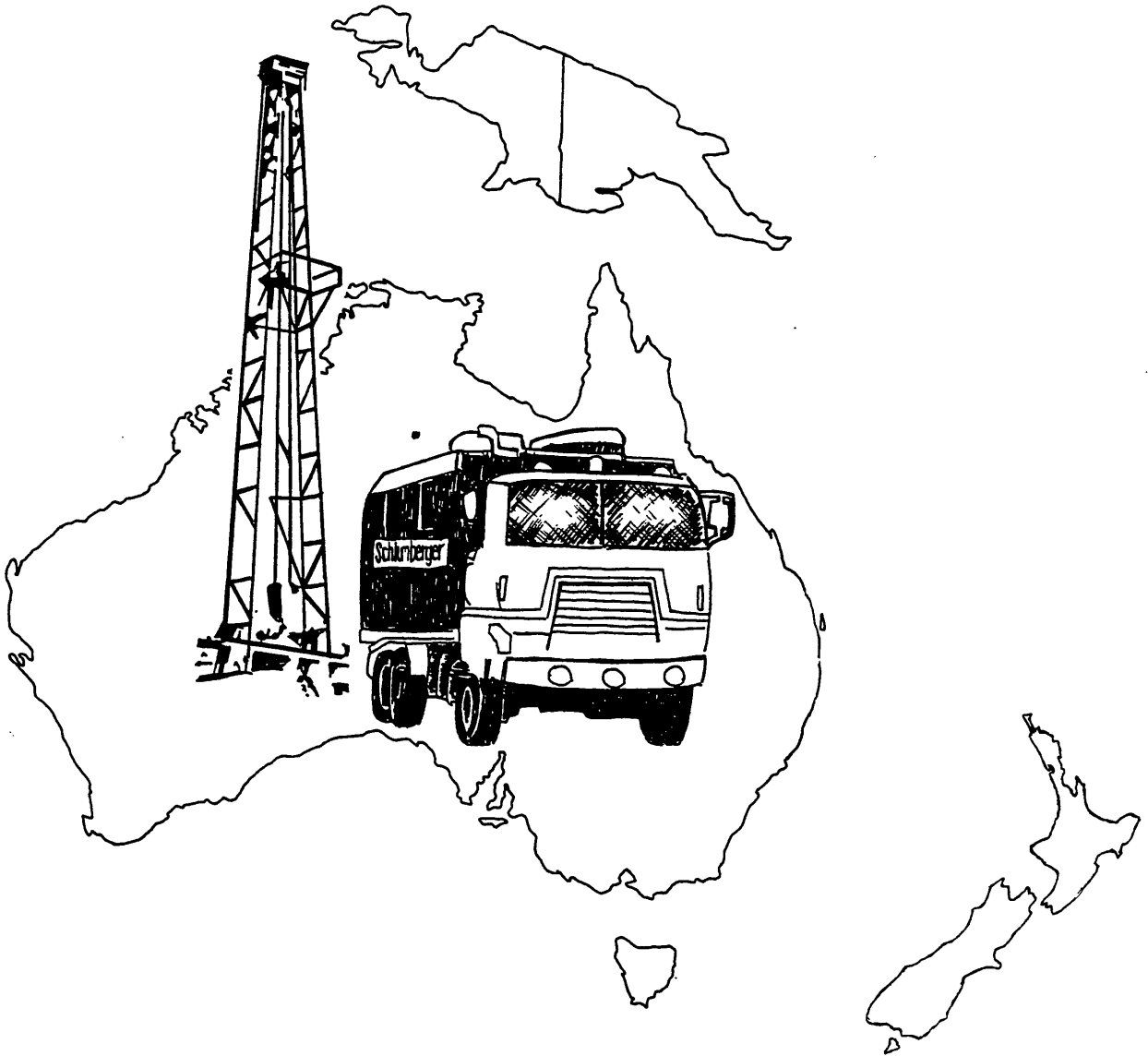
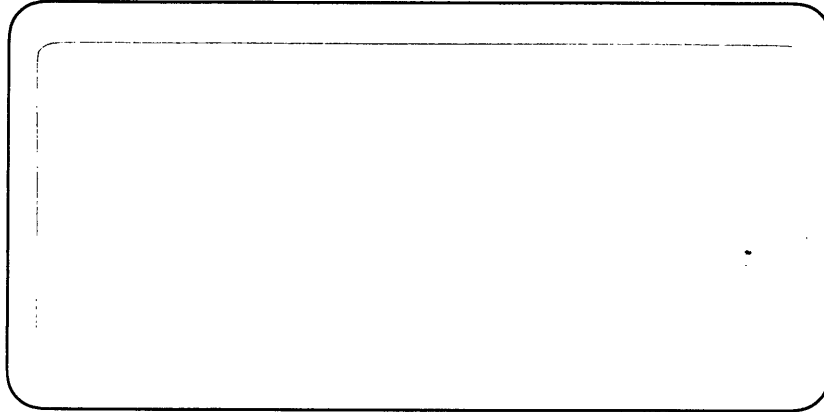




SEPARATE ATTACHMENT TO WCR OF KUNGFISH-9
(APPENDIX 5) **(W1060)**



Schlumberger

Schlumberger

PETROLEUM DIVISION

30 OCT 1992

USA

ESSO AUSTRALIA LTD
SONIC CALIBRATION
AND GEOGRAM
PROCESSING REPORT

KINGFISH 9

FIELD : KINGFISH

COUNTRY : AUSTRALIA

COORDINATES : 38° 60' 0" S
148° 149' 0" E

DATE OF SURVEY : 23 APR 1992

REFERENCE NO. : SYJ-560781

INTERVAL : 2429.0 - 240.0 M

Contents

1. Introduction	1
2. Data Acquisition	1
3. Sonic Calibration Processing	2
3.1 Sonic Calibration	2
3.2 Correction to Datum	3
3.3 Open Hole Logs	3
3.4 Sonic Calibration Results	3
4. Synthetic Seismogram Processing	4
4.1 Depth to Time Conversion	4
4.2 Primary Reflection Coefficients	4
4.3 Primaries with Transmission Loss	5
4.4 Primaries plus Multiples	5
4.5 Multiples Only	5
4.6 Wavelet	5
4.7 Polarity Convention	5
4.8 Convolution	5
A Summary of Geophysical Listings	6
A1 Geophysical Airgun Report	6
A2 Drift Computation Report	6
A3 Sonic Adjustment Parameter Report	7
A4 Velocity Report	7
A5 Time Converted Velocity Report	8

List of Tables

1 Survey Parameters	1
-------------------------------	---

1. Introduction

A checkshot survey of the KINGFISH #9 well has been used to calibrate the sonic log and generate synthetic seismograms using 25,35,45 hertz zero phase Ricker wavelets with a -90 degrees phase shift and a minimum phase Ricker wavelet. The final presentation includes synthetic seismograms, at 20 cm/sec as well as a drift corrected sonic plot and a seismic calibration log.

2. Data Acquisition

The data was acquired with the CSAT acquisition tool. Recording was made on the MAXIS Unit using DLIS format.

Table 1: Survey Parameters

Datum	MSL
Elevation KB	22 metres AMSL
Elevation GL	76.0 metres below MSL
Total Depth	2442 metres below KB
Energy Source	Airgun
Source Offset	69 metres
Source Depth	10 metre below MSL
Source Azimuth	325°
Reference Sensor	Hydrophone
Hydrophone Offset	69 metres
Hydrophone Depth	15 metres below MSL
Hydrophone Azimuth	325°

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.

For a negative drift $\frac{\Delta drift}{\Delta depth} < 0$, the sonic time is greater than the seismic time over a certain section of the log.

For a positive drift $\frac{\Delta drift}{\Delta depth} > 0$, 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} , $\Delta t - \Delta t_{min}$.

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

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

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

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

3.2 Correction to Datum

The corrected sonic log is indexed to true vertical depth and referenced to mean sea level. Static corrections are applied to correct for source offset and source depth by assuming a water velocity of 1524 metres/sec.

3.3 Open Hole Logs

The sonic log has been recorded from 2429.0 to 240.0 metres below KB. The overall log quality is good with small zones having been patched out. A density log was recorded from TD up to 2242 metres and is extrapolated to the surface with a constant density value.

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

3.4 Sonic Calibration Results

The top of the sonic log (240 metres below KB) is chosen as the origin for the calibration drift curve. The drift curve indicates a number of corrections to be made to 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 in the adjusted sonic parameter report.

4. Synthetic Seismogram Processing

GEOGRAM plots were generated using 25,35,45 HZ zero phase Ricker wavelets with a negative 90 degrees phase shift and a 35 HZ minimum phase Ricker wavelet .

The presentations include both normal and reverse polarity on a time scale of 20cm/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:

$$R = \frac{\rho_2 \cdot \nu_2 - \rho_1 \cdot \nu_1}{\rho_2 \cdot \nu_2 + \rho_1 \cdot \nu_1}$$

where:

- ρ_1 = density of the layer above the reflection interface
- ρ_2 = density of the layer below the reflection interface
- ν_1 = compressional wave velocity of the layer above the reflection interface
- ν_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:

$$A_n = (1 - R_1^2) \cdot (1 - R_2^2) \cdot (1 - R_3^2) \dots (1 - R_n^2)$$

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

$$Primary_n = R_n \cdot A_{n-1}$$

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.

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 meters from kelly bushing .
3. Vertical depth from SRD : *dsrd*, the depth in meters from seismic reference datum.
4. Vertical depth from GL : *dgl*, the depth in meters from ground level.
5. 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.
6. Vertical travel time SRC to GEO : *timv*, is corrected for source to hydrophone distance and for source offset.
7. Vertical travel time SRD to GEO : *shtm*, is *timv* corrected for the vertical distance between source and datum.
8. Average velocity SRD to GEO : the average seismic velocity from datum to the corresponding checkshot level, $\frac{dsrd}{shtm}$.
9. Delta depth between shots : $\Delta depth$, the vertical distance between each level.
10. Delta time between shots : $\Delta time$, the difference in vertical travel time (*shtm*) between each level.
11. 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 meters from kelly bushing .
3. Vertical depth from SRD : the depth in meters from seismic reference datum.
4. Vertical depth from GL : the depth in meters from ground level.
5. Vertical travel time SRD to GEO : the calculated vertical travel time from datum to downhole geophone (see column 7, Geophysical Airgun Report).

6. 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.
7. Computed drift at level : the checkshot time minus the integrated raw sonic time.
8. Computed blk-shft correction : the drift gradient between any two checkshot levels ($\frac{\Delta drift}{\Delta depth}$).

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 meters from kelly bushing .
3. Vertical depth from SRD : the depth in meters from seismic reference datum.
4. Vertical depth from GL : the depth in meters from ground level.
5. Drift at knee : the value of drift imposed at each knee.
6. Blockshift used : the change in drift divided by the change in depth between any two levels.
7. Delta-T minimum used : see section 4 of report for an explanation of Δt_{min} .
8. Reduction factor : see section 4 of report.
9. 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 meters from kelly bushing .
3. Vertical depth from SRD : the depth in meters from seismic reference datum
4. Vertical depth from GL : the depth in meters from ground level
5. Vertical travel time SRD to GEOPH : the vertical travel time from SRD to downhole geophone (see column 7, Geophysical Airgun Report)
6. Integrated adjusted sonic time : the adjusted sonic log is integrated from top to bottom. An initial value at the the top of the sonic is set equal the checkshot time at that level. (The adjusted sonic log is the drift corrected sonic log.)

7. Drift=shot time-raw sonic : the check shot time minus the raw integrated sonic time.
8. 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.
9. 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.

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

where v_i is the velocity between each 2 millisecs interval.

6. First normal moveout : the correction time in millisecs to be applied to the two way travel time for a specified moveout distance (default = 3000 feet).

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

where:

$$\begin{aligned} \Delta t &= \text{normal moveout (secs)} \\ X &= \text{moveout distance (meters)} \\ t &= \text{two way time (secs)} \\ v_{rms} &= \text{rms velocity (meters /sec)} \end{aligned}$$

7. Second normal moveout : the correction time in millisecs to be applied to the two way travel time for a specified moveout distance (default = 4500 feet).
8. Third normal moveout : the correction time in millisecs to be applied to the two way travel time for a specified moveout distance (default = 6000 feet).

9. Interval velocity : the velocity between each sampled depth. Typically, the sampling rate is 2 millisecs two way time, (1 millisecc one way time) therefore the interval velocity will be equal to the depth increment divided by 0.001. It is equivalent to column 9 from the the Velocity Report.

LIST OF ENCLOSURES

Drift Corrected Sonic

Seismic Calibration Log

25 hz zero phase Geogram 20 cm/sec

35 hz zero phase Geogram 20 cm/sec

45 hz zero phase Geogram 20 cm/sec

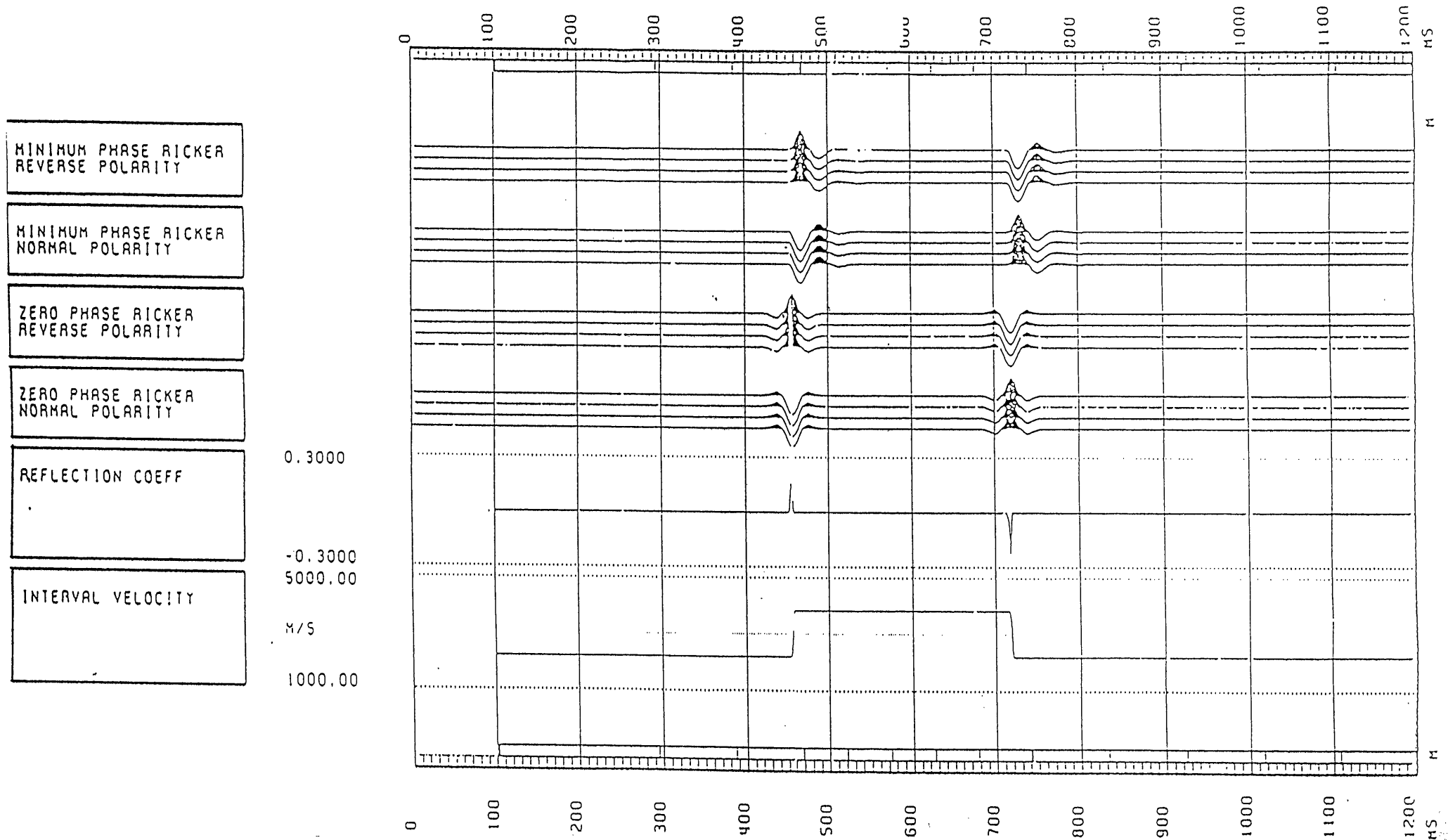
35 hz minimum phase Geogram 20 cm/sec

Figure 1. Wavelet Polarity Convention.

