

**YATES DRILLING COMPANY
PROPOSED CACTUS QUEEN UNIT
CHAVES COUNTY, NEW MEXICO**

MAPS & CROSS SECTIONS

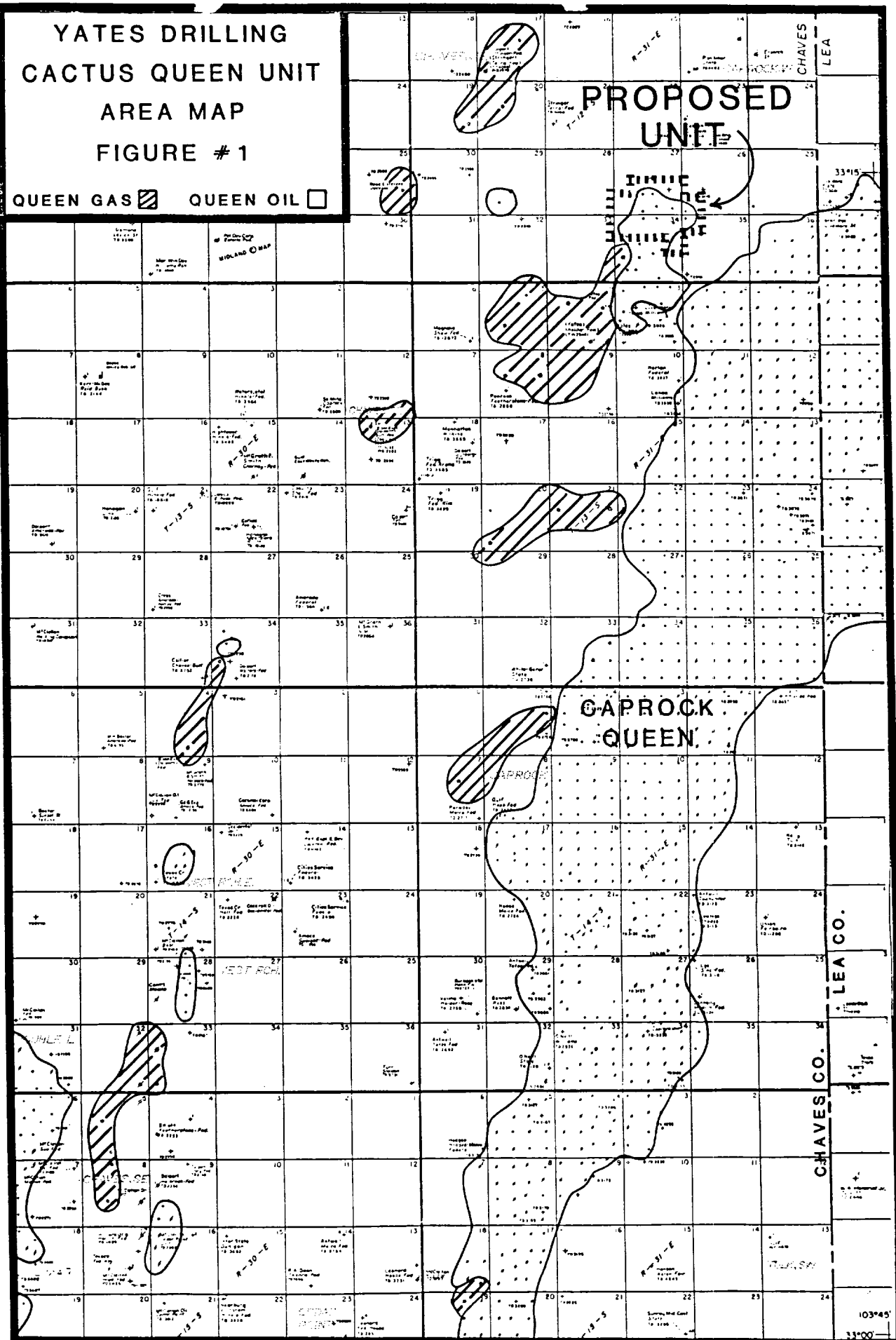
YATES DRILLING COMPANY	
CHAVES COUNTY, NEW MEXICO	
YATES	WELL NO. 15
WELL NO. 9809, 9810, 9823	

FIGURES

1. Area Map
2. Unit Tract Map
3. Area Queen Structure Map (pocket)
4. Queen Paleo Structure Map
5. Gross Sand Map
6. Net Pay Map
7. Oil Saturated Pore Volume Map
8. Permeability - Porosity Cross Plot
9. Net Capacity Map (Permeability - Feet)
10. Cross Section A-A' (pocket)
11. Cross Section B-B' (pocket)
12. Cumulative Primary Production Map
13. Pressure Map 11/84 - 3/85
14. Pressure Map 9/86 - 10/86
15. Pressure Map 1/89
16. Injection Pattern Map

YATES DRILLING CACTUS QUEEN UNIT AREA MAP FIGURE # 1

QUEEN GAS  QUEEN OIL 



28

27

UNIT OUTLINE

33

34

ENRON

LH-1648

(5a)

2

Apache St.

YDC

NM-015807

(1a)

9

Garner Fed.

YDC

3

(8)

Doyal

CACTUS QUEEN UNIT

YDC

NM-015807

(1)

1

Apache St.

YDC

2

(7)

Doyal

YDC

(9)

4

Doyal

YDC

(3)

3

YDC

NM-0256521

(2)

Burkitt Fed.

NM-15896

DeLuna Fed.

YDC

1

(6)

Doyal

YDC

1

(4)

B-10418

Gallagher St.

YDC

NM-015807

(1b)

Garner Fed.

