FORM 925322 REV (8-80)

**Dresser Atlas**

**DRESSER**

# Compensated Densilog®
# Compensated Neutron
# Gamma Ray

FILE NO.

API NO.

5" = 100'

COMPANY OREGON NATURAL GAS CORPORATION

WELL OM 12 C-3

FIELD MIST

COUNTY COLUMBIA STATE OREGON

LOCATION: 455.6' N. & 113.58' E.
FROM W/4 CORNER OF:

SEC 3 TWP 6N RGE 5W

Other Services
DIFL
BHC/AL
DIP

Permanent Datum GL Elev. 1012.8'
Log Measured from KB 11.5 Ft. Above Permanent Datum
Drilling Measured from KB

Elev. KB 1024.3'
DF
GL 1012.8'

Confidential

| | | | | |
|---|---|---|---|---|
| Date | 1-6-87 | | | |
| Run No. | ONE | | | |
| Service Order | 2281[illegible] | | | |
| Depth—Driller | 3156 | | | |
| Depth—Logger | 3156' | | | |
| Bottom Logged Interval | 3154' | | | |
| Top Logged Interval | 498' | | | |
| Casing—Driller | 8 5/8" @ 501' | @ | @ | @ |
| Casing—Logger | 498' | | | |
| Bit Size | 7 7/8" | | | |
| Type Fluid in Hole | ORZAN/DRISPAC | | | |
| Density and Viscosity | 10   54 | | | |
| pH and Fluid Loss | 9.5   4.0 cc | cc | cc | cc |
| Source of Sample | FLOWLINE | | | |
| Rm @ Meas. Temp. | 2.15 @ 45°F | @ °F | @ °F | @ °F |
| Rmf @ Meas. Temp. | 2.85 @ 45°F | @ °F | @ °F | @ °F |
| Rmc @ Meas. Temp. | 1.50 @ 45°F | @ °F | @ °F | @ °F |
| Source of Rmf and Rmc | M   M | | | |
| Rm @ BHT | 0.96 @ LESS | THAN @ 100°F | @ °F | @ °F |
| Time Since Circ. | 4.5 HRS. | | | |
| Max. Rec. Temp. Deg. F. | LESS THAN °F | 100 °F | °F | °F |
| Equip. No. and Location | 6406   SAC. | | | |
| Recorded By | M. HINDS | | | |
| Witnessed By | MR. THOMAS | | | |

FOLD HERE

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASURMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

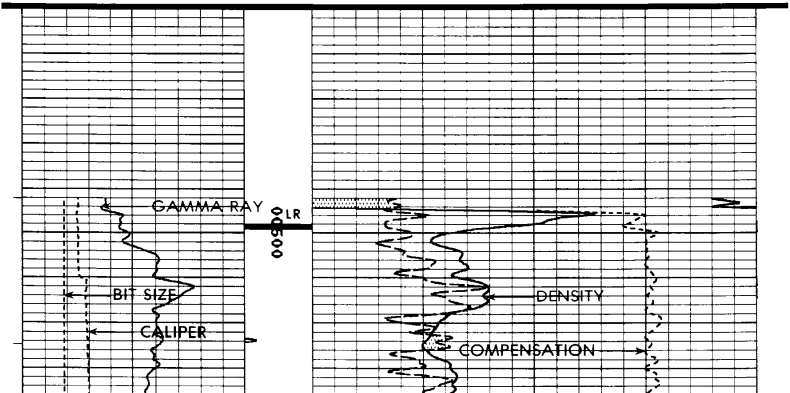
REMARKS RUN ( 1 )

