Schlumberger

SEISMIC ACQUISITON SERVICE

COMPANY: ARCO OIL AND GAS COMPANY

WELL: LONGVIEW FIBRE #23-25

FIELD: MIST GAS FIELD
COUNTY: COLUMBIA
STATE: OREGON

LOCATION: 3050'S & 1800'E OF THE
NW CORNER OF
SEC: 25 TWP: 6N RGE: 5W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 900.0 F
LOG MEASURED FROM: KB
12.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB:
DF:
GL: 900.0 F

DATE: 12 DEC 1985
RUN NO: ONE

DEPTH-DRILLER: 1143.0 F
DEPTH-LOGGER: 1143.0 F
BTM. LOG INTERVAL: 1125.0 F
TOP LOG INTERVAL: 250.0 F

CASING-DRILLER:
CASING-LOGGER:
CASING: 5.5
WEIGHT:
BIT SIZE: 8.75
DEPTH: 1976.0 F

RECEIVED
FEB 18 1986
DOGAMI
Portland

OTHER SERVICES-
CBL
CET

PROGRAM
TAPE NO:
28.2A
SERVICE
ORDER NO:
272165

TYPE FLUID IN HOLE: FRESH WATER
DENSITY:
VISCOSITY:
PH:
FLUID LOSS:
SOURCE OF SAMPLE:
RM: AT
RMF: AT
RMC: AT
SOURCE RMF/RMC: /
RM AT BHT: AT 69.0 DEGF
RMF AT BHT: AT 69.0 DEGF
RMC AT BHT: AT 69.0 DEGF

TIME CIRC. STOPPED:
TIME LOGGER ON BTM.: 1200 12-12

MAX. REC. TEMP: 69.0 DEGF

LOGGING UNIT NO: 5898
LOGGING UNIT LOC: BAKERSFIELD
RECORDED BY: REINIG
WITNESSED BY: TEMPLER

SEISMIC DATA:

```
SRD TO GROUND LEVEL:       0 F        GUN DEPTH BELOW GL:          -8 F
SRD TO ROTARY TABLE:      12 F        HYDRO DEPTH BELOW GL:        -6 F

MAX HOLE DEVIATION:       33 DEG      SOURCE OFFSET DISTANCE:    120 F
AZIMUTH OF HOLE DEV:     270 DEG      SOURCE OFFSET AZIMUTH:     270 DEG

DOWNHOLE GEOPHONE TYPE:  SENSOR  3-AXIS
SURFACE SENSOR TYPE:     MP-22 HYDROPHONE
PLATFORM TYPE:

JOB TYPE:  VSP                        SOURCE TYPE:       AIRGUN
RIG TYPE:  WELL-TECH                  GUN VOLUME:        200
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REMARKS:

SRD = GL = 900'

EQUIPMENT NUMBERS-

SAT-A

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.

```
   CP 28.2A          FILE    0        00-     -00 00:15
                SEISMIC    QUICKLOOK


                GEOMETRY   PARAMETERS   LIST



        SURFACE VELOCITY                                :    6000.0 FT/S
        SRD DEPTH FROM SCHLUMBERGER ZERO                :      20.0 F
        HYDRO DEPTH FROM SCHLUMBERGER ZERO              :      18.0 F
        GUN DEPTH FROM SCHLUMBERGER ZERO                :      20.0 F
        GUN OFFSET                                      :     120.0 F
        GUN AZIMUTH                                     :     270.0 DEG



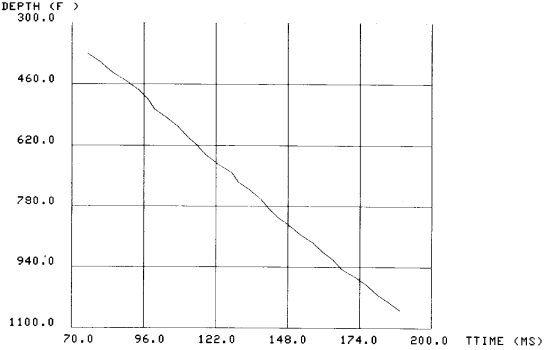
                         WST DEPTH VS TTIME SUMMARY

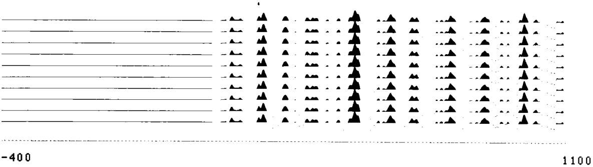
*********************************************************************
*  STACK     MEASURED    MEASURED    TVD (F)   CORRECTED      INTERVAL    *
*   NBR     DEPTH (F)  TTIME (MS)            TTIME (MS)     VEL (F/S)   *

