

# PHOTON LOG GRAVEL PACK SURVEY

ATLAS WIRELINE SERVICES  
OREGON NATURAL GAS CORP  
WELL: IW 238-3  
FIELD: MIST  
COUNTY: COLUMBIA  
STATE OR

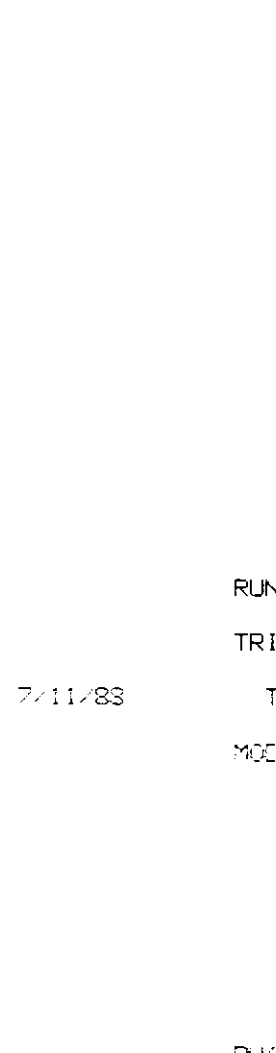
FILE NO.:  
WELL: IW 238-3  
FIELD: MIST  
COUNTY: COLUMBIA  
STATE OR  
5" = 100'

COMPANY: OREGON NATURAL GAS CORP  
WELL: IW 238-3  
FIELD: MIST  
COUNTY: COLUMBIA  
STATE OR  
OTHER SERVICES: NONE

PERMITS: DEPT. OF ENERGY  
ELEV. 1073.1  
LOGGING: MESSURED FROM 1073.1'  
DATE: 7/10/88  
SERVICE: 158946  
DEPTH: 2725'  
DEPTH: 2724'  
DEPTH: 2721'  
TOP LOGGED INTERVAL: 2464'  
TYPE FLUID IN HOLE: KOL POLYMER  
SALINITY: 14000  
DENSITY: 8.5  
LEVEL: FULL  
MAX. REC. TEMP.: 112 F  
ORIG. RIG TIME: 1 HR  
EQUIP. NO. / LOC.: HL 6406 / SEC  
RECORDED BY: B. KELCH  
WITNESSED BY: MR. THOMAS  
NO. BIT FROM TO

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IN MAKING INTERPRETATIONS OF LOGS, OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCE 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, WHATSOEVER INCURRED OR SUFFERED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.



REMARKS: RUN ( 1 )

