

COMPANY CARBON ENERGY INT.
WELL WNS MENASHA #32-1
FIELD WILDCAT
COUNTY COOS
STATE OREGON

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 willful negligence or 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.	824589
Drilling Fluid Level	5.0 F
Salinity	
Rm @ BHT	4.281 OHMM @ 89.0 DEG F
Rm @ BHT	2.794 OHMM @ 86.0 DEG F
Logging Speed	2000.0 F/HR

EQUIPMENT DATA

Tool Number 1	MEAC-A
Tool Number 2	MEOS-C
Tool Number 3	SEC-CA
Tool Number 4	TCMAB-1516
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 SWS INDUCTION LOG
 SOME HEADER INFORMATION NOT AVAILABLE AT WELLSITE

Main Log - 5/100'

MEST CYBERDIP

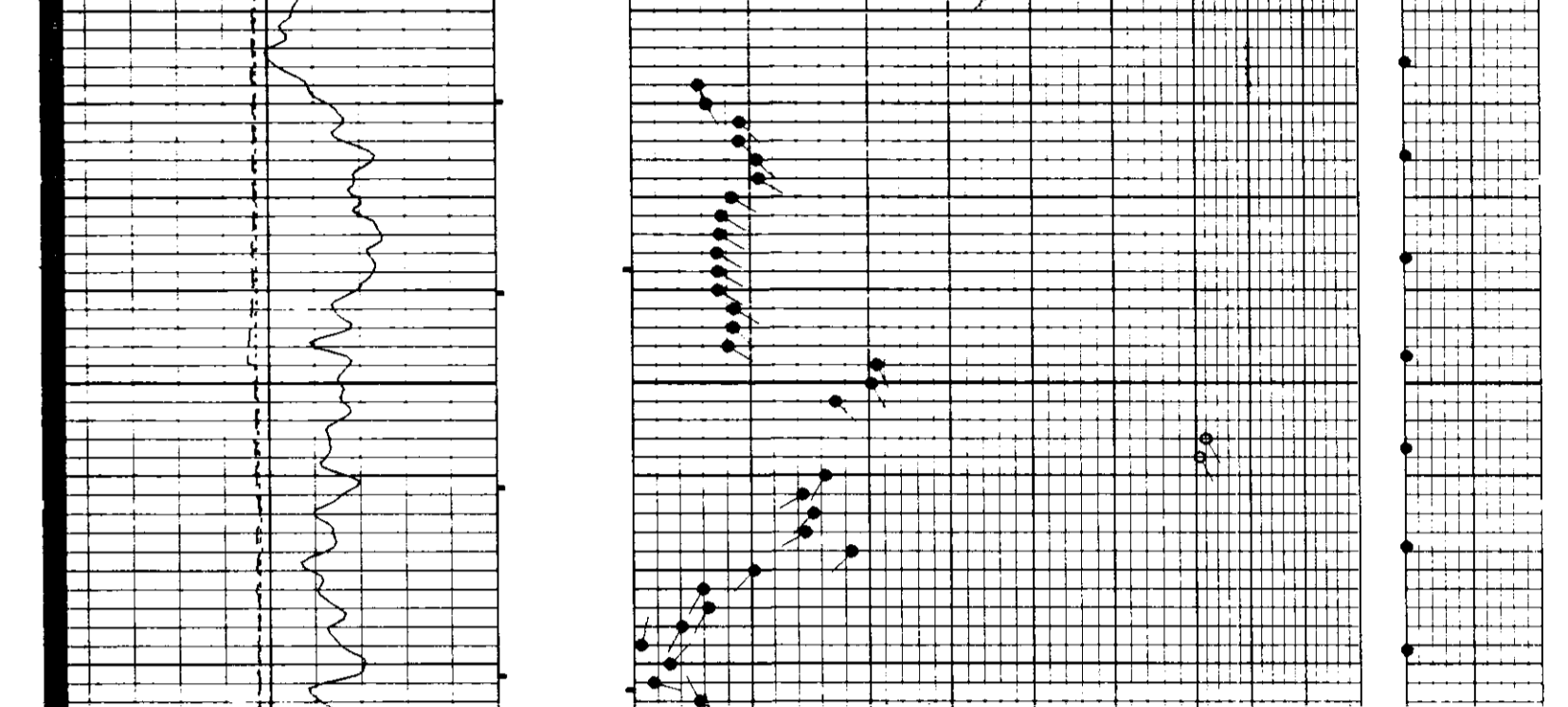
STRUCTURAL DIP NOT REMOVED
 MIRROR IMAGES NOT REMOVED

SPEED CORRECTION NOT APPLIED

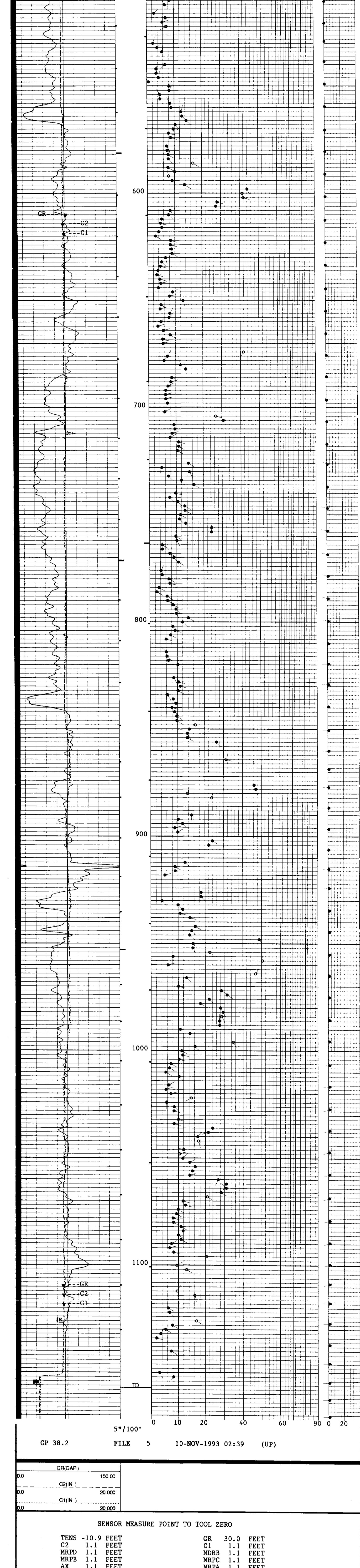
ACCUMULATED INTEGRATION VALUES SUMMARY:
 Integrated Hole Volume: 529.621 F3 FROM 1157.00 F TO 154.000 F
 Integrated Cement Volume: 262.363 F3 FROM 1157.00 F TO 154.000 F
 (ASSUMING 7.00000 IN O.D. CASING)

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE



CP 38.2 FILE 5 10-NOV-1993 03:10 (UP)



CP 38.2 FILE 5 10-NOV-1993 02:39 (UP)

SENSOR MEASURE POINT TO TOOL ZERO

TENS -10.9 FEET	GR 30.0 FEET
C2 1.1 FEET	C1 1.1 FEET
MRPD 1.1 FEET	MRB 1.1 FEET
MRPB 1.1 FEET	MRPA 1.1 FEET
AX 1.1 FEET	AY 1.1 FEET
AZ 1.1 FEET	FX 1.1 FEET
FY 1.1 FEET	FZ 1.1 FEET
FCAX 1.1 FEET	FCAY 1.1 FEET
FTIM 1.1 FEET	

