

COMPANY: ARCO EXPLORATION COMPANY  
WELL: COLUMBIA COUNTY 044-21

FIELD: SOUTH MIST  
COUNTY: COLUMBIA  
STATE: OREGON  
LOCATION: U.S. AND 4221 W FROM  
SECTION: 21 CORNER OF T1P 6N  
REEL: 30

PERFORATION DATA: GL  
ELEMENT MEASUREMENT: K 8.6 F  
LOG MEASURED FROM: K 8.6 F  
DRILG. MEASURED FROM: K 8.6 F

DATE: 7 FEB 85  
RUN NO: 1

DEPTH-DRILLER: 4300.0 F  
DEPTH-LOGGER: 4300.0 F  
TOP LOG INTERVAL: 480.0 F  
CASING-DRILLER: 990 F  
CASING-LOGGER: 990 F  
BIT SIZE: 8 3/4"  
DEPTH: 4300 F

OTHER SERVICES:  
DL-BHC  
FIC-CML-GR  
MCI  
CPI

API SERIAL NO:  
36 009 001

PROGRAM  
TAPE NO: 4  
SERIAL NO: 1  
ORDER NO: 42209

ELEVATIONS:  
N 1: 880.0 F  
N 2: 880.0 F  
GL: 889.6 F

CONFIDENTIAL

TYPE FLUID IN HOLE: GEL/LIQMD  
DENSITY: 11.6 LB/G  
VISCOSITY: 51.0 S  
PH: 8.0  
FLUID LOSS: 6.1 C3  
SOURCE OF SAMPLE: MUDDPIT  
RMF: 2.640 DHMM AT 64.0 DEGF  
RMC: 2.700 DHMM AT 48.0 DEGF  
RMC/RMF: 3.590 DHMM AT 48.0 DEGF  
RM AT BHT: MEASURED/MEASURED  
RMC AT BHT: 1.529 DHMM AT 108. DEGF  
RMC AT BHT: 1.291 DHMM AT 108. DEGF  
RMC AT BHT: 1.716 DHMM AT 108. DEGF

