

ATLAS WIRELINES SERVICES **PHOTON LOG**
Gravel Prock Survey

FILE NO. 1010
 WELL I. W. 23d - 3
 FIELD MISSI
 COUNTY COLUMBIA STATE OREGON
 COMPANY NORTHWEST NATURAL GAS COMPANY
 3-009-0025

PERMITS: 2415 11' EAST & 299' 29" SOUTH FROM THE WEST 1/4 CORNER OF:
 SECTION 3 T19P14N R06E35W

LOGGING MEASURED FROM K. B. 11.4 FT. ABOVE P.D. ELEVATIONS: NG 1199.25', KB 1197.85'

DATE 25-OCT-91

RUN 2
 SERVICE ORDER 28919
 DEPTH-TRIGGER 28917
 DEPTH-LOOKER 28917
 BOTTOM LOCKED INTERVAL 28912
 TOP LOCKED INTERVAL 28902
 TYPE FLUID IN HOLE HELIX 10 FILTERED
 SHELBY PH. Q.L. 8.6
 DENSITY 19.0/L. 8.6
 MAX. REC. TEMP. DEG. F 101 F
 OPR. RIG TIME 1 1/2 HRS.
 EQUIP. NO. / LOC. H. 13999 BRISFIELD
 RECORDED BY LOGGERS
 ATTENDED BY GOOD THOMAS

NO. BIT FROM 10
 2 11 1/2" 30' 697' 215'
 3 12 1/4" 694' 273'
 4 5 1/2" 7 1/8" 2730' 3079'

IN MAKING INTERPRETATIONS OF LOSS OR GAIN ORDERS WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON MEASUREMENTS FROM ELECTRICAL OR OTHER MEASUREMENTS, 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 INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS RUN (2)
 TAYLOR RIG NO. 4
 BHT 101 F & 101 F

EQUIPMENT DATA

| RUN | TRIP | TOOL | SERIAL NO. | SERIES | NO. | POSITION |
|-----|------|------|------------|--------|-----|-------------|
| 2 | 1 | PH | 24393 | 1313XA | | CENTRALIZED |
| 2 | 1 | CCL | 47491 | 2316XA | | CENTRALIZED |

5" = 100'

FILE: 2

CURVE DELAY REPORT

| CURVE | PHYS. DELAY | UNITS |
|-------|-------------|--------|
| PH | 0 | FT./IN |
| OCL | 4.6 | FT./IN |
| OCL1 | 4.6 | FT./IN |

PARAMETERS

*** NONE ***

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: NORTHWEST NATURAL GAS COMPANY RUN: 2
 WELL NAME: I. W. 23d - 3 TRIP: 1
 SERVICE: KC451E FILE: 2 DATE: 10/25/91 TIME: 16:44:03
 REVISION: F5YS256 REV:0002 VER:2.0 MODE: RECORD



FILE: 2

REPEAT SECTION

FILE: 1

CURVE DELAY REPORT

| CURVE | PHYS. DELAY | UNITS |
|-------|-------------|--------|
| PH | 0 | FT./IN |
| OCL | 4.6 | FT./IN |
| OCL1 | 4.6 | FT./IN |

PARAMETERS

*** NONE ***

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: NORTHWEST NATURAL GAS COMPANY RUN: 2
 WELL NAME: I. W. 23d - 3 TRIP: 1
 SERVICE: KC451E FILE: 1 DATE: 10/25/91 TIME: 16:32:58
 REVISION: F5YS256 REV:0002 VER:2.0 MODE: RECORD



FILE: 1

 • CALIBRATION/VERIFICATION SUMMARIES •
 • DATE 10/25/91 •
 • UNIT NO. HL 6399 •
 • ASSET NO. 24393 •

LOG NAME PH ASSET NO. 24393 UNIT NO. HL 6399
 CALIBRATION ENTERED ON 10/25/91 AT 15:08:58

| DATE | TIME | PH | COUNTS/SEC | SCALE FACTOR | ENGINEERING UNITS | UNITS |
|------|------|----|------------|--------------|-------------------|-------|
| | | | HIGH | ACC. MULT. | LOW | HIGH |

| DATE | TIME | PH | COUNTS/SEC | SCALE FACTOR | ENGINEERING UNITS | UNITS |
|----------|----------|------|------------|--------------|-------------------|-------|
| 09/21/91 | 11:39:31 | | | | | |
| PH | | 40.3 | 165.8 | 0.000 1.5932 | 0.000 200.000 | API |
| 09/21/91 | 11:45:56 | | | | | |
| PH | | 41.5 | 163.7 | 0.000 1.5932 | 66.118 260.807 | API |
| 10/25/91 | 15:14:53 | | | | | |
| PH | | 56.0 | 181.8 | 0.000 1.5932 | 89.166 289.697 | API |
| 10/25/91 | 17:17:16 | | | | | |
| PH | | 50.7 | 178.4 | 0.000 1.5932 | 80.828 284.227 | API |