Figure 2. Stacked Data.

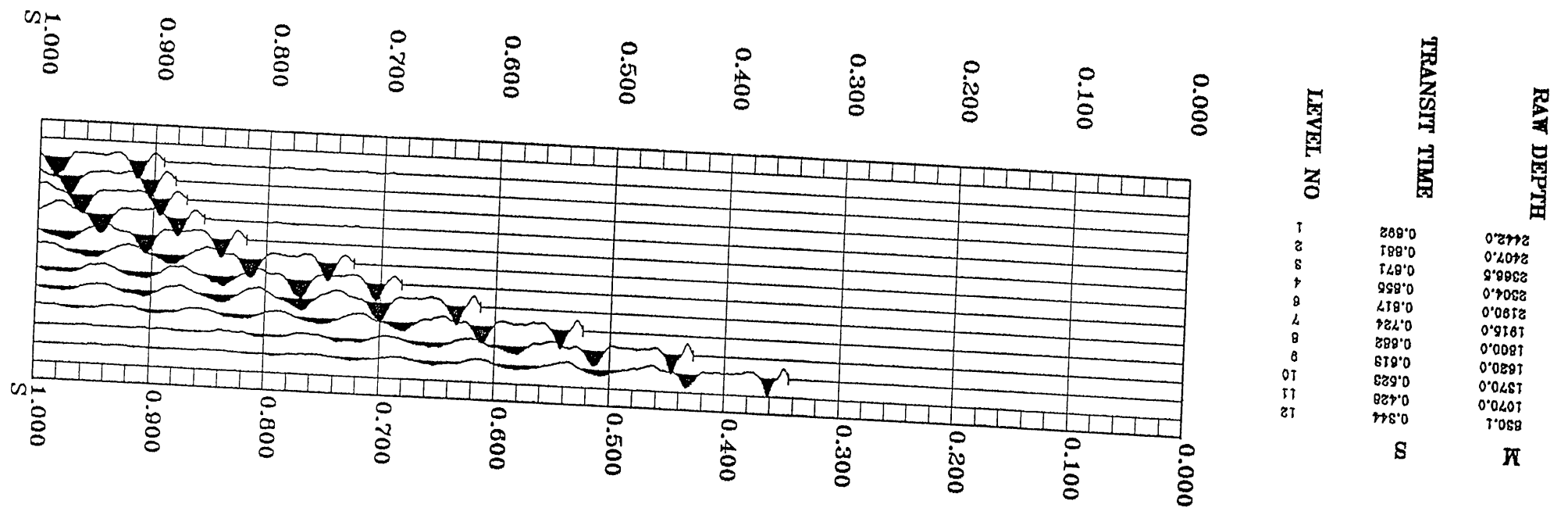
SCHLUMBERGER (SEG-1976) WAVELET POLARITY CONVENTION

Figure 1



CLIENT = ESSO AUSTRALIA LTD.
 FIELD = KINGFISH
 WELL = KINGFISH-9

Figure 2



SHOTS

LONG DEFINITIONS

GLOBAL
 ELEVATION OF THE KELLY-BUSHING ABOVE MSL OR MWL
 ELEVATION OF THE SEISMIC REFERENCE DATUM ABOVE MSL OR MWL
 ELEVATION OF KELLY BUSHING
 ELEVATION OF USER'S REFERENCE (GENERALLY GROUND LEVEL) ABOVE SRD
 VELOCITY OF THE MEDIUM BETWEEN THE SOURCE AND THE HYDROPHONE
 VELOCITY OF THE MEDIUM BETWEEN THE SOURCE AND THE SRD

MATRIX
 SOURCE ELEVATION ABOVE SRD (ONE FOR THE WHOLE JOB; OR ONE PER SHOT)
 SOURCE DISTANCE FROM THE BOREHOLE AXIS IN EW DIRECTION (CF. GUNELZ)
 SOURCE DISTANCE FROM THE BOREHOLE AXIS IN NS DIRECTION (CF. GUNELZ)
 HYDROPHONE ELEVATION ABOVE SRD (CF. GUNELZ)
 HYDROPHONE DISTANCE FROM THE BOREHOLE AXIS IN EW DIRECTION (CF. GUNELZ)
 HYDROPHONE DISTANCE FROM THE BOREHOLE AXIS IN NS DIRECTION (CF. GUNELZ)
 TRAVEL TIME FROM THE HYDROPHONE TO THE SOURCE
 TRAVEL TIME FROM THE SOURCE TO THE SRD
 DEVIATED WELL DATA PER SHOT : MEAS. DEPTH, VERT. DEPTH, EW, NS

SAMPLED
 SHOT NUMBER FROM KELLY-BUSHING
 MEASURED DEPTH FROM SRD
 DEPTH FROM SRD
 VERTICAL DEPTH RELATIVE TO GROUND LEVEL (USER'S REFERENCE)
 TIE IN MEMORIZED OUTPUT
 VERTICAL TRAVEL TIME FROM THE SOURCE TO THE GEOPHONE
 SHOT TIME (WST)
 AVERAGE SEISMIC VELOCITY
 DEPTH INTERVAL BETWEEN SUCCESSIVE SHOTS
 TRAVEL TIME INTERVAL BETWEEN SUCCESSIVE SHOTS
 INTERNAL VELOCITY, AVERAGE

(GLOBAL PARAMETERS)

ELEV OF KB AB.	MSL (WST)	KB	:	22.0000	M
ELEV OF SRD AB.	MSL (WST)	SRD	:	0	M
ELEVATION OF KELLY BUSHI		EKB	:	22.0000	M
ELEV OF GL AB.	SRD (WST)	GL	:	-76.0000	M
VEL SOURCE-HYDRO (WST)		VELHYD	:	1524.00	M/S
VEL SOURCE-SRD (WST)		VELSUR	:	1524.00	M/S

(MATRIX PARAMETERS)

SOURCE ELV M	SOURCE EW M	SOURCE NS M	HYDRO ELEV M	HYDRO EW M	HYDRO NS M
1 -10.00	-39.58	56.52	-15.00	-39.53	56.52

TRT HYD-SC MS	TRT SC-SRD MS
1 3.28	6.56

	MD @ KB M	VD @ KB M	VD @ SRD M	E-W COORD M	N-S COORD M
1	98.00	98.00	76.00	0	0
2	240.03	240.03	218.03	0	0
3	830.10	830.10	808.10	0	0
4	1070.00	1070.00	1048.00	0	0
5	1370.00	1370.00	1348.00	0	0
6	1620.00	1620.00	1598.00	0	0
7	1800.00	1800.00	1778.00	0	0
8	1915.00	1915.00	1893.00	0	0
9	2190.00	2190.00	2168.00	0	0
10	2304.00	2304.00	2282.00	0	0
11	2366.50	2366.50	2344.50	0	0
12	2407.00	2407.00	2385.00	0	0
13	2442.00	2442.00	2420.00	0	0

LEVEL NUMBER	MEASUR DEPTH FROM KB M	VERTIC DEPTH FROM SRD M	VERTIC DEPTH FROM GL M	VERTIC DEPTH FROM GL 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	98.00	76.00	0	0	59.37	43.31	49.87	1524	142.03	68.96	2060
2	240.03	218.03	142.03	142.03	115.00	112.27	118.83	1835	590.07	233.72	2525
3	830.10	808.10	732.10	732.10	344.00	345.99	352.55	2292	239.90	84.34	2344
4	1070.00	1048.00	972.00	972.00	428.00	430.33	436.89	2399	300.00	95.25	3150
5	1370.00	1348.00	1272.00	1272.00	523.00	525.58	532.14	2533	250.00	90.12	2774
6	1620.00	1598.00	1522.00	1522.00	613.00	615.70	622.26	2568	180.00	69.06	2606
7	1800.00	1778.00	1702.00	1702.00	682.00	684.76	691.32	2572	115.00	42.03	2736
8	1915.00	1893.00	1817.00	1817.00	724.00	726.79	733.35	2581	275.00	93.07	2955
9	2190.00	2168.00	2092.00	2092.00	817.00	819.86	826.42	2623	114.00	38.02	2998
10	2304.00	2282.00	2206.00	2206.00	855.00	857.89	864.45	2640	62.50	16.01	3903
11	2366.50	2344.50	2268.50	2268.50	871.00	873.90	880.46	2663	40.50	10.01	4046
12	2407.00	2385.00	2309.00	2309.00	881.00	883.91	890.47	2678	35.00	11.01	3180
13	2442.00	2420.00	2344.00	2344.00	892.00	894.91	901.48	2684			

DRIFT

DRIFT

LONG DEFINITIONS

GLOBAL
 -- ELEVATION OF THE KELLY-BUSHING ABOVE MSL OR MWL
 -- ELEVATION OF THE SEISMIC REFERENCE DATUM ABOVE MSL OR MWL
 -- ELEVATION OF KELLY BUSHING
 -- ELEVATION OF USERS REFERENCE (GENERALLY GROUND LEVEL) ABOVE SRD
 -- TOP OF ZONE PROCESSED BY WST
 -- BOTTOM OF ZONE PROCESSED BY WST
 -- RAW SONIC CHANNEL NAME USED FOR WST SONIC ADJUSTMENT
 -- UNIFORM DENSITY VALUE

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

SAMPLED
 -- SHOT NUMBER
 -- MEASURED DEPTH FROM KELLY-BUSHING
 -- DEPTH FROM SRD
 -- VERTICAL DEPTH RELATIVE TO GROUND LEVEL (USER'S REFERENCE)
 -- SHOT TIME (WST)
 -- RAW SONIC (WST)
 -- DIFT AT SHOT OR KNEE
 -- BLOCK SHIFT BETWEEN SHOTS OR KNEE

(GLOBAL PARAMETERS)

ELEV OF KB AB. MSL (WST) : 22.0000 M
 ELEV OF SRD AB. MSL (WST) : 0 M
 ELEVATION OF KELLY BUSHI : 22.0000 M
 ELEV OF GL AB. SRD (WST) : -76.0000 M
 TOP OF ZONE PROC (WST) : 0 M
 BOT OF ZONE PROC (WST) : 0 M
 RAW SONIC CH NAME (WST) : DT.ATT.002.FLP.*
 UNIFORM DENSITY VALUE : 2.30000 G/C3

(ZONED PARAMETERS)

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

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL DEPTH FROM GL M	VERTICAL TRAVEL TIME SRD/GEO MS	INTEGRATED RAW SONIC TIME MS	COMPUTED DRIFT AT LEVEL MS	COMPUTED BLK-SHIFT CORRECTION US/F
1	98.00	76.00	0	49.87	49.87	0	0
2	240.03	218.03	142.03	118.83	118.83	0	0
3	830.10	808.10	732.10	352.55	348.96	3.59	1.86
4	1070.00	1048.00	972.00	436.89	430.20	6.70	3.95
5	1370.00	1348.00	1272.00	532.14	523.38	8.76	2.10
6	1620.00	1598.00	1522.00	622.26	609.57	12.69	4.79
7	1800.00	1778.00	1702.00	691.32	675.10	16.22	5.99
8	1915.00	1893.00	1817.00	733.35	715.97	17.39	3.08
9	2190.00	2168.00	2092.00	826.42	805.03	21.39	4.44
10	2304.00	2282.00	2206.00	864.45	839.74	24.70	8.86
11	2366.50	2344.50	2268.50	880.46	856.80	23.66	-5.07
12	2407.00	2385.00	2309.00	890.47	867.41	23.06	-4.56
13	2428.95	2406.95	2330.95	897.37	873.24	24.13	14.90
14	2442.00	2420.00	2344.00	901.48			

ANALYST: T. BOWMAN

30-APR-92 12:27:22

PROGRAM: GADJST 008.E08

```
*****  
*  
*  
*  
*****  
* SCHLUMBERGER *  
*  
*****
```

SONIC ADJUSTMENT PARAMETER REPORT

```
COMPANY : ESSO AUSTRALIA LTD  
WELL : KINGFISH #9  
FIELD : KINGFISH  
STATE : VICTORIA  
COUNTRY : AUSTRALIA  
REFERENCE: 560781  
LOGGED : 24-APR-92
```

LONG DEFINITIONS

GLOBAL
 - ELEVATION OF THE KELLY-BUSHING ABOVE MSL OR MWL
 - ELEVATION OF THE SEISMIC REFERENCE DATUM ABOVE MSL OR MWL
 - ELEVATION OF KELLY BUSHING
 - ELEVATION OF USERS REFERENCE (GENERALLY GROUND LEVEL) ABOVE SRD
 - TOP OF ZONE PROCESSED BY WST
 - BOTTOM OF ZONE PROCESSED BY WST
 - RAW SONIC CHANNEL NAME USED FOR WST SONIC ADJUSTMENT
 - UNIFORM DENSITY VALUE