TIME CIRC. STOPPED: 03:00 2-6  
TIME LOGGER ON BTN.: 05:00 2-7

MAX. REC. TEMP: 108.0 DEGF

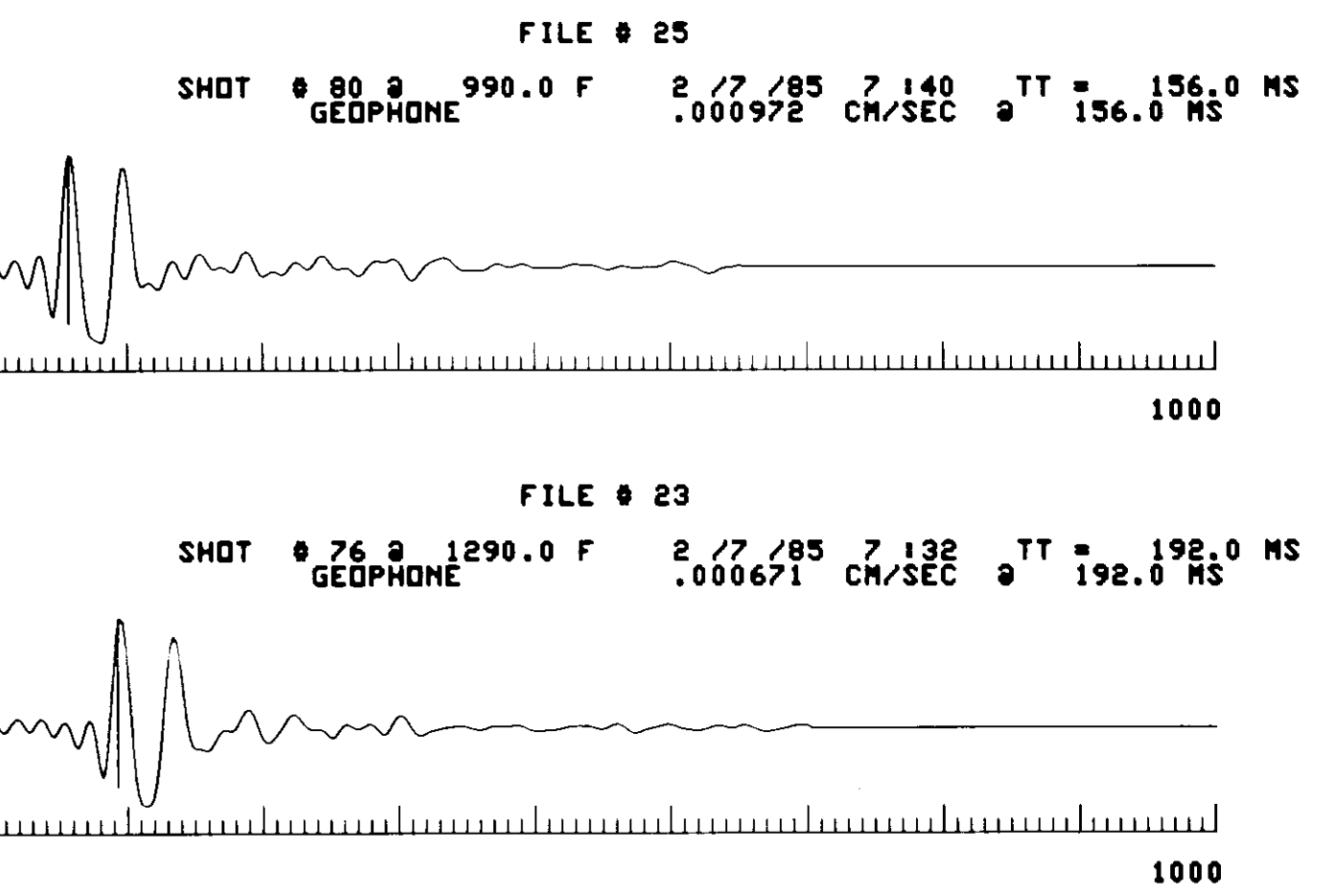
LOGGING UNIT NO: 8128  
LOGGING UNIT LOC: SACRAMENTO  
RECORDED BY: MAYER/PILCH  
WITNESSED BY: ANDERSON

REMARKS:  
1 HERTZ BSK USED AT 280' OFFSET @ N250 AZIM.  
SWEEP: 13 SECONDS, 12-56 HZ, UP, TAPER=.5, RATE= 3.375HZ/SE

EQUIPMENT NUMBERS-  
MSH 1735 WSN 385 WSI 729 CAC 967  
HPS 968 WSA 953 WSC 930 CPU 96

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 ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

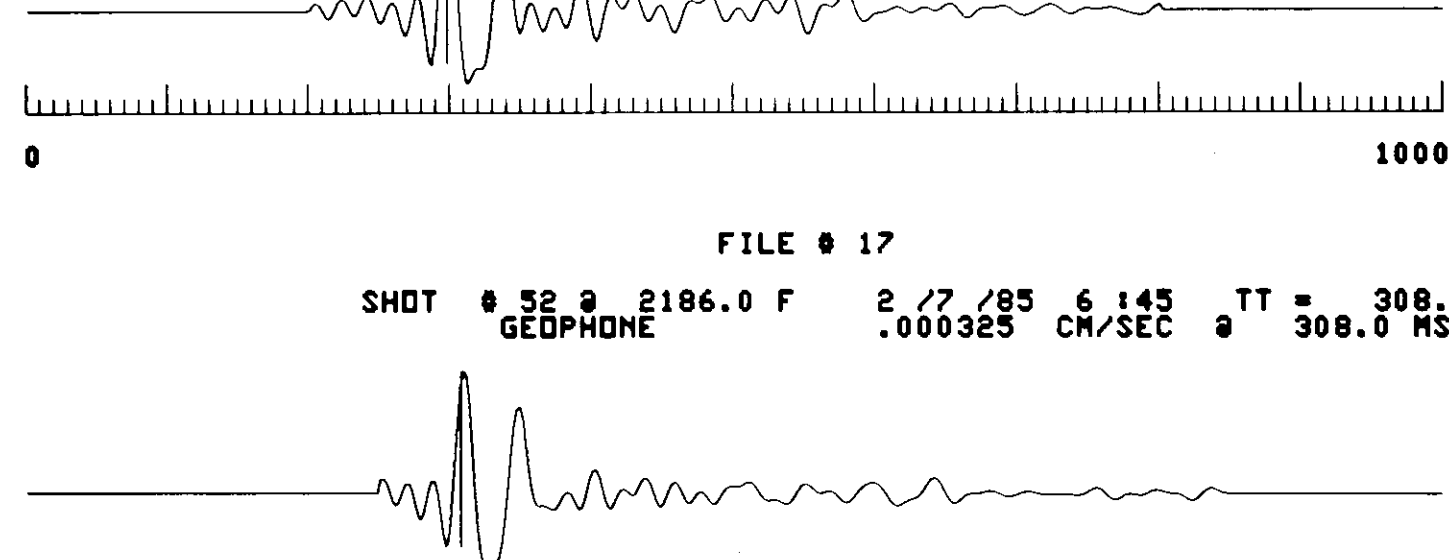
FILE 30 07-FEB-85 08:22  
DATA ACQUIRED 01-JAN-80 00:10  
WST DEPTH VS TTIME CURVE



