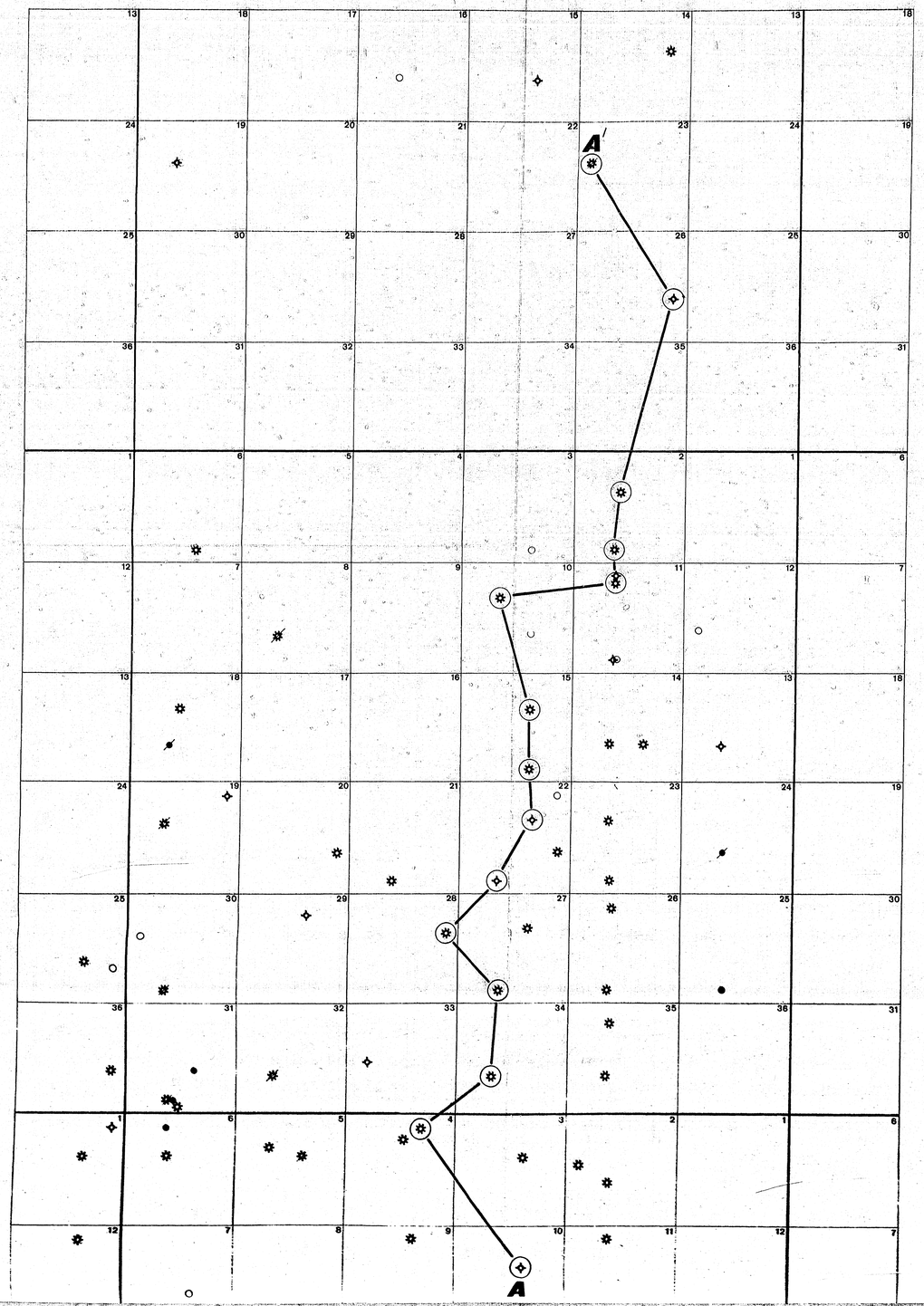
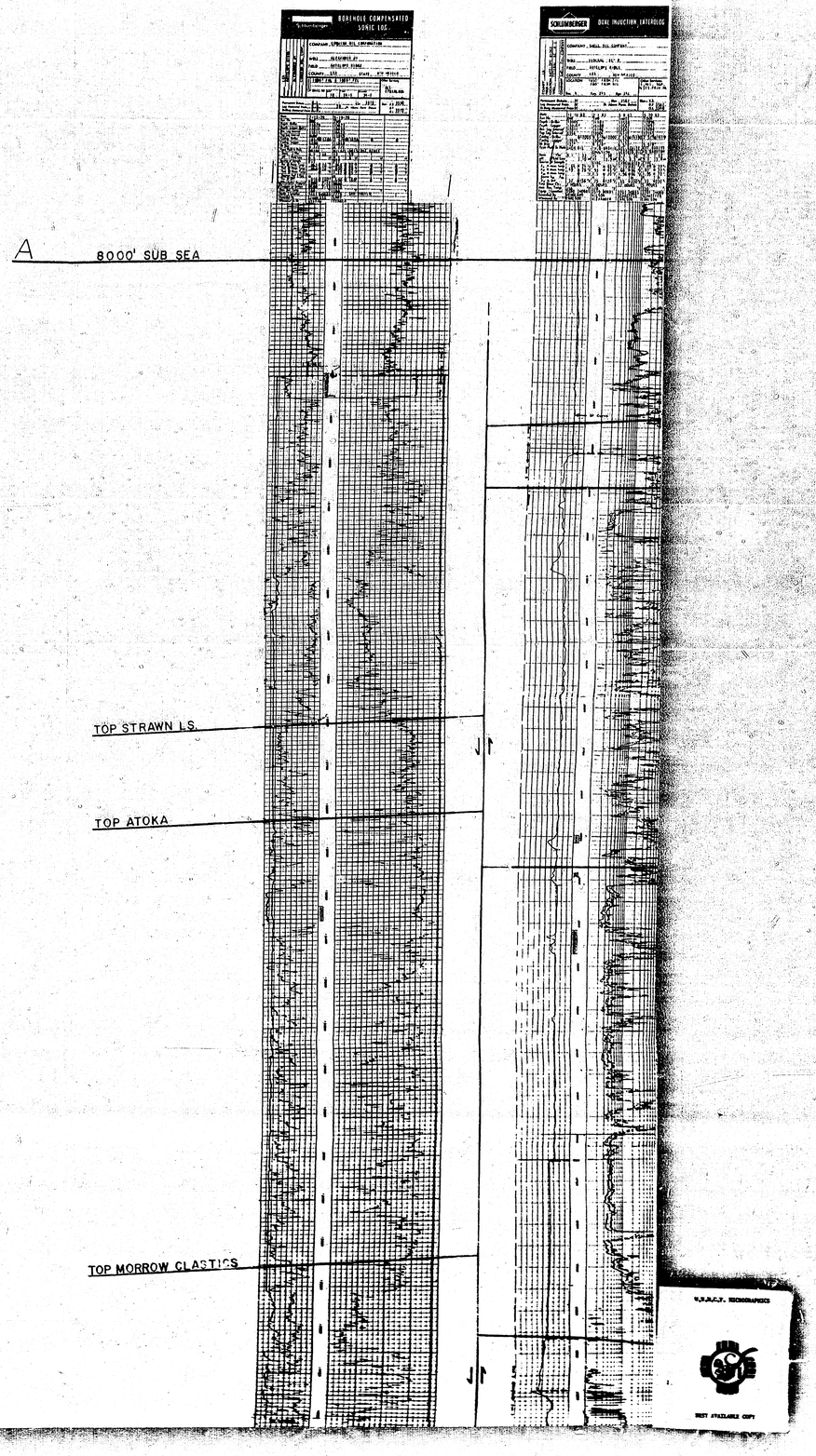
