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DEPT. NAT. RES & ENV



PE904856

Appendix 5 of

W.C.R. vol 1.

HALIBUT - 2

MELBOURNE LOG INTERPRETATION CENTRE

**PO BOX 7435
479 ST. KILDA ROAD
MELBOURNE VICTORIA 3004**

GEOGRAM PLOTS

Drift Corrected Sonic
Seismic Calibration Log
25 hz zero phase Geogram
35 hz zero phase Geogram
45 hz zero phase Geogram
Geograms with -90 degr. phase shift

VSP PLOTS

Plot 1	Stacked data
Plot 2	Amplitude Recovery
Plot 3	Velocity Filter
Plot 4	Waveshaping Deconvolution Zero Phase
Plot 5	Waveshaping Deconvolution - Corridor Stack
Plot 5A	Waveshaping Deconvolution - Corridor Stack (-90 degr. phase shift)
Plot 6	VSP and Geogram Composite - normal polarity
Plot 7	VSP and Geogram Composite - reverse polarity

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Schlumberger Seaco Inc
ARBN: 009 473 147
(Incorporated in Panama with Limited Liability)
Level 3, 312 St Kilda Road, MELBOURNE VIC 3004
P.O. Box 7435, 479 St Kilda Road, MELBOURNE VIC 3004
Phone: (03) 696 6266 Fax: (03) 690 0309 Telex: AA 151320

ESSO AUSTRALIA LTD.
WELL SEISMIC PROCESSING REPORT
Zero Offset VSP and Geogram

HALIBUT-2

FIELD : HALIBUT

COUNTRY : AUSTRALIA

COORDINATES : 038 23' 45.42" S
: 148 19' 47.79" E

LOCATION : VICTORIA

DATE OF SURVEY : 05 MARCH 1994

REFERENCE NO. : VSP :560996
GEOGRAM :560997

INTERVAL : 2585 - 230 M

PETROLEUM DIVISION

07 SEP 1994

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1. Introduction

A vertical seismic profile was recorded with the Seismic Acquisition Tool (SAT) at the *HALIBUT-2* well. The data was processed using the conventional zero offset processing chain using only the vertical component.

2. Data Acquisition

The data was acquired in single logging run using the three components Seismic Acquisition Tool (SAT). A sleeve air gun was as the source, positioned 7 meters below the sea level. Recording was made on the Schlumberger Maxis 500 Unit using DLIS format .

Table 1. Survey Parameters

Elevation of KB	25.0 M
Elevation of DF	24.7 M
Elevation of GL	- 79.0 M
Total Depth	2585 M
Energy Source	150 cu in airgun
Source Offset	58 M
Source Depth	7 M below MSL
Reference Sensor	Hydrophone
Hydrophone Offset	58 M
Hydrophone Depth	14 M below MSL
Source & Hyd. Azimuth	57 Degr.

3. Sonic Calibration Processing

3.1 Sonic Calibration

A 'drift' curve is obtained using the sonic log and the vertical check level times. The term 'drift' is defined as the seismic time (from check shots) minus the sonic time (from integration of edited sonic). Commonly the word 'drift' is used to identify the above difference, or to identify the gradient of drift versus increasing depth, or to identify a difference of drift between two levels.

The gradient of drift, that is the slope of the drift curve, can be negative or positive.

$$\frac{\Delta \text{drift}}{\Delta \text{depth}} < 0$$

For a negative drift the sonic time is greater than the seismic time over a certain section of the log.

For a positive drift $\frac{\Delta \text{drift}}{\Delta \text{depth}} > 0$, the sonic time is less than the seismic time over a certain section of the log.

The drift curve, between two levels, is then an indication of the error on the integrated sonic or an indication of the amount of correction required on the sonic to have the TTI of the corrected sonic match the check shot times.

Two methods of correction to the sonic log are used.

1. Uniform or block shift. This method applies a uniform correction to all the sonic values over the interval. This uniform correction is applied in the case of positive drift and is the average correction represented by the drift curve gradient expressed in $\mu\text{sec}/\text{ft}$.

2. ΔT Minimum. In the case of negative drift a second method is used, called ΔT minimum. This applies a differential correction to the sonic log, where it is assumed that the greatest amount of transit time error is caused by the lower velocity sections of the log. Over a given interval the method will correct only Δt values which are higher than a threshold, the Δt_{min} . Values of Δt which are lower than the threshold are not corrected. The correction is a reduction of the excess of Δt over Δt_{min} , $\Delta t - \Delta t_{\text{min}}$.

$\Delta t - \Delta t_{\text{min}}$ is reduced through multiplication by a reduction coefficient which remains constant over the interval. This reduction coefficient, named G, can be defined as:

$$G = 1 + \frac{\text{drift}}{\int (\Delta t - \Delta t_{\text{min}}) dZ}$$

Where drift is the drift over the interval to be corrected and the value $\int (\Delta t - \Delta t_{\text{min}}) dZ$ is the time difference between the integrals of the two curves Δt and Δt_{min} , only over the intervals where $\Delta t > \Delta t_{\text{min}}$.

Hence the corrected sonic: $\Delta t = G(\Delta t - \Delta t_{\text{min}}) + \Delta t_{\text{min}}$.

3.2 Open Hole Logs

The sonic log has been recorded from 2585.0 to 430.0 metres below KB. This sonic log has been edited to alleviate cycle skipping and spiky data. The density log has also been edited to take into account bad hole condition.

The gamma ray and caliper logs are included as correlation curves.

3.3 Correction to Datum and Velocity Modelling

The sonic calibration processing has been referenced to mean sea level which the seismic reference datum. Static corrections are applied to correct for source offset and source depth. This involves using a water velocity of 1524 m/sec.

3.4 Sonic Calibration Results

The top of the sonic log (430.0 metres below KB) is chosen as the origin for the calibration drift curve.

The drift curve is the correction imposed upon the sonic log. The adjusted sonic curve is considered to be the best result using the available data. A list of shifts used on the sonic data is given below.

Table 2: Sonic Drift

Depth Interval (metres below KB)	Block Shift $\mu\text{sec}/\text{mt}$	Δt_{min} $\mu\text{sec}/\text{mt}$	Equiv Block shift $\mu\text{sec}/\text{mt}$
0 - 430	0	-	0
430 - 781	17.66	-	17.66
781 - 2330	9.10	-	9.10
2330 - 5585	5.50	-	5.50

4. Synthetic Seismogram Processing

GEOGRAM plots were generated using 25, 35, and 45 Hz zero phase ricker wavelets, and -90 degr. phase rotation.

The presentations include both normal and reverse polarity on a time scale of 40 cm/sec.

GEOGRAM processing produces synthetic seismic traces based on reflection coefficients generated from sonic and density measurements in the well-bore. The steps in the processing chain are the following:

Depth to time conversion
Reflection coefficient generation
Attenuation coefficient calculation
Convolution
Output

4.1 Depth to Time Conversion

Open hole logs are recorded from the bottom to top with a depth index. This data is converted to a two-way time index and flipped to read from the top to bottom in order to match the seismic section.

4.2 Primary Reflection Coefficients

Sonic and density data are averaged over chosen time intervals (normally 2 or 4 milliseconds). Reflection coefficients are then computed using:

$$R = \frac{\rho_2 \cdot v_2 - \rho_1 \cdot v_1}{\rho_2 \cdot v_2 + \rho_1 \cdot v_1}$$

where:

ρ_1 = density of the layer above the reflection interface

ρ_2 = density of the layer below the reflection interface

v_1 = compressional wave velocity of the layer above the reflection interface

v_2 = compressional wave velocity of the layer below the reflection interface

This computation is done for each time interval to generate a set of primary reflection coefficients without transmission losses.

4.3 Primaries with Transmission Loss

Transmission loss on two-way attenuation coefficients is computed using:

$$A_n = (1 - R_1^2).(1 - R_2^2).(1 - R_3^2)...(1 - R_n^2)$$

A set of primary reflection coefficients with transmission loss is generated using:

$$Primary_n = R_n.A_{n-1}$$

4.4 Primaries plus Multiples

Multiples are computed from these input reflection coefficients using the transform technique from the top of the well to obtain the impulse response of the earth. The transform outputs primaries plus multiples.

4.5 Multiples Only

By subtracting previously calculated primaries from the above result we obtain multiples only.

4.6 Wavelet

A theoretical wavelet is chosen to use for convolution with the reflection coefficients previously generated. Choices available include:

- Klauder wavelet
- Ricker zero phase wavelet
- Ricker minimum phase wavelet
- Butterworth wavelet
- User defined wavelet

Time variant Butterworth filtering can be applied after convolution.

4.7 Polarity Convention

An increase in acoustic impedance gives a positive reflection coefficient, is written to tape as a negative number and is displayed as a white trough under normal polarity. Polarity conventions are displayed in figure 1.

4.8 Convolution

The standard procedure of convolving the wavelet with reflection coefficients; the output is the synthetic seismogram.

5. VSP Processing

The vertical component of the VSP data was processed using the conventional zero offset vertical incident processing chain. The following subsections describe the main aspects of the processing chain.

5.1 Stacking

A median stack was performed on the vertical and horizontal component data. The surface sensor (hydrophone) breaks are used as the zero time for stacking. The break time of each trace is recomputed after stacking.

The data quality is fairly good with the vertical component stacks displaying a consistent signature and a high signal to noise ratio, as seen on Plo1 1.

5.2 Spherical Divergence Correction and Bandpass Filter

A bandpass filter of 5-100 hertz bandwidth was applied and time varying gain function of the exponential form :

$$\text{GAIN}(T) = \left(\frac{T}{T_0} \right)^\alpha$$

where T is the recorded time, T_0 is the first break time and $\alpha = 1.0$

Trace equalisation was applied by normalising the RMS amplitude of the first break to correct for transmission losses of the direct wave. A normalisation window of 100 milliseconds was used (see plot 2).

5.3 Velocity filter

The downgoing coherent energy is estimated using a seven levels median velocity filter. The filter array is moved down one level after each computation and the process is repeated level by level over the entire dataset. As a result, the deepest and shallowest levels are lost because of edge effects.

The residual wavefield is obtained by subtracting the downgoing coherent energy from the total wavefield. The residual wavefield is dominated by reflected compressional events (plot 3).

The upgoing wavefield is enhanced by making a median stack of the upgoing aligned traces using a 5 levels filter. The data is now displayed in two way time (plot 3).

5.4 Waveshaping Deconvolution

The waveshaping deconvolution operator is a double sided operator and is designed trace by trace opening 20 ms before the first break with a window length of 1000 ms. The desired outputs were chosen to be zero phase with a band width of 5-65 Hz. Once the design is made upon the downgoing wavefield, it is applied to the downgoing and subtracted wavefield at the same level. The upgoing compressional wavefield is enhanced in an exactly analogous manner to before.

The result of waveshaping deconvolution on the residual wavefield is shown in Plot 4. The deconvolution is applied before any coherency enhancement in order to collapse the multiple sequence of shear arrivals, diffractions or out of plane reflections.

A corridor stack was computed on the data after zero phase waveshaping deconvolution by defining a timing window 150 msec wide along the time depth curve and stacking the data onto a single trace. This trace under normal circumstances should satisfy the assumption of one dimensionality and provide the best seismic representation of the borehole. This is displayed on Plot 5 .

Plot 5A shows the enhanced upgoing wavefield and corridor stacks with -90 degr. phase rotation.

5.5 VSP Acoustic Impedance Inversion

The zero phase waveshaping should permit a better interpretation of acoustic contrast, hence the data used for the inversion has been taken from the VSP after zero phase waveshaping deconvolution.

The inversion technique is based on entropy minimisation of the reflection coefficient series. In other words, the algorithm chooses the sparsest sequences of reflection coefficients as the preferred solution. The low frequency trend is extracted from the time depth curve such that the inversion technique is achieved without any input from the logged data.

It is important to point out that the acoustic impedance inversion is obtained without any input from the logged data. The quality of the inversion can be assessed by the similarity of the match between the logged impedance and inverted impedance.

Plots 6 and 7 are composite displays of the VSP data, inverted impedance, logged impedance and synthetic seismograms. These displays are a guide to the tie between the geograms and corridor stack.

There is a good tie between the synthetic seismogram and VSP. There are some subtle variations on the Amplitude of the events. The VSP provides a measure of the earth filter effect whilst the synthetic makes some very basic assumptions to approximate the earth filter effect.

A Summary of Geophysical Listings

Five geophysical data listings are appended to this report. Following is a brief description of the format of each listing.

A1 Geophysical Airgun Report

1. Level number: the level number starting from the top level (includes any imposed shots).
2. Measured depth from KB: *dkb*, the depth in metres from kelly bushing.
3. Vertical depth form SRD: *dsrd*, the depth in metres from seismic reference datum.
4. Observed travel time HYD to GEO: *tim0*, the transit time picked from the stacked data by subtracting the surface sensor first break time from the downhole sensor first break time.
5. Vertical travel time SRC to GEO: *timv*, is corrected for source to hydrophone distance and for source offset.
6. Vertical travel time SRD to GEO: *shtm*, is *timv* corrected for the vertical distance between source and datum.
7. Average velocity SRD to GEO: the average seismic velocity from datum to the corresponding checkshot level, $\frac{dsrd}{shtm}$.
8. Delta depth between shots: $\Delta depth$, the vertical distance between each level.
9. Delta time between shots: $\Delta time$, the difference in vertical travel time (*shtm*), between each level.
10. Interval velocity between shots: the average seismic velocity between each level, $\frac{\Delta depth}{\Delta time}$.

A2 Drift Computation Report

1. Level number: the level number starting from the top level (includes any imposed shots).
2. Vertical depth from KB: the depth in metres from kelly bushing
3. Vertical depth from SRD: the depth in metres from seismic reference datum.
4. Vertical travel time SRD to GEO: the calculated vertical travel time from datum to downhole geophone (see column 7, Geophysical Airgun Report).
5. Integrated raw sonic time: the raw sonic log is integrated from top to bottom and listed at each level. An initial value at the top of the sonic log is set equal to the checkshot time at that level. This may be an imposed shot if a shot was not taken at the top of the sonic.
6. Computed drift at level: the checkshot time minus the integrated raw sonic time.
7. Computed blk-shft correction: the drift gradient between any two checkshot levels
$$\left(\frac{\Delta \text{drift}}{\Delta \text{depth}} \right)$$
.

A3 Sonic Adjustment Parameter Report

1. Knee number: the knee number starting from the highest knee. (The first knees listed will generally be at SRD and the top of sonic. The drift imposed at these knees will normally be zero.)
2. Vertical depth from KB: the depth in metres from kelly bushing
3. Vertical depth from SRD: the depth in metres from seismic reference datum.
4. Drift at knee: the value of drift imposed at each knee.
5. Blockshift used: the change in drift divided by the change in depth between any two levels.
6. Delta-T minimum used: see section 4 of report for an explanation of Δt_{\min} .
7. reduction factor: see section 4 of report.
8. Equivalent blockshift: the gradient of the imposed drift curve.

A4 Velocity Report

1. Level number: the level number starting from the top level (includes any imposed shots).
2. Vertical depth from KB: the depth in metres from kelly bushing.
3. Vertical depth from SRD: the depth in metres from seismic reference datum.
4. Vertical travel time SRD to GEOPH: the vertical travel time from SRD to downhole geophone (see column 7, Geophysical Airgun Report)
5. Integrated adjusted sonic time: the adjusted sonic log is integrated from top to bottom. An initial value at the top of the sonic is set equal the checkshot time at that level. (the adjusted sonic log is the drift corrected sonic log.)
6. Drift=shot time-raw sonic: the check shot time minus the raw integrated sonic time.
7. Residual=shot time-adj sonic: the check shot time minus the adjusted integrated sonic time. This is the difference between calculated drift and the imposed drift.
8. Adjusted interval velocity: the interval velocity calculated from the integrated adjusted sonic time at each level.

A5 Time Converted Velocity Report

the data in this listing has been resampled in time.