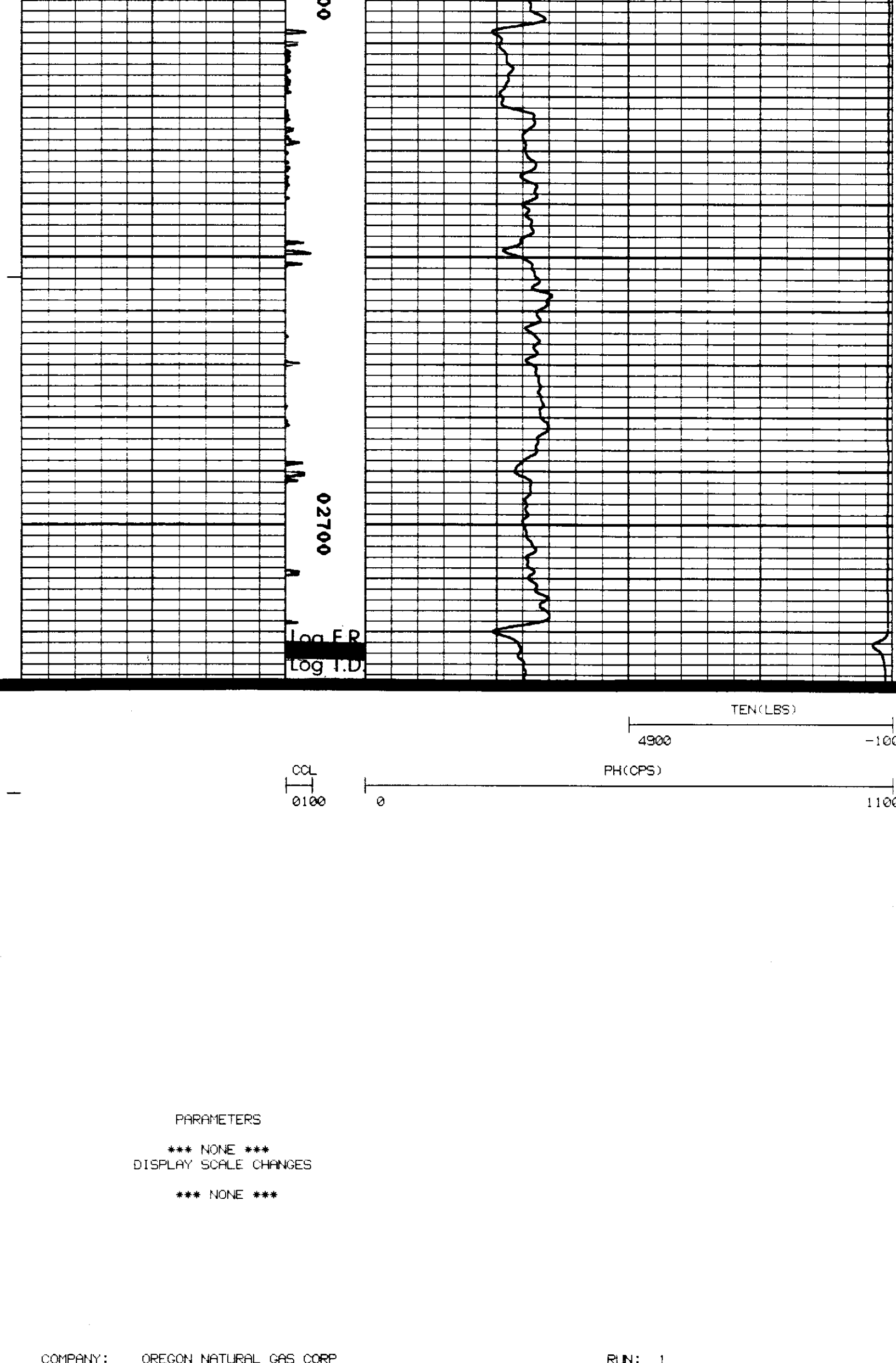
### EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1	1	PH	50196	1305	CENT
1	1	CCL			

