

**SCHLUMBERGER**

# SONIC LOG - GAMMA RAY

WITH CALIPER

SCHLUMBERGER WELL SURVEYING CORPORATION

Houston, Texas

|                                                   |                                               |                                                                                        |
|---------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|
| COUNTY<br>FIELD or<br>LOCATION<br>WELL<br>COMPANY | OIL CONSERVATION COMM<br>Santa Fe             | Case 5434<br>COMPANY <u>PAN AMERICAN PETROLEUM</u><br><u>CORPORATION</u> <u>Pan Am</u> |
|                                                   |                                               | WELL <u>NAGATO TRIBAL 4-8</u>                                                          |
|                                                   |                                               | FIELD <u>TXITODOME PENN "L"</u>                                                        |
|                                                   |                                               | COUNTY <u>CITY JUAN</u> STATE <u>NEW MEXICO</u>                                        |
|                                                   | LOCATION <u>1980' FNL</u><br><u>1400' FNL</u> | Other Services:<br><u>LL</u>                                                           |
|                                                   | Sec. _____ Twp. _____ Rge. _____              |                                                                                        |

Permanent Datum: 50, Elev. 5815 Elev.: K.B. 5520  
 Log Measured From KD, 12 Ft. Above Perm. Datum D.F. \_\_\_\_\_  
 Drilling Measured From KD G.I. 5815

|                                         |              |              |        |    |    |
|-----------------------------------------|--------------|--------------|--------|----|----|
| Date                                    | 11-29-60     |              |        |    |    |
| Run No.                                 | ONE          |              |        |    |    |
| Depth—Driller                           | 0210         |              |        |    |    |
| Depth—Logger                            | 6382         |              |        |    |    |
| Btm. Log Interval                       | 2511         |              |        |    |    |
| Top Log Interval                        | 250          |              |        |    |    |
| Casing—Driller                          | 878 @ 1220   | @            | @      | @  | @  |
| Casing—Logger                           | 1224         |              |        |    |    |
| Bit Size                                | 7 7/8        |              |        |    |    |
| Type Fluid in Hole                      | WATER        |              |        |    |    |
| Dens.                                   | Visc.        | 10.1         | 44     |    |    |
| pH                                      | Fluid Loss   | 13.5         | 7.4 ml | ml | ml |
| Source of Sample                        | FLUID LINE   |              |        |    |    |
| R <sub>m</sub> @ Meas. Temp.            | 110 @ 10 °F  | @            | °F     | @  | °F |
| R <sub>mf</sub> @ Meas. Temp.           | 105 @ 10 °F  | 105 @ 122 °F | @      | °F | @  |
| R <sub>mc</sub> @ Meas. Temp.           | @ °F         | @            | °F     | @  | °F |
| Source: R <sub>mf</sub> R <sub>mc</sub> | 145          |              |        |    |    |
| R <sub>m</sub> @ BHT                    | 104 @ 135 °F | @            | °F     | @  | °F |
| Time Since Circ.                        | 2 MIN        |              |        |    |    |
| Max. Rec. Temp.                         | 135 °F       |              | °F     |    | °F |
| Equip. Location                         | 4542 FANNI   |              |        |    |    |
| Recorded By                             | KIMBALL      |              |        |    |    |
| Witnessed By                            | HOLLINGBORN  |              |        |    |    |

**SCHLUMBERGER****SONIC LOG - GAMMA RAY**

WITH CALIPER

SCHLUMBERGER WELL SURVEYING CORPORATION

Houston, Texas

|                                                   |                                            |                  |      |
|---------------------------------------------------|--------------------------------------------|------------------|------|
| COUNTY<br>FIELD or<br>LOCATION<br>WELL<br>COMPANY | 1975                                       | Case 5834        |      |
|                                                   | COMPANY PAN AMERICAN PETROLEUM CORPORATION |                  |      |
|                                                   | WELL NAVAJO TRIBAL "U" # 3                 |                  |      |
|                                                   | FIELD TOCITO DOME PENN "D"                 |                  |      |
| COUNTY SAN JUAN                                   |                                            | STATE NEW MEXICO |      |
| LOCATION 660 FSL & 510 FWL                        |                                            | Other Services:  |      |
| Sec. 16 Twp. 26N Rge. 18W                         |                                            | IES              |      |
| Permanent Datum: GL, Elev. 5710                   |                                            | Elev.: K.B. 5722 |      |
| Log Measured From KB, 12 Ft. Above Perm. Datum    |                                            | D.F. 5721        |      |
| Drilling Measured From KB                         |                                            | G.L. 5710        |      |
| Date                                              | 2-6-65                                     |                  |      |
| Run No.                                           | TWO                                        |                  |      |
| Depth—Driller                                     | 6940                                       |                  |      |
| Depth—Logger                                      | 6948                                       |                  |      |
| Btm. Log Interval                                 | 6946                                       |                  |      |
| Top Log Interval                                  | 5950                                       |                  |      |
| Casing—Driller                                    | 8 5/8 @ 1475                               | @                | @    |
| Casing—Logger                                     |                                            |                  |      |
| Bit Size                                          | 7 7/8                                      |                  |      |
| Type Fluid in Hole                                | FRESH-GEL                                  |                  |      |
|                                                   | C-SA-4CM                                   |                  |      |
| Dens.                                             | 11.9                                       |                  |      |
| Visc.                                             | 78                                         |                  |      |
| pH                                                | 9.0                                        |                  |      |
| Fluid Loss                                        | 3.6 ml                                     | ml               | ml   |
| Source of Sample                                  | FLOW LINE                                  |                  |      |
| R <sub>m</sub> @ Meas. Temp.                      | 2.15 @ 65 °F                               | @ °F             | @ °F |
| R <sub>mf</sub> @ Meas. Temp.                     | 1.35 @ 65 °F                               | @ °F             | @ °F |
| R <sub>mc</sub> @ Meas. Temp.                     | — @ — °F                                   | @ °F             | @ °F |
| Source: R <sub>mf</sub> R <sub>mc</sub>           | M —                                        |                  |      |
| R <sub>m</sub> @ BHT                              | 1.07 @ 132 °F                              | @ °F             | @ °F |
| Time Since Circ.                                  | 5 HR                                       |                  |      |
| Max. Rec. Temp.                                   | 132 °F                                     | °F               | °F   |
| Equip.                                            | 4509 FARM,                                 |                  |      |
| Recorded By                                       | FEATHER                                    |                  |      |
| Witnessed By                                      | MR. BONHAM & MR. GRAY                      |                  |      |

