Case No
7397

Large Exhibits

[illegible] MICROGRAPHICS

BEST AVAILABLE COPY

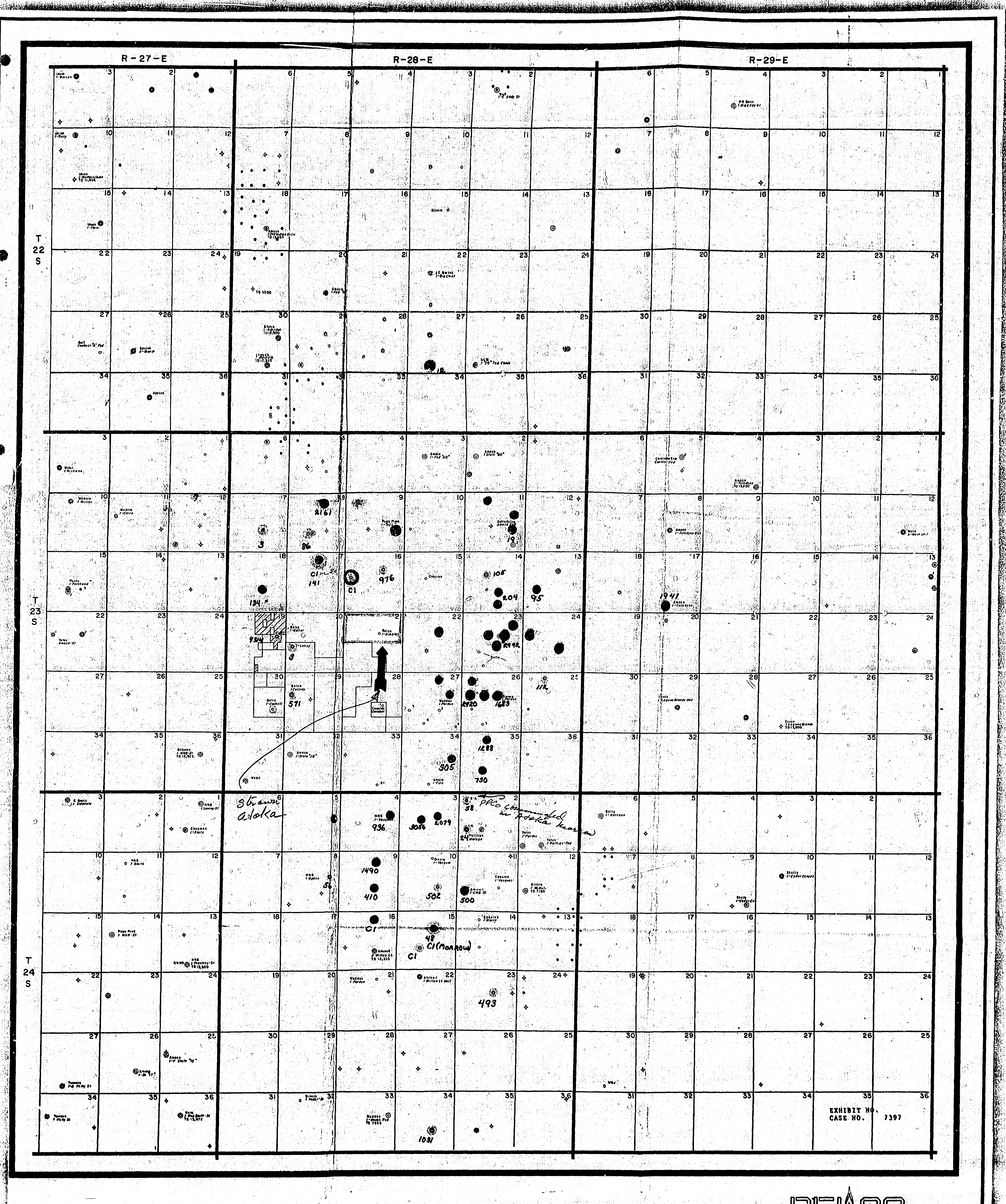


EXHIBIT NO.
CASE NO. 7397

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 2
CASE NO. 7397

LEGEND
● BONE SPRING
● STRAWN
● ATOKA
● MORROW

1000 mcf/D

N

BELCO
BELCO PETROLEUM CORPORATION
MIDLAND EXPLORATION DISTRICT

PECOS BEND PROSPECT
EDDY CO., NEW MEXICO

0 2 4 8 12
Scale in Thousands of Feet

By: E. Parrott

Date: 6/81

File No. / /

[illegible] MICROGRAPHICS

BEST AVAILABLE COPY

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Belco EXHIBIT NO. 6
CASE NO. 7397