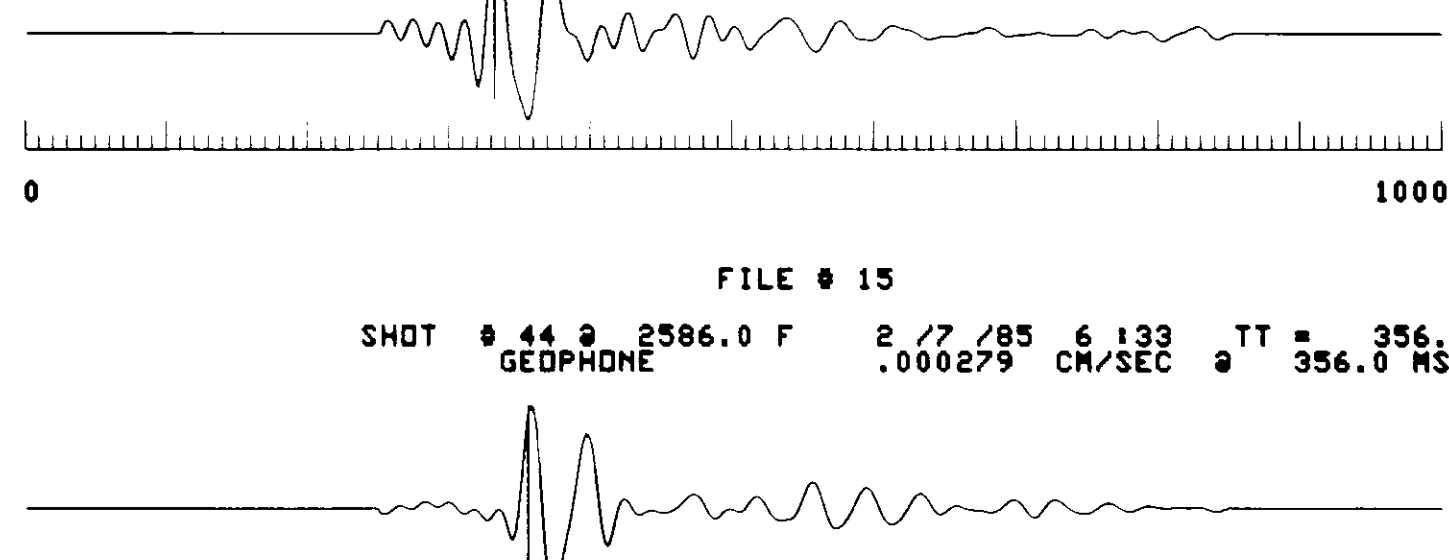
WST DEPTH VS TTIME SUMMARY

Table with columns: STACK NBR, DEPTH (F), TTIME (MS). Lists data for various depths from 180.0 to 4486.0 F.