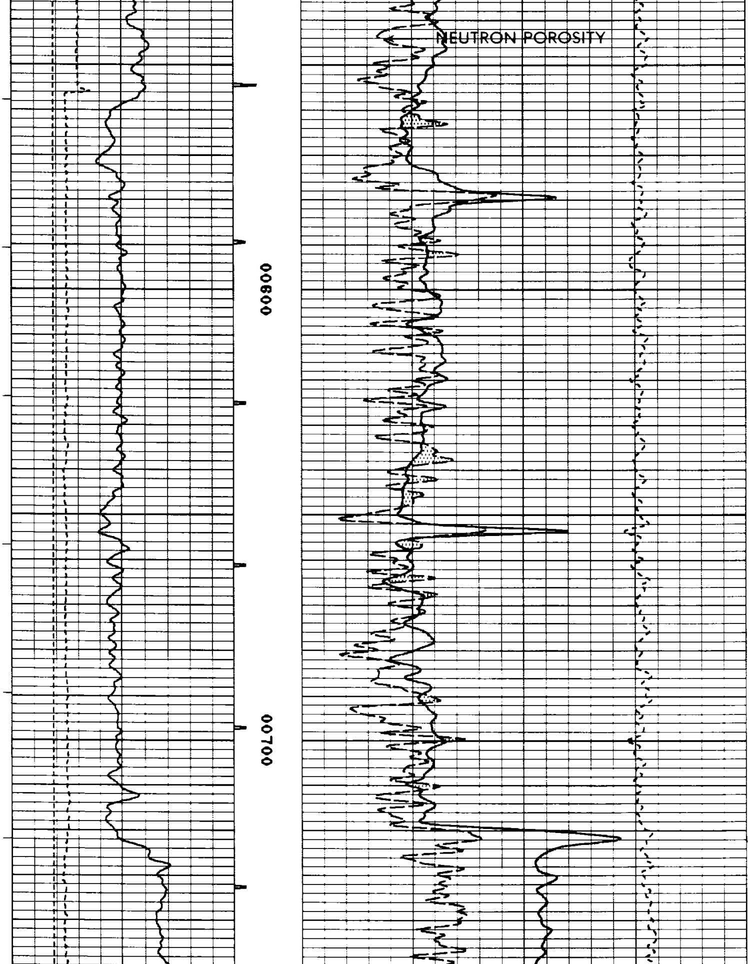
## EQUIPMENT DATA

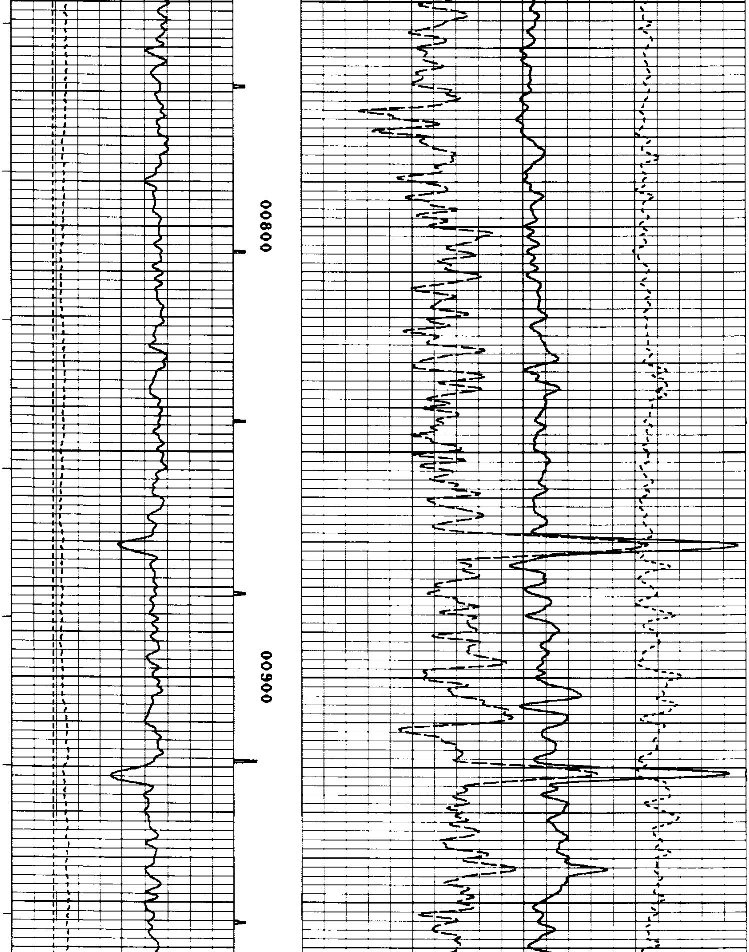
| RUN | TRIP | TOOL | SERIAL NO. | SERIES NO. | POSITION |
|---|---|---|---|---|---|
| 1 | 1 | CDL | 50138 | 2212 | DE-CENT |
| 1 | 1 | CAL | 50138 | 2212 | VARIABLE |
| 1 | 1 | CN | 73525 | 2420 | DE-CENT |
| 1 | 1 | GR | 72564 | 1309 | DE-CENT |

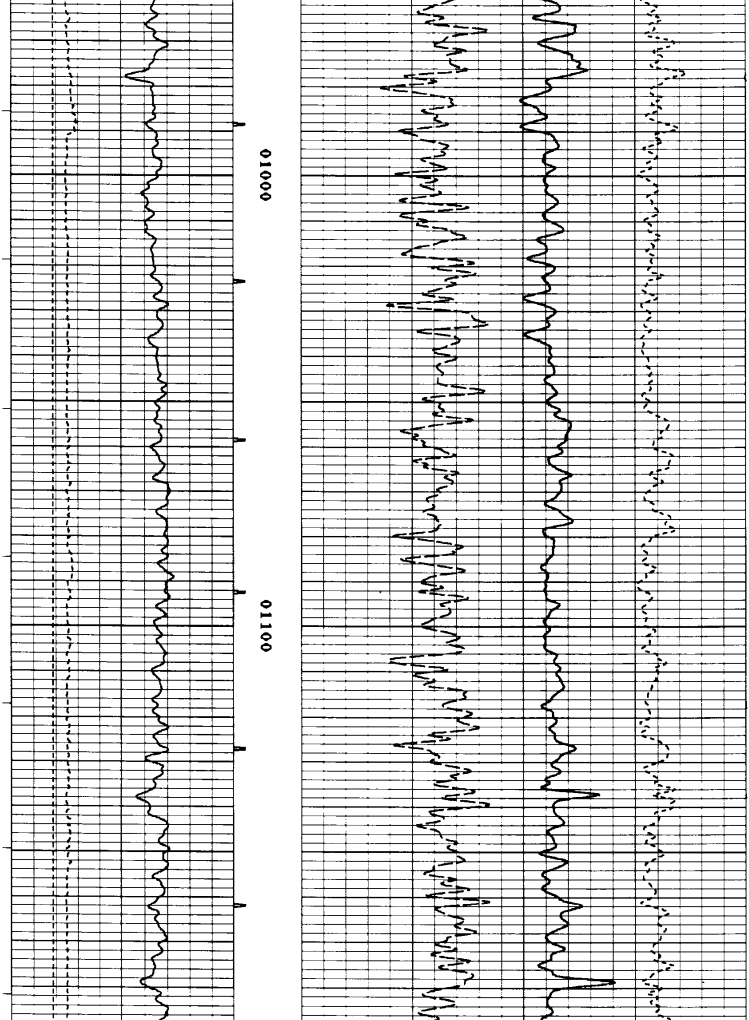
COMPANY: OREGON NATURAL GAS CORP. RUN: 1
WELL NAME: OM 12 C-3 TRIP: 1
SERVICE: KC227F FILE: 2 DATE: 01/06/87 TIME: 05:03:20
REVISION: FSYSAL REV D007 VER 7 MODE: RECORD