**Welex**
DIGITAL LOGGING SYSTEM

## GUARD-FORXO LOG

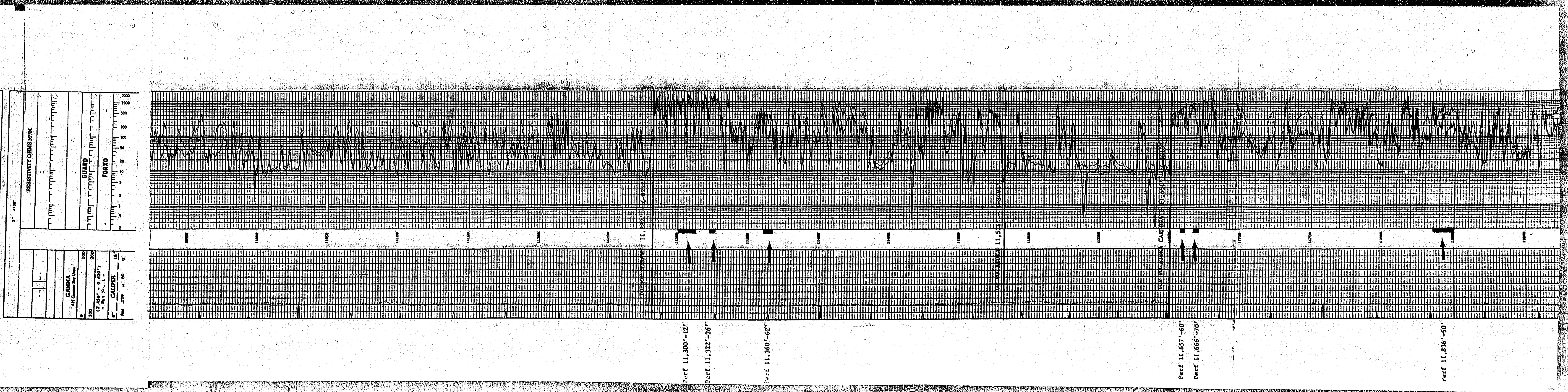
COMPANY Belco Petroleum Corporation
WELL Kimbley # 1
FIELD Loving-Morrow
County Eddy
State N.M.

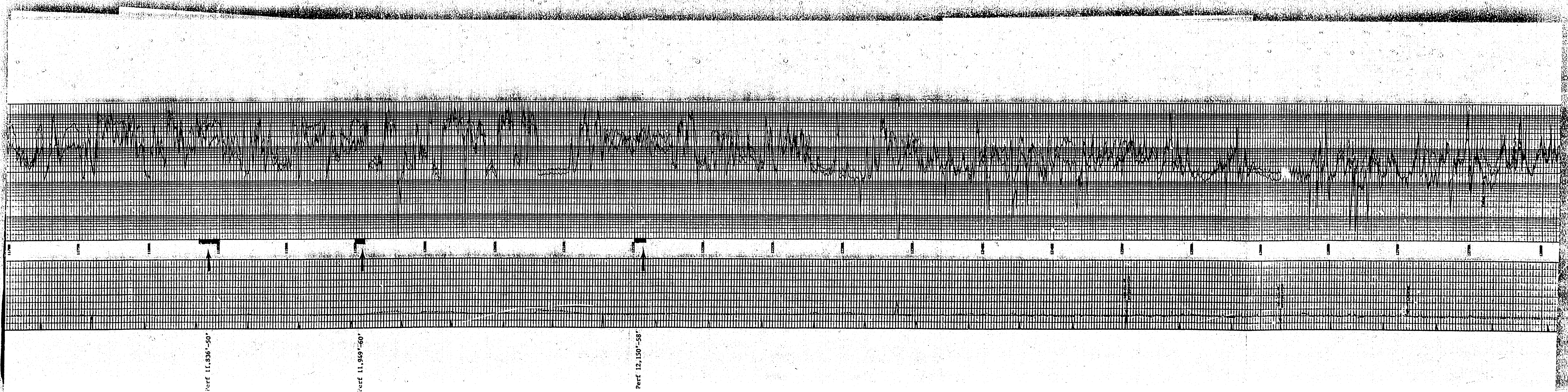
COMPANY BELCO PETROLEUM CORPORATION
RECEIVED
WELL KIMBLEY # 1
APR 02 1981
FIELD LOVING - MORROW
HOUSTON TEXAS
COUNTY EDDY STATE NEW MEXICO
Location 1830' FNL & 2060' FEL
Other Services: G R - AVL, CD - DSN
Sec 21 Twp 23-S Rge 28-E
Permanent Datum Ground Level Elev 3026'
Log Measured From K. B. - 14 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing
Elev. K.B. 3040' D.F. 3039' G.L. 3026'

