STATE DEPARTMENT OF GEOLOGY

Sutherlin Unit 1

Schlumberger

# BOREHOLE COMPENSATED SONIC LOG

COUNTY DOUGLAS
FIELD WILDCAT
LOCATION 36 24S 5W
WELL SUTHERLIN UNIT NO.1
COMPANY MOBIL OIL CORP.

**COMPANY** MOBIL OIL CORPORATION

**WELL** SUTHERLIN UNIT NO. 1

**FIELD** WILDCAT

**COUNTY** DOUGLAS **STATE** OREGON

LOCATION 455.7'SOUTH & 2064.6'EAST FROM THE WEST ¼ CORNER OF

| API SERIAL NO. | SEC. | TWP | RANGE |
|---|---|---|---|
| | 36 | 24S | 5W |

Other Services:
DIL HRT
HDT CBL
FDC/CNL/GR
BGT

Permanent Datum: GL ; Elev.: 488
Log Measured From KB 23 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 511
D.F. - -
G.L. 488

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Date | 8-1-78 | | 9-22-78 | | | | 3-7-79 | |
| Run No. | ONE | | TWO | | | | FOUR | |
| epth—Driller | 1900 | | 3624 | | | | 13,177 | |
| epth—Logger (Schl.) | 1902 | | 3634 | | | | 13,162 | |
| tm. Log Interval | 1880 | | 3628 | | | | 13,150 | |
| op Log Interval | 643 | | 1860 | | | | 9,506 | |
| asing—Driller | 20" @ 643 | | 16" @1858 | | @ | | 12¼" @ 9511 | |
| ising—Logger | 643 | | 1860 | | | | 9,506 | |
| Size | 12¼" | | 12¼" | | | | 9¼" | |
| oe Fluid in Hole | LIGNOSUL. | | LIGNOSUL. | | | | LIGNOSUL. | |
| ens. / Visc. | 19 | 71 | 20.4 | 58 | | | 13 | 50 |
| / Fluid Loss | 11 | 7.2 ml | 10.0 | 9.6 ml | | ml | 12 | 6.6 ml |
| urce of Sample | CIRCULATED | | CIRCULATED | | | | CIRCULATED | |
| m @ Meas. Temp. | 0.68 @ 61 °F | | .816 @76 °F | | @ °F | | 1.13 @75 °F | |
| mf @ Meas. Temp. | .152 @ 70 °F | | .285 @68 °F | | @ °F | | 0.64 @62 °F | |
| mc @ Meas. Temp. | .665 @ 68 °F | | 1.52 @77 °F | | @ °F | | 2.59 @66 °F | |
| Source: Rmf / Rmc | M | M | M | M | | | M | M |
| Rm @ BHT | 0.39 @ 110F | | .639 @99 °F | | @ °F | | - - @- - °F | |
| Circulation Stopped | 0330 | | 4½ HOURS | | | | 0700 | |
| Logger on Bottom | 1100 | | 2000 | | | | 1730 | |
| Max. Rec. Temp. | 110F | | 99 °F | | °F | | - - °F | |
| Equip. / Location | 7731 | SAC | 7731 | SAC | | | 7731 | SAC |
| Recorded By | ANDERSEN | | BRASFIELD | | | | FINNELL | |
| Witnessed By Mr. | PRICE | | FRIEND | | | | RYDER | |

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

| | | | | |
|---|---|---|---|---|
| Run No. | ONE | TWO | | FOUR |
| Service Order No. | 27511 | 48038 | | 64726 |
| Fluid Level | FULL | FULL | | FULL |

## EQUIPMENT DATA

| | | | | |
|---|---|---|---|---|
| Sonic Panel No. | JH-388 | JH-306 | | BB-131 |
| Sonic Cart No. | EA-380 | EA-380 | | FA-1061 |
| Sonic Sonde No. | QA1289 | QA1289 | | RA-2251 |
| Mem. Panel No. | CA-293 | CA-293 | | - - |
| G.R. Cart. No. | 266 | JAA-1410 | | JAA-1410 |
| G.R. Panel No. | CA-293 | AB-405 | | BB- 46 |
| Caliper No. | - - | DA-495 | | DA-663 |
| TTR No. | 2927 | 2927 | | - - |
| Centralizers: No. | - - | 1 | | 1 |
| Type | - - | CME-Z | | CME-Z |
| Standoffs: No. | - - | 2 | | - - |
| Type | - - | FIN | | - - |
| Time Const.-Sec. | - - | 1 | | 1 |
| Speed - F.P.M. | 60 | 60 | | 60 |

## CALIBRATION DATA

| | | | | | |
|---|---|---|---|---|---|
| GR | BKG. CPS | 65 | 46 | | 22 |
| | Source CPS | 365 | 286 | | 186 |
| | Tc Sec | 6 | 6 | | 6 |