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

SAMPLED
 - SHOT NUMBER FROM KELLY-BUSHING
 - MEASURED DEPTH FROM KELLY-BUSHING
 - DEPTH FROM SRD
 - VERTICAL DEPTH RELATIVE TO GROUND LEVEL (USER'S REFERENCE)
 - SHOT TIME (WST)
 - RAW SONIC (WST)
 - DRIFT AT SHOT OR KNEE
 - BLOCK SHIFT BETWEEN SHOTS OR KNEE

(GLOBAL PARAMETERS)

ELEV OF KB AB	MSL (WST)	KB	:	22.0000	M
ELEV OF SRD AB	MSL (WST)	SRD	:	0	M
ELEVATION OF KELLY BUSHI		EKB	:	22.0000	M
ELEV OF GL AB	SRD (WST)	GL	:	-76.0000	M
TOP OF ZONE PROC	(WST)	XSTART	:	0	M
BOT OF ZONE PROC	(WST)	XSTOP	:	0	M
RAW SONIC CH NAME	(WST)	GAD001	:	DI:ATT.002	FLP.*
UNIFORM DENSITY VALUE		UNFDEN	:	2.30000	G/C3

(ZONED PARAMETERS)

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

(VALUE)

(LIMITS)

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL DEPTH FROM GL FT	VERTICAL TRAVEL TIME SRD/GEO MS	INTEGRATED RAW SONIC TIME MS	COMPUTED DRIFT AT LEVEL MS	COMPUTED US/F
1	98.00	76.00	0	49.87	49.87	0	0
2	240.03	218.03	142.03	118.83	118.83	0	0
3	830.10	808.10	732.10	352.55	348.96	3.59	1.86
4	1070.00	1048.00	972.00	436.89	430.20	6.70	3.95
5	1370.00	1348.00	1272.00	532.14	523.38	8.76	2.10
6	1620.00	1598.00	1522.00	622.26	609.57	12.69	4.79
7	1800.00	1778.00	1702.00	691.32	675.10	16.22	5.99
8	1915.00	1893.00	1817.00	733.35	715.97	17.39	3.08
9	2190.00	2168.00	2092.00	826.42	805.03	21.39	4.44
10	2304.00	2282.00	2206.00	864.45	839.74	24.70	8.86
11	2366.50	2344.50	2268.50	880.46	856.80	23.66	-5.07
12	2407.00	2385.00	2309.00	390.47	867.41	23.06	-4.56
13	2428.95	2406.95	2330.95	397.37	873.24	24.13	14.90
14	2442.00	2420.00	2344.00	901.48			

ANALYST: T. BOWMAN

30-APR-92 12:27:22

PROGRAM: GADJST 008.E08

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

SCHLUMBERGER

SONIC ADJUSTMENT PARAMETER REPORT

COMPANY : ESSO AUSTRALIA LTD

WELL : KINGFISH #9

FIELD : KINGFISH

STATE : VICTORIA

COUNTRY : AUSTRALIA

REFERENCE: 560781

LOGGED : 24-APR-92

WELL : KINGFISH #9

COMPANY : ESSO AUSTRALIA LTD

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
 DGLL - VERTICAL DEPTH RELATIVE TO GROUND LEVEL (USER'S REFERENCE)
 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) (LIMITS)
 ORIG OF ADJ DATA (WST) SRCDRF : 2.00000 MS 2429.00 - 1631.00
 CONS SONIC ADJST (WST) CONADJ : 7.50000 US/F 1631.00 - 833.000
 UNIFORM EARTH VELOCITY UNERTH : 1524.00 M/S 833.000 240.030
 (ZONED PARAMETERS) (VALUE) (LIMITS)
 USER DRIFT ZONE (WST) ZDRIFT : 25.50000 MS 2429.00 - 1631.00
 : 12.70000 1631.00 - 833.000
 : 3.600000 833.000 240.030
 ADJUSMNT MODE (WST) ADJOPZ : -999.2500 US/F 30479.7 - 0
 USER DELTA-T MIN (WST) ADJUSZ : -999.2500 US/F 30479.7 - 0
 LAYER OPTION FLAG VELOC LOFVEL : 1.000000 M/S 30479.7 - 0
 USER VELOC (WST) LAYVEL : 2060.000 M/S 240.030 - 98.0000
 : 1524.000 98.00000

KNEE NUMBER	VERTICAL DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL DEPTH FROM GL M	DRIFT AT KNEE MS	BLOCKSHIFT USED US/F	DELTA-T MINIMUM USED US/F	REDUCTION FACTOR G	EQUIVALENT BLOCKSHIFT US/F
2	240.03	218.03	142.03	0	1.85	0	1.85	1.85
3	833.00	811.00	735.00	3.60	3.48		3.48	3.48
4	1631.00	1609.00	1533.00	12.70	4.89		4.89	4.89
5	2429.00	2407.00	2331.00	25.50				

COMPANY : ESSO AUSTRALIA LTD WELL : KINGFISH #9

LONG DEFINITIONS

GLOBAL
 - 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
 GL - ELEVATION OF USERS REFERENCE (GENERALLY GROUND LEVEL) ABOVE SRD
 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 NUMBER FROM KELLY-BUSHING
 DKE - MEASURED DEPTH FROM KELLY-BUSHING
 DSRD - DEPTH FROM SRD
 DGL - VERTICAL DEPTH RELATIVE TO GROUND LEVEL (USER'S REFERENCE)
 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) : 22.0000 M
 ELEV OF SRD AB. MSL (WST) : 0 M
 ELEVATION OF KELLY BUSHI : 22.0000 M
 ELEV OF GL AB. SRD (WST) : -76.0000 M
 UNIFORM EARTH VELOCITY UNERTH : 1524.00 M/S

(ZONED PARAMETERS) (VALUE) (LIMITS)
 LAYER OPTION FLAG VELOC LOFVEL : 1.000000 M/S : 30479.7 0
 USER VELOC (WST) LAYVEL : 2060.000 M/S : 240.030 - 98.0000
 : 1524.000 : 98.0000 0

COMPANY : ESSO AUSTRALIA LTD

WELL : KINGFISH #9

PAGE 4

LEVEL NUMBER	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL DEPTH FROM GL 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	98.00	76.00	0	49.87	49.87	0	0	1524
2	240.03	218.03	142.03	118.83	118.82	0	0	2060
3	830.10	808.10	732.10	352.55	352.53	3.59	.02	2525
4	1070.00	1048.00	972.00	436.89	436.43	6.70	.41	2858
5	1370.00	1348.00	1272.00	532.14	533.09	8.76	-.95	3105
6	1620.00	1598.00	1522.00	622.26	622.13	12.69	.13	2808
7	1800.00	1778.00	1702.00	691.32	690.50	16.22	.83	2633
8	1915.00	1893.00	1817.00	733.35	733.21	17.39	.15	2692
9	2190.00	2168.00	2092.00	826.42	826.68	21.39	-.26	2942
10	2304.00	2282.00	2206.00	864.45	863.22	24.70	1.23	3120
11	2366.50	2344.50	2268.50	880.46	881.27	23.66	-.81	3462
12	2407.00	2385.00	2309.00	890.47	892.54	23.06	-2.07	3595
13	2428.95	2406.95	2330.95	897.37	898.69	24.13	-1.32	3567
14	2442.00	2420.00	2344.00	901.48	901.48		0	4686

Time / DEPTH

TIME/DEPTH

ANALYST: T. BOWMAN

30-APR-92 12:29:37

PROGRAM: GTRFM 001.E12

```
*****  
*  
*  
*  
*****  
*  
* SCHLUMBERGER *  
*  
*****
```

TIME CONVERTED VELOCITY REPORT

```
COMPANY : ESSO AUSTRALIA LTD  
WELL : KINGFISH #9  
FIELD : KINGFISH  
STATE : VICTORIA  
COUNTRY : AUSTRALIA  
REFERENCE: 560781  
LOGGED : 24-APR-92
```

LONG DEFINITIONS

GLOBAL
 - ELEVATION OF THE KELLY-BUSHING ABOVE MSL OR HWL
 - ELEVATION OF THE SEISMIC REFERENCE DATUM ABOVE MSL OR HWL
 - ELEVATION OF USERS REFERENCE (GENERALLY GROUND LEVEL) ABOVE SRD
 - UNIFORM EARTH VELOCITY (GTRFRM)
 - UNIFORM DENSITY VALUE

MATRIX
 - MOVE-OUT DISTANCE FROM BOREHOLE

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

SAMPLED
 - TWO WAY TRAVEL TIME (RELATIVE TO THE SEISMIC REFERENCE)
 - MEASURED DEPTH FROM KELLY-BUSHING
 - DEPTH FROM SRD
 - AVERAGE SEISMIC VELOCITY
 - ROOT MEAN SQUARE VELOCITY (SEISMIC)
 - NORMAL MOVE-OUT
 - NORMAL MOVE-OUT
 - NORMAL MOVE-OUT
 - INTERNAL VELOCITY, AVERAGE

(GLOBAL PARAMETERS) (VALUE)

ELEV OF KB AB. MSL (WST) KB : 22.0000 M
 ELEV OF SRD AB. MSL(WST) SRD : 0 M
 ELEV OF GL AB. SRD(WST) GL : -76.0000 M
 UNIFORM EARTH VELOCITY UNERTH : 1524.00 M/S
 UNIFORM DENSITY VALUE UNFDEN : 2.30000 G/C3

(MATRIX PARAMETERS)

MVOUT DIST
 M

1 1000.0
 2 1500.0
 3 2000.0

(ZONED PARAMETERS)

(LIMITS)

	(VALUE)		(LIMITS)
LAYER OPTION FLAG VELOC	: 1.000000		30479.7 -
LAYER OPTION FLAG DENS	: 2060.000	M/S	240.030 -
LAYER SUPPLIED DENSITY DA	: 1524.000		98.0000
LAYER SUPPLIED DENSITY LAYDEN	: -1.000000	G/C3	30479.7 -
LAYER OPTION FLAG VELOC LAYVEL	:		0
LAYER OPTION FLAG DENS LAYDEN	:		0
LAYER SUPPLIED DENSITY DA LAYDEN	:		0
LAYER SUPPLIED DENSITY LAYDEN	:		0

WELL : KINGFISH #9

COMPANY : ESSO AUSTRALIA LTD

TWO-WAY TRAVEL TIME FROM SRD M/S	MEASURED DEPTH FROM KB N	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	22.00	0	1524	1524	654.17	982.25	1310.34	1524
2.00	23.52	1.52	1524	1524	652.18	980.26	1308.34	1524
4.00	25.05	3.05	1524	1524	650.20	978.27	1306.35	1524
6.00	26.57	4.57	1524	1524	648.22	976.28	1304.36	1524
8.00	28.10	6.10	1524	1524	646.24	974.30	1302.37	1524
10.00	29.62	7.62	1524	1524	644.28	972.32	1300.39	1524
12.00	31.14	9.14	1524	1524	642.32	970.35	1298.41	1524
14.00	32.67	10.67	1524	1524	640.36	968.38	1296.43	1524
16.00	34.19	12.19	1524	1524	638.41	966.42	1294.46	1524
18.00	35.72	13.72	1524	1524	636.47	964.46	1292.49	1524
20.00	37.24	15.24	1524	1524	634.54	962.50	1290.52	1524
22.00	38.76	16.76	1524	1524	632.61	960.54	1288.56	1524
24.00	40.29	18.29	1524	1524	630.68	958.60	1286.59	1524
26.00	41.81	19.81	1524	1524	628.77	956.65	1284.63	1524
28.00	43.34	21.34	1524	1524	626.85	954.71	1282.68	1524
30.00	44.86	22.86	1524	1524	624.95	952.77	1280.73	1524
32.00	46.38	24.38	1524	1524	623.05	950.84	1278.78	1524
34.00	47.91	25.91	1524	1524	621.15	948.91	1276.83	1524
36.00	49.43	27.43	1524	1524	619.27	946.99	1274.89	1524
38.00	50.96	28.96	1524	1524	617.39	945.06	1272.95	1524
40.00	52.48	30.48	1524	1524	615.51	943.15	1271.01	1524
42.00	54.00	32.00	1524	1524	613.64	941.24	1269.07	1524
44.00	55.53	33.53	1524	1524	611.78	939.33	1267.14	1524
46.00	57.05	35.05	1524	1524				

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	58.58	36.58	1524	1524	609.92	937.42	1265.21	1524
50.00	60.10	38.10	1524	1524	608.07	935.52	1263.29	1524
52.00	61.62	39.62	1524	1524	606.23	933.62	1261.37	1524
54.00	63.15	41.15	1524	1524	604.39	931.73	1259.45	1524
56.00	64.67	42.67	1524	1524	602.55	929.84	1257.53	1524
58.00	66.20	44.20	1524	1524	600.73	927.96	1255.62	1524
60.00	67.72	45.72	1524	1524	598.91	926.08	1253.71	1524
62.00	69.24	47.24	1524	1524	597.09	924.20	1251.80	1524
64.00	70.77	48.77	1524	1524	595.28	922.33	1249.90	1524
66.00	72.29	50.29	1524	1524	593.48	920.46	1247.99	1524
68.00	73.82	51.82	1524	1524	591.68	918.60	1246.10	1524
70.00	75.34	53.34	1524	1524	589.89	916.74	1244.20	1524
72.00	76.86	54.86	1524	1524	588.11	914.88	1242.31	1524
74.00	78.39	56.39	1524	1524	586.33	913.03	1240.42	1524
76.00	79.91	57.91	1524	1524	584.55	911.18	1238.53	1524
78.00	81.44	59.44	1524	1524	582.79	909.34	1236.65	1524
80.00	82.96	60.96	1524	1524	581.03	907.50	1234.77	1524
82.00	84.48	62.48	1524	1524	579.27	905.66	1232.90	1524
84.00	86.01	64.01	1524	1524	577.52	903.83	1231.02	1524
86.00	87.53	65.53	1524	1524	575.78	902.00	1229.15	1524
88.00	89.06	67.06	1524	1524	574.04	900.18	1227.28	1524
90.00	90.58	68.58	1524	1524	572.31	898.36	1225.42	1524
92.00	92.10	70.10	1524	1524	570.59	896.54	1223.56	1524
94.00	93.63	71.63	1524	1524	568.87	894.73	1221.70	1524