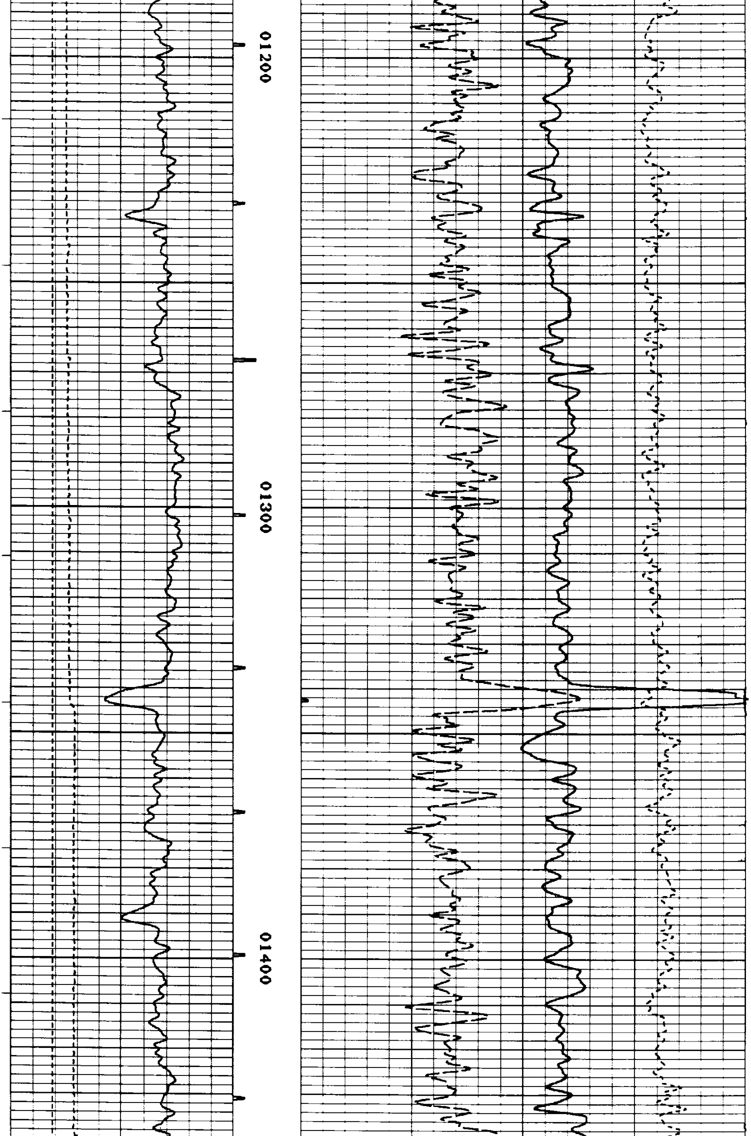
PORD(%) 60 0
BIT 6 16
CN(%) 60 0
VOL(CUFT) 0 20
CORR(G/CC) -0.5 0.5
GR(API) 0 150
DEN(G/CC) 1.65 2.65
CAL(INCH) 6 16
TEN(LBS) 5000 0

