COUNTY	COLUMBIA
FIELD	MIST GAS FIELD
LOCATION	S 03-05 16 W 2267 48 & S 86-54-44 E
WELL	OM 12 22 65
COMPANY	NORTHWEST NATURAL GAS

Schlumberger

FORMATION MICROSCANNER GAMMA RAY

COMPANY NORTHWEST NATURAL GAS

WELL OM 12-22-65

FIELD MIST GAS FIELD

COUNTY COLUMBIA **STATE** OREGON

LOCATION S 03-05-16 W 2267.48' & S 86 54 44 E
1224.03' FROM THE NW COR OF SEC 22

API SERIAL NO.	SECT.	TWP.	RANGE
36-009-00326	22	6N	5W

Other Services:
SONIC
FMS
LDT
CNL
GR
CALIPER

Permanent Datum	GROUND LEVEL	**Elev.**	556.0 F	**Elev.: K.B.** 565.0 F
Log Measured From	KELLY BUSHING	9.0 F	**above Perm. Datum**	**D.F.**
Drilling Measured From	KELLY BUSHING			**G.L.** 556.0 F

Date	09-SEPT-1997	
Run No.	TWO	
Depth Driller	2337.0 F	
Depth Logger (Schl.)	2324.0 F	
Btm. Log Interval	2320.0 F	
Top Log Interval	1100.0 F	
Casing-Driller	8 5/8" @ 343.0 F	@ @
Casing-Logger	341.0 F	
Bit Size	@	@ @
Type Fluid in Hole	DRILLING MUD/LSND	
Dens. | Visc.	9.30 LB/G | 40.0 S	
pH | Fld. Loss	9.5	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp.	1.480 OHMM @ 83.0 DEGF	@
Rmf @ Meas. Temp.	1.220 OHMM @ 83.0 DEGF	@
Rmc @ Meas. Temp.	1.860 OHMM @ 83.0 DEGF	@
Source: Rmf | Rmc	FLOWLINE | MUD TESTER	
Rm @ BHT	1.138 OHMM @ 110. DEGF	@
TIME **Circulation Ended**	9-9-97 12:30	
TIME **Logger on Bottom**	SEE LOG	
Max. Rec. Temp.	110. DEGF	
Equip. | Location	8303 | BAKERSFIELD	
Recorded By	GREG PERRY	
Witnessed By	MR MEYER/MR. THOMAS	

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

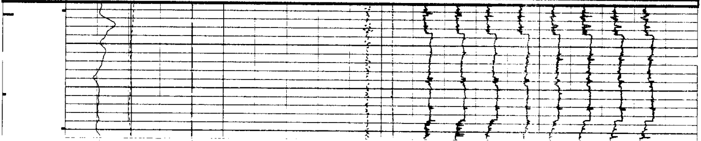
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

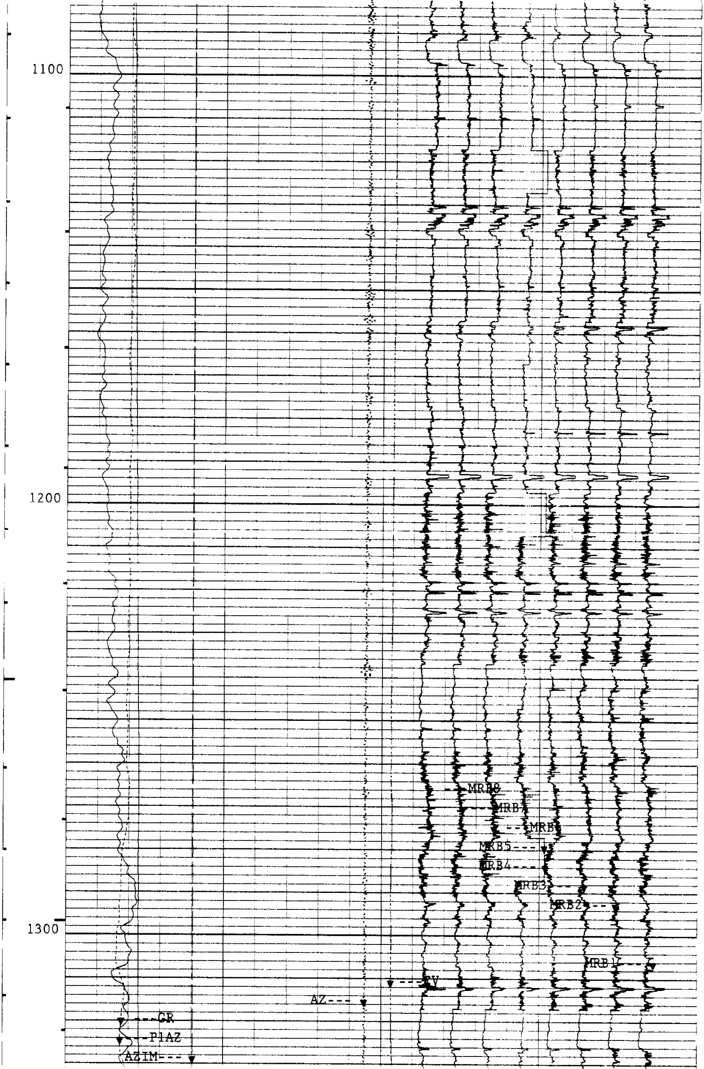
Run No.	TWO	
Service Order No.	1024934	
Drilling Fluid Level	0.0 F	
Salinity		
Rmf @ BHT	.938 OHMM @ 110. DEGF	@
Rmc @ BHT	1.431 OHMM @ 110. DEGF	@
Logging Speed	1800.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	FMS	
Tool Number 2	DRS 4768	
Tool Number 3	NSCE 2979	
Tool Number 4	CNCHA 1345	
Tool Number 5	SGCSA 483	
Tool Number 6	TCCB 1289	
Tool Number 7	TCM 353	
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