**SCHLUMBERGER****INDUCTION - ELECTRICAL LOG**

SCHLUMBERGER WELL SURVEYING CORPORATION

Houston, Texas

JAN 22 1975

COMPANY PAN AMERICAN PETROLEUM CORPORATION

OIL CONSERVATION COMM.  
Santa Fe

Case 5-434

WELL NAVAJO TRIBAL "U" # 3

FIELD TOCITO DOME PENN "D"

COUNTY SAN JUAN STATE NEW MEXICO

LOCATION

660 FSL &amp; 510 FWL

Other Services:

SGR-C-1

Sec. 16 Twp. 26N Rge. 18W

Permanent Datum: GL, Elev. 5710  
Log Measured From KB, 12 Ft. Above Perm. Datum  
Drilling Measured From KBElev.: K.B. 5722  
D.F. 5721  
G.L. 5710

|                                         |                       |        |    |    |    |
|-----------------------------------------|-----------------------|--------|----|----|----|
| Date                                    | 2-6-65                |        |    |    |    |
| Run No.                                 | TWO                   |        |    |    |    |
| Depth—Driller                           | 6940                  |        |    |    |    |
| Depth—Logger                            | 6947                  |        |    |    |    |
| Btm. Log Interval                       | 6946                  |        |    |    |    |
| Top Log Interval                        | 5950                  |        |    |    |    |
| Casing—Driller                          | 8 5/8 @ 1475          | @      | @  | @  | @  |
| Casing—Logger                           |                       |        |    |    |    |
| Bit Size                                | 7 7/8                 |        |    |    |    |
| Type Fluid in Hole                      | FRESH-GEL<br>C-SA-LCM |        |    |    |    |
| Dens.                                   | 11.9                  | 78     |    |    |    |
| Visc.                                   | 9.0                   | 3.6 ml | ml | ml | ml |
| pH                                      |                       |        |    |    |    |
| Fluid Loss                              |                       |        |    |    |    |
| Source of Sample                        | FLOW LINE             |        |    |    |    |
| R <sub>m</sub> @ Meas. Temp.            | 2.15 @ 65 °F          | @      | @  | @  | @  |
| R <sub>mt</sub> @ Meas. Temp.           | 1.35 @ 65 °F          | @      | @  | @  | @  |
| R <sub>mc</sub> @ Meas. Temp.           | — @ — °F              | @      | @  | @  | @  |
| Source: R <sub>mt</sub> R <sub>mc</sub> | M —                   |        |    |    |    |
| R <sub>m</sub> @ BHT                    | 1.07 @ 132 °F         | @      | @  | @  | @  |
| Time Since Circ.                        | 3 HR                  |        |    |    |    |
| Mdx. Rec. Temp.                         | 132 °F                | °F     | °F | °F | °F |
| Equip. Location                         | 4509 FARM.            |        |    |    |    |
| Recorded By                             | FEATHER               |        |    |    |    |
| Witnessed By                            | MR. BONHAM & MR. GRAY |        |    |    |    |

# SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



*Laterolog*

FIELD or  
LOCATION  
WELL  
COMPANY

CONSERVATION COMM

Santa Fe

COMPANY PAN AMERICAN PETROLEUM  
CORPORATION *Can 5434*

WELL *NAVAJO TRIBAL U-8*

FIELD *TOXITO DOME PENN "D"*

COUNTY *SAN JUAN* STATE *NEW MEXICO*

Location:

*1980' FNL*

*1900' FNL*

Other Services:

*SG121*

Sec. *16* Twp. *26N* Rge. *18W*

Permanent Datum:

*GL*

; Elev.: *5813*

g Measured From

*KB*

, *14* Ft. Above Perm. Datum

illing Measured From

*KB*

Elev.: K

D

G

te  
n No.  
pth - Driller  
pth - Schlum.  
n. Log. Interval  
p Log. Interval  
sing - Driller  
sing - Schlum.  
Size  
oe Fluid in Hole

*11-24-20*

*YALE*

*6370*

*6382*

*6378*

*898 @ 1520*

*77/8"*

*2 ALT SAT*

ens. Visc.

*10.7*

*144*

Fluid Loss

*10.5*

*9.4*

Source of Sample

*FLOW LINE*

n @ Meas. Temp.

*070 @ 70*

F

@

F

@

F

@

F

nf @ Meas. Temp.

*055 @ 10*

F

@

F

@

F

@

F

nc @ Meas. Temp.

*— @ —*

F

@

F

@

F

@

F

Source: Rmf Rmc

*M*

n @ B. H. T.

*@*

F

@

F

@

F

@

F

ne Since Circ.

*3 HR*

ax. Rec. Temp.

*F*

*F*

*F*

*F*

ip. Location

*4342 FARM*

ded By

*KIMBALL*

sed By

*HOLLINGSWORTH*

RECOMMENDED STANDARD PRACTICE RP-31

THIS HEADING AND LOG CONFORM

FOLD HERE