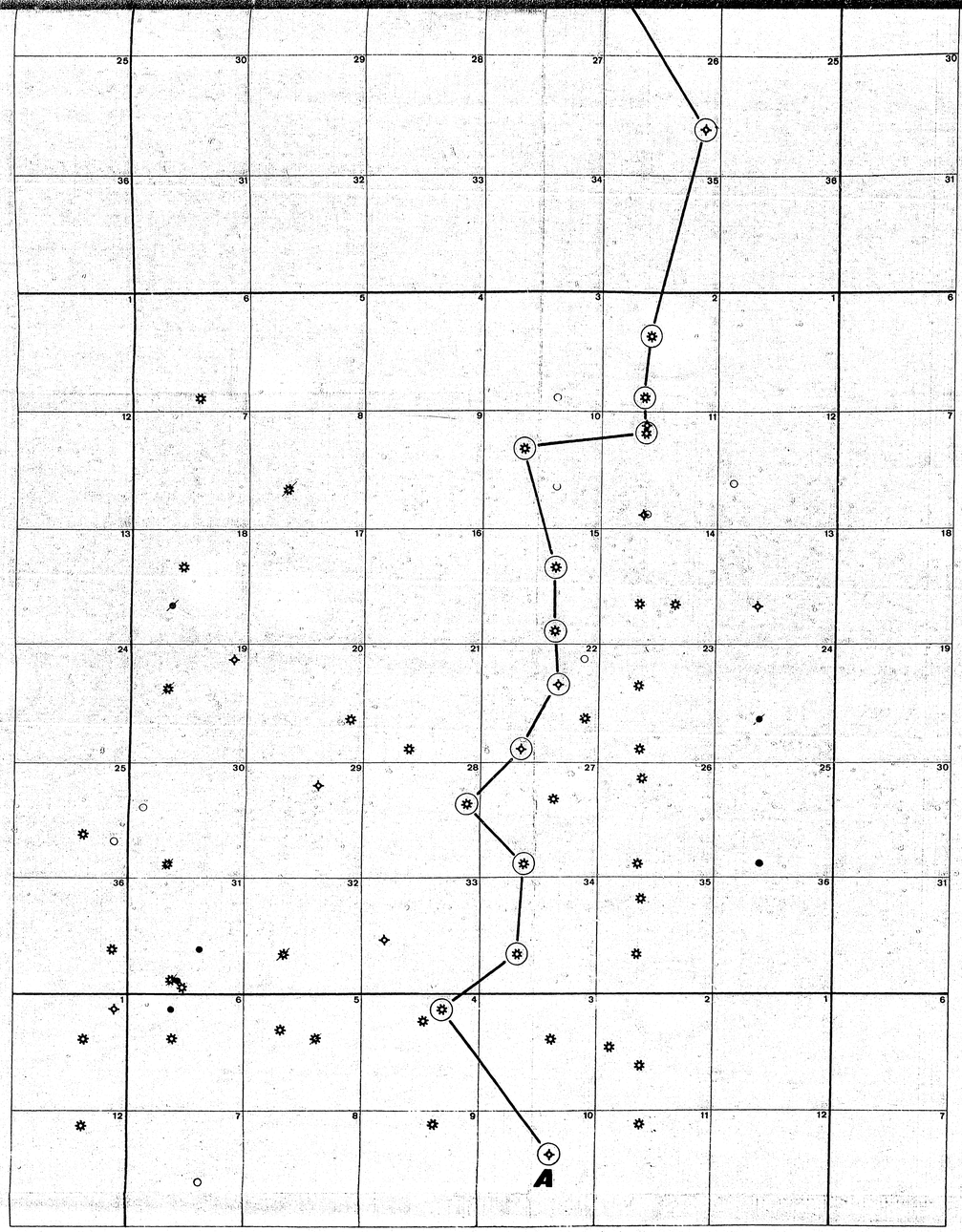
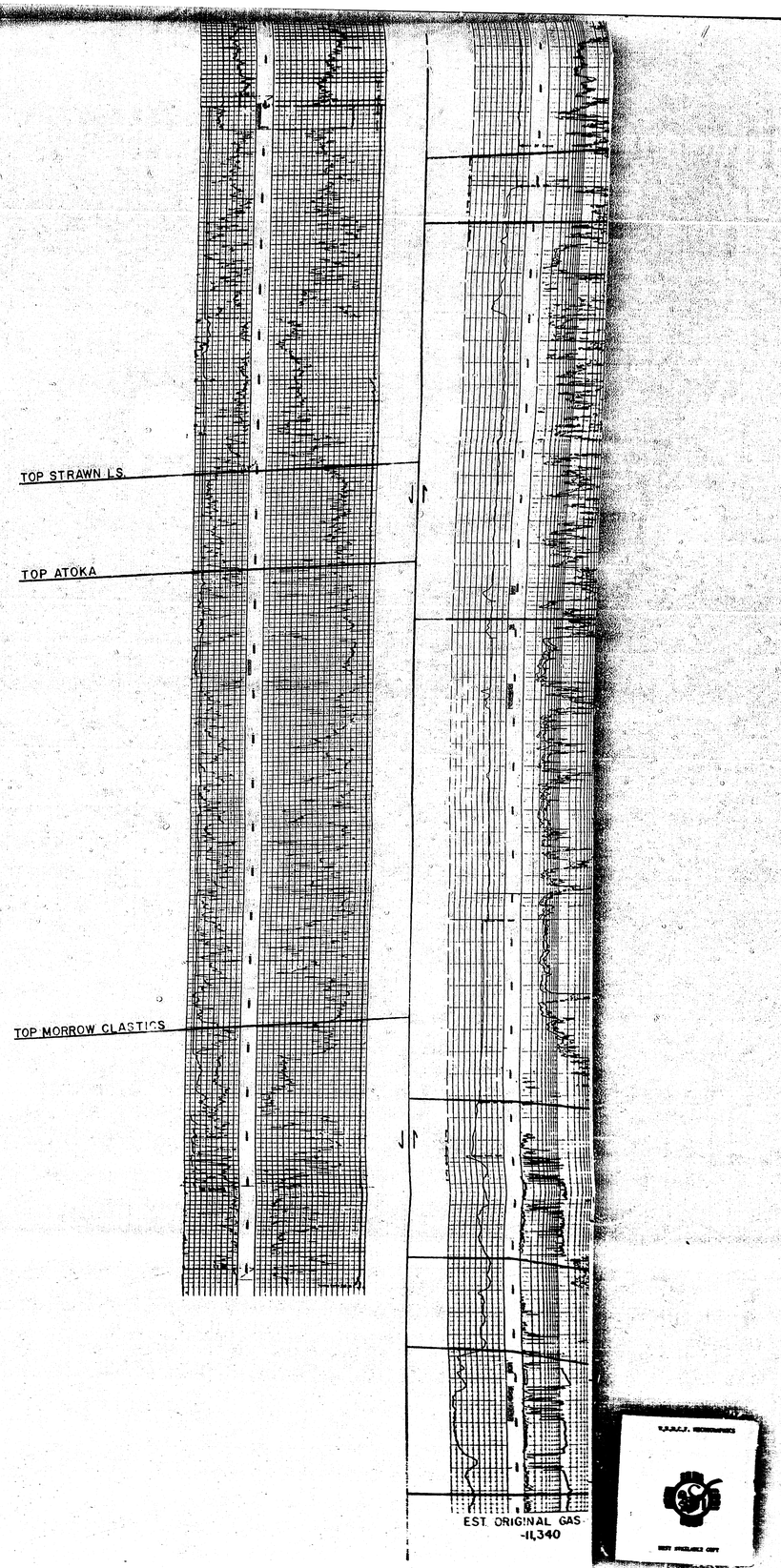
Case No.
7499

