COUNTY	Columbia
FIELD	Mist
LOCATION	879.33'S AND 391.73'W
WELL	Columbia County #43-22
COMPANY	Oregon Natural Gas

Schlumberger

Dual Burst
Thermal Decay Time Log

COMPANY Oregon Natural Gas

WELL Columbia County #43-22

FIELD Mist

COUNTY Columbia **STATE** Oregon

LOCATION 879.33'S AND 391.73'W
FROM EAST 1/4 CORNER

Other Services:

API SERIAL NO.	SECT.	TWP.	RANGE
	22	6N	5W

Permanent Datum	Ground Level	**Elev.**	697.5 F	**Elev.: K.B.** 708.9 F
Log Measured From	Kelly Bushing	11.4 F	**above Perm. Datum**	**D.F.**
Drilling Measured From	Kelly Bushing			**G.L.** 697.5 F

Date	19-JAN-1996			
Run No.	ONE			
Depth Driller	1517.0 F			
Depth Logger (Schl.)	1515.0 F			
Btm. Log Interval	1509.0 F			
Top Log Interval	500.0 F			
Type Fluid in Hole	WATER			
Salinity NaCl				
Density	8.50 LB/G			
Fluid Level				
Max. Rec. Temp.				
Deviation				
Logger on Bottom	13:55 19-JAN-1996			
Equip. | Location	8305	Evanston WY		
Recorded By	Scott Pilch			
Witnessed By	Clayton Roth/Todd Thomas			

BOREHOLE RECORD

Bit Size	7 7/8"			
Depth				

CASING & TUBING RECORD

Size	5 1/2"	2 3/8"		
Weight	15.5000 LB/F			
Casing Top-Driller				
Casing Top-Logger				
Casing Shoe-Driller	1517.0 F	1338.0 F		
Casing-Logger	1515.0 F	1338.0 F		

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

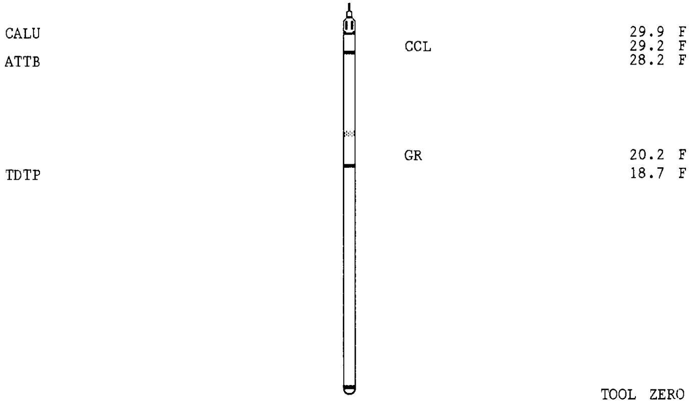
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

Run No.	ONE	
Service Order No.	532865	
Logging Speed	1800.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	TDT-P 4301	
Tool Number 2	ATT-B 1512	
Tool Number 3	CAL-U 433	
Tool Number 4	ATM-AA 286	
Tool Number 5		
Tool Number 6		
Tool Number 7		
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

REMARKS:

Correlated to Welex TDT of 10-24-?.

LOGGING TOOL STRING SKETCH

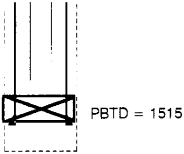


TOTAL TOOL STRING LENGTH IS 32.9 F.
TOTAL TOOL STRING WEIGHT IS 147. LB IN AIR.

>> Wellsketch <<

based on Driller depth

			Driller Depth (ft)	Wireline Depth (ft)
2.375"	TBG	SHOE	@ 1338	
5.500"	CSG	SHOE	@ 1995	
7.875"	OH	TD	@ 2252	



Main Log

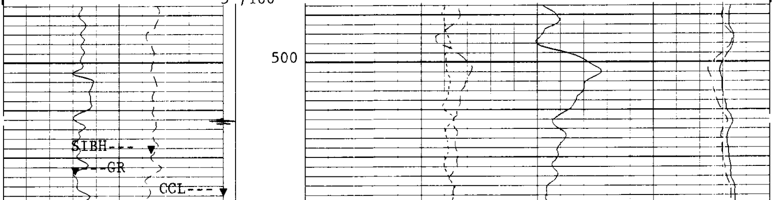
SIBH(CU)	100.00	0.0
GR(GAPI)	0.0	150.00
CCL	-19.00	1.0000
NFD(CPS)	1500.0	0.0
TSCF(CPS)	12000	0.0
TPHI	.60000	0.0
TSCN(CPS)	30000.	0.0
SIGM(CU)	60.000	0.0