1. Two way travel time from SRD: this is the index for the data in this listing. The first value is at SRD (0 millisecs) and the sampling rate is 2 millisecs.
2. Measured depth from KB: the depth from KB at each corresponding value of two way time.
3. Vertical depth from SRD: the vertical depth from SRD at each corresponding value of two way time.
4. Average velocity SRD to GEO: the vertical depth from SRD divided by half the two way time.
5. RMS velocity: the root mean square velocity from datum to the corresponding value of two way time.

$$v_{rms} = \sqrt{\sum_1^n v_i^2 t_i / \sum_1^n t_i}$$

where v_i is the velocity between each 2 millisecs interval.

6. First normal moveout: the correction time in milliseconds to be applied to the two way travel time for a specified moveout distance (default = 1000 M).

$$\Delta t = \sqrt{t^2 + \left(\frac{X}{v_{rms}}\right)^2} - t$$

where:

Δt = normal moveout (secs)
 X = moveout distance (metres)
 t = two way time (secs)
 v_{rms} = rms velocity (metres / sec)

7. Second normal moveout: the correction time in milliseconds to be applied to the two way travel time for a specified moveout distance (default = 1500 M).

8. Third normal moveout: the correction time in milliseconds to be applied to the two way travel time for a specified moveout distance (default = 2000 M)

9. Interval velocity: the velocity between each sampled depth. Typically, the sampling rate is 2 milliseconds two way time, (1 millisecond one way time) therefore the interval velocity will be equal to the depth increment divided by 0.002. It is equivalent to column 9 from the Velocity Report.

GEOGRAM PLOTS

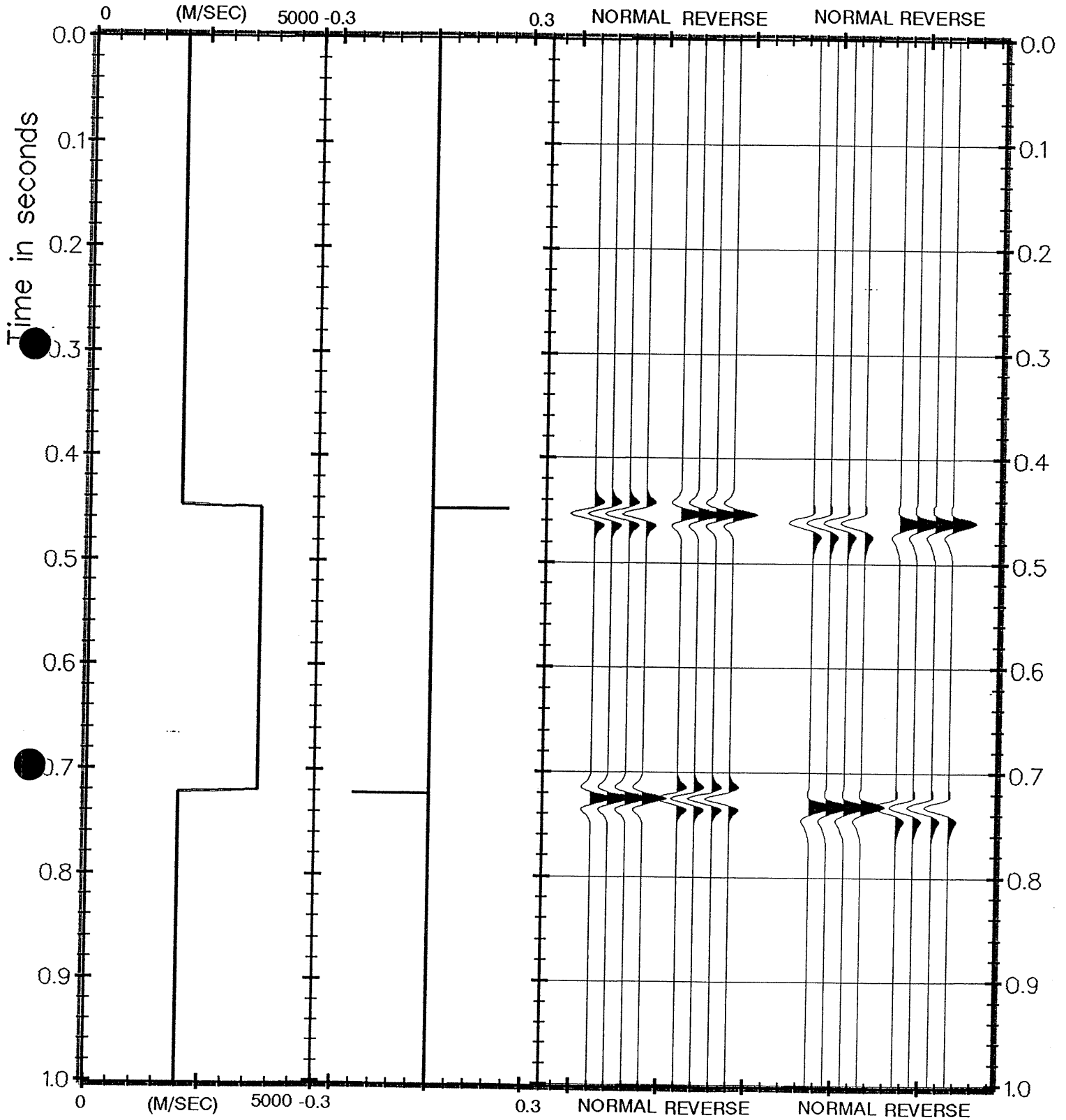
Drift Corrected Sonic
Seismic Calibration Log
25 hz zero phase Geogram
35 hz zero phase Geogram
45 hz zero phase Geogram
Geograms with -90 degr. phase shift

VSP PLOTS

Plot 1	Stacked data
Plot 2	Amplitude Recovery
Plot 3	Velocity Filter
Plot 4	Waveshaping Deconvolution Zero Phase
Plot 5	Waveshaping Deconvolution - Corridor Stack
Plot 5A	Waveshaping Deconvolution - Corridor Stack (-90 degr. phase shift)
Plot 6	VSP and Geogram Composite - normal polarity
Plot 7	VSP and Geogram Composite - reverse polarity

SCHLUMBERGER (SEG-1976) WAVELET POLARITY CONVENTION

INTERVAL VELOCITY REFLECTION COEFF. ZERO PHASE MINIMUM PHASE



SHOTS

ANALYST: WIBISONO

16-MAR-94 11:59

PROGRAM: GSHOT 007.E08

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*****  
*                                     *  
*                                     *  
*                                     *  
*****  
*                                     *  
*   SCHLUMBERGER                     *  
*                                     *  
*****
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GEOPHYSICAL AIRGUN REPORT

COMPANY : ESSO AUSTRALIA LTD.
WELL : HALIBUT #2
FIELD : HALIBUT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.560997
LOGGED : 04-MAR-1994

LONG DEFINITIONS

GLOBAL

KB - Elevation of the KELLY-BUSHING Above MSL or MWL
 SRD - Elevation of the Seismic Reference Datum Above MSL or MWL
 EKB - Elevation of Kelly Bushing
 VELHYD - VELOCITY OF THE MEDIUM BETWEEN THE SOURCE AND THE HYDROPHONE
 VELSUR - VELOCITY OF THE MEDIUM BETWEEN THE SOURCE AND THE SRD

MATRIX

GUNELZ - SOURCE ELEVATION ABOVE SRD (ONE FOR THE WHOLE JOB; OR ONE PER SHOT)
 GUNEWZ - SOURCE DISTANCE FROM THE BOREHOLE AXIS IN EW DIRECTION (CF. GUNELZ)
 GUNNSZ - SOURCE DISTANCE FROM THE BOREHOLE AXIS IN NS DIRECTION (CF. GUNELZ)
 HYDELZ - HYDROPHONE ELEVATION ABOVE SRD (CF. GUNELZ)
 HYDEWZ - HYDROPHONE DISTANCE FROM THE BOREH AXIS IN EW DIRECTION (CF GUNELZ)
 HYDNSZ - HYDROPHONE DISTANCE FROM THE BOREH AXIS IN NS DIRECTION (CF GUNELZ)
 TRTHYD - TRAVEL TIME FROM THE HYDROPHONE TO THE SOURCE
 TRTSRD - TRAVEL TIME FROM THE SOURCE TO THE SRD
 DEWVEL - DEVIATED WELL DATA PER SHOT : MEAS. DEPTH, VERT. DEPTH, EW, NS

SAMPLED

SHOT.GSH - Shot number
 DKB.GSH - Measured Depth from Kelly-Bushing
 DSRD.GSH - Depth from SRD
 TIMO.GSH - Tie In Memorized Output
 TIMV.GSH - Vertical Travel Time from the Source to the Geophone
 SHTM.GSH - Shot time (WST)
 AVGV.GSH - Average Seismic Velocity
 DELZ.GSH - Depth Interval between Successive Shots
 DELT.GSH - Travel Time Interval between Successive Shots
 INTV.GSH - Internal Velocity, Average

(GLOBAL PARAMETERS)

(VALUE)

ELEV OF KB AB. MSL (WST)	KB	:	25.0000	M
ELEV OF SRD AB. MSL (WST)	SRD	:	0	M
Elevation of Kelly Bushi	EKB	:	25.0000	M
VEL SOURCE-HYDRO (WST)	VELHYD	:	1524.00	M/S
VEL SOURCE-SRD (WST)	VELSUR	:	1524.00	M/S

(MATRIX PARAMETERS)

SOURCE ELV	SOURCE EW	SOURCE NS	HYDRO ELEV	HYDRO EW	HYDRO NS	
M	M	M	M	M	M	
1	-7.0	48.6	31.6	-14.0	48.6	31.6

	TRT HYD-SC		TRT SC-SRD
	MS		MS
1	4.59		4.59

	MD @ KB	VD @ KB	VD @ SRD	E-W COORD	N-S COORD
	M	M	M	M	M
1	230.0	230.0	205.0	0	0
2	430.0	430.0	405.0	0	0
3	630.0	630.0	605.0	0	0
4	830.0	830.0	805.0	0	0
5	1030.0	1030.0	1005.0	0	0
6	1230.0	1230.0	1205.0	0	0
7	1430.0	1430.0	1405.0	0	0
8	1630.0	1630.0	1605.0	0	0
9	1830.0	1830.0	1805.0	0	0
10	2030.0	2030.0	2005.0	0	0
11	2230.0	2230.0	2205.0	0	0
12	2250.0	2250.0	2225.0	0	0
13	2270.0	2270.0	2245.0	0	0
14	2290.0	2290.0	2265.0	0	0
15	2310.0	2310.0	2285.0	0	0
16	2330.0	2330.0	2305.0	0	0
17	2350.0	2350.0	2325.0	0	0
18	2370.0	2370.0	2345.0	0	0
19	2390.0	2390.0	2365.0	0	0
20	2410.0	2410.0	2385.0	0	0
21	2430.0	2430.0	2405.0	0	0
22	2450.0	2450.0	2425.0	0	0
23	2470.0	2470.0	2445.0	0	0
24	2490.0	2490.0	2465.0	0	0
25	2510.0	2510.0	2485.0	0	0
26	2530.0	2530.0	2505.0	0	0
27	2550.0	2550.0	2525.0	0	0
28	2570.0	2570.0	2545.0	0	0
29	2585.0	2585.0	2560.0	0	0

LEVEL NUMBER	MEASUR DEPTH FROM KB M	VERTIC DEPTH FROM SRD M	OBSERV TRAVEL TIME HYD/GEO MS	VERTIC TRAVEL TIME SRC/GEO MS	VERTIC TRAVEL TIME SRD/GEO MS	AVERAGE VELOC SRD/GEO M/S	DELTA DEPTH BETWEEN SHOTS M	DELTA TIME BETWEEN SHOTS MS	INTERV VELOC BETWEEN SHOTS M/S
1	230.0	205.0	110.00	109.97	114.57	1789			
2	430.0	405.0	197.80	200.28	204.87	1977	200.0	90.31	2215
3	630.0	605.0	277.10	280.38	284.97	2123	200.0	80.10	2497
4	830.0	805.0	346.20	349.87	354.46	2271	200.0	69.49	2878
5	1030.0	1005.0	411.50	415.39	419.99	2393	200.0	65.52	3052
6	1230.0	1205.0	473.20	477.23	481.83	2501	200.0	61.84	3234
7	1430.0	1405.0	528.40	532.54	537.13	2616	200.0	55.30	3617
8	1630.0	1605.0	583.30	587.51	592.10	2711	200.0	54.97	3638
9	1830.0	1805.0	638.30	642.56	647.15	2789	200.0	55.05	3633
10	2030.0	2005.0	695.70	700.00	704.59	2846	200.0	57.44	3482
11	2230.0	2205.0	760.80	765.13	769.72	2865	200.0	65.13	3071
12	2250.0	2225.0	767.60	771.93	776.52	2865	20.0	6.80	2940
13	2270.0	2245.0	773.80	778.13	782.73	2868	20.0	6.20	3224
14	2290.0	2265.0	780.40	784.73	789.33	2870	20.0	6.60	3029
15	2310.0	2285.0	787.50	791.84	796.43	2869	20.0	7.10	2816
16	2330.0	2305.0	794.00	798.34	802.93	2871	20.0	6.50	3076
17	2350.0	2325.0	799.10	803.44	808.03	2877	20.0	5.10	3919
18	2370.0	2345.0	804.70	809.04	813.64	2882	20.0	5.60	3570
19	2390.0	2365.0	810.60	814.95	819.54	2886	20.0	5.90	3388
20	2410.0	2385.0	815.60	819.95	824.54	2893	20.0	5.00	3998
21	2430.0	2405.0	821.80	826.15	830.74	2895	20.0	6.20	3225
22	2450.0	2425.0	825.70	830.05	834.65	2905	20.0	3.90	5124
23	2470.0	2445.0	831.90	836.26	840.85	2908	20.0	6.20	3225
24	2490.0	2465.0	836.90	841.26	845.85	2914	20.0	5.00	3998

LEVEL NUMBER	MEASUR DEPTH FROM KB M	VERTIC DEPTH FROM SRD M	OBSERV TRAVEL TIME HYD/GEO MS	VERTIC TRAVEL TIME SRC/GEO MS	VERTIC TRAVEL TIME SRD/GEO MS	AVERAGE VELOC SRD/GEO M/S	DELTA DEPTH BETWEEN SHOTS M	DELTA TIME BETWEEN SHOTS MS	INTERV VELOC BETWEEN SHOTS M/S
25	2510.0	2485.0	841.90	846.26	850.85	2921	20.0	5.00	3998
26	2530.0	2505.0	847.00	851.36	855.96	2927	20.0	5.10	3920
27	2550.0	2525.0	852.10	856.47	861.06	2932	20.0	5.10	3920
28	2570.0	2545.0	857.20	861.57	866.16	2938	20.0	5.10	3920
29	2585.0	2560.0	861.40	865.77	870.36	2941	15.0	4.20	3570

DRIFT

DRIFT

ANALYST: WIBISONO

16-MAR-94 11:59

PROGRAM: GDRIFT 007.E09

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* SCHLUMBERGER *  
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DRIFT COMPUTATION REPORT

COMPANY : ESSO AUSTRALIA LTD.
WELL : HALIBUT #2
FIELD : HALIBUT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.560997
LOGGED : 04-MAR-1994

LONG DEFINITIONS

GLOBAL

- KB - Elevation of the KELLY-BUSHING Above MSL or MWL
- SRD - Elevation of the Seismic Reference Datum Above MSL or MWL
- EKB - Elevation of Kelly Bushing
- XSTART - TOP OF ZONE PROCESSED BY WST
- XSTOP - BOTTOM OF ZONE PROCESSED BY WST
- UNFDEN - UNIFORM DENSITY VALUE
- GAD001 - RAW SONIC CHANNEL NAME USED FOR WST SONIC ADJUSTMENT