YATES DRILLING

SE CHAVES QUEEN FIELD

CACTUS QUEEN UNIT

T12S-R31E

CHAVES CO. NM

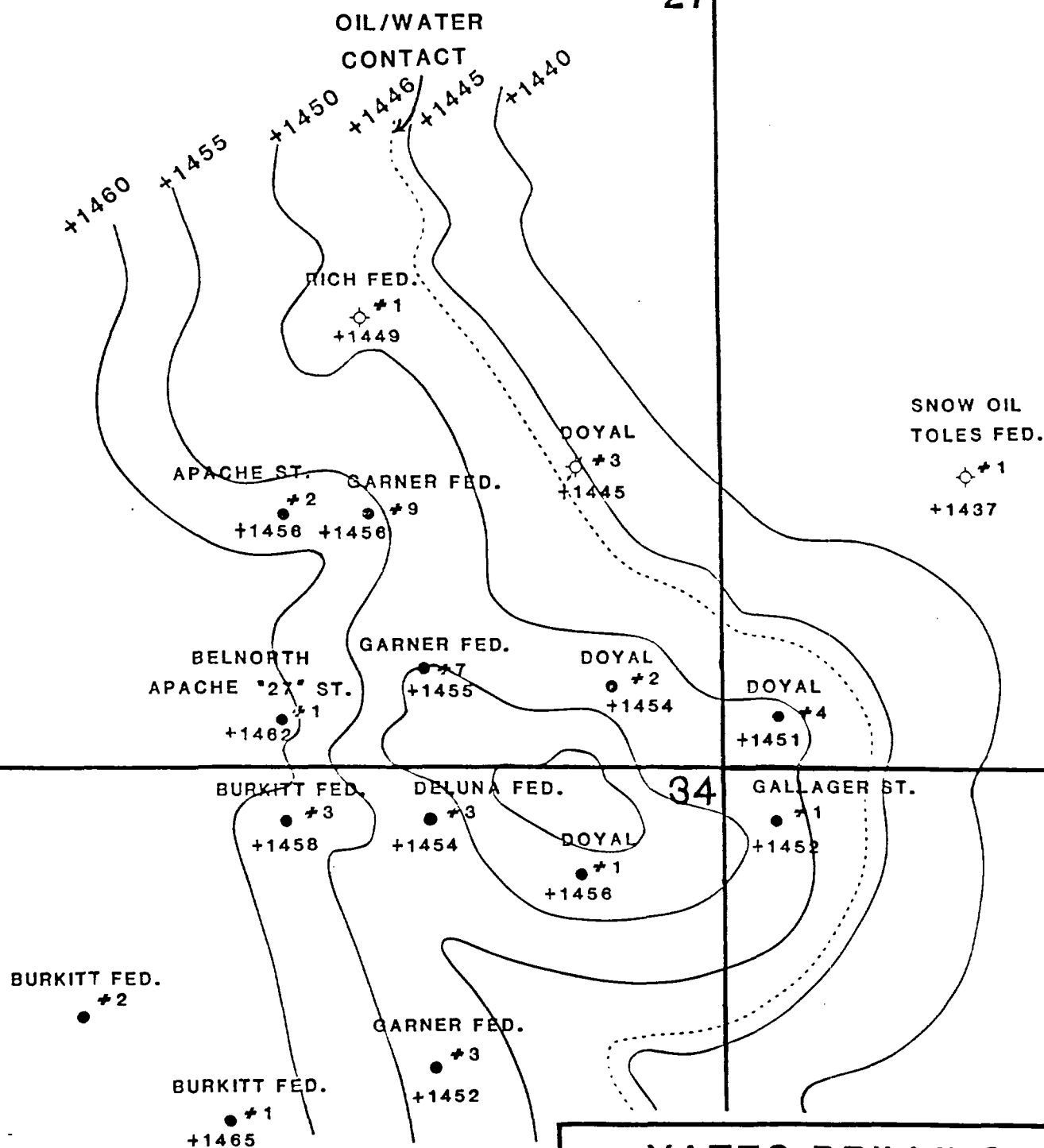
FIGURE #2

28

27

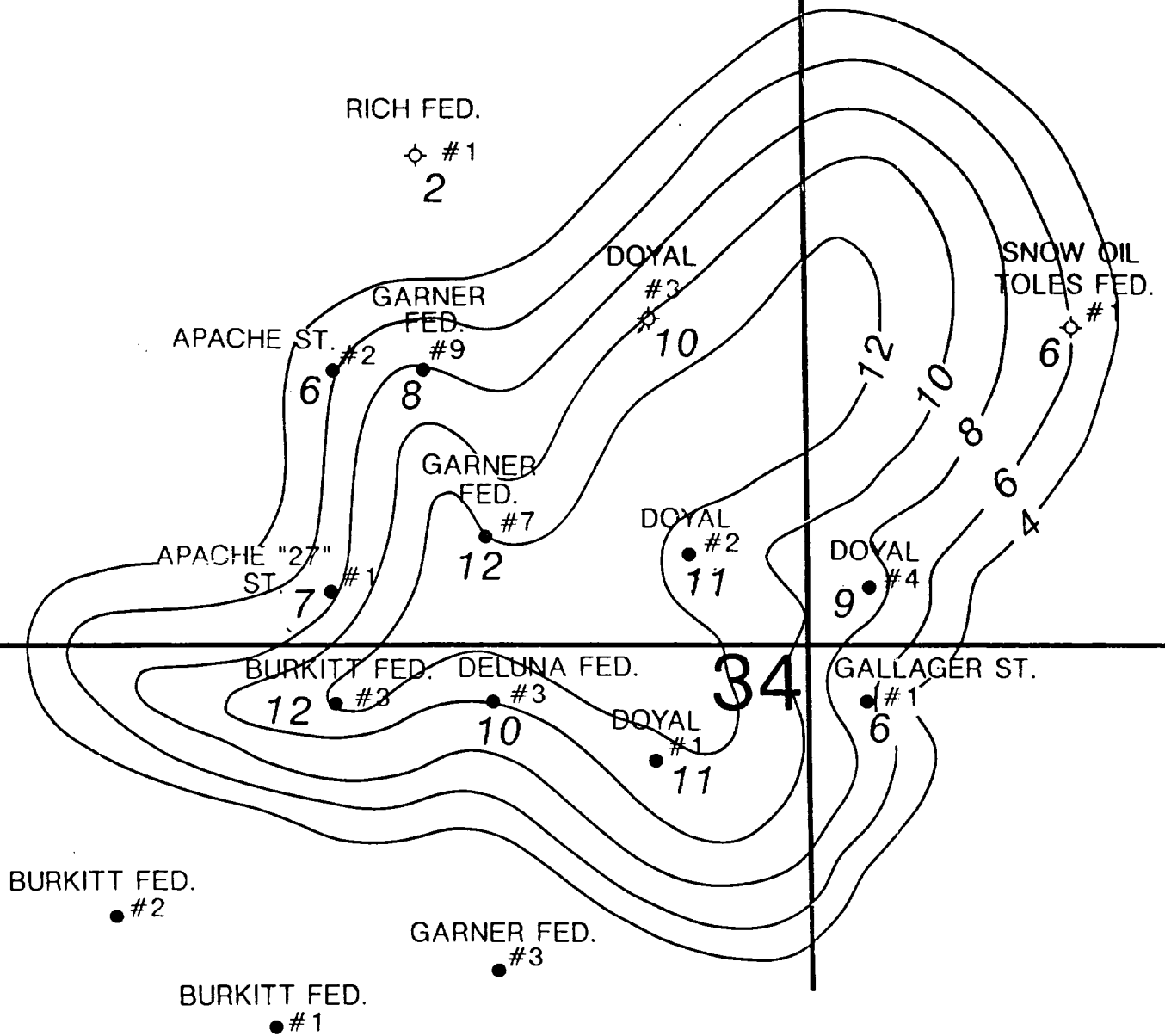
33

34



YATES DRILLING
SE CHAVES QUEEN FIELD
CACTUS QUEEN UNIT
T12S-R31E
CHAVES CO., NM
QUEEN PALEO STRUCTURE
INDICATED BY TILTED OIL/WATER CONTACT
C.I.:5'
FIGURE #4