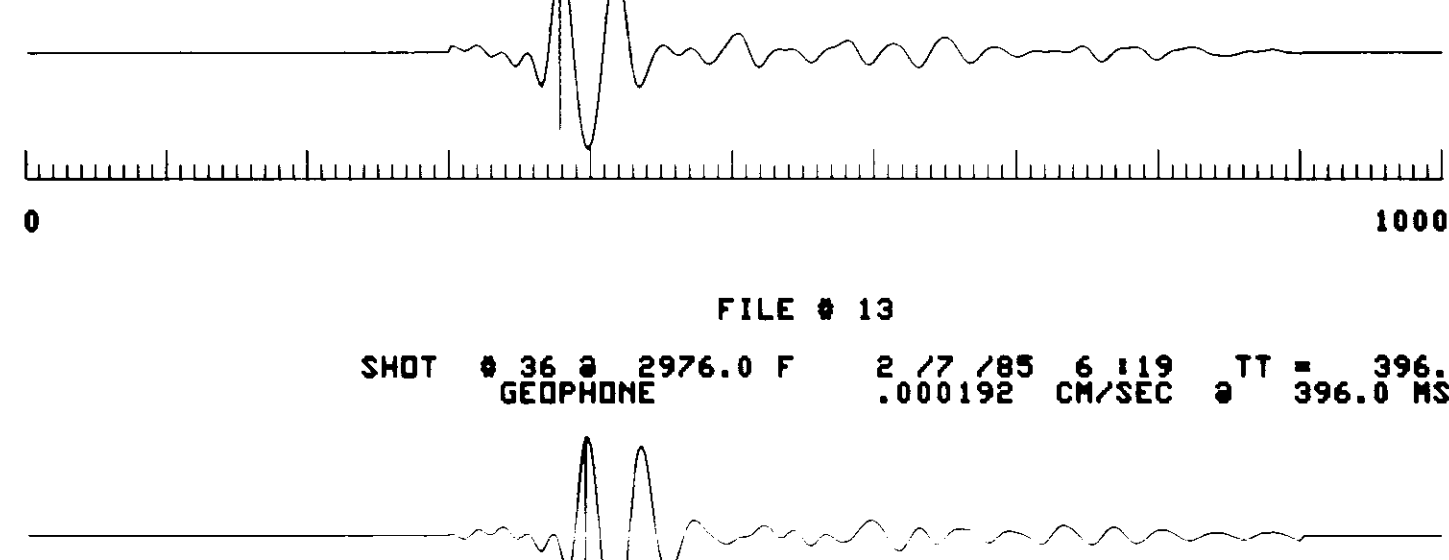
SHOT # 98 @ 180.0 F 2 / 7 / 85 8.16 TT = 62.0 MS  
GEOPHONE .001456 CM/SEC @ 62.0 MS



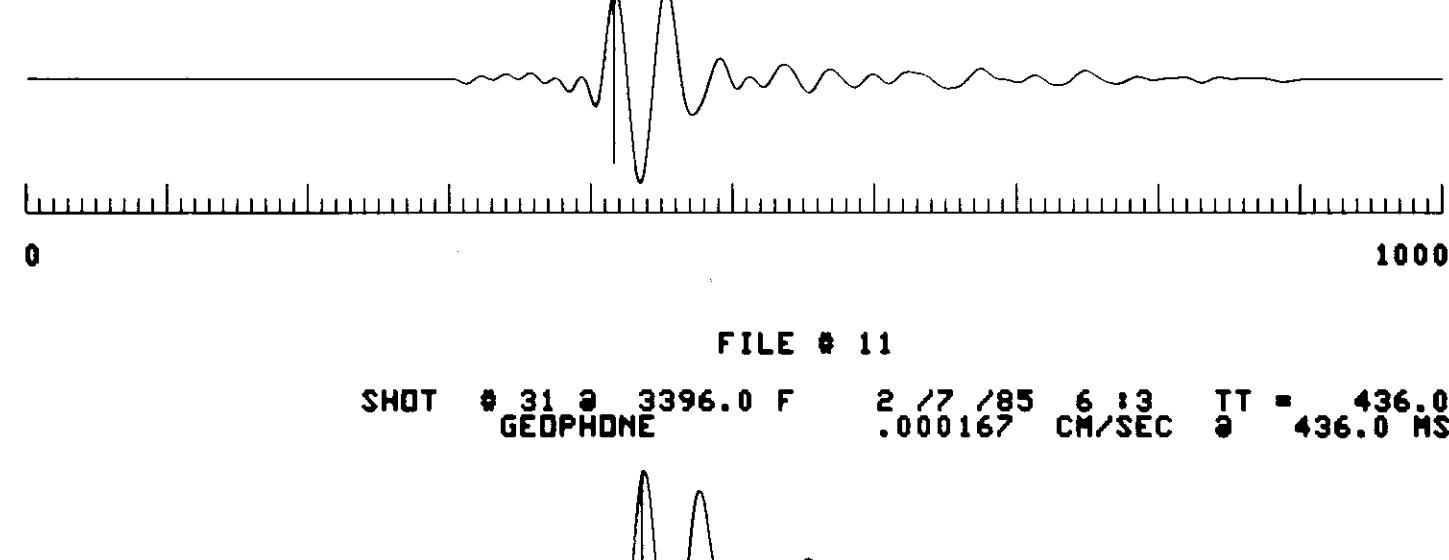
FILE # 27  
SHOT # 88 @ 400.0 F 2 / 7 / 85 8.10 TT = 82.0 MS  
GEOPHONE .002897 CM/SEC @ 82.0 MS