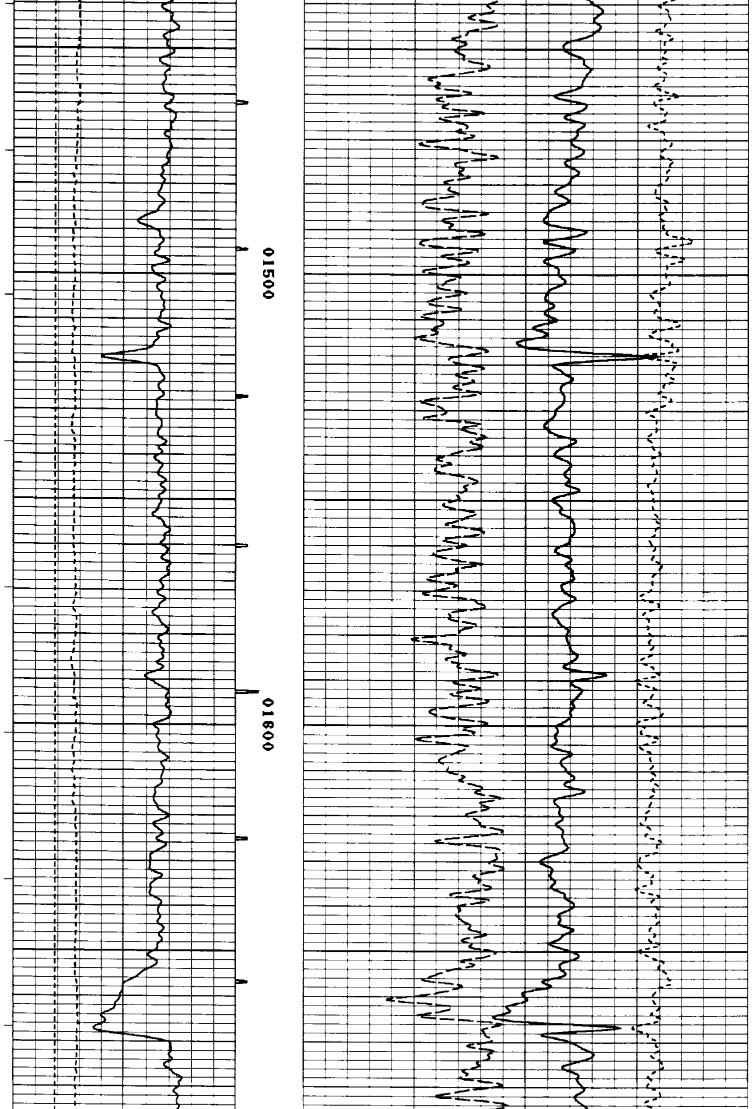


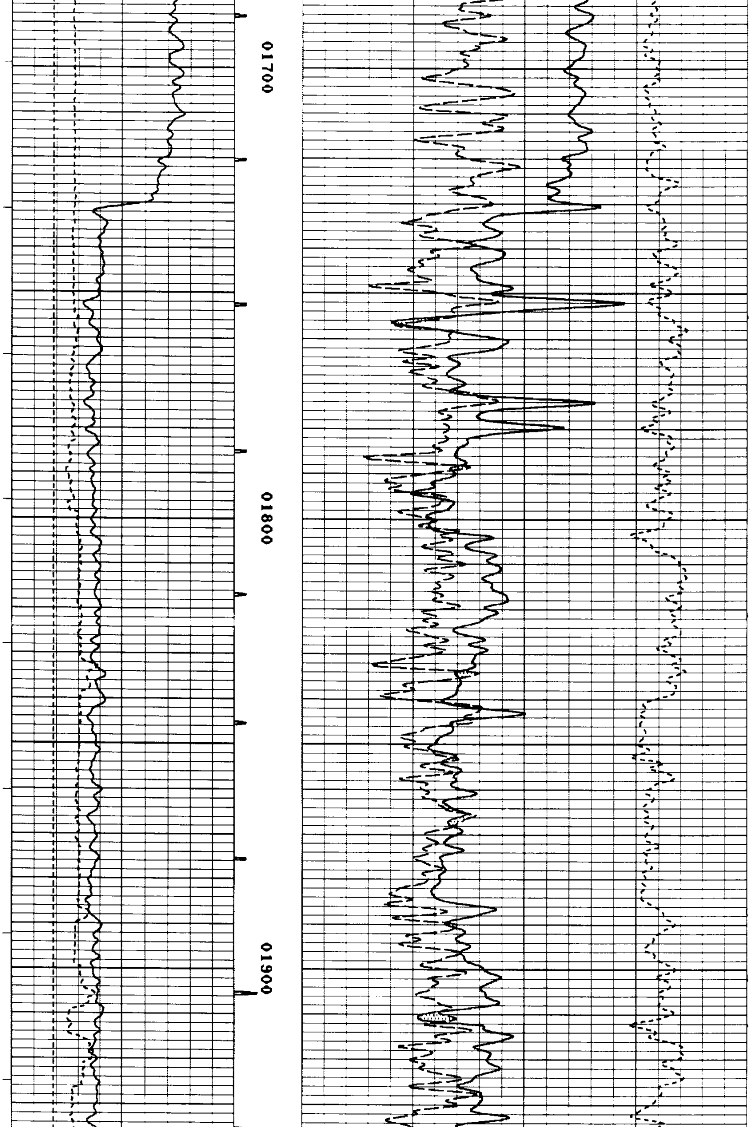


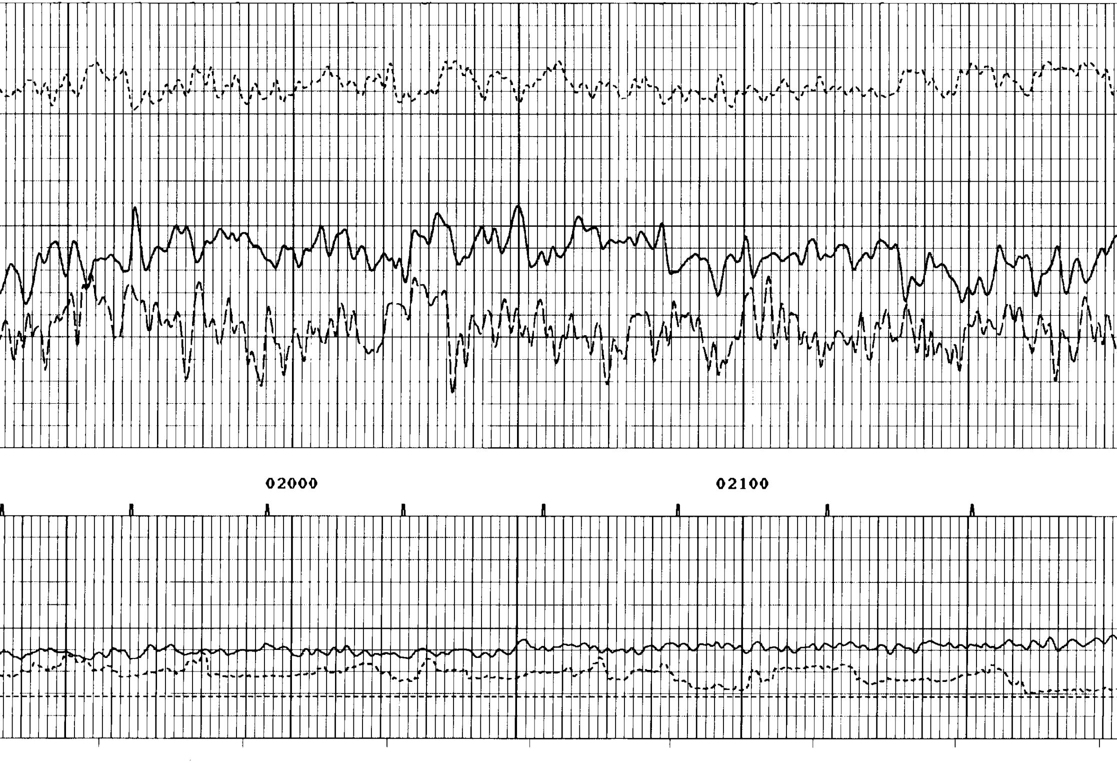


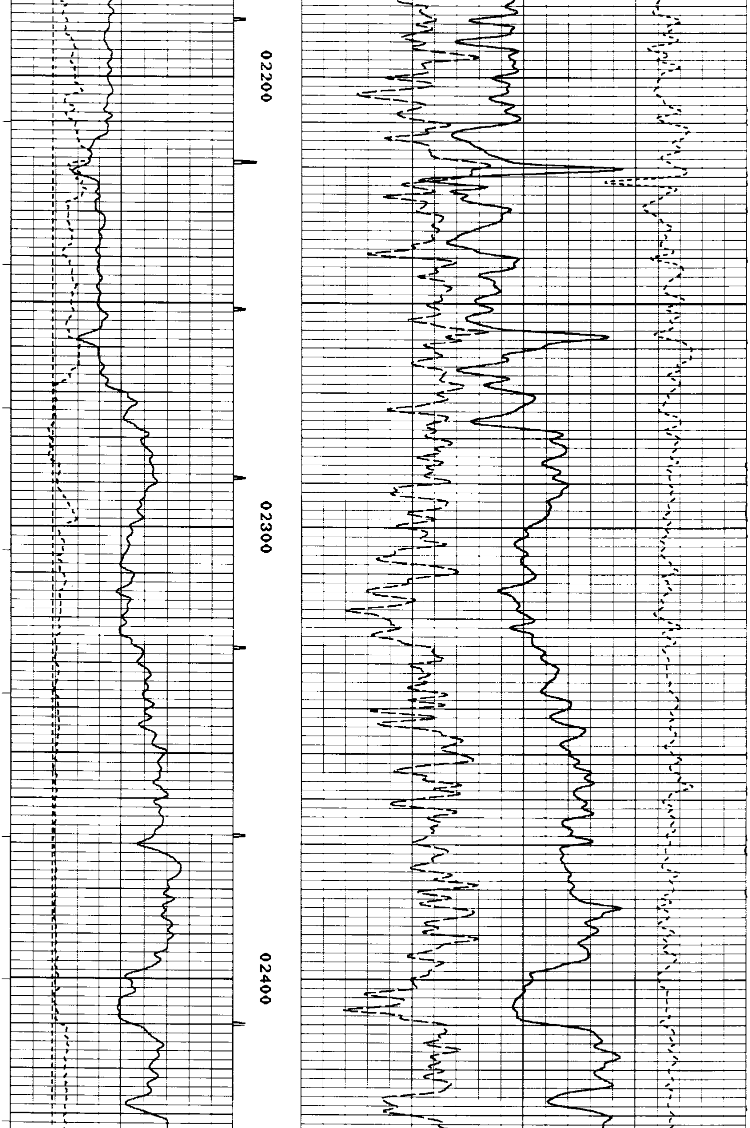