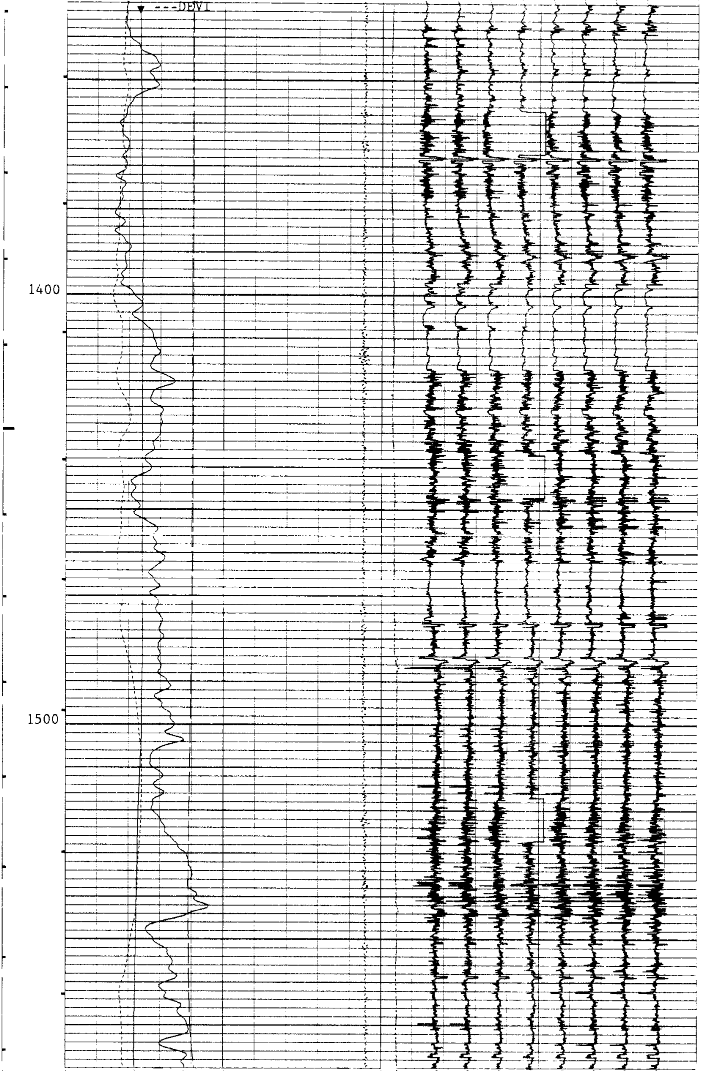
REMARKS:

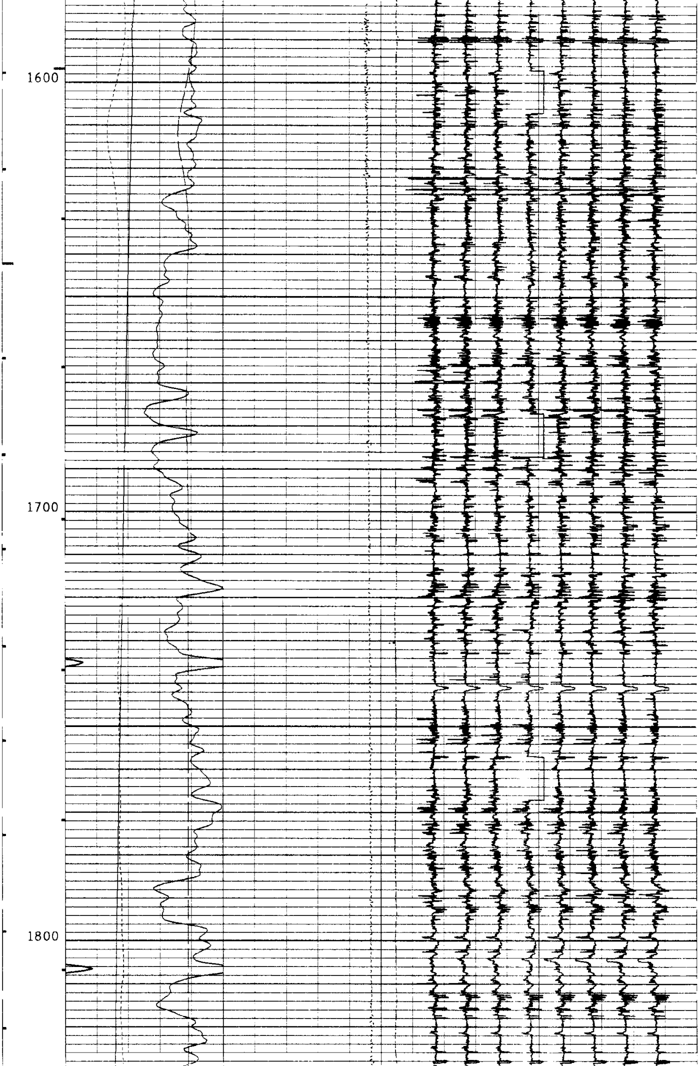
CREW: DAN LEE
THANKS FOR CHOOSING SCHLUMBERGER

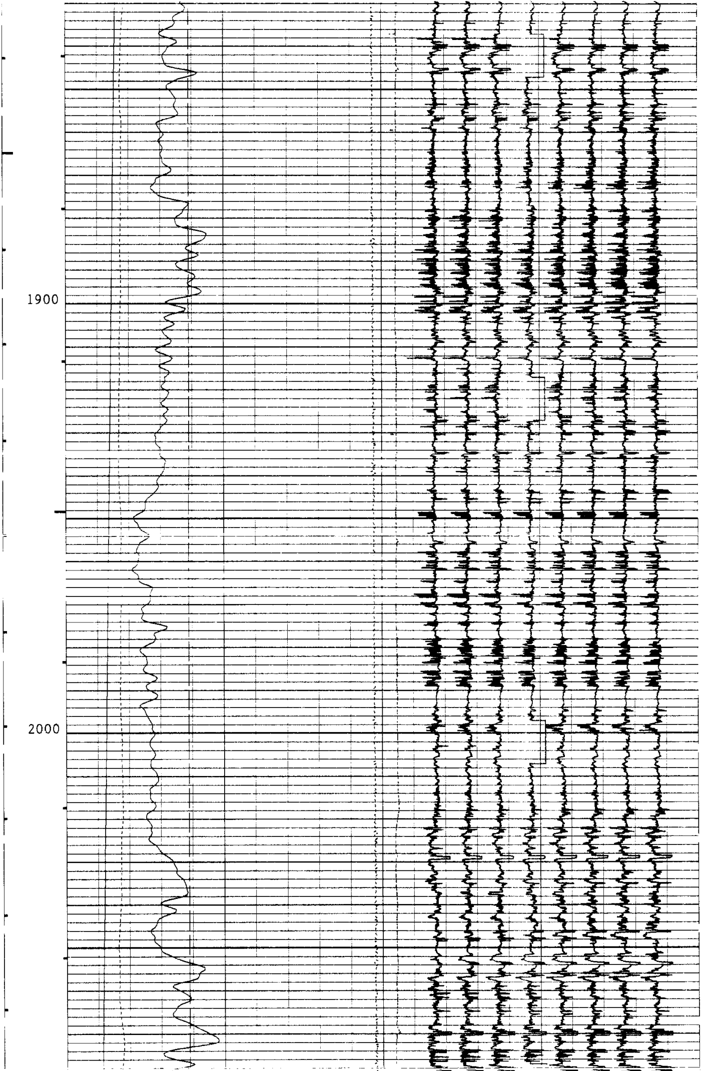