*    20      400.00          79     378.78          75      4953.2      *
*    19      425.00          84     403.40          80      6291.4      *
*    18      450.00          87     427.89          84      4624.3      *
*    17      475.00          92     452.22          89      5166.8      *
*    16      500.00          96     476.55          94      7686.4      *
*    15      525.00          99     500.88          97      11472.      *
*    14      550.00         101     525.00          99      5134.4      *
*    13      575.00         106     548.91         104      5635.1      *
*    12      600.00         110     572.81         108      7921.6      *
*    11      625.00         112     596.72         111      6288.3      *
*    10      650.00         116     620.39         115      8295.4      *
*     9      675.00         119     643.99         118      5474.9      *
*     8      700.00         123     667.59         122      4532.1      *
*     7      725.00         128     691.19         127      10867.      *
*     6      750.00         130     714.57         130      5145.7      *
*     5      775.00         135     737.94         134      6046.1      *
*     4      800.00         138     761.20         138      8573.5      *
*     3      825.00         141     784.36         141      7208.6      *
*     2      850.00         144     807.52         144      5407.0      *
*     1      875.00         149     830.60         148      6225.1      *
*    12      900.00         152     853.46         152      4618.8      *
*    11      925.00         157     876.32         157      6987.0      *
*    10      950.00         161     899.18         160      5394.5      *
*     9      975.00         165     921.72         164      8442.3      *
*     8      1000.0         168     943.97         167      4241.9      *
*     7      1025.0         173     966.21         172      5054.1      *
*     6      1050.0         178     988.46         177      6544.9      *
*     5      1075.0         181     1010.7         180      5058.9      *
*     4      1100.0         186     1032.4         184      5199.5      *
*     3      1125.0         190     1053.7         188      5579.7      *