ZONE

- LOFDEN - LAYER OPTION FLAG FOR DENSITY : -1=NONE; 0=UNIFORM; 1=UNIFORM+LAYER
- LAYDEN - USER SUPPLIED DENSITY DATA

SAMPLED

- SHOT - Shot number
- DKB - Measured Depth from Kelly-Bushing
- DSRD - Depth from SRD
- SHTM - Shot time (WST)
- RAWS - Raw Sonic (WST)
- SHDR - Drift at Shot or Knee
- BLSH - Block Shift between Shots or Knee

(GLOBAL PARAMETERS)

(VALUE)

ELEV OF KB AB. MSL (WST)	KB	:	25.0000	M
ELEV OF SRD AB. MSL(WST)	SRD	:	0	M
Elevation of Kelly Bushi	EKB	:	25.0000	M
TOP OF ZONE PROCD (WST)	XSTART	:	0	M
BOT OF ZONE PROCD (WST)	XSTOP	:	0	M
UNIFORM DENSITY VALUE	UNFDEN	:	2.30000	G/C3
RAW SONIC CH NAME (WST)	GAD001	:	DT.EDI.003.FUN.FLP.*	

(ZONED PARAMETERS)

(VALUE)

(LIMITS)

LAYER OPTION FLAG DENS	LOFDEN	:	1.000000	30479.7	-	0
USER SUPPLIED DENSITY DA	LAYDEN	:	0	G/C3	0	-

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL TRAVEL TIME SRD/GEO MS	INTEGRATED RAW SONIC TIME MS	COMPUTED DRIFT AT LEVEL MS	COMPUTED BLK-SHFT CORRECTION US/M
1	230.0	205.0	114.57	114.57	0	0
2	430.0	405.0	204.87	204.87	0	0
3	630.0	605.0	284.97	282.24	2.73	13.66
4	830.0	805.0	354.46	347.05	7.42	23.42
5	1030.0	1005.0	419.99	410.66	9.32	9.54
6	1230.0	1205.0	481.83	471.55	10.28	4.79
7	1430.0	1405.0	537.13	525.25	11.87	7.96
8	1630.0	1605.0	592.10	578.11	13.99	10.59
9	1830.0	1805.0	647.15	631.86	15.30	6.52
10	2030.0	2005.0	704.59	687.87	16.73	7.15
11	2230.0	2205.0	769.72	750.83	18.89	10.82
12	2250.0	2225.0	776.52	757.09	19.44	27.26
13	2270.0	2245.0	782.73	763.43	19.30	-6.98
14	2290.0	2265.0	789.33	769.64	19.68	19.36
15	2310.0	2285.0	796.43	775.98	20.45	38.12
16	2330.0	2305.0	802.93	782.40	20.54	4.56
17	2350.0	2325.0	808.03	787.50	20.53	-.32
18	2370.0	2345.0	813.64	792.74	20.89	18.15
19	2390.0	2365.0	819.54	798.04	21.50	30.26
20	2410.0	2385.0	824.54	803.44	21.10	-19.90
21	2430.0	2405.0	830.74	808.77	21.97	43.59
22	2450.0	2425.0	834.65	813.88	20.77	-60.05
23	2470.0	2445.0	840.85	819.33	21.52	37.21
24	2490.0	2465.0	845.85	824.52	21.33	-9.15

COMPANY ESSO AUSTRALIA LTD.

WELL : HALIBUT #2

PAGE 3

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL TRAVEL TIME SRD/GEO MS	INTEGRATED RAW SONIC TIME MS	COMPUTED DRIFT AT LEVEL MS	COMPUTED BLK-SHFT CORRECTION US/M
25	2510.0	2485.0	850.85	829.66	21.20	-6.86
26	2530.0	2505.0	855.96	834.88	21.08	-5.94
27	2550.0	2525.0	861.06	840.10	20.96	-5.91
28	2570.0	2545.0	866.16	845.41	20.75	-10.28
29	2585.0	2560.0	870.36	849.45	20.91	10.81

ANALYST: WIBISONO

16-MAR-94 12:24:01

PROGRAM: GADJST 008.E08

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SONIC ADJUSTMENT PARAMETER REPORT

COMPANY : ESSO AUSTRALIA LTD.
WELL : HALIBUT #2
FIELD : HALIBUT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.560997
LOGGED : 04-MAR-1994

LONG DEFINITIONS

GLOBAL

SRCDRF - ORIGIN OF ADJUSTMENT DATA
 CONADJ - CONSTANT ADJUSTMENT TO AUTOMATIC DELTA-T MINIMUM = 7.5 US/F
 UNERTH - UNIFORM EARTH VELOCITY (GTRFRM)

ZONE

ZDRIFT - USER DRIFT AT BOTTOM OF THE ZONE
 ADJOPZ - TYPE OF ADJUSTMENT IN THE DRIFT ZONE : 0=DELTA-T MIN, 1=BLOCKSHIFT
 ADJUSZ - DELTA-T MINIMUM USED FOR ADJUSTMENT IN THE DRIFT ZONE
 LOFVEL - LAYER OPTION FLAG FOR VELOCITY: -1=NONE; 0=UNIFORM; 1=UNIFORM+LAYER
 LAYVEL - USER SUPPLIED VELOCITY DATA

SAMPLED

SHOT - Shot number
 VDKB - Vertical Depth Relative to KB
 DSRD - Depth from SRD
 KNEE - Knee
 BLSH - Block Shift between Shots or Knee
 DTMI - Value of Delta-T Minimum used
 COEF - Delta-T MIN Coefficient used in the Drift Zone
 DRGR - Gradient of Drift Curve

(GLOBAL PARAMETERS)

(VALUE)

ORIG OF ADJ DATA (WST)	SRCDRF	:	2.00000	
CONS SONIC ADJST (WST)	CONADJ	:	24.6063	US/M
UNIFORM EARTH VELOCITY	UNERTH	:	1789.00	M/S

(ZONED PARAMETERS)

(VALUE)

(LIMITS)

(ZONED PARAMETERS)	(VALUE)	(LIMITS)
USER DRIFT ZONE (WST)	ZDRIFT	: 21.70000 MS 2585.10 - 2330.50
		20.30000 2330.50 781.000
		6.200000 781.000 430.000
		0 430.000 0
ADJUSMNT MODE (WST)	ADJOPZ	:-999.2500 30479.7 - 0
USER DELTA-T MIN (WST)	ADJUSZ	:-999.2500 US/M 30479.7 - 0
LAYER OPTION FLAG VELOC	LOFVEL	: 0 30479.7 - 0
USER VELOC (WST)	LAYVEL	: 2215.000 M/S 430.000 - 230.000
		1789.000 230.000 0

COMPANY ● ESSO AUSTRALIA LTD.

WELL ● : HALIBUT #2

● PAGE 2

KNEE NUMBER	VERTICAL DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	DRIFT AT KNEE MS	BLOCKSHIFT USED US/M	DELTA-T MINIMUM USED US/M	REDUCTION FACTOR G	EQUIVALENT BLOCKSHIFT US/M
2	430.0	405.0	0	0			0
3	781.0	756.0	6.20	17.66			17.66
4	2330.5	2305.5	20.30	9.10			9.10
5	2585.1	2560.1	21.70	5.50			5.50

ANALYST: WIBISONO

16-MAR-94 12:24 7

PROGRAM: GADJST 008.E08

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VELOCITY REPORT

COMPANY : ESSO AUSTRALIA LTD.
WELL : HALIBUT #2
FIELD : HALIBUT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.560997
LOGGED : 04-MAR-1994

LONG DEFINITIONS

GLOBAL

- KB - Elevation of the KELLY-BUSHING Above MSL or MWL
- SRD - Elevation of the Seismic Reference Datum Above MSL or MWL
- EKB - Elevation of Kelly Bushing
- UNERTH - UNIFORM EARTH VELOCITY (GTRFRM)

ZONE

- LOFVEL - LAYER OPTION FLAG FOR VELOCITY: -1=NONE; 0=UNIFORM; 1=UNIFORM+LAYER
- LAYVEL - USER SUPPLIED VELOCITY DATA

SAMPLED

- SHOT - Shot number
- DKB - Measured Depth from Kelly-Bushing
- DSRD - Depth from SRD
- SHTM - Shot time (WST)
- ADJS - Adjusted Sonic Travel Time
- SHDR - Drift at Shot or Knee
- REST - Residual Travel Time at Knee
- INTV - Internal Velocity, Average

(GLOBAL PARAMETERS)

(VALUE)

ELEV OF KB AB. MSL (WST)	KB	:	25.0000	M
ELEV OF SRD AB. MSL (WST)	SRD	:	0	M
Elevation of Kelly Bushi	EKB	:	25.0000	M
UNIFORM EARTH VELOCITY	UNERTH	:	1789.00	M/S

(ZONED PARAMETERS)

(VALUE)

(LIMITS)

LAYER OPTION FLAG VELOC	LOFVEL	:	0	30479.7	-	0
USER VELOC (WST)	LAYVEL	:	2215.000	M/S	430.000	- 230.000
			1789.000		230.000	0

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL TRAVEL TIME SRD/GEOPH MS	INTEGRATED ADJUSTED SONIC TIME MS	DRIFT = SHOT TIME - RAW SON MS	RESIDUAL = SHOT TIME - ADJ SON MS	ADJUSTED INTERVAL VELOCITY M/S
1	230.0	205.0	114.57	114.57	0	0	1789
2	430.0	405.0	204.87	204.87	0	0	2215
3	630.0	605.0	284.97	285.77	2.73	-.80	2472
4	830.0	805.0	354.46	353.68	7.42	.78	2945
5	1030.0	1005.0	419.99	419.11	9.32	.88	3057
6	1230.0	1205.0	481.83	481.81	10.28	.02	3190
7	1430.0	1405.0	537.13	537.34	11.87	-.21	3602
8	1630.0	1605.0	592.10	592.01	13.99	.09	3658
9	1830.0	1805.0	647.15	647.58	15.30	-.42	3599
10	2030.0	2005.0	704.59	705.41	16.73	-.82	3458
11	2230.0	2205.0	769.72	770.20	18.89	-.48	3087
12	2250.0	2225.0	776.52	776.63	19.44	-.11	3106
13	2270.0	2245.0	782.73	783.16	19.30	-.44	3063
14	2290.0	2265.0	789.33	789.56	19.68	-.23	3128
15	2310.0	2285.0	796.43	796.08	20.45	.35	3065
16	2330.0	2305.0	802.93	802.67	20.54	.26	3033
17	2350.0	2325.0	808.03	807.88	20.53	.15	3841
18	2370.0	2345.0	813.64	813.24	20.89	.40	3735
19	2390.0	2365.0	819.54	818.65	21.50	.89	3696
20	2410.0	2385.0	824.54	824.15	21.10	.39	3632
21	2430.0	2405.0	830.74	829.60	21.97	1.15	3674
22	2450.0	2425.0	834.65	834.81	20.77	-.16	3838
23	2470.0	2445.0	840.85	840.38	21.52	.47	3593
24	2490.0	2465.0	845.85	845.67	21.33	.18	3776

COMPANY ESSO AUSTRALIA LTD.

WELL : HALIBUT #2

PAGE 5

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL TRAVEL TIME SRD/GEOPH MS	INTEGRATED ADJUSTED SONIC TIME MS	DRIFT = SHOT TIME - RAW SON MS	RESIDUAL = SHOT TIME - ADJ SON MS	ADJUSTED INTERVAL VELOCITY M/S
25	2510.0	2485.0	850.85	850.92	21.20	-.06	3811
26	2530.0	2505.0	855.96	856.25	21.08	-.29	3751
27	2550.0	2525.0	861.06	861.58	20.96	-.52	3752
28	2570.0	2545.0	866.16	867.00	20.75	-.84	3691
29	2585.0	2560.0	870.36	871.16	20.91	-.80	3604

TIME / DEPTH

TIME/DEPTH

ANALYST: WIBISONO

16-MAR-94 12:26

PROGRAM: GTRFRM 001.E13

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TIME CONVERTED VELOCITY REPORT

COMPANY : ESSO AUSTRALIA LTD.
WELL : HALIBUT #2
FIELD : HALIBUT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.560997
LOGGED : 04-MAR-1994

LONG DEFINITIONS

GLOBAL

KB - Elevation of the KELLY-BUSHING Above MSL or MWL
 SRD - Elevation of the Seismic Reference Datum Above MSL or MWL
 GL - Elevation of Users Reference (Generally Ground Level) Above SRD
 UNERTH - UNIFORM EARTH VELOCITY (GTRFRM)
 UNFDEN - UNIFORM DENSITY VALUE

MATRIX

MVODIS - MOVE-OUT DISTANCE FROM BOREHOLE

ZONE

LOFVEL - LAYER OPTION FLAG FOR VELOCITY: -1=NONE; 0=UNIFORM; 1=UNIFORM+LAYER
 LAYVEL - USER SUPPLIED VELOCITY DATA
 LOFDEN - LAYER OPTION FLAG FOR DENSITY : -1=NONE; 0=UNIFORM; 1=UNIFORM+LAYER
 LAYDEN - USER SUPPLIED DENSITY DATA

SAMPLED

TWOT - Two Way Travel Time (Relative to the Seismic Reference)
 DKB - Measured Depth from Kelly-Bushing
 DSRD - Depth from SRD
 AVGV - Average Seismic Velocity
 RMSV - Root Mean Square Velocity (Seismic)
 MVOT - Normal Move-Out
 MVOT - Normal Move-Out
 MVOT - Normal Move-Out
 INTV - Internal Velocity, Average

(GLOBAL PARAMETERS)

(VALUE)

ELEV OF KB AB. MSL (WST)	KB	:	25.0000	M
ELEV OF SRD AB. MSL (WST)	SRD	:	0	M
ELEV OF GL AB. SRD (WST)	GL	:	0	M
UNIFORM EARTH VELOCITY	UNERTH	:	1789.00	M/S
UNIFORM DENSITY VALUE	UNFDEN	:	2.30000	G/C3

(MATRIX PARAMETERS)

MVOUT DIST
M

1	1000.0
2	1500.0
3	2000.0

COMPANY ESSO AUSTRALIA LTD.

WELL : HALIBUT #2

PAGE 2

(ZONED PARAMETERS)

	(VALUE)		(LIMITS)
LAYER OPTION FLAG VELOC LOFVEL	: 0		30479.7 - 0
USER VELOC (WST) LAYVEL	: 2215.000	M/S	430.000 - 230.000
	1789.000		230.000
LAYER OPTION FLAG DENS LOFDEN	: -1.000000		30479.7 - 0
USER SUPPLIED DENSITY DA LAYDEN	: 0	G/C3	0 - 0

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
0	25.0	0						1789
2.00	26.8	1.8	1789	1789	556.98	836.46	1115.94	1789
4.00	28.6	3.6	1789	1789	554.99	834.47	1113.95	1789
6.00	30.4	5.4	1789	1789	553.00	832.48	1111.96	1789
8.00	32.2	7.2	1789	1789	551.03	830.50	1109.97	1789
10.00	33.9	8.9	1789	1789	549.06	828.52	1107.99	1789
12.00	35.7	10.7	1789	1789	547.10	826.54	1106.01	1789
14.00	37.5	12.5	1789	1789	545.15	824.57	1104.03	1789
16.00	39.3	14.3	1789	1789	543.20	822.61	1102.06	1789
18.00	41.1	16.1	1789	1789	541.26	820.65	1100.09	1789
20.00	42.9	17.9	1789	1789	539.33	818.70	1098.12	1789
22.00	44.7	19.7	1789	1789	537.40	816.75	1096.16	1789
24.00	46.5	21.5	1789	1789	535.49	814.80	1094.20	1789
26.00	48.3	23.3	1789	1789	533.58	812.86	1092.25	1789
28.00	50.0	25.0	1789	1789	531.67	810.92	1090.29	1789
30.00	51.8	26.8	1789	1789	529.78	808.99	1088.35	1789
32.00	53.6	28.6	1789	1789	527.89	807.07	1086.40	1789
34.00	55.4	30.4	1789	1789	526.00	805.15	1084.46	1789
36.00	57.2	32.2	1789	1789	524.13	803.23	1082.52	1789
38.00	59.0	34.0	1789	1789	522.26	801.32	1080.59	1789
40.00	60.8	35.8	1789	1789	520.40	799.41	1078.66	1789
42.00	62.6	37.6	1789	1789	518.55	797.51	1076.73	1789
44.00	64.4	39.4	1789	1789	516.70	795.61	1074.81	1789
46.00	66.1	41.1	1789	1789	514.86	793.72	1072.89	1789

COMPANY ESSO AUSTRALIA LTD.