Large Exhibits


A
A'


A
8000' SUB SEA
TOP STRAWN LS.
TOP ATOKA
TOP MORROW CLASTICS
A'





DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

ANTELOPE RIDGE AREA
LEA COUNTY, N.M.

CROSS SECTION A—A'

SCALE: NO HORIZONTAL SCALE DATE: 3-82
BY: L. B. TAYLOR

Lynch
CASE 7999 1

8000' SUB SEA

TOP STRAWN L.S.

TOP ATOKA

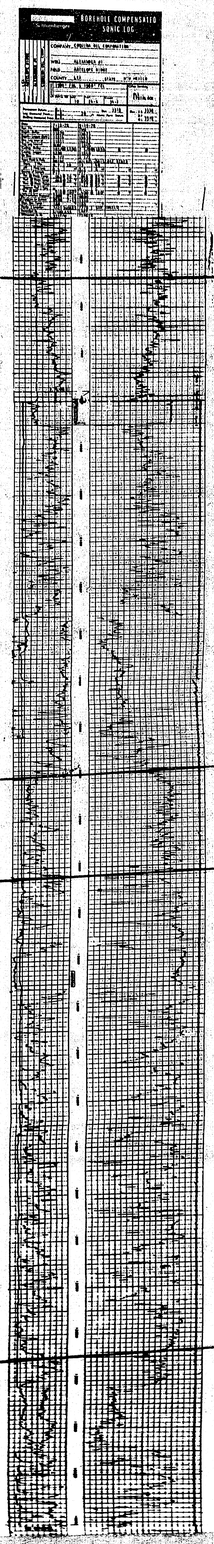
TOP MORROW CLASTICS

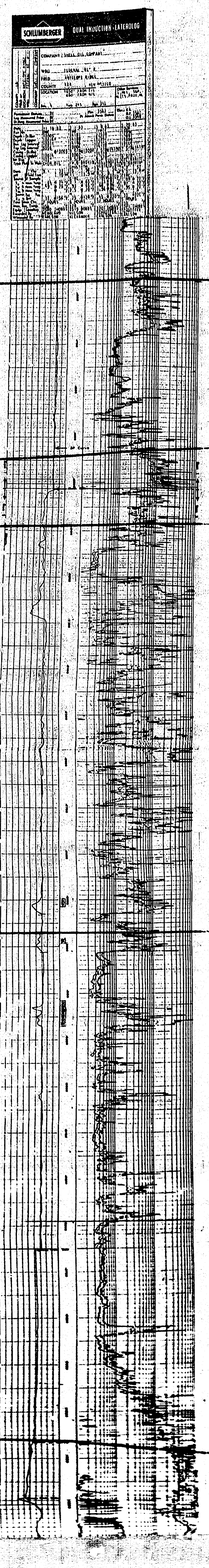
STRAWN

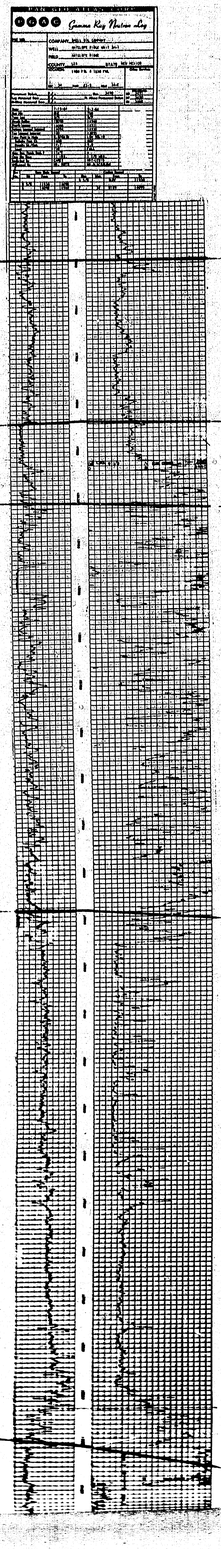
ATOKA

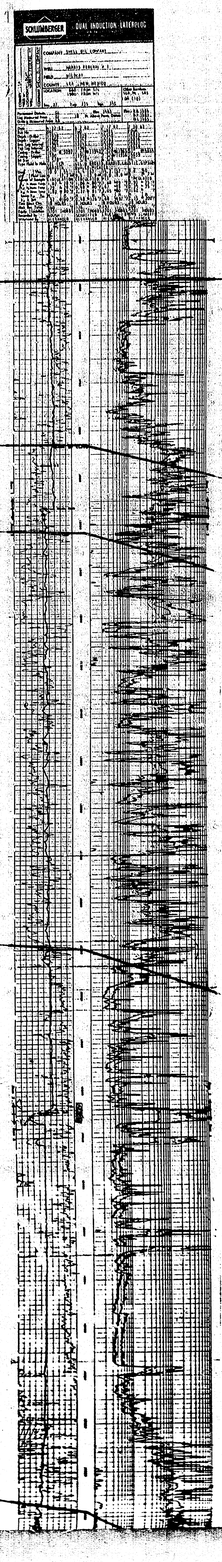
MORROW CLASTICS

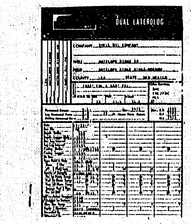
MISS. L.S.