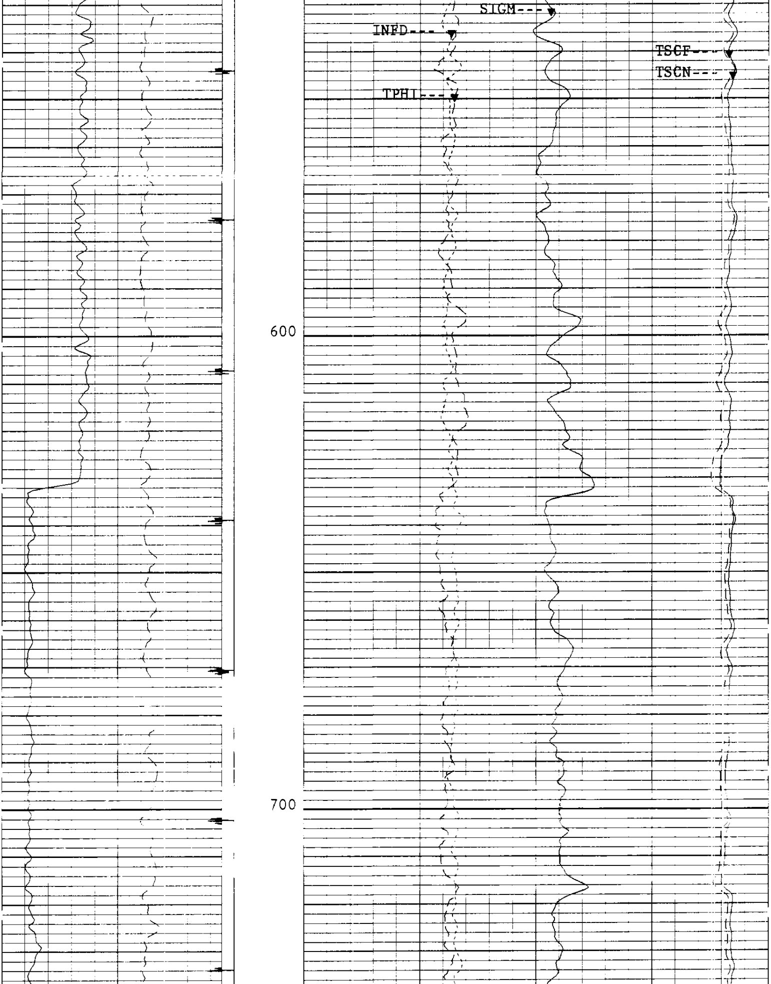
CP 44.2 FILE 1 19-JAN-1996 14:33

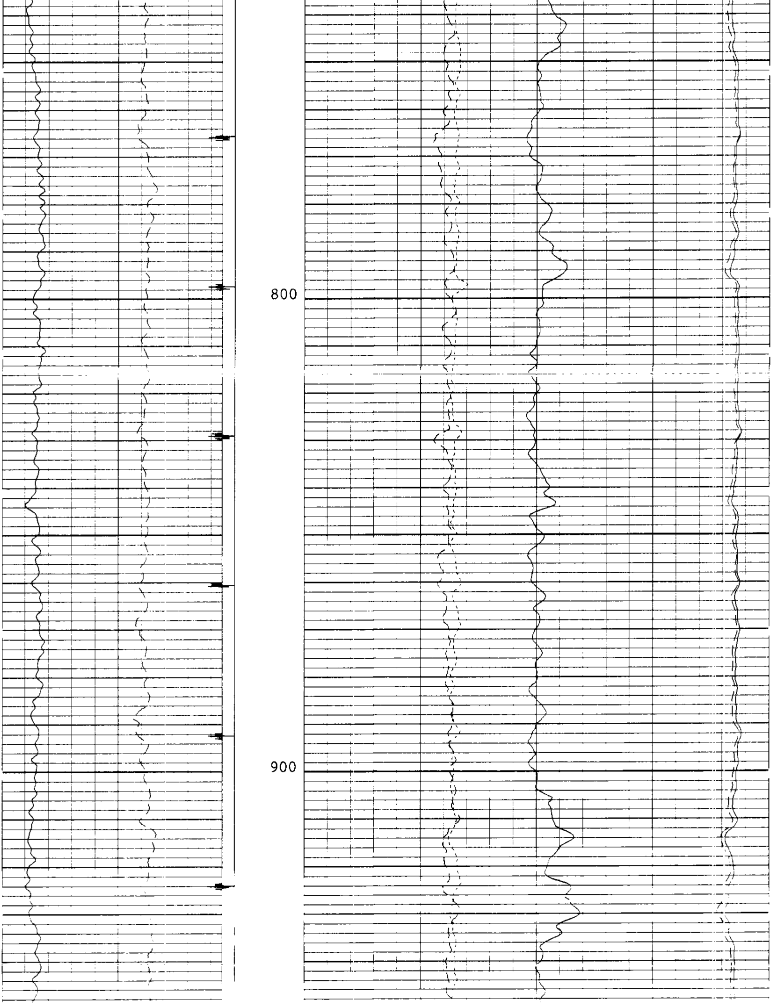
INPUT FILE(S) 6

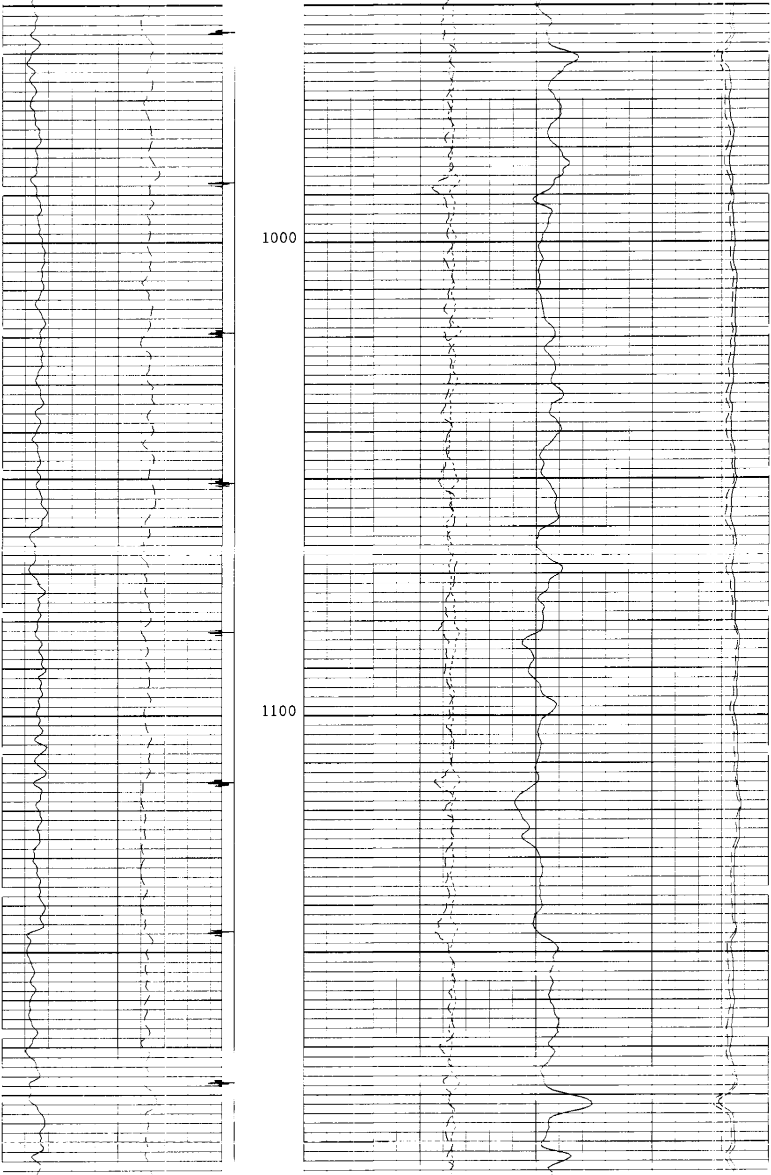
CREATION DATE 19-JAN-1996 15:02