27



YATES DRILLING

SE CHAVES QUEEN FIELD

CACTUS QUEEN UNIT

CHAVES CO., NM

T12S-R31E

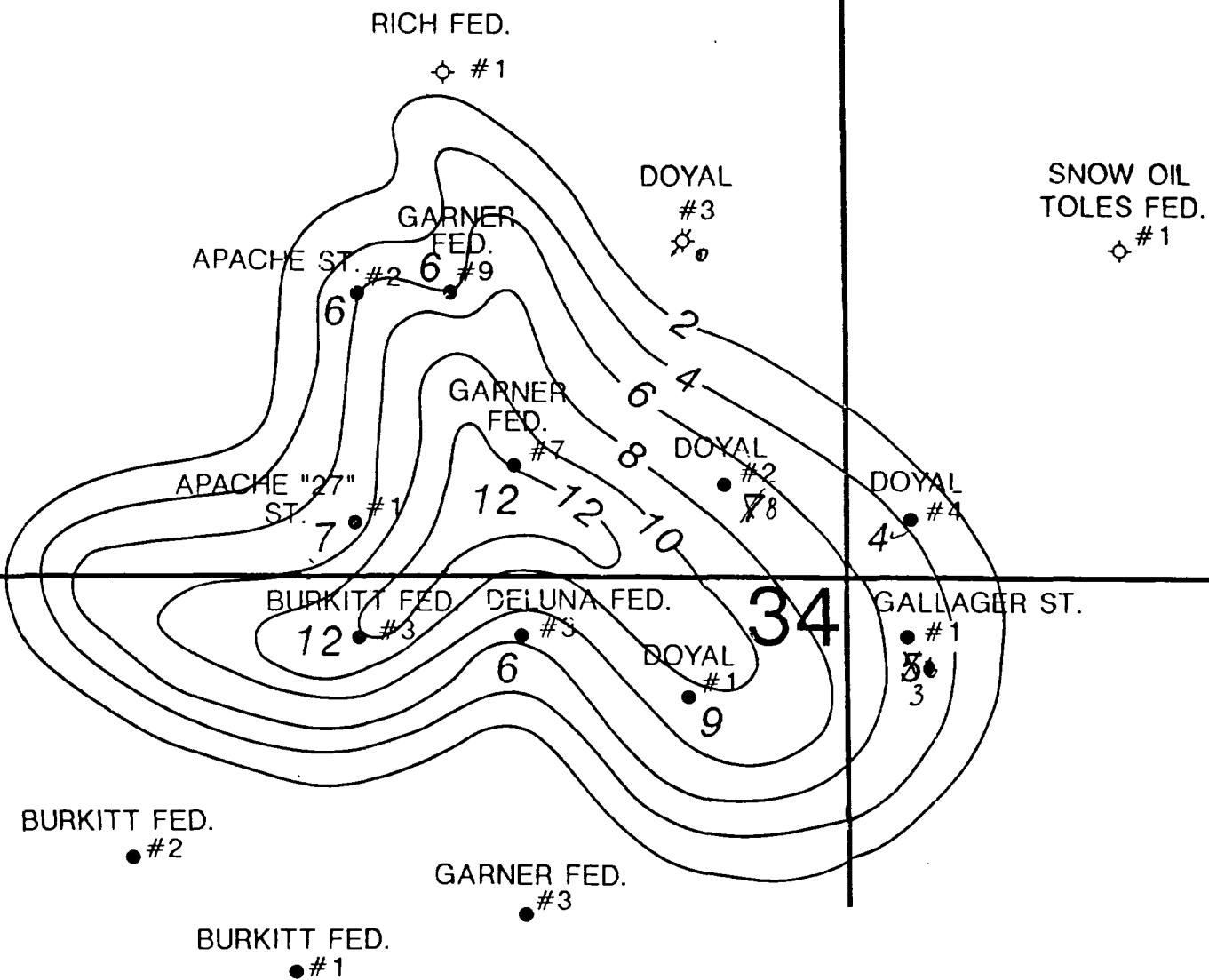
GROSS SAND MAP

FT Ø ≥ 10% Ø

C.I. = 2'

FIGURE #5

27



YATES DRILLING

SE CHAVES QUEEN FIELD

CACTUS QUEEN UNIT

CHAVES CO., NM

T12S-R31E

NET PAY

C.I. = 2'

FIGURE #6

1000.

100.

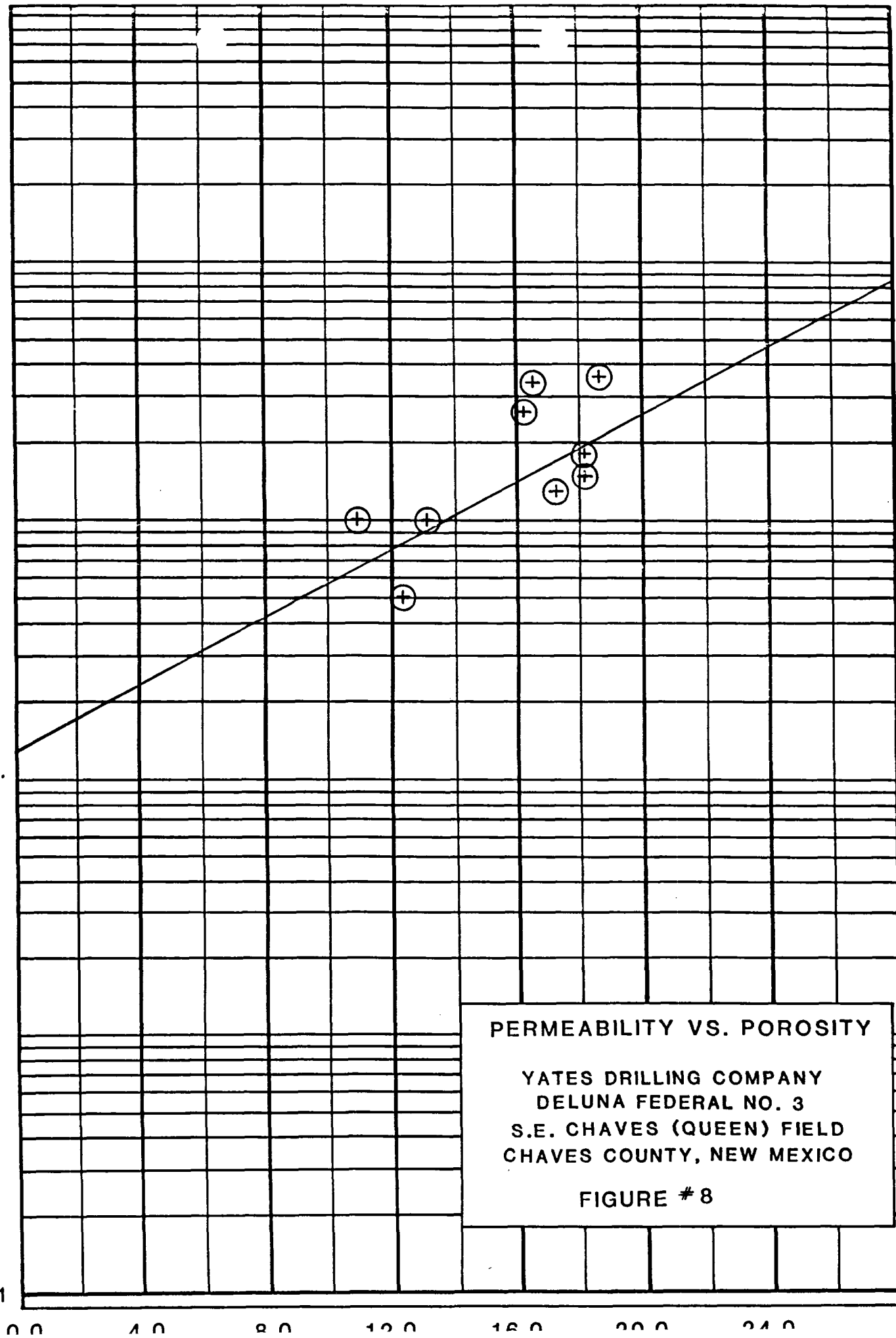
10.

1.

