Porosity Index

JUL 22 1980

Schlumberger

SIMULTANEOUS

COMPENSATED NEUTRON-FORMATION DENSITY

COUNTY COOS
FIELD WILDCAT
LOCATION 16-26S-13W
WELL WESTPORT NO. 1
COMPANY NORTHWEST EXPLORATIO

COMPANY NORTHWEST EXPLORATION COMPANY

WELL WESTPORT NO. 1

FIELD WILDCAT - COOS BAY AREA

COUNTY COOS **STATE** OREGON

LOCATION: 694' NORTH & 2136' WEST FROM THE SOUTHEAST CORNER OF:

API SERIAL NO.	SEC.	TWP.	RANGE
	16	26S	13W

Other Services:
DI-SFL
BHC

Permanent Datum: GL ; Elev.: 552
Log Measured From KB 12.8 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 564.8
D.F. --
G.L. 552.0

CONFIDENTIAL

Date	6-25-80			
Run No.	ONE			
Depth—Driller	3700			
Depth—Logger	3692			
Btm. Log Interval	3692			
Top Log Interval	657			
Casing—Driller	9⅝" @ 660	@	@	@
Casing—Logger	657			
Bit Size	8¾"			
Type Fluid in Hole	GEL-WATER			
Dens. | Visc.	9.1 | 4.0			
pH | Fluid Loss	9.0 | 12 ml	ml	ml	ml
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	3.29 @ 74 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	3.54 @ 62 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	3.79 @ 62 °F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	M | M			
Rm @ BHT	2.43 @ 102°F	@ °F	@ °F	@ °F
TIME Circulation Stopped	2400 6/24			
TIME Logger on Bottom	0930 6/25			
Max. Rec. Temp.	102°F	°F	°F	°F
Equip. | Location	8126 | SAC			
Recorded By	KAISER			
Witnessed By Mr.	ROBERTSON			

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

RUN NO.	ONE			
Service Order No.	123142			
Fluid Level	FULL			
Salinity, PPM CL.	--			
Speed - F.P.M.	--			
EQUIPMENT DATA				
Dens. Panel	418			
Dens. Cart.	392			
Dens. Skid.	206			
Dens. Sonde	392			
Dens. Source	5153			
Dens. Calibrator	1177			
Neut. Panel	418			
Neut. Cart.	409			
Neut. Source	--			
Neut. Calibrator	594			
GR Cart.	2087			
Memorizer Panel	--			
Tape Recorder (TTR)	--			
Depth Encoder (DRE)	--			
Pressure Wheel (CPW)	--			
Centralizers: Enter Spring, Standoffs, In-line, or None — Type	SPRING			
Centralizers — No.	FIN			
Centralizers — S. O. — Inches	1½			
CALIBRATION DATA				
GR — BKG. CPS	27.9			
GR — Source CPS	187.6			
GR — Sens. - Cal	165			
GR — T. C. - Cal	CSU			
CNL — Short Spacing - Before Log	2914			
CNL — Long Spacing - Before Log	1260			
CNL — Short Spacing - After Log	2902			
CNL — Long Spacing - After Log	1279			
FDC — P1 — Before Log	819.5			
FDC — P2 — Before Log	380.7			
FDC — P1 — After Log	733.5			
FDC — P2 — After Log	388.5			

