

**DUAL INDUCTION  
BOREHOLE COMPENSATED  
SONIC**  
2"=100'

COMPANY: ENERFIN RESOURCES NORTHWEST  
WELL: HOBBS #22-26-65  
FIELD: MIST  
COUNTY: COLUMBIA STATE: OR  
Sect 25 Twp 6N Rge 5W  
API No: 96-009-00330  
Location: 1744 22 FT SOUTH AND 25 1/2 FT EAST FROM CORNER OF SECTION 25Other Services: NONE  
Date: 06-03-98  
Run No: ONE  
Depth - Driller: 1743 FT  
Bottom - Logger: 1728 FT  
Top - Logged Interval: 488 FT @ 487  
Casing - Driller: 7.00" @ 487  
Casing - Logger: 4.86 FT @ 487  
Bit Size: 6.25"  
Type Fluid in Hole: CYPAN  
Dens | Visc: 9.6 | 39  
Ph | Fluid Loss: 5.8 | 7.0  
Source of Sample: FLOWLINE  
Rm @ Meas. Temp: 3.85 @ 70F  
Rmf @ Meas. Temp: 4.01 @ 70F  
Rmc @ Meas. Temp: 3.35 @ 70F  
Source Rmf | Rmc: MEAS | MEAS  
Rm @ BHT: 2.70 @ 101F  
Rmf @ BHT: 2.81 @ 101F  
Rmc @ BHT: 2.35 @ 101F  
Drilling measured from: K.B. 10.0 ft. above perm. datum  
Permanent Datum: G.L. 621.0' Elev: 621.0' K.B. 631.0' D.F. 621.0' G.L. 621.0'

Service Ticket No.: #34567 API Serial No.: 36-009-00330 PGM Version: XL v3.45

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLES				RESISTIVITY SCALE CHANGES			
Date   Sample No.		ONE		Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth - Driller	1743 FT						
Type Fluid							
In Hole	CYPAN						

RESISTIVITY EQUIPMENT DATA							
Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other	Run No.	Serial No.	Model No.
Rm @ Meas. Temp.	3.85 @ 70F	ONE	DILT #109440	NA	FREE	NA	NA
Rmf @ Meas. Temp.	4.01 @ 70F	ONE	SGRD #108940	NA	FREE	NA	NA
Rmc @ Meas. Temp.	3.35 @ 70F	ONE	SGRD #108940	NA	FREE	NA	NA

EQUIPMENT DATA			
GAMMA	ACOUSTIC	DENSITY	NEUTRON
Run No. ONE	Run No. ONE	Run No.	Run No.
Serial No. 108581	Serial No. A013 262	Serial No.	Serial No.
Model No. NGRT	Model No. 305B BCS	Model No.	Model No.
Diameter 3.625"	No. of Cent. THREE	Diameter	Diameter
Detector Model No. 432	Spacing 2 FEET	Log Type	Log Type
Type SCINT.		Source Type	Source Type
Length 4.00"	LSA [Y/N] NO	Serial No.	Serial No.
Distance to Source NA	FWDA [Y/N] NO	Strength	Strength

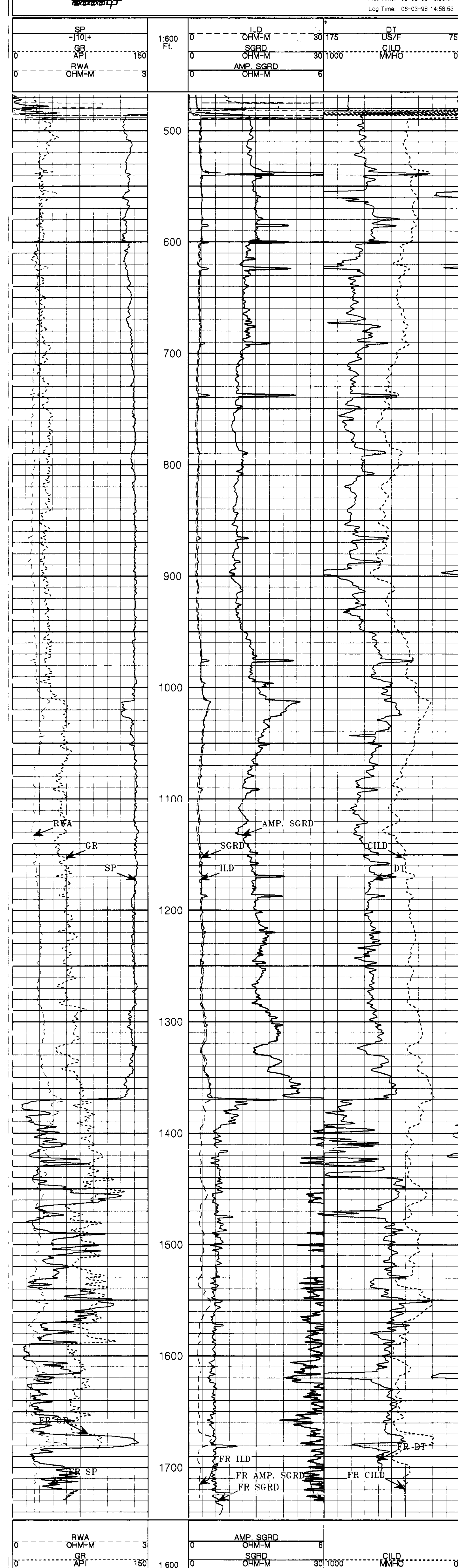
LOGGING DATA														
GENERAL			GAMMA			ACOUSTIC			DENSITY			NEUTRON		
Run	Depth	Speed	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Scale	
No.	From	To	Ft/Min	L	R	L	R	Matrix	L	R	Matrix	L	R	
ONE	1732'	486'	25	0	150	175	75	57						
				API	API	USEC	USEC	USEC						