PARAMETERS  
\*\*\* NONE \*\*\*  
DISPLAY SCALE CHANGES  
\*\*\* NONE \*\*\*

COMPANY: OREGON NATURAL GAS CORP  
WELL NAME: IW 238-3  
SERVICE: K0451B  
REVISION: FYSAL REV 6508 VER 2

RUN: 1  
TRIP: 1  
DATE: 7/11/88  
TIME: 18:14:47  
MODE: PLAYS

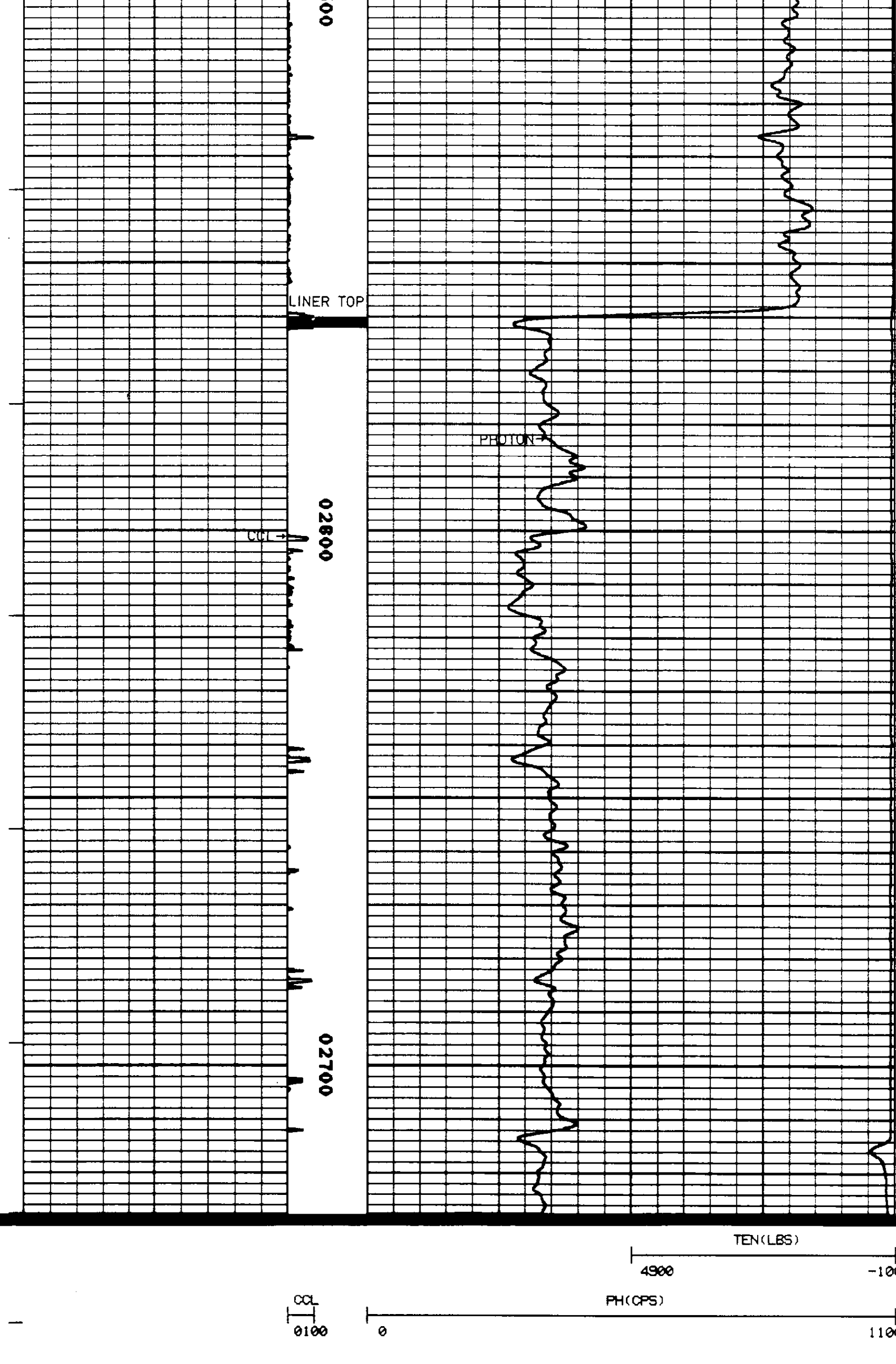


PARAMETERS  
\*\*\* NONE \*\*\*  
DISPLAY SCALE CHANGES  
\*\*\* NONE \*\*\*

COMPANY: OREGON NATURAL GAS CORP  
WELL NAME: IW 238-3  
SERVICE: K0451B  
REVISION: FYSAL REV 6508 VER 2

RUN: 1  
TRIP: 1  
DATE: 07/11/88  
TIME: 19:00:39  
MODE: RECORD

### REPEAT SECTION



PARAMETERS  
\*\*\* NONE \*\*\*  
DISPLAY SCALE CHANGES  
\*\*\* NONE \*\*\*

LOG NAME: PH  
ASSET NO.: 50196  
UNIT NO.: HL 6406  
CALIBRATION ENTERED ON: 07/11/88 AT 18:07:51

DATE	LOW	HIGH	SCALE FACTOR	ADJ.	MULT.	END DEEPING	CALLS	UNITS
06-12-88			0.000		1.5345	0.000	200.000	API

PRIMARY VERIFICATION NOT DONE  
DATE 07/11/88 BEFORE LOG VERIFICATION TIME 18:09:17  
PH 73.8 202.7 0.000 1.5345 113.187 311.100 API  
DATE 07/11/88 AFTER LOG VERIFICATION TIME 18:31:13  
PH 48.3 183.6 0.000 1.5345 78.382 297.135 API

\*\*\* CCL NOT CALIBRATED \*\*\*