0.1

0.01

PERMEABILITY-MILIDARCIES

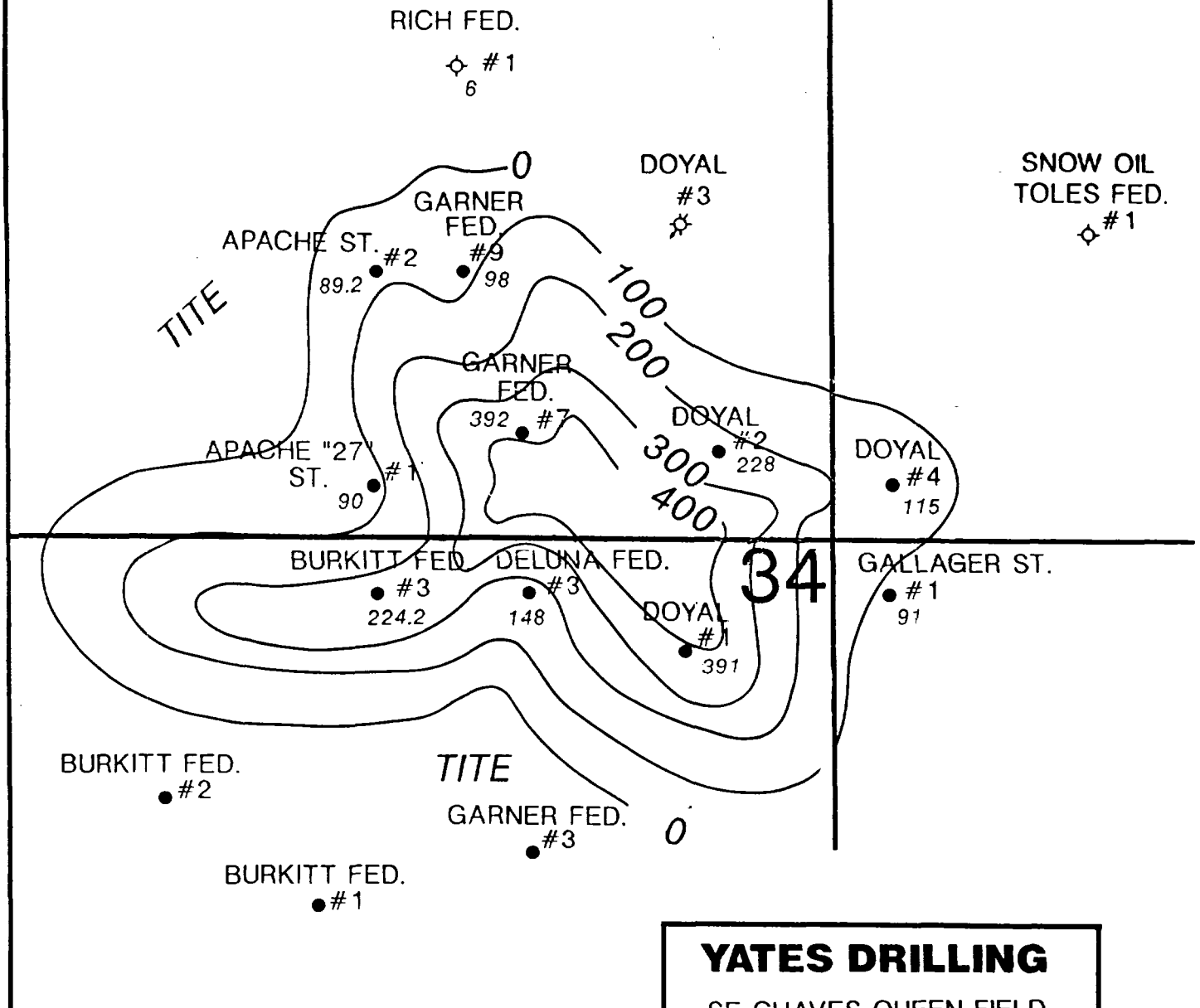


PERMEABILITY VS. POROSITY

YATES DRILLING COMPANY
DELUNA FEDERAL NO. 3
S.E. CHAVES (QUEEN) FIELD
CHAVES COUNTY, NEW MEXICO

FIGURE # 8

27



YATES DRILLING

SE CHAVES QUEEN FIELD

CACTUS QUEEN UNIT

CHAVES CO., NM

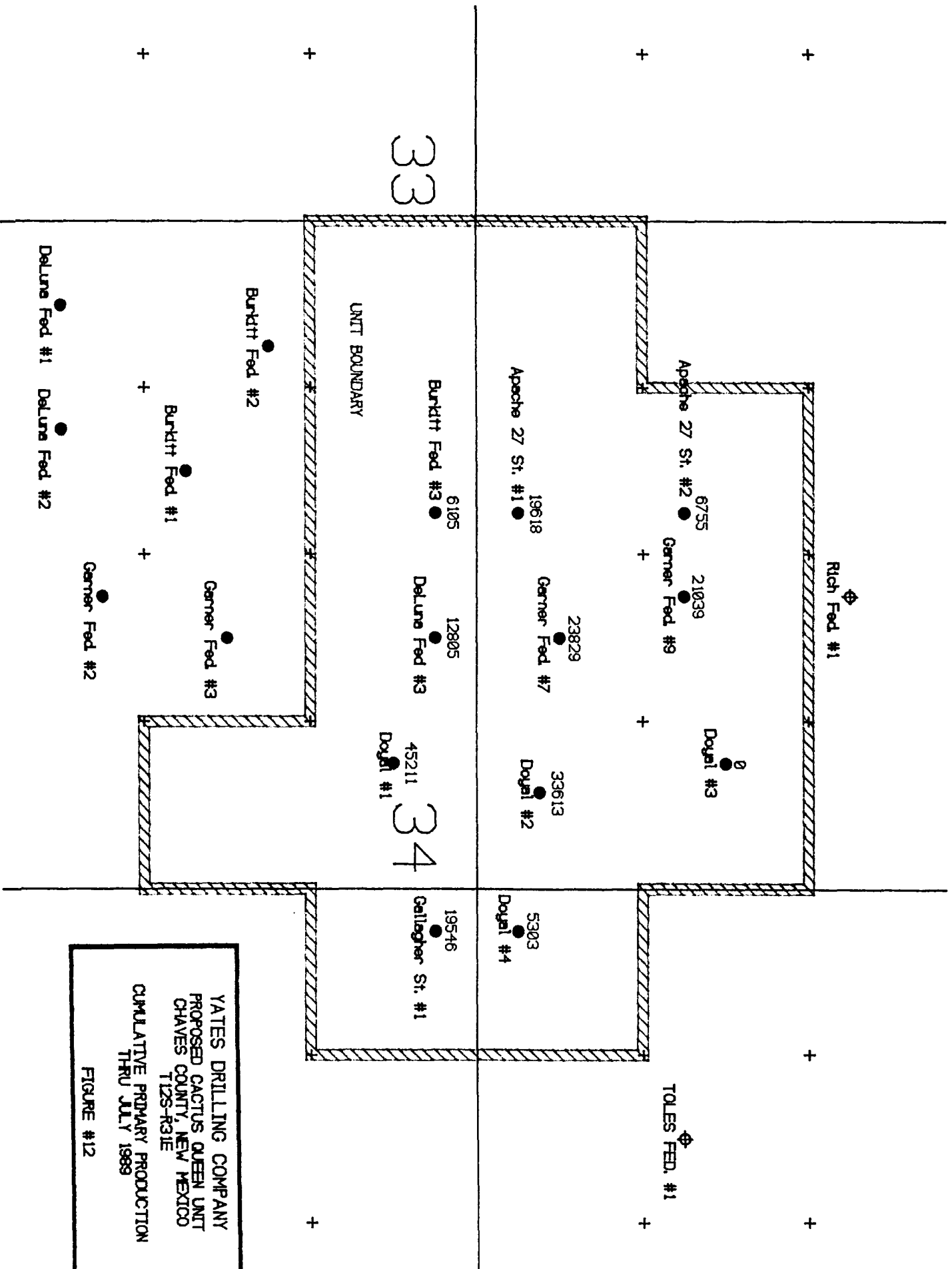
T12S-R31E

PERMEABILITY FEET

AVG K(md) x NET FT = K FT

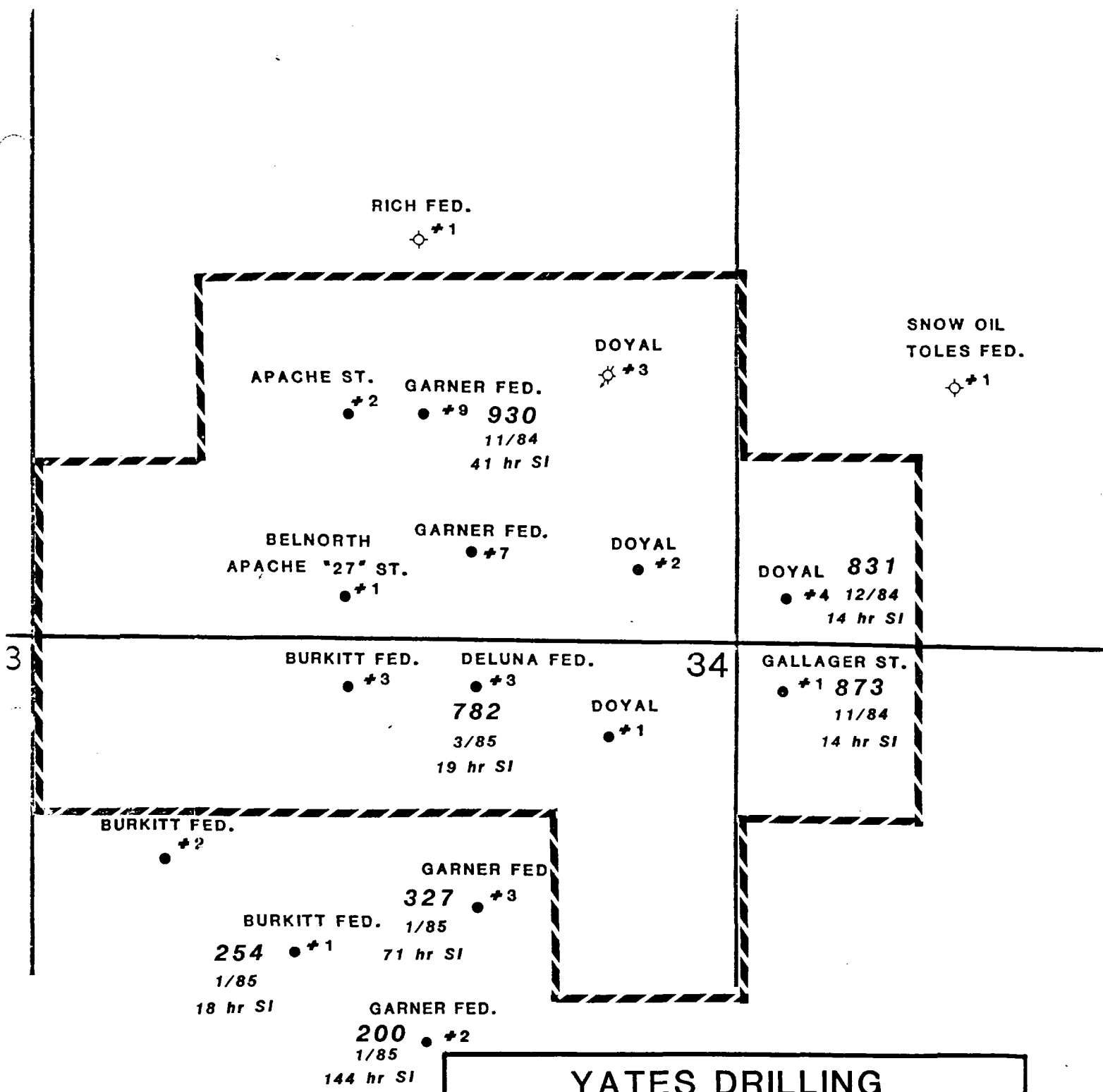
C.I. = 100'