WELL : HALIBUT #2

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TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
48.00	67.9	42.9	1789	1789	513.03	791.83	1070.97	1789
50.00	69.7	44.7	1789	1789	511.20	789.95	1069.06	1789
52.00	71.5	46.5	1789	1789	509.38	788.07	1067.15	1789
54.00	73.3	48.3	1789	1789	507.57	786.19	1065.25	1789
56.00	75.1	50.1	1789	1789	505.77	784.33	1063.34	1789
58.00	76.9	51.9	1789	1789	503.97	782.46	1061.45	1789
60.00	78.7	53.7	1789	1789	502.18	780.60	1059.55	1789
62.00	80.5	55.5	1789	1789	500.40	778.75	1057.66	1789
64.00	82.2	57.2	1789	1789	498.62	776.90	1055.77	1789
66.00	84.0	59.0	1789	1789	496.85	775.05	1053.89	1789
68.00	85.8	60.8	1789	1789	495.09	773.21	1052.01	1789
70.00	87.6	62.6	1789	1789	493.34	771.37	1050.13	1789
72.00	89.4	64.4	1789	1789	491.59	769.54	1048.26	1789
74.00	91.2	66.2	1789	1789	489.85	767.72	1046.39	1789
76.00	93.0	68.0	1789	1789	488.11	765.89	1044.52	1789
78.00	94.8	69.8	1789	1789	486.39	764.08	1042.66	1789
80.00	96.6	71.6	1789	1789	484.67	762.27	1040.80	1789
82.00	98.3	73.3	1789	1789	482.95	760.46	1038.95	1789
84.00	100.1	75.1	1789	1789	481.25	758.65	1037.09	1789
86.00	101.9	76.9	1789	1789	479.55	756.86	1035.25	1789
88.00	103.7	78.7	1789	1789	477.86	755.06	1033.40	1789
90.00	105.5	80.5	1789	1789	476.17	753.27	1031.56	1789
92.00	107.3	82.3	1789	1789	474.49	751.49	1029.72	1789
94.00	109.1	84.1	1789	1789	472.82	749.71	1027.89	1789

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
96.00	110.9	85.9	1789	1789	471.16	747.94	1026.06	1789
98.00	112.7	87.7	1789	1789	469.50	746.16	1024.23	1789
100.00	114.5	89.5	1789	1789	467.85	744.40	1022.41	1789
102.00	116.2	91.2	1789	1789	466.20	742.64	1020.59	1789
104.00	118.0	93.0	1789	1789	464.56	740.88	1018.77	1789
106.00	119.8	94.8	1789	1789	462.93	739.13	1016.96	1789
108.00	121.6	96.6	1789	1789	461.31	737.38	1015.15	1789
110.00	123.4	98.4	1789	1789	459.69	735.64	1013.34	1789
112.00	125.2	100.2	1789	1789	458.08	733.90	1011.54	1789
114.00	127.0	102.0	1789	1789	456.48	732.17	1009.74	1789
116.00	128.8	103.8	1789	1789	454.88	730.44	1007.95	1789
118.00	130.6	105.6	1789	1789	453.29	728.72	1006.15	1789
120.00	132.3	107.3	1789	1789	451.71	727.00	1004.36	1789
122.00	134.1	109.1	1789	1789	450.13	725.29	1002.58	1789
124.00	135.9	110.9	1789	1789	448.56	723.58	1000.80	1789
126.00	137.7	112.7	1789	1789	447.00	721.87	999.02	1789
128.00	139.5	114.5	1789	1789	445.44	720.17	997.25	1789
130.00	141.3	116.3	1789	1789	443.89	718.48	995.48	1789
132.00	143.1	118.1	1789	1789	442.35	716.78	993.71	1789
134.00	144.9	119.9	1789	1789	440.81	715.10	991.94	1789
136.00	146.7	121.7	1789	1789	439.28	713.42	990.18	1789
138.00	148.4	123.4	1789	1789	437.75	711.74	988.43	1789
140.00	150.2	125.2	1789	1789	436.24	710.06	986.67	1789
142.00	152.0	127.0	1789	1789	434.73	708.40	984.93	1789

COMPANY ESSO AUSTRALIA LTD.

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TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
144.00	153.8	128.8	1789	1789	433.22	706.73	983.18	1789
146.00	155.6	130.6	1789	1789	431.72	705.07	981.44	1789
148.00	157.4	132.4	1789	1789	430.23	703.42	979.70	1789
150.00	159.2	134.2	1789	1789	428.75	701.77	977.96	1789
152.00	161.0	136.0	1789	1789	427.27	700.12	976.23	1789
154.00	162.8	137.8	1789	1789	425.80	698.48	974.50	1789
156.00	164.5	139.5	1789	1789	424.33	696.85	972.77	1789
158.00	166.3	141.3	1789	1789	422.87	695.21	971.05	1789
160.00	168.1	143.1	1789	1789	421.42	693.59	969.33	1789
162.00	169.9	144.9	1789	1789	419.97	691.96	967.62	1789
164.00	171.7	146.7	1789	1789	418.53	690.35	965.91	1789
166.00	173.5	148.5	1789	1789	417.10	688.73	964.20	1789
168.00	175.3	150.3	1789	1789	415.67	687.12	962.50	1789
170.00	177.1	152.1	1789	1789	414.25	685.52	960.79	1789
172.00	178.9	153.9	1789	1789	412.84	683.92	959.10	1789
174.00	180.6	155.6	1789	1789	411.43	682.32	957.40	1789
176.00	182.4	157.4	1789	1789	410.02	680.73	955.71	1789
178.00	184.2	159.2	1789	1789	408.63	679.14	954.02	1789
180.00	186.0	161.0	1789	1789	407.24	677.56	952.34	1789
182.00	187.8	162.8	1789	1789	405.85	675.98	950.66	1789
184.00	189.6	164.6	1789	1789	404.48	674.41	948.98	1789
186.00	191.4	166.4	1789	1789	403.11	672.84	947.31	1789
188.00	193.2	168.2	1789	1789	401.74	671.28	945.64	1789
190.00	195.0	170.0	1789	1789	400.38	669.72	943.97	1789

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
192.00	196.7	171.7	1789	1789	399.03	668.16	942.31	1789
194.00	198.5	173.5	1789	1789	397.68	666.61	940.65	1789
196.00	200.3	175.3	1789	1789	396.34	665.06	938.99	1789
198.00	202.1	177.1	1789	1789	395.00	663.52	937.34	1789
200.00	203.9	178.9	1789	1789	393.67	661.98	935.69	1789
202.00	205.7	180.7	1789	1789	392.35	660.45	934.05	1789
204.00	207.5	182.5	1789	1789	391.03	658.92	932.40	1789
206.00	209.3	184.3	1789	1789	389.72	657.39	930.76	1789
208.00	211.1	186.1	1789	1789	388.42	655.87	929.13	1789
210.00	212.8	187.8	1789	1789	387.12	654.36	927.50	1789
212.00	214.6	189.6	1789	1789	385.82	652.84	925.87	1789
214.00	216.4	191.4	1789	1789	384.54	651.34	924.24	1789
216.00	218.2	193.2	1789	1789	383.25	649.83	922.62	1789
218.00	220.0	195.0	1789	1789	381.98	648.33	921.00	1789
220.00	221.8	196.8	1789	1789	380.71	646.84	919.38	1789
222.00	223.6	198.6	1789	1789	379.44	645.35	917.77	1789
224.00	225.4	200.4	1789	1789	378.18	643.86	916.16	1789
226.00	227.2	202.2	1789	1789	376.93	642.38	914.56	1789
228.00	228.9	203.9	1789	1789	375.68	640.90	912.96	1789
230.00	230.9	205.9	1791	1791	373.97	638.69	910.35	1969
232.00	233.1	208.1	1794	1795	371.56	635.38	906.27	2215
234.00	235.3	210.3	1798	1799	369.19	632.13	902.25	2215
236.00	237.6	212.6	1801	1803	366.85	628.92	898.29	2215
238.00	239.8	214.8	1805	1807	364.55	625.76	894.40	2215

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
240.00	242.0	217.0	1808	1810	362.28	622.65	890.56	2215
242.00	244.2	219.2	1812	1814	360.04	619.58	886.78	2215
244.00	246.4	221.4	1815	1818	357.84	616.56	883.05	2215
246.00	248.6	223.6	1818	1821	355.67	613.57	879.38	2215
248.00	250.8	225.8	1821	1825	353.53	610.63	875.75	2215
250.00	253.1	228.1	1824	1828	351.41	607.72	872.18	2215
252.00	255.3	230.3	1828	1832	349.33	604.86	868.65	2215
254.00	257.5	232.5	1831	1835	347.27	602.03	865.18	2215
256.00	259.7	234.7	1834	1838	345.24	599.24	861.74	2215
258.00	261.9	236.9	1837	1841	343.24	596.48	858.35	2215
260.00	264.1	239.1	1840	1845	341.26	593.76	855.01	2215
262.00	266.4	241.4	1842	1848	339.31	591.07	851.71	2215
264.00	268.6	243.6	1845	1851	337.38	588.41	848.44	2215
266.00	270.8	245.8	1848	1854	335.47	585.78	845.22	2215
268.00	273.0	248.0	1851	1857	333.59	583.19	842.03	2215
270.00	275.2	250.2	1853	1860	331.73	580.62	838.89	2215
272.00	277.4	252.4	1856	1862	329.90	578.09	835.77	2215
274.00	279.6	254.6	1859	1865	328.08	575.58	832.70	2215
276.00	281.9	256.9	1861	1868	326.29	573.10	829.66	2215
278.00	284.1	259.1	1864	1871	324.52	570.65	826.65	2215
280.00	286.3	261.3	1866	1873	322.76	568.22	823.67	2215
282.00	288.5	263.5	1869	1876	321.03	565.82	820.73	2215
284.00	290.7	265.7	1871	1879	319.32	563.45	817.82	2215
286.00	292.9	267.9	1874	1881	317.63	561.10	814.94	2215

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
288.00	295.1	270.1	1876	1884	315.95	558.77	812.09	2215
290.00	297.4	272.4	1878	1886	314.29	556.47	809.27	2215
292.00	299.6	274.6	1881	1889	312.66	554.19	806.47	2215
294.00	301.8	276.8	1883	1891	311.03	551.93	803.71	2215
296.00	304.0	279.0	1885	1893	309.43	549.70	800.97	2215
298.00	306.2	281.2	1887	1896	307.84	547.49	798.26	2215
300.00	308.4	283.4	1890	1898	306.27	545.30	795.57	2215
302.00	310.6	285.6	1892	1900	304.72	543.13	792.91	2215
304.00	312.9	287.9	1894	1903	303.18	540.98	790.27	2215
306.00	315.1	290.1	1896	1905	301.66	538.85	787.66	2215
308.00	317.3	292.3	1898	1907	300.15	536.74	785.07	2215
310.00	319.5	294.5	1900	1909	298.66	534.65	782.51	2215
312.00	321.7	296.7	1902	1911	297.18	532.58	779.97	2215
314.00	323.9	298.9	1904	1913	295.72	530.52	777.45	2215
316.00	326.1	301.1	1906	1915	294.27	528.49	774.95	2215
318.00	328.4	303.4	1908	1917	292.84	526.47	772.48	2215
320.00	330.6	305.6	1910	1919	291.42	524.47	770.02	2215
322.00	332.8	307.8	1912	1921	290.02	522.49	767.59	2215
324.00	335.0	310.0	1914	1923	288.62	520.52	765.17	2215
326.00	337.2	312.2	1915	1925	287.24	518.57	762.78	2215
328.00	339.4	314.4	1917	1927	285.88	516.64	760.40	2215
330.00	341.7	316.7	1919	1929	284.52	514.72	758.05	2215
332.00	343.9	318.9	1921	1931	283.18	512.82	755.71	2215
334.00	346.1	321.1	1923	1933	281.85	510.94	753.39	2215

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
336.00	348.3	323.3	1924	1934	280.54	509.07	751.09	2215
338.00	350.5	325.5	1926	1936	279.23	507.21	748.81	2215
340.00	352.7	327.7	1928	1938	277.94	505.37	746.55	2215
342.00	354.9	329.9	1929	1940	276.66	503.55	744.30	2215
344.00	357.2	332.2	1931	1941	275.39	501.73	742.07	2215
346.00	359.4	334.4	1933	1943	274.13	499.94	739.86	2215
348.00	361.6	336.6	1934	1945	272.88	498.15	737.66	2215
350.00	363.8	338.8	1936	1946	271.64	496.38	735.48	2215
352.00	366.0	341.0	1938	1948	270.42	494.63	733.31	2215
354.00	368.2	343.2	1939	1950	269.20	492.88	731.16	2215
356.00	370.4	345.4	1941	1951	268.00	491.15	729.02	2215
358.00	372.7	347.7	1942	1953	266.80	489.43	726.90	2215
360.00	374.9	349.9	1944	1954	265.62	487.73	724.80	2215
362.00	377.1	352.1	1945	1956	264.44	486.04	722.71	2215
364.00	379.3	354.3	1947	1957	263.28	484.36	720.63	2215
366.00	381.5	356.5	1948	1959	262.12	482.69	718.57	2215
368.00	383.7	358.7	1950	1960	260.98	481.03	716.52	2215
370.00	385.9	360.9	1951	1962	259.84	479.39	714.49	2215
372.00	388.2	363.2	1952	1963	258.72	477.75	712.46	2215
374.00	390.4	365.4	1954	1965	257.60	476.13	710.46	2215
376.00	392.6	367.6	1955	1966	256.49	474.52	708.46	2215
378.00	394.8	369.8	1957	1968	255.39	472.92	706.48	2215
380.00	397.0	372.0	1958	1969	254.30	471.33	704.51	2215
382.00	399.2	374.2	1959	1970	253.22	469.75	702.55	2215

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
384.00	401.4	376.4	1961	1972	252.15	468.19	700.61	2215
386.00	403.7	378.7	1962	1973	251.09	466.63	698.68	2215
388.00	405.9	380.9	1963	1974	250.03	465.08	696.76	2215
390.00	408.1	383.1	1965	1976	248.98	463.55	694.85	2215
392.00	410.3	385.3	1966	1977	247.94	462.02	692.95	2215
394.00	412.5	387.5	1967	1978	246.91	460.51	691.07	2215
396.00	414.7	389.7	1968	1979	245.89	459.00	689.19	2215
398.00	416.9	391.9	1970	1981	244.87	457.51	687.33	2215
400.00	419.2	394.2	1971	1982	243.87	456.02	685.48	2215
402.00	421.4	396.4	1972	1983	242.87	454.54	683.64	2215
404.00	423.6	398.6	1973	1984	241.88	453.08	681.81	2215
406.00	425.8	400.8	1974	1986	240.89	451.62	679.99	2215
408.00	428.0	403.0	1976	1987	239.92	450.17	678.18	2228
410.00	430.3	405.3	1977	1988	238.93	448.71	676.35	2354
412.00	432.6	407.6	1979	1990	237.82	447.02	674.20	2419
414.00	435.0	410.0	1981	1992	236.64	445.22	671.89	2407
416.00	437.4	412.4	1983	1994	235.49	443.46	669.63	2348
418.00	439.8	414.8	1985	1996	234.41	441.82	667.54	2428
420.00	442.2	417.2	1987	1999	233.26	440.05	665.26	2385
422.00	444.6	419.6	1989	2001	232.16	438.37	663.11	2398
424.00	447.0	422.0	1991	2003	231.06	436.68	660.94	2394
426.00	449.4	424.4	1992	2005	229.98	435.01	658.80	2411
428.00	451.8	426.8	1994	2007	228.88	433.33	656.64	2328
430.00	454.1	429.1	1996	2008	227.89	431.80	654.69	