|  |  |  |
|---|---|---|
| Date | 1-24-81 | 3-15-81 |
| Run No. | - One - | - Two - |
| Depth—Driller | 9,649 | 12,876 |
| Depth—Welex | 9,624 | 12,877 |
| Btm. Log Inter. | 9,620 | 12,876 |
| Top Log Inter. | 2,150 | 9,620 |
| Casing—Driller | 10-3/4" @ 2,470 | 7-7/8" @ 9,628 |
| Casing—Welex | 2,504 | 9,616 |
| Bit Size | 9-7/8" | 6-1/2" |
| Type Fluid in Hole | Cut Brine | Salt Mud |
| Dens. / Visc. | 9.8 | 10.8 / 35 |
| pH / Fluid Loss | 9.5 | 10 |
| Source of Sample | Pit | Pit |
| $R_m$ @ Meas. Temp. | .09 @ 53 °F | .07 @ 71 °F |
| $R_{mf}$ @ Meas. Temp. | .07 @ 55 °F | .06 @ 71 °F |
| $R_{mc}$ @ Meas. Temp. | @ °F | @ °F |
| Source $R_{mf}$ $R_{mc}$ | Measured | Measured |
| $R_m$ @ BHT | .04 @ 150 °F | .03 @ 190 °F |
| Time Since Circ. | 12 Hours | |
| Max. Rec. Temp. | 150 °F | 190 °F B.H. |
| Equip. / Location | 9937 / Hobbs | 2919 / Hobbs |
| Recorded By | Kyeton | Campbell |
| Witnessed By | Mr. Akins | Mr. Parrott |