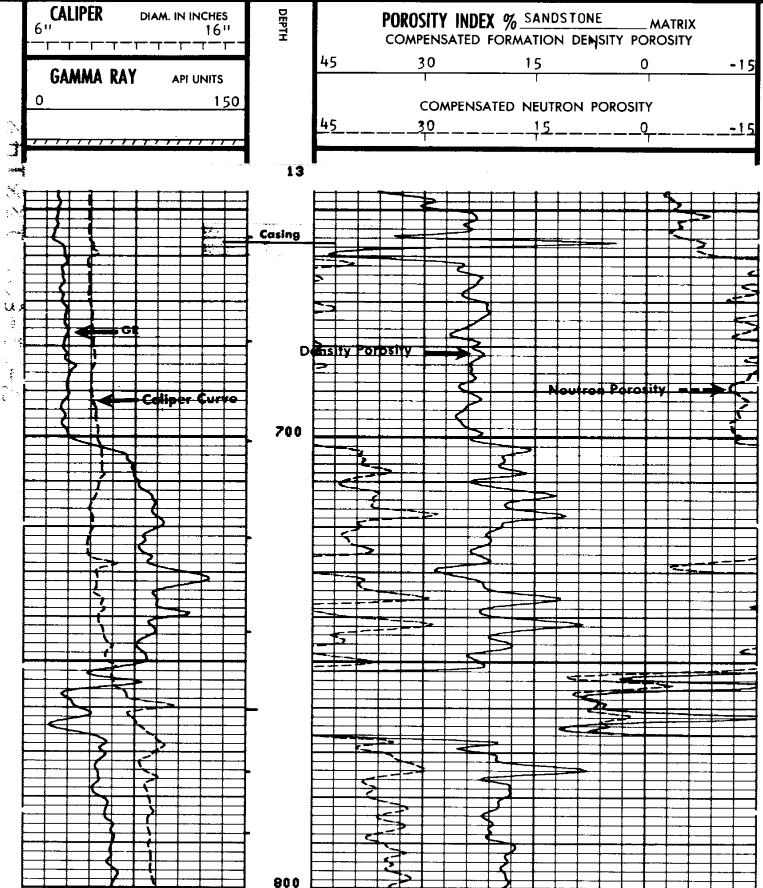
Type Log	Depth		

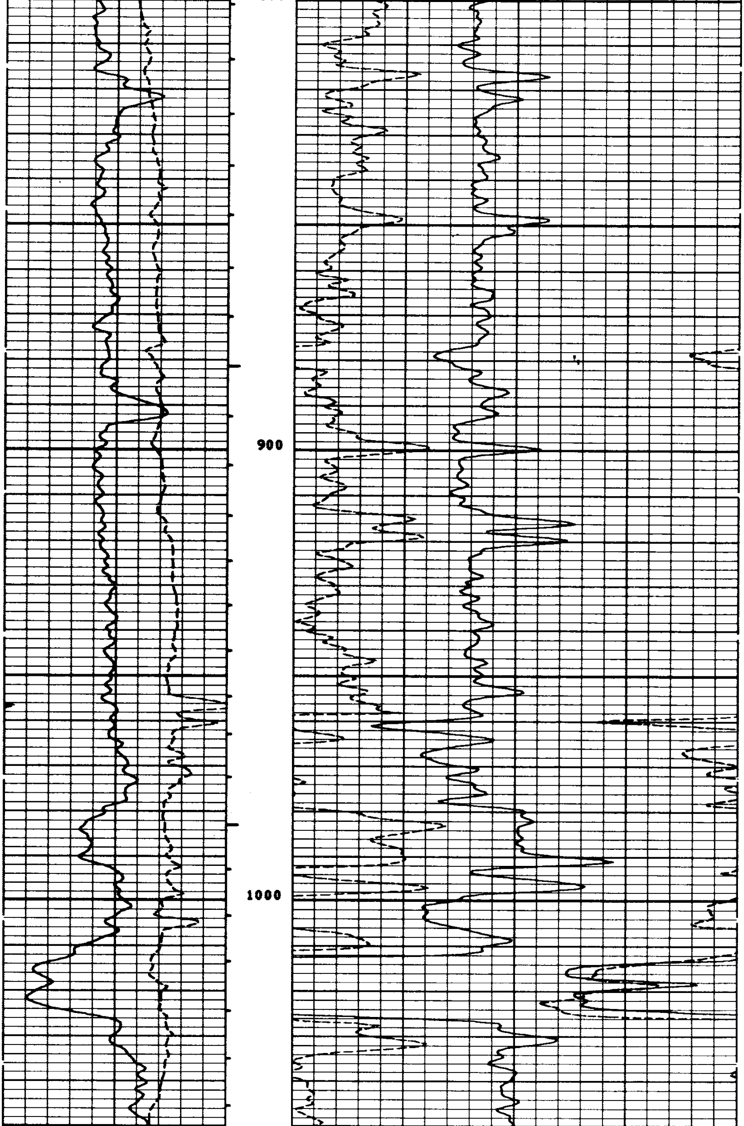
REMARKS:

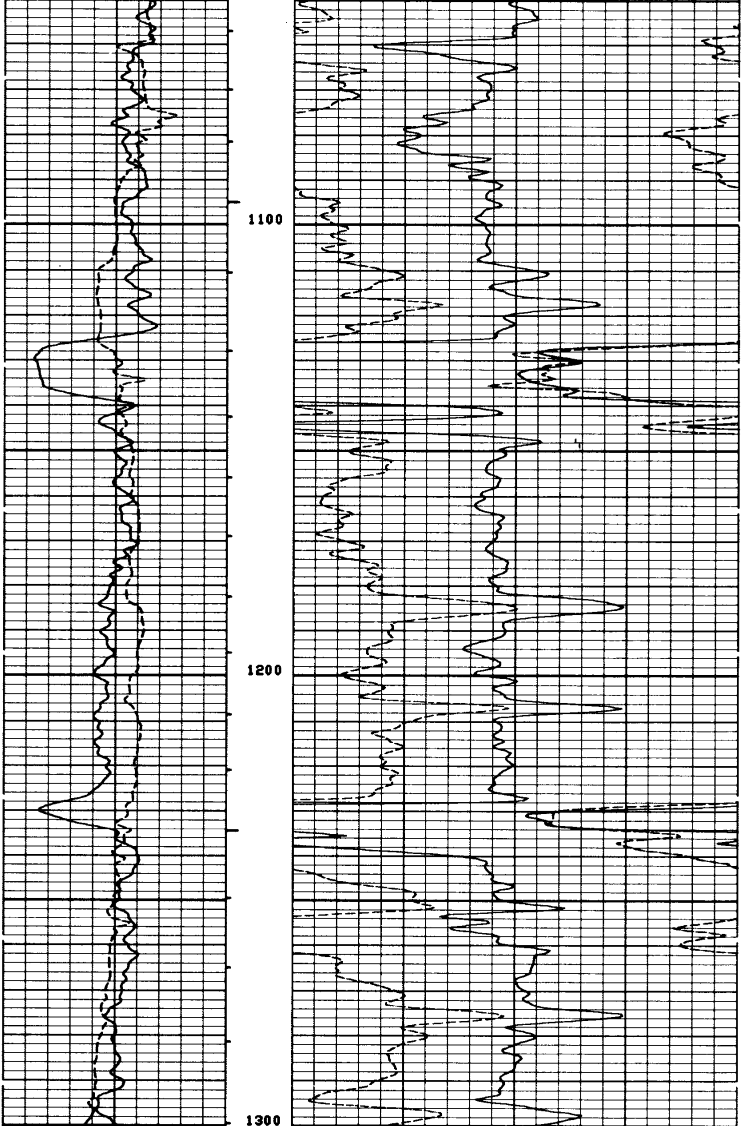
LOGGING DATA

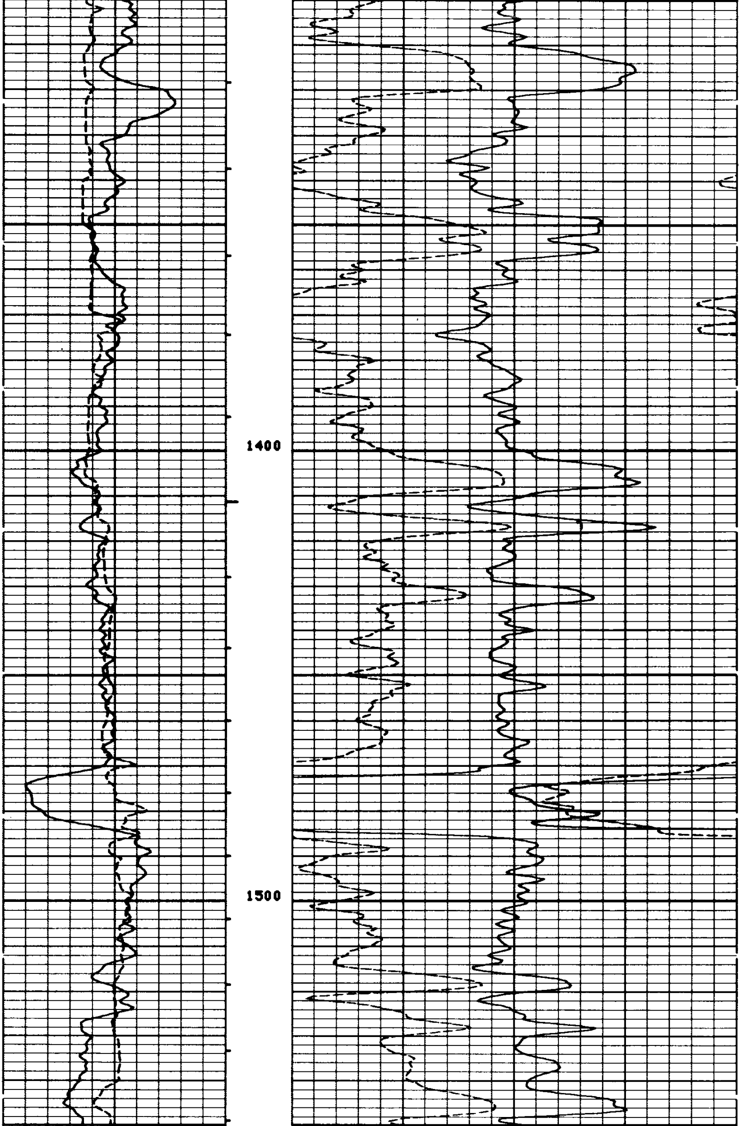
DEPTH		CNP			FDC				GR			
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens. Logged	T. C.	Zero. Div. Left	Scale Per 100 Div.
657	3692	45 -15	SS-OH	AUTO	45 -15	2.65	1	WATER	165	CSU	0	150

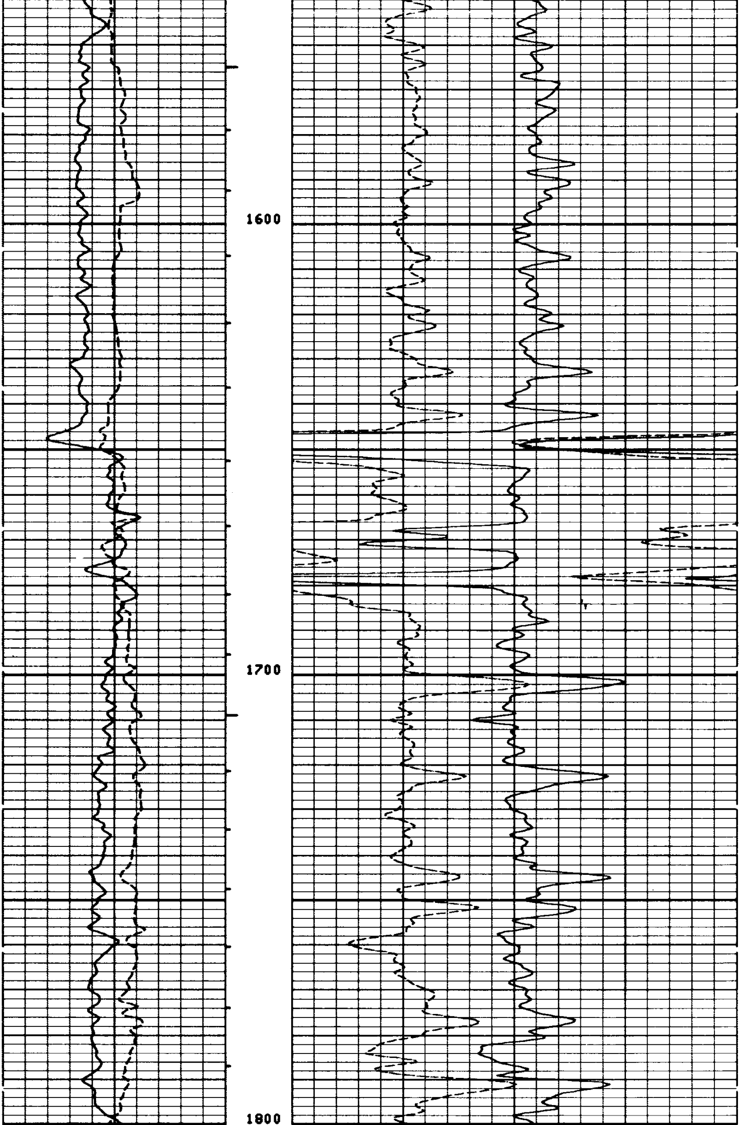
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