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
432.00	456.5	431.5	1998	2010	226.88	430.27	652.73	2341
434.00	458.8	433.8	1999	2012	225.85	428.67	650.68	2380
436.00	461.2	436.2	2001	2014	224.83	427.10	648.66	2376
438.00	463.7	438.7	2003	2016	223.74	425.40	646.46	2456
440.00	466.0	441.0	2005	2018	222.77	423.91	644.56	2338
442.00	468.4	443.4	2007	2020	221.72	422.28	642.44	2431
444.00	470.9	445.9	2009	2022	220.65	420.61	640.27	2464
446.00	473.3	448.3	2010	2024	219.62	419.00	638.19	2429
448.00	475.7	450.7	2012	2026	218.66	417.51	636.27	2370
450.00	478.1	453.1	2014	2027	217.66	415.94	634.23	2426
452.00	480.5	455.5	2016	2029	216.69	414.43	632.28	2394
454.00	482.8	457.8	2017	2030	215.83	413.11	630.60	2280
456.00	485.2	460.2	2018	2032	214.90	411.65	628.72	2376
458.00	487.5	462.5	2020	2033	214.05	410.33	627.03	2294
460.00	489.7	464.7	2021	2034	213.24	409.09	625.45	2243
462.00	492.1	467.1	2022	2036	212.35	407.71	623.67	2346
464.00	494.4	469.4	2023	2037	211.46	406.30	621.86	2364
466.00	496.8	471.8	2025	2039	210.54	404.87	619.99	2392
468.00	499.2	474.2	2027	2041	209.64	403.44	618.14	2392
470.00	501.5	476.5	2028	2042	208.80	402.13	616.46	2319
472.00	503.9	478.9	2029	2043	207.90	400.70	614.60	2405
474.00	506.3	481.3	2031	2045	207.06	399.38	612.89	2341
476.00	508.7	483.7	2032	2046	206.17	397.98	611.06	2402
478.00	511.1	486.1	2034	2048	205.27	396.54	609.19	2429

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
480.00	513.4	488.4	2035	2049	204.48	395.31	607.60	2300
482.00	515.7	490.7	2036	2050	203.71	394.10	606.05	2281
484.00	518.1	493.1	2037	2052	202.87	392.76	604.30	2381
486.00	520.5	495.5	2039	2053	202.02	391.41	602.54	2398
488.00	522.9	497.9	2040	2055	201.19	390.09	600.82	2382
490.00	525.3	500.3	2042	2056	200.36	388.76	599.08	2396
492.00	527.7	502.7	2044	2058	199.48	387.34	597.20	2469
494.00	530.1	505.1	2045	2059	198.68	386.06	595.54	2368
496.00	532.5	507.5	2046	2061	197.86	384.75	593.82	2401
498.00	534.9	509.9	2048	2062	197.06	383.48	592.16	2380
500.00	537.3	512.3	2049	2064	196.26	382.19	590.47	2394
502.00	539.7	514.7	2050	2065	195.46	380.89	588.77	2411
504.00	542.0	517.0	2052	2067	194.68	379.65	587.14	2374
506.00	544.4	519.4	2053	2068	193.95	378.48	585.61	2326
508.00	546.7	521.7	2054	2069	193.24	377.34	584.13	2310
510.00	549.0	524.0	2055	2070	192.50	376.16	582.59	2341
512.00	551.3	526.3	2056	2071	191.81	375.04	581.13	2300
514.00	553.6	528.6	2057	2072	191.14	373.98	579.76	2254
516.00	556.0	531.0	2058	2073	190.39	372.76	578.15	2393
518.00	558.3	533.3	2059	2074	189.69	371.63	576.68	2323
520.00	560.6	535.6	2060	2075	189.01	370.54	575.26	2298
522.00	563.0	538.0	2061	2076	188.25	369.31	573.62	2421
524.00	565.5	540.5	2063	2078	187.43	367.94	571.80	2527
526.00	569.1	544.1	2069	2086	185.69	364.94	567.61	3584

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
528.00	572.7	547.7	2075	2094	183.98	361.99	563.47	3590
530.00	575.4	550.4	2077	2096	183.08	360.49	561.44	2675
532.00	578.0	553.0	2079	2098	182.23	359.07	559.53	2620
534.00	580.6	555.6	2081	2101	181.39	357.67	557.64	2619
536.00	583.2	558.2	2083	2102	180.61	356.37	555.90	2546
538.00	585.8	560.8	2085	2104	179.81	355.03	554.09	2590
540.00	588.4	563.4	2087	2107	178.99	353.67	552.25	2611
542.00	591.0	566.0	2088	2109	178.20	352.34	550.45	2595
544.00	593.5	568.5	2090	2110	177.45	351.09	548.78	2531
546.00	596.1	571.1	2092	2112	176.64	349.72	546.92	2645
548.00	598.7	573.7	2094	2114	175.87	348.43	545.17	2589
550.00	601.3	576.3	2096	2116	175.10	347.13	543.41	2600
552.00	604.0	579.0	2098	2119	174.30	345.78	541.58	2655
554.00	606.6	581.6	2100	2121	173.50	344.43	539.75	2657
556.00	609.2	584.2	2102	2123	172.75	343.16	538.02	2602
558.00	611.7	586.7	2103	2124	172.06	342.02	536.48	2502
560.00	614.3	589.3	2105	2126	171.33	340.77	534.79	2592
562.00	617.1	592.1	2107	2128	170.52	339.39	532.89	2725
564.00	619.8	594.8	2109	2131	169.71	338.02	531.01	2724
566.00	622.5	597.5	2111	2133	168.94	336.70	529.21	2688
568.00	625.2	600.2	2113	2135	168.18	335.40	527.44	2672
570.00	627.9	602.9	2115	2138	167.39	334.05	525.57	2739
572.00	630.5	605.5	2117	2140	166.68	332.83	523.91	2623
574.00	633.3	608.3	2120	2142	165.86	331.41	521.96	2807

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TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/Geo M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
576.00	636.1	611.1	2122	2145	165.08	330.08	520.12	2745
578.00	638.8	613.8	2124	2147	164.33	328.80	518.35	2714
580.00	641.3	616.3	2125	2148	163.73	327.76	516.95	2477
582.00	643.9	618.9	2127	2150	163.03	326.57	515.31	2648
584.00	646.4	621.4	2128	2151	162.42	325.53	513.91	2494
586.00	649.1	624.1	2130	2154	161.68	324.25	512.13	2745
588.00	651.7	626.7	2132	2155	161.04	323.16	510.65	2558
590.00	654.5	629.5	2134	2158	160.28	321.83	508.80	2805
592.00	658.1	633.1	2139	2164	158.99	319.52	505.51	3613
594.00	661.1	636.1	2142	2167	158.13	318.02	503.40	2992
596.00	664.0	639.0	2144	2170	157.36	316.66	501.51	2865
598.00	666.6	641.6	2146	2172	156.71	315.55	499.98	2642
600.00	669.3	644.3	2148	2174	156.05	314.41	498.39	2683
602.00	672.1	647.1	2150	2176	155.35	313.18	496.69	2768
604.00	675.2	650.2	2153	2180	154.47	311.61	494.47	3111
606.00	678.0	653.0	2155	2182	153.74	310.33	492.68	2845
608.00	680.9	655.9	2158	2185	153.01	309.05	490.89	2860
610.00	683.8	658.8	2160	2188	152.25	307.71	489.00	2929
612.00	686.7	661.7	2162	2190	151.53	306.44	487.22	2867
614.00	689.6	664.6	2165	2193	150.80	305.14	485.41	2903
616.00	692.5	667.5	2167	2196	150.06	303.83	483.55	2937
618.00	695.4	670.4	2170	2199	149.33	302.54	481.74	2922
620.00	698.4	673.4	2172	2201	148.59	301.22	479.87	2963
622.00	701.2	676.2	2174	2204	147.95	300.10	478.30	2770

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
624.00	704.1	679.1	2177	2206	147.22	298.79	476.45	2972
626.00	706.9	681.9	2179	2208	146.61	297.71	474.94	2742
628.00	709.5	684.5	2180	2210	146.07	296.76	473.63	2597
630.00	712.5	687.5	2183	2213	145.31	295.41	471.70	3052
632.00	715.5	690.5	2185	2216	144.61	294.14	469.90	2974
634.00	718.4	693.4	2187	2218	143.95	292.98	468.26	2870
636.00	720.9	695.9	2188	2219	143.48	292.14	467.11	2494
638.00	723.6	698.6	2190	2221	142.88	291.08	465.62	2769
640.00	726.6	701.6	2192	2223	142.22	289.90	463.94	2927
642.00	729.4	704.4	2194	2226	141.62	288.82	462.42	2811
644.00	732.2	707.2	2196	2228	141.01	287.73	460.88	2830
646.00	735.5	710.5	2200	2232	140.17	286.19	458.66	3328
648.00	738.7	713.7	2203	2235	139.43	284.85	456.74	3142
650.00	741.6	716.6	2205	2238	138.79	283.71	455.11	2929
652.00	744.4	719.4	2207	2240	138.21	282.66	453.63	2830
654.00	747.2	722.2	2208	2241	137.68	281.71	452.28	2722
656.00	749.9	724.9	2210	2243	137.15	280.77	450.96	2710
658.00	752.8	727.8	2212	2246	136.53	279.64	449.34	2960
660.00	755.7	730.7	2214	2248	135.96	278.61	447.89	2836
662.00	758.5	733.5	2216	2250	135.38	277.56	446.39	2878
664.00	762.5	737.5	2221	2257	134.25	275.47	443.31	3982
666.00	766.7	741.7	2227	2265	133.05	273.22	440.01	4141
668.00	770.5	745.5	2232	2271	132.02	271.31	437.21	3867
670.00	774.7	749.7	2238	2279	130.86	269.13	433.99	4147

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
672.00	778.5	753.5	2243	2286	129.88	267.31	431.32	3834
674.00	781.9	756.9	2246	2290	129.14	265.93	429.31	3387
676.00	784.7	759.7	2248	2291	128.64	265.02	428.01	2817
678.00	787.5	762.5	2249	2293	128.16	264.15	426.77	2765
680.00	790.2	765.2	2251	2294	127.71	263.35	425.62	2689
682.00	793.0	768.0	2252	2296	127.24	262.48	424.38	2778
684.00	795.9	770.9	2254	2298	126.72	261.53	423.01	2908
686.00	798.8	773.8	2256	2300	126.20	260.59	421.66	2899
688.00	801.6	776.6	2258	2302	125.70	259.66	420.34	2883
690.00	804.5	779.5	2259	2303	125.21	258.76	419.04	2867
692.00	807.6	782.6	2262	2306	124.64	257.71	417.51	3077
694.00	810.5	785.5	2264	2308	124.15	256.81	416.21	2884
696.00	813.4	788.4	2265	2310	123.66	255.90	414.90	2897
698.00	816.2	791.2	2267	2312	123.18	255.02	413.64	2867
700.00	819.0	794.0	2269	2313	122.72	254.19	412.43	2815
702.00	822.1	797.1	2271	2316	122.19	253.20	411.00	3037
704.00	825.0	800.0	2273	2318	121.71	252.31	409.71	2912
706.00	827.9	802.9	2275	2320	121.22	251.40	408.40	2942
708.00	830.9	805.9	2276	2321	120.74	250.52	407.11	2924
710.00	833.8	808.8	2278	2323	120.28	249.66	405.87	2892
712.00	836.9	811.9	2280	2326	119.75	248.67	404.42	3099
714.00	839.8	814.8	2282	2328	119.28	247.79	403.15	2931
716.00	842.7	817.7	2284	2330	118.81	246.93	401.90	2925
718.00	845.6	820.6	2286	2331	118.37	246.10	400.69	2885

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TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
720.00	848.5	823.5	2287	2333	117.92	245.28	399.49	2879
722.00	851.4	826.4	2289	2335	117.46	244.42	398.25	2942
724.00	854.4	829.4	2291	2337	117.01	243.58	397.02	2933
726.00	857.2	832.2	2293	2339	116.58	242.77	395.83	2889
728.00	860.1	835.1	2294	2340	116.15	241.97	394.67	2873
730.00	863.0	838.0	2296	2342	115.73	241.18	393.53	2864
732.00	865.9	840.9	2297	2343	115.30	240.39	392.37	2890
734.00	868.8	843.8	2299	2345	114.88	239.59	391.21	2894
736.00	871.7	846.7	2301	2347	114.45	238.79	390.04	2914
738.00	874.7	849.7	2303	2349	114.00	237.94	388.79	3002
740.00	877.8	852.8	2305	2351	113.50	237.01	387.41	3149
742.00	880.8	855.8	2307	2353	113.07	236.20	386.23	2947
744.00	883.7	858.7	2308	2355	112.67	235.44	385.12	2886
746.00	886.4	861.4	2310	2356	112.29	234.74	384.09	2792
748.00	889.3	864.3	2311	2358	111.90	234.00	383.00	2864
750.00	892.2	867.2	2312	2359	111.51	233.27	381.94	2852
752.00	895.1	870.1	2314	2361	111.08	232.47	380.76	2983
754.00	898.3	873.3	2316	2363	110.61	231.57	379.43	3149
756.00	901.3	876.3	2318	2365	110.20	230.79	378.27	2978
758.00	904.3	879.3	2320	2367	109.77	229.97	377.07	3032
760.00	907.4	882.4	2322	2369	109.33	229.15	375.85	3064
762.00	910.4	885.4	2324	2371	108.92	228.37	374.70	2993
764.00	913.3	888.3	2325	2373	108.52	227.61	373.58	2972
766.00	916.3	891.3	2327	2375	108.12	226.85	372.46	2976

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/Geo M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
768.00	919.2	894.2	2329	2376	107.74	226.12	371.38	2931
770.00	922.3	897.3	2331	2378	107.31	225.30	370.16	3105
772.00	925.6	900.6	2333	2381	106.83	224.38	368.79	3281
774.00	928.7	903.7	2335	2383	106.42	223.61	367.64	3035
776.00	931.8	906.8	2337	2385	106.00	222.81	366.44	3111
778.00	934.9	909.9	2339	2388	105.57	221.98	365.21	3152
780.00	938.1	913.1	2341	2390	105.14	221.16	363.99	3161
782.00	941.3	916.3	2343	2392	104.71	220.34	362.76	3168
784.00	944.5	919.5	2346	2395	104.26	219.47	361.46	3266
786.00	947.8	922.8	2348	2397	103.82	218.63	360.19	3229
788.00	950.9	925.9	2350	2400	103.41	217.83	358.99	3168
790.00	954.2	929.2	2352	2402	102.96	216.96	357.70	3286
792.00	957.1	932.1	2354	2404	102.61	216.29	356.70	2935
794.00	960.0	935.0	2355	2405	102.28	215.67	355.77	2857
796.00	963.1	938.1	2357	2407	101.89	214.91	354.64	3119
798.00	966.2	941.2	2359	2409	101.51	214.19	353.55	3069
800.00	969.2	944.2	2361	2411	101.14	213.47	352.48	3059
802.00	972.4	947.4	2363	2413	100.75	212.71	351.34	3158
804.00	975.7	950.7	2365	2416	100.31	211.87	350.07	3328
806.00	978.8	953.8	2367	2417	99.96	211.18	349.05	3022
808.00	981.7	956.7	2368	2419	99.62	210.53	348.07	2967
810.00	985.1	960.1	2371	2422	99.17	209.66	346.75	3417
812.00	988.1	963.1	2372	2423	98.83	209.00	345.76	2998
814.00	991.1	966.1	2374	2425	98.50	208.36	344.81	2968