PARAMETERS

PARAMETER	VALUE	UNIT
PADT - Presentation Allow Disallow Threshold	.500000	DEG
NCJT - NCT Calibration Jig Type	GSRY	
FCSP - Fast Channel Sample Rate	0.1"	
AFMO - Accelerometer Filtering Mode	HARM	
ICMO - Inclinometry Computation Mode	AUTO	
MDEC - Magnetic Field Declination	19.0000	DEG
GLM - GPIT Logging Mode	DIPM	
ICSD - Inclinometry Computation Stop Depth	154.0000	F
RBS - Resistivity Button Selection	AUTO	
PTYP - Platform Type	MEC	
MLM - MEST Logging Mode	DIPM	
SOFF - Stand Off	-6"	
CSR - Curves Sampling Rate	1.00000	IN
ODFO - Output Data Format	RAW	
XMOD - EMEX Voltage Regulation Mode	AUTO	
XGAI - Gain Setting	2	
XOFF - Offset Setting	0	
YCD - Future Casing Diameter	7.00000	IN
DSCA - Speed Correction Constant	20	DEG
SBUT - Set of Buttons Selected	ALL	
INT - Correlation Interval Length	4.00000	F
STEP - Step Length between Correlations	2.00000	F
SPAN - Span of Correlation Sample	AUTO	
SANG - S Wave Arrival Angle	60.0000	DEG
DPAD - Disallow Dip	AUTO	
ELRA - Maximum Dip Plotted	90	DEG
AFMO - Accelerometer Filtering Mode	.500000	IN
SDFA - Side-By-Side Distance Factor	19.00000	IN
HQUA - High Quality Dip	14	
LQUA - Low Quality Dip	6	
STDI - Structural Dip	0.0	DEG
STDA - Structural Azimuth Value	0.0	DEG
CSBL - CSB Number of Levels	8	DEG
BS - Bit Size	2.75000	IN
BHS - BoreHole Status (Open or Cased)	OPEN	

Repeat Section - 5/100'