*********************************************************************
```

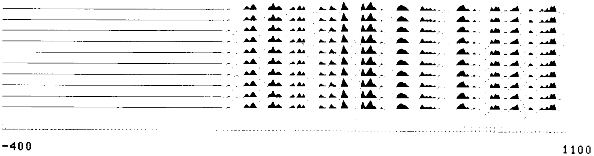
TVD VS CORRECTED TTIME CURVE





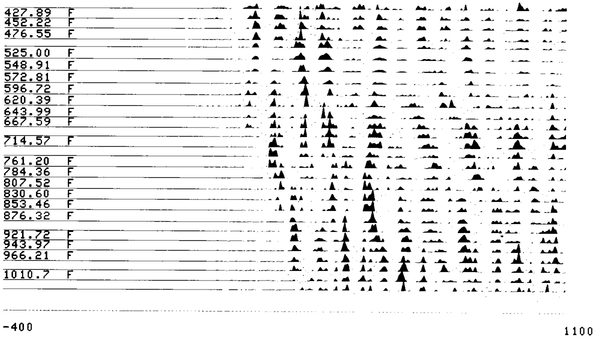
- STACKED DATA - CORRECTED TO SRD & TVD
UPGOING VSP
TWO WAY TIME PLOT
CORRIDOR STACK - WINDOW 200 MS
REVERSE POLARITY
TAR = DATA(I)*I** 1.60000
Z-AXIS PROCESSED

FILE # 103



- STACKED DATA - CORRECTED TO SRD & TVD
UPGOING VSP
TWO WAY TIME PLOT
CORRIDOR STACK - WINDOW 200 MS
NORMAL POLARITY
TAR = DATA(I)*I** 1.60000
Z-AXIS PROCESSED

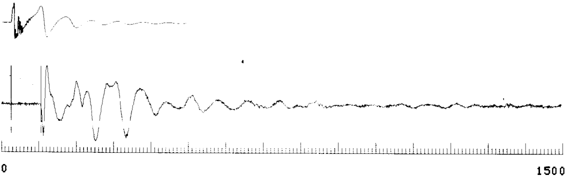
FILE # 103



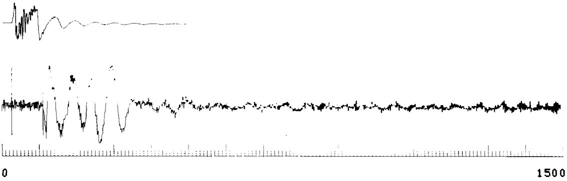
- STACKED DATA - CORRECTED TO SRD & TVD
UPGOING VSP
TWO WAY TIME PLOT
NORMAL POLARITY
TAR = DATA(I)*I** 1.60000
Z-AXIS PROCESSED

FILE # 102

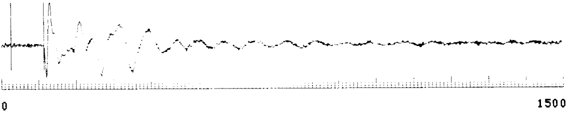
STACK # 20 D3 @ 400.0 F 12 /12 /85 16 :47
GEOPHONE .002832 CM/SEC @ 104.0 MS
SHOTS STACKED : 141
FILTER : OFF - OFF



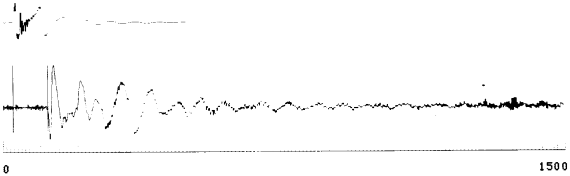
STACK # 19 D3 @ 425.0 F 12 /12 /85 16 :41
GEOPHONE .001876 CM/SEC @ 109.8 MS
SHOTS STACKED : 131
FILTER : OFF - OFF



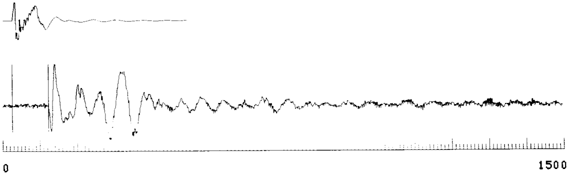
STACK # 18 D3 @ 450.0 F 12 /12 /85 16 :36
GEOPHONE .002685 CM/SEC @ 112.1 MS
SHOTS STACKED : 125
FILTER : OFF - OFF



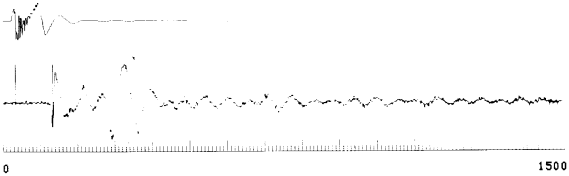
STACK # 17 D3 @ 475.0 F 12 /12 /85 16 :31
GEOPHONE .001976 CM/SEC @ 118.1 MS
SHOTS STACKED : 118
FILTER : OFF - OFF



STACK # 16 D3 @ 500.0 F 12 /12 /85 16 :22
GEOPHONE .001561 CM/SEC @ 121.7 MS
SHOTS STACKED : 108 ,109 ,111
FILTER : OFF - OFF

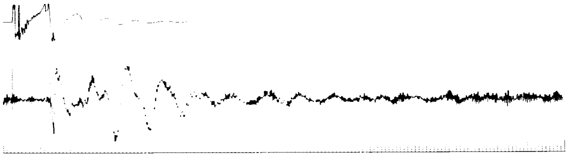


STACK # 15 D3 @ 525.0 F 12 /12 /85 16 :16
GEOPHONE .001085 CM/SEC @ 132.3 MS
SHOTS STACKED : 103 ,104 ,105
FILTER : OFF - OFF



FILE # 103

STACK # 14 D3 @ 550.0 F 12 /12 /85 16 :7
GEOPHONE .002208 CM/SEC @ 125.1 MS
SHOTS STACKED : 97
FILTER : OFF - OFF



0 1500

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STACK # 13 D3   @   575.0 F     12 /12 /85  16 :1
       GEOPHONE             .004798  CM/SEC  @   128.5 MS
          SHOTS STACKED : 82 ,83 ,86 ,87 ,88
          FILTER : OFF  - OFF
```
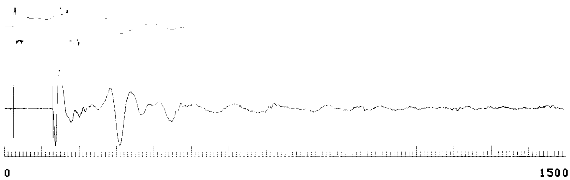
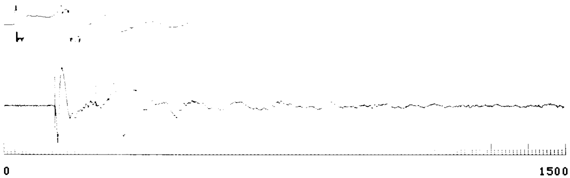



```
STACK # 12 D3   @   600.0 F     12 /12 /85  15 :54
       GEOPHONE             .004566  CM/SEC  @   245.7 MS
          SHOTS STACKED : 77 ,78 ,79 ,80
          FILTER : OFF  - OFF
```



```
STACK # 11 D3   @   625.0 F     12 /12 /85  15 :49
       GEOPHONE             .004314  CM/SEC  @   139.0 MS
          SHOTS STACKED : 69 ,70 ,71 ,72 ,74
          FILTER : OFF  - OFF
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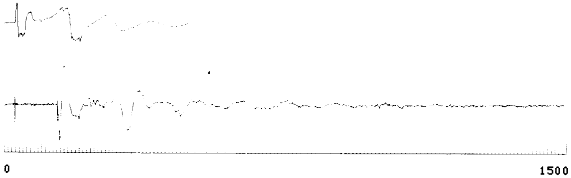