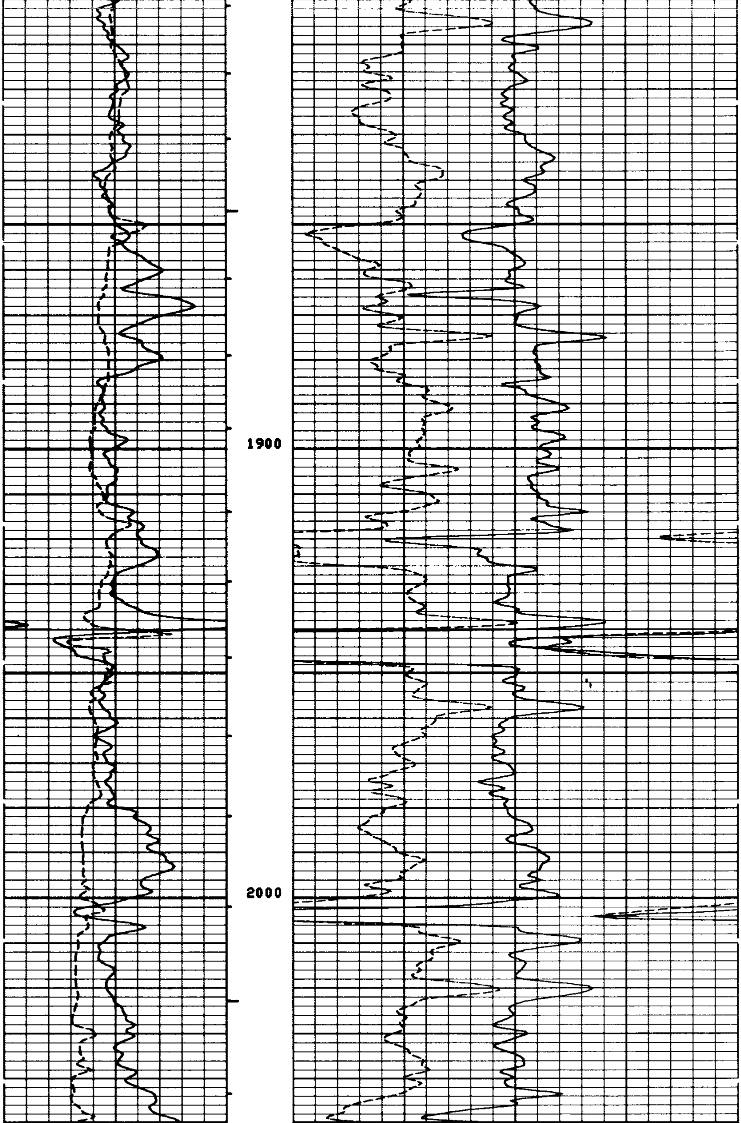


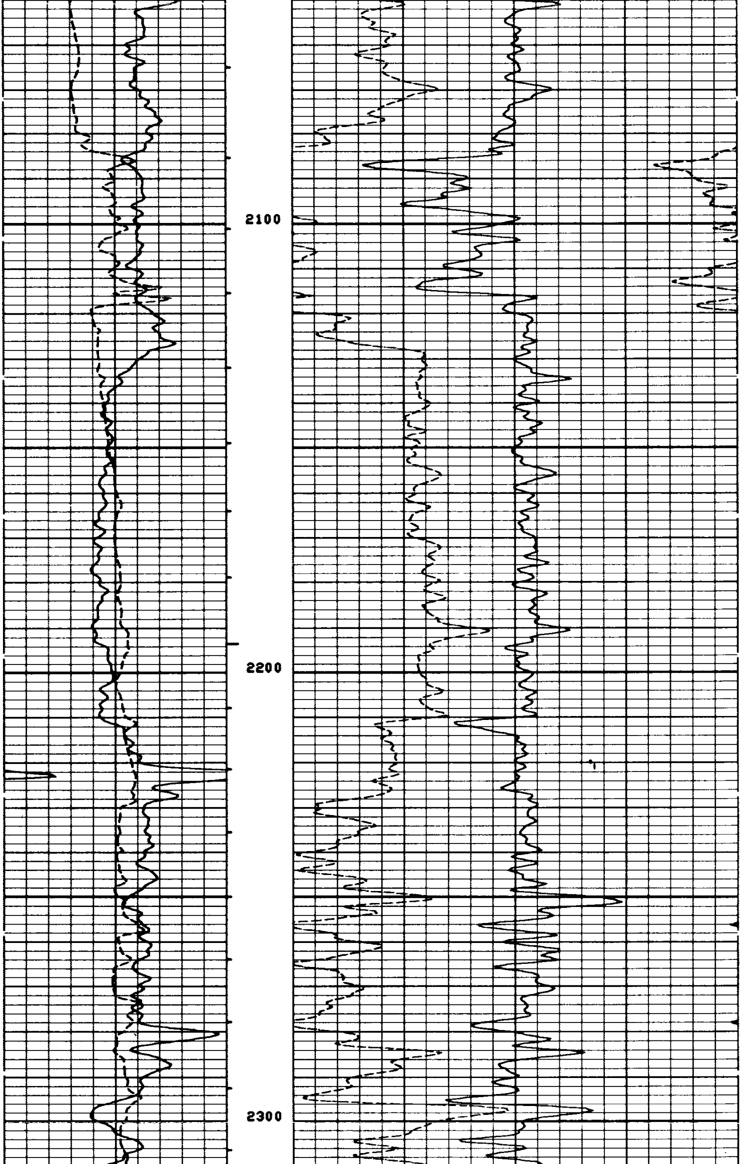


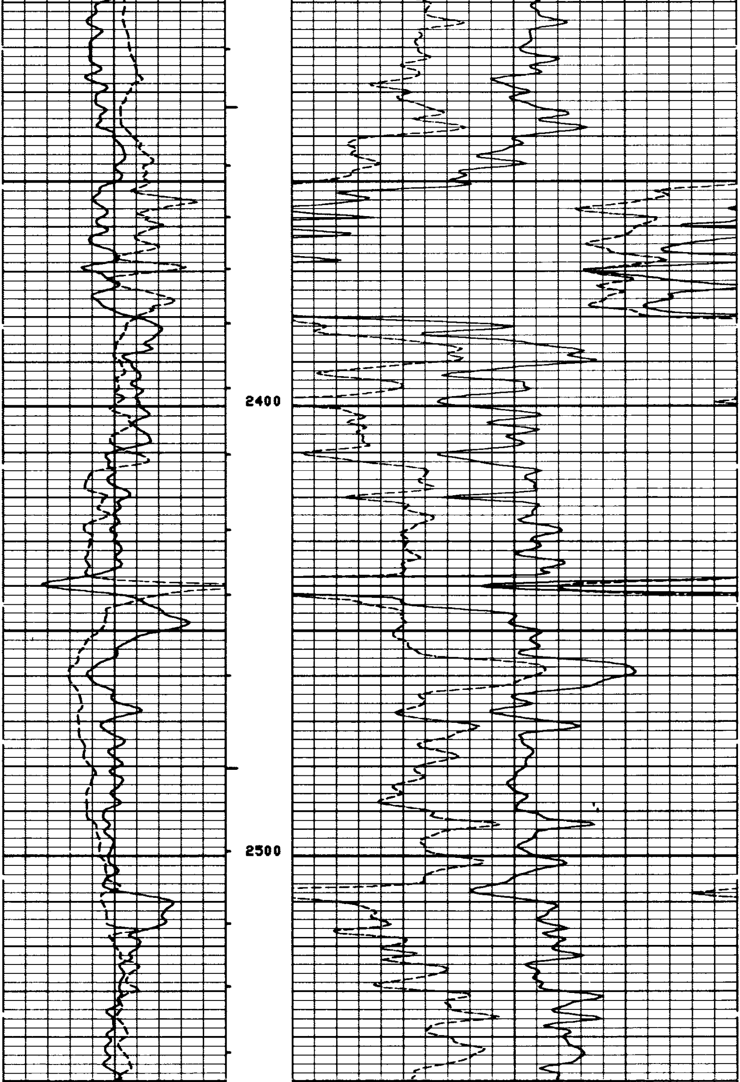


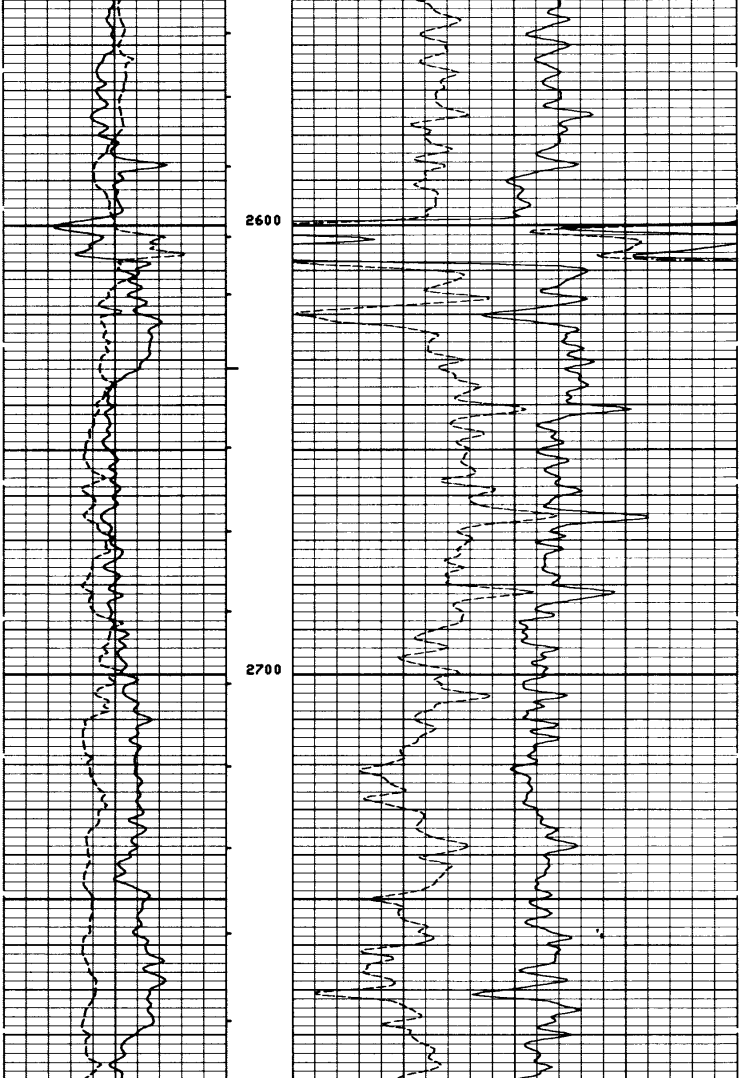


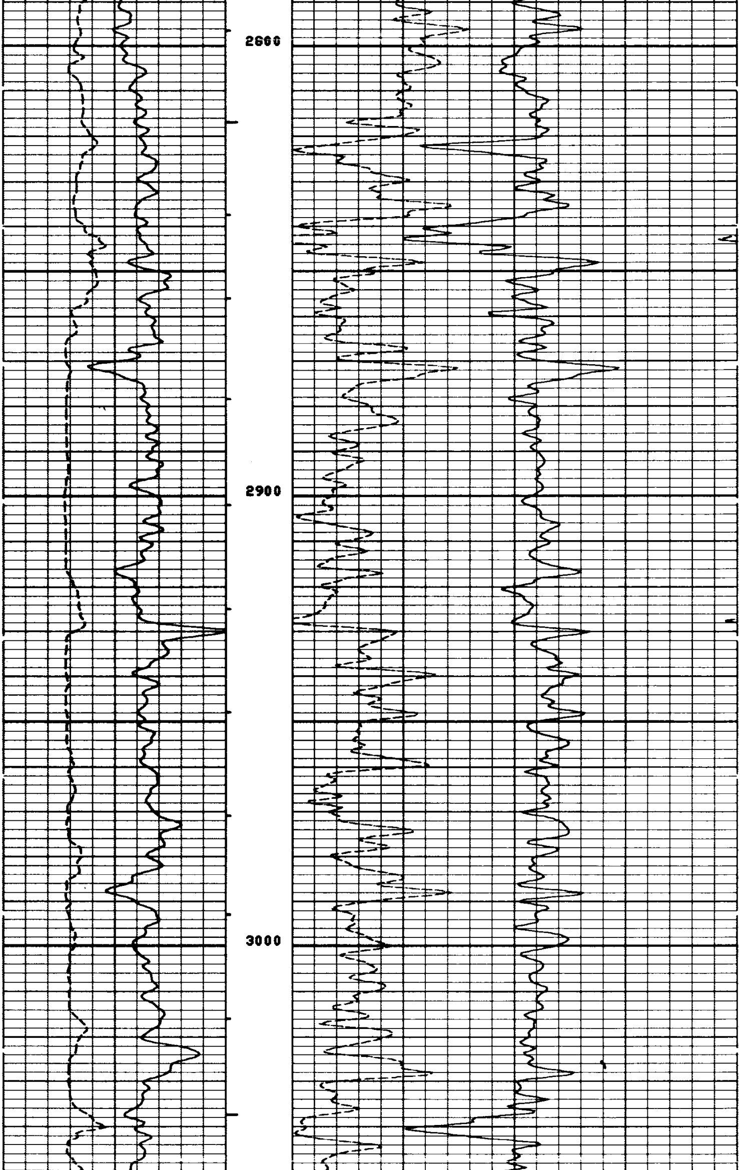


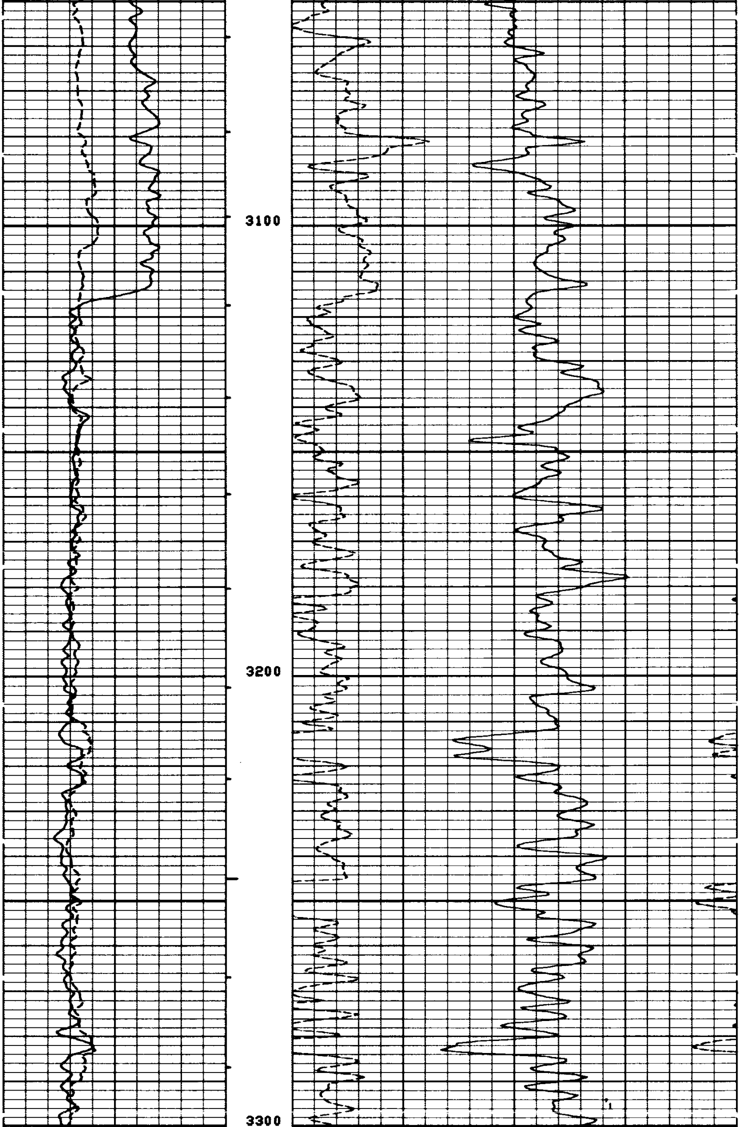


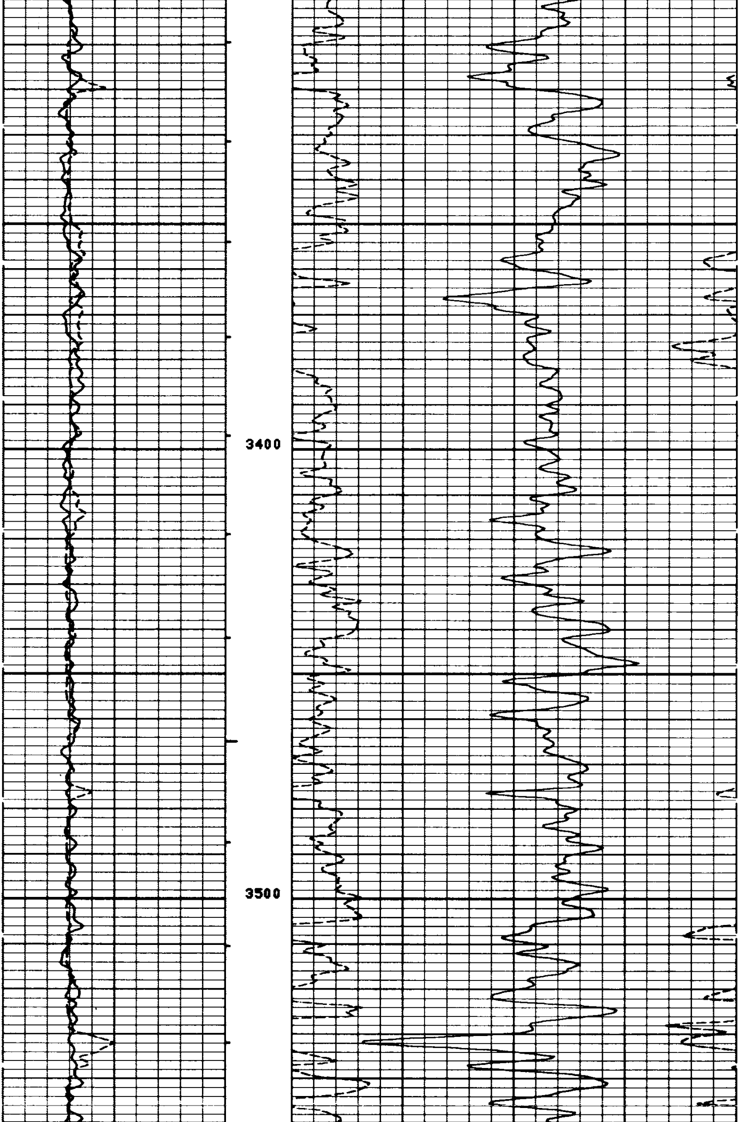


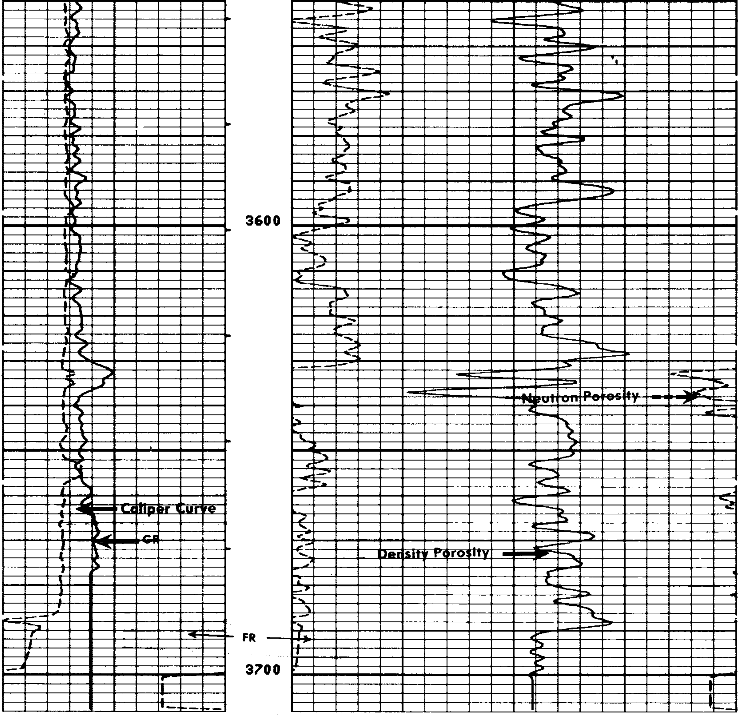








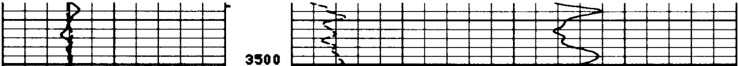


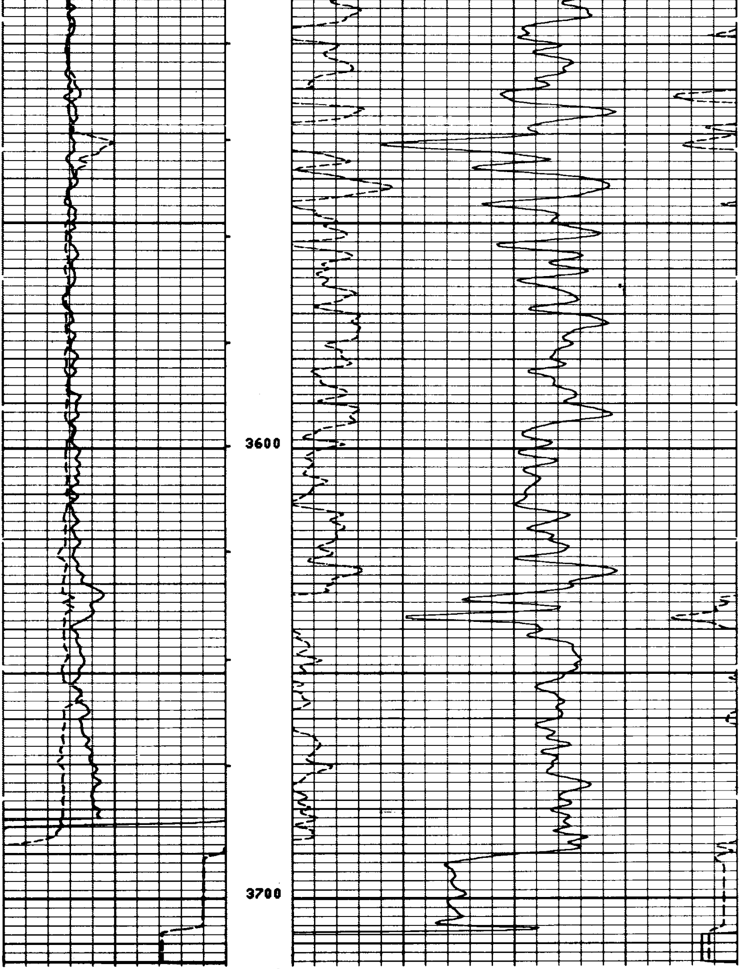


13
13
13

REPEAT SECTION

12
12
12





GAMMA RAY API UNITS

0 150

CALIPER DIAM. IN INCHES

6" 16"

POROSITY INDEX (%) SANDSTONE MATRIX

COMPENSATED FORMATION DENSITY POROSITY

45 30 15 0 -15

COMPENSATED NEUTRON POROSITY

45 30 15 0 -15

CALIBRATION RECORD

```
