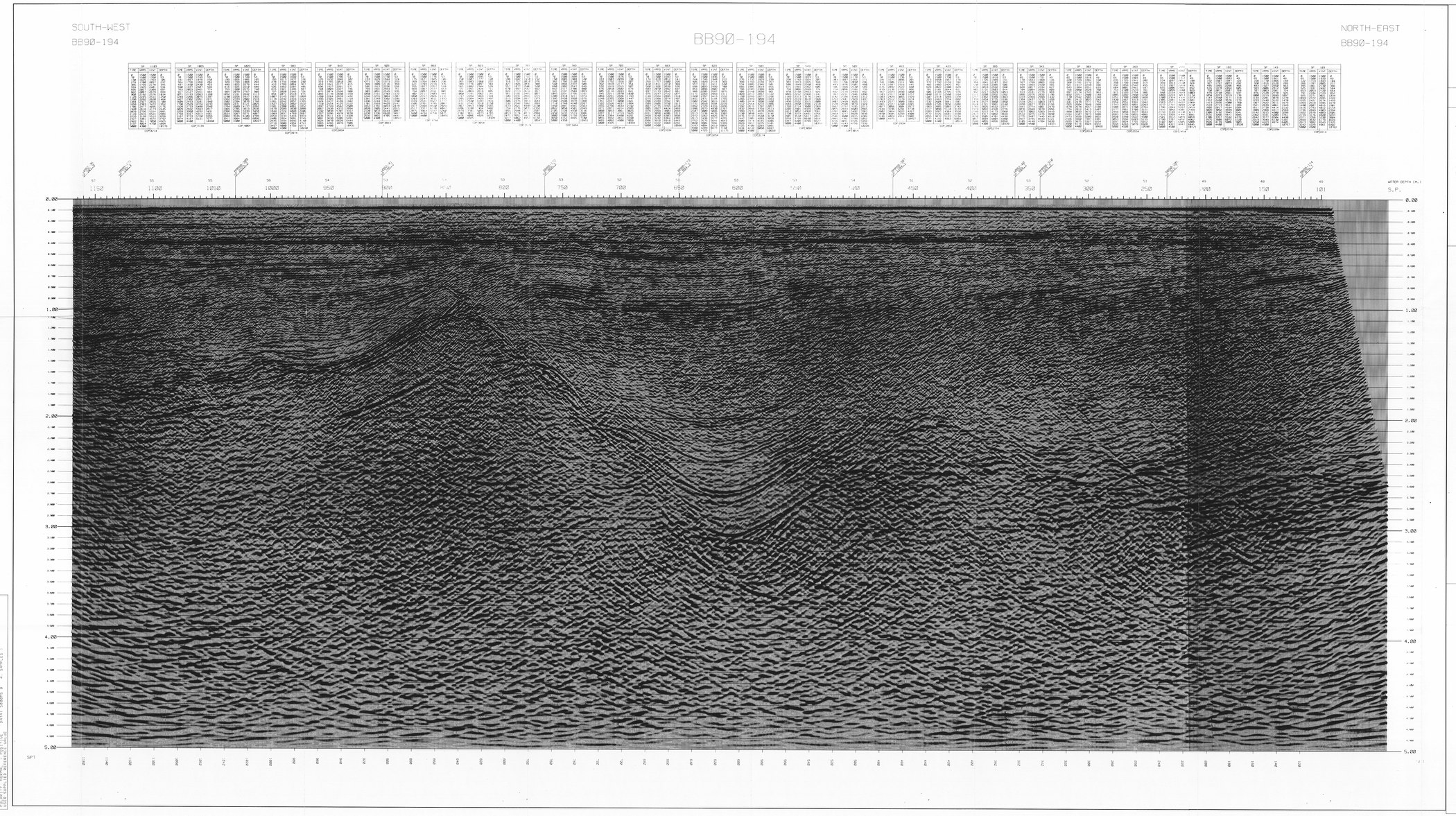
257331 OR-0261

ENCLOSURE 4



6.25m TRACE INTERPOLATION

BRIDGE OIL LTD

LINE : BB90-194
S.P : 101-1176
AREA : SE BASS BASIN
PERMIT : T/15P

MIGRATED STACK

RECORDING PARAMETERS

RECORDED BY : HELLIBURTON GEOPHYSICAL
PARTY NO. : 2060
DATE STARTED : 4 NOV PRIMARY DONT CHECK
DATE RECORDED : 4 NOVEMBER 1990