MAIN PASS

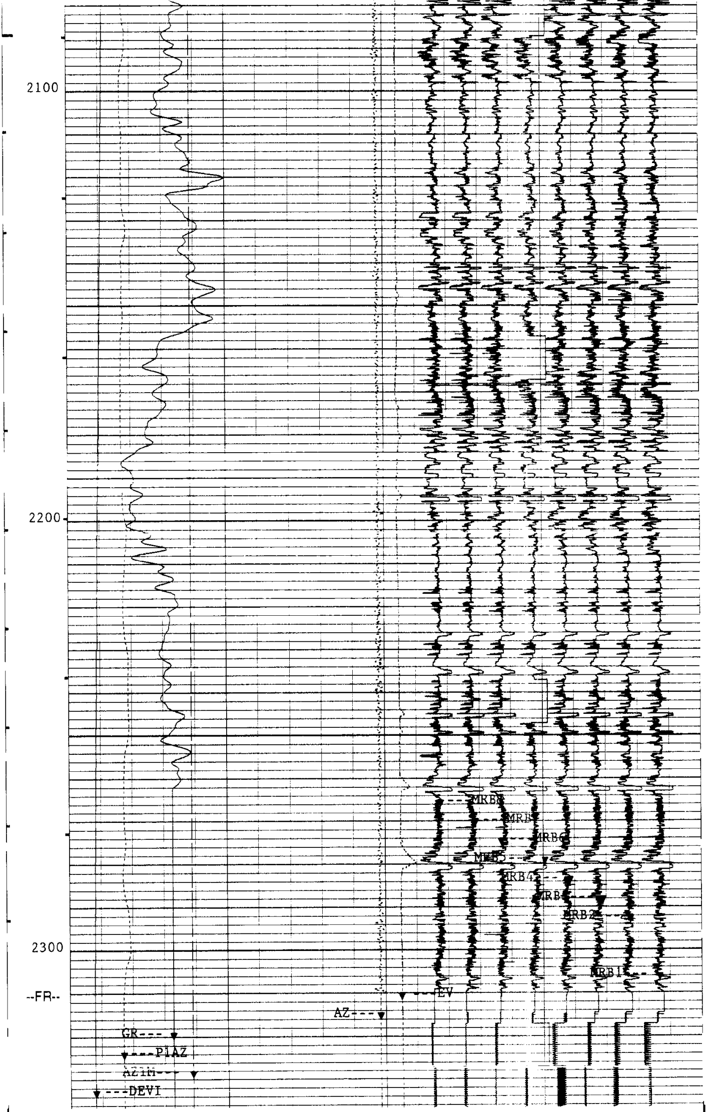








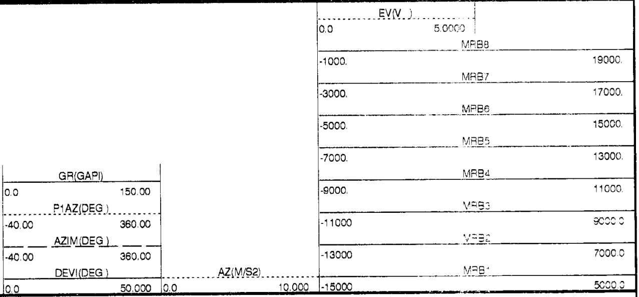




5"/100'