## SCALE CHANGES

| Type Log | Depth | Scale Up Hole | Scale Down Hole |
|---|---|---|---|
| | | | |

## LOGGING DATA

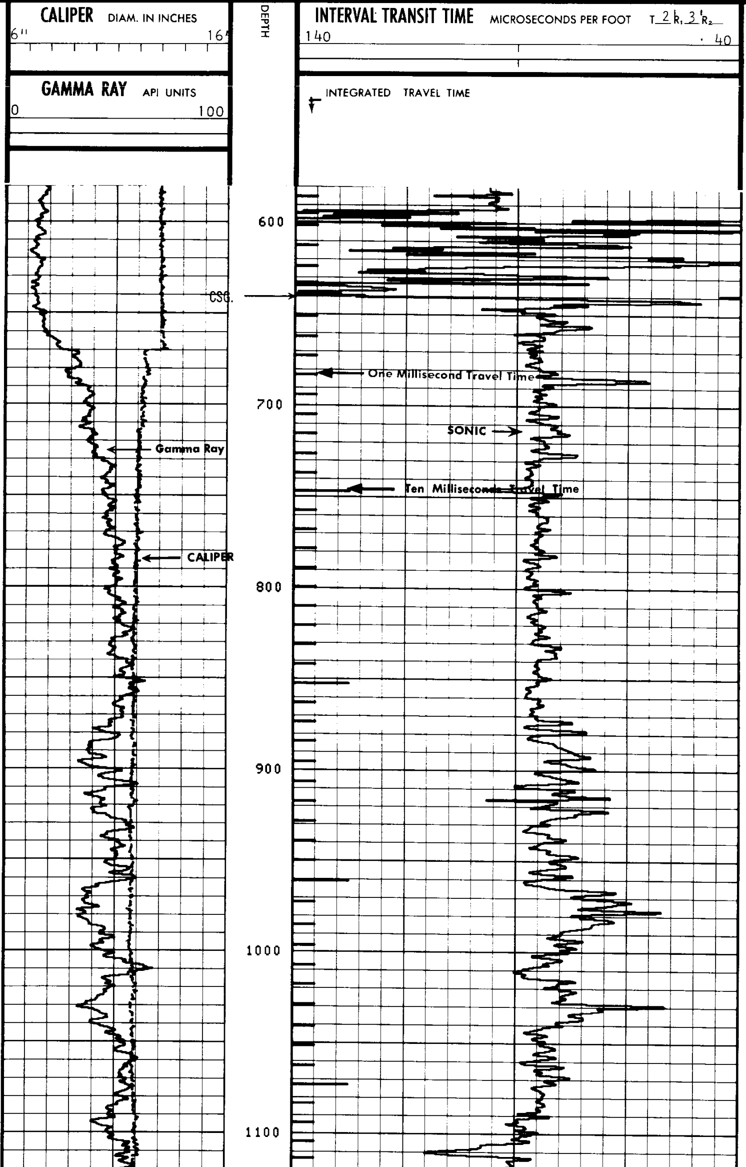
| Porosity Selectors | | | | Depth | |
|---|---|---|---|---|---|
| $\Delta t_m$ | $\Delta t_f$ | Cp | Ø Scale | From | To |
| | | | | | |