FIGURE #9

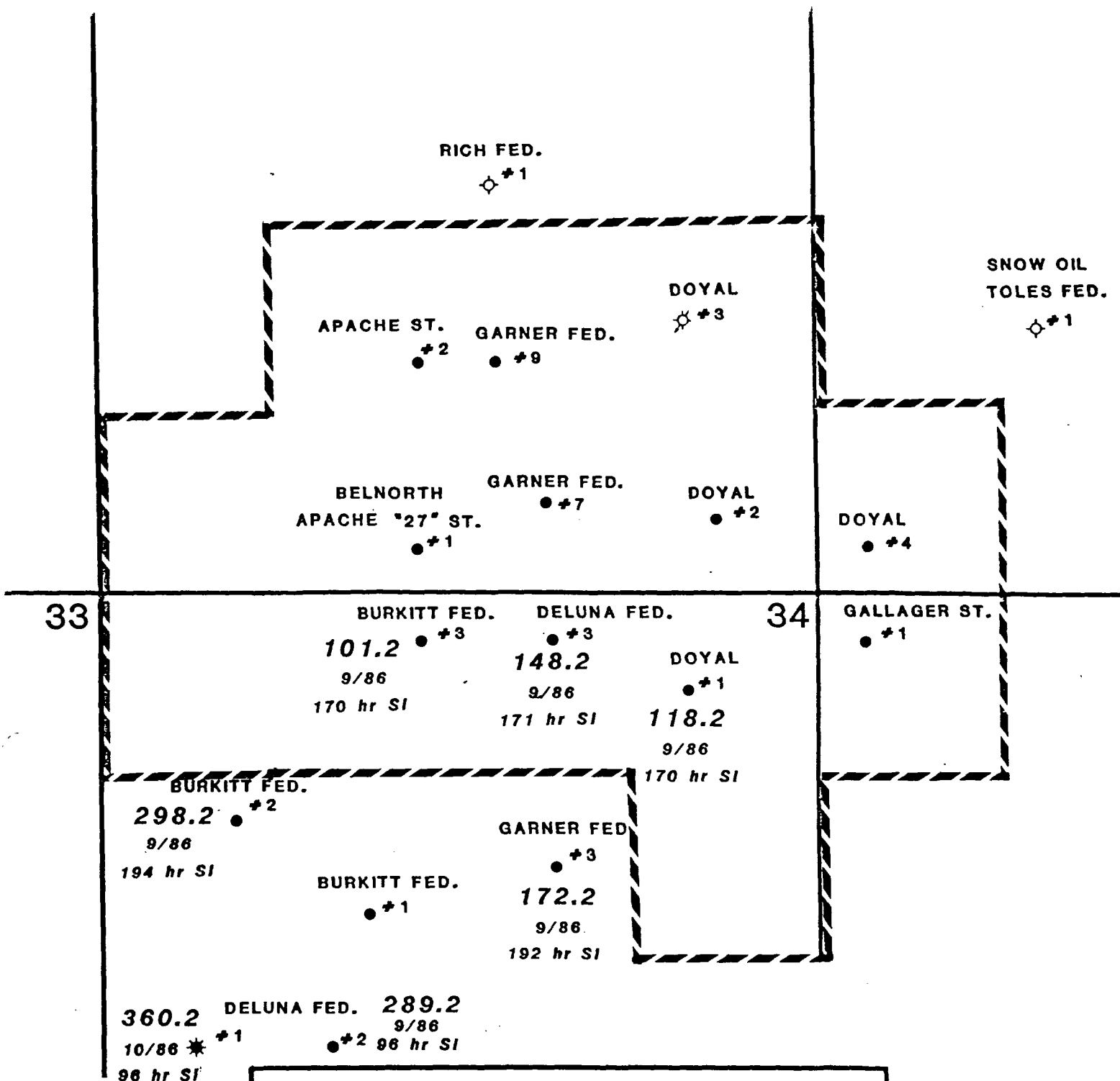


YATES DRILLING COMPANY
 PROPOSED CACTUS QUEEN UNIT
 CHAVES COUNTY, NEW MEXICO
 T12S-R31E
 CUMULATIVE PRIMARY PRODUCTION
 THRU JULY 1989

