

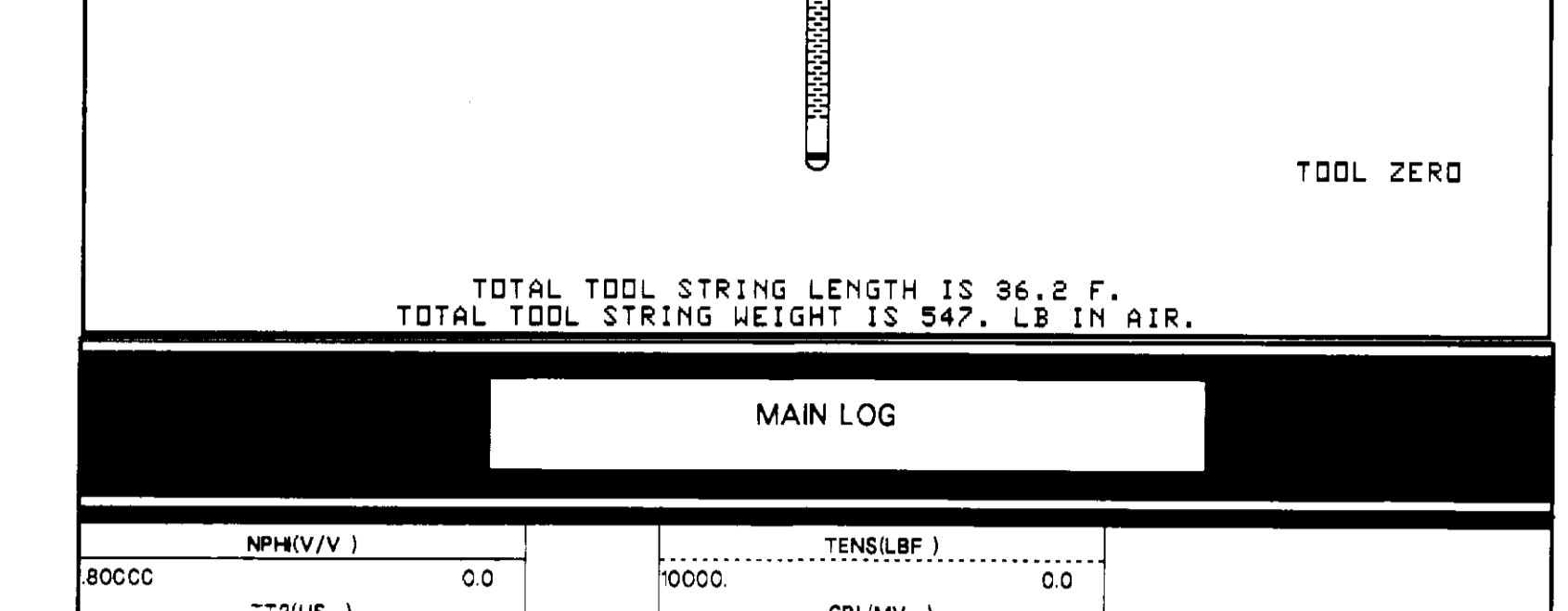
COMPANY	NAHAMANA AND WEAGANT ENERGY CO.	WELL	"KING" LF #31-36-65	FIELD	MIST	COUNTY	COLUMBIA	STATE	OREGON
LOGGING UNIT	NAHAMANA AND WEAGANT ENERGY CO.	LOGGING NO.	36-009-00303	DATE	16-AUG-93	LOGGING TIME	09:19	LOGGING LOCATION	2830' W AND 980' S
LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD	LOGGING METHOD
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The well name, location and borehole reference data were furnished by the customer.

All interpretations are optional 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 willful 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.	484894
Logging Speed	2800.0 F/H
EQUIPMENT DATA	
Tool Number 1	SLS-WA
Tool Number 2	SLC-MA
Tool Number 3	CNC-A
Tool Number 4	CAL-R
Tool Number 5	SLM-DA 443
Tool Number 6	NLM-BC 456
Tool Number 7	
Tool Number 8	
Tool Number 9	
Tool Number 10	
Tool Number 11	
Tool Number 12	