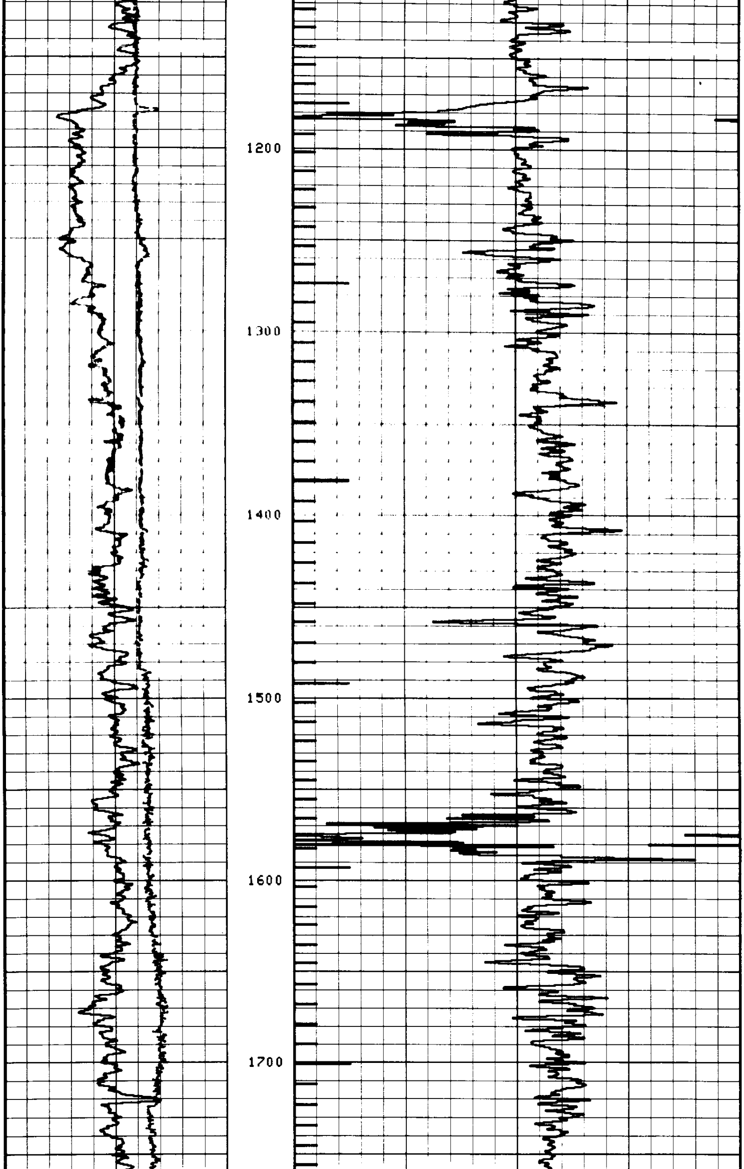
## REMARKS

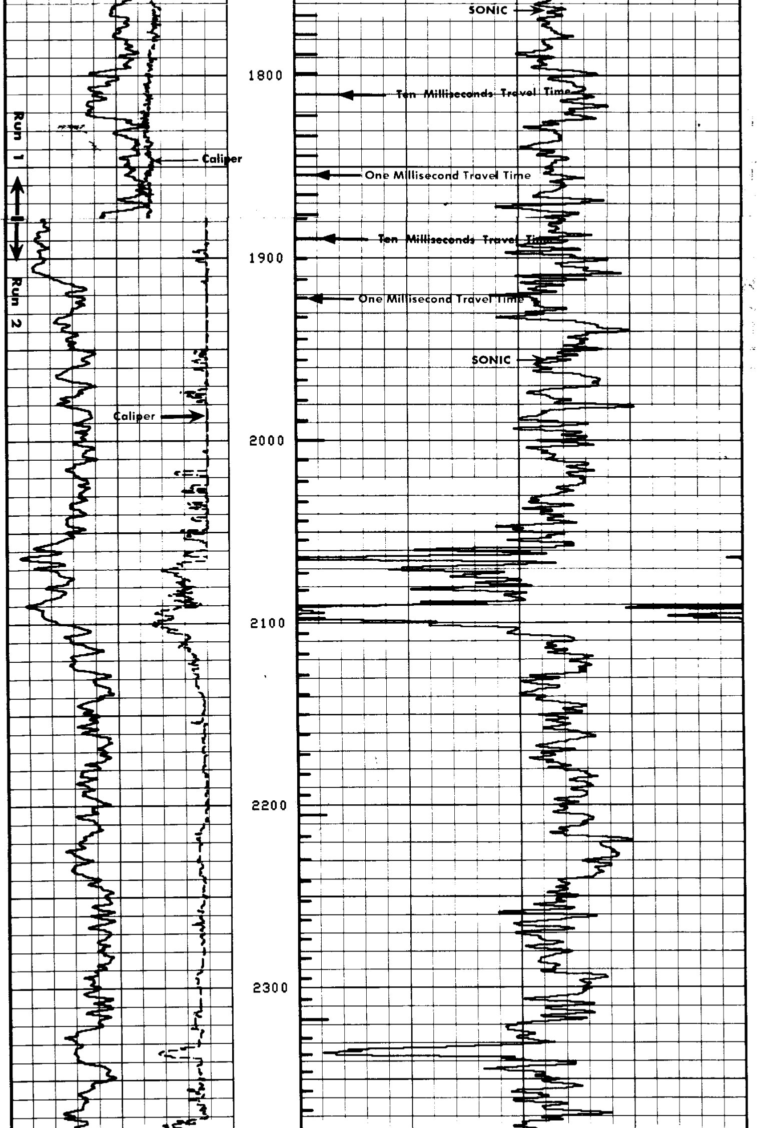
GR SCALE APPROXIMATE

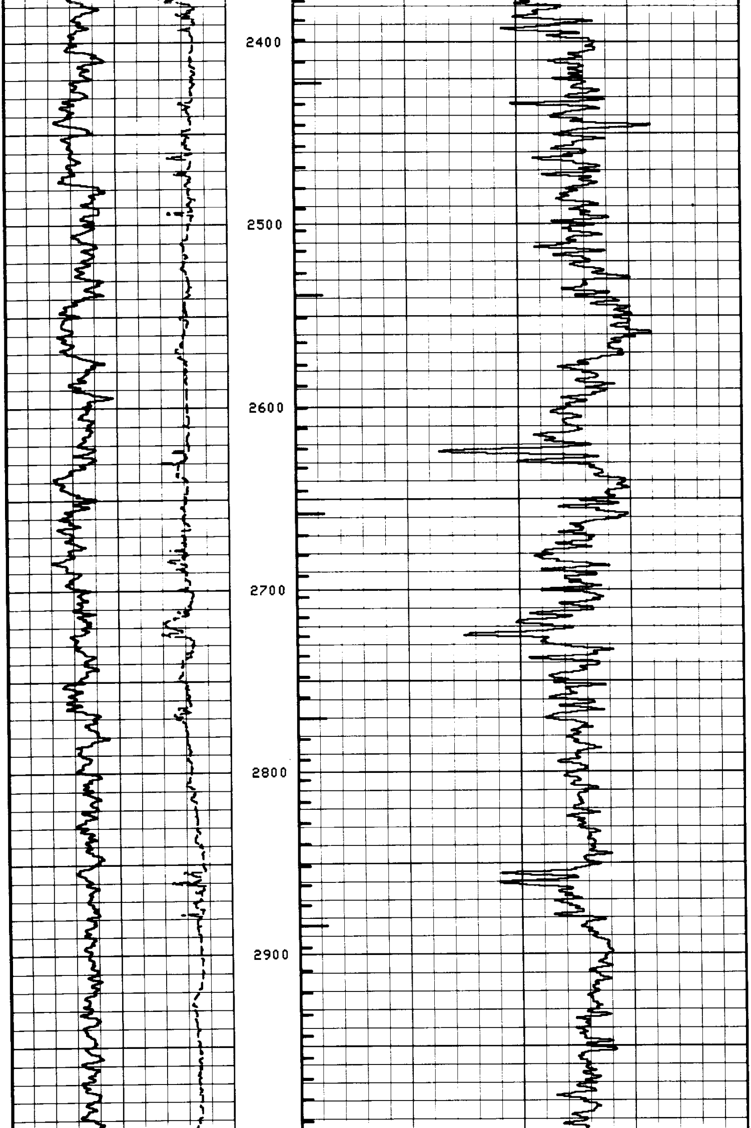