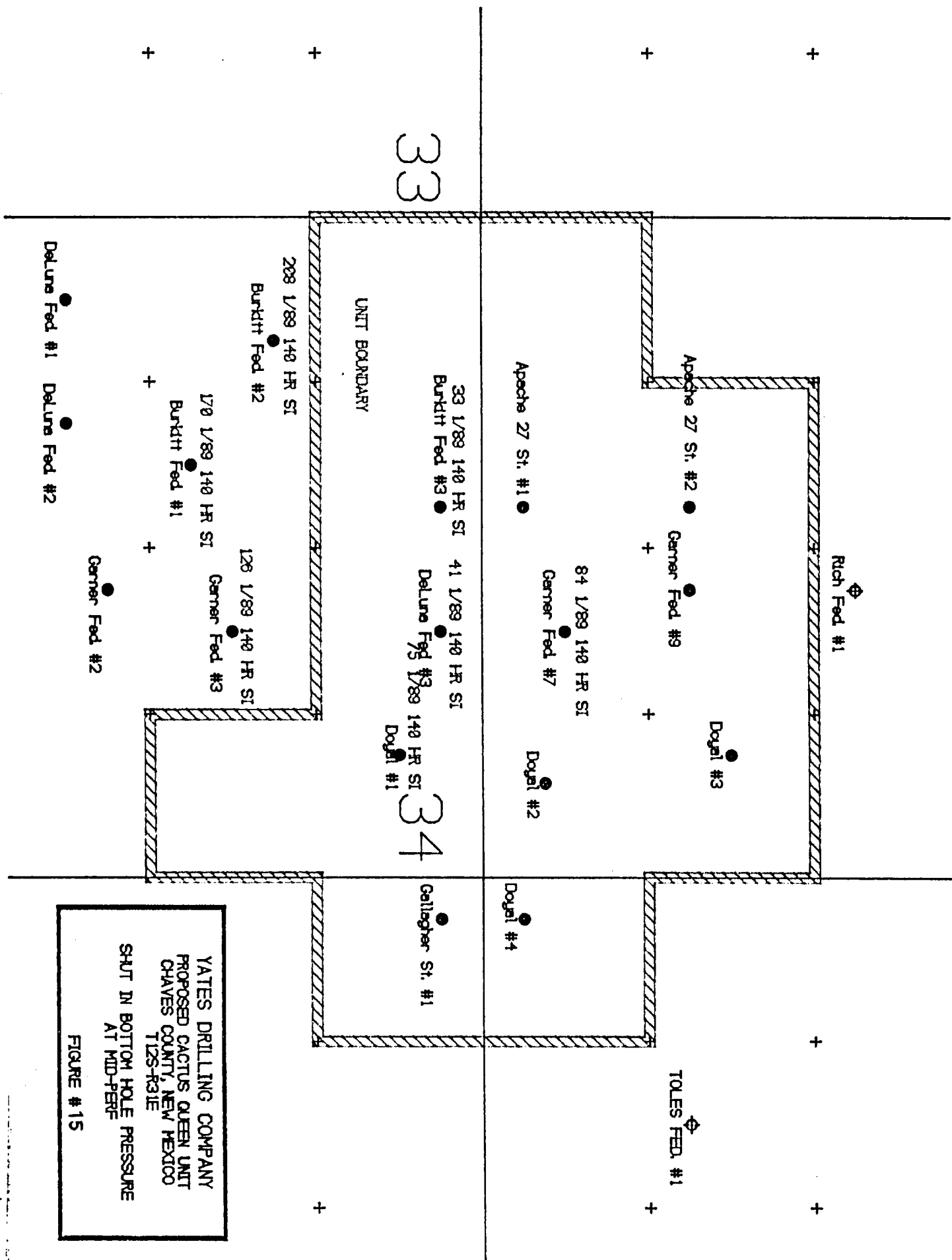
FIGURE #12



YATES DRILLING
SE CHAVES QUEEN FIELD
CACTUS QUEEN UNIT
T12S-R31E
CHAVES CO., NM
BOTTOM HOLE PRESSURE AT MID-PERF
(PSIA)
NOV/84 - MARCH/85
FIGURE #13



YATES DRILLING
SE CHAVES QUEEN FIELD
CACTUS QUEEN UNIT
T12S-R31E
CHAVES CO., NM
BOTTOM HOLE PRESSURE AT MID-PERF
(PSIA)
SEPT/OCT 1986
FIGURE #14



3

27

3

34

RICH FED.

SNOW OIL
TOLES FED.

APACHE ST.



GARNER FED.



DOYAL

BELNORTH
APACHE "27" ST.

GARNER FED.



DOYAL



DOYAL



BURKITT FED.



DELUNA FED.



DOYAL



GALLAGER ST.



BURKITT FED.



GARNER FED.



BURKITT FED.



INJECTION WELL



PRODUCING WELL

YATES DRILLING

SE CHAVES QUEEN FIELD

CACTUS QUEEN UNIT

T12S-R31E

CHAVES CO., NM

FIGURE # 16

A

YATES DRILLING
RICH FED. #1
SEC. 27-12S-31E
2310' FNL & 2310' FEL
CHAVES CO., NM
KB 4441'

YATES DRILLING
DOYAL #3
SEC. 27-12S-31E
1980' FSL & 990' FEL
CHAVES CO., NM
KB 4434'

YATES DRILLING
DOYAL #2
SEC. 27-12S-31E
650' FSL & 660' FEL
CHAVES CO., NM
KB 4432'

YATES DRILLING
DOYAL FED. #1
SEC. 34-12S-31E
660' FNL & 990' FEL
CHAVES CO., NM
KB 4430'

YATES DRILLING
GARNER FED. #3
SEC. 34-12S-31E
1980' FNL & 1980' FEL
CHAVES CO., NM
KB 4432'

A'