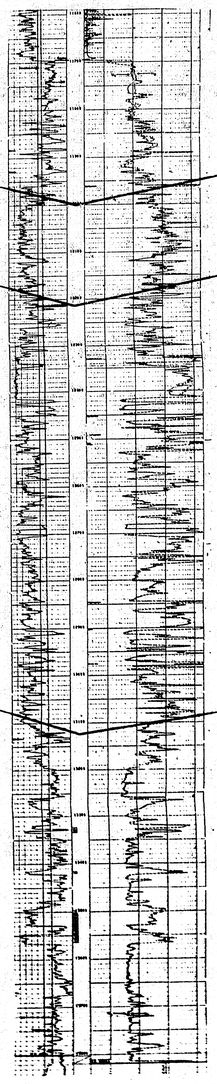


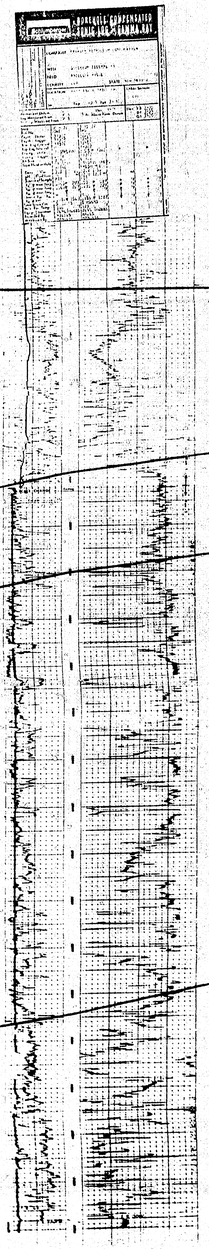




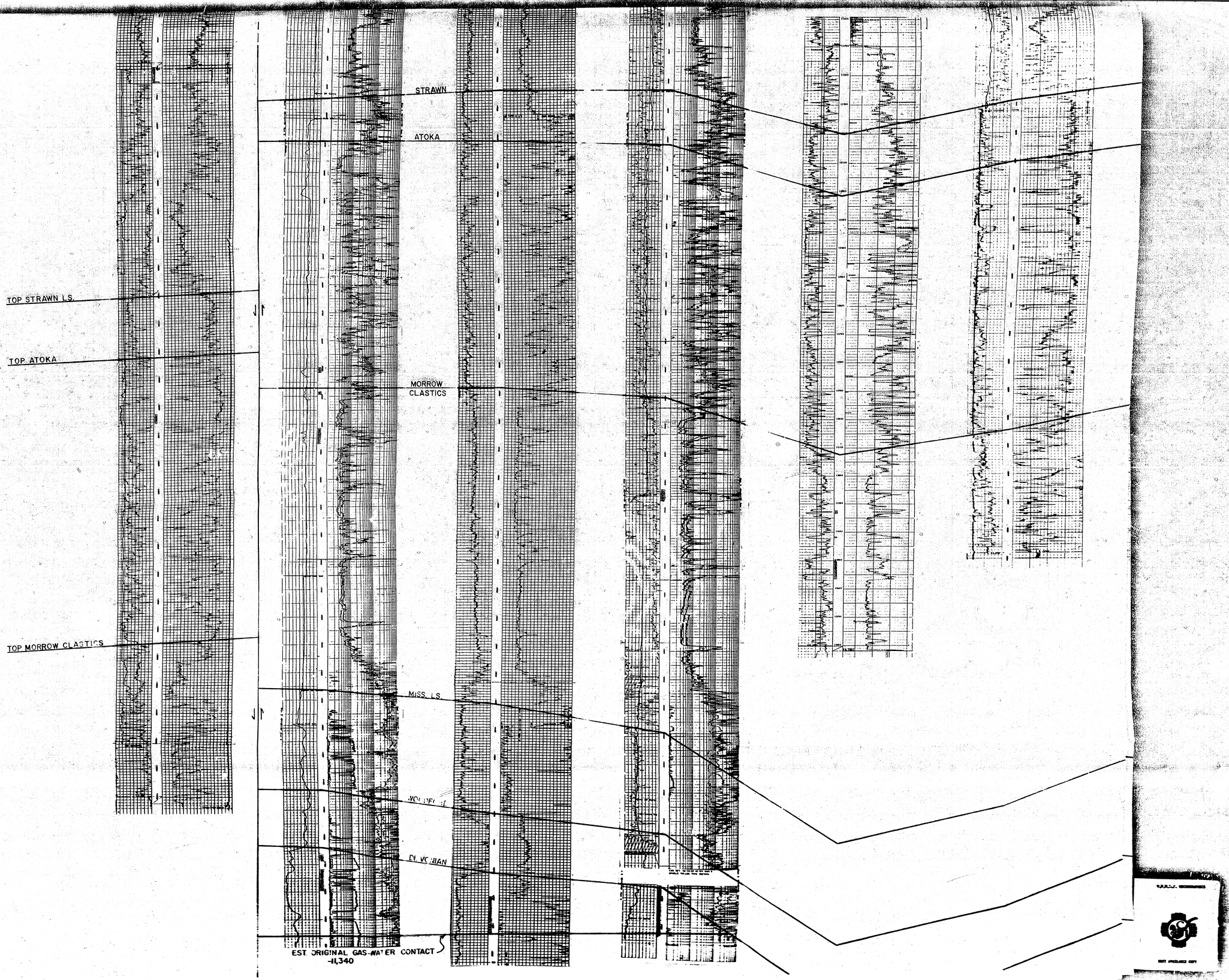








U.S.G.S. RECONNAISSANCE
BEST AVAILABLE COPY


STRAWN
ATOKA
TOP STRAWN L.S.
TOP ATOKA
MORROW CLASTICS
TOP MORROW CLASTICS
MISS. LS.
DEVONIAN
EST. ORIGINAL GAS-WATER CONTACT
-11,340

NE/4 Sec 15

NW/4 Sec 10

Unit

T Strawn

T Atoka

T Morrow

12,900

12,900

12

DUAL LATEROLOG

ACOUSTIC-COMPENSATED SONIC LOG - GAMMA RAY

ACOUSTIC-COMPENSATED SONIC LOG - GAMMA RAY - NEUTRON

Compensated Neutron-Formation Density Log

Dresser Atlas Combination Logging System — Densilog Neutron

Dresser Atlas Combination Logging System — Densilog Neutron

COMPENSATED NEUTRON-FORMATION DENSITY

U.S.G.S. RESTRICTED

BEST AVAILABLE COPY

T Strawn

T Atoka

12900

12900

T Morrow

12

DST #4 (BS-Atk) (-4240 (4334)
Open 120" Rec 90 MC Sulphur Water & Oil Sulphur Water
42 2310 4223 FP 2331-3345, 125' FSIP=1333