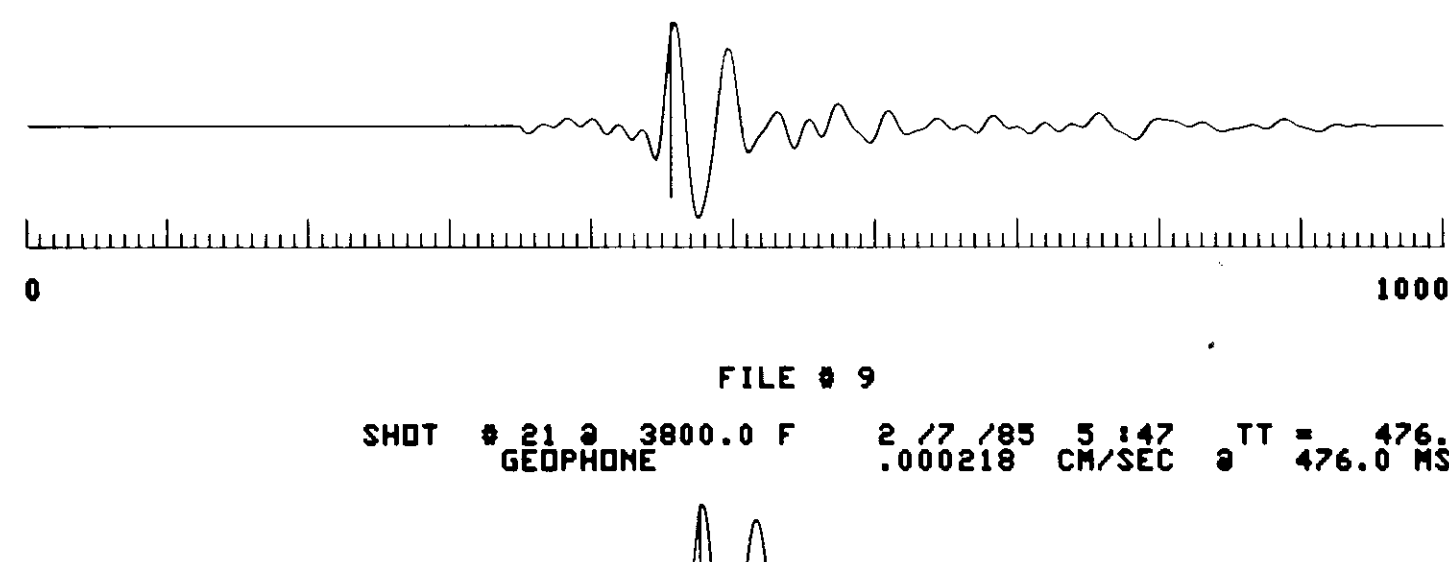
FILE # 26  
SHOT # 84 @ 700.0 F 2 / 7 / 85 7.153 TT = 118.0 MS  
GEOPHONE .001363 CM/SEC @ 118.0 MS