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	95.15	73.15	1524	1524	567.15	892.92	1219.84	1524
98.00	96.68	74.68	1524	1524	565.45	891.12	1217.99	1524
100.00	98.31	76.31	1526	1526	562.80	887.90	1214.24	1631
102.00	100.37	78.37	1537	1538	555.96	878.33	1202.00	2060
104.00	102.43	80.43	1547	1550	549.44	869.24	1190.40	2060
106.00	104.49	82.49	1556	1561	543.21	860.53	1179.38	2060
108.00	106.55	84.55	1566	1572	537.26	852.33	1168.89	2060
110.00	108.60	86.60	1575	1582	531.55	844.44	1158.88	2060
112.00	110.66	88.66	1583	1592	526.07	836.88	1149.32	2060
114.00	112.72	90.72	1592	1601	520.81	829.64	1140.17	2060
116.00	114.78	92.78	1600	1610	515.74	822.69	1131.39	2060
118.00	116.84	94.84	1608	1619	510.85	816.00	1122.97	2060
120.00	118.90	96.90	1615	1627	506.12	809.55	1114.88	2060
122.00	120.96	98.96	1622	1635	501.56	803.34	1107.09	2060
124.00	123.02	101.02	1629	1643	497.14	797.34	1099.57	2060
126.00	125.08	103.08	1636	1650	492.86	791.54	1092.32	2060
128.00	127.14	105.14	1643	1658	488.71	785.92	1085.32	2060
130.00	129.20	107.20	1649	1665	484.67	780.48	1078.55	2060
132.00	131.26	109.26	1655	1671	480.75	775.20	1071.99	2060
134.00	133.32	111.32	1661	1678	476.94	770.08	1065.63	2060
136.00	135.38	113.38	1667	1684	473.23	765.10	1059.47	2060
138.00	137.44	115.44	1673	1690	469.61	760.26	1053.48	2060
140.00	139.50	117.50	1679	1696	466.08	755.54	1047.66	2060
142.00	141.56	119.56	1684	1701	462.64	750.95	1042.00	2060

TWO-WAY TRAVEL TIME FROM SRD M/S	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	143.62	121.62	1689	1707	459.27	746.48	1036.49	2060
146.00	145.68	123.68	1694	1712	455.99	742.11	1031.12	2060
148.00	147.74	125.74	1699	1717	452.78	737.84	1025.89	2060
150.00	149.80	127.80	1704	1722	449.63	733.68	1020.78	2060
152.00	151.86	129.86	1709	1727	446.55	729.60	1015.80	2060
154.00	153.92	131.92	1713	1732	443.54	725.62	1010.93	2060
156.00	155.98	133.98	1718	1737	440.59	721.72	1006.17	2060
158.00	158.03	136.03	1722	1741	437.69	717.90	1001.52	2060
160.00	160.09	138.09	1726	1745	434.85	714.15	996.97	2060
162.00	162.15	140.15	1730	1750	432.06	710.48	992.51	2060
164.00	164.21	142.21	1734	1754	429.32	706.89	988.14	2060
166.00	166.27	144.27	1738	1758	426.63	703.35	983.86	2060
168.00	168.33	146.33	1742	1762	423.99	699.88	979.66	2060
170.00	170.39	148.39	1746	1765	421.39	696.48	975.54	2060
172.00	172.45	150.45	1749	1769	418.83	693.13	971.49	2060
174.00	174.51	152.51	1753	1773	416.32	689.84	967.52	2060
176.00	176.57	154.57	1756	1776	413.84	686.60	963.62	2060
178.00	178.63	156.63	1760	1780	411.41	683.42	959.78	2060
180.00	180.69	158.69	1763	1783	409.01	680.29	956.01	2060
182.00	182.75	160.75	1766	1786	406.65	677.20	952.30	2060
184.00	184.81	162.81	1770	1790	404.32	674.16	948.65	2060
186.00	186.87	164.87	1773	1793	402.02	671.17	945.06	2060
188.00	188.93	166.93	1776	1796	399.76	668.22	941.52	2060
190.00	190.99	168.99	1779	1799	397.53	665.31	938.04	2060

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	193.05	171.05	1782	1802	395.33	662.45	934.61	2060
194.00	195.11	173.11	1785	1804	393.16	659.62	931.22	2060
196.00	197.17	175.17	1787	1807	391.02	656.83	927.89	2060
198.00	199.23	177.23	1790	1810	388.91	654.07	924.60	2060
200.00	201.29	179.29	1793	1813	386.82	651.36	921.35	2060
202.00	203.35	181.35	1795	1815	384.76	648.67	918.15	2060
204.00	205.40	183.41	1798	1818	382.73	646.02	914.99	2060
206.00	207.46	185.46	1801	1820	380.72	643.40	911.87	2060
208.00	209.52	187.52	1803	1823	378.73	640.82	908.79	2060
210.00	211.58	189.58	1806	1825	376.77	638.26	905.75	2060
212.00	213.64	191.64	1808	1827	374.83	635.73	902.74	2060
214.00	215.70	193.70	1810	1830	372.91	633.24	899.77	2060
216.00	217.76	195.76	1813	1832	371.02	630.77	896.83	2060
218.00	219.82	197.82	1815	1834	369.15	628.32	893.93	2060
220.00	221.88	199.88	1817	1836	367.29	625.91	891.06	2060
222.00	223.94	201.94	1819	1839	365.46	623.51	888.22	2060
224.00	226.00	204.00	1821	1841	363.65	621.15	885.41	2060
226.00	228.06	206.06	1824	1843	361.86	618.81	882.63	2060
228.00	230.12	208.12	1826	1845	360.08	616.49	879.88	2060
230.00	232.18	210.18	1828	1847	358.33	614.19	877.16	2060
232.00	234.24	212.24	1830	1849	356.59	611.92	874.47	2060
234.00	236.30	214.30	1832	1851	354.87	609.67	871.80	2060
236.00	238.36	216.36	1834	1852	353.17	607.44	869.16	2060
238.00	240.46	218.46	1836	1855	351.38	605.08	866.34	2098

TWO-WAY TRAVEL TIME FROM SRD M/S	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	242.62	220.62	1838	1857	349.46	602.50	863.21	2160
242.00	244.81	222.81	1841	1860	347.48	599.81	859.94	2194
244.00	246.93	224.93	1844	1863	345.72	597.46	857.12	2116
246.00	249.06	227.06	1846	1865	343.94	595.08	854.25	2131
248.00	251.26	229.26	1849	1868	342.00	592.45	851.05	2202
250.00	253.47	231.47	1852	1871	340.08	589.82	847.84	2209
252.00	255.59	233.59	1854	1873	338.37	587.53	845.09	2127
254.00	257.73	235.73	1856	1875	336.65	585.23	842.32	2137
256.00	259.98	237.98	1859	1878	334.70	582.55	839.03	2246
258.00	262.29	240.29	1863	1882	332.63	579.66	835.46	2308
260.00	264.41	242.41	1865	1884	330.99	577.47	832.83	2128
262.00	266.61	244.61	1867	1887	329.24	575.08	829.93	2191
264.00	268.71	246.71	1869	1888	327.68	573.01	827.45	2106
266.00	270.81	248.81	1871	1890	326.17	570.99	825.05	2094
268.00	273.29	251.29	1875	1895	323.78	567.58	820.74	2489
270.00	275.51	253.51	1878	1898	322.05	565.19	817.84	2219
272.00	277.53	255.53	1879	1899	320.75	563.50	815.86	2014
274.00	279.77	257.77	1882	1902	318.99	561.07	812.88	2246
276.00	282.05	260.05	1884	1905	317.19	558.56	809.80	2276
278.00	284.31	262.31	1887	1907	315.45	556.14	806.83	2257
280.00	286.65	264.65	1890	1911	313.54	553.46	803.49	2347
282.00	288.90	266.90	1893	1913	311.87	551.15	800.67	2241
284.00	291.19	269.19	1896	1916	310.11	548.68	797.62	2298
286.00	293.35	271.35	1898	1918	308.64	546.68	795.21	2157

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	295.45	273.45	1899	1919	307.29	544.85	793.03	2105
290.00	297.70	275.70	1901	1922	305.69	542.63	790.31	2242
292.00	299.98	277.98	1904	1925	304.03	540.31	787.45	2280
294.00	302.01	280.01	1905	1925	302.83	538.71	785.59	2037
296.00	304.02	282.02	1906	1926	301.68	537.21	783.84	2008
298.00	306.16	284.16	1907	1927	300.33	535.36	781.62	2136
300.00	308.54	286.54	1910	1931	298.53	532.79	778.41	2385
302.00	310.87	288.87	1913	1934	296.88	530.44	775.49	2324
304.00	313.02	291.02	1915	1935	295.53	528.59	773.26	2157
306.00	315.20	293.20	1916	1937	294.16	526.70	770.97	2175
308.00	317.35	295.35	1918	1938	292.85	524.90	768.80	2148
310.00	319.62	297.62	1920	1941	291.35	522.78	766.19	2271
312.00	321.93	299.93	1923	1943	289.79	520.57	763.44	2313
314.00	324.19	302.19	1925	1945	288.34	518.51	760.92	2261
316.00	326.48	304.48	1927	1948	286.85	516.40	758.31	2291
318.00	328.75	306.75	1929	1950	285.42	514.37	755.81	2264
320.00	330.99	308.99	1931	1952	284.03	512.42	753.41	2246
322.00	333.28	311.28	1933	1954	282.60	510.38	750.89	2284
324.00	335.64	313.64	1936	1957	281.04	508.13	748.09	2368
326.00	337.91	315.91	1938	1959	279.67	506.19	745.69	2263
328.00	340.29	318.29	1941	1962	278.13	503.95	742.89	2379
330.00	342.67	320.67	1943	1965	276.59	501.73	740.10	2385
332.00	344.96	322.96	1946	1967	275.23	499.78	737.69	2287
334.00	347.26	325.26	1948	1969	273.85	497.80	735.23	2306

TWO-WAY TRAVEL TIME FROM SRD	MEASURED DEPTH FROM KB	VERTICAL DEPTH FROM SRD	AVERAGE VELOCITY SRD/GEO	RMS VELOCITY	FIRST NORMAL MOVEOUT	SECOND NORMAL MOVEOUT	THIRD NORMAL MOVEOUT	INTERVAL VELOCITY
MS	M	M	M/S	M/S	MS	MS	MS	M/S
336.00	349.56	327.56	1950	1971	272.49	495.85	732.81	2300
338.00	351.85	329.85	1952	1973	271.17	493.95	730.47	2285
340.00	354.16	332.16	1954	1975	269.82	492.00	728.04	2314
342.00	356.52	334.52	1956	1978	268.42	489.97	725.51	2354
344.00	358.88	336.88	1959	1980	267.03	487.94	722.96	2363
346.00	361.27	339.27	1961	1983	265.61	485.87	720.36	2388
348.00	363.65	341.65	1964	1985	264.21	483.82	717.78	2387
350.00	366.01	344.01	1966	1988	262.87	481.87	715.34	2351
352.00	368.35	346.35	1968	1990	261.56	479.95	712.94	2347
354.00	370.71	348.71	1970	1992	260.24	478.03	710.53	2355
356.00	373.07	351.07	1972	1994	258.93	476.10	708.12	2363
358.00	375.48	353.48	1975	1997	257.57	474.09	705.57	2411
360.00	377.88	355.88	1977	1999	256.23	472.11	703.09	2399
362.00	380.28	358.28	1979	2002	254.90	470.15	700.61	2404
364.00	382.67	360.67	1982	2004	253.62	468.25	698.22	2384
366.00	385.07	363.07	1984	2007	252.33	466.34	695.81	2396
368.00	387.44	365.44	1986	2009	251.08	464.50	693.49	2373
370.00	389.79	367.79	1988	2011	249.87	462.71	691.24	2353
372.00	392.17	370.17	1990	2013	248.64	460.89	688.95	2378
374.00	394.59	372.59	1992	2015	247.36	458.98	686.54	2423
376.00	397.00	375.00	1995	2018	246.12	457.13	684.20	2405
378.00	399.42	377.42	1997	2020	244.88	455.27	681.84	2419
380.00	401.87	379.87	1999	2022	243.61	453.36	679.41	2450
382.00	404.33	382.33	2002	2025	242.33	451.44	676.95	2467

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	406.81	384.81	2004	2028	241.06	449.52	674.50	2472
386.00	409.28	387.28	2007	2030	239.80	447.62	672.07	2472
388.00	411.78	389.78	2009	2033	238.52	445.67	669.59	2500
390.00	414.28	392.28	2012	2036	237.25	443.74	667.11	2505
392.00	416.77	394.77	2014	2038	236.01	441.86	664.69	2491
394.00	419.26	397.26	2017	2041	234.79	440.00	662.31	2485
396.00	421.71	399.71	2019	2043	233.62	438.22	660.05	2451
398.00	424.17	402.17	2021	2045	232.45	436.45	657.78	2459
400.00	426.63	404.63	2023	2047	231.30	434.69	655.53	2456
402.00	429.12	407.12	2025	2050	230.11	432.88	653.20	2496
404.00	431.66	409.66	2028	2053	228.89	431.00	650.78	2537
406.00	434.21	412.21	2031	2055	227.67	429.11	648.34	2554
408.00	436.72	414.72	2033	2058	226.51	427.32	646.04	2506
410.00	439.22	417.22	2035	2060	225.37	425.57	643.78	2499
412.00	441.77	419.77	2038	2063	224.18	423.73	641.40	2555
414.00	444.38	422.38	2040	2066	222.94	421.80	638.89	2610
416.00	446.95	424.95	2043	2069	221.76	419.96	636.51	2571
418.00	449.46	427.46	2045	2071	220.66	418.27	634.32	2502
420.00	451.97	429.97	2047	2073	219.56	416.57	632.13	2510
422.00	454.53	432.53	2050	2076	218.43	414.80	629.83	2560
424.00	457.10	435.10	2052	2078	217.29	413.02	627.52	2574
426.00	459.67	437.67	2055	2081	216.17	411.27	625.24	2570
428.00	462.26	440.26	2057	2084	215.04	409.50	622.93	2588
430.00	464.85	442.85	2060	2086	213.92	407.73	620.63	2593

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	467.44	445.44	2062	2089	212.81	405.99	618.35	2594
434.00	470.03	448.03	2065	2092	211.72	404.27	616.11	2585
436.00	472.66	450.66	2067	2094	210.59	402.48	613.77	2635
438.00	475.31	453.31	2070	2097	209.46	400.70	611.43	2644
440.00	477.97	455.97	2073	2100	208.33	398.90	609.06	2664
442.00	480.67	458.67	2075	2103	207.17	397.05	606.62	2702
444.00	483.37	461.37	2078	2106	206.04	395.23	604.22	2695
446.00	486.04	464.04	2081	2109	204.93	393.47	601.91	2669
448.00	488.70	466.70	2083	2112	203.85	391.74	599.63	2663
450.00	491.37	469.37	2086	2115	202.77	390.02	597.36	2666
452.00	494.03	472.03	2089	2117	201.71	388.32	595.11	2664
454.00	496.72	474.72	2091	2120	200.64	386.60	592.84	2687
456.00	499.42	477.42	2094	2123	199.56	384.86	590.54	2704
458.00	502.07	480.07	2096	2126	198.54	383.22	588.38	2653
460.00	504.71	482.71	2099	2128	197.55	381.63	586.27	2635
462.00	507.33	485.33	2101	2131	196.57	380.06	584.20	2624
464.00	509.94	487.94	2103	2133	195.62	378.52	582.18	2610
466.00	512.55	490.55	2105	2135	194.68	377.02	580.19	2602
468.00	515.16	493.16	2108	2137	193.74	375.50	578.20	2613
470.00	517.77	495.77	2110	2140	192.81	374.00	576.21	2614
472.00	520.36	498.36	2112	2142	191.91	372.55	574.30	2585
474.00	522.92	500.92	2114	2144	191.04	371.15	572.46	2560
476.00	525.47	503.47	2115	2146	190.17	369.76	570.62	2558
478.00	528.05	506.05	2117	2148	189.31	368.36	568.78	2571

