ATLAS WIRELINE SERVICES

PHOTON LOG
GRAND PECK SURVEY

FILE NO.
COMPANY: OREGON NATURAL GAS DEVELOPMENT CORP.
WELL: 32S-10
FIELD: WILDCAT
COUNTY: CURRY
STATE: OR
API NO.
LOCATION: 2310' FSL & 2310' FEL
SEC 10 TWP 32S RGE 10W
PERMANENT DATUM: GROUND LEVEL
ELEV.: K.B. 0
D.F. 0
G.L. 0
LOG MEASURED FROM: KELLY BUSHING
DRILLING MEASURED FROM: KELLY BUSHING
DATE: 01-02-91
RUN NO.: ONE
DEPTH-DRILLER: 2318
DEPTH-LOGGER: 2318
BTM. LOG INTERVAL: 2318
TOP LOG INTERVAL: 0
CASING-DRILLER: 13 3/8" @ 0
CASING-LOGGER: 13 3/8" @ 0
BIT SIZE: 12 1/4"
TYPE FLUID IN HOLE: WATER
DENSITY: 8.4
VISCOSITY: 28
PH: 7.0
FLUID LOSS: 0
SOURCE OF SAMPLE: FLOWLINE
RM @ MEAS. TEMP.: 0.1 @ 70
RMF @ MEAS. TEMP.: 0.1 @ 70
RMC @ MEAS. TEMP.: 0.1 @ 70
SOURCE: RMF: RMC:
RM @ BHT: 0.1 @ 70
TIME SINCE CIRC.: 0
MAX. REC. TEMP.: 70
EQUIP. LOCATION: 0
RECORDED BY: D. MCCLAIN
WITNESSED BY: MR. MCCLAIN

FINAL PRINT

FOLD HERE

IN WORKING INTERPRETATIONS OF WELL LOGS (AS DEFINED IN OUR CURRENT PRICE SCHEDULE), WE WILL USE OUR BEST JUDGMENT BASED ON EXPERIENCE AND EDUCATION. WE CANNOT, HOWEVER, GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION, AND WE SHALL NOT 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 OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

REMARKS RUN (1)

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1	1	PH	47491	13855R	DENT.
1	1	GR			
1	1	CCL	50093	2318DR	DENT.

FILE: 2

CURVE DELAY REPORT

CURVE	PASS DELAY	UNITS
PH	0	FT/M
GR	5.0	FT/M
CCL	5.0	FT/M

PARAMETERS

*** NONE ***

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: OREGON NATURAL GAS DEVELOPMENT CORP.
WELL NAME: 32S-10
SER. NO.: -0491A FILE#: 2 DATE: 01-02-91
REVISION: FS1/5256 REV:5002 VER2.0

RUN: 1
TRIP: 1
TIME: 06:18:54
MODE: RECORD

TEN (LBS)
4000 -100
PH (CPS)
0 2000
CCL
0 100

0100
0200
0300
0400
0500
0600
0700
0800
0900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300

TD
EOT
TD

TEN (LBS)
4000 -100
PH (CPS)
0 2000
CCL
0 100

FILE: 2

REPEAT SECTION

FILE: 3

CURVE DELAY REPORT

CURVE	PASS DELAY	UNITS
PH	0	FT/M
GR	5.0	FT/M
CCL	5.0	FT/M

PARAMETERS

*** NONE ***

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: OREGON NATURAL GAS DEVELOPMENT CORP.
WELL NAME: 32S-10
SER. NO.: -0491A FILE#: 3 DATE: 01-02-91
REVISION: FS1/5256 REV:5002 VER2.0

RUN: 1
TRIP: 1
TIME: 06:20:17
MODE: RECORD

TEN (LBS)
4000 -100
PH (CPS)
0 2000
CCL
0 100

0100
0200
0300
0400
0500
0600
0700
0800
0900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300

TD
EOT
TD

TEN (LBS)
4000 -100
PH (CPS)
0 2000
CCL
0 100

FILE: 3

CALIBRATION-VERIFICATION SUMMARIES
DATE 01-02-91 TIME 06:15:30
RUN 1 TRIP 1

LOG NAME PH ASSET NO. 47491 UNIT NO. 6399
CALIBRATION ENTERED ON 01-02-91 AT 03:56:44

CURVE	COUNTS-SEC. LOW	HIGH	SCALING FACTORS ADD.	MULT.	ENGINEERING VALUES LOW	HIGH	UNITS
DATE 12-06-90 CALIBRATION TIME 11:27:58							
PH	34.8	152.4	0.000	1.5649	0.000	238.490	API
PRIMARY VERIFICATION NOT DONE							
DATE 01-02-91 BEFORE LOG VERIFICATION TIME 04:00:28							
PH	74.6	138.7	0.000	1.5649	116.797	310.840	API
DATE 01-02-91 AFTER LOG VERIFICATION TIME 06:15:05							
PH	48.9	173.3	0.000	1.5649	73.396	271.252	API

*** DR. NOT CALIBRATED ***
*** CCL NOT CALIBRATED ***