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
816.00	994.3	969.3	2376	2427	98.11	207.60	343.65	3235
818.00	997.6	972.6	2378	2430	97.71	206.83	342.49	3256
820.00	1000.6	975.6	2380	2431	97.37	206.18	341.50	3034
822.00	1003.8	978.8	2381	2433	97.01	205.47	340.43	3152
824.00	1007.1	982.1	2384	2436	96.60	204.68	339.23	3337
826.00	1010.3	985.3	2386	2438	96.24	203.97	338.17	3165
828.00	1013.3	988.3	2387	2440	95.90	203.32	337.18	3068
830.00	1016.6	991.6	2389	2442	95.54	202.60	336.10	3206
832.00	1019.9	994.9	2392	2444	95.15	201.84	334.94	3313
834.00	1023.2	998.2	2394	2447	94.77	201.10	333.82	3284
836.00	1026.3	1001.3	2396	2449	94.42	200.41	332.77	3189
838.00	1029.6	1004.6	2398	2451	94.06	199.71	331.69	3235
840.00	1032.8	1007.8	2400	2453	93.69	199.00	330.62	3246
842.00	1035.9	1010.9	2401	2455	93.37	198.37	329.67	3074
844.00	1038.8	1013.8	2402	2456	93.09	197.82	328.83	2915
846.00	1041.7	1016.7	2404	2457	92.81	197.28	328.02	2881
848.00	1044.5	1019.5	2405	2458	92.55	196.76	327.24	2834
850.00	1047.5	1022.5	2406	2459	92.24	196.17	326.35	3022
852.00	1050.5	1025.5	2407	2461	91.96	195.62	325.51	2948
854.00	1053.5	1028.5	2409	2462	91.67	195.05	324.65	2983
856.00	1056.6	1031.6	2410	2464	91.34	194.41	323.68	3157
858.00	1059.8	1034.8	2412	2466	91.01	193.76	322.68	3202
860.00	1062.9	1037.9	2414	2467	90.71	193.17	321.78	3072
862.00	1065.9	1040.9	2415	2469	90.43	192.61	320.94	2985

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
								3024
864.00	1068.9	1043.9	2416	2470	90.14	192.05	320.08	2983
866.00	1071.9	1046.9	2418	2472	89.86	191.50	319.24	3036
868.00	1074.9	1049.9	2419	2473	89.57	190.93	318.38	3095
870.00	1078.0	1053.0	2421	2475	89.27	190.35	317.49	3035
872.00	1081.1	1056.1	2422	2476	88.99	189.79	316.64	3075
874.00	1084.1	1059.1	2424	2478	88.70	189.22	315.76	3171
876.00	1087.3	1062.3	2425	2479	88.39	188.61	314.84	2906
878.00	1090.2	1065.2	2426	2480	88.14	188.11	314.08	2983
880.00	1093.2	1068.2	2428	2482	87.87	187.59	313.27	3174
882.00	1096.4	1071.4	2429	2483	87.57	186.99	312.36	3118
884.00	1099.5	1074.5	2431	2485	87.28	186.42	311.48	3076
886.00	1102.6	1077.6	2432	2487	87.00	185.87	310.64	3151
888.00	1105.7	1080.7	2434	2488	86.71	185.29	309.75	3148
890.00	1108.9	1083.9	2436	2490	86.42	184.72	308.87	3046
892.00	1111.9	1086.9	2437	2491	86.15	184.19	308.06	3069
894.00	1115.0	1090.0	2438	2493	85.88	183.65	307.24	3106
896.00	1118.1	1093.1	2440	2494	85.61	183.11	306.39	3261
898.00	1121.4	1096.4	2442	2496	85.30	182.50	305.46	3086
900.00	1124.4	1099.4	2443	2498	85.03	181.97	304.65	2947
902.00	1127.4	1102.4	2444	2499	84.79	181.49	303.91	2993
904.00	1130.4	1105.4	2446	2500	84.54	181.00	303.15	2865
906.00	1133.2	1108.2	2446	2501	84.32	180.55	302.47	3108
908.00	1136.4	1111.4	2448	2502	84.05	180.02	301.65	3152
910.00	1139.5	1114.5	2449	2504	83.78	179.48	300.81	

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
912.00	1142.6	1117.6	2451	2505	83.52	178.96	300.02	3080
914.00	1145.6	1120.6	2452	2507	83.27	178.47	299.26	3027
916.00	1148.6	1123.6	2453	2508	83.02	177.98	298.50	3032
918.00	1151.9	1126.9	2455	2510	82.74	177.41	297.62	3266
920.00	1155.2	1130.2	2457	2512	82.45	176.84	296.74	3265
922.00	1158.7	1133.7	2459	2514	82.12	176.17	295.70	3535
924.00	1162.2	1137.2	2462	2517	81.79	175.51	294.66	3537
926.00	1165.8	1140.8	2464	2520	81.46	174.84	293.62	3560
928.00	1169.3	1144.3	2466	2522	81.15	174.22	292.65	3468
930.00	1172.6	1147.6	2468	2524	80.87	173.65	291.77	3314
932.00	1175.8	1150.8	2470	2526	80.61	173.13	290.95	3207
934.00	1179.2	1154.2	2471	2528	80.31	172.54	290.04	3394
936.00	1182.7	1157.7	2474	2530	80.00	171.91	289.06	3509
938.00	1186.2	1161.2	2476	2533	79.70	171.31	288.12	3457
940.00	1189.6	1164.6	2478	2535	79.40	170.70	287.16	3492
942.00	1193.1	1168.1	2480	2538	79.11	170.10	286.23	3468
944.00	1196.5	1171.5	2482	2540	78.83	169.54	285.35	3374
946.00	1199.6	1174.6	2483	2541	78.59	169.07	284.61	3131
948.00	1202.8	1177.8	2485	2543	78.34	168.56	283.82	3228
950.00	1206.4	1181.4	2487	2545	78.04	167.96	282.88	3524
952.00	1209.8	1184.8	2489	2547	77.76	167.38	281.97	3468
954.00	1213.4	1188.4	2491	2550	77.46	166.78	281.03	3538
956.00	1216.9	1191.9	2494	2552	77.16	166.18	280.08	3566
958.00	1220.5	1195.5	2496	2555	76.87	165.59	279.15	3538

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/Geo M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
960.00	1223.9	1198.9	2498	2557	76.61	165.05	278.31	3381
962.00	1227.2	1202.2	2499	2559	76.36	164.55	277.52	3298
964.00	1230.6	1205.6	2501	2561	76.09	164.01	276.67	3431
966.00	1234.0	1209.0	2503	2563	75.82	163.46	275.81	3448
968.00	1237.5	1212.5	2505	2565	75.55	162.90	274.93	3503
970.00	1241.1	1216.1	2507	2568	75.27	162.34	274.04	3520
972.00	1244.7	1219.7	2510	2570	74.98	161.75	273.12	3609
974.00	1248.2	1223.2	2512	2573	74.70	161.18	272.22	3568
976.00	1251.7	1226.7	2514	2575	74.44	160.67	271.40	3416
978.00	1255.1	1230.1	2515	2577	74.20	160.16	270.60	3395
980.00	1258.6	1233.6	2518	2579	73.92	159.59	269.71	3591
982.00	1262.3	1237.3	2520	2582	73.63	159.00	268.78	3665
984.00	1266.0	1241.0	2522	2584	73.34	158.42	267.85	3670
986.00	1269.7	1244.7	2525	2587	73.06	157.84	266.93	3680
988.00	1273.4	1248.4	2527	2590	72.77	157.25	266.00	3693
990.00	1277.0	1252.0	2529	2592	72.49	156.68	265.10	3665
992.00	1280.6	1255.6	2531	2595	72.23	156.14	264.23	3604
994.00	1284.2	1259.2	2534	2597	71.97	155.60	263.39	3576
996.00	1287.7	1262.7	2536	2599	71.71	155.09	262.57	3531
998.00	1291.2	1266.2	2537	2601	71.47	154.60	261.79	3444
1000.00	1294.6	1269.6	2539	2603	71.24	154.13	261.05	3390
1002.00	1297.9	1272.9	2541	2605	71.03	153.69	260.36	3289
1004.00	1301.3	1276.3	2542	2607	70.80	153.23	259.62	3403
1006.00	1304.8	1279.8	2544	2609	70.55	152.72	258.81	3563

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1008.00	1308.5	1283.5	2547	2611	70.29	152.17	257.94	3694
1010.00	1312.7	1287.7	2550	2616	69.94	151.47	256.82	4187
1012.00	1316.4	1291.4	2552	2618	69.68	150.92	255.94	3734
1014.00	1320.1	1295.1	2555	2621	69.42	150.38	255.08	3709
1016.00	1323.8	1298.8	2557	2623	69.16	149.86	254.26	3647
1018.00	1327.5	1302.5	2559	2626	68.91	149.34	253.43	3665
1020.00	1331.1	1306.1	2561	2628	68.67	148.84	252.62	3633
1022.00	1334.6	1309.6	2563	2630	68.43	148.36	251.86	3554
1024.00	1338.1	1313.1	2565	2632	68.21	147.90	251.12	3504
1026.00	1341.7	1316.7	2567	2634	67.98	147.43	250.38	3533
1028.00	1345.3	1320.3	2569	2636	67.74	146.95	249.60	3601
1030.00	1348.8	1323.8	2570	2638	67.53	146.50	248.89	3477
1032.00	1352.1	1327.1	2572	2640	67.32	146.08	248.22	3378
1034.00	1355.5	1330.5	2573	2641	67.13	145.68	247.59	3321
1036.00	1359.1	1334.1	2575	2644	66.90	145.21	246.83	3602
1038.00	1362.8	1337.8	2578	2646	66.65	144.69	246.00	3778
1040.00	1367.0	1342.0	2581	2650	66.35	144.07	245.01	4123
1042.00	1370.8	1345.8	2583	2653	66.10	143.55	244.17	3824
1044.00	1374.5	1349.5	2585	2655	65.86	143.05	243.37	3751
1046.00	1378.3	1353.3	2588	2658	65.61	142.54	242.55	3788
1048.00	1382.0	1357.0	2590	2660	65.38	142.06	241.78	3715
1050.00	1385.7	1360.7	2592	2663	65.15	141.58	241.01	3708
1052.00	1389.5	1364.5	2594	2665	64.92	141.11	240.24	3722
1054.00	1393.2	1368.2	2596	2667	64.69	140.63	239.48	3724

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1056.00	1396.9	1371.9	2598	2670	64.46	140.17	238.74	3679
1058.00	1400.5	1375.5	2600	2672	64.25	139.72	238.01	3663
1060.00	1404.1	1379.1	2602	2674	64.04	139.30	237.34	3540
1062.00	1407.6	1382.6	2604	2676	63.85	138.89	236.69	3496
1064.00	1411.1	1386.1	2605	2677	63.65	138.48	236.02	3532
1066.00	1414.6	1389.6	2607	2679	63.45	138.07	235.37	3510
1068.00	1418.1	1393.1	2609	2681	63.26	137.67	234.73	3498
1070.00	1421.6	1396.6	2610	2683	63.06	137.27	234.09	3498
1072.00	1425.1	1400.1	2612	2685	62.87	136.87	233.44	3541
1074.00	1428.7	1403.7	2614	2687	62.67	136.46	232.78	3567
1076.00	1432.3	1407.3	2616	2689	62.47	136.03	232.09	3632
1078.00	1436.1	1411.1	2618	2691	62.26	135.59	231.38	3714
1080.00	1439.8	1414.8	2620	2693	62.05	135.16	230.68	3713
1082.00	1443.6	1418.6	2622	2696	61.83	134.71	229.95	3781
1084.00	1447.4	1422.4	2624	2698	61.61	134.25	229.21	3824
1086.00	1451.1	1426.1	2626	2700	61.40	133.81	228.50	3761
1088.00	1454.9	1429.9	2628	2703	61.19	133.38	227.80	3747
1090.00	1458.6	1433.6	2630	2705	60.99	132.96	227.13	3682
1092.00	1462.2	1437.2	2632	2707	60.80	132.57	226.49	3596
1094.00	1465.7	1440.7	2634	2709	60.62	132.19	225.88	3536
1096.00	1469.3	1444.3	2636	2711	60.43	131.79	225.24	3646
1098.00	1473.0	1448.0	2638	2713	60.23	131.38	224.57	3694
1100.00	1476.8	1451.8	2640	2715	60.04	130.97	223.91	3721
1102.00	1480.5	1455.5	2642	2717	59.83	130.55	223.22	3776

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1104.00	1484.3	1459.3	2644	2719	59.63	130.13	222.54	3783
1106.00	1488.0	1463.0	2646	2722	59.44	129.72	221.89	3711
1108.00	1491.8	1466.8	2648	2724	59.24	129.31	221.22	3760
1110.00	1495.6	1470.6	2650	2726	59.04	128.90	220.54	3797
1112.00	1499.3	1474.3	2652	2728	58.85	128.49	219.89	3745
1114.00	1503.1	1478.1	2654	2730	58.66	128.10	219.25	3725
1116.00	1506.8	1481.8	2656	2732	58.47	127.71	218.61	3714
1118.00	1510.4	1485.4	2657	2734	58.30	127.34	218.02	3622
1120.00	1513.8	1488.8	2659	2736	58.14	127.01	217.48	3443
1122.00	1517.2	1492.2	2660	2737	57.99	126.70	216.98	3335
1124.00	1520.4	1495.4	2661	2738	57.85	126.41	216.51	3255
1126.00	1523.7	1498.7	2662	2739	57.71	126.11	216.03	3290
1128.00	1527.2	1502.2	2663	2740	57.55	125.79	215.50	3457
1130.00	1530.8	1505.8	2665	2742	57.38	125.43	214.92	3620
1132.00	1534.6	1509.6	2667	2745	57.19	125.03	214.28	3816
1134.00	1538.6	1513.6	2669	2747	56.99	124.61	213.58	3968
1136.00	1542.4	1517.4	2672	2749	56.80	124.21	212.94	3840
1138.00	1546.1	1521.1	2673	2751	56.63	123.86	212.36	3640
1140.00	1550.0	1525.0	2675	2754	56.44	123.45	211.70	3921
1142.00	1553.7	1528.7	2677	2756	56.27	123.09	211.10	3714
1144.00	1557.4	1532.4	2679	2758	56.09	122.72	210.51	3742
1146.00	1561.2	1536.2	2681	2760	55.92	122.36	209.91	3737
1148.00	1564.9	1539.9	2683	2762	55.75	122.01	209.34	3685
1150.00	1568.5	1543.5	2684	2763	55.59	121.67	208.79	3636

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1152.00	1572.1	1547.1	2686	2765	55.43	121.34	208.24	3602
1154.00	1575.6	1550.6	2687	2767	55.28	121.02	207.73	3537
1156.00	1579.1	1554.1	2689	2768	55.13	120.71	207.22	3502
1158.00	1582.7	1557.7	2690	2770	54.98	120.39	206.71	3535
1160.00	1586.3	1561.3	2692	2771	54.83	120.07	206.18	3597
1162.00	1590.0	1565.0	2694	2773	54.67	119.72	205.61	3741
1164.00	1593.7	1568.7	2695	2775	54.50	119.38	205.06	3690
1166.00	1597.3	1572.3	2697	2777	54.36	119.07	204.55	3574
1168.00	1600.8	1575.8	2698	2778	54.21	118.77	204.06	3505
1170.00	1604.3	1579.3	2700	2779	54.07	118.47	203.56	3524
1172.00	1607.8	1582.8	2701	2781	53.93	118.17	203.07	3530
1174.00	1611.4	1586.4	2703	2782	53.78	117.86	202.57	3562
1176.00	1615.0	1590.0	2704	2784	53.63	117.55	202.06	3617
1178.00	1618.7	1593.7	2706	2786	53.48	117.23	201.53	3661
1180.00	1622.4	1597.4	2708	2788	53.32	116.89	200.98	3762
1182.00	1626.3	1601.3	2709	2790	53.15	116.54	200.41	3853
1184.00	1629.9	1604.9	2711	2791	53.01	116.24	199.91	3601
1186.00	1633.5	1608.5	2712	2793	52.87	115.94	199.42	3579
1188.00	1637.1	1612.1	2714	2795	52.72	115.63	198.92	3629
1190.00	1640.8	1615.8	2716	2796	52.57	115.31	198.40	3695
1192.00	1644.5	1619.5	2717	2798	52.42	114.99	197.87	3745
1194.00	1648.0	1623.0	2719	2799	52.29	114.72	197.42	3475
1196.00	1651.5	1626.5	2720	2801	52.16	114.45	196.98	3437
1198.00	1654.9	1629.9	2721	2802	52.04	114.18	196.54	3425