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	530.63	508.63	2119	2150	188.44	366.96	566.93	2581
482.00	533.22	511.22	2121	2152	187.58	365.55	565.07	2591
484.00	535.79	513.79	2123	2153	186.74	364.19	563.27	2568
486.00	538.37	516.37	2125	2155	185.89	362.82	561.46	2583
488.00	540.95	518.95	2127	2157	185.06	361.46	559.66	2580
490.00	543.59	521.59	2129	2160	184.19	360.03	557.76	2639
492.00	546.25	524.25	2131	2162	183.31	358.59	555.84	2661
494.00	548.94	526.94	2133	2164	182.42	357.13	553.88	2686
496.00	551.55	529.55	2135	2166	181.59	355.77	552.07	2614
498.00	554.23	532.23	2137	2169	180.72	354.34	550.16	2681
500.00	556.84	534.84	2139	2170	179.91	353.00	548.38	2614
502.00	559.47	537.47	2141	2172	179.09	351.66	546.59	2623
504.00	562.15	540.15	2143	2175	178.25	350.27	544.72	2673
506.00	564.79	542.79	2145	2177	177.43	348.92	542.91	2648
508.00	567.44	545.44	2147	2179	176.63	347.59	541.13	2645
510.00	570.03	548.03	2149	2181	175.86	346.32	539.44	2596
512.00	572.68	550.68	2151	2183	175.06	345.00	537.67	2649
514.00	575.39	553.39	2153	2185	174.24	343.63	535.82	2702
516.00	578.09	556.09	2155	2187	173.42	342.26	533.97	2708
518.00	580.82	558.82	2158	2189	172.60	340.88	532.11	2723
520.00	583.54	561.54	2160	2192	171.78	339.51	530.26	2725
522.00	586.24	564.24	2162	2194	170.99	338.19	528.48	2696
524.00	588.93	566.93	2164	2196	170.21	336.88	526.70	2695
526.00	591.58	569.58	2166	2198	169.47	335.64	525.03	2644

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	594.26	572.26	2168	2200	168.71	334.36	523.31	2679
530.00	596.98	574.98	2170	2202	167.93	333.05	521.53	2724
532.00	599.72	577.72	2172	2204	167.14	331.73	519.73	2741
534.00	602.51	580.51	2174	2207	166.33	330.35	517.36	2792
536.00	605.20	583.20	2176	2209	165.60	329.11	516.17	2687
538.00	607.93	585.93	2178	2211	164.84	327.84	514.44	2725
540.00	610.64	588.64	2180	2213	164.10	326.58	512.73	2719
542.00	613.36	591.36	2182	2215	163.37	325.34	511.04	2713
544.00	616.10	594.10	2184	2217	162.62	324.07	509.31	2745
546.00	618.90	596.90	2186	2220	161.86	322.76	507.51	2794
548.00	621.61	599.61	2188	2222	161.14	321.55	505.86	2710
550.00	624.21	602.21	2190	2223	160.50	320.46	504.39	2601
552.00	626.80	604.80	2191	2225	159.86	319.38	502.93	2592
554.00	629.31	607.31	2192	2226	159.28	318.39	501.60	2512
556.00	631.87	609.87	2194	2227	158.67	317.36	500.21	2560
558.00	634.50	612.50	2195	2229	158.02	316.27	498.73	2629
560.00	637.16	615.16	2197	2230	157.37	315.15	497.20	2663
562.00	639.87	617.87	2199	2232	156.70	314.01	495.63	2702
564.00	642.54	620.54	2200	2234	156.05	312.89	494.11	2675
566.00	645.22	623.22	2202	2236	155.40	311.78	492.59	2683
568.00	647.88	625.88	2204	2237	154.77	310.70	491.11	2658
570.00	650.57	628.57	2205	2239	154.13	309.60	489.61	2684
572.00	653.23	631.23	2207	2241	153.51	308.53	488.14	2661
574.00	655.87	633.87	2209	2242	152.90	307.48	486.70	2648

TWO-WAY TRAVEL TIME FROM SRD M/S	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	658.58	636.58	2210	2244	152.26	306.38	485.19	2709
578.00	661.21	639.21	2212	2245	151.67	305.37	483.80	2624
580.00	663.93	641.93	2214	2247	151.04	304.27	482.29	2718
582.00	666.61	644.61	2215	2249	150.43	303.22	480.85	2681
584.00	669.23	647.23	2217	2250	149.85	302.22	479.48	2628
586.00	671.98	649.98	2218	2252	149.22	301.13	477.96	2743
588.00	674.70	652.70	2220	2254	148.61	300.06	476.48	2724
590.00	677.40	655.40	2222	2256	148.01	299.02	475.05	2696
592.00	680.10	658.10	2223	2257	147.42	297.99	473.62	2700
594.00	682.80	660.80	2225	2259	146.82	296.95	472.19	2706
596.00	685.38	663.38	2226	2260	146.30	296.04	470.94	2575
598.00	688.01	666.01	2227	2261	145.75	295.09	469.63	2630
600.00	690.68	668.68	2229	2263	145.18	294.10	468.26	2673
602.00	693.41	671.41	2231	2265	144.60	293.07	466.84	2731
604.00	696.13	674.13	2232	2266	144.02	292.06	465.43	2723
606.00	698.83	676.83	2234	2268	143.46	291.07	464.06	2696
608.00	701.55	679.55	2235	2269	142.89	290.07	462.67	2723
610.00	704.25	682.25	2237	2271	142.33	289.10	461.32	2693
612.00	706.94	684.94	2238	2272	141.73	288.14	459.97	2698
614.00	709.64	687.64	2240	2274	141.24	287.18	458.64	2692
616.00	712.37	690.37	2241	2276	140.68	286.20	457.27	2734
618.00	715.06	693.06	2243	2277	140.15	285.26	455.96	2687
620.00	717.75	695.75	2244	2279	139.62	284.32	454.65	2693
622.00	720.45	698.45	2246	2280	139.09	283.38	453.34	2699

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	723.14	701.14	2247	2281	138.56	282.45	452.05	2693
626.00	725.87	703.87	2249	2283	138.03	281.51	450.72	2723
628.00	728.55	706.55	2250	2284	137.52	280.60	449.46	2683
630.00	731.32	709.32	2252	2286	136.97	279.63	448.09	2774
632.00	734.07	712.07	2253	2288	136.44	278.68	446.76	2753
634.00	736.72	714.72	2255	2289	135.95	277.82	445.55	2649
636.00	739.38	717.38	2256	2290	135.46	276.95	444.34	2658
638.00	742.02	720.02	2257	2291	134.98	276.10	443.15	2642
640.00	744.63	722.63	2258	2292	134.52	275.28	442.01	2607
642.00	747.24	725.24	2259	2293	134.06	274.47	440.87	2606
644.00	749.83	727.83	2260	2294	133.61	273.67	439.75	2597
646.00	752.47	730.47	2262	2296	133.15	272.84	438.60	2637
648.00	755.17	733.17	2263	2297	132.67	271.98	437.38	2699
650.00	757.75	735.75	2264	2298	132.23	271.20	436.29	2580
652.00	760.38	738.38	2265	2299	131.77	270.39	435.15	2636
654.00	762.98	740.98	2266	2300	131.34	269.61	434.06	2599
656.00	765.61	743.61	2267	2301	130.89	268.81	432.94	2625
658.00	768.22	746.22	2268	2302	130.46	268.03	431.84	2613
660.00	770.81	748.81	2269	2303	130.03	267.27	430.77	2587
662.00	773.43	751.43	2270	2304	129.60	266.49	429.68	2622
664.00	776.06	754.06	2271	2305	129.16	265.71	428.58	2627
666.00	778.73	756.73	2272	2306	128.72	264.91	427.44	2668
668.00	781.35	759.35	2274	2307	128.29	264.14	426.36	2625
670.00	784.03	762.03	2275	2308	127.84	263.34	425.22	2683

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	786.66	764.66	2276	2309	127.42	262.58	424.15	2623
674.00	789.29	767.29	2277	2310	127.00	261.82	423.03	2632
676.00	791.94	769.94	2278	2312	126.57	261.05	421.98	2654
678.00	794.51	772.51	2279	2312	126.18	260.34	420.98	2565
680.00	797.14	775.14	2280	2313	125.77	259.59	419.93	2629
682.00	799.88	777.88	2281	2315	125.32	258.77	418.76	2743
684.00	802.62	780.62	2283	2316	124.87	257.96	417.60	2740
686.00	805.36	783.36	2284	2317	124.43	257.16	416.46	2737
688.00	808.01	786.01	2285	2318	124.02	256.42	415.40	2649
690.00	810.72	788.72	2286	2320	123.60	255.64	414.29	2710
692.00	813.23	791.23	2287	2320	123.24	254.99	413.37	2517
694.00	815.85	793.85	2288	2321	122.85	254.28	412.36	2615
696.00	818.35	796.35	2288	2322	122.49	253.64	411.46	2505
698.00	821.05	799.05	2290	2323	122.08	252.89	410.38	2698
700.00	823.63	801.63	2290	2324	121.71	252.21	409.42	2583
702.00	826.24	804.24	2291	2325	121.33	251.52	408.43	2607
704.00	828.73	806.73	2292	2325	120.99	250.90	407.56	2493
706.00	831.36	809.36	2293	2326	120.61	250.21	406.57	2622
708.00	833.92	811.92	2294	2327	120.25	249.56	405.64	2561
710.00	836.55	814.55	2294	2328	119.87	248.87	404.65	2630
712.00	839.17	817.17	2295	2328	119.50	248.18	403.67	2628
714.00	841.79	819.79	2296	2329	119.13	247.51	402.71	2619
716.00	844.35	822.35	2297	2330	118.78	246.87	401.79	2561
718.00	846.68	824.68	2297	2330	118.50	246.36	401.08	2323

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	849.27	827.27	2298	2331	118.14	245.71	400.15	2594
722.00	851.46	829.46	2298	2330	117.90	245.27	399.55	2185
724.00	854.23	832.23	2299	2332	117.49	244.52	398.45	2776
726.00	857.13	835.13	2301	2333	117.05	243.69	397.26	2897
728.00	859.65	837.65	2301	2334	116.72	243.10	396.40	2517
730.00	862.20	840.20	2302	2335	116.39	242.48	395.52	2557
732.00	864.30	842.80	2303	2335	116.04	241.84	394.61	2599
734.00	867.56	845.56	2304	2337	115.65	241.12	393.55	2760
736.00	870.40	848.40	2305	2338	115.24	240.35	392.44	2839
738.00	873.34	851.34	2307	2340	114.81	239.53	391.24	2935
740.00	876.10	854.10	2308	2341	114.42	238.82	390.20	2767
742.00	878.88	856.88	2310	2343	114.04	238.10	389.16	2778
744.00	881.74	859.74	2311	2344	113.63	237.34	388.04	2861
746.00	884.60	862.60	2313	2346	113.23	236.58	386.94	2860
748.00	887.43	865.43	2314	2347	112.84	235.85	385.87	2827
750.00	890.29	868.29	2315	2349	112.44	235.11	384.78	2858
752.00	893.19	871.19	2317	2350	112.03	234.34	383.65	2902
754.00	896.05	874.05	2318	2352	111.64	233.61	382.58	2858
756.00	898.98	876.98	2320	2353	111.23	232.83	381.44	2931
758.00	901.91	879.91	2322	2355	110.83	232.06	380.30	2936
760.00	904.83	882.83	2323	2357	110.42	231.31	379.19	2919
762.00	907.65	885.65	2325	2358	110.06	230.61	378.17	2819
764.00	910.46	888.46	2326	2359	109.69	229.92	377.16	2813
766.00	913.15	891.15	2327	2360	109.36	229.30	376.26	2684

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	915.88	893.88	2328	2361	109.02	228.67	375.33	2727
770.00	918.70	896.70	2329	2363	108.66	227.98	374.32	2827
772.00	921.27	899.27	2330	2363	108.36	227.43	373.52	2568
774.00	924.14	902.14	2331	2365	107.99	226.73	372.48	2873
776.00	926.96	904.96	2332	2366	107.64	226.06	371.50	2816
778.00	929.76	907.76	2334	2367	107.29	225.40	370.53	2797
780.00	932.58	910.58	2335	2368	106.94	224.74	369.55	2826
782.00	935.17	913.17	2335	2369	106.65	224.19	368.76	2585
784.00	938.10	916.10	2337	2371	106.28	223.48	367.70	2929
786.00	941.05	919.05	2339	2372	105.90	222.76	366.63	2955
783.00	943.96	921.96	2340	2374	105.54	222.07	365.60	2908
790.00	946.86	924.86	2341	2375	105.18	221.38	364.58	2904
792.00	949.80	927.80	2343	2377	104.81	220.68	363.54	2939
794.00	952.81	930.81	2345	2379	104.43	219.95	362.45	3010
796.00	955.81	933.81	2346	2380	104.05	219.23	361.37	2993
798.00	958.68	936.68	2348	2382	103.71	218.57	360.40	2871
800.00	961.58	939.58	2349	2383	103.36	217.91	359.41	2904
802.00	964.48	942.48	2350	2385	103.02	217.25	358.44	2894
804.00	967.33	945.33	2352	2386	102.68	216.61	357.49	2859
806.00	970.25	948.25	2353	2387	102.34	215.96	356.51	2913
808.00	973.14	951.14	2354	2389	102.00	215.31	355.55	2893
810.00	976.09	954.09	2356	2390	101.66	214.64	354.55	2948
812.00	979.02	957.02	2357	2392	101.31	213.98	353.56	2937
814.00	982.00	960.00	2359	2393	100.97	213.31	352.56	2973