Remarks:  
NO CALIPER RUN DUE TO SLIM HOLE.  
NO STANDOFFS RUN DUE TO SLIM HOLE.

CREW: K. CLARK, D. ROSENSTEEL. RIG: TAYLOR NO. 7.

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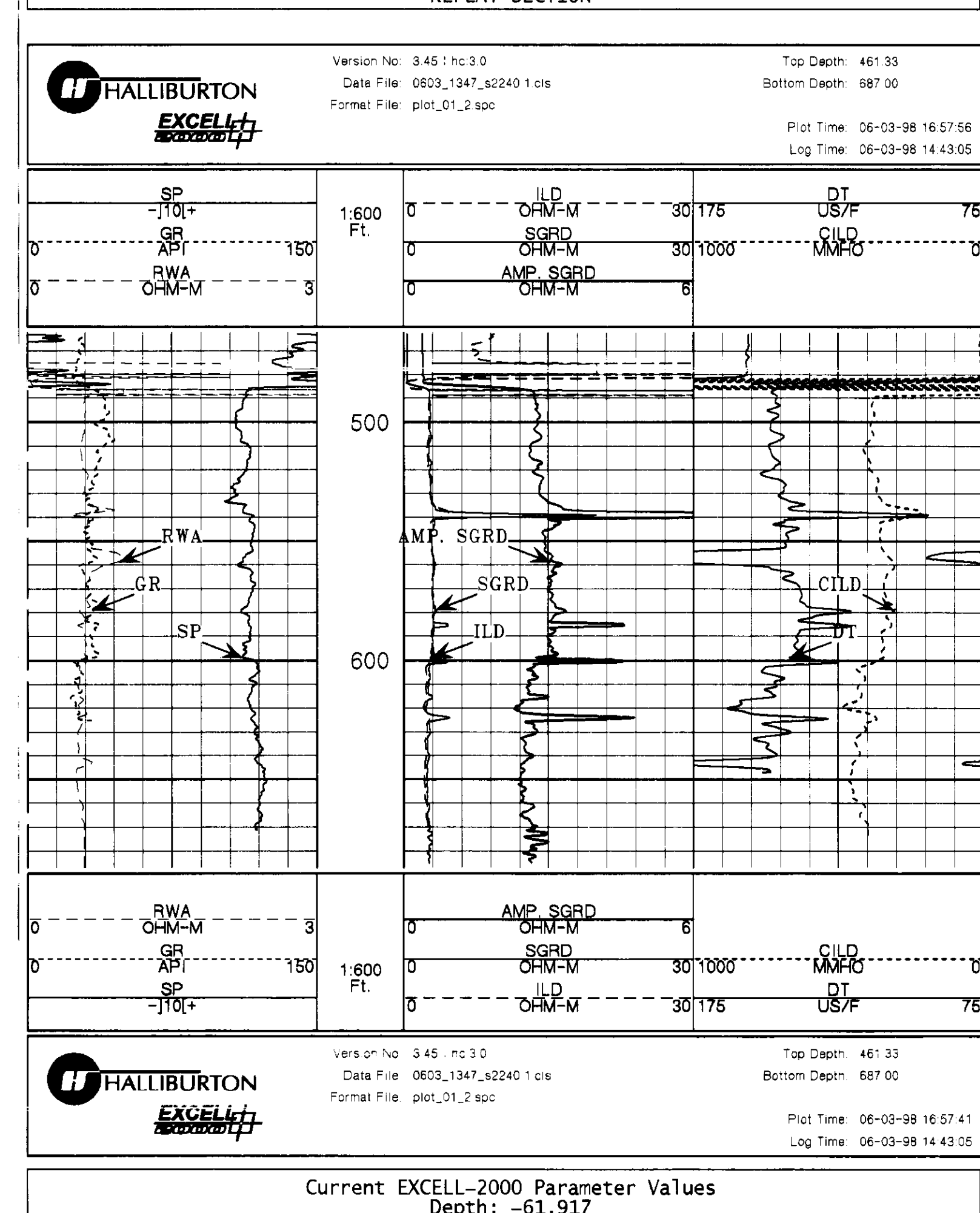
Version No: 3.45 | hc 3.0 Top Depth: 466.33  
Data File: 0603\_1347\_s2240.3.cls Bottom Depth: 1744.75  
Format File: plot\_01\_2.spc Plot Time: 06-03-98 16:59:04  
Log Time: 06-03-98 14:58:53