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1200.00	1658.3	1633.3	2722	2803	51.91	113.92	196.11	3421
1202.00	1661.7	1636.7	2723	2804	51.79	113.67	195.70	3366
1204.00	1665.1	1640.1	2724	2805	51.67	113.41	195.28	3403
1206.00	1668.5	1643.5	2726	2806	51.55	113.15	194.85	3441
1208.00	1672.0	1647.0	2727	2808	51.42	112.88	194.40	3500
1210.00	1675.5	1650.5	2728	2809	51.29	112.60	193.95	3530
1212.00	1679.1	1654.1	2730	2810	51.16	112.32	193.50	3561
1214.00	1682.8	1657.8	2731	2812	51.02	112.03	193.01	3661
1216.00	1686.4	1661.4	2733	2814	50.88	111.74	192.53	3680
1218.00	1690.0	1665.0	2734	2815	50.75	111.46	192.07	3601
1220.00	1693.6	1668.6	2735	2816	50.62	111.19	191.63	3535
1222.00	1697.1	1672.1	2737	2818	50.49	110.92	191.18	3560
1224.00	1700.7	1675.7	2738	2819	50.36	110.65	190.74	3564
1226.00	1704.2	1679.2	2739	2820	50.24	110.39	190.31	3522
1228.00	1707.7	1682.7	2741	2822	50.12	110.13	189.88	3511
1230.00	1711.3	1686.3	2742	2823	49.99	109.86	189.44	3564
1232.00	1714.9	1689.9	2743	2825	49.86	109.58	188.98	3653
1234.00	1718.6	1693.6	2745	2826	49.73	109.30	188.51	3700
1236.00	1722.3	1697.3	2746	2828	49.60	109.03	188.07	3604
1238.00	1725.8	1700.8	2748	2829	49.48	108.77	187.64	3549
1240.00	1729.3	1704.3	2749	2830	49.36	108.51	187.22	3537
1242.00	1732.9	1707.9	2750	2832	49.23	108.26	186.79	3560
1244.00	1736.3	1711.3	2751	2833	49.12	108.02	186.41	3419
1246.00	1739.7	1714.7	2752	2834	49.01	107.79	186.02	3401

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1248.00	1743.3	1718.3	2754	2835	48.89	107.54	185.61	3535
1250.00	1746.9	1721.9	2755	2836	48.77	107.27	185.17	3631
1252.00	1750.6	1725.6	2756	2838	48.64	107.00	184.73	3679
1254.00	1754.2	1729.2	2758	2839	48.52	106.73	184.28	3670
1256.00	1757.9	1732.9	2759	2841	48.39	106.47	183.85	3644
1258.00	1761.4	1736.4	2761	2842	48.28	106.22	183.44	3574
1260.00	1765.2	1740.2	2762	2844	48.14	105.94	182.97	3794
1262.00	1769.1	1744.1	2764	2846	48.01	105.65	182.49	3850
1264.00	1773.0	1748.0	2766	2848	47.87	105.35	181.99	3926
1266.00	1776.8	1751.8	2767	2850	47.74	105.08	181.54	3758
1268.00	1780.3	1755.3	2769	2851	47.63	104.84	181.15	3524
1270.00	1783.7	1758.7	2770	2852	47.53	104.63	180.80	3353
1272.00	1787.3	1762.3	2771	2853	47.41	104.38	180.38	3643
1274.00	1790.8	1765.8	2772	2854	47.30	104.14	179.99	3546
1276.00	1794.4	1769.4	2773	2855	47.19	103.90	179.60	3557
1278.00	1798.1	1773.1	2775	2857	47.06	103.64	179.17	3719
1280.00	1801.9	1776.9	2776	2859	46.94	103.37	178.72	3810
1282.00	1805.7	1780.7	2778	2860	46.81	103.11	178.28	3767
1284.00	1809.3	1784.3	2779	2862	46.70	102.87	177.89	3569
1286.00	1812.7	1787.7	2780	2863	46.60	102.66	177.53	3460
1288.00	1816.3	1791.3	2782	2864	46.49	102.42	177.14	3592
1290.00	1820.0	1795.0	2783	2865	46.37	102.17	176.72	3703
1292.00	1823.7	1798.7	2784	2867	46.26	101.92	176.31	3718
1294.00	1827.7	1802.7	2786	2869	46.12	101.63	175.83	3970

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1296.00	1831.5	1806.5	2788	2871	46.00	101.37	175.40	3819
1298.00	1835.4	1810.4	2790	2873	45.87	101.10	174.94	3904
1300.00	1839.3	1814.3	2791	2874	45.75	100.84	174.51	3823
1302.00	1843.0	1818.0	2793	2876	45.63	100.59	174.10	3757
1304.00	1846.7	1821.7	2794	2877	45.52	100.35	173.70	3674
1306.00	1850.6	1825.6	2796	2879	45.40	100.09	173.26	3877
1308.00	1854.5	1829.5	2797	2881	45.27	99.82	172.82	3928
1310.00	1858.3	1833.3	2799	2883	45.16	99.57	172.39	3836
1312.00	1862.1	1837.1	2801	2884	45.04	99.32	171.98	3802
1314.00	1866.1	1841.1	2802	2886	44.91	99.05	171.53	3961
1316.00	1869.9	1844.9	2804	2888	44.80	98.80	171.12	3799
1318.00	1873.7	1848.7	2805	2889	44.68	98.55	170.70	3821
1320.00	1877.5	1852.5	2807	2891	44.57	98.31	170.30	3771
1322.00	1881.1	1856.1	2808	2892	44.47	98.10	169.95	3572
1324.00	1884.6	1859.6	2809	2893	44.37	97.89	169.60	3547
1326.00	1888.2	1863.2	2810	2894	44.27	97.68	169.24	3585
1328.00	1892.3	1867.3	2812	2897	44.14	97.40	168.78	4073
1330.00	1896.1	1871.1	2814	2898	44.03	97.15	168.37	3883
1332.00	1900.1	1875.1	2815	2900	43.91	96.90	167.95	3915
1334.00	1903.9	1878.9	2817	2902	43.80	96.66	167.54	3867
1336.00	1907.8	1882.8	2819	2904	43.68	96.41	167.12	3916
1338.00	1911.6	1886.6	2820	2905	43.57	96.18	166.74	3749
1340.00	1915.2	1890.2	2821	2906	43.47	95.96	166.38	3663
1342.00	1918.8	1893.8	2822	2907	43.38	95.76	166.04	3594

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1344.00	1922.1	1897.1	2823	2908	43.30	95.58	165.75	3308
1346.00	1925.8	1900.8	2824	2909	43.20	95.37	165.39	3661
1348.00	1929.5	1904.5	2826	2911	43.10	95.16	165.04	3655
1350.00	1933.0	1908.0	2827	2912	43.01	94.97	164.72	3513
1352.00	1936.3	1911.3	2827	2912	42.93	94.79	164.43	3318
1354.00	1939.6	1914.6	2828	2913	42.85	94.62	164.15	3321
1356.00	1942.9	1917.9	2829	2913	42.77	94.45	163.86	3316
1358.00	1946.1	1921.1	2829	2914	42.70	94.30	163.61	3123
1360.00	1949.2	1924.2	2830	2914	42.62	94.15	163.36	3157
1362.00	1952.3	1927.3	2830	2914	42.56	94.00	163.12	3099
1364.00	1955.4	1930.4	2831	2915	42.49	93.85	162.87	3134
1366.00	1958.5	1933.5	2831	2915	42.42	93.71	162.63	3076
1368.00	1961.6	1936.6	2831	2915	42.35	93.56	162.39	3098
1370.00	1964.7	1939.7	2832	2916	42.28	93.42	162.15	3098
1372.00	1967.8	1942.8	2832	2916	42.22	93.28	161.91	3087
1374.00	1970.9	1945.9	2833	2916	42.15	93.13	161.66	3129
1376.00	1974.0	1949.0	2833	2916	42.08	92.99	161.43	3080
1378.00	1977.2	1952.2	2833	2917	42.01	92.83	161.17	3210
1380.00	1980.5	1955.5	2834	2917	41.94	92.68	160.91	3236
1382.00	1983.7	1958.7	2835	2918	41.86	92.52	160.65	3215
1384.00	1987.0	1962.0	2835	2918	41.79	92.36	160.39	3279
1386.00	1990.2	1965.2	2836	2919	41.72	92.21	160.12	3268
1388.00	1993.4	1968.4	2836	2919	41.64	92.05	159.87	3214
1390.00	1996.6	1971.6	2837	2920	41.57	91.90	159.62	3197

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1392.00	1999.8	1974.8	2837	2920	41.50	91.75	159.37	3214
1394.00	2003.1	1978.1	2838	2921	41.43	91.60	159.11	3239
1396.00	2006.3	1981.3	2839	2921	41.36	91.45	158.87	3207
1398.00	2009.5	1984.5	2839	2921	41.30	91.31	158.62	3173
1400.00	2012.7	1987.7	2840	2922	41.23	91.16	158.38	3205
1402.00	2015.9	1990.9	2840	2922	41.16	91.01	158.13	3215
1404.00	2019.1	1994.1	2841	2923	41.09	90.86	157.88	3244
1406.00	2022.3	1997.3	2841	2923	41.02	90.71	157.64	3169
1408.00	2025.4	2000.4	2842	2923	40.95	90.57	157.40	3140
1410.00	2028.6	2003.6	2842	2924	40.89	90.43	157.16	3172
1412.00	2031.8	2006.8	2842	2924	40.82	90.29	156.92	3190
1414.00	2035.0	2010.0	2843	2925	40.75	90.14	156.68	3213
1416.00	2038.1	2013.1	2843	2925	40.69	90.00	156.45	3130
1418.00	2041.3	2016.3	2844	2925	40.62	89.86	156.22	3161
1420.00	2044.4	2019.4	2844	2926	40.56	89.73	155.99	3096
1422.00	2047.6	2022.6	2845	2926	40.50	89.59	155.76	3149
1424.00	2050.7	2025.7	2845	2926	40.43	89.46	155.54	3118
1426.00	2053.9	2028.9	2846	2927	40.37	89.32	155.30	3187
1428.00	2057.1	2032.1	2846	2927	40.30	89.18	155.06	3198
1430.00	2060.3	2035.3	2847	2927	40.23	89.03	154.82	3248
1432.00	2063.5	2038.5	2847	2928	40.17	88.89	154.58	3234
1434.00	2066.7	2041.7	2848	2928	40.10	88.75	154.35	3193
1436.00	2069.9	2044.9	2848	2929	40.04	88.61	154.12	3184
1438.00	2073.1	2048.1	2849	2929	39.97	88.47	153.89	3171

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1440.00	2076.3	2051.3	2849	2929	39.91	88.33	153.65	3241
1442.00	2079.6	2054.6	2850	2930	39.84	88.19	153.41	3237
1444.00	2082.8	2057.8	2850	2930	39.78	88.04	153.17	3268
1446.00	2086.0	2061.0	2851	2931	39.71	87.91	152.94	3208
1448.00	2089.3	2064.3	2851	2931	39.64	87.76	152.70	3279
1450.00	2092.6	2067.6	2852	2932	39.58	87.62	152.46	3258
1452.00	2095.7	2070.7	2852	2932	39.52	87.49	152.24	3164
1454.00	2098.9	2073.9	2853	2932	39.46	87.36	152.02	3140
1456.00	2102.1	2077.1	2853	2933	39.39	87.22	151.79	3185
1458.00	2105.2	2080.2	2853	2933	39.33	87.09	151.58	3135
1460.00	2108.3	2083.3	2854	2933	39.27	86.96	151.36	3116
1462.00	2111.4	2086.4	2854	2934	39.22	86.84	151.15	3096
1464.00	2114.6	2089.6	2855	2934	39.15	86.71	150.93	3169
1466.00	2117.7	2092.7	2855	2934	39.10	86.58	150.72	3122
1468.00	2120.8	2095.8	2855	2934	39.04	86.46	150.51	3096
1470.00	2124.0	2099.0	2856	2935	38.98	86.33	150.29	3187
1472.00	2127.1	2102.1	2856	2935	38.92	86.20	150.08	3091
1474.00	2130.1	2105.1	2856	2935	38.86	86.09	149.89	3013
1476.00	2133.1	2108.1	2856	2935	38.81	85.97	149.70	2996
1478.00	2136.1	2111.1	2857	2935	38.76	85.86	149.50	3001
1480.00	2139.1	2114.1	2857	2935	38.70	85.74	149.31	3013
1482.00	2142.1	2117.1	2857	2935	38.65	85.62	149.11	3035
1484.00	2145.1	2120.1	2857	2935	38.60	85.51	148.93	2950
1486.00	2148.0	2123.0	2857	2935	38.55	85.40	148.75	2926

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1488.00	2151.0	2126.0	2858	2936	38.50	85.29	148.56	2986
1490.00	2154.0	2129.0	2858	2936	38.44	85.18	148.37	2980
1492.00	2157.0	2132.0	2858	2936	38.39	85.06	148.17	3063
1494.00	2159.9	2134.9	2858	2936	38.34	84.96	148.00	2910
1496.00	2162.9	2137.9	2858	2936	38.29	84.85	147.81	2981
1498.00	2165.9	2140.9	2858	2936	38.24	84.74	147.63	2933
1500.00	2168.9	2143.9	2859	2936	38.19	84.62	147.44	3042
1502.00	2171.8	2146.8	2859	2936	38.14	84.52	147.27	2853
1504.00	2174.8	2149.8	2859	2936	38.09	84.41	147.08	3017
1506.00	2177.6	2152.6	2859	2936	38.04	84.31	146.92	2800
1508.00	2180.5	2155.5	2859	2936	37.99	84.21	146.74	2949
1510.00	2183.5	2158.5	2859	2936	37.94	84.10	146.56	2992
1512.00	2186.4	2161.4	2859	2936	37.89	83.99	146.38	2931
1514.00	2189.5	2164.5	2859	2936	37.84	83.88	146.19	3020
1516.00	2192.4	2167.4	2859	2936	37.79	83.78	146.02	2912
1518.00	2195.3	2170.3	2859	2936	37.74	83.67	145.84	2944
1520.00	2198.3	2173.3	2860	2936	37.69	83.56	145.66	3016
1522.00	2201.3	2176.3	2860	2936	37.64	83.45	145.48	3011
1524.00	2204.8	2179.8	2861	2937	37.57	83.30	145.22	3496
1526.00	2208.0	2183.0	2861	2937	37.52	83.18	145.02	3195
1528.00	2211.1	2186.1	2861	2937	37.46	83.07	144.83	3055
1530.00	2214.0	2189.0	2862	2937	37.42	82.97	144.65	2956
1532.00	2217.1	2192.1	2862	2938	37.36	82.85	144.46	3081
1534.00	2220.1	2195.1	2862	2938	37.31	82.74	144.28	3013