DATUM
+1550

DATUM
+1550

TOP QUEEN
OIL/WATER CONTACT

TOP QUEEN
UPPER QUEEN SANDSTONE

Ø & K
BARRIER

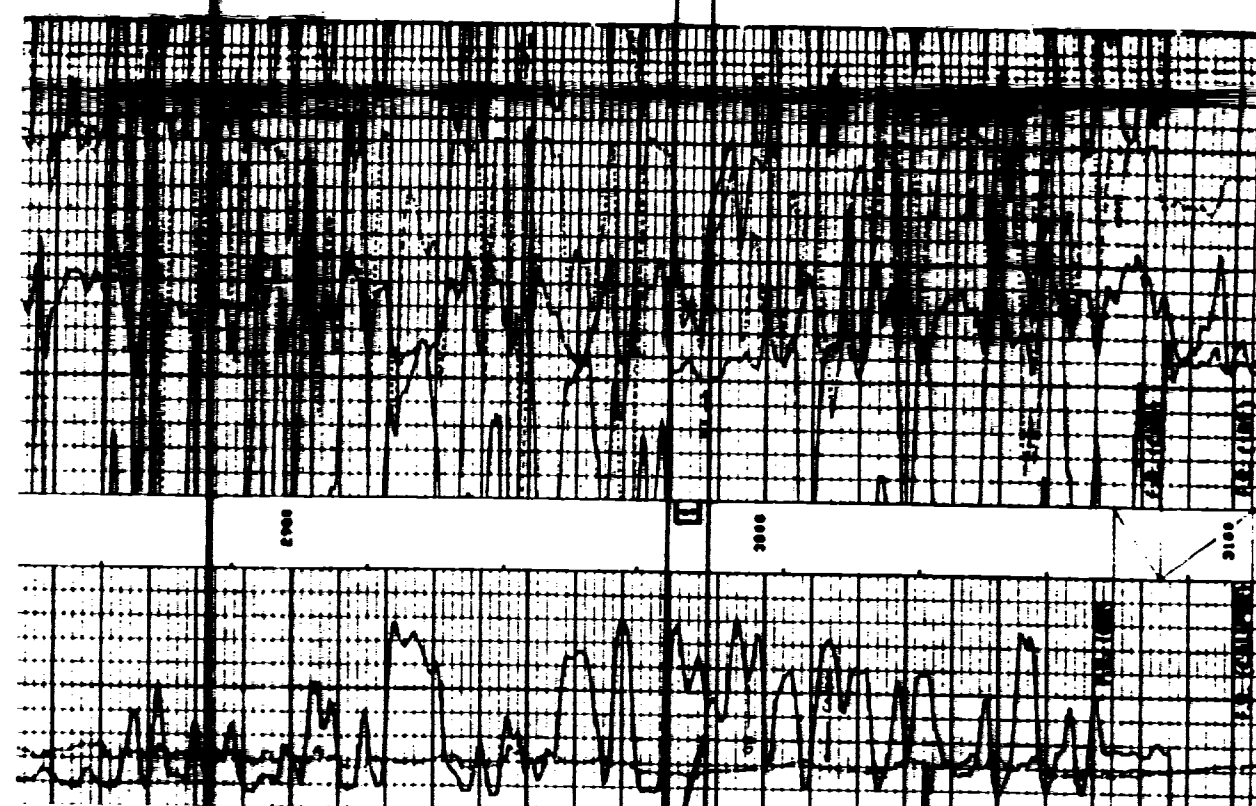
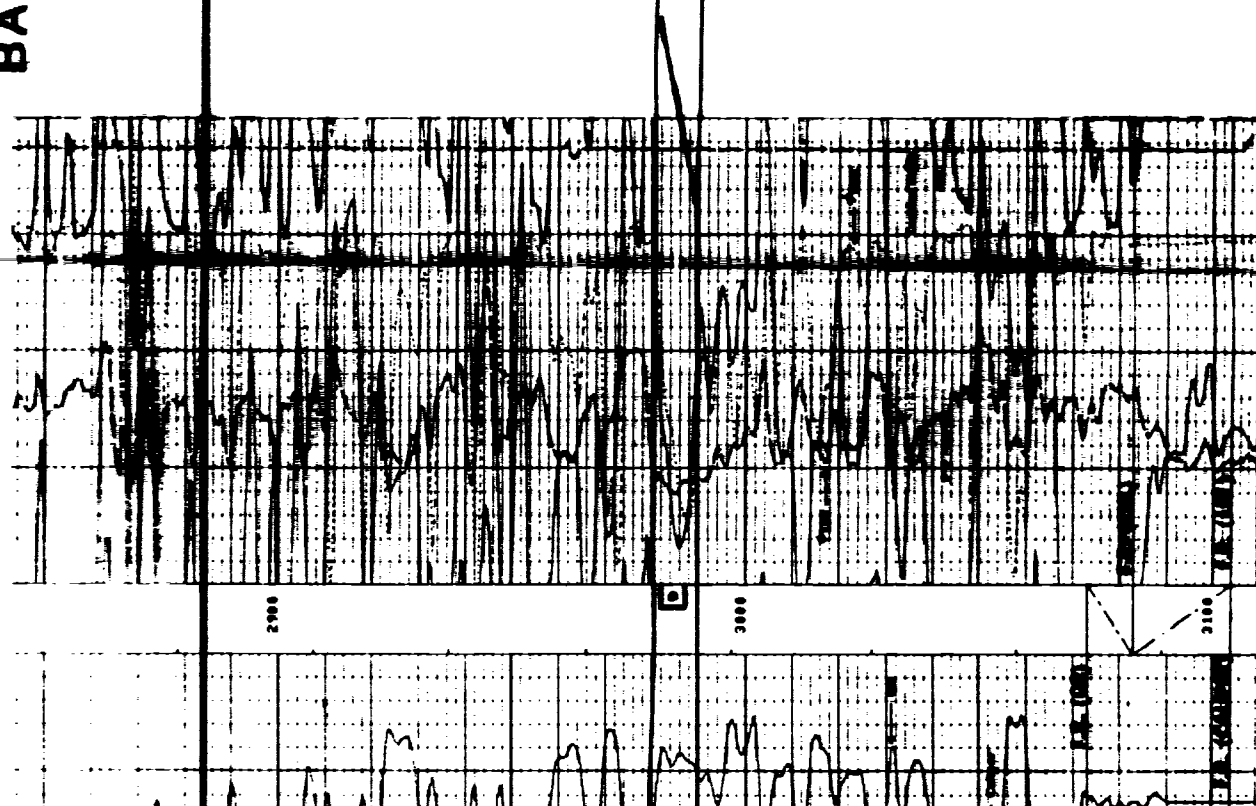
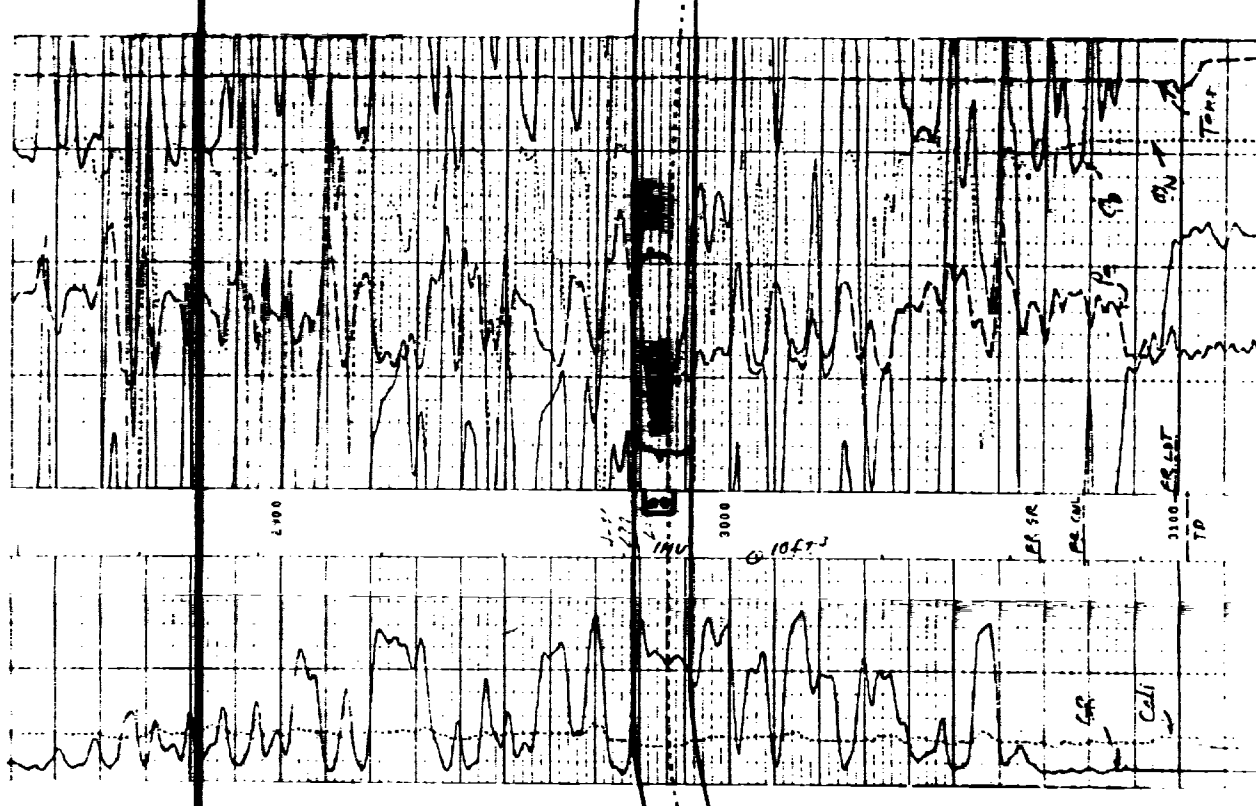
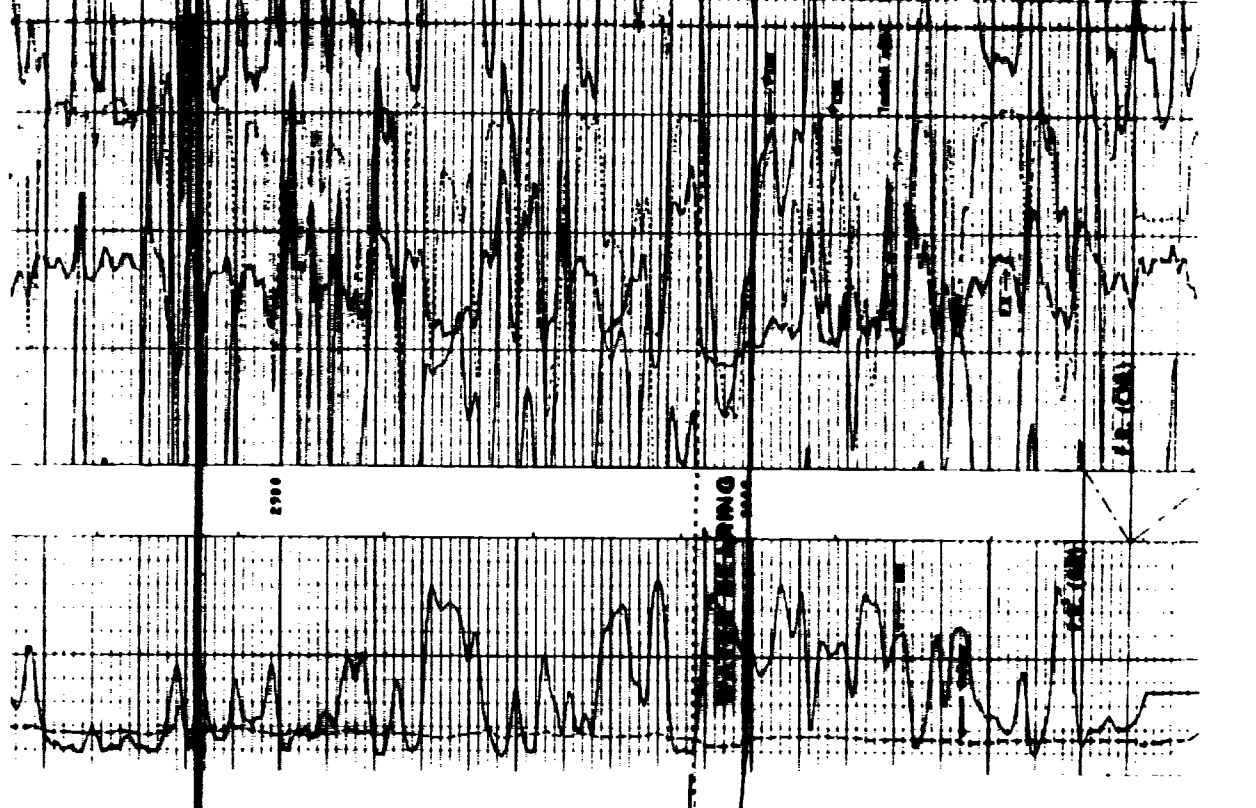
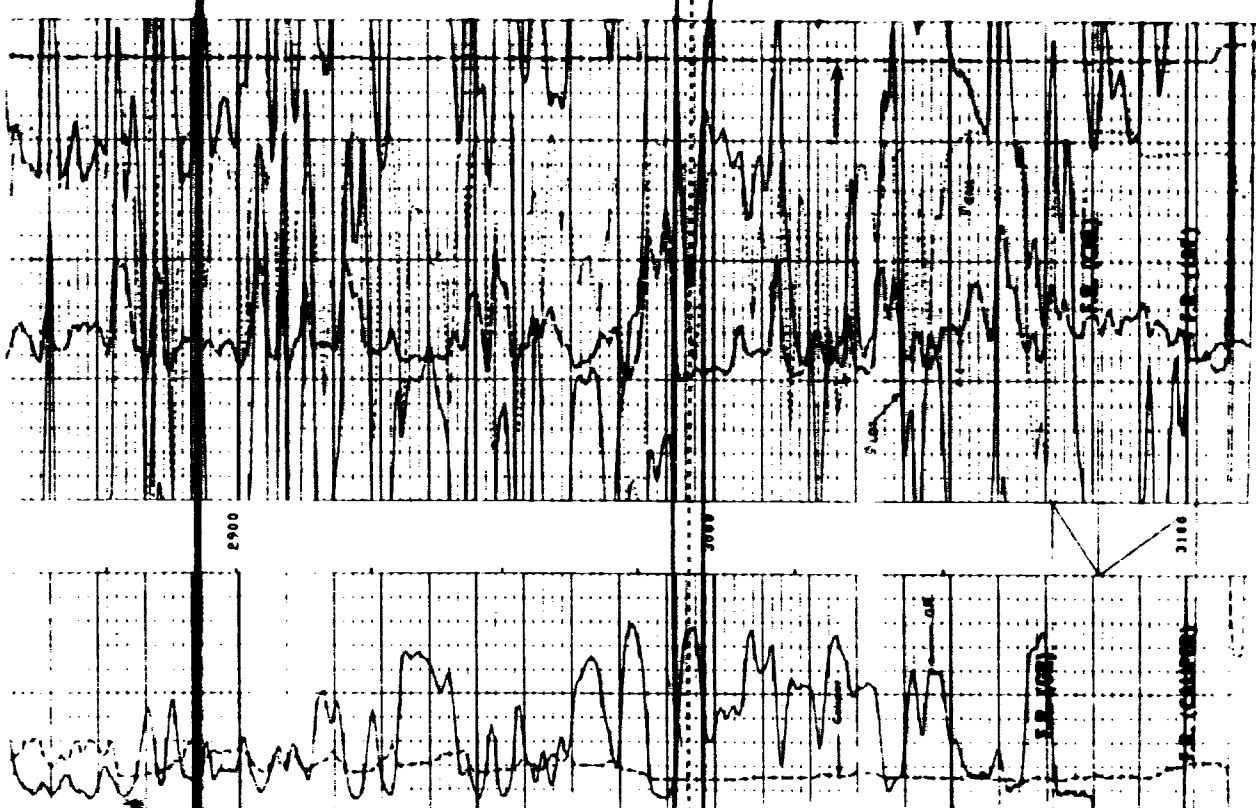
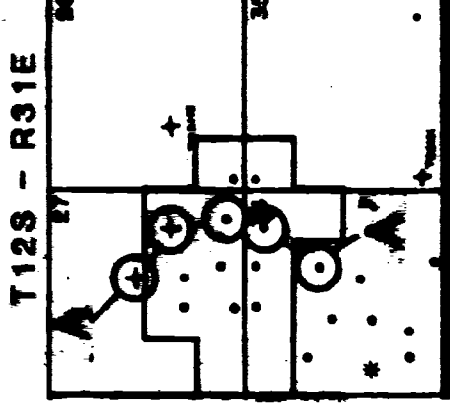