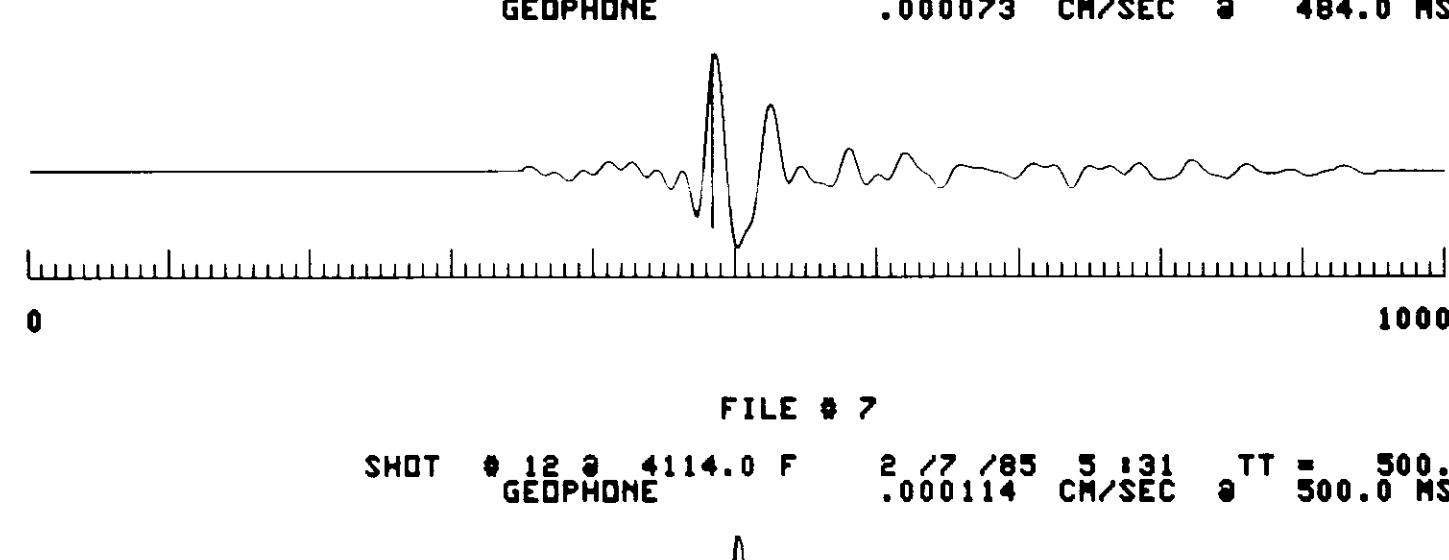
FILE # 25  
SHOT # 80 @ 990.0 F 2 / 7 / 85 7.140 TT = 156.0 MS  
GEOPHONE .000972 CM/SEC @ 156.0 MS