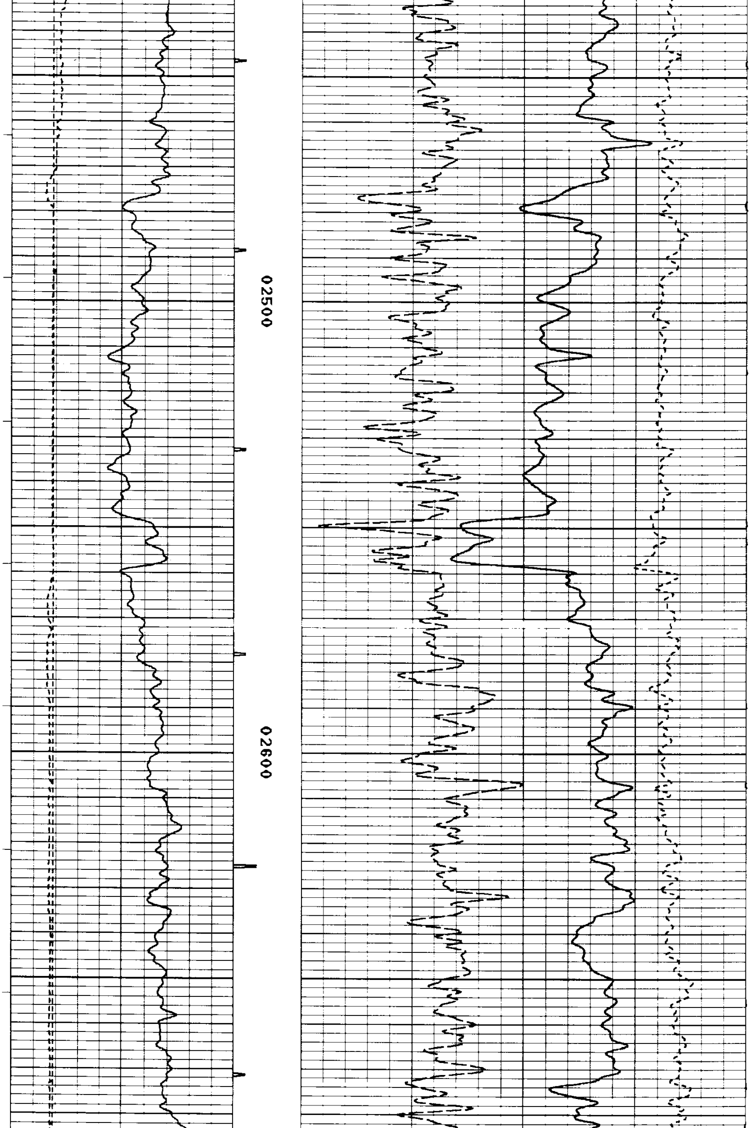


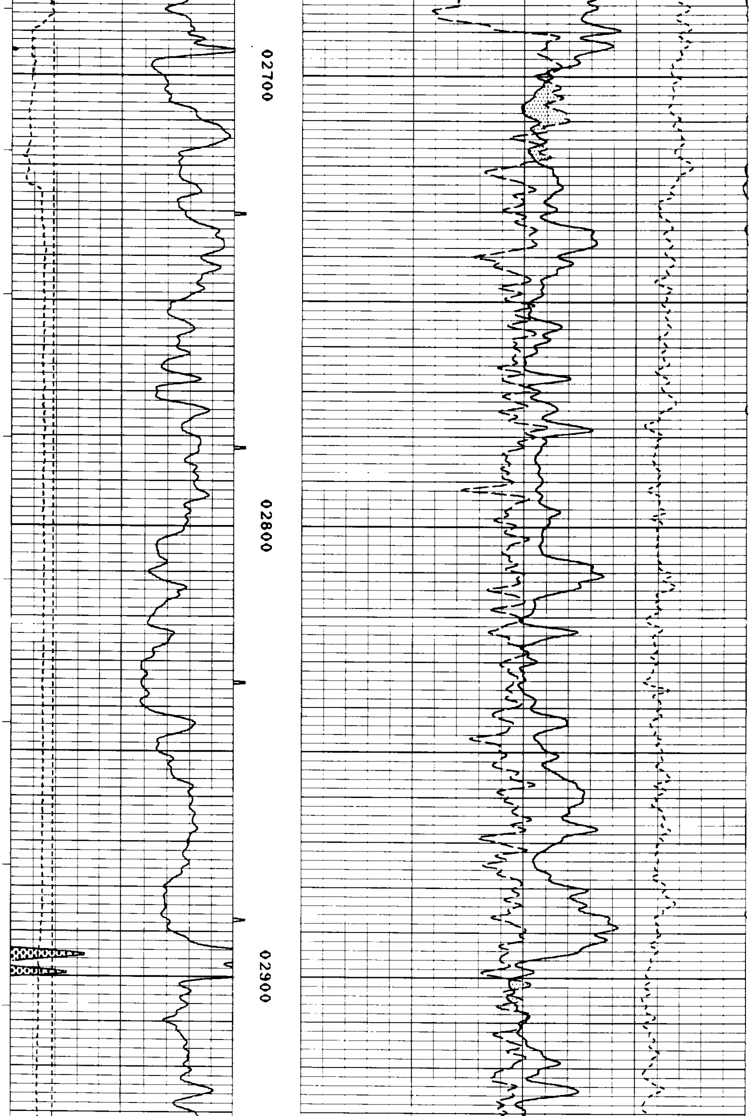


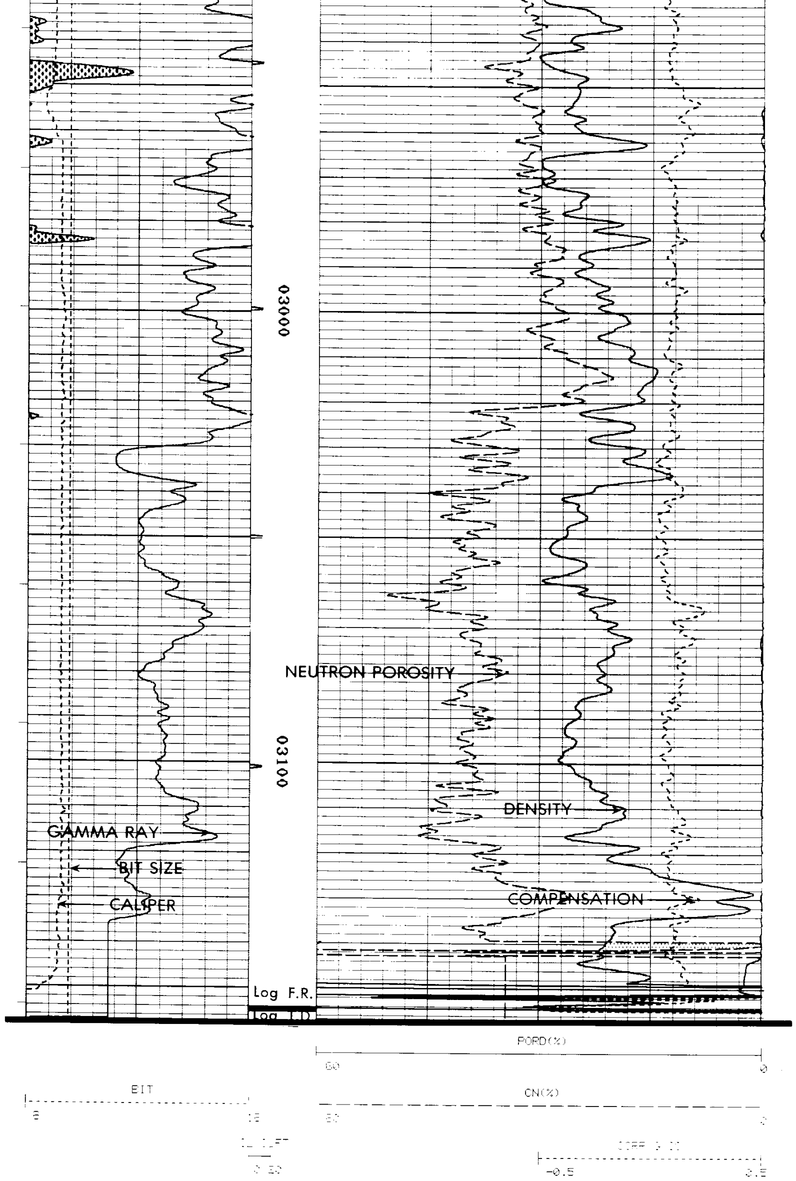


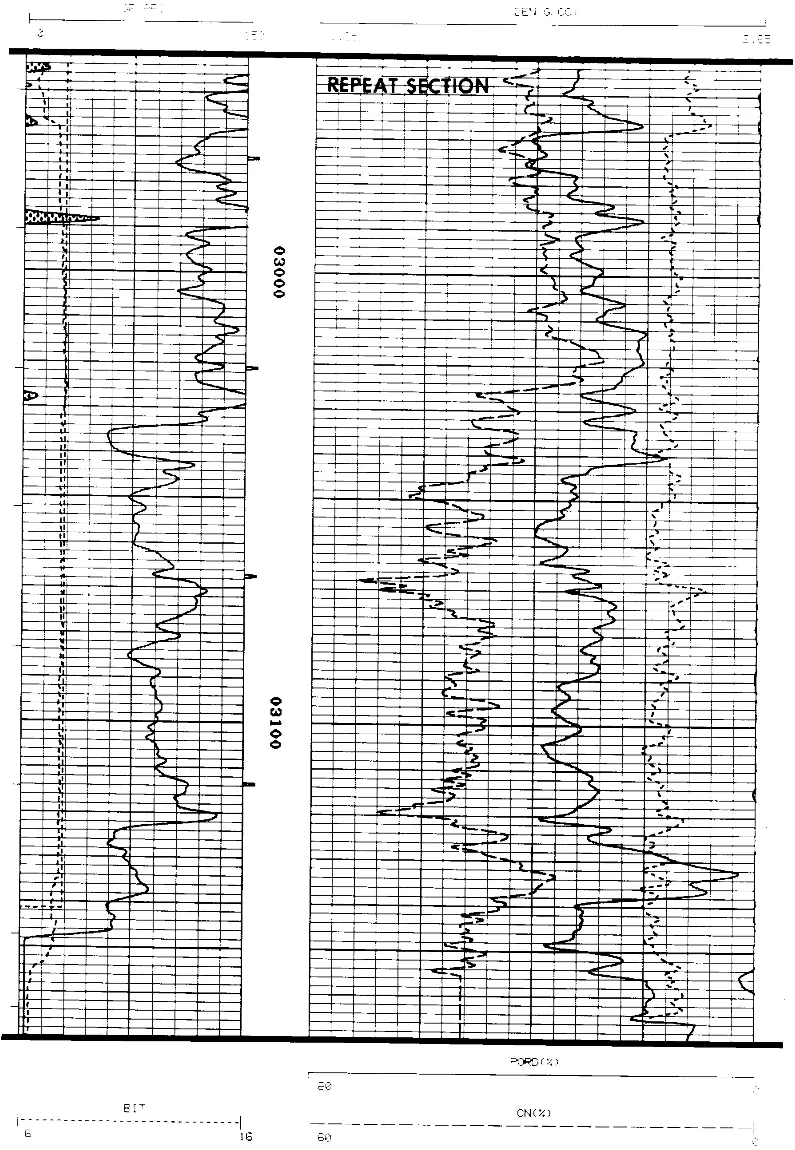












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                VOL(CUFT)                                                   CORR(G/CC)
                 0 20                                          -0.5                         0.5

        GR(API)                                                DEN(G/CC)
 0                        150        1.65                                                   2.65