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
216.00	984.95	962.95	2360	2395	100.62	212.65	351.57	2950
218.00	987.95	965.95	2362	2397	100.27	211.98	350.56	3001
220.00	990.89	968.89	2363	2398	99.94	211.33	349.59	2944
222.00	993.94	971.94	2365	2400	99.58	210.64	348.55	3044
224.00	996.94	974.94	2366	2402	99.24	209.97	347.55	3007
226.00	1000.08	978.08	2368	2404	98.86	209.24	346.45	3143
228.00	1003.14	981.14	2370	2405	98.51	208.56	345.42	3056
230.00	1006.12	984.12	2371	2407	98.18	207.92	344.45	2977
232.00	1009.08	987.08	2373	2408	97.85	207.29	343.51	2958
234.00	1012.00	990.00	2374	2410	97.54	206.68	342.59	2925
236.00	1014.88	992.88	2375	2411	97.23	206.09	341.71	2883
238.00	1017.78	995.78	2377	2412	96.93	205.50	340.82	2897
240.00	1020.74	998.74	2378	2414	96.61	204.88	339.89	2964
242.00	1023.74	1001.74	2379	2415	96.28	204.25	338.94	2999
244.00	1026.67	1004.67	2381	2417	95.98	203.66	338.05	2923
246.00	1029.57	1007.57	2382	2418	95.68	203.08	337.18	2901
248.00	1032.50	1010.50	2383	2419	95.33	202.49	336.29	2931
250.00	1035.37	1013.37	2384	2420	95.09	201.93	335.44	2874
252.00	1038.26	1016.26	2386	2422	94.80	201.37	334.59	2890
254.00	1041.11	1019.11	2387	2423	94.52	200.82	333.77	2843
256.00	1044.03	1022.03	2388	2424	94.22	200.25	332.90	2928
258.00	1046.97	1024.97	2389	2425	93.93	199.67	332.03	2940
260.00	1049.99	1027.99	2391	2427	93.62	199.06	331.11	3018
262.00	1053.00	1031.00	2392	2428	93.31	198.46	330.20	3008

TWO-WAY TRAVEL TIME FROM SRD M/S	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
864.00	1056.04	1034.04	2394	2430	93.00	197.86	329.28	3037
866.00	1059.10	1037.10	2395	2432	92.69	197.24	328.34	3061
868.00	1062.18	1040.18	2397	2433	92.37	196.62	327.39	3088
870.00	1065.29	1043.29	2398	2435	92.05	195.99	326.44	3110
872.00	1068.49	1046.49	2400	2437	91.71	195.33	325.43	3192
874.00	1071.80	1049.80	2402	2439	91.36	194.62	324.34	3153
876.00	1074.96	1052.96	2404	2441	91.03	193.99	323.37	3184
878.00	1078.14	1056.14	2406	2443	90.71	193.35	322.39	3242
880.00	1081.38	1059.38	2408	2445	90.37	192.68	321.37	3157
882.00	1084.54	1062.54	2409	2447	90.06	192.06	320.41	3196
884.00	1087.74	1065.74	2411	2449	89.73	191.42	319.44	3155
886.00	1090.89	1068.89	2413	2451	89.42	190.81	318.50	3149
888.00	1094.04	1072.04	2415	2453	89.12	190.20	317.57	3233
890.00	1097.27	1075.27	2416	2455	88.79	189.56	316.58	3183
892.00	1100.46	1078.46	2418	2457	88.48	188.95	315.64	3121
894.00	1103.58	1081.58	2420	2458	88.19	188.36	314.74	3190
896.00	1106.77	1084.77	2421	2460	87.88	187.76	313.81	3099
898.00	1109.87	1087.87	2423	2462	87.59	187.19	312.93	3164
900.00	1113.03	1091.03	2425	2464	87.29	186.59	312.02	3158
902.00	1116.19	1094.19	2426	2465	87.00	186.01	311.12	3238
904.00	1119.42	1097.42	2428	2467	86.69	185.40	310.18	3096
906.00	1122.52	1100.52	2429	2469	86.41	184.84	309.32	3063
908.00	1125.58	1103.58	2431	2470	86.14	184.30	308.50	2915
910.00	1128.50	1106.50	2432	2472	85.90	183.82	307.76	

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	1131.51	1109.51	2433	2473	85.64	183.31	306.97	3008
914.00	1134.54	1112.54	2434	2474	85.38	182.79	306.17	3037
916.00	1137.73	1115.73	2436	2476	85.09	182.22	305.29	3182
918.00	1140.82	1118.82	2438	2477	84.82	181.68	304.46	3096
920.00	1143.90	1121.90	2439	2479	84.55	181.15	303.65	3080
922.00	1147.03	1125.03	2440	2481	84.28	180.61	302.81	3133
924.00	1150.15	1128.15	2442	2482	84.01	180.08	301.99	3112
926.00	1153.28	1131.28	2443	2484	83.74	179.54	301.15	3136
928.00	1156.35	1134.35	2445	2485	83.49	179.03	300.36	3070
930.00	1159.56	1137.56	2446	2487	83.21	178.47	299.50	3204
932.00	1162.78	1140.78	2448	2489	82.93	177.91	298.63	3220
934.00	1165.93	1143.93	2450	2490	82.66	177.38	297.81	3158
936.00	1169.17	1147.17	2451	2492	82.38	176.82	296.94	3236
938.00	1172.27	1150.27	2453	2494	82.13	176.31	296.15	3102
940.00	1175.47	1153.47	2454	2495	81.86	175.78	295.32	3195
942.00	1178.51	1156.51	2455	2497	81.62	175.30	294.58	3042
944.00	1181.54	1159.54	2457	2498	81.39	174.82	293.84	3027
946.00	1184.68	1162.68	2458	2499	81.13	174.31	293.05	3140
948.00	1187.81	1165.81	2460	2501	80.88	173.81	292.27	3134
950.00	1191.03	1169.03	2461	2503	80.62	173.28	291.44	3216
952.00	1194.14	1172.14	2462	2504	80.37	172.79	290.68	3117
954.00	1197.15	1175.15	2464	2505	80.14	172.33	289.97	3005
956.00	1200.26	1178.26	2465	2507	79.90	171.85	289.22	3110
958.00	1203.34	1181.34	2466	2508	79.67	171.37	288.48	3085

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	1206.65	1184.65	2468	2510	79.39	170.83	287.62	3310
962.00	1209.94	1187.94	2470	2512	79.13	170.29	286.79	3283
964.00	1212.93	1190.93	2471	2513	78.91	169.85	286.11	2999
966.00	1216.05	1194.05	2472	2514	78.67	169.38	285.37	3120
968.00	1219.10	1197.10	2473	2515	78.45	168.93	284.66	3051
970.00	1222.16	1200.16	2475	2517	78.23	168.48	283.96	3059
972.00	1225.19	1203.19	2476	2518	78.01	168.04	283.28	3022
974.00	1228.17	1206.17	2477	2519	77.80	167.62	282.62	2985
976.00	1231.20	1209.20	2478	2520	77.58	167.18	281.94	3028
978.00	1234.12	1212.12	2479	2521	77.38	166.78	281.32	2921
980.00	1237.12	1215.12	2480	2522	77.17	166.36	280.66	2999
982.00	1240.16	1218.16	2481	2523	76.96	165.93	279.99	3039
984.00	1243.13	1221.13	2482	2524	76.76	165.52	279.35	2971
986.00	1246.14	1224.14	2483	2525	76.55	165.10	278.70	3008
988.00	1249.22	1227.22	2484	2527	76.33	164.66	278.01	3086
990.00	1252.23	1230.23	2485	2528	76.13	164.25	277.36	3007
992.00	1255.23	1233.23	2486	2529	75.92	163.84	276.72	3004
994.00	1258.35	1236.35	2488	2530	75.71	163.39	276.03	3122
996.00	1261.51	1239.51	2489	2531	75.48	162.94	275.32	3151
998.00	1264.62	1242.62	2490	2533	75.27	162.51	274.64	3119
1000.00	1267.72	1245.72	2491	2534	75.06	162.08	273.96	3094
1002.00	1270.84	1248.84	2493	2535	74.84	161.65	273.28	3120
1004.00	1273.83	1251.83	2494	2536	74.65	161.25	272.66	2991
1006.00	1276.77	1254.77	2495	2537	74.46	160.87	272.07	2938

WELL : KINGFISH #9

COMPANY : ESSO AUSTRALIA LTD

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	1279.63	1257.63	2495	2538	74.28	160.52	271.52	2862
1010.00	1282.60	1260.60	2496	2539	74.10	160.13	270.92	2966
1012.00	1285.66	1263.66	2497	2540	73.89	159.73	270.28	3063
1014.00	1288.83	1266.83	2499	2541	73.68	159.29	269.59	3172
1016.00	1292.00	1270.00	2500	2543	73.47	158.86	268.91	3167
1018.00	1295.07	1273.07	2501	2544	73.27	158.46	268.27	3069
1020.00	1298.12	1276.12	2502	2545	73.07	158.06	267.65	3050
1022.00	1301.21	1279.21	2503	2546	72.87	157.65	267.01	3095
1024.00	1304.29	1282.29	2504	2547	72.68	157.26	266.38	3074
1026.00	1307.47	1285.47	2506	2549	72.47	156.83	265.71	3186
1028.00	1310.57	1288.57	2507	2550	72.27	156.43	265.08	3094
1030.00	1313.66	1291.66	2508	2551	72.08	156.03	264.45	3091
1032.00	1316.83	1294.83	2509	2552	71.87	155.62	263.80	3171
1034.00	1320.06	1298.06	2511	2554	71.66	155.19	263.11	3229
1036.00	1323.30	1301.30	2512	2555	71.45	154.76	262.43	3241
1038.00	1326.52	1304.52	2514	2557	71.25	154.33	261.76	3216
1040.00	1329.63	1307.63	2515	2558	71.05	153.94	261.14	3111
1042.00	1332.72	1310.72	2516	2559	70.87	153.56	260.54	3089
1044.00	1335.93	1313.93	2517	2560	70.66	153.14	259.88	3218
1046.00	1338.94	1316.94	2518	2561	70.49	152.78	259.31	3007
1048.00	1341.87	1319.87	2519	2562	70.32	152.44	258.77	2932
1050.00	1345.00	1323.00	2520	2563	70.13	152.06	258.16	3132
1052.00	1348.08	1326.03	2521	2564	69.95	151.69	257.57	3072
1054.00	1351.16	1329.16	2522	2565	69.77	151.31	256.98	3086

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	1354.32	1332.32	2523	2567	69.58	150.92	256.36	3158
1058.00	1357.41	1335.41	2524	2568	69.40	150.55	255.78	3094
1060.00	1360.56	1338.56	2526	2569	69.21	150.17	255.17	3141
1062.00	1363.61	1341.61	2527	2570	69.04	149.82	254.61	3053
1064.00	1366.70	1344.70	2528	2571	68.86	149.45	254.03	3091
1066.00	1369.77	1347.77	2529	2572	68.68	149.09	253.46	3073
1068.00	1372.82	1350.82	2530	2573	68.51	148.74	252.90	3050
1070.00	1375.89	1353.89	2531	2574	68.34	148.39	252.34	3063
1072.00	1378.84	1356.84	2531	2575	68.18	148.06	251.83	2951
1074.00	1381.85	1359.85	2532	2576	68.02	147.73	251.29	3015
1076.00	1384.77	1362.77	2533	2576	67.86	147.41	250.79	2914
1078.00	1387.69	1365.69	2534	2577	67.71	147.10	250.29	2920
1080.00	1390.58	1368.58	2534	2578	67.56	146.79	249.81	2899
1082.00	1393.57	1371.57	2535	2579	67.40	146.47	249.29	2986
1084.00	1396.53	1374.53	2536	2579	67.25	146.15	248.78	2956
1086.00	1399.46	1377.46	2537	2580	67.10	145.84	248.29	2933
1088.00	1402.43	1380.43	2538	2581	66.94	145.52	247.78	2972
1090.00	1405.45	1383.45	2538	2582	66.78	145.19	247.26	3020
1092.00	1408.49	1386.49	2539	2583	66.62	144.86	246.73	3042
1094.00	1411.44	1389.44	2540	2583	66.47	144.55	246.24	2945
1096.00	1414.43	1392.43	2541	2584	66.31	144.23	245.73	2991
1098.00	1417.27	1395.27	2541	2585	66.18	143.95	245.29	2837
1100.00	1420.19	1398.19	2542	2585	66.03	143.65	244.81	2921
1102.00	1423.04	1401.04	2543	2586	65.89	143.36	244.36	2855

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	1425.89	1403.89	2543	2586	65.75	143.08	243.91	2851
1106.00	1428.72	1406.72	2544	2587	65.62	142.80	243.47	2831
1103.00	1431.57	1409.57	2544	2587	65.48	142.53	243.02	2841
1110.00	1434.26	1412.26	2545	2587	65.36	142.28	242.63	2696
1112.00	1437.04	1415.04	2545	2588	65.23	142.01	242.21	2781
1114.00	1439.80	1417.80	2545	2588	65.11	141.75	241.80	2758
1116.00	1442.52	1420.52	2546	2588	64.99	141.50	241.40	2716
1112.00	1445.26	1423.26	2546	2589	64.86	141.25	241.00	2740
1120.00	1448.00	1426.00	2546	2589	64.74	141.00	240.60	2741
1122.00	1450.74	1428.74	2547	2589	64.62	140.75	240.20	2738
1124.00	1453.47	1431.47	2547	2589	64.50	140.50	239.80	2730
1126.00	1456.21	1434.21	2547	2590	64.37	140.25	239.40	2745
1128.00	1459.01	1437.01	2548	2590	64.25	139.99	238.99	2801
1130.00	1461.85	1439.85	2548	2591	64.12	139.72	238.56	2841
1132.00	1464.57	1442.57	2549	2591	64.00	139.47	238.17	2721
1134.00	1467.34	1445.34	2549	2591	63.88	139.22	237.77	2769
1136.00	1470.04	1448.04	2549	2591	63.76	138.98	237.39	2701
1138.00	1472.70	1450.70	2550	2591	63.65	138.75	237.03	2655
1140.00	1475.34	1453.34	2550	2591	63.54	138.53	236.67	2644
1142.00	1477.99	1455.99	2550	2592	63.43	138.30	236.31	2645
1144.00	1480.66	1458.66	2550	2592	63.32	138.07	235.94	2676
1146.00	1483.34	1461.34	2550	2592	63.20	137.84	235.57	2679
1148.00	1486.01	1464.01	2551	2592	63.09	137.61	235.21	2670
1150.00	1488.72	1466.72	2551	2592	62.98	137.38	234.84	2706