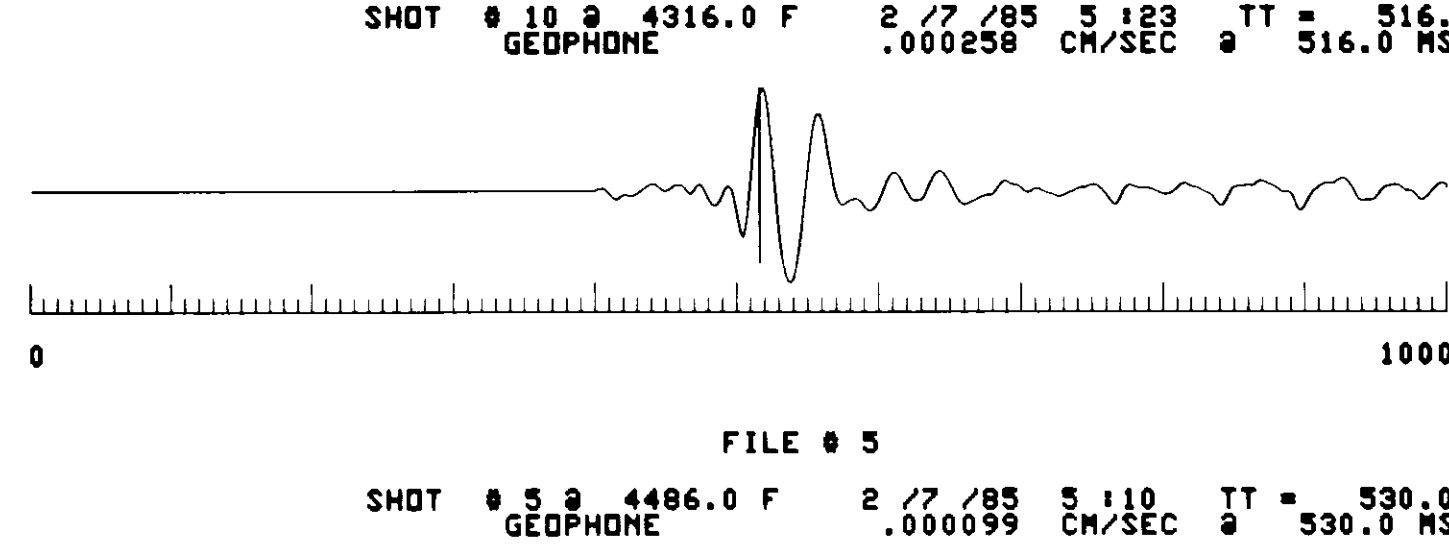
FILE # 23  
SHOT # 76 @ 1290.0 F 2 / 7 / 85 7.132 TT = 192.0 MS  
GEOPHONE .000671 CM/SEC @ 192.0 MS



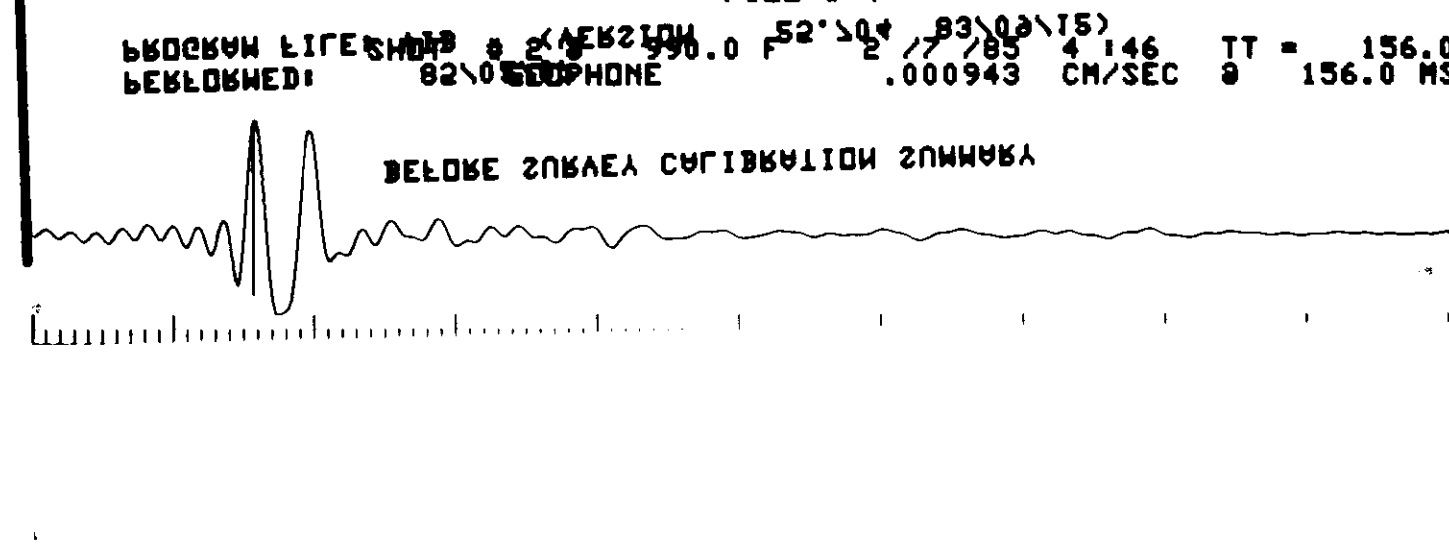
FILE # 22  
SHOT # 72 @ 1490.0 F 2 / 7 / 85 7.126 TT = 218.0 MS  
GEOPHONE .000540 CM/SEC @ 218.0 MS