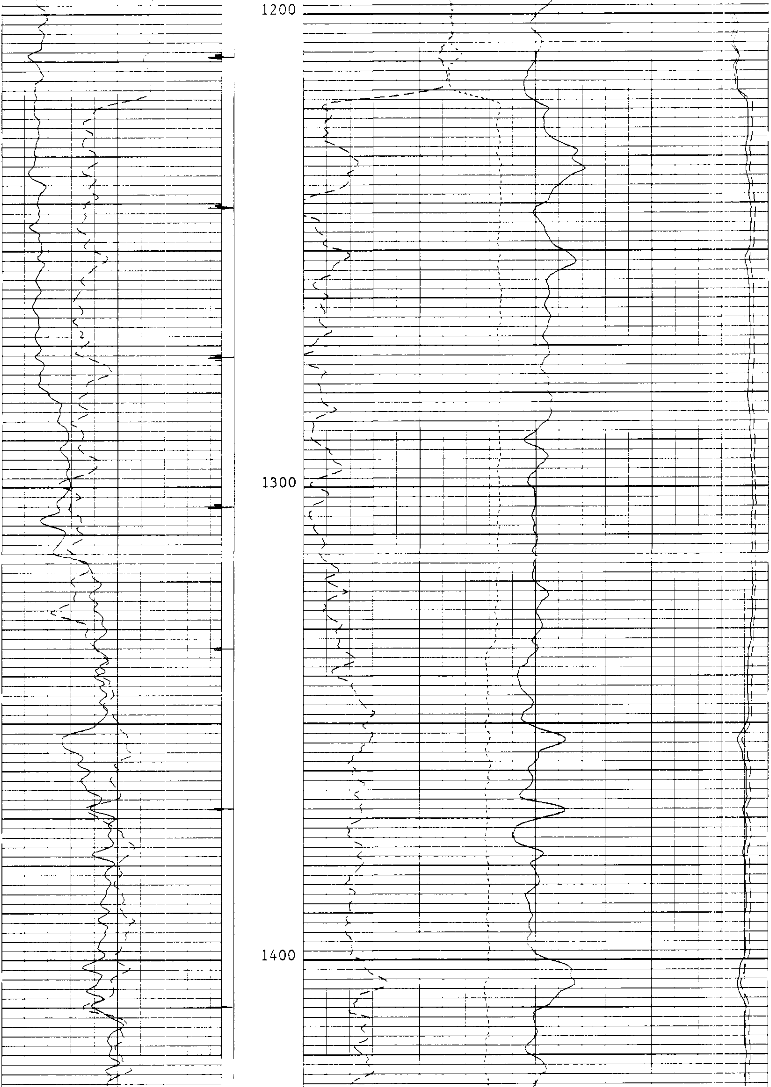
5"/100'

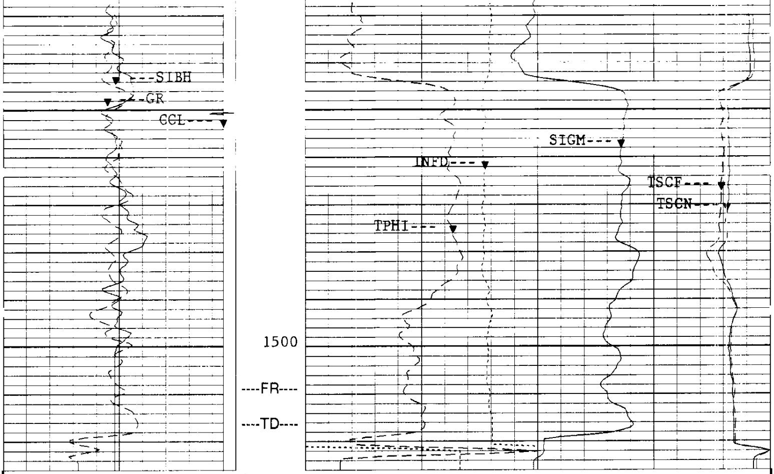












5"/100'

CP 44.2 FILE 1 19-JAN-1996 14:03

INPUT FILE(S) 6

CREATION DATE 19-JAN-1996 15:02

Curve	Left	Right
SIBH(CU)	100.00	0.0
GR(GAPI)	0.0	150.00
CCL	-19.00	1.0000
INFD(CPS)	1500.0	0.0
TPHI	.60000	0.0
TSCF(CPS)	12000.	0.0
TSCN(CPS)	30000.	0.0
SIGM(CU)	60.000	0.0