W.S.U.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

NE/4 Sec 15

NW/4 Sec 10

Unit C Sec 11

Unit N Sec 2

Unit F Sec 2

T Strawn

T Atoka

12,900

12900

T Morrow

12,870

T Strawn

T Atoka

12,900

12900

T Morrow

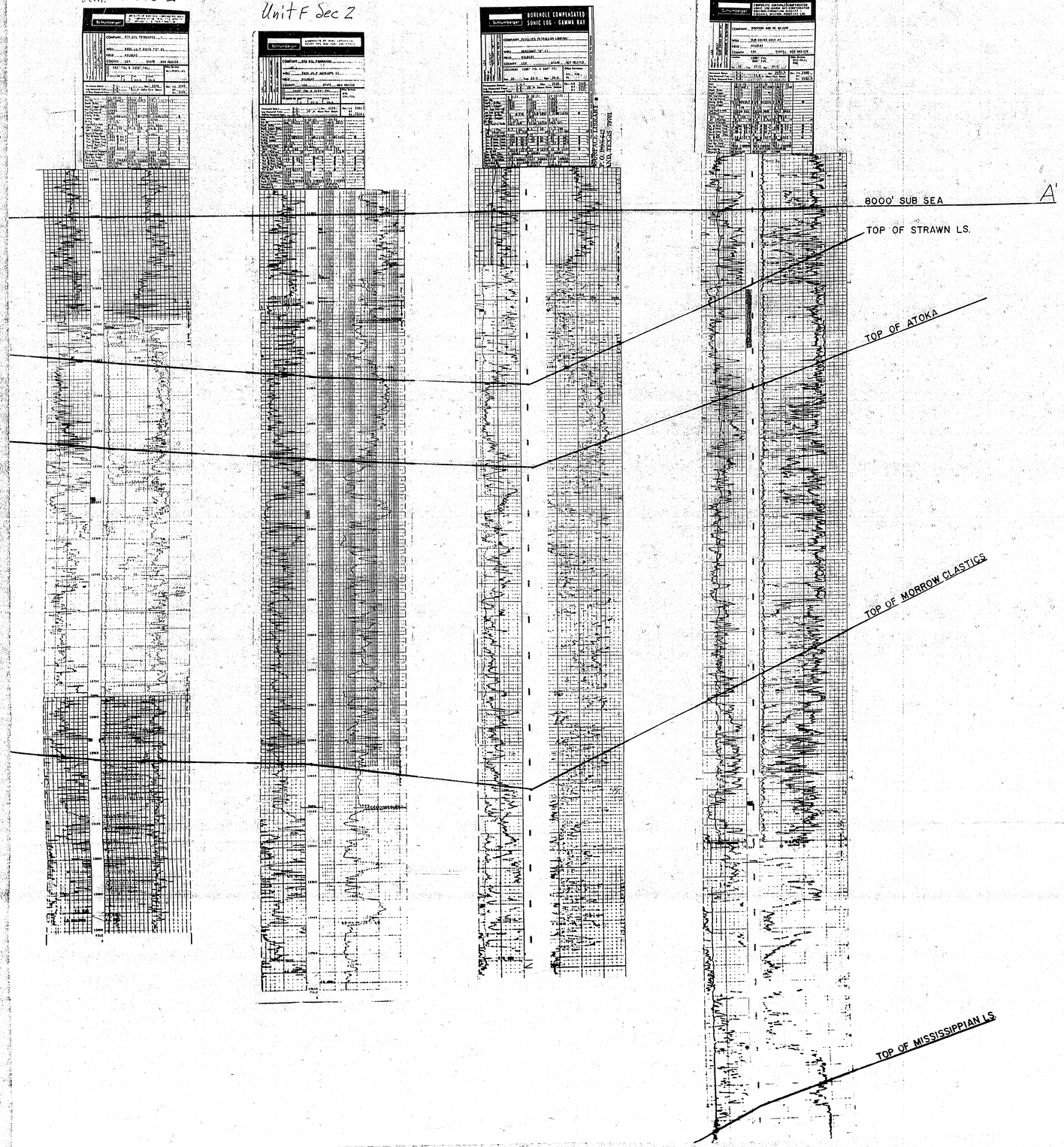
12,870

W.P.M.C.V. MICROGRAPHICS

BEST AVAILABLE COPY

Unit N Sec 2

Unit F Sec 2



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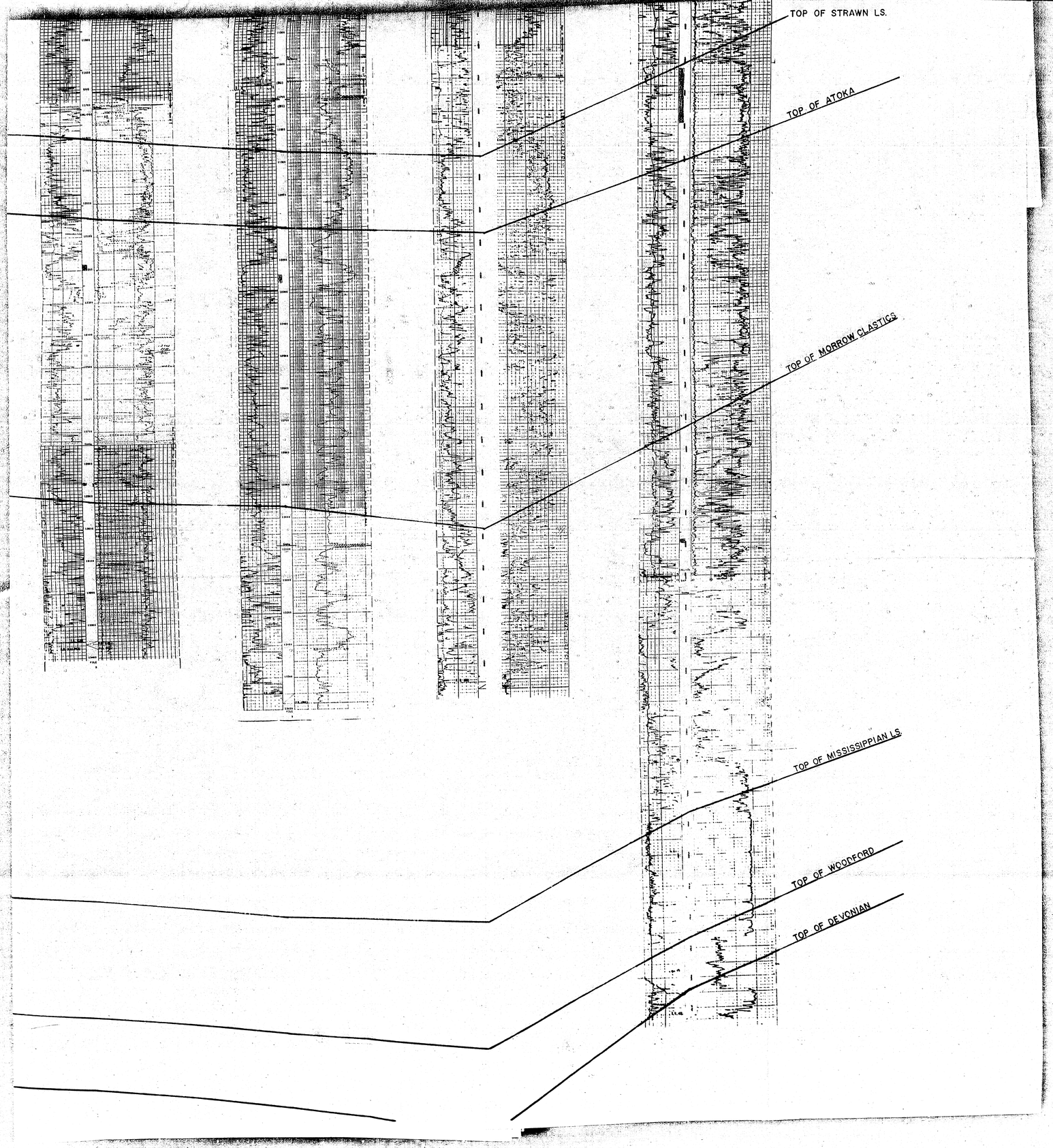

V.P.A.C.Y. KOCKOGRAPHICS
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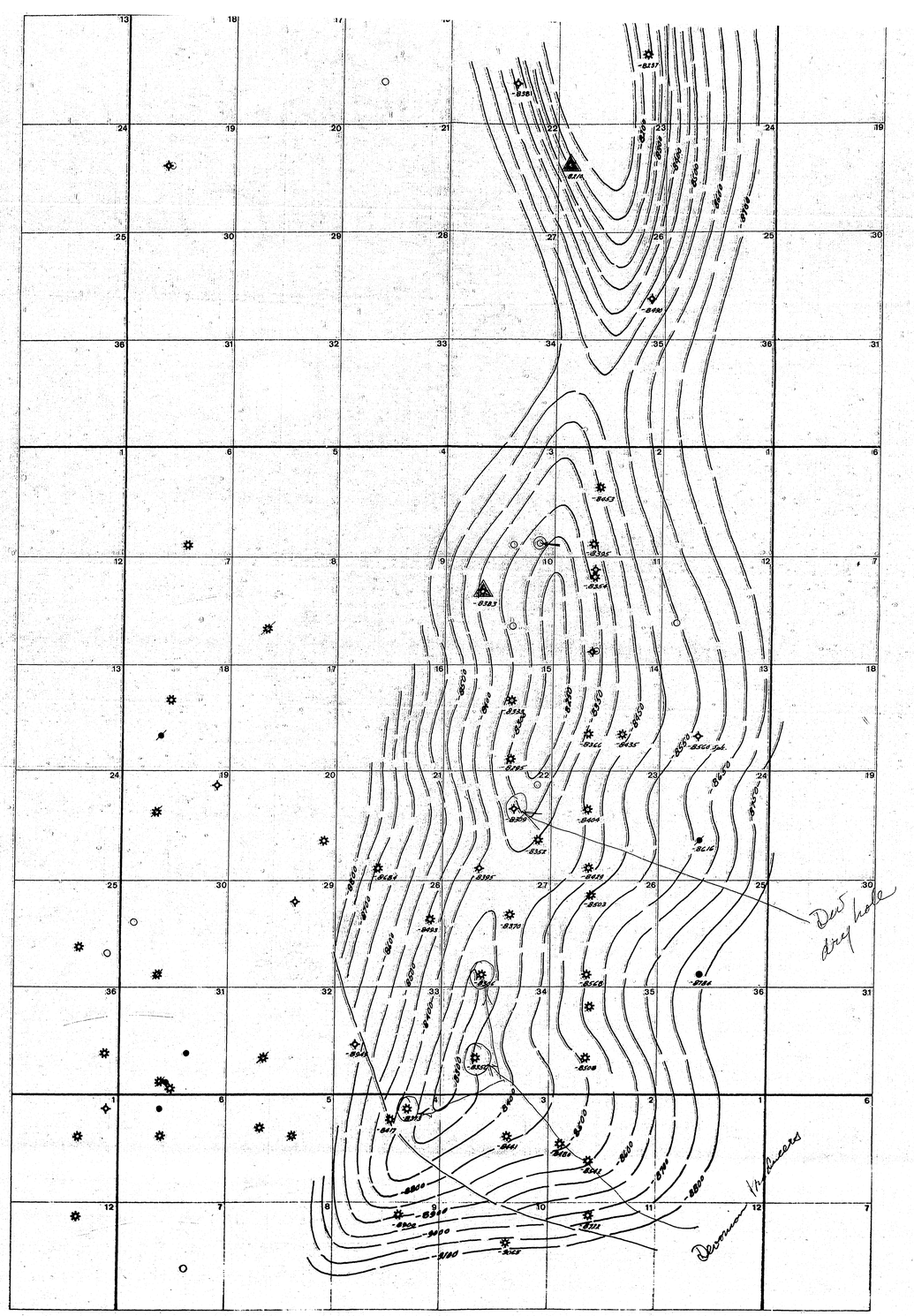


BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Applicant's Exhibit No. 2
CASE NO. 7199