FILE # 21  
SHOT # 68 @ 1690.0 F 2 / 7 / 85 7.115 TT = 246.0 MS  
GEOPHONE .000994 CM/SEC @ 246.0 MS



FILE # 20  
SHOT # 64 @ 1888.0 F 2 / 7 / 85 7.15 TT = 272.0 MS  
GEOPHONE .000525 CM/SEC @ 272.0 MS



FILE # 19  
SHOT # 61 @ 1950.0 F 2 / 7 / 85 6.158 TT = 280.0 MS  
GEOPHONE .000990 CM/SEC @ 280.0 MS



FILE # 18  
SHOT # 56 @ 2090.0 F 2 / 7 / 85 6.151 TT = 298.0 MS  
GEOPHONE .000310 CM/SEC @ 298.0 MS



FILE # 17  
SHOT # 52 @ 2186.0 F 2 / 7 / 85 6.145 TT = 308.0 MS  
GEOPHONE .000325 CM/SEC @ 308.0 MS



FILE # 16  
SHOT # 48 @ 2386.0 F 2 / 7 / 85 6.139 TT = 332.0 MS  
GEOPHONE .000299 CM/SEC @ 332.0 MS



FILE # 15  
SHOT # 44 @ 2586.0 F 2 / 7 / 85 6.133 TT = 356.0 MS  
GEOPHONE .000279 CM/SEC @ 356.0 MS



FILE # 14  
SHOT # 40 @ 2776.0 F 2 / 7 / 85 6.126 TT = 378.0 MS  
GEOPHONE .000235 CM/SEC @ 378.0 MS



FILE # 13  
SHOT # 36 @ 2976.0 F 2 / 7 / 85 6.119 TT = 396.0 MS  
GEOPHONE .000192 CM/SEC @ 396.0 MS



FILE # 12  
SHOT # 35 @ 3176.0 F 2 / 7 / 85 6.113 TT = 416.0 MS  
GEOPHONE .000193 CM/SEC @ 416.0 MS



FILE # 11  
SHOT # 31 @ 3396.0 F 2 / 7 / 85 6.113 TT = 436.0 MS  
GEOPHONE .000167 CM/SEC @ 436.0 MS



FILE # 10  
SHOT # 24 @ 3594.0 F 2 / 7 / 85 5.153 TT = 456.0 MS  
GEOPHONE .000174 CM/SEC @ 456.0 MS



FILE # 9  
SHOT # 21 @ 3800.0 F 2 / 7 / 85 5.147 TT = 476.0 MS  
GEOPHONE .000218 CM/SEC @ 476.0 MS



FILE # 8  
SHOT # 16 @ 3910.0 F 2 / 7 / 85 5.138 TT = 484.0 MS  
GEOPHONE .000073 CM/SEC @ 484.0 MS



FILE # 7  
SHOT # 12 @ 4114.0 F 2 / 7 / 85 5.131 TT = 500.0 MS  
GEOPHONE .000114 CM/SEC @ 500.0 MS



FILE # 6  
SHOT # 10 @ 4316.0 F 2 / 7 / 85 5.123 TT = 516.0 MS  
GEOPHONE .000258 CM/SEC @ 516.0 MS



FILE # 5  
SHOT # 5 @ 4486.0 F 2 / 7 / 85 5.110 TT = 530.0 MS  
GEOPHONE .000099 CM/SEC @ 530.0 MS



DATA ACQUIRED 01-JAN-80 00:10  
M210  
CMT1 14.0 14.0 0.0 15.0 15.0  
MEASURED

FILE # 4  
SHOT # 2 @ 4214.0 F 2 / 7 / 85 5.146 TT = 156.0 MS  
GEOPHONE .000943 CM/SEC @ 156.0 MS