Remarks: Ticket No. Run 1-001403

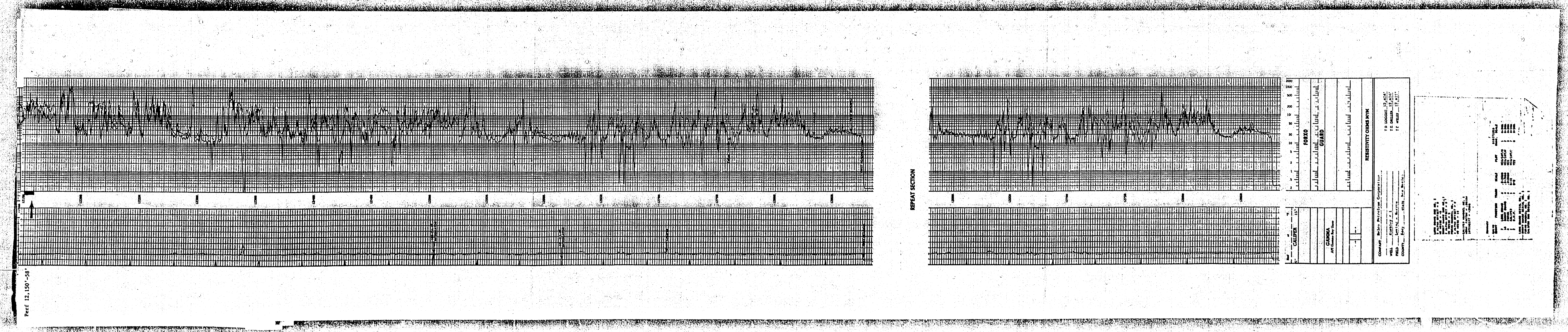
EXHIBIT NO. 6
CASE NO. 7397





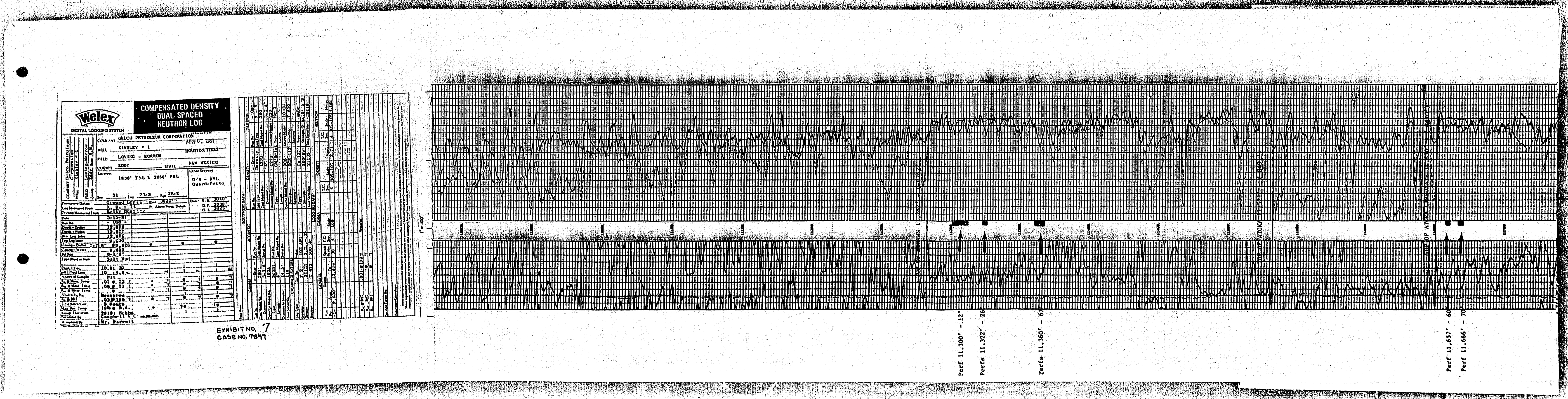
[illegible] MICROGRAPHICS

BEST AVAILABLE COPY



U.S.G.S. MICROGRAPHICS

BEST AVAILABLE COPY



COMPENSATED DENSITY
DUAL SPACED
NEUTRON LOG

COMPANY BELCO PETROLEUM CORPORATION

WELL KINDLEY # 1

FIELD LOVING - MORROW

COUNTY EDDY STATE NEW MEXICO

Location 1830' FNL & 2060' FEL

Other Services G/R - AVL Guard-Forxo

Sec 21 Twp 23-S Rge 28-E

RECEIVED
APR 0? 1981
HOUSTON TEXAS

Permanent Datum Ground Level Elev. 3020'

Log Measured From K. B. - 14 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Elev.: K.B. 3030' D.F. 3030' G.L. 3020'