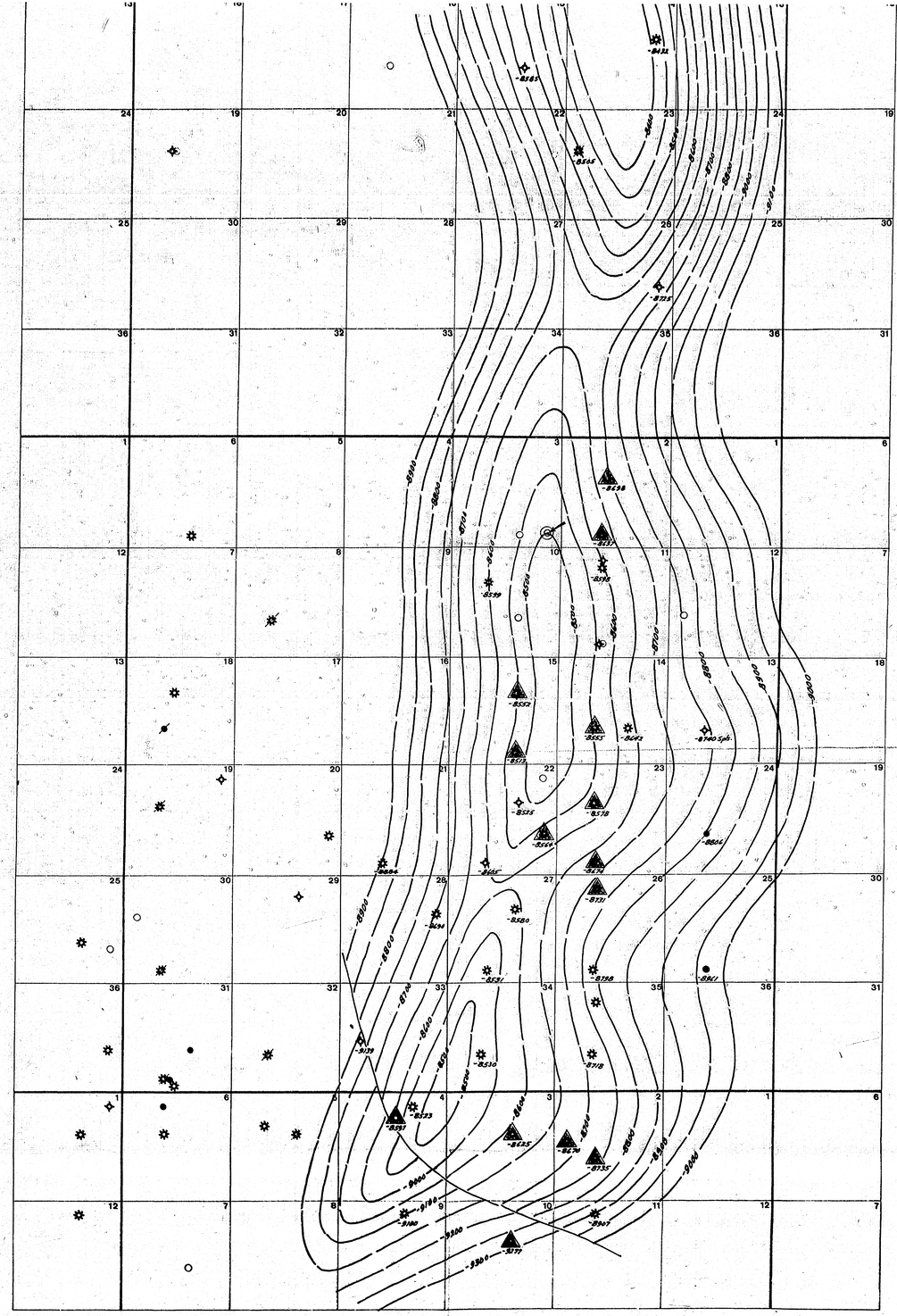
-8295 STRAWN LS. PRODUCERS

DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

ANTELOPE RIDGE AREA
LEA COUNTY, N.M.

TOP OF STRAWN LIMESTONE

SCALE 1" = 2000'
CONTOUR INTERVAL: 50'
DATE: 3-82
BY: L.B. TAYLOR



▲ -8578 ATOKA PRODUCERS

DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

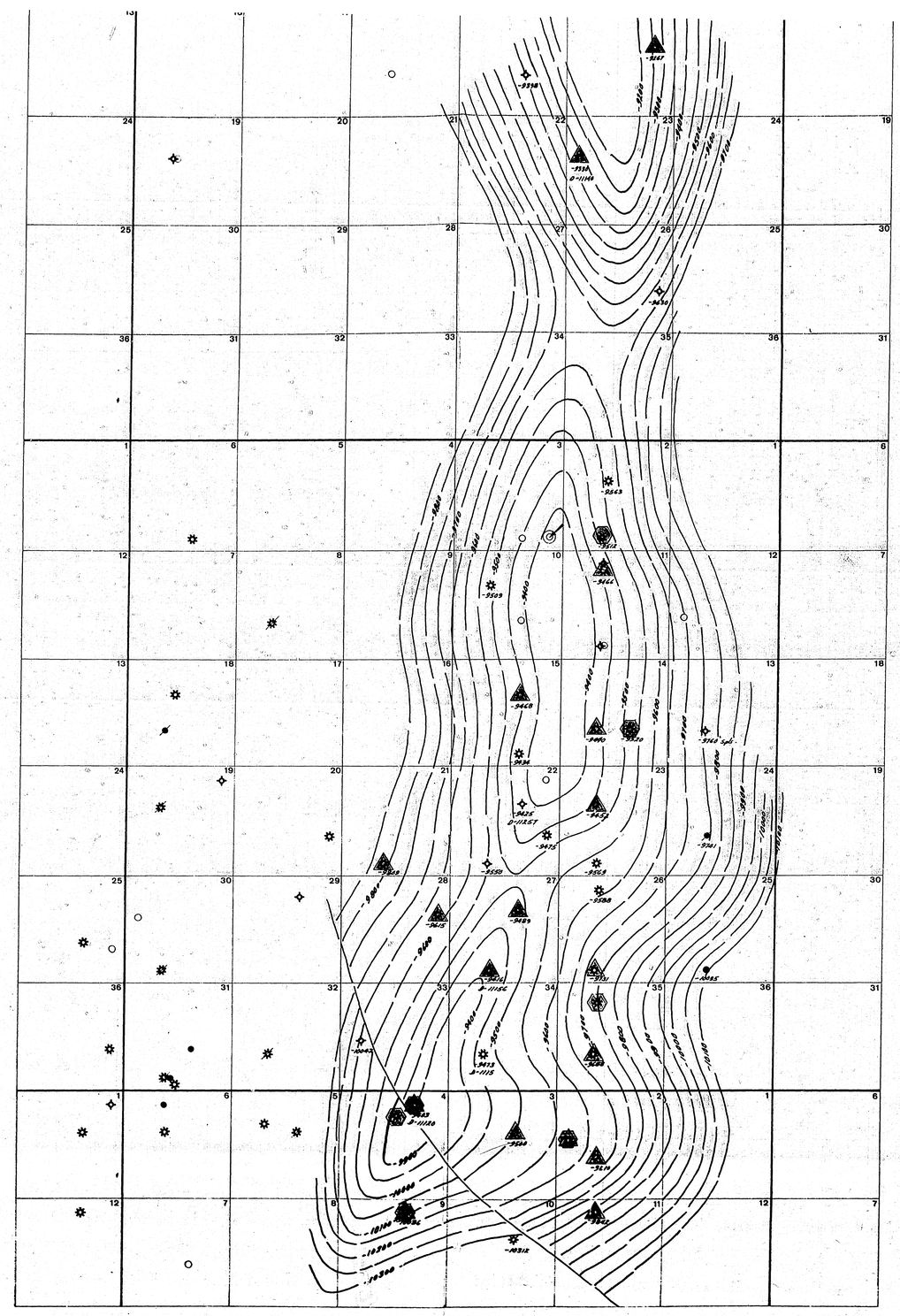
ANTELOPE RIDGE AREA
LEA COUNTY, N.M.

TOP OF ATOKA

SCALE: 1" = 2000'
CONTOUR INTERVAL: 50'
DATE: 3-82
BY: L. B. TAYLOR

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 3
CASE NO. 7777

V.R.A.C.Y. KODAKPHOTO
BEST AVAILABLE COPY



9952 MORROW L.S. PRODUCERS

9466 MORROW SAND PRODUCERS

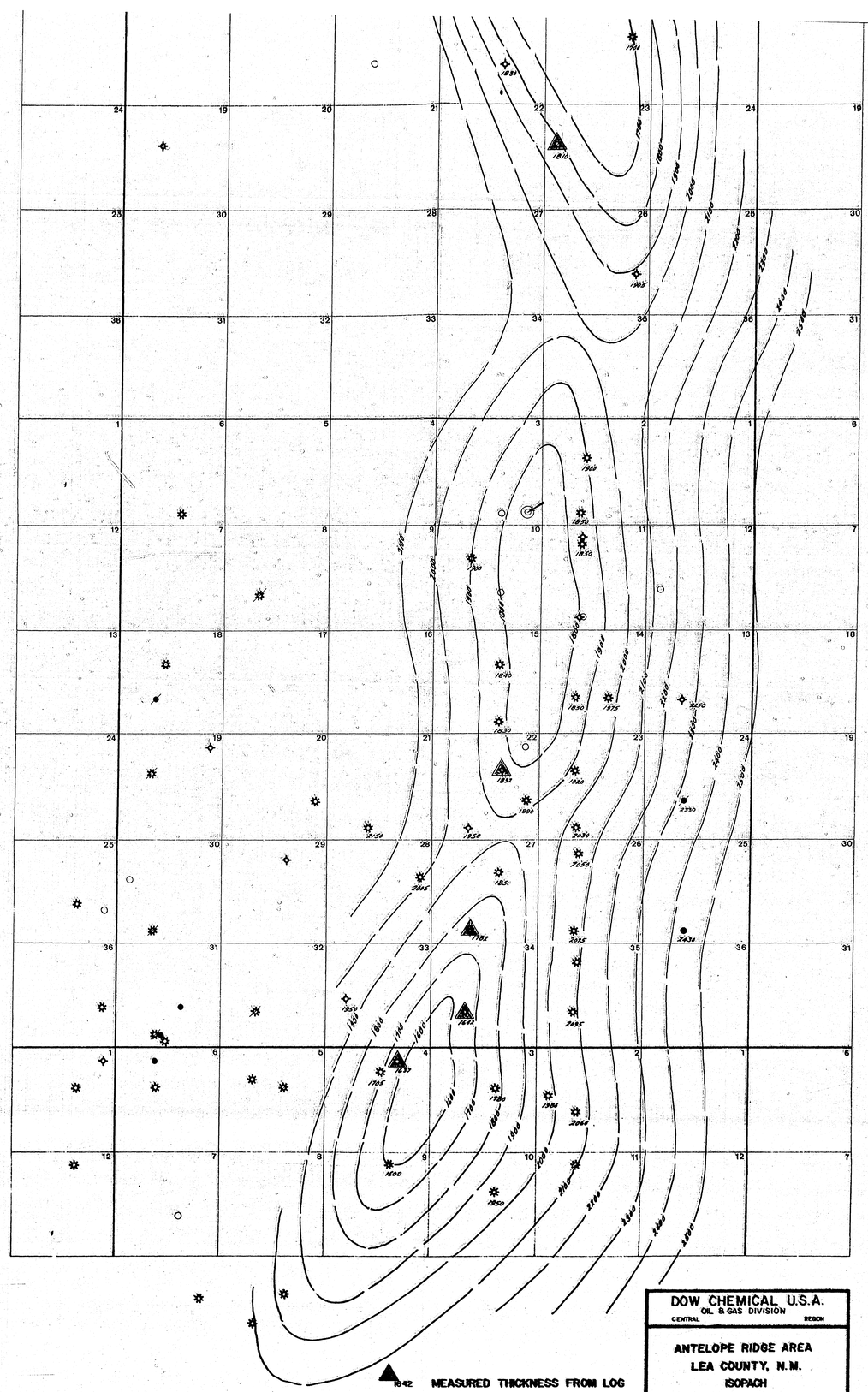
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO. 7999

DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

ANTELOPE RIDGE AREA
LEA COUNTY, N.M.

TOP OF MORROW CLASTICS

SCALE: 1"=2000'
CONTOUR INTERVAL: 50'
DATE: 3-82
BY: L.B. TAYLOR



MEASURED THICKNESS FROM LOG

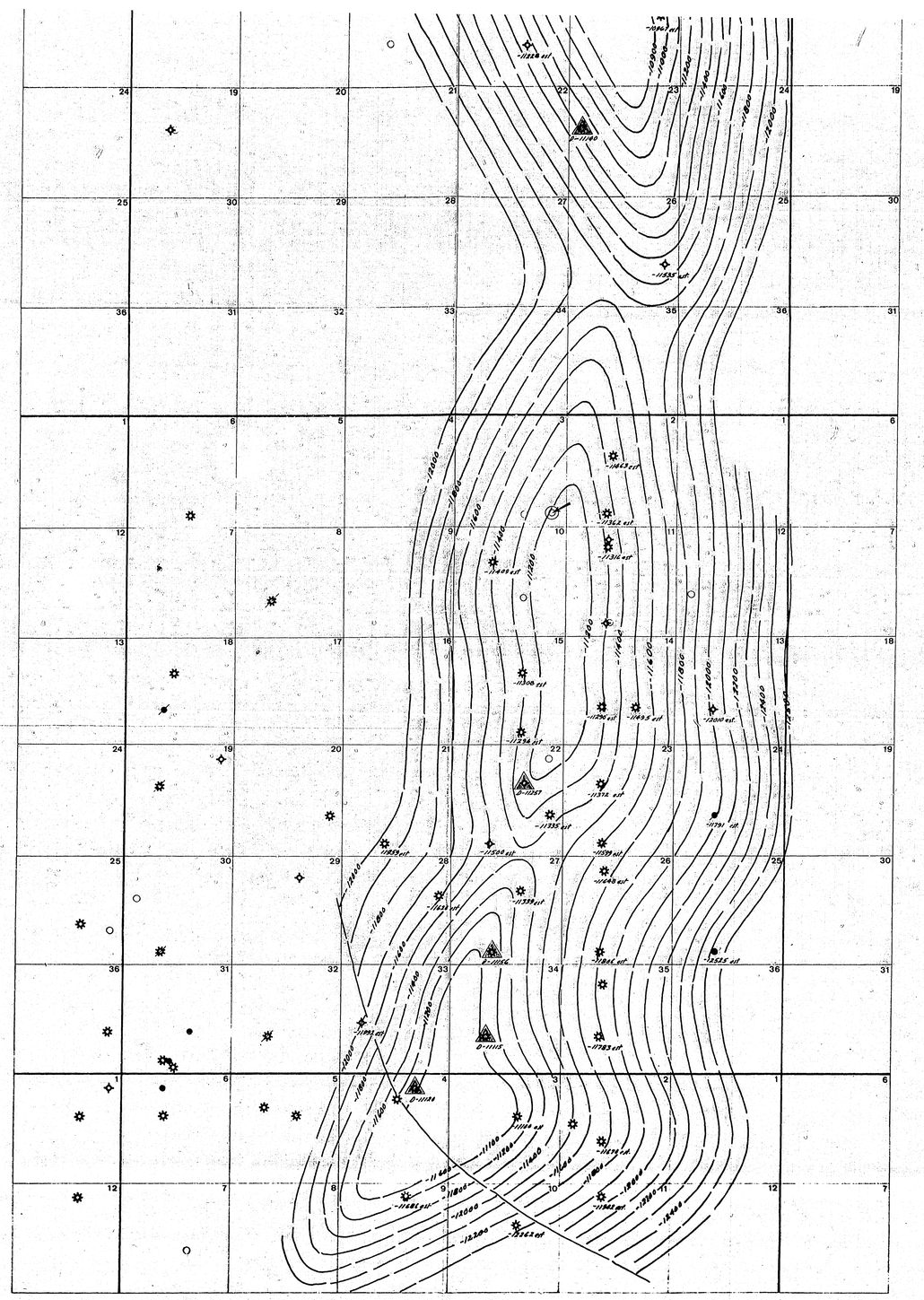
ESTIMATED THICKNESS

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 7499

DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

ANTELOPE RIDGE AREA
LEA COUNTY, N.M.
ISOPACH
MORROW CLASTICS TO DEVONIAN

SCALE: 1" 2000'
CONTOUR INTERVAL: 100'
DATE: 3-82
BY: L.E.TAYLOR



D-11156 DEVONIAN DATUM FROM LOG

-11599 est. ESTIMATED DEVONIAN DATUM

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 6
CASE NO. 7444

DOW CHEMICAL U.S.A.
OIL & GAS DIVISION
CENTRAL REGION

ANTELOPE RIDGE AREA
LEA COUNTY, N.M.

TOP OF DEVONIAN

SCALE: 1" = 2000'
CONTOUR INTERVAL: 100'
DATE: 3-82
BY: L. B. TAYLOR

TYPE LOG

SHELL OIL

#1 ANTELOPE RIDGE UNIT

27-23S-34E

660'/SL, 1980/WL

KB 3484' TD 14,817'

1967 IP (MRRW) PERFS 13226-13276
CAOF 9005 MCFGPD & 7.5 B. COND/MMCF

1962 IP (DEV) OPEN HOLE 14654-14832
CAOF 46,900 MCFGPD & 23 B. COND/MMCF

(DEV) TOTAL PRODUCTION (ZONE ABANDONED): 5.1 BCF & 113,672 BO

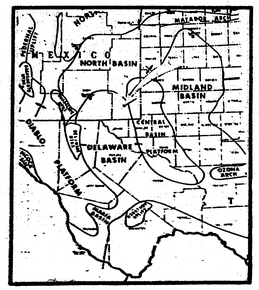
(MRRW) CUM. PRODUCTION (12/1/81) : 23.5 BCF & 221,201 BD