MEST CYBERDIP

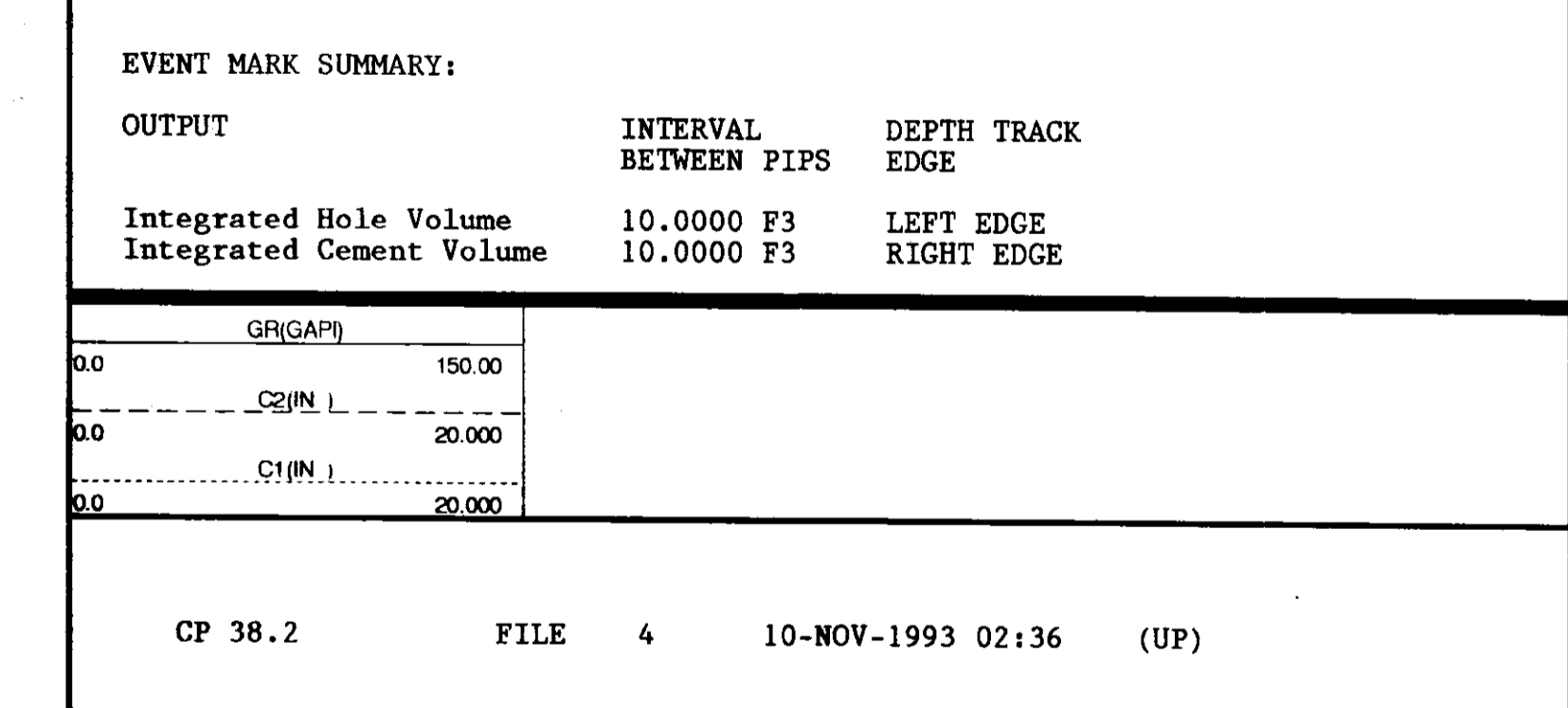
STRUCTURAL DIP NOT REMOVED
 MIRROR IMAGES NOT REMOVED

SPEED CORRECTION NOT APPLIED

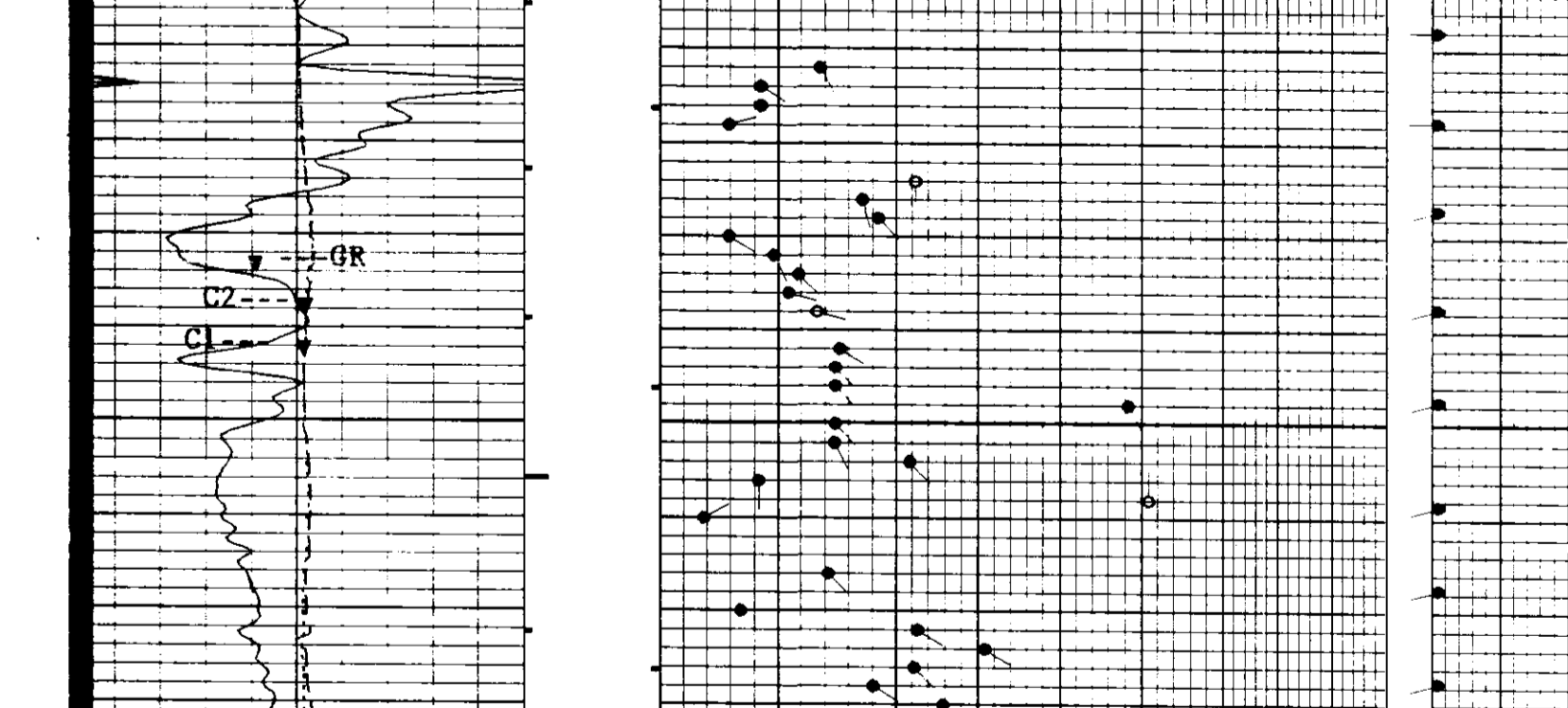
ACCUMULATED INTEGRATION VALUES SUMMARY:
 Integrated Hole Volume: 139.904 F3 FROM 1157.00 F TO 885.500 F
 Integrated Cement Volume: 67.9185 F3 FROM 1157.00 F TO 885.500 F
 (ASSUMING 7.00000 IN O.D. CASING)