REMARKS: CORRELATED TO SWS INDUCTION/SONIC 3-AUG-93
CEMENT TOP FOUND AT 736
LOGGED UNDER 0 PSI

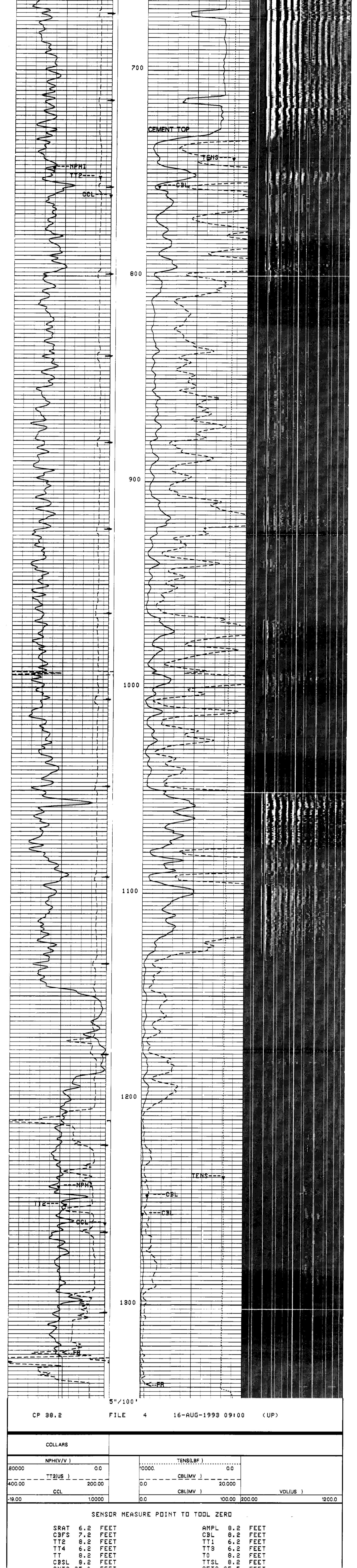


TOTAL TOOL STRING LENGTH IS 36.2 F.
TOTAL TOOL STRING WEIGHT IS 547. LB IN AIR.

MAIN LOG

80000	NPH(V/V)	0.0	TENS(LBF)	0.0
400.00	TT2(US)	200.00	CBL(MV)	20.000
18.00	CCL	10000	CBL(MV)	100.00
			VDL(US)	1200.0

CP 38.2 FILE 4 16-AUG-1993 09:19 (UP)



CP 38.2 FILE 4 16-AUG-1993 09:10 (UP)

COLLARS

80000	NPH(V/V)	0.0	TENS(LBF)	0.0
400.00	TT2(US)	200.00	CBL(MV)	20.000
18.00	CCL	10000	CBL(MV)	100.00
			VDL(US)	1200.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	6.2	FEET	AMPL	8.2	FEET
CBFS	7.2	FEET	CBL	8.2	FEET
TT2	8.2	FEET	TT1	6.2	FEET
TT4	6.2	FEET	TT3	6.2	FEET
TT	8.2	FEET	TO	8.2	FEET
CBSL	8.2	FEET	TTSL	8.2	FEET
CNTC	25.0	FEET	CFTC	25.0	FEET
CCL	32.7	FEET	TENS	6.2	FEET
NDIS	6.2	FEET	TNRA	26.0	FEET

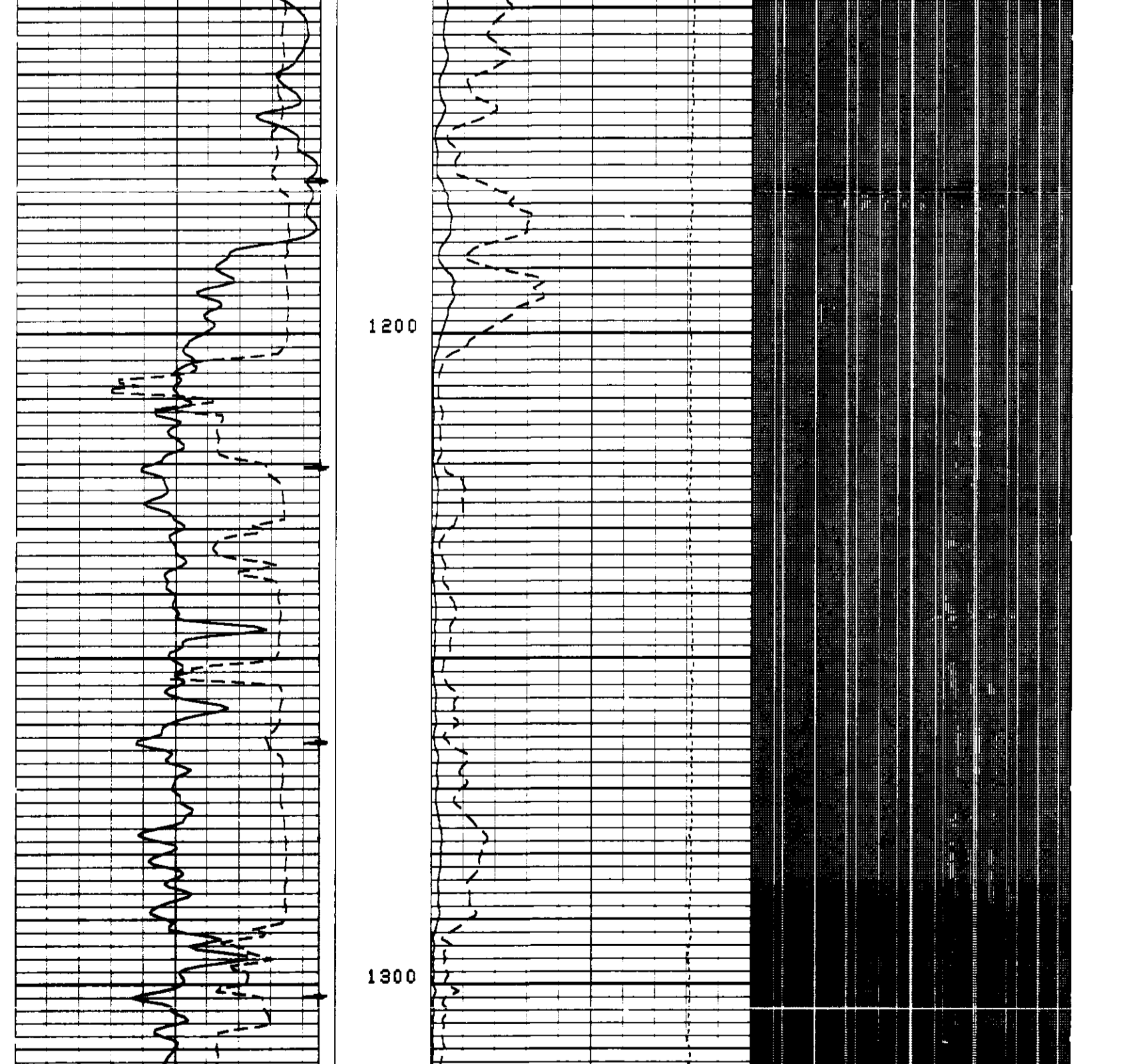
PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SMB	ALLD		VDLR	2IN	
VDLO	D3		TOCA	DISA	
RATE	15	HZ	DG	/20	
DETE	E1		NMSG	210	US
CBLG	35	US	AMPL	2	
CBL	UT		HFM	1	
SS	MEDI		TOP	ALLD	
DTF	199.000	US/F	DTM	56.0000	US/F
CDS	100.000		SPFS	R-H	
WMUD	8.30000	LB/G	DPPM	STAN	
MATR	SAND		HC	BS	
NPDC	0		HSCD	YES	
SDCO	NO		MCCO	NO	
BSCD	NO		FSCD	NO	
MUCD	NO		PTCD	NO	
CCCD	NO		SDAT	SDCN	
MCDR	NATU		SDCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
CSTR	1500.00	PSIA	CHEI	10.5000	LB/F
DHCO	512	US	DSIN	5	US
DDEL	200	US	STEM	-50000.0	DEGF
DFL	-50000.0	LB/G	RMFS	-50000.0	DHMM
RMS	-50000.0	DHMM	MST	-50000.0	DEGF
MFST	-50000.0	DHMM	BS	7.87500	IN
BHS	CASE		CSIZ	4.50000	IN