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	1491.42	1469.42	2551	2592	62.87	137.14	234.47	2706
1154.00	1494.16	1472.16	2551	2593	62.75	136.91	234.09	2732
1156.00	1496.92	1474.92	2552	2593	62.63	136.67	233.70	2763
1158.00	1499.72	1477.72	2552	2593	62.51	136.42	233.30	2805
1160.00	1502.56	1480.56	2553	2594	62.39	136.16	232.89	2837
1162.00	1505.39	1483.39	2553	2594	62.27	135.91	232.49	2825
1164.00	1508.21	1486.21	2554	2595	62.15	135.66	232.09	2826
1166.00	1511.03	1489.03	2554	2595	62.03	135.41	231.69	2820
1168.00	1513.83	1491.83	2554	2595	61.91	135.17	231.30	2792
1170.00	1516.62	1494.62	2555	2596	61.79	134.93	230.92	2796
1172.00	1519.33	1497.33	2555	2596	61.68	134.70	230.55	2710
1174.00	1522.03	1500.03	2555	2596	61.58	134.48	230.20	2695
1176.00	1524.73	1502.73	2556	2596	61.47	134.25	229.84	2704
1178.00	1527.45	1505.45	2556	2597	61.36	134.03	229.48	2724
1180.00	1530.10	1508.10	2556	2597	61.26	133.82	229.14	2640
1182.00	1532.77	1510.77	2556	2597	61.15	133.60	228.79	2674
1184.00	1535.47	1513.47	2557	2597	61.05	133.38	228.44	2699
1186.00	1538.21	1516.21	2557	2597	60.94	133.15	228.08	2740
1188.00	1540.96	1518.96	2557	2597	60.83	132.93	227.71	2751
1190.00	1543.69	1521.69	2557	2598	60.72	132.70	227.35	2731
1192.00	1546.42	1524.42	2558	2598	60.61	132.48	227.00	2728
1194.00	1549.15	1527.15	2558	2598	60.50	132.26	226.64	2733
1196.00	1551.94	1529.94	2558	2598	60.39	132.03	226.27	2786
1198.00	1554.81	1532.81	2559	2599	60.28	131.78	225.88	2868

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	1557.58	1535.58	2559	2599	60.17	131.56	225.51	2773
1202.00	1560.40	1538.40	2560	2600	60.05	131.32	225.13	2820
1204.00	1563.22	1541.22	2560	2600	59.94	131.09	224.76	2821
1206.00	1566.03	1544.03	2561	2600	59.83	130.86	224.39	2810
1208.00	1568.80	1546.80	2561	2601	59.72	130.64	224.02	2777
1210.00	1571.63	1549.63	2561	2601	59.61	130.40	223.65	2830
1212.00	1574.45	1552.45	2562	2601	59.50	130.17	223.28	2813
1214.00	1577.30	1555.30	2562	2602	59.39	129.94	222.90	2857
1216.00	1580.12	1558.12	2563	2602	59.28	129.71	222.53	2811
1218.00	1582.97	1560.97	2563	2603	59.17	129.48	222.16	2850
1220.00	1585.77	1563.77	2564	2603	59.06	129.25	221.80	2800
1222.00	1588.60	1566.60	2564	2603	58.95	129.03	221.43	2835
1224.00	1591.39	1569.39	2564	2604	58.84	128.80	221.07	2791
1226.00	1594.27	1572.27	2565	2604	58.73	128.57	220.69	2882
1228.00	1597.09	1575.09	2565	2605	58.62	128.35	220.33	2816
1230.00	1599.96	1577.96	2566	2605	58.51	128.11	219.95	2870
1232.00	1602.83	1580.83	2566	2605	58.40	127.88	219.58	2870
1234.00	1605.66	1583.66	2567	2606	58.30	127.66	219.22	2829
1236.00	1608.45	1586.45	2567	2606	58.19	127.44	218.87	2792
1238.00	1611.27	1589.27	2567	2606	58.09	127.22	218.51	2819
1240.00	1614.08	1592.08	2568	2607	57.98	127.01	218.16	2806
1242.00	1616.92	1594.92	2568	2607	57.88	126.78	217.80	2847
1244.00	1619.63	1597.68	2569	2607	57.78	126.58	217.47	2754
1246.00	1622.41	1600.41	2569	2608	57.68	126.37	217.14	2730

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	1625.09	1603.09	2569	2608	57.59	126.18	216.32	2681
1250.00	1627.81	1605.81	2569	2608	57.49	125.98	216.50	2724
1252.00	1630.47	1608.47	2569	2608	57.40	125.79	216.19	2662
1254.00	1633.26	1611.26	2570	2608	57.30	125.58	215.85	2784
1256.00	1635.96	1613.96	2570	2608	57.20	125.38	215.53	2706
1258.00	1638.58	1616.58	2570	2608	57.12	125.20	215.24	2616
1260.00	1641.25	1619.25	2570	2609	57.03	125.01	214.93	2666
1262.00	1643.93	1621.93	2570	2609	56.93	124.82	214.62	2688
1264.00	1646.64	1624.64	2571	2609	56.84	124.62	214.31	2709
1266.00	1649.26	1627.26	2571	2609	56.75	124.44	214.02	2617
1268.00	1651.91	1629.91	2571	2609	56.67	124.26	213.72	2647
1270.00	1654.55	1632.55	2571	2609	56.58	124.08	213.42	2640
1272.00	1657.28	1635.28	2571	2609	56.49	123.88	213.11	2727
1274.00	1659.97	1637.97	2571	2609	56.39	123.69	212.80	2691
1276.00	1662.66	1640.66	2572	2609	56.30	123.50	212.49	2690
1278.00	1665.35	1643.35	2572	2610	56.21	123.32	212.19	2692
1280.00	1668.05	1646.05	2572	2610	56.12	123.13	211.88	2700
1282.00	1670.68	1648.68	2572	2610	56.04	122.95	211.59	2630
1284.00	1673.38	1651.38	2572	2610	55.95	122.76	211.29	2705
1286.00	1676.15	1654.15	2573	2610	55.86	122.56	210.97	2762
1288.00	1678.82	1656.82	2573	2610	55.77	122.38	210.67	2674
1290.00	1681.50	1659.50	2573	2610	55.68	122.20	210.38	2682
1292.00	1684.17	1662.17	2573	2610	55.59	122.02	210.08	2668
1294.00	1686.81	1664.81	2573	2610	55.51	121.84	209.80	2639

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	1689.46	1667.46	2573	2611	55.43	121.66	209.51	2654
1298.00	1692.10	1670.10	2573	2611	55.34	121.49	209.22	2639
1300.00	1694.72	1672.72	2573	2611	55.26	121.31	208.94	2622
1302.00	1697.34	1675.34	2573	2611	55.18	121.14	208.66	2618
1304.00	1699.97	1677.97	2574	2611	55.10	120.97	208.39	2622
1306.00	1702.61	1680.61	2574	2611	55.01	120.80	208.10	2648
1308.00	1705.19	1683.19	2574	2611	54.93	120.63	207.84	2577
1310.00	1707.81	1685.81	2574	2611	54.85	120.46	207.56	2619
1312.00	1710.41	1688.41	2574	2611	54.77	120.30	207.29	2598
1314.00	1712.98	1690.98	2574	2611	54.70	120.13	207.03	2572
1316.00	1715.60	1693.60	2574	2611	54.61	119.96	206.75	2622
1318.00	1718.19	1696.19	2574	2611	54.54	119.80	206.48	2594
1320.00	1720.82	1698.82	2574	2611	54.46	119.63	206.21	2629
1322.00	1723.43	1701.43	2574	2611	54.38	119.47	205.94	2607
1324.00	1725.94	1703.94	2574	2610	54.30	119.31	205.69	2507
1326.00	1728.56	1706.56	2574	2610	54.22	119.15	205.42	2620
1328.00	1731.20	1709.20	2574	2611	54.14	118.98	205.15	2645
1330.00	1733.92	1711.92	2574	2611	54.06	118.80	204.85	2720
1332.00	1736.55	1714.55	2574	2611	53.98	118.63	204.58	2629
1334.00	1739.08	1717.08	2574	2611	53.91	118.48	204.33	2534
1336.00	1741.52	1719.52	2574	2610	53.84	118.34	204.11	2440
1338.00	1744.22	1722.22	2574	2610	53.76	118.16	203.82	2697
1340.00	1746.84	1724.84	2574	2611	53.68	118.00	203.56	2619
1342.00	1749.37	1727.37	2574	2610	53.61	117.85	203.31	2534

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	1751.87	1729.87	2574	2610	53.54	117.70	203.07	2498
1346.00	1754.36	1732.36	2574	2610	53.47	117.56	202.83	2490
1348.00	1756.96	1734.96	2574	2610	53.39	117.40	202.57	2596
1350.00	1759.56	1737.56	2574	2610	53.32	117.24	202.32	2598
1352.00	1762.16	1740.16	2574	2610	53.24	117.08	202.06	2601
1354.00	1764.80	1742.80	2574	2610	53.16	116.92	201.79	2638
1356.00	1767.39	1745.39	2574	2610	53.09	116.76	201.54	2595
1358.00	1770.00	1748.00	2574	2610	53.01	116.60	201.28	2611
1360.00	1772.65	1750.65	2574	2610	52.94	116.44	201.01	2652
1362.00	1775.20	1753.20	2574	2610	52.86	116.29	200.77	2548
1364.00	1777.88	1755.88	2575	2610	52.79	116.12	200.50	2675
1366.00	1780.59	1758.59	2575	2610	52.71	115.95	200.22	2714
1368.00	1783.16	1761.16	2575	2610	52.63	115.80	199.97	2571
1370.00	1785.69	1763.69	2575	2610	52.56	115.66	199.73	2525
1372.00	1788.29	1766.28	2575	2610	52.49	115.50	199.48	2599
1374.00	1790.89	1768.89	2575	2610	52.42	115.35	199.23	2609
1376.00	1793.54	1771.54	2575	2610	52.34	115.19	198.97	2649
1378.00	1796.11	1774.11	2575	2610	52.27	115.04	198.72	2569
1380.00	1798.76	1776.76	2575	2610	52.20	114.88	198.46	2648
1382.00	1801.35	1779.35	2575	2610	52.12	114.73	198.22	2591
1384.00	1803.94	1781.94	2575	2610	52.05	114.58	197.97	2593
1386.00	1806.42	1784.42	2575	2610	51.99	114.44	197.74	2478
1388.00	1809.01	1787.01	2575	2610	51.92	114.29	197.50	2593
1390.00	1811.58	1789.58	2575	2610	51.85	114.15	197.26	2560

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	1814.12	1792.12	2575	2610	51.78	114.00	197.02	2547
1394.00	1816.75	1794.75	2575	2610	51.71	113.85	196.77	2625
1396.00	1819.43	1797.43	2575	2610	51.63	113.69	196.51	2683
1398.00	1821.91	1799.91	2575	2610	51.57	113.55	196.29	2484
1400.00	1824.66	1802.66	2575	2610	51.49	113.39	196.02	2743
1402.00	1827.38	1805.38	2575	2610	51.41	113.22	195.75	2725
1404.00	1830.04	1808.04	2576	2610	51.34	113.07	195.49	2656
1406.00	1832.64	1810.64	2576	2610	51.27	112.92	195.25	2606
1408.00	1835.32	1813.32	2576	2610	51.19	112.76	194.99	2673
1410.00	1837.95	1815.95	2576	2610	51.12	112.61	194.75	2628
1412.00	1840.70	1818.70	2576	2610	51.04	112.45	194.48	2753
1414.00	1843.37	1821.37	2576	2610	50.97	112.29	194.22	2668
1416.00	1846.18	1824.18	2577	2611	50.89	112.12	193.94	2810
1418.00	1848.96	1826.96	2577	2611	50.81	111.96	193.66	2787
1420.00	1851.80	1829.80	2577	2611	50.73	111.78	193.38	2835
1422.00	1854.45	1832.45	2577	2611	50.66	111.63	193.13	2652
1424.00	1857.19	1835.19	2578	2612	50.58	111.47	192.87	2739
1426.00	1859.93	1837.93	2578	2612	50.51	111.31	192.60	2742
1428.00	1862.64	1840.64	2578	2612	50.43	111.15	192.34	2711
1430.00	1865.28	1843.28	2578	2612	50.36	111.01	192.10	2634
1432.00	1867.94	1845.94	2578	2612	50.29	110.86	191.86	2661
1434.00	1870.66	1848.66	2578	2612	50.22	110.70	191.60	2727
1436.00	1873.29	1851.29	2578	2612	50.15	110.56	191.36	2624
1438.00	1876.02	1854.02	2579	2612	50.08	110.40	191.10	2735

WELL : KINGFISH #9

COMPANY : ESSO AUSTRALIA LTD

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	1878.76	1856.76	2579	2613	50.00	110.24	190.84	2733
1442.00	1881.51	1859.51	2579	2613	49.93	110.08	190.58	2752
1444.00	1834.23	1862.23	2579	2613	49.86	109.93	190.33	2727
1446.00	1886.87	1864.87	2579	2613	49.79	109.79	190.09	2633
1448.00	1889.62	1867.62	2580	2613	49.71	109.63	189.83	2756
1450.00	1892.27	1870.27	2580	2613	49.65	109.48	189.59	2649
1452.00	1894.93	1872.93	2580	2613	49.58	109.34	189.35	2657
1454.00	1897.55	1875.55	2580	2613	49.51	109.20	189.12	2622
1456.00	1900.32	1878.32	2580	2613	49.44	109.04	188.86	2764
1458.00	1903.06	1881.06	2580	2614	49.37	108.89	188.61	2744
1460.00	1905.78	1883.78	2581	2614	49.30	108.74	188.36	2719
1462.00	1908.54	1886.54	2581	2614	49.22	108.58	188.10	2766
1464.00	1911.43	1889.43	2581	2614	49.14	108.41	187.82	2885
1466.00	1914.42	1892.42	2582	2615	49.06	108.23	187.52	2995
1468.00	1917.59	1895.59	2583	2616	48.96	108.03	187.18	3167
1470.00	1920.68	1898.68	2583	2616	48.87	107.83	186.86	3085
1472.00	1923.75	1901.75	2584	2617	48.78	107.64	186.54	3078
1474.00	1926.75	1904.75	2584	2618	48.70	107.46	186.24	2999
1476.00	1929.71	1907.71	2585	2618	48.62	107.29	185.95	2956
1478.00	1932.76	1910.76	2586	2619	48.53	107.10	185.65	3049
1480.00	1935.75	1913.75	2586	2619	48.45	106.93	185.35	2996
1482.00	1938.89	1916.89	2587	2620	48.35	106.73	185.03	3133
1484.00	1941.85	1919.85	2587	2621	48.27	106.56	184.74	2962
1486.00	1944.73	1922.73	2588	2621	48.20	106.40	184.47	2882