                    BEFORE SURVEY CALIBRATION SUMMARY


     PERFORMED:        80/06/25
     PROGRAM FILE:     NUC     (VERSION     16.4     79/11/20)


   SGTE                     DETECTOR CALIBRATION SUMMARY

                  MEASURED
                BKGD     JIG          CALIBRATED          UNITS
       GR        27      187             165               GAPI


   CNTA                     DETECTOR CALIBRATION SUMMARY

                   TANK                               JIG
               INPUT   CALIBRATED           MEASURED    CALIBRATED
     NRAT      2.260     2.15                 2.31         2.20


   PGTE                     DETECTOR CALIBRATION SUMMARY

                   BLOCK                              JIG
               INPUT   CALIBRATED           MEASURED    CALIBRATED      UNITS
     FFDC       480       337                 380          267           CPS
     NFDC       854       528                 819          506           CPS


   PGTE                     CALIPER CALIBRATION SUMMARY

                  MEASURED                          CALIBRATED
                SMALL     LARGE                   SMALL      LARGE        UNITS
     CALI        5.6      10.5                     6.0       12.0          IN
                              7
                              7
                              7
                              7

                    AFTER SURVEY TOOL CHECK SUMMARY


     PERFORMED:        80/06/25
     PROGRAM FILE:     NUC     (VERSION     16.4     79/11/20)


   CNTA                          TOOL   CHECK

                             JIG
                   BEFORE          AFTER
     NRAT           2.20            2.16

     POROSITY CHANGE  (LIME): -0.005


   PGTE                          TOOL   CHECK
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                      JIG
                BEFORE        AFTER      UNITS
FFDC             267           272        CPS
NFDC             506           453        CPS
                         17
                         17
                         17
                         17
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                SHOP SUMMARY

PERFORMED:       80/06/09
PROGRAM FILE:    SHOP   (VERSION    14.4    79/09/05)

PGTE                  DETECTOR CALIBRATION SUMMARY

                 BLOCK                        JIG
      MEASURED   CALIBRATED     MEASURED   CALIBRATED     UNITS

FFDC   480          337            391         274          CPS
NFDC   854          528            823         509          CPS

         (PGS:392  , PDH:206   , GSR:5153 , SFT:1177 )
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CALIBRATION RECORD

COMPANY NORTHWEST EXPLORATION COMPANY

WELL WESTPORT NO. 1

FIELD WILDCAT - COOS BAY AREA

COUNTY COOS STATE OREGON

SCHL. FR 3692
SCHL. TD 3692
DRLR. TD 3700

Elev: KB 564.8
DF --
GL 552.0

SWS-2244-A