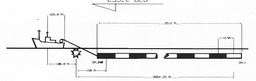
RECORDING INSTRUMENTS
INSTRUMENTS : 1 TAPE
FIELD FILTER : HI : 108 HZ 72 DB/OCT
LO : 8 HZ 18 DB/OCT
SAMPLE RATE : 2 MSEC
RECORD LENGTH : 6 SEC
TAPE FORMAT : SEG B 6250BPI

NAVIGATION
PRIMARY : SYLEDIS
SECONDARY : SATCOMMR

SOURCE
ENERGY SOURCE : 4TH SLEEVE MORGAN ARRAY
NOMINAL VOLUME : 1 X 1000 CU.IN.
NOMINAL PRESSURE : 2000 PSI.
SHOT INTERVAL : 25.0 MSEC.
GUN DEPTH : 6.0 M.
SHOTPOINT INTERVAL : 25.0M.
SHOTPOINT INTERVAL : SAME M.
STACKED

TOWED STREAMER
STREAMER TYPE : MARINES (FLUID SKIN)
NUMBER OF CHANNELS : 240 (FRAME)
STREAMER LENGTH : 6000 M.
NEAR OFFSET : 200 M. (NOMINAL)
FAR OFFSET : 6000 M.(NOMINAL)
STREAMER DEPTH : 6.0 M.
GROUP INTERVALS : 25.0 M. (TRACES 1-120)
: 12.5 M. (TRACES 121-240)

235.2 DEG



PROCESSING SEQUENCE

[1] TRANSCRIPTION
DEVICE FIELD TAPES TO DIGICON INTERNAL FORMAT
SAMPLE RATE..... 2 MSEC.
SAMPLE RATE..... 2 MSEC.

[2] RESAMPLE
RESAMPLE TO 4 MS MINIMUM PHASE ANTI-ALIAS FILTER
BUTTERWORTH 8 / 108 HZ.

[3] STATIC CORRECTIONS
DATUM..... -51.0 MSEC.
SOURCE CORRECTION..... +7.8 MSEC.
RECEIVER CORRECTION..... +0.0 MSEC.
TOTAL STATICS..... -43.2 MSEC.

[4] EDIT

[5] TRACE INTERPOLATION
INTERPOLATE TRACES 1-162 TO GIVE A UNIFORM GROUP
INTERVAL OF 6.25M

[6] SPHERICAL DIVERGENCE CORRECTION
SCALAR V.V. USING REPRESENTIVE VELOCITY FUNCTION

[7] GAIN CORRECTION
EXPONENTIAL +12 DB OVER 2.4 - 4.4 SEC.

[8] VELOCITY FILTER:- (F-D-T-X-P)
PASS RANGE : -4.0M/SEC. (VELOCITY REJ.-SAMPSEC. GATE)
PASS RANGE : +4.0M/SEC. (VELOCITY REJ.-SAMPSEC. GATE)

[9] PRE-STACK TRACE EQUALIZATION
GATES : 1 (FULL TRACE) : 0.0M - 6000 MSEC.
2 (FIXED) : 0.0M - 6000 MSEC.