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	1947.73	1925.73	2583	2622	48.12	106.22	184.18	2994
1490.00	1950.81	1928.81	2589	2622	48.03	106.03	183.87	3083
1492.00	1953.72	1931.72	2589	2623	47.95	105.87	183.59	2909
1494.00	1956.61	1934.61	2590	2623	47.88	105.71	183.33	2890
1496.00	1959.59	1937.59	2590	2624	47.80	105.54	183.04	2985
1498.00	1962.42	1940.42	2591	2624	47.72	105.38	182.78	2823
1500.00	1965.32	1943.32	2591	2624	47.65	105.22	182.52	2903
1502.00	1968.06	1946.06	2591	2624	47.58	105.08	182.28	2742
1504.00	1970.86	1948.86	2592	2625	47.51	104.93	182.03	2803
1506.00	1973.82	1951.82	2592	2625	47.43	104.76	181.75	2960
1508.00	1976.67	1954.67	2592	2625	47.36	104.61	181.50	2844
1510.00	1979.68	1957.68	2593	2626	47.28	104.44	181.21	3015
1512.00	1982.56	1960.56	2593	2626	47.21	104.28	180.95	2874
1514.00	1985.49	1963.49	2594	2627	47.13	104.12	180.68	2932
1516.00	1988.42	1966.42	2594	2627	47.06	103.96	180.41	2927
1518.00	1991.39	1969.39	2595	2628	46.98	103.79	180.14	2973
1520.00	1994.31	1972.31	2595	2628	46.91	103.63	179.87	2922
1522.00	1997.18	1975.18	2596	2628	46.83	103.48	179.62	2870
1524.00	2000.10	1978.10	2596	2629	46.76	103.32	179.36	2924
1526.00	2002.88	1980.88	2596	2629	46.69	103.18	179.12	2775
1528.00	2005.61	1983.61	2596	2629	46.63	103.04	178.89	2733
1530.00	2008.43	1986.43	2597	2629	46.56	102.90	178.65	2815
1532.00	2011.25	1989.25	2597	2630	46.49	102.75	178.41	2818
1534.00	2014.10	1992.10	2597	2630	46.42	102.60	178.16	2852

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	2016.96	1994.96	2598	2630	46.35	102.45	177.91	2860
1533.00	2019.85	1997.85	2598	2631	46.28	102.30	177.66	2896
1540.00	2022.71	2000.71	2598	2631	46.21	102.16	177.41	2854
1542.00	2025.62	2003.62	2599	2631	46.14	102.00	177.16	2916
1544.00	2028.54	2006.54	2599	2632	46.07	101.85	176.90	2916
1546.00	2031.49	2009.49	2600	2632	46.00	101.69	176.64	2944
1548.00	2034.33	2012.33	2600	2632	45.93	101.55	176.40	2845
1550.00	2037.20	2015.20	2600	2633	45.86	101.40	176.16	2870
1552.00	2040.15	2018.15	2601	2633	45.79	101.25	175.90	2946
1554.00	2043.07	2021.07	2601	2634	45.72	101.09	175.64	2924
1556.00	2046.03	2024.03	2602	2634	45.65	100.94	175.39	2957
1558.00	2049.09	2027.09	2602	2635	45.57	100.77	175.11	3062
1560.00	2052.14	2030.14	2603	2635	45.49	100.61	174.83	3050
1562.00	2055.29	2033.29	2603	2636	45.41	100.44	174.54	3152
1564.00	2058.57	2036.57	2604	2637	45.33	100.25	174.22	3276
1566.00	2061.63	2039.63	2605	2637	45.25	100.08	173.95	3063
1568.00	2064.56	2042.56	2605	2638	45.18	99.93	173.70	2927
1570.00	2067.62	2045.62	2606	2638	45.10	99.77	173.43	3060
1572.00	2070.68	2048.68	2606	2639	45.03	99.61	173.16	3057
1574.00	2073.70	2051.70	2607	2639	44.96	99.45	172.90	3019
1576.00	2076.54	2054.54	2607	2640	44.89	99.32	172.67	2843
1578.00	2079.49	2057.49	2608	2640	44.82	99.17	172.42	2949
1580.00	2082.36	2060.36	2608	2640	44.76	99.03	172.18	2873
1582.00	2085.23	2063.23	2608	2641	44.69	98.89	171.95	2874

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	2088.17	2066.17	2609	2641	44.62	98.74	171.70	2934
1586.00	2090.96	2068.96	2609	2641	44.56	98.61	171.48	2789
1588.00	2093.84	2071.84	2609	2642	44.50	98.47	171.25	2886
1590.00	2096.74	2074.74	2610	2642	44.43	98.33	171.01	2893
1592.00	2099.62	2077.62	2610	2642	44.37	98.19	170.78	2885
1594.00	2102.39	2080.39	2610	2642	44.31	98.06	170.57	2772
1596.00	2105.27	2083.27	2611	2643	44.24	97.92	170.34	2879
1598.00	2108.13	2086.13	2611	2643	44.18	97.79	170.11	2860
1600.00	2110.98	2088.98	2611	2643	44.12	97.65	169.88	2853
1602.00	2113.76	2091.76	2611	2643	44.06	97.53	169.67	2777
1604.00	2116.67	2094.67	2612	2644	43.99	97.39	169.44	2914
1606.00	2119.44	2097.44	2612	2644	43.93	97.26	169.23	2766
1608.00	2122.35	2100.35	2612	2644	43.87	97.12	168.99	2913
1610.00	2125.22	2103.22	2613	2645	43.81	96.99	168.77	2865
1612.00	2128.05	2106.05	2613	2645	43.75	96.86	168.55	2829
1614.00	2130.82	2108.82	2613	2645	43.69	96.73	168.34	2773
1616.00	2133.75	2111.75	2614	2645	43.62	96.59	168.11	2930
1618.00	2136.64	2114.64	2614	2646	43.56	96.46	167.88	2891
1620.00	2139.62	2117.62	2614	2646	43.49	96.31	167.64	2976
1622.00	2142.63	2120.68	2615	2647	43.42	96.16	167.39	3060
1624.00	2145.77	2123.77	2615	2647	43.35	96.01	167.13	3097
1626.00	2148.77	2126.77	2616	2648	43.29	95.86	166.89	2996
1628.00	2151.80	2129.80	2616	2648	43.22	95.72	166.64	3028
1630.00	2154.73	2132.73	2617	2649	43.16	95.58	166.41	2931

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	2157.70	2135.70	2617	2649	43.09	95.44	166.18	2969
1634.00	2160.69	2138.69	2618	2649	43.02	95.30	165.94	2997
1636.00	2163.73	2141.73	2618	2650	42.96	95.15	165.69	3035
1638.00	2166.69	2144.69	2619	2650	42.89	95.02	165.46	2965
1640.00	2169.64	2147.64	2619	2651	42.83	94.88	165.23	2950
1642.00	2172.61	2150.61	2620	2651	42.77	94.74	165.00	2967
1644.00	2175.62	2153.62	2620	2652	42.70	94.60	164.76	3010
1646.00	2178.68	2156.68	2621	2652	42.63	94.45	164.52	3065
1648.00	2181.74	2159.74	2621	2653	42.56	94.31	164.27	3060
1650.00	2184.84	2162.84	2622	2653	42.50	94.16	164.02	3095
1652.00	2187.90	2165.90	2622	2654	42.43	94.02	163.78	3062
1654.00	2191.07	2169.07	2623	2655	42.36	93.86	163.52	3172
1656.00	2194.28	2172.28	2624	2655	42.28	93.70	163.25	3207
1658.00	2197.49	2175.49	2624	2656	42.21	93.55	162.99	3209
1660.00	2200.68	2178.68	2625	2657	42.14	93.39	162.72	3186
1662.00	2203.80	2181.80	2626	2657	42.07	93.24	162.47	3125
1664.00	2206.96	2184.96	2626	2658	42.00	93.09	162.22	3162
1666.00	2210.10	2188.10	2627	2659	41.93	92.94	161.97	3141
1668.00	2213.34	2191.34	2628	2659	41.86	92.79	161.70	3237
1670.00	2216.46	2194.46	2628	2660	41.79	92.64	161.46	3116
1672.00	2219.66	2197.66	2629	2661	41.72	92.49	161.20	3205
1674.00	2222.69	2200.69	2629	2661	41.66	92.35	160.97	3029
1676.00	2225.87	2203.87	2630	2662	41.59	92.20	160.71	3180
1678.00	2229.03	2207.03	2631	2663	41.52	92.05	160.46	3160

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	2232.18	2210.18	2631	2663	41.45	91.91	160.22	3147
1682.00	2235.34	2213.34	2632	2664	41.38	91.76	159.97	3162
1684.00	2238.62	2216.62	2633	2665	41.31	91.60	159.70	3286
1686.00	2241.87	2219.87	2633	2665	41.24	91.45	159.44	3243
1688.00	2245.28	2223.28	2634	2666	41.16	91.28	159.15	3412
1690.00	2248.43	2226.43	2635	2667	41.10	91.13	158.91	3151
1692.00	2251.52	2229.52	2635	2668	41.03	90.99	158.68	3086
1694.00	2254.58	2232.58	2636	2668	40.97	90.86	158.45	3066
1696.00	2257.68	2235.68	2636	2669	40.91	90.72	158.21	3096
1698.00	2260.85	2238.85	2637	2669	40.84	90.58	157.97	3172
1700.00	2263.98	2241.98	2638	2670	40.77	90.44	157.73	3130
1702.00	2266.96	2244.96	2638	2670	40.72	90.31	157.52	2981
1704.00	2269.90	2247.90	2638	2671	40.66	90.19	157.31	2937
1706.00	2272.89	2250.89	2639	2671	40.60	90.06	157.10	2987
1708.00	2275.83	2253.83	2639	2671	40.54	89.94	156.89	2944
1710.00	2278.80	2256.80	2640	2672	40.49	89.81	156.68	2970
1712.00	2281.87	2259.87	2640	2672	40.43	89.68	156.46	3072
1714.00	2284.89	2262.89	2640	2673	40.37	89.55	156.24	3022
1716.00	2287.86	2265.86	2641	2673	40.31	89.43	156.04	2966
1718.00	2290.87	2268.87	2641	2673	40.25	89.31	155.82	3004
1720.00	2293.68	2271.68	2641	2674	40.20	89.20	155.64	2815
1722.00	2296.69	2274.69	2642	2674	40.14	89.07	155.43	3014
1724.00	2299.92	2277.92	2643	2675	40.08	88.93	155.18	3226
1726.00	2303.29	2281.29	2643	2676	40.00	88.77	154.92	3374

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GE0 M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
1728.00	2306.60	2284.60	2644	2676	39.93	88.62	154.66	3305
1730.00	2310.15	2288.15	2645	2678	39.85	88.44	154.37	3547
1732.00	2313.75	2291.75	2646	2679	39.77	88.27	154.07	3603
1734.00	2317.18	2295.18	2647	2680	39.70	88.11	153.79	3433
1736.00	2320.57	2298.57	2648	2681	39.63	87.95	153.53	3390
1738.00	2324.00	2302.00	2649	2682	39.55	87.79	153.26	3425
1740.00	2327.43	2305.43	2650	2683	39.48	87.63	152.99	3427
1742.00	2330.87	2308.87	2651	2684	39.41	87.47	152.72	3449
1744.00	2334.28	2312.28	2652	2685	39.34	87.32	152.45	3410
1746.00	2337.77	2315.77	2653	2686	39.26	87.16	152.18	3481
1748.00	2341.14	2319.14	2653	2687	39.19	87.00	151.92	3377
1750.00	2344.56	2322.56	2654	2688	39.12	86.85	151.66	3420
1752.00	2347.95	2325.95	2655	2688	39.05	86.70	151.40	3392
1754.00	2351.40	2329.40	2656	2689	38.98	86.54	151.14	3448
1756.00	2354.77	2332.77	2657	2690	38.91	86.39	150.88	3369
1758.00	2358.30	2336.30	2658	2691	38.84	86.23	150.61	3524
1760.00	2361.83	2339.83	2659	2692	38.76	86.07	150.33	3536
1762.00	2365.53	2343.53	2660	2694	38.68	85.89	150.03	3702
1764.00	2369.17	2347.17	2661	2695	38.60	85.72	149.74	3639
1766.00	2372.76	2350.76	2662	2696	38.52	85.55	149.46	3585
1768.00	2376.34	2354.34	2663	2697	38.45	85.39	149.18	3585
1770.00	2379.93	2357.93	2664	2699	38.37	85.22	148.90	3589
1772.00	2383.41	2361.41	2665	2700	38.30	85.07	148.63	3478
1774.00	2386.91	2364.91	2666	2701	38.23	84.92	148.37	3498

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
1776.00	2390.48	2368.48	2667	2702	38.16	84.75	148.09	3577
1773.00	2394.06	2372.06	2668	2703	38.08	84.59	147.82	3572
1780.00	2397.75	2375.75	2669	2704	38.00	84.42	147.53	3695
1732.00	2401.48	2379.48	2671	2706	37.93	84.25	147.23	3726
1784.00	2405.14	2383.14	2672	2707	37.85	84.08	146.95	3660
1786.00	2408.70	2386.70	2673	2708	37.78	83.92	146.68	3563
1788.00	2412.23	2390.23	2674	2709	37.71	83.77	146.42	3531
1790.00	2415.72	2393.72	2675	2710	37.64	83.62	146.17	3488
1792.00	2419.26	2397.26	2676	2711	37.57	83.47	145.90	3542
1794.00	2422.75	2400.75	2676	2712	37.50	83.32	145.65	3491
1796.00	2426.36	2404.36	2677	2713	37.43	83.16	145.38	3604
1798.00	2429.89	2407.89	2678	2714	37.36	83.01	145.12	3532
1800.00	2433.07	2411.07	2679	2715	37.30	82.89	144.92	3180
1802.00	2436.25	2414.25	2680	2715	37.25	82.77	144.71	3180
1804.00	2439.43	2417.43	2680	2716	37.19	82.65	144.50	3180

PE603393

This is an enclosure indicator page.
The enclosure PE603393 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603393 has the following characteristics:

ITEM_BARCODE = PE603393
CONTAINER_BARCODE = PE906041
 NAME = Drift Corrected Sonic
 BASIN = GIPPSLAND
 ON_OFF = OFFSHORE
 PERMIT = VIC/L7
 TYPE = WELL
 SUBTYPE = LOG
DESCRIPTION = Drift Corrected Sonic log for
 Kingfish-9
REMARKS =
DATE_CREATED = 30/04/1992
DATE_RECEIVED =
 W_NO = W1060
 WELL_NAME = KINGFISH-9
CONTRACTOR = SCHLUMBERGER
CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603394

This is an enclosure indicator page.
The enclosure PE603394 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603394 has the following characteristics:

ITEM_BARCODE = PE603394
CONTAINER_BARCODE = PE906041
NAME = Seismic Calibration Log
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L7
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Seismic Calibration Log (Adjusted
Continuous Velocity Log) for Kingfish-9
REMARKS =
DATE_CREATED = 30/04/1992
DATE_RECEIVED =
W_NO = W1060
WELL_NAME = KINGFISH-9
CONTRACTOR = SCHLUMBERGER
CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603395

This is an enclosure indicator page.
The enclosure PE603395 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603395 has the following characteristics:

ITEM_BARCODE = PE603395
CONTAINER