Date 5-15-81

Run No. - One -

Depth - Driller 12,878

Depth - Welex 12,877

Type Fluid in Hole Salt Mud

Source of Sample Pit

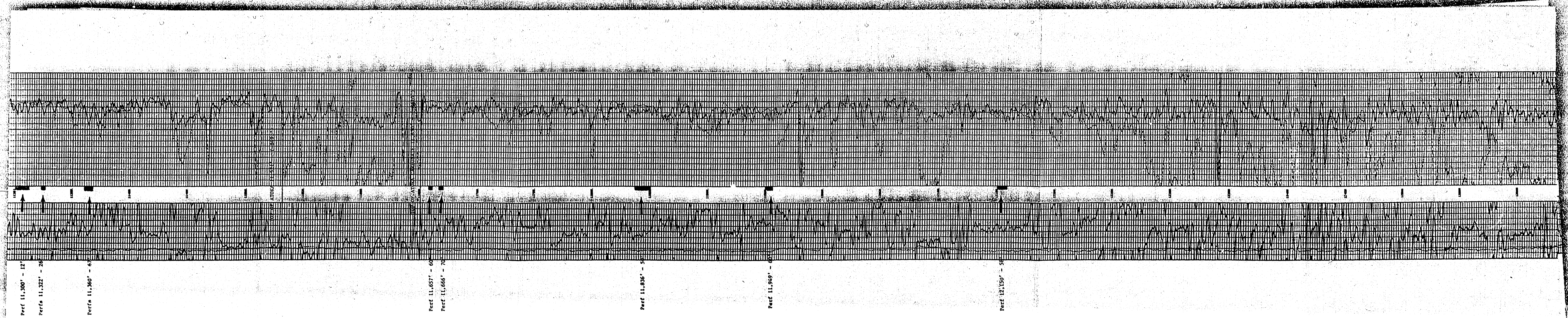
Source $R_{mf}$ $R_{mc}$ Measured

Logged by Mr. Parrott

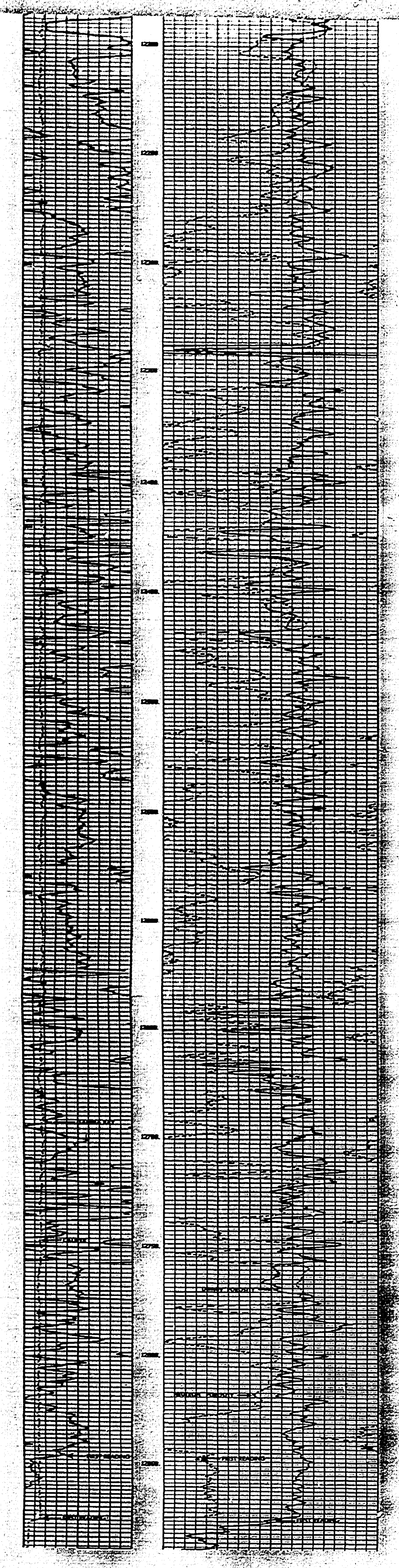
EXHIBIT NO. 7
CASE NO. 7397

W.R.C.F. MICROGRAPHICS

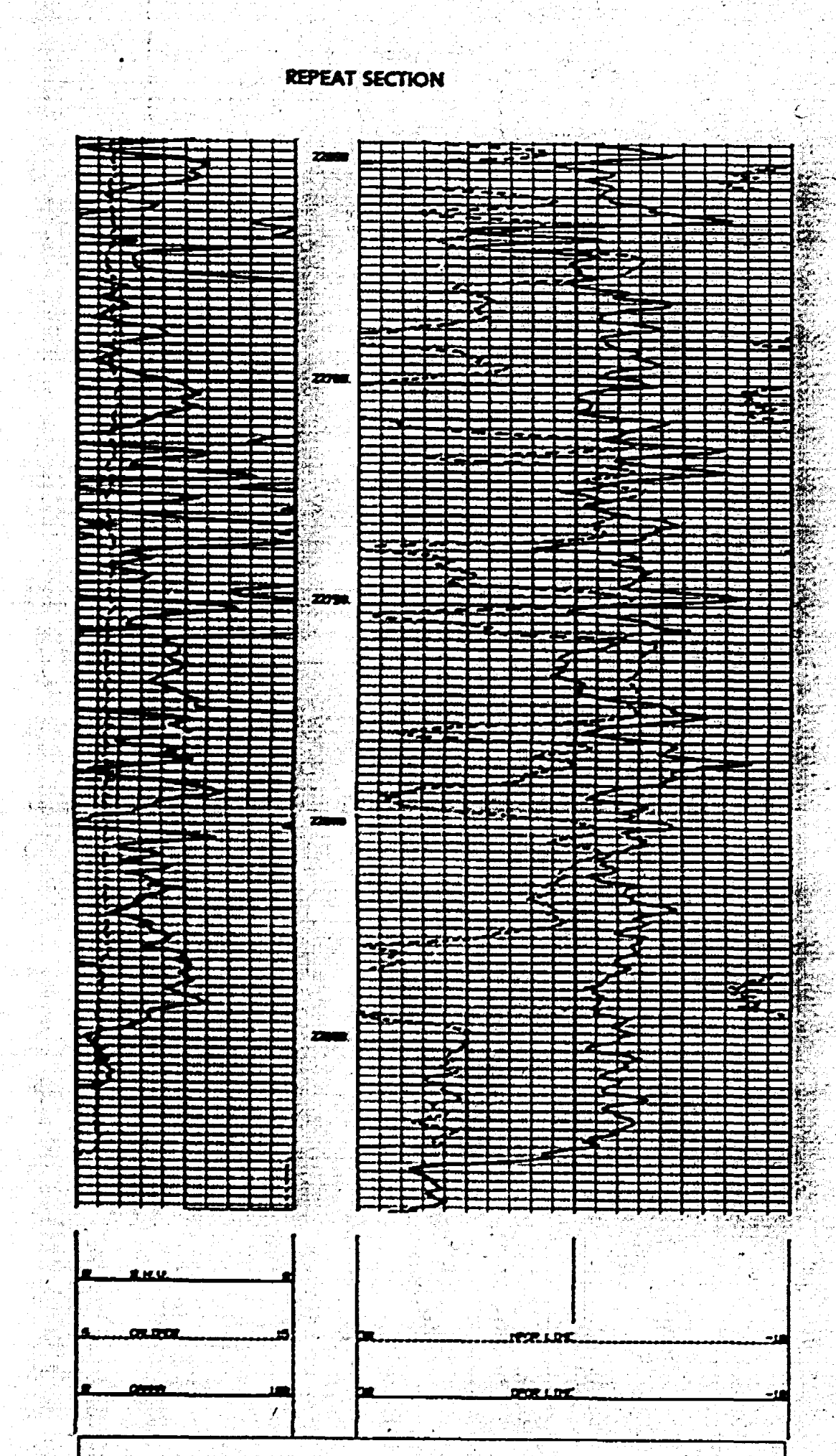
BEST AVAILABLE COPY



U.S.N.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



REPEAT SECTION



Belco Petroleum Corporation
Kimble, # 1
Loving - Morrow Field
Eddy County, New Mexico

TD LOGGED 12,870'
TD DRILLER 12,870'
TD WELEX 12,877'

COMPENSATED DENSITY DUAL SPACE NEUTRON CALIBRATION SUMMARY

[illegible] SUB SERIAL NUMBER 119
[illegible] BACKGROUND TOOL VALUE 118
[illegible] SOURCE VALUE 193 API UNITS SOURCE + BACKGROUND TOOL VALUE 452

[illegible] CAL SERIAL NUMBER -1
[illegible] 16 TOOL VALUE 9102

[illegible] RING 3 TOOL VALUE 2773 LARGE RING 16 TOOL VALUE 9102

[illegible] SUB SERIAL NUMBER 110
BACKGROUND SS + SOURCE
STC VALUE COUNTS STC VALUE COUNTS

[illegible]