SENSOR MEASURE POINT TO TOOL ZERO

GR	20.3	FEET	CVEL	0.0	FEET
EXP3	0.0	FEET	EXT	0.0	FEET
EXP1	0.0	FEET	EXP2	0.0	FEET
CCL	29.2	FEET	TENS	-5.0	FEET
F15	6.7	FEET	F16	6.7	FEET
F13	6.7	FEET	F14	6.7	FEET
F11	6.7	FEET	F12	6.7	FEET
F9	6.7	FEET	F10	6.7	FEET
F7	6.7	FEET	F8	6.7	FEET
F5	6.7	FEET	F6	6.7	FEET
F3	6.7	FEET	F4	6.7	FEET
F1	6.7	FEET	F2	6.7	FEET
N15	6.2	FEET	N16	6.2	FEET
N13	6.2	FEET	N14	6.2	FEET
N11	6.2	FEET	N12	6.2	FEET
N9	6.2	FEET	N10	6.2	FEET
N7	6.2	FEET	N8	6.2	FEET
N5	6.2	FEET	N6	6.2	FEET
N3	6.2	FEET	N4	6.2	FEET
N1	6.2	FEET	N2	6.2	FEET

PARAMETERS

PARAMETER		VALUE	UNIT
PP	- Playback Processing	NORM	
DO	- Depth Offset for Logical Unit LI1	-1.50000	F
WMUD	- Weight of Mud	8.50000	LB/G
TD	- Total Depth	1517.00	F
MOT	- Minitron On Time	33.1153	HR
DFPC	- Depth Filter Processing Constant	2	
RGAI	- Ratio Gain	1.00000	
BGAS	- Formation Volume Factor of Gas	650.000	CPS
STBY	- OXYGEN ACTIVATION NEUTRON PULSE OFF TIME	60.0000	S
PULS	- North Pulse or Mark	10.0000	S
CWEI	- Casing Weight	15.5000	LB/F
GTSE	- Generalized Temperature Selection	HPT	
SHT	- Surface Hole Temperature	80.0000	DEGF
BHT	- Bottom Hole Temperature	95.0000	DEGF
NCJT	- NGT Calibration Jig Type	GSRE	
FCHD	- Flag for Cased Hole Diameter	CSID	
PTHR	- Positive Spinner Threshold	10.0000	F/MN
NTHR	- Negative Spinner Threshold	-10.0000	F/MN
TIRA	- Threshold Intercept Ratio	.500000	
	Profile Correction Factor	.830000	
	lation	0.0	DEG
	sity Shift	0.0	G/C3
	rpretation Option	FLOW	
	ing Caliper Shift	0.0	IN
		SAND	
		7.87500	IN
	Status (Open or Cased)	CASE	
	ze	5.50000	IN