```
STACK # 10 D3   @   650.0 F     12 /12 /85  15 :44
       GEOPHONE             .004202  CM/SEC  @   139.4 MS
          SHOTS STACKED : 66 ,67
          FILTER : OFF  - OFF
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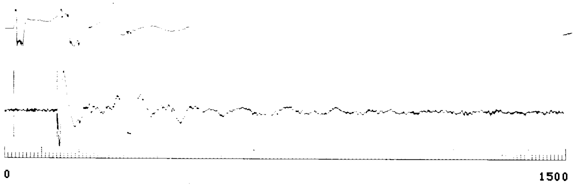
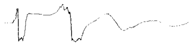
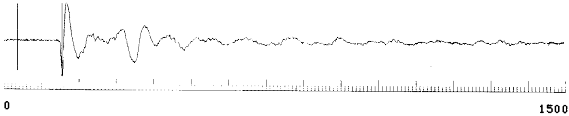
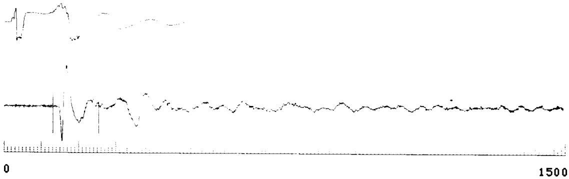


```
STACK # 9 D3   @   675.0 F     12 /12 /85  15 :39
       GEOPHONE             .003987  CM/SEC  @   152.3 MS
          SHOTS STACKED : 56 ,57 ,58 ,59 ,60 ,61
          FILTER : OFF  - OFF
```

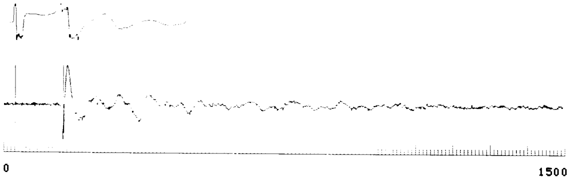




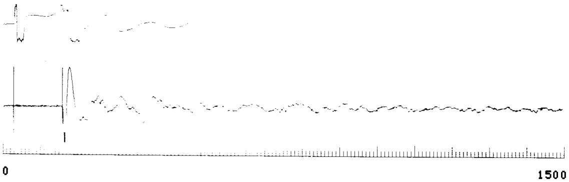
```
STACK # 8 D3    @    700.0 F     12 /12 /85  15 :34
           GEOPHONE            .003993   CM/SEC   @    252.6 MS
              SHOTS STACKED : 49 ,50 ,52 ,54 ,55
              FILTER : OFF   - OFF
```



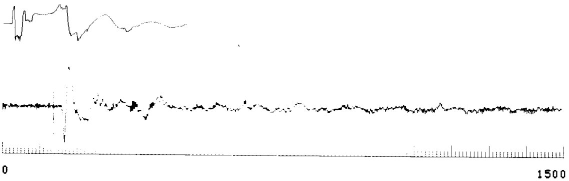
```
STACK # 7 D3    @    725.0 F     12 /12 /85  15 :29
           GEOPHONE            .003847   CM/SEC   @    158.3 MS
              SHOTS STACKED : 46 ,47 ,48
              FILTER : OFF   - OFF
```