        CAL(INCH)                                                        TEN(LBS)
 6                        16                                   5000                         0
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             *****************************************
             *                                       *
             *  CALIBRATION/VERIFICATION SUMMARIES   *
             *  DATE 01/06/87         TIME 07:08:00  *
             *  RUN  1                TRIP 1         *
             *                                       *
             *****************************************


      LOG NAME CDL     ASSET NO. 50138     UNIT NO. 0``9H0aZH`
   CALIBRATION ENTERED ON 01/06/87 AT 04:17:50          LARGE TOOL
                         SOURCE NUMBER 767

CURVE   COUNTS/SEC.     SCALING FACTORS     RATIO     ENG. VALUE  UNITS
        BLOCK  VALUE    ADD.    MULT.       MG/AL
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      DATE  0/28/86         CALIBRATION          TIME 14:56:04

LSD     MG      302.9
SSD             359.0
DEN                                                        2.200  G/CC
CORR                                                       0.000  G/CC
LSD     AL      100.2   0.000    1.0000    3.0248
SSD             236.5   0.000    1.0000    1.5178
DEN                                                        2.800  G/CC
CORR                                                       0.000  G/CC
LSD     MGRV    278.5
SSD             388.5
DEN                                                        2.480  G/CC
CORR                                                       0.234  G/CC

      DATE  0/31/86    PRIMARY VERIFICATION      TIME 12:52:31

LSD     AL       99.7   0.000    1.0000
SSD             236.7   0.000    1.0000
DEN                                                        2.807  G/CC
CORR                                                       0.005  G/CC

      DATE 01/06/87   BEFORE LOG VERIFICATION    TIME 04:30:11

LSD     AL       98.9   0.000    1.0000
SSD             237.3   0.000    1.0000
DEN                                                        2.823  G/CC
CORR                                                       0.016  G/CC

      DATE 01/06/87    AFTER LOG VERIFICATION    TIME 06:30:16

LSD     AL       98.6   0.000    1.0000
SSD             237.5   0.000    1.0000
DEN                                                        2.830  G/CC
CORR                                                       0.021  G/CC


      LOG NAME CAL     ASSET NO. 50138    UNIT NO. 6406
   CALIBRATION ENTERED ON 01/06/87 AT 04:14:41

CURVE   MILLIVOLTS      SCALING FACTORS     ENGINEERING VALUES   UNITS
         LOW    HIGH     ADD.    MULT.       LOW        HIGH
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      DATE 01/06/87         CALIBRATION          TIME 04:14:41

CAL      742.1  4267.2   4.737    0.0130     6.000     12.000 INCH

                     PRIMARY VERIFICATION             NOT DONE

      DATE 01/06/87   BEFORE LOG VERIFICATION    TIME 04:34:09

CAL        E    1878.8   4.737    0.0130     E          7.335 INCH
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       DATE 01/06/87     AFTER LOG VERIFICATION     TIME 06:27:49

   CAL       E      2219.3     4.737     0.0130       E           8.514 INCH



         LOG NAME CN      ASSET NO. 73525     UNIT NO. 6406
     CALIBRATION ENTERED ON 01/06/87 AT 04:14:58          LARGE TOOL
                          SOURCE NUMBER S17520

   CURVE    COUNTS/SEC.     SCALING FACTORS     RATIO     ENG. VALUE   UNITS
                             ADD.      MULT.  LSN/(SSN*8)
   ----     ---------     ------------------  ---------  -----------  ----

        DATE 12/06/86          CALIBRATION           TIME 10:47:01

   LSN          100.0        0.000     1.0000
   SSN          150.5        0.000     1.0000
   CN                                           0.0830         15.000  %

        DATE 12/06/86      PRIMARY VERIFICATION      TIME 11:11:53

   LSN           91.9        0.000     1.0000
   SSN          145.1        0.000     1.0000
   CN                                           0.0792         16.749  %

        DATE 01/06/87     BEFORE LOG VERIFICATION    TIME 04:22:24

   LSN           93.2        0.000     1.0000
   SSN          147.1        0.000     1.0000
   CN                                           0.0792         16.722  %

        DATE 01/06/87      AFTER LOG VERIFICATION    TIME 06:34:23

   LSN           95.0        0.000     1.0000
   SSN          148.0        0.000     1.0000
   CN                                           0.0802         16.255  %



         LOG NAME GR      ASSET NO. 725640    UNIT NO. 6406
     CALIBRATION ENTERED ON 01/06/87 AT 04:07:37

   CURVE    MILLIVOLTS       SCALING FACTORS    ENGINEERING VALUES   UNITS
             LOW     HIGH    ADD.     MULT.        LOW        HIGH
   ----   --------------   -----------------  -------------------  ----

        DATE 12/16/86          CALIBRATION           TIME 01:56:34

   GR      1301.0   4704.9   0.000     0.1075      0.000     150.000 API

                         PRIMARY VERIFICATION            NOT DONE

        DATE 01/06/87     BEFORE LOG VERIFICATION    TIME 04:08:28

   GR      1215.7   4934.1   0.000     0.1075     53.572     217.434 API

        DATE 01/06/87      AFTER LOG VERIFICATION    TIME 07:03:59

   GR      1389.9   5000.4   0.000     0.1075     61.247     220.353 API

    CURVE DELAYS
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DresserAtlas DRESSER