Velocity (ft/sec) = 1,000,000 / Interval Transit Time (microseconds per foot)

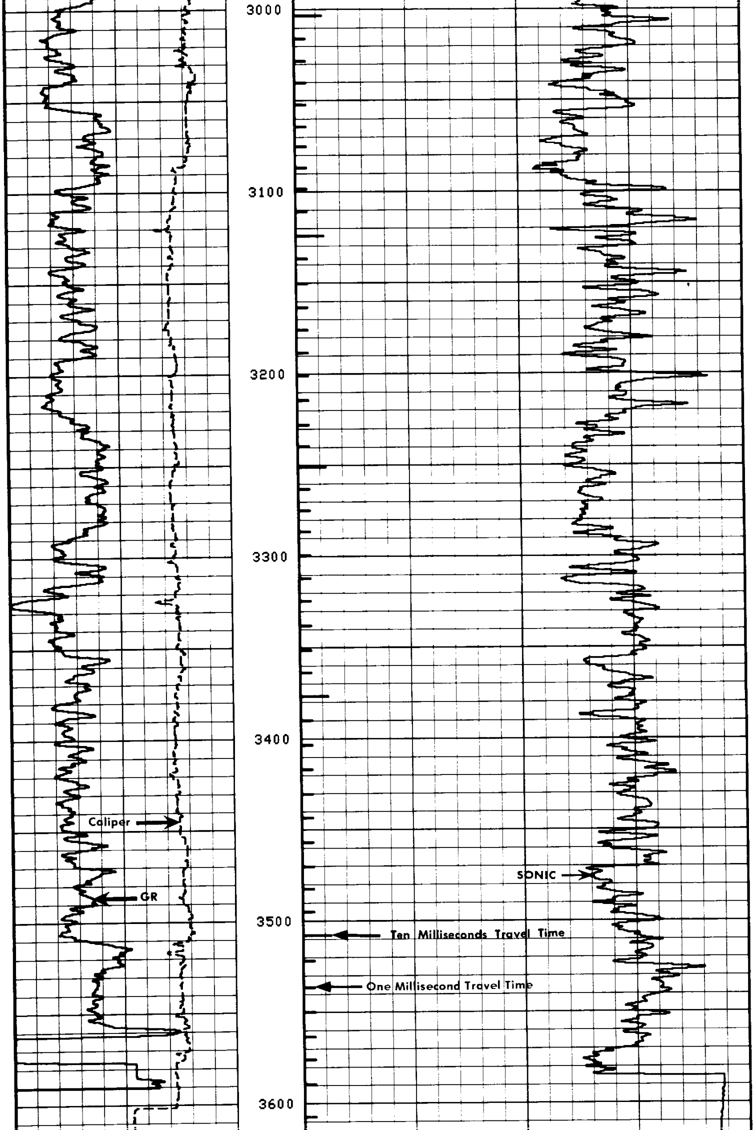
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