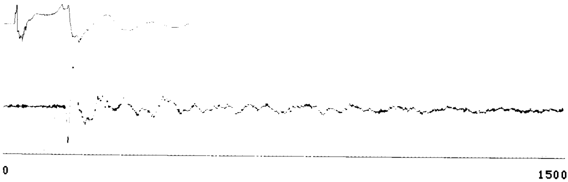
```
STACK # 6 D3    @    750.0 F     12 /12 /85  15 :23
           GEOPHONE            .003514   CM/SEC   @    157.0 MS
              SHOTS STACKED : 34 ,35 ,37 ,38 ,39 ,40
              FILTER : OFF   - OFF
```



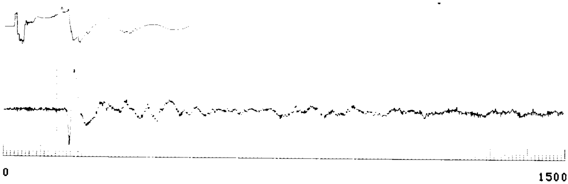
```
STACK # 5 D3    @    775.0 F     12 /12 /85  15 :17
           GEOPHONE            .003210   CM/SEC   @    135.0 MS
              SHOTS STACKED : 27 ,28 ,32 ,33
              FILTER : OFF   - OFF
```



```
STACK # 4 D3    @    800.0 F     12 /12 /85  15 :11
       GEOPHONE           .002943   CM/SEC  @    136.1 MS
          SHOTS STACKED : 22 ,23 ,24 ,25 ,26
          FILTER : OFF   - OFF
```



```
STACK # 3 D3    @    825.0 F     12 /12 /85  15 :4
       GEOPHONE           .002953   CM/SEC  @    141.6 MS
          SHOTS STACKED : 14 ,15 ,16 ,17 ,18
          FILTER : OFF   - OFF
```



```
STACK # 2 D3    @    850.0 F     12 /12 /85  14 :58
       GEOPHONE           .002814   CM/SEC  @    171.9 MS
          SHOTS STACKED : 10 ,11 ,12
          FILTER : OFF   - OFF
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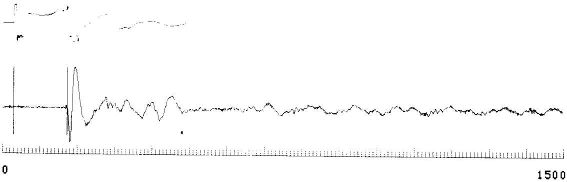

```
STACK # 1 D3    @    875.0 F     12 /12 /85  14 :53
       GEOPHONE           .002841   CM/SEC  @    177.7 MS
          SHOTS STACKED : 3 ,4 ,5 ,6
          FILTER : OFF   - OFF
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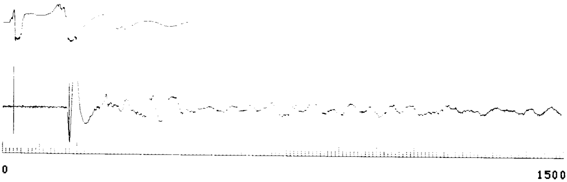
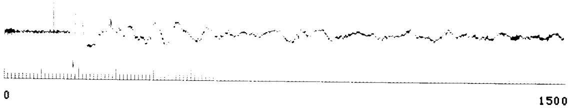
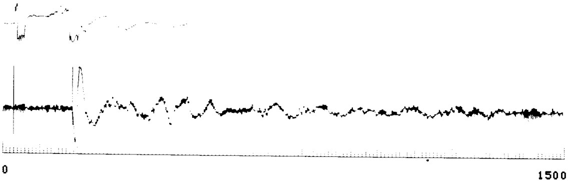


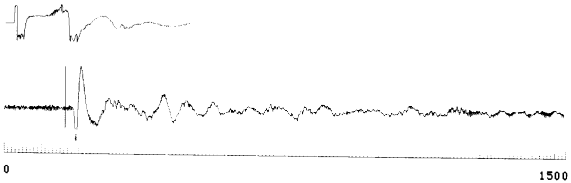
```
STACK # 12 D3    @    900.0 F     12 /12 /85  13 :14
       GEOPHONE           .002765   CM/SEC  @    283.1 MS
          SHOTS STACKED : 91
          FILTER : OFF   - OFF
```