CP 44.2 FILE 21 09-SEP-1997 23:04

INPUT FILE(S)	CREATION DATE
14	09-SEP-1997 20:48



SENSOR MEASURE POINT TO TOOL ZERO

LDTD	29.2	FEET	SGTL	55.7	FEET
MESTC	2.2	FEET	DTT	-2.9	FEET
CNTH	47.2	FEET	GPIT	1.1	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PADT	.500000	DEG	PP	NORM	
DO	-16.5000	F	WMUD	9.30000	LB/G
NCJI	GSRY		DHC	BS	
BFM	LIQU		NPDC	0	
HSCO	YES		SOCO	NO	
MCCO	NO		BSCO	NO	
FSCO	NO		MWCO	NO	
PTCO	NO		CCCO	NO	
SDAT	SOCN		MCOR	NATU	
SOCN	.500000	IN	FSAL	-50000.0	PPM
ANGL	0.0	DEG	GGRD	.0100000	DF/F
BHFL	WATE		MDEN	2.65000	G/C3
FD	1.00000	G/C3	FCSR	0.1"	
AFMO	HAMM		ICMO	AUTO	
MDEC	19.5000	DEG	GLM	DIPM	
ICSD	-50000.0	F	RBS	AUTO	
PTYP	MEC		MLM	1800	
SOFF	-1.00000	IN	CSR	.6"	
ODFO	LIS		XMOD	AUTO	
XGAI	2		XOFF	0	
DPPM	STAN		MATR	SAND	
HC	CALI		FCD	5.50000	IN
SPCR	DISA		DSCA	40	DEG
SBUT	8		INT	4.00000	F
STEP	2.00000	F	SPAN	4	
SANG	35.0000		DPAD	AUTO	
DMAX	90	DEG	ELRA	.500000	IN
SDFA	.900000		HQUA	14	
LQUA	6		STDI	0.0	DEG
STDA	0.0	DEG	CSBL	2	
TDL	2324.00	F	MRT	110.000	DEGF
DFD	9.30000	LB/G	RMFS	1.22000	OHMM
RMS	1.48000	OHMM	MST	83.0000	DEGF
MFST	83.0000	DEGF	BS	7.87500	IN
BHS	OPEN				

REPEAT SECTION

SPEED CORRECTION NOT APPLIED

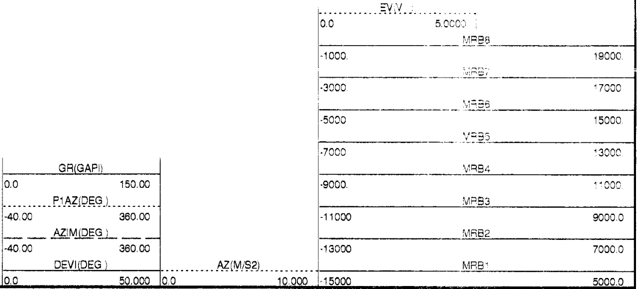
ACCUMULATED INTEGRATION VALUES SUMMARY:

```
Integrated Hole Volume:   95.4148 F3    FROM 2328.50 F    TO 2100.50 F
Integrated Cement Volume: 57.7975 F3    FROM 2328.50 F    TO 2100.50 F
  (ASSUMING 5.50000 IN   O.D. CASING)
```

EVENT MARK SUMMARY:

```
OUTPUT                        INTERVAL       DEPTH TRACK
                              BETWEEN PIPS   EDGE

Integrated Hole Volume        10.0000 F3     LEFT EDGE
Integrated Cement Volume      10.0000 F3     RIGHT EDGE
```



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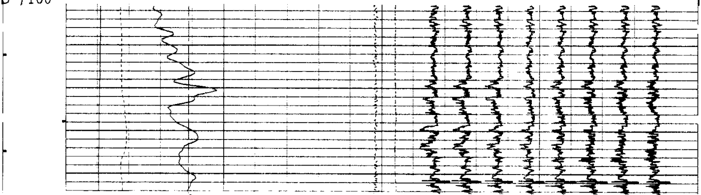
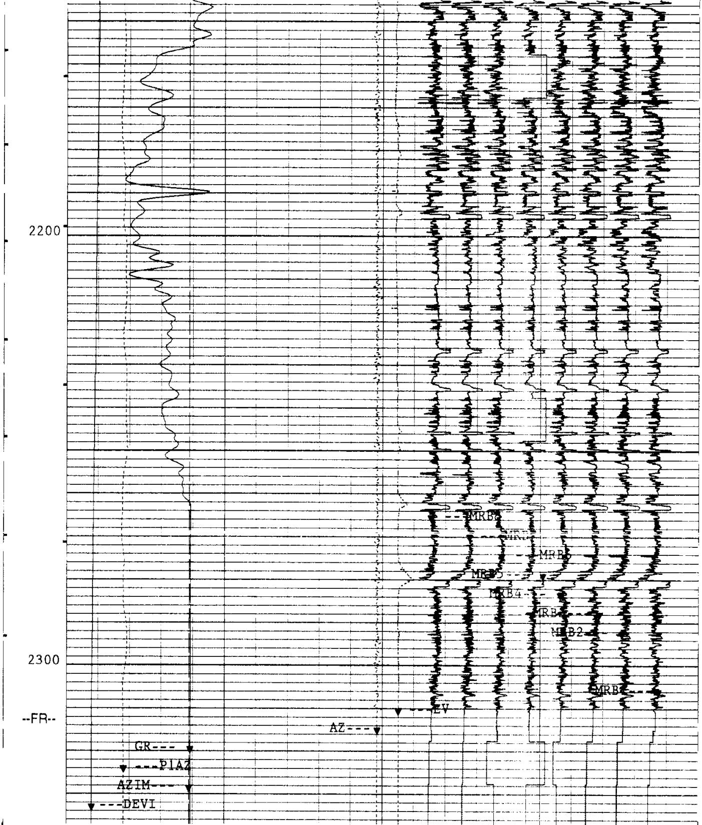
CP 44.2          FILE   20      09-SEP-1997 23:04