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1536.00	2223.3	2198.3	2862	2938	37.26	82.63	144.09	3130
1538.00	2226.3	2201.3	2863	2938	37.21	82.52	143.90	3057
1540.00	2229.3	2204.3	2863	2938	37.16	82.41	143.72	2989
1542.00	2232.5	2207.5	2863	2939	37.11	82.30	143.53	3137
1544.00	2235.6	2210.6	2863	2939	37.05	82.18	143.34	3101
1546.00	2238.6	2213.6	2864	2939	37.00	82.08	143.16	3012
1548.00	2241.7	2216.7	2864	2939	36.95	81.96	142.96	3152
1550.00	2244.8	2219.8	2864	2939	36.90	81.85	142.77	3094
1552.00	2248.0	2223.0	2865	2940	36.85	81.73	142.58	3143
1554.00	2251.1	2226.1	2865	2940	36.79	81.62	142.39	3093
1556.00	2254.1	2229.1	2865	2940	36.74	81.51	142.21	3062
1558.00	2257.3	2232.3	2866	2940	36.69	81.40	142.02	3155
1560.00	2260.3	2235.3	2866	2940	36.64	81.29	141.83	3080
1562.00	2263.4	2238.4	2866	2941	36.59	81.19	141.66	3006
1564.00	2266.5	2241.5	2866	2941	36.54	81.08	141.47	3100
1566.00	2269.4	2244.4	2866	2941	36.49	80.98	141.30	2975
1568.00	2272.4	2247.4	2867	2941	36.45	80.87	141.13	3012
1570.00	2275.5	2250.5	2867	2941	36.40	80.77	140.96	3011
1572.00	2278.6	2253.6	2867	2941	36.35	80.66	140.77	3143
1574.00	2281.8	2256.8	2868	2942	36.30	80.54	140.58	3168
1576.00	2285.0	2260.0	2868	2942	36.24	80.43	140.38	3200
1578.00	2288.1	2263.1	2868	2942	36.19	80.31	140.19	3186
1580.00	2291.3	2266.3	2869	2942	36.14	80.20	140.00	3157
1582.00	2294.4	2269.4	2869	2943	36.09	80.10	139.82	3049

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1584.00	2297.4	2272.4	2869	2943	36.04	80.00	139.65	3055
1586.00	2300.5	2275.5	2869	2943	35.99	79.89	139.47	3073
1588.00	2303.5	2278.5	2870	2943	35.94	79.79	139.30	3057
1590.00	2306.7	2281.7	2870	2943	35.89	79.68	139.11	3160
1592.00	2309.7	2284.7	2870	2943	35.85	79.58	138.94	2990
1594.00	2312.7	2287.7	2870	2944	35.80	79.48	138.77	3053
1596.00	2315.8	2290.8	2871	2944	35.75	79.37	138.60	3061
1598.00	2318.7	2293.7	2871	2944	35.71	79.28	138.44	2919
1600.00	2321.7	2296.7	2871	2944	35.66	79.18	138.27	3024
1602.00	2324.7	2299.7	2871	2944	35.62	79.08	138.11	2979
1604.00	2327.8	2302.8	2871	2944	35.57	78.98	137.94	3046
1606.00	2331.0	2306.0	2872	2944	35.52	78.87	137.75	3231
1608.00	2334.7	2309.7	2873	2945	35.45	78.72	137.49	3738
1610.00	2338.6	2313.6	2874	2947	35.38	78.55	137.21	3881
1612.00	2342.4	2317.4	2875	2948	35.31	78.40	136.95	3758
1614.00	2346.2	2321.2	2876	2949	35.23	78.24	136.68	3857
1616.00	2350.4	2325.4	2878	2951	35.15	78.05	136.36	4210
1618.00	2354.3	2329.3	2879	2952	35.07	77.90	136.09	3819
1620.00	2358.0	2333.0	2880	2953	35.01	77.75	135.84	3697
1622.00	2361.6	2336.6	2881	2954	34.94	77.61	135.61	3614
1624.00	2365.3	2340.3	2882	2955	34.88	77.47	135.36	3719
1626.00	2369.1	2344.1	2883	2956	34.81	77.32	135.11	3764
1628.00	2372.8	2347.8	2884	2958	34.74	77.17	134.86	3727
1630.00	2376.2	2351.2	2885	2958	34.68	77.05	134.65	3450

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1632.00	2379.8	2354.8	2886	2959	34.62	76.92	134.42	3590
1634.00	2383.8	2358.8	2887	2961	34.55	76.75	134.14	4021
1636.00	2387.6	2362.6	2888	2962	34.48	76.60	133.89	3784
1638.00	2391.2	2366.2	2889	2963	34.42	76.47	133.66	3597
1640.00	2394.8	2369.8	2890	2963	34.36	76.34	133.44	3574
1642.00	2398.6	2373.6	2891	2965	34.29	76.19	133.18	3835
1644.00	2402.5	2377.5	2892	2966	34.22	76.04	132.93	3829
1646.00	2406.2	2381.2	2893	2967	34.16	75.90	132.69	3710
1648.00	2409.4	2384.4	2894	2967	34.11	75.80	132.52	3207
1650.00	2412.9	2387.9	2894	2968	34.05	75.67	132.30	3546
1652.00	2416.6	2391.6	2895	2969	33.99	75.53	132.07	3722
1654.00	2420.5	2395.5	2897	2970	33.92	75.38	131.82	3812
1656.00	2424.1	2399.1	2897	2971	33.86	75.25	131.59	3666
1658.00	2427.7	2402.7	2898	2972	33.80	75.12	131.38	3576
1660.00	2431.3	2406.3	2899	2973	33.74	75.00	131.16	3622
1662.00	2435.1	2410.1	2900	2974	33.68	74.86	130.92	3766
1664.00	2439.1	2414.1	2902	2975	33.61	74.70	130.65	3961
1666.00	2443.0	2418.0	2903	2977	33.54	74.55	130.40	3927
1668.00	2446.9	2421.9	2904	2978	33.47	74.40	130.14	3938
1670.00	2450.6	2425.6	2905	2979	33.41	74.27	129.91	3711
1672.00	2454.2	2429.2	2906	2980	33.35	74.14	129.71	3546
1674.00	2457.8	2432.8	2907	2980	33.29	74.02	129.49	3582
1676.00	2461.2	2436.2	2907	2981	33.24	73.91	129.31	3409
1678.00	2464.8	2439.8	2908	2982	33.18	73.78	129.09	3662

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1680.00	2468.5	2443.5	2909	2983	33.13	73.65	128.87	3691
1682.00	2472.2	2447.2	2910	2984	33.06	73.52	128.64	3732
1684.00	2476.0	2451.0	2911	2985	33.00	73.38	128.41	3799
1686.00	2479.8	2454.8	2912	2986	32.94	73.25	128.18	3738
1688.00	2483.6	2458.6	2913	2987	32.88	73.12	127.95	3797
1690.00	2487.4	2462.4	2914	2988	32.82	72.98	127.72	3785
1692.00	2491.1	2466.1	2915	2989	32.76	72.85	127.50	3763
1694.00	2495.0	2470.0	2916	2990	32.69	72.71	127.26	3887
1696.00	2498.8	2473.8	2917	2991	32.63	72.58	127.03	3781
1698.00	2502.6	2477.6	2918	2992	32.57	72.44	126.80	3821
1700.00	2506.5	2481.5	2919	2994	32.51	72.31	126.57	3838
1702.00	2510.2	2485.2	2920	2995	32.45	72.18	126.34	3771
1704.00	2514.1	2489.1	2921	2996	32.39	72.04	126.11	3881
1706.00	2517.7	2492.7	2922	2997	32.33	71.92	125.91	3578
1708.00	2521.4	2496.4	2923	2998	32.28	71.80	125.70	3721
1710.00	2525.2	2500.2	2924	2999	32.22	71.67	125.48	3769
1712.00	2529.0	2504.0	2925	3000	32.16	71.54	125.26	3776
1714.00	2532.8	2507.8	2926	3001	32.10	71.41	125.04	3810
1716.00	2536.6	2511.6	2927	3002	32.04	71.28	124.81	3811
1718.00	2540.3	2515.3	2928	3003	31.98	71.16	124.60	3718
1720.00	2544.0	2519.0	2929	3004	31.93	71.03	124.39	3733
1722.00	2547.7	2522.7	2930	3005	31.87	70.91	124.18	3709
1724.00	2551.6	2526.6	2931	3006	31.81	70.78	123.96	3848
1726.00	2555.2	2530.2	2932	3006	31.76	70.67	123.76	3626

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TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1728.00	2559.0	2534.0	2933	3007	31.70	70.54	123.55	3746
1730.00	2562.7	2537.7	2934	3008	31.65	70.42	123.35	3704
1732.00	2566.4	2541.4	2935	3009	31.59	70.30	123.14	3731
1734.00	2569.9	2544.9	2935	3010	31.54	70.20	122.96	3530
1736.00	2573.4	2548.4	2936	3010	31.50	70.09	122.78	3448
1738.00	2577.1	2552.1	2937	3011	31.44	69.97	122.58	3734
1740.00	2580.8	2555.8	2938	3012	31.39	69.85	122.38	3706
1742.00	2584.5	2559.5	2939	3013	31.33	69.74	122.18	3662

PE904857

This is an enclosure indicator page.
The enclosure PE904857 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904857 has the following characteristics:

ITEM_BARCODE = PE904857
CONTAINER_BARCODE = PE904856
 NAME = Stacked Data
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = VELOCITY_CHART
DESCRIPTION = Halibut 2 Vertical Seismic Profile
 Stacked Data. Plot 1 from appendix 5 of
 WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
 W_NO = W1090
 WELL_NAME = Halibut-2
 CONTRACTOR = Schlumberger
 CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904858

This is an enclosure indicator page.
The enclosure PE904858 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904858 has the following characteristics:

- ITEM_BARCODE = PE904858
- CONTAINER_BARCODE = PE904856
- NAME = Amplitude Recovery
- BASIN = GIPPSLAND
- PERMIT = VIC/L5
- TYPE = WELL
- SUBTYPE = VELOCITY_CHART
- DESCRIPTION = Halibut 2 Vertical Seismic Profile
Amplitude Recovery. Plot 2 from
appendix 5 of WCR volume 1.
- REMARKS =
- DATE_CREATED = 11/04/94
- DATE_RECEIVED = 7/09/94
- W_NO = W1090
- WELL_NAME = Halibut-2
- CONTRACTOR = Schlumberger
- CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904859

This is an enclosure indicator page.
The enclosure PE904859 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904859 has the following characteristics:

ITEM_BARCODE = PE904859
CONTAINER_BARCODE = PE904856
NAME = Velocity Filtering
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Halibut 2 Vertical Seismic Profile
Velocity Filtering. Plot 3 from
appendix 5 of WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904860

This is an enclosure indicator page.
The enclosure PE904860 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904860 has the following characteristics:

- ITEM_BARCODE = PE904860
- CONTAINER_BARCODE = PE904856
 - NAME = Waveshaping Deconvolution
 - BASIN = GIPPSLAND
 - PERMIT = VIC/L5
 - TYPE = WELL
 - SUBTYPE = VELOCITY_CHART
- DESCRIPTION = Halibut 2 Vertical Seismic Profile
Waveshaping Deconvolution. Plot 4 from
appendix 5 of WCR volume 1.
- REMARKS =
- DATE_CREATED = 11/04/94
- DATE_RECEIVED = 7/09/94
 - W_NO = W1090
 - WELL_NAME = Halibut-2
 - CONTRACTOR = Schlumberger
 - CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904861

This is an enclosure indicator page.
The enclosure PE904861 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904861 has the following characteristics:

ITEM_BARCODE = PE904861
CONTAINER_BARCODE = PE904856
NAME = Waveshaping and Corridor Stack
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Halibut 2 Vertical Seismic Profile
Waveshaping and Corridor Stack. Plot 5
from appendix 5 of WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904862

This is an enclosure indicator page.
The enclosure PE904862 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904862 has the following characteristics:

ITEM_BARCODE = PE904862
CONTAINER_BARCODE = PE904856
 NAME = Waveshaping and Corridor Stack
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = VELOCITY_CHART
DESCRIPTION = Halibut 2 Vertical Seismic Profile
 Waveshaping and Corridor Stack (with
 -90 deg. phase rotation). Plot 5A from
 appendix 5 of WCR volume1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
 W_NO = W1090
 WELL_NAME = Halibut-2
 CONTRACTOR = Schlumberger
 CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904863

This is an enclosure indicator page.
The enclosure PE904863 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904863 has the following characteristics:

- ITEM_BARCODE = PE904863
- CONTAINER_BARCODE = PE904856
 - NAME = VSP and Geogram Composite
 - BASIN = GIPPSLAND
 - PERMIT = VIC/L5
 - TYPE = WELL
 - SUBTYPE = VELOCITY_CHART
- DESCRIPTION = Halibut 2 Vertical Seismic Profile VSP
and Geogram Composite (Normal
Polarity). Plot 6 from appendix 5 of
WCR volume 1.
- REMARKS =
- DATE_CREATED = 11/04/94
- DATE_RECEIVED = 7/09/94
 - W_NO = W1090
 - WELL_NAME = Halibut-2
 - CONTRACTOR = Schlumberger
 - CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904864

This is an enclosure indicator page.
The enclosure PE904864 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904864 has the following characteristics:

ITEM_BARCODE = PE904864
CONTAINER_BARCODE = PE904856
NAME = VSP and Geogram Composite
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Halibut 2 Vertical Seismic Profile VSP
and Geogram Composite (Reverse
Polarity). Plot 7 from appendix 5 of
WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603189

This is an enclosure indicator page.
The enclosure PE603189 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE603189 has the following characteristics:

- ITEM_BARCODE = PE603189
- CONTAINER_BARCODE = PE904856
- NAME = Seismic Calibration Log
- BASIN = GIPPSLAND
- PERMIT = VIC/L5
- TYPE = WELL
- SUBTYPE = VELOCITY_CHART
- DESCRIPTION = Halibut 2 Seismic Calibration Log
(Adjusted Continuous Velocity Log).
From appendix 5 of WCR volume 1.
- REMARKS =
- DATE_CREATED = 11/04/94
- DATE_RECEIVED = 7/09/94
- W_NO = W1090
- WELL_NAME = Halibut-2
- CONTRACTOR = Schlumberger
- CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904865

This is an enclosure indicator page.
The enclosure PE904865 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904865 has the following characteristics:

ITEM_BARCODE = PE904865
CONTAINER_BARCODE = PE904856
NAME = Halibut 2 Geogram
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAM
DESCRIPTION = Halibut 2 25 hz zero phase Geogram
(Synthetic Seismogram). From appendix 5
of WCR volume1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904866

This is an enclosure indicator page.
The enclosure PE904866 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904866 has the following characteristics:

ITEM_BARCODE = PE904866
CONTAINER_BARCODE = PE904856
NAME = Halibut 2 Geogram
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAM
DESCRIPTION = Halibut 2 Geogram (Synthetic
Seismogram) with -90 degree phase
shift. From appendix 5 of WCR volume1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603190

This is an enclosure indicator page.
The enclosure PE603190 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE603190 has the following characteristics:

- ITEM_BARCODE = PE603190
- CONTAINER_BARCODE = PE904856
- NAME = Drift Corrected Sonic
- BASIN = GIPPSLAND
- PERMIT = VIC/L5
- TYPE = WELL
- SUBTYPE = WELL_LOG
- DESCRIPTION = Halibut 2 Drift Corrected Sonic. From
appendix 5 of WCR volume 1.
- REMARKS =
- DATE_CREATED = 11/04/94
- DATE_RECEIVED = 7/09/94
- W_NO = W1090
- WELL_NAME = Halibut-2
- CONTRACTOR = Schlumberger
- CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904867

This is an enclosure indicator page.
The enclosure PE904867 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904867 has the following characteristics:

ITEM_BARCODE = PE904867
CONTAINER_BARCODE = PE904856
NAME = Halibut 2 Geogram
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAM
DESCRIPTION = Halibut 2 35 Hz zero phase Geogram
(Synthetic Seismogram). From appendix 5
of WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904868

This is an enclosure indicator page.
The enclosure PE904868 is enclosed within the
container PE904856 at this location in this
document.

The enclosure PE904868 has the following characteristics:

ITEM_BARCODE = PE904868
CONTAINER_BARCODE = PE904856
NAME = Halibut 2 Geogram
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAM
DESCRIPTION = Halibut 2 45 Hz zero phase Geogram
(Synthetic Seismogram). From appendix 5
of WCR volume 1.
REMARKS =
DATE_CREATED = 11/04/94
DATE_RECEIVED = 7/09/94
W_NO = W1090
WELL_NAME = Halibut-2
CONTRACTOR = Schlumberger
CLIENT_OP_CO = Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)