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE



CP 38.2 FILE 4 10-NOV-1993 02:36 (UP)



CP 38.2 FILE 4 10-NOV-1993 02:25 (UP)

SENSOR MEASURE POINT TO TOOL ZERO

TENS -10.9 FEET	GR 30.0 FEET
C2 1.1 FEET	C1 1.1 FEET
MRPD 1.1 FEET	MRB 1.1 FEET
MRPB 1.1 FEET	MRPA 1.1 FEET
AX 1.1 FEET	AY 1.1 FEET
AZ 1.1 FEET	FX 1.1 FEET
FY 1.1 FEET	FZ 1.1 FEET
FCAX 1.1 FEET	FCAY 1.1 FEET
FTIM 1.1 FEET	

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PADT	.500000	DEG	NCJT	GSRY	
FCSP	0.1"		AFMO	HARM	
ICMO	AUTO		MDEC	19.0000	DEG
GLM	DIPM		ICSD	154.0000	F
RBS	AUTO		PTYP	MEC	
MLM	DIPM		SOFF	-6"	
CSR	1.00000	IN	ODFO	RAW	
XMOD	AUTO		XGAI	2	
XOFF	0		YCD	7.00000	IN
SPCR	DISA		DSCA	20	DEG
SBUT	ALL		INT	4.00000	F
STEP	2.00000	F	SPAN	AUTO	
SANG	60.0000	DEG	DPAD	AUTO	
DMAX	90	DEG	ELRA	.500000	IN
SDFA	.900000	IN	HQUA	14	
LQUA	6		STDI	0.0	DEG
STDA	0.0	DEG	CSBL	2	DEG
BS	8.75000	IN	BHS	OPEN	

Calibration Summary

BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED: 10-NOV-1993 01:59
 PROGRAM FILE: TDIP (VERSTON 38.2 92/10/12 92/10/12)

SCTL DETECTOR CALIBRATION SUMMARY

MEASURED	BKGD	JIG	CALIBRATED	UNITS
GR	33	184	165	GAPI

BACK: 10-NOV-1993 01:54 JIG: 10-NOV-1993 01:58 COMP: 10-NOV-1993 01:59

MEST CALIPER CALIBRATION SUMMARY

MEASURED	SMALL	LARGE	CALIBRATED	SMALL	LARGE	UNITS
C1	8.67	12.46	8.00	12.00		IN
C2	8.68	12.40	8.00	12.00		IN

SMALL: 10-NOV-1993 01:51 LARGE: 10-NOV-1993 01:52 COMP: 10-NOV-1993 01:52

GPIC CALIBRATION SUMMARY

MAGNETOMETER MANUFACTURER CODE: 3
 MAGNETOMETER SERIAL NUMBER: 87
 MAGNETOMETER REFERENCE TEMPERATURE: 20.0 DEGC

GPIC CALIBRATION SUMMARY

ACCELEROMETER MANUFACTURER CODE: 3
 ACCELEROMETER SERIAL NUMBER: 336
 ACCELEROMETER REFERENCE TEMPERATURE: 20.0 DEGC

CP 38.2 FILE 8 10-NOV-1993 01:59

COMPANY CARBON ENERGY INT. **SCHL** FR 1155.0 F

WELL WNS MENASHA #32-1 **DHLR** TD 1158.0 F

FIELD WILDCAT **Elev**: KB 183.0 F

COUNTY COOS **STATE** OREGON **GL** 165.0 F

Schlumberger CYBERDIP