STRATIGRAPHIC COLUMN

WEST TEXAS-SOUTHEAST NEW MEXICO

✲ POTENTIAL GAS RESERVOIR

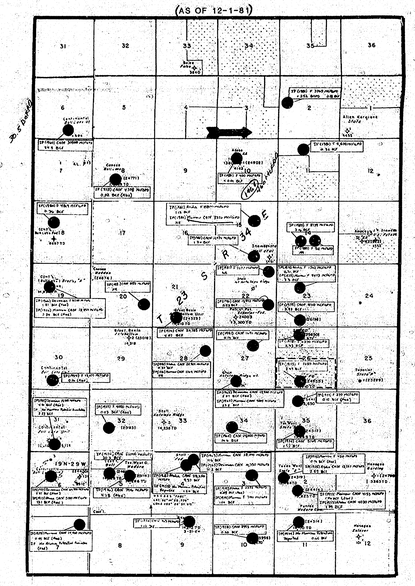
SYSTEM	SERIES OR EPOCH	DELAWARE BASIN
QUATERNARY	RECENT / PLEISTOCENE	Alluvium
TERTIARY	PLIOCENE TO EOCENE	
CRETACEOUS	GULF	
	COMANCHEAN	Fredericksburg, Lime, Trinity, Paluxy Ss.
TRIASSIC	UPPER	Santa Rosa
PERMIAN	OCHOA	Dewey Lake, Rustler, Salado, Castile
	GUADALUPE	Delaware Mtn. Group: Lamar Beli Canyon, Cherry Canyon, Brushy Canyon
	LEONARD	Bone Spring: Avalon Member, 1st Bone Spring Sand, 2nd Bone Spring Sand, 3rd Bone Spring Sand
	WOLFCAMP	Wolfcamp ✲
PENNSYLVANIAN	VIRGIL	Cisco
	MISSOURI	Canyon
	DES MOINES	Strawn ✲
	ATOKA	Atoka ✲
	MORROW	Morrow ✲
MISSISSIPPIAN	CHESTER	Barnett Sh.
	MERAMEC-OSAGE	Mississippian Ls.
	KINDERHOOK	Kinderhook
DEVONIAN	UPPER	Woodford
	MIDDLE	
	LOWER	Devonian ✲
SILURIAN	U. WENLOCKIAN	U. Silurian
	L. WENLOCKIAN, ALEXANDRIAN	Fusselman
ORDOVICIAN	CINCINNATIAN	Montoya
	MOHAWKIAN	Simpson: Bromide, Tulip Cr. Mc Lish, Oil Creek, Joins
	CHAZYAN	
	CANADIAN, OZARKIAN	Ellenburger
CAMBRIAN	UPPER	
PRECAMBRIAN		



REGIONAL GEOLOGIC MAP

ANTELOPE RIDGE AREA PRODUCTION

(AS OF 12-1-81)



BEFORE EXAMINER UTTER
OIL CONSERVATION DIVISION
AMOCO EXHIBIT NO. 6
CASE NO. 7499

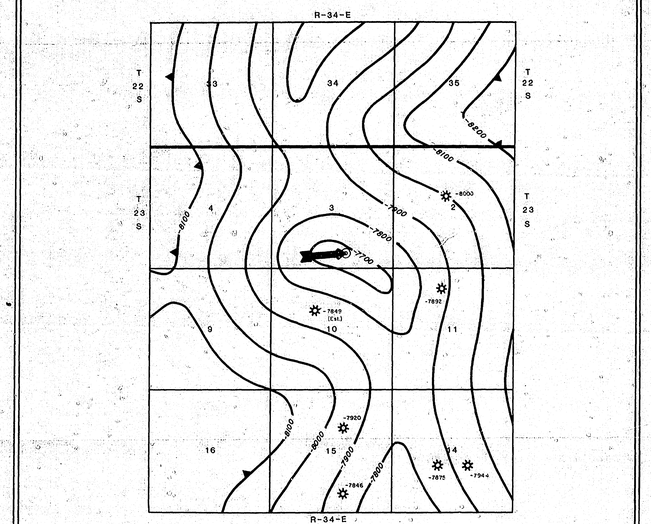
Amoco Production Company
HOUSTON REGION
WEST TEXAS - EASTERN NEW MEXICO DIVISION

ANTELOPE RIDGE AREA

PRODUCING INTERVALS

- WOLFCAMP
- STRAWN
- ATOKA
- MORROW
- DEVONIAN

ENCL NO ____
DATE 2/82
GEOL A. Oertel
E.T. A. Gratia



SCALE 1" = 2000'

✲ CONTROL POINT

PROPOSED LOCATION

Amoco Production Company
HOUSTON REGION

STRUCTURE CONTOUR MAP

TOP OF THE

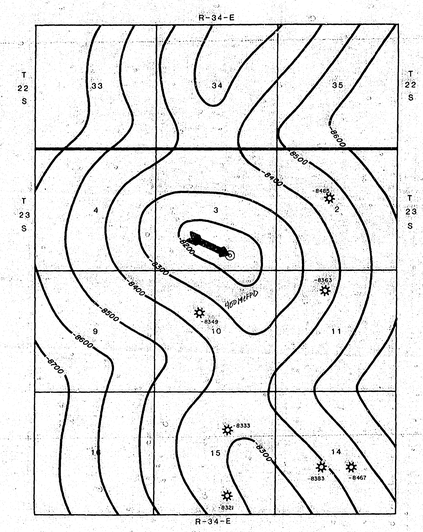
WOLFCAMP FORMATION

ENCL. NO. _____ DATE 2-82

C.I. = 100' GEOL. A. CERTEL

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Amoco EXHIBIT NO. 7
CASE NO. 7999

U.S.G.S. RESTRICTED
TEST SPECIMEN COPY



SCALE 1" = 2000'

☼ CONTROL POINT

PROPOSED LOCATION

Amoco Production Company
HOUSTON REGION

STRUCTURE CONTOUR MAP

TOP OF THE

STRAWN FORMATION

ENCL. NO. _____ DATE 2-82

C. I. = 100' GEOL. A. OERTEL

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Amoco EXHIBIT NO. 2
CASE NO. 7449

Amoco Production Company
HOUSTON REGION

STRUCTURE CONTOUR MAP
TOP OF THE
ATOKA FORMATION

ENCL. NO. _____ DATE 2-82
C. I. = 100' GEOL. A. OERTEL

SCALE 1" = 2000'

✲ CONTROL POINT
PROPOSED LOCATION

Amoco Production Company
HOUSTON REGION

ISOPACH OF PRODUCTIVE
INTERVAL IN ATOKA FORMATION

ENCL. NO. _____ DATE 2-82
C. I. = 10' GEOL. A. OERTEL

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Amoco EXHIBIT NO. 9
CASE NO. 7799

V.P.I.C.T. ICONOGRAPHICS
BEST AVAILABLE COPY

Structural Check points are inserted from this plat

SCALE 1" = 2000'

✲ CONTROL POINT

PROPOSED LOCATION

Amoco Production Company
HOUSTON REGION

STRUCTURE CONTOUR MAP

TOP OF THE

MORROW FORMATION

ENCL. NO. _____ DATE 2-82

C.I. = 100' GEOL. A. OERTEL

Amoco Production Company
HOUSTON REGION

GROSS SAND ISOPACH

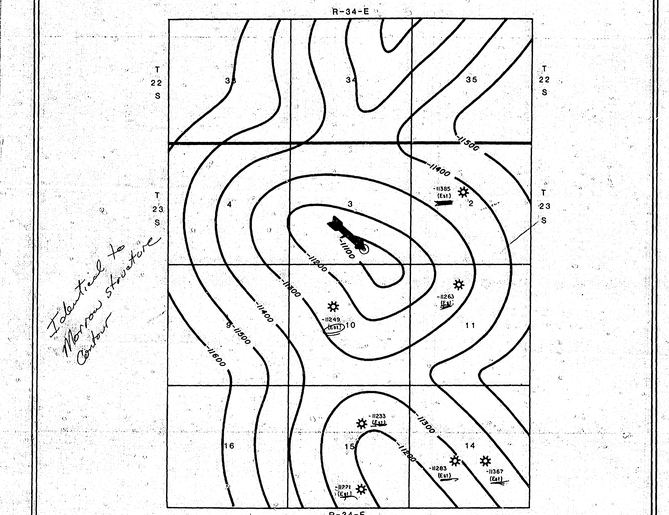
OF THE

MORROW FORMATION

ENCL. NO. _____ DATE 2-82

C.I. = 10' GEOL. A. OERTEL

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Amoco EXHIBIT NO. 10
CASE NO. 7799



Industrial to Morrow Structure Contour

SCALE 1" = 2000'

✲ CONTROL POINT

PROPOSED LOCATION

Amoco Production Company
HOUSTON REGION

STRUCTURE CONTOUR MAP
TOP OF THE
DEVONIAN FORMATION

ENCL. NO. _____ DATE 2-82
C.I. = 100' GEOL. A. OBERTEL

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
AMOCO EXHIBIT NO. 11
CASE NO. 7499

U.S.G.S. TOPOGRAPHIC
BEST AVAILABLE COPY