[10] WAVELET DECONVOLUTION:
DETAIL DEPENDENT DESIGN
DESIGN SPECIFICATIONS
DESIGN GATE : 1 (FIXED) : 0.0M - 6000 MSEC.
2 (FIXED) : 0.0M - 6000 MSEC.
WINDOW LENGTH : 1 (FIXED) : 1000 MSEC.
2 (FIXED) : 1000 MSEC.
WHITE NOISE : 1 (FIXED) : 0.1%
2 (FIXED) : 0.1%
DESIGNED OUTPUT : 1 ZERO PHASE WAVELET 5-50 HZ.

[11] C.D.P. GATHER
MINIMUM FOLD : 50
CDP INTERVAL : 12.5M M

[12] VELOCITY ANALYSIS :- FIRST PASS
SUPER GATHERS USING ROUTINE VELOCITY ROUTINE
SUPER GATHERS USING ROUTINE VELOCITY FUNCTIONS

[13] MULTIPLE SUPPRESSION I ANALYSIS
TAU-P TRANSFORM ROUTINE
SUPERGATHER CONSTANT VELOCITY FIELD

[14] DIP MOVEOUT COMPENSATION :- F-K METHOD

[15] VELOCITY ANALYSIS :- 2ND PASS
SUPER GATHERS USING ROUTINE VELOCITY ROUTINE
(NEW 25 M STRAWS CDP) NMO'D USING VELOCITY FUNCTIONS

[16] N.M.O. CORRECTION
SUPERGATHER VELOCITY FIELD
NEW CDP FOR MAXIMUM FOLD HORIZ SECTION

[17] PRE-STACK TRACE MUTES
SUPER GATHER MUTE : TAPER (.25)
TIME (MSEC.) : 0 500 2500

[18] COMMON DEPTH POINT STACK
MINIMUM FOLD : 50

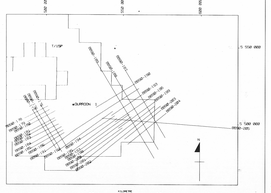
[19] DECONVOLUTION
TYPE : PREDICTIVE
OPERATOR LENGTH : 1 GAP : 36 MSEC.
WHITE NOISE : 0.1%
GATES : 1 (FULL TRACE) : 0.0M 6000 MSEC.
2 (FIXED) : 0.0M 6000 MSEC.
APPLICATION GATES : 1 (FULL TRACE) : 0.0M 6000 MSEC.
2 (FIXED) : 0.0M 6000 MSEC.

[20] MIGRATION
FINITE DIFFERENCE ALGORITHM
INTERCHANGE OF SMOOTHED RMS VELOCITIES USED
0.0 - 5.0 SEC. : MSEC. SMOOTHED MIGRATION

[21] TIME VARIANT BANDPASS FILTER
(TIME-MSEC) (FREQUENCY-SLOPE GRADIENT)
0.0 - 2.0 : 7/10 50/90
2.0 - 3.0 : 10/15 50/90
3.0 - 4.0 : 15/20 50/90
4.0 - 5.0 : 20/30 50/90

[22] TRACE EQUALIZATION
TAPER TIME (MSEC.) GATE TIME (MSEC.)
500 1000
500 2000
500 3000
500 4000
1000 5000
1000 6000
1000 7000
1000 8000
1000 9000
1000 10000
1000 11000
1000 12000
1000 13000
1000 14000
1000 15000
1000 16000
1000 17000
1000 18000
1000 19000
1000 20000

[23] 4:1 DECIMATION

DISPLAY PARAMETERS

HORIZONTAL SCALE : SALES TAPE (1" = 20.1/SEC. 1:25,000)
VERTICAL SCALE : 5.0 CM/SEC. (1:25,000)
DISPLAY GAIN : 8.0DB
POLARITY : TAPE REPRESENTION RECORDED AS NEGATIVE NUMBER
: TAPE
DISPLAYED : TAPE POLARITY NORMAL ON DISPLAY WITH BLACK
: REPRESENTION REPRESENTED BY A WHITE TROUGH.
GROUP : 24 TRACES
S.P. ANNOTATION : SHOTPOINTS ANNOTATED TO ANTENNA POSITION.