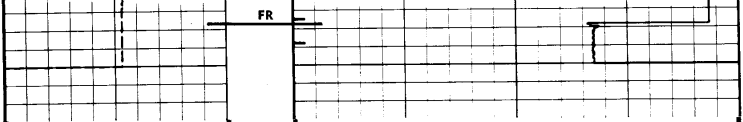












**GAMMA RAY** API UNITS
0 100

**CALIPER** DIAM. IN INCHES
6" 16"

DEPTH

INTEGRATED TRAVEL TIME RUN TWO

**INTERVAL TRANSIT TIME** MICROSECONDS PER FOOT T 3' R₁ 2' R₂
140 90 40

COMPANY MOBIL OIL CORPORATION
WELL SUTHERLIN UNIT NO. 1
FIELD WILDCAT
COUNTY DOUGLAS STATE OREGON

SCHL. FR 3628
SCHL. TD 3634
DRLR. TD 3624
Elev: KB 511
DF - -
GL 488

## DETAIL LOG

**CALIPER** DIAM. IN INCHES
6" 16'

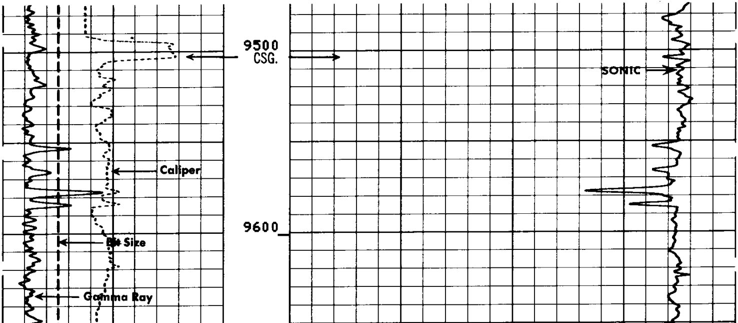
**GAMMA RAY** API UNITS
0 100

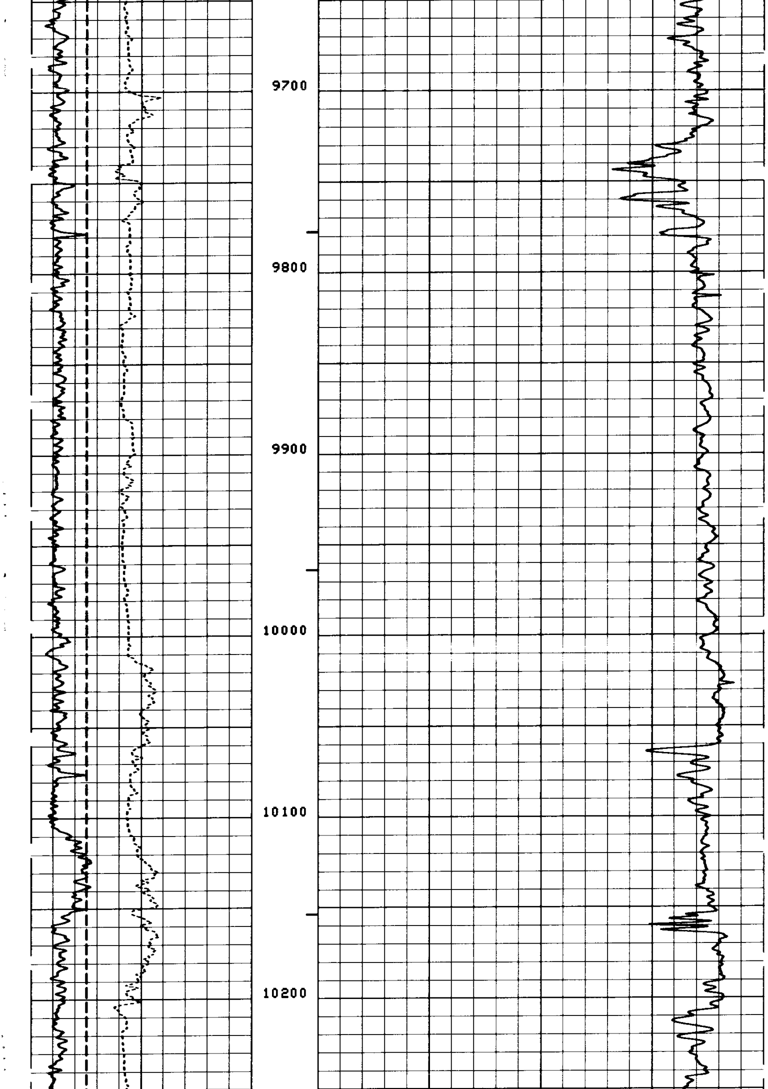
DEPTH

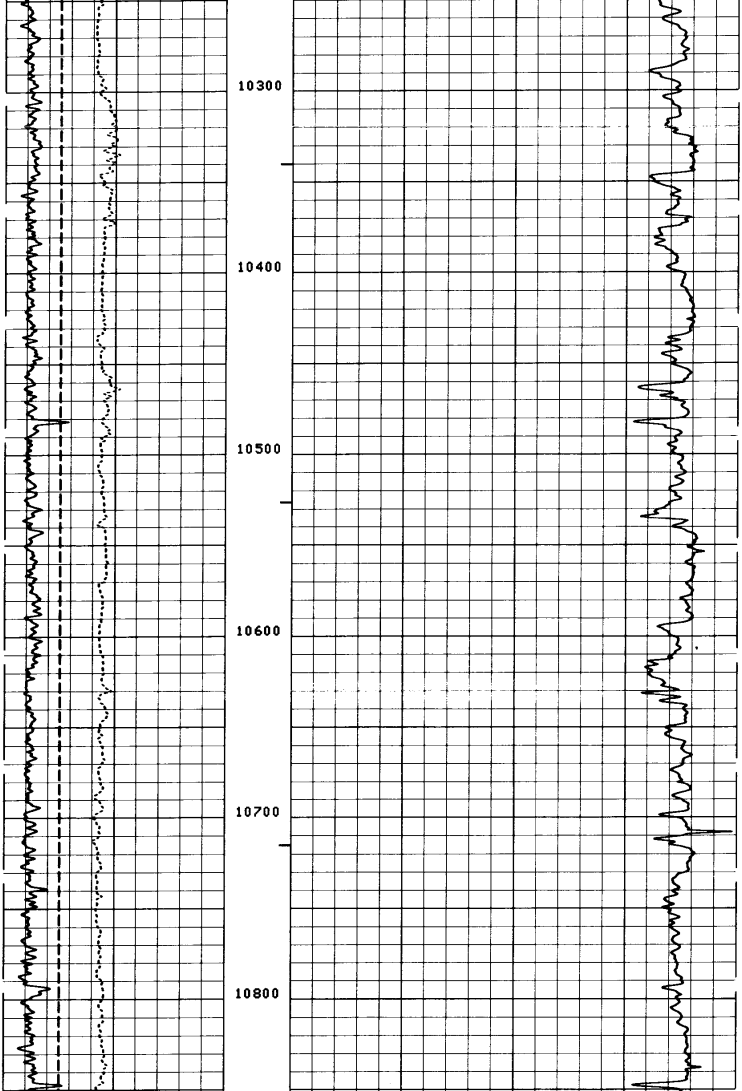