                 INPUT FILE(S)  CREATION DATE
                      13        09-SEP-1997 20:30
```

5"/100'





5"/100'

CP 44.2 FILE 20 09-SEP-1997 22:50

INPUT FILE(S) 13

CREATION DATE 09-SEP-1997 20:30

EV(V_)	
0.0	5.0000
MRB8	
-1000.	19000.
MRB7	
-3000.	17000.
MRB6	
-5000.	15000.

Curve	Left	Right
GR(GAPI)	0.0	150.00
P1AZ(DEG)	-40.00	360.00
AZIM(DEG)	-40.00	360.00
DEVI(DEG)	0.0	50.000
AZ(M/S2)	0.0	10.000
MRB5	-7000	13000
MRB4	-9000.	11000
MRB3	-11000	9000.0
MRB2	-13000	7000.0
MRB1	-15000	5000.0

SENSOR MEASURE POINT TO TOOL ZERO

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MESTC	2.2	FEET	DTI	-2.9	FEET
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BFM	LIOU		NPDC	0	
HSCO	YES		SOCO	NO	
MCCO	NO		BSCO	NO	
FSCO	NO		MWCO	NO	
PTCO	NO		CCCO	NO	
SDAT	SOCN		MCOR	NATU	
SOCN	.500000	IN	FSAL	-50000.0	PPM
ANGL	0.0	DEG	GGRD	.0100000	DF/F
BHFL	WATE		MDEN	2.65000	G/C3
FD	1.00000	G/C3	FCSR	0.1"	
AFMO	HAMM		ICMO	AUTO	
MDEC	19.5000	DEG	GLM	DIPM	
ICSD	-50000.0	F	RBS	AUTO	
PTYP	MEC		MLM	1800	
SOFF	-1.00000	IN	CSR	.6"	
ODFO	LIS		XMOD	AUTO	
XGAI	2		XOFF	0	
DPPM	STAN		MATR	SAND	
HC	CALI		FCD	5.50000	IN
SPCR	DISA		DSCA	40	DEG
SBUT	8		INT	4.00000	F
STEP	2.00000	F	SPAN	4	
SANG	35.0000		DPAD	AUTO	
DMAX	90	DEG	ELRA	.500000	IN
SDFA	.900000		HQUA	14	
LQUA	6		STDI	0.0	DEG
STDA	0.0	DEG	CSBL	2	
TDL	2324.00	F	MRT	110.000	DEGF
DFD	9.30000	LB/G	RMFS	1.22000	OHMM
RMS	1.48000	OHMM	MST	83.0000	DEGF
MFST	83.0000	DEGF	BS	7.87500	IN
BHS	OPEN				

COMPANY	NORTHWEST NATURAL GAS			**SCHL.**	**FR**	2320.0 F
				SCHL.	**TD**	2324.0 F
WELL	OM 12-22-65			**DRLR.**	**TD**	2337.0 F
				Elev:	**KB**	565.0 F
FIELD	MIST GAS FIELD				**DF**	
COUNTY	COLUMBIA	**STATE**	OREGON		**GL**	556.0 F

Schlumberger

FORMATION MICROSCANNER
GAMMA RAY