CALIBRATION AFTER SURVEY

SUMMARY

| TRACE SURVEY | GALVO | TRF | SCALE L | R | INT CAL | NORM OF MATRIX | INTER | OFF SET | T.C. | DELAY | R/T PLOT | BIG CHAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DENSITY LS | 10 | 4 | 1.9, | 3. | 0. | 0.26342 | -5 | 0. | 4. | 0. | NO | 2 |
| DENSITY SS | 0 | 0 | 0., | 0. | 0. | 0.139 | 63 | 0. | 0. | 0. | NO | 0 |
| CORRECTION | 9 | 2 | -0.2, | 0.8 | 0. | 0. | 0 | 0. | 0. | 0. | NO | 3 |
| D. POROSITY | 6 | 4 | 30., | -10. | 0. | 2.71 | 0 | 0. | 0. | 0. | Y/ | 5 |
| DSN,LS,CP | 4 | 4 | 0., | 4000. | 0. | 1.14132 | 25 | 0. | 4. | 16.5 | NO | 9 |
| DSN,SS,CP | 5 | 4 | 0., | 46000 | 0. | 0.92704 | 16 | 0. | 4. | 15. | NO | 10 |
| DSN,RATIO | 8 | 4 | 200., | 0. | 0. | 0. | 0 | 0. | 0. | 0. | NO | 6 |
| DOP,POR | 7 | 4 | 30., | -10. | 0. | LIME | 0 | 0. | 4. | 0. | Y/Y | 7 |
| GAMMA | 2 | 1 | 0., | 100. | 0. | 0.78297 | 0 | 0. | 4. | 29.5 | Y/ | 4 |
| CALIPER | 1 | 1 | 5., | 15. | 0. | 0.00114 | -1600 | 0. | 0. | 1.6 | Y/Y | 1 |
| B. H. VOL. | 3 | 1 | 0., | 0. | 0. | 0. | 0 | 0. | 0. | 0. | Y/ | 0 |

CALIBRATION BEFORE SURVEY

SUMMARY

| TRACE SURVEY | GALVO | TRF | SCALE L | R | INT CAL | NORM OF MATRIX | INTER | OFF SET | T.C. | DELAY | R/T PLOT | BIG CHAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | 10 | 4 | 1.9, | 3. | 0. | 0.26343 | -5 | 0. | 4. | 0. | Y/ | 2 |
| [illegible] | 0 | 0 | 0., | 0. | 0. | 0.13937 | 63 | 0. | 0. | 0. | NO | 0 |
| [illegible] | 9 | 2 | -0.2, | 0.8 | 0. | 0. | 0 | 0. | 0. | 0. | Y/ | 3 |
| [illegible] | 6 | 4 | 30., | -10. | 0. | 2.71 | 0 | 0. | 0. | 0. | Y/ | 5 |
| [illegible] | 4 | 4 | 0., | 4000. | 0. | 1.14132 | 25 | 0. | 4. | 16.5 | Y/ | 9 |
| [illegible] | 5 | 4 | 0., | 46000 | 0. | 0.92704 | 16 | 0. | 4. | 15. | Y/ | 10 |
| [illegible] | 8 | 4 | 200., | 0. | 0. | 0. | 0 | 0. | 4. | 0. | Y/N | 6 |
| [illegible] | 7 | 4 | 30., | -10. | 0. | LIME | 0 | 0. | 4. | 0. | Y/Y | 7 |
| [illegible] | 2 | 1 | 0., | 100. | 0. | 0.78297 | 0 | 0. | 4. | 29.5 | Y/ | 4 |
| [illegible] | 1 | 1 | 5., | 15. | 0. | 0.00114 | -1600 | 0. | 0. | 1.6 | Y/Y | 1 |
| [illegible] | 3 | 1 | 0., | 0. | 0. | 0. | 0 | 0. | 0. | 0. | Y/ | 0 |

U.S.D.C.F. MICROGRAPHICS
BEST AVAILABLE COPY