**INTERVAL TRANSIT TIME** MICROSECONDS PER FOOT T 3' R₁ 2' R₂
140 90 40

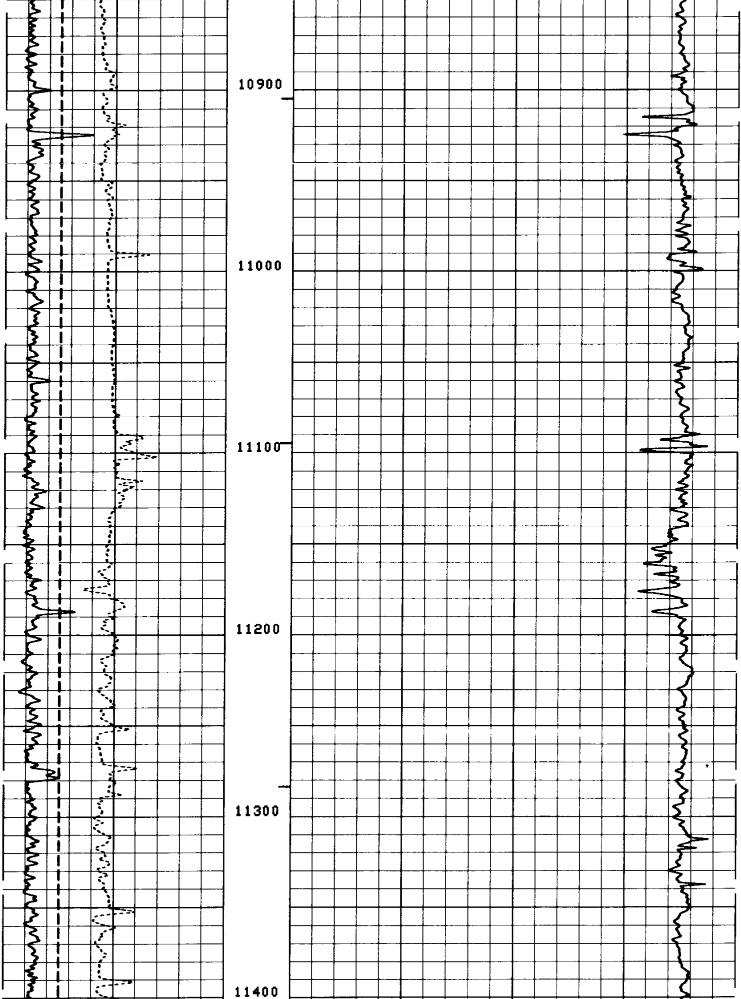
INTEGRATED TRAVEL TIME RUN FOUR

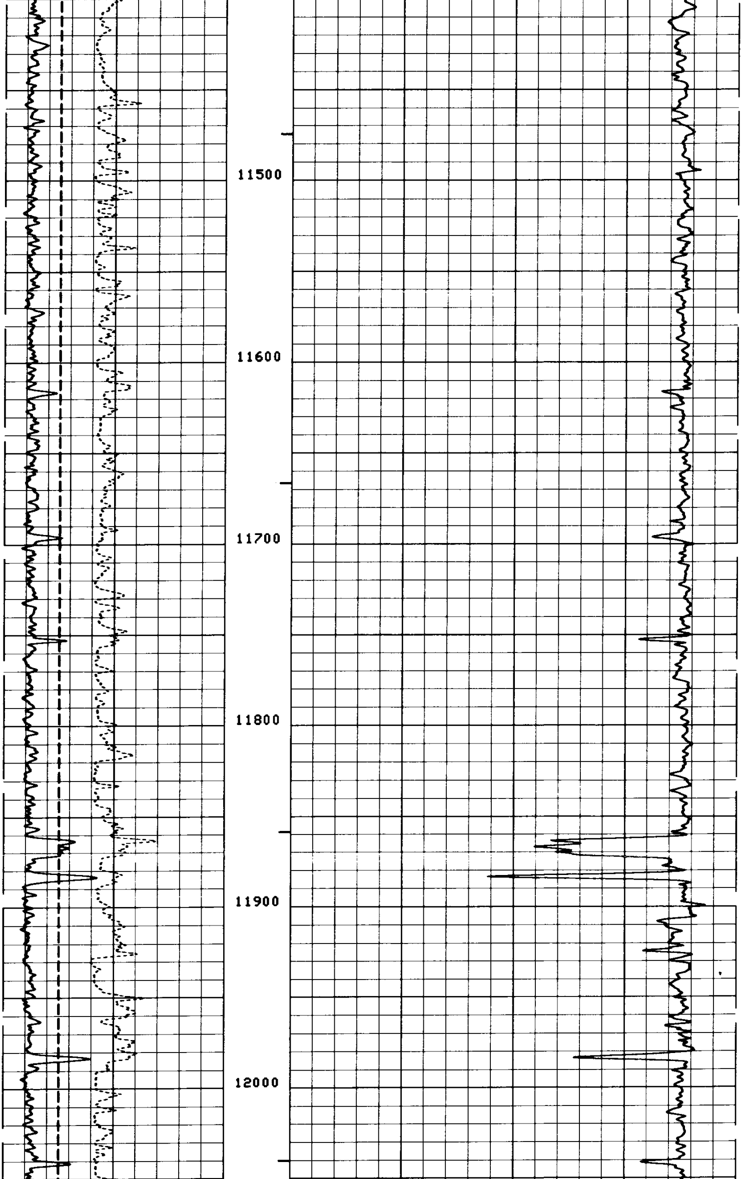
8

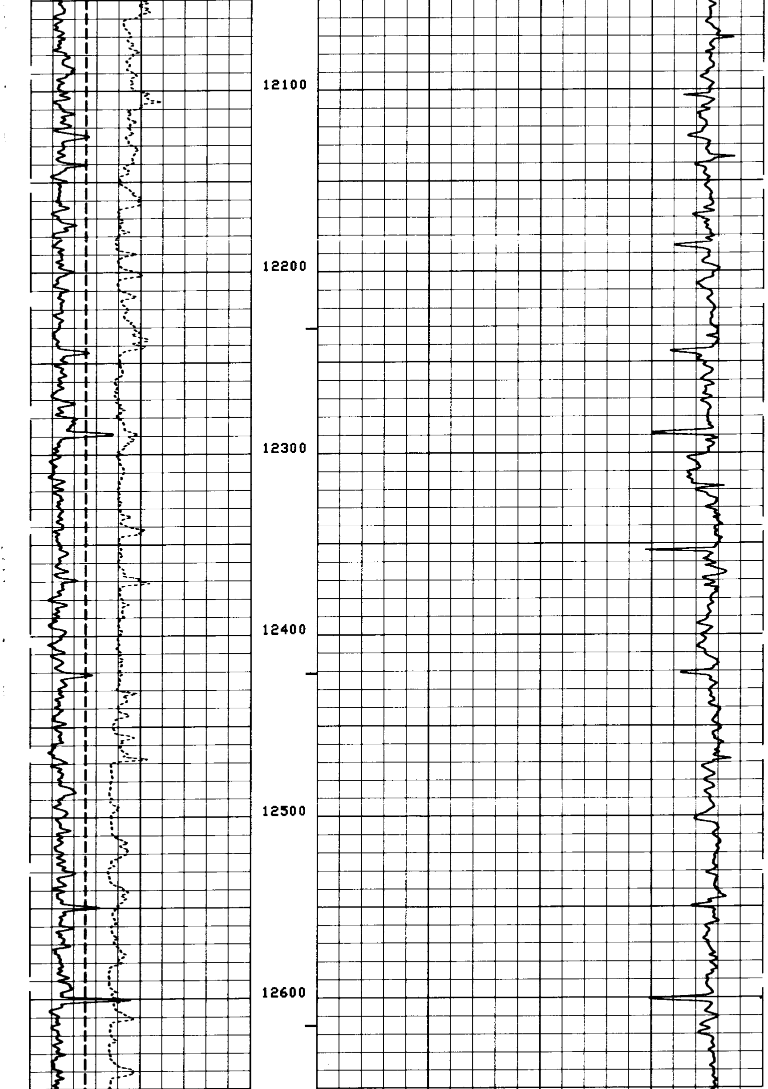


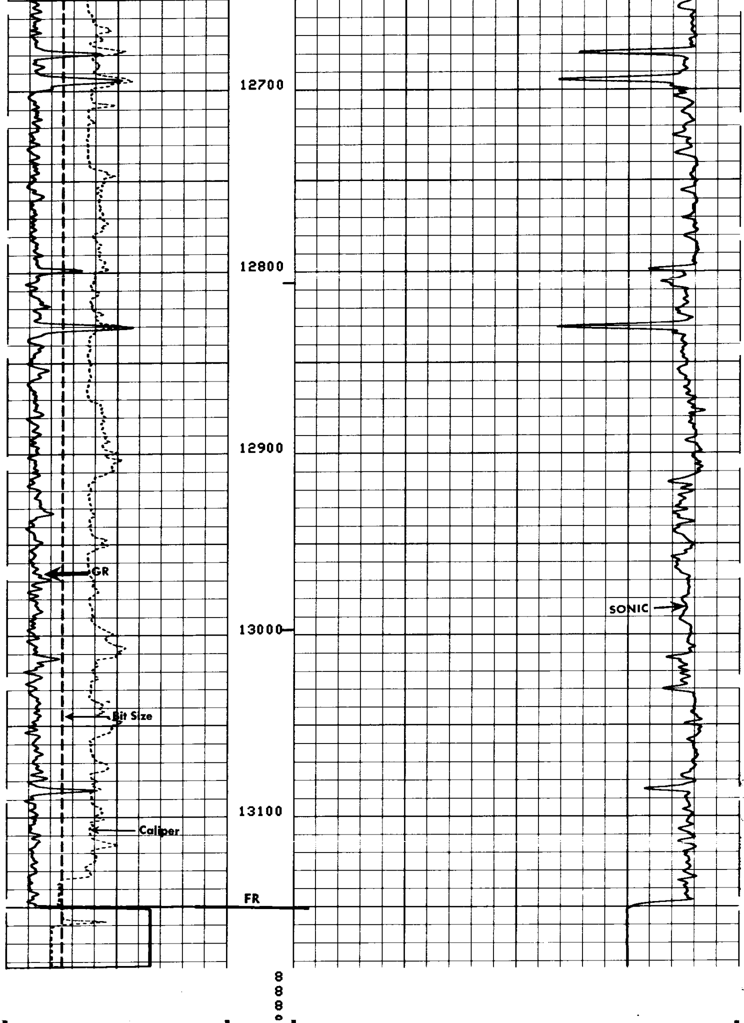












**GAMMA RAY** API UNITS
0 100

**CALIPER** DIAM. IN INCHES
6" 16"

DEPTH

INTEGRATED TRAVEL TIME

**INTERVAL TRANSIT TIME** MICROSECONDS PER FOOT $T \underline{3'} R_1 \underline{2'} R_2$
140 90 40

COMPANY MOBIL OIL CORPORATION

WELL SUTHERLIN UNIT NO. 1

FIELD WILDCAT

COUNTY DOUGLAS STATE OREGON

SCHL. FR 13,150
SCHL. TD 13,162
DRLR TD 13,177

Elev: KB 511
DF -
GL 488