REPEAT SECTION

80000	NPH(V/V)	0.0	TENS(LBF)	0.0
400.00	TT2(US)	200.00	CBL(MV)	20.000
18.00	CCL	10000	CBL(MV)	100.00
			VDL(US)	1200.0

CP 38.2 FILE 3 16-AUG-1993 08:57 (UP)



CP 38.2 FILE 3 16-AUG-1993 08:50 (UP)

COLLARS

80000	NPH(V/V)	0.0	TENS(LBF)	0.0
400.00	TT2(US)	200.00	CBL(MV)	20.000
18.00	CCL	10000	CBL(MV)	100.00
			VDL(US)	1200.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	6.2	FEET	AMPL	8.2	FEET
CBFS	7.2	FEET	CBL	8.2	FEET
TT2	8.2	FEET	TT1	6.2	FEET
TT4	6.2	FEET	TT3	6.2	FEET
TT	8.2	FEET	TO	8.2	FEET
CBSL	8.2	FEET	TTSL	8.2	FEET
CNTC	25.0	FEET	CFTC	25.0	FEET
CCL	32.7	FEET	TENS	6.2	FEET
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RATE	15	HZ	DG	/20	
DETE	E1		NMSG	210	US
CBLG	35	US	AMPL	2	
CBL	UT		HFM	1	
SS	MEDI		TOP	ALLD	
DTF	199.000	US/F	DTM	56.0000	US/F
CDS	100.000		SPFS	R-H	
WMUD	8.30000	LB/G	DPPM	STAN	
MATR	SAND		HC	BS	
NPDC	0		HSCD	YES	
SDCO	NO		MCCO	NO	
BSCD	NO		FSCD	NO	
MUCD	NO		PTCD	NO	
CCCD	NO		SDAT	SDCN	
MCDR	NATU		SDCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
CSTR	1500.00	PSIA	CHEI	10.5000	LB/F
DHCO	512	US	DSIN	5	US
DDEL	200	US	STEM	-50000.0	DEGF
DFL	-50000.0	LB/G	RMFS	-50000.0	DHMM
RMS	-50000.0	DHMM	MST	-50000.0	DEGF
MFST	-50000.0	DHMM	BS	7.87500	IN
BHS	CASE		CSIZ	4.50000	IN

COMPANY	NAHAMANA AND WEAGANT ENERGY COMPANY	SCHL. FR	1341.0 F
WELL	"KING" LF #31-36-65	SCHL. TD	1347.0 F
FIELD	MIST	DRLR. TD	1348.0 F
COUNTY	COLUMBIA	STATE	CALIFORNIA
		ELEV.	KB 764.5 F
		DF	763.5 F
		QL	764.5 F