Version No: 3.45 | hc 3.0 Top Depth: 466.33  
Data File: 0603\_1347\_s2240.3.cls Bottom Depth: 1744.75  
Format File: plot\_01\_2.spc Plot Time: 06-03-98 16:58:23  
Log Time: 06-03-98 14:58:53

REPEAT SECTION

Version No: 3.45 | hc 3.0 Top Depth: 461.33  
Data File: 0603\_1347\_s2240.1.cls Bottom Depth: 687.00  
Format File: plot\_01\_2.spc Plot Time: 06-03-98 16:57:56  
Log Time: 06-03-98 14:43:05



Version No: 3.45 | hc 3.0 Top Depth: 461.33  
Data File: 0603\_1347\_s2240.1.cls Bottom Depth: 687.00  
Format File: plot\_01\_2.spc Plot Time: 06-03-98 16:57:41  
Log Time: 06-03-98 14:43:05

Current EXCELL-2000 Parameter Values  
Depth: -61.917  
Date: 03-Jun-1998 16:40

Mnemonic	Tool	Parameter Description	Value	Units
PERF	DITSHD	PERFORATED INTERVAL	NO	
TD	DITSHD	TOTAL DEPTH	0.	FT
FWSTOK	BCS	DO FWST CALCULATIONS?	YES	
WYLIE	BCS	ACOUSTIC POROSITY EQUATION	HLSF	
DTSHA	BCS	DELTA T SHALE	100.	uSec/Ft.
DTMAT	BCS	DELTA T MATRIX	57.	uSec/Ft.
DTFLU	BCS	DELTA T FLUID?	189.	uSec/Ft.
RHOMAT	BCS	MATRIX DENSITY	2.65	Grams/CC
RHOFLU	SHARED	FLUID DENSITY	1.	Grams/CC
DTFT	SHARED	USE 1 OR 2 FT DT FOR POROSITY	2	Feet
ARCHA	SHARED	ARCHIE A	0.81	
ARCHM	SHARED	ARCHIE M	2.	
FSEL	SHARED	POROSITY SELECTION FOR F	ACOU	
USEFIX	BCS	USE MINIMUM FIXED THRESHOLD.	NO	
USENOI	BCS	USE NOISE THRESHOLD FOR PICK.	NO	
TDU_OK	TDFD	USE TDU DISPLAY CONTROLS?	YES	
DI_OK	DIND	DO DUAL INDUCTION CALCULATION?	YES	
SG_OK	SGRD	DO SHORT GUARD CALCULATIONS?	YES	
XPHLOC	XP_RWA	CROSSPLOT SELECTION FOR XPHI	XPL7	
CASED	SHARED	IS THE HOLE CASED?	NO	
GR_OK	GAMMA	DO GAMMA CALCULATIONS?	YES	
CASEOD	GAMMA	CASING DIAMETER (COD)	2.895	Inches
MUDWT	GAMMA	BOREHOLE FLUID WEIGHT	9.5	Pounds/Gal.
GRSO	GAMMA	GAMMA RAY STANDOFF	0.	Inches
BS	GAMMA	BIT SIZE	6.25	Inches