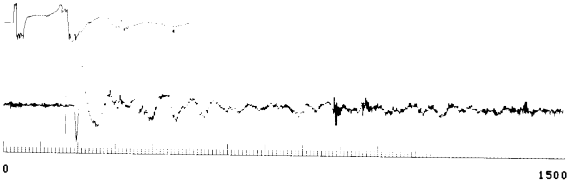
STACK # 11 D3 @ 925.0 F 12 /12 /85 13 :7
GEOPHONE .002596 CM/SEC @ 185.5 MS
SHOTS STACKED : 83
FILTER : OFF - OFF



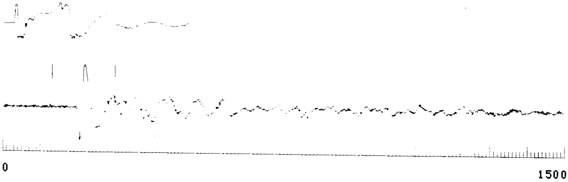
STACK # 10 D3 @ 950.0 F 12 /12 /85 13 :0
GEOPHONE .002567 CM/SEC @ 161.3 MS
SHOTS STACKED : 76
FILTER : OFF - OFF



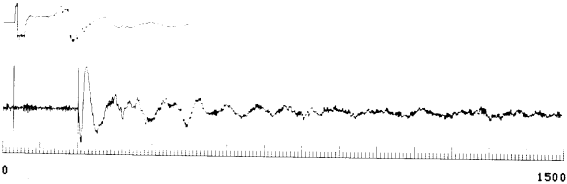
STACK # 9 D3 @ 975.0 F 12 /12 /85 12 :54
GEOPHONE .002307 CM/SEC @ 165.6 MS
SHOTS STACKED : 70
FILTER : OFF - OFF



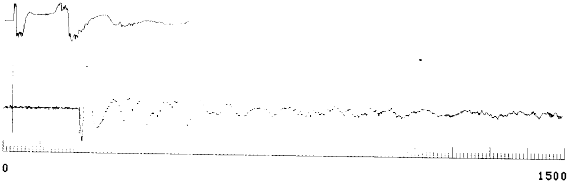
STACK # 8 D3 @ 1000.0 F 12 /12 /85 12 :40
GEOPHONE .002322 CM/SEC @ 297.5 MS
SHOTS STACKED : 51 ,52 ,53 ,54 ,55
FILTER : OFF - OFF



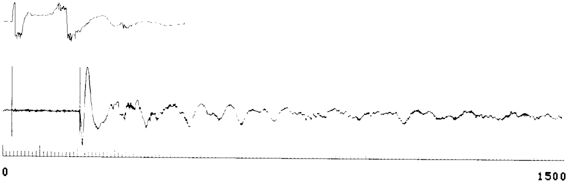
STACK # 7 D3 @ 1025.0 F 12 /12 /85 12 :32
GEOPHONE .002307 CM/SEC @ 200.8 MS
SHOTS STACKED : 48 ,49
FILTER : OFF - OFF



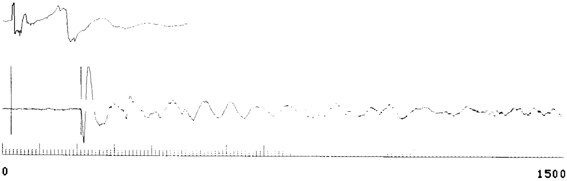
STACK # 6 D3 @ 1050.0 F 12 /12 /85 12 :26
GEOPHONE .002322 CM/SEC @ 202.0 MS
SHOTS STACKED : 42
FILTER : OFF - OFF



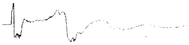
STACK # 5 D3 @ 1075.0 F 12 /12 /85 12 :19
GEOPHONE .002325 CM/SEC @ 205.2 MS
SHOTS STACKED : 34
FILTER : OFF - OFF

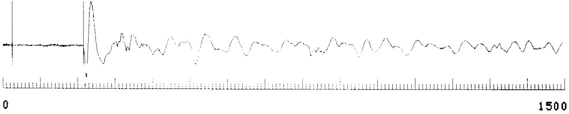


STACK # 4 D3 @ 1100.0 F 12 /12 /85 12 :8
GEOPHONE .001967 CM/SEC @ 209.2 MS
SHOTS STACKED : 16 ,17 ,18 ,19 ,20 ,21 ,22
FILTER : OFF - OFF



STACK # 3 D3 @ 1125.0 F 12 /12 /85 11 :58
GEOPHONE .001859 CM/SEC @ 214.0 MS
SHOTS STACKED : 9 ,10 ,11 ,12 ,13 ,14 ,15
FILTER : OFF - OFF





FILE # 102