FIGURE #10



B

BELNORTH
APACHE "27" ST. #1
SEC. 27-128-31E
330' FSL & 2310' FWL
CHAVES CO., NM
KB 4444'

YATES DRILLING
GARNER FED. #7
SEC. 27-128-31E
660' FSL & 1980' FEL
CHAVES CO., NM
KB 4438'

YATES DRILLING
DOYAL #2
SEC. 27-128-31E
550' FSL & 660' FEL
CHAVES CO., NM
KB 4432'

YATES DRILLING
DOYAL #4
SEC. 26-128-31E
330' FSL & 380' FWL
CHAVES CO., NM
KB 4430'

B'

DATUM
+1550

DATUM
+1550

TOP QUEEN

UPPER QUEEN SANDSTONE

GLAUCONITE CONTACT

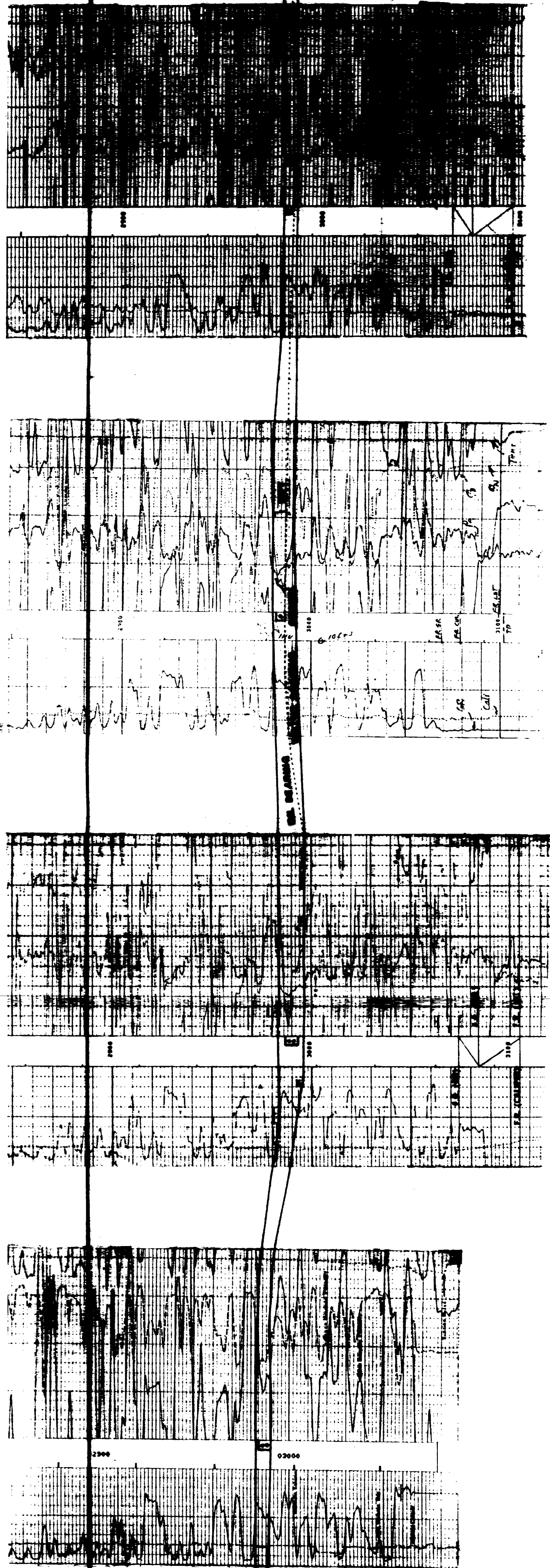


FIGURE #11

T128 - R31E

