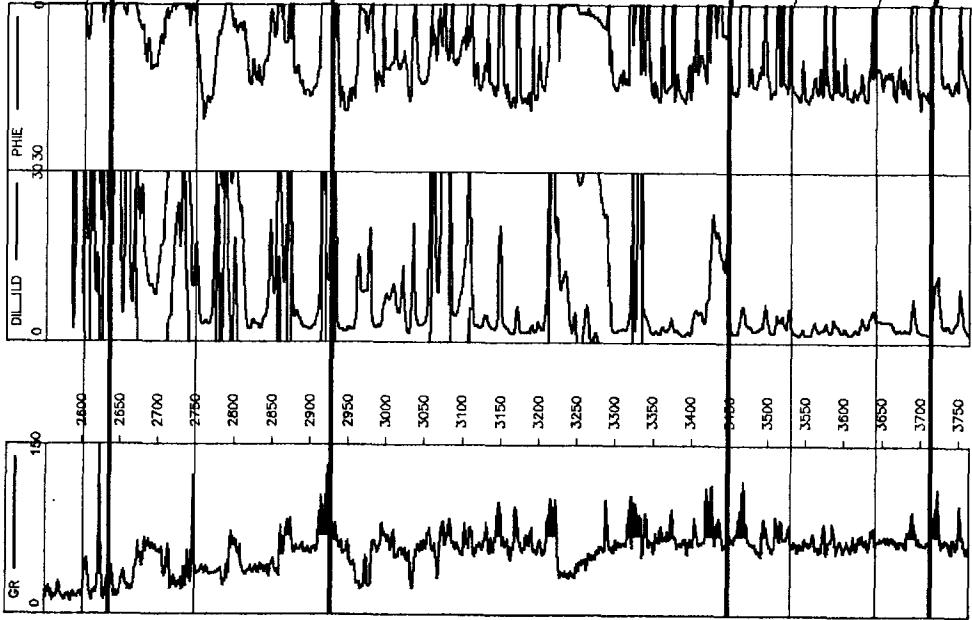
OPERATOR: MWJ PRODUCING LEASE: STATE "GWA"
WELLNO: 1 STACO: 30015 REFNO: 234430

GWA2

OPERATOR: MWJ PRODUCING LEASE: STATE "GWA"
WELLNO: 2 STACO: 30015 REFNO: 247460

MS3

OPERATOR: MOBIL PROD. TX & NM LEASE: BURTON FLAT "SEC 6" ST
WELLNO: 3 STACO: 30015 REFNO: 247510



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RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURAL CROSS SECTION B1
AVALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
GAMMA RAY SHADED ABOVE 75 API UNITS

PICK COMMENT LEGEND
EROD : PICK MISSING DUE TO EROSION, ONLY ERODED SURFACE SHOWN
ONLAP: PICK MISSING DUE TO ONLAP, ONLY ONLAPPED SURFACE SHOWN
GENZ : PICK ESTIMATED FROM GRID MODEL BECAUSE NOT ORIGINALLY PICKED

PROG.MD MODEL.AVALON.ENCLOSURE.APR.03.92.03 17405
VERTICAL SCALE = 250 FEET/INCH
HORIZONTAL SCALE = 1500 FEET/INCH

TW BRANNON, DL CANTRELL, TV KANE
AUGUST 18, 1992

NORTH AVALON (DELAWARE) FIELD STRUCTURAL CROSS SECTION 1 SOUTH

C13

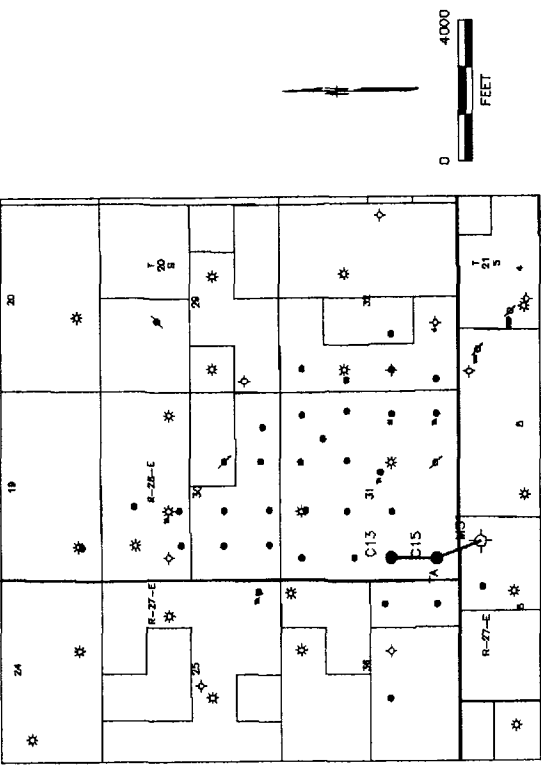
OPERATOR: EXXON CORP LEASE: YATES "C" FEDERAL
WELLNO: 13
STACO: 30015 RETNO: 243860

C15

OPERATOR: EXXON CORP LEASE: YATES "C" FEDERAL
WELLNO: 15
STACO: 30015 RETNO: 243790

MS1

OPERATOR: MOBIL PROD. TX & NM LEASE: BURTON FLAT " SEC 6"
WELLNO: 1
STACO: 30015 RETNO: 246870



EXXON COMPANY USA

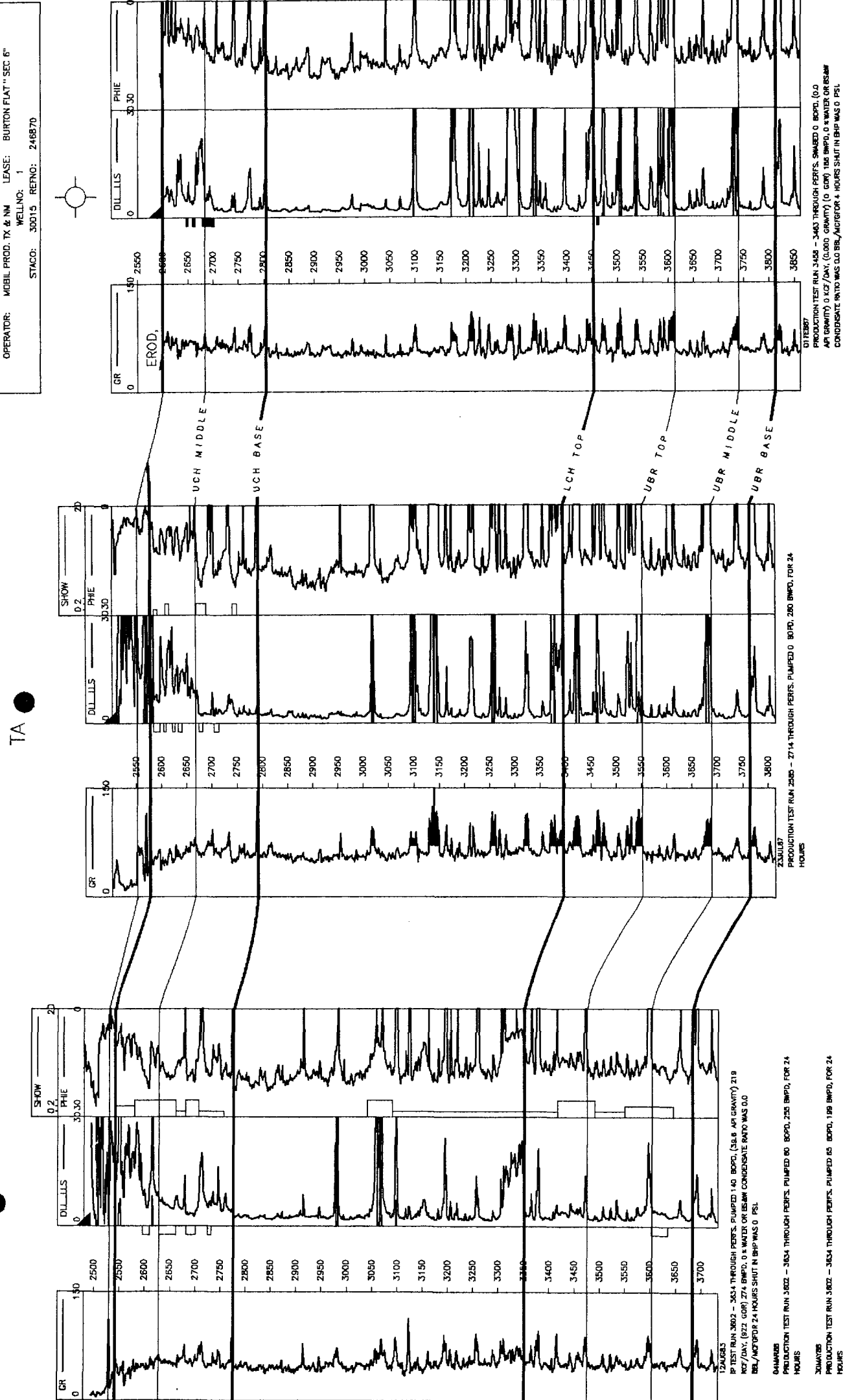
PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURAL CROSS SECTION 1
AVALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
GAMMA RAY SHADED ABOVE 75 API UNITS