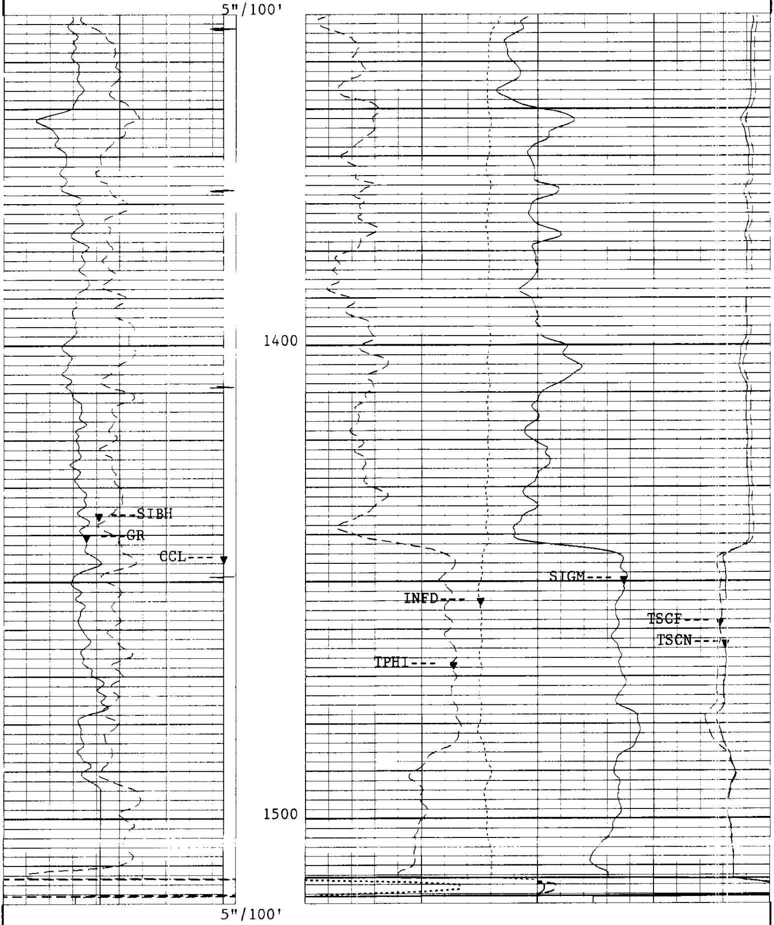
Repeat Section

DATA ACQUIRED LOGGING UP

MINITRON "ON" TIME (MOT): 33.1153 HR

SIBH(CU)		INFD(CPS)	TSCF(CPS)
100.00 0.0		1500.0 0.0	12000. 0.0
GR(GAPI)		TPHI	TSCN(CPS)
0.0 150.00		60000 0.0	30000. 0.0
CCL		SIGM(CU)	
-19.00 1.0000		60.000 0.0	

CP 44.2 FILE 5 19-JAN-1996 13:53 (UP)



CP 44.2 FILE 5 19-JAN-1996 13:46 (UP)

SIBH(CU)	100.00	0.0
GR(GAPI)	0.0	150.00
CCL	-19.00	1.0000
INFD(CPS)	1500.0	0.0
TPHI	.60000	0.0
TSCF(CPS)	12000.	0.0
TSCN(CPS)	30000.	0.0
SIGM(CU)	60.000	0.0

SENSOR MEASURE POINT TO TOOL ZERO

EXP	-5.0	FEET	ATTB	20.3	FEET
CALU	29.2	FEET	DTT	-5.0	FEET
TDTP	6.7	FEET			

PARAMETERS

PARAMETER	VALUE	UNIT
WMUD - Weight of Mud	8.50000	LB/G
TD - Total Depth	1517.00	F
MOT - Minitron On Time	33.0000	HR
DFPC - Depth Filter Processing Constant	2	
RGAI - Ratio Gain	1.00000	
BGAS - Formation Volume Factor of Gas	650.000	CPS
STBY - OXYGEN ACTIVATION NEUTRON PULSE OFF TIME	60.0000	S
PULS - North Pulse or Mark	10.0000	S
CWEI - Casing Weight	15.5000	LB/F
GTSE - Generalized Temperature Selection	HPT	
SHT - Surface Hole Temperature	80.0000	DEGF
BHT - Bottom Hole Temperature	95.0000	DEGF
NCJT - NGT Calibration Jig Type	GSRE	
FCHD - Flag for Cased Hole Diameter	CSID	
PTHR - Positive Spinner Threshold	10.0000	F/MN
NTHR - Negative Spinner Threshold	-10.0000	F/MN
TIRA - Threshold Intercept Ratio	.500000	
VPCF - Velocity Profile Correction Factor	.830000	
DEVI - Hole Deviation	0.0	DEG
FDSH - Fluid Density Shift	0.0	G/C3
QIOP - Flow Interpretation Option	FLOW	
TCSH - Thru Tubing Caliper Shift	0.0	IN
MATR - Matrix	SAND	
BS - Bit Size	7.87500	IN
BHS - BoreHole Status (Open or Cased)	CASE	
CSIZ - Casing Size	5.50000	IN

COMPANY	Oregon Natural Gas			**SCHL.**	**FR**	1509.0 F
				SCHL.	**TD**	1515.0 F
WELL	Columbia County #43-22			**DRLR.**	**TD**	1517.0 F
				Elev:	**KB**	708 9 F
FIELD	Mist				**DF**	
COUNTY	Columbia	**STATE**	Oregon		**GL**	697 5 F

Schlumberger

Dual Burst
Thermal Decay Time Log