PICK COMMENT LEGEND
EROD : PICK MISSING DUE TO EROSION, ONLY ERODED SURFACE SHOWN
ONLAP: PICK MISSING DUE TO ONLAP, ONLY ONLAPPED SURFACE SHOWN
GENZ : PICK ESTIMATED FROM GRID MODEL BECAUSE NOT ORIGINALLY PICKED

PROD.MD.MD.L.AVALON.DEVELOP.API.CROSSSECTION 17:10
VERTICAL SCALE = 250 FEET/INCH
HORIZONTAL SCALE = 1500 FEET/INCH

TW BRANNON, DL CANTRELL, TV KANE
AUGUST 18, 1992



NORTHWEST

AVALON (DELAWARE) FIELD STRUCTURAL CROSS SECTION A2

SOUTHEAST

ZG1

OPERATOR: YATES PET LEASE: CITREL-2G-
WELLNO: 1
STACD: 30015 REFNO: 247940

C8

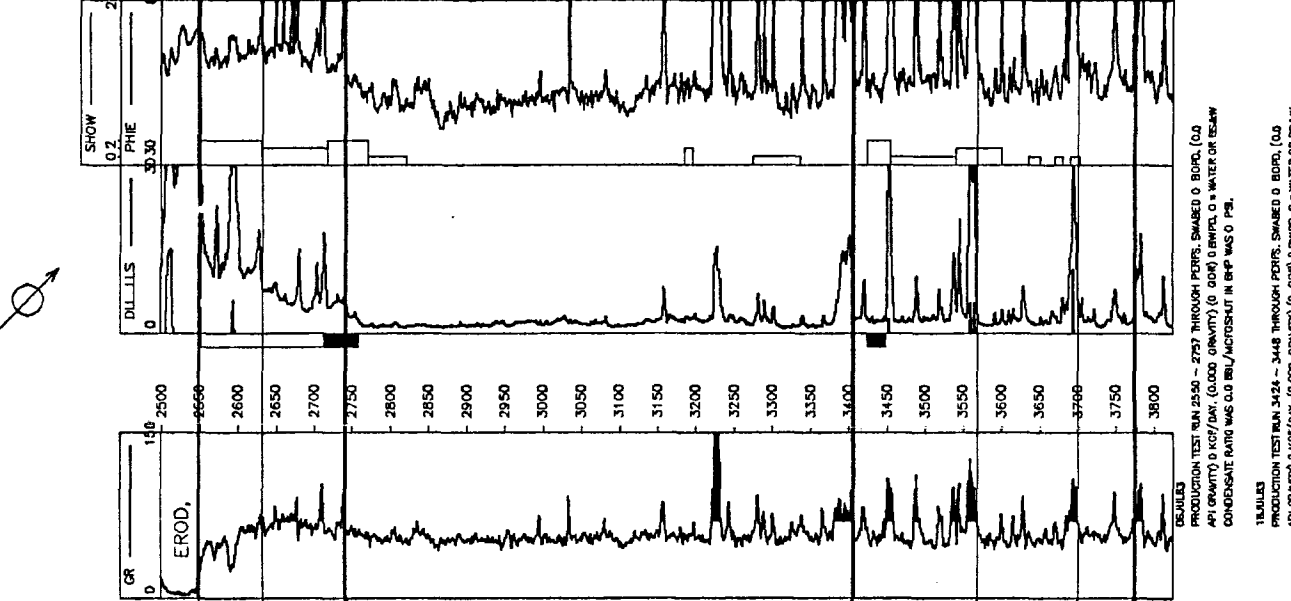
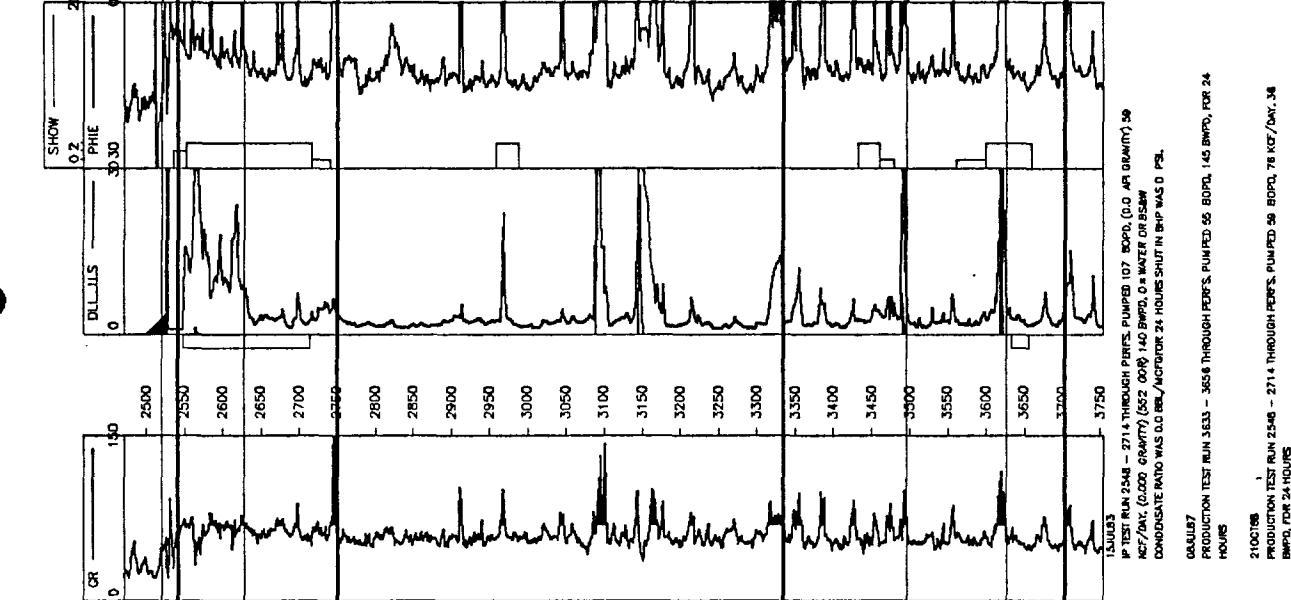
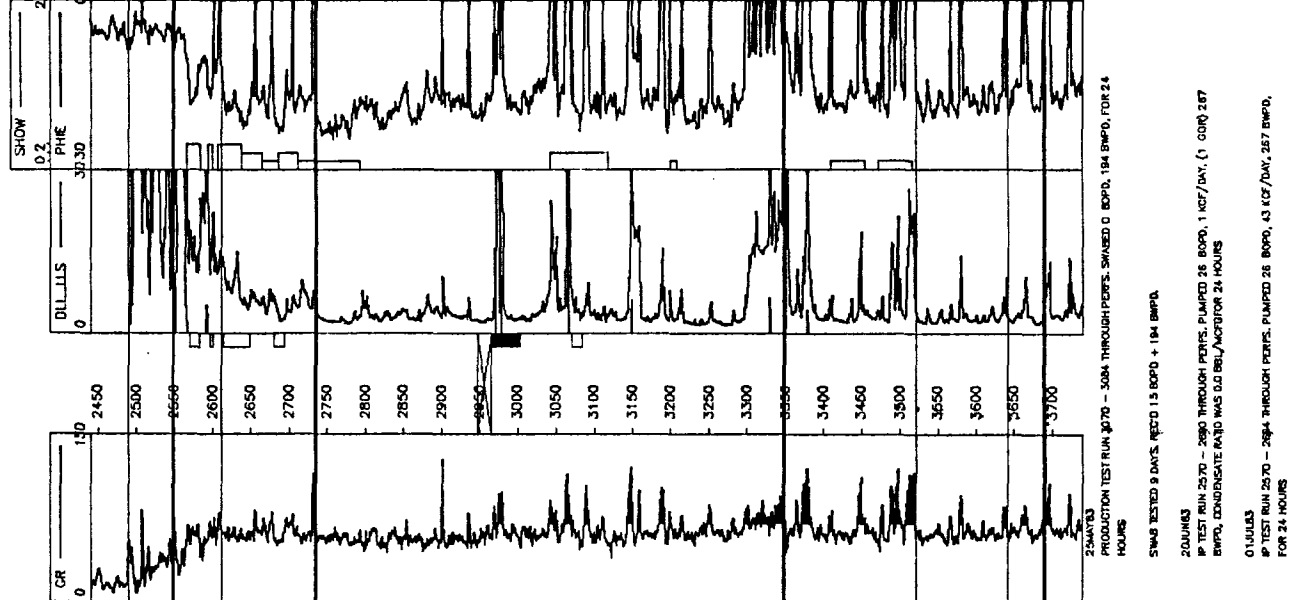
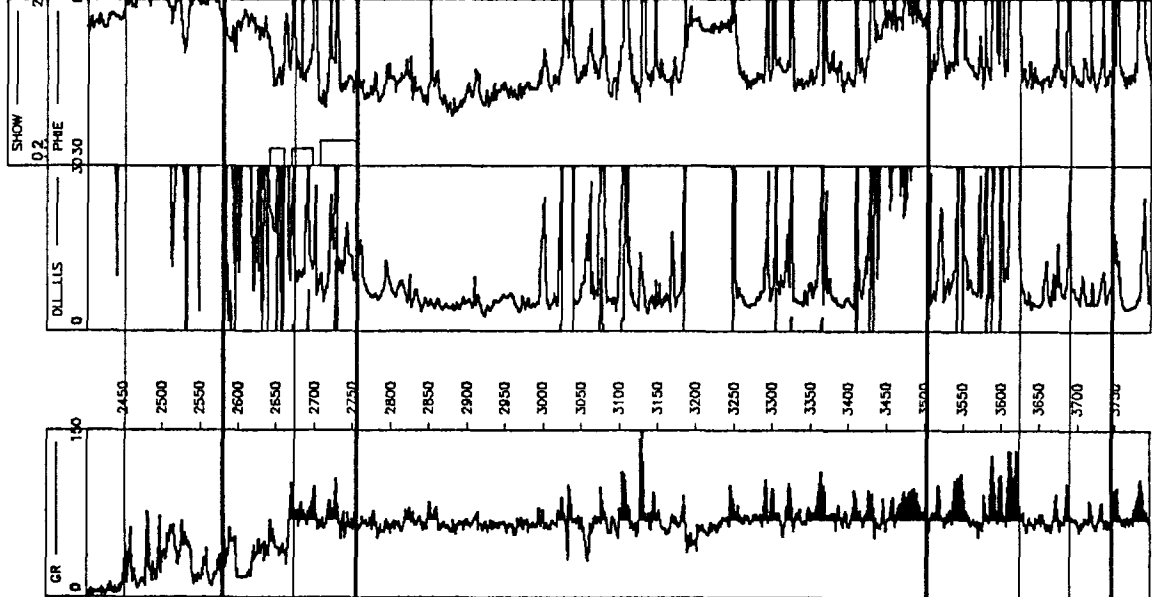
OPERATOR: EXXON CORP LEASE: YATES "C" FEDERAL
WELLNO: 8
STACD: 30015 REFNO: 243360

C10

OPERATOR: EXXON CORP LEASE: YATES "C" FEDERAL
WELLNO: 10
STACD: 30015 REFNO: 243760

C11

OPERATOR: EXXON CORP LEASE: YATES "C" FEDERAL
WELLNO: 11
STACD: 30015 REFNO: 243770



EXXON COMPANY USA

PRODUCTION DEPARTMENT - SOUTHWESTERN DIVISION
RESERVOIR TECHNOLOGY GROUP - GEOLOGY

STRUCTURAL CROSS SECTION A2
AVALON (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
GAMMA RAY SHADED ABOVE 75 API UNITS

PICK COMMENT LEGEND
EROD: PICK MISSING DUE TO EROSION, ONLY ERODED SURFACE SHOWN
ONLAP: PICK MISSING DUE TO ONLAP, ONLY ONLAPED SURFACE SHOWN
GENZ: PICK ESTIMATED FROM GRID MODEL BECAUSE NOT ORIGINALLY PICKED

PROD.MIDDELANDUNDEVLOP.MIDCROSS273 1700
VERTICAL SCALE = 250 FEET/INCH
HORIZONTAL SCALE = 1500 FEET/INCH

TW BRANNON, DL CANTRELL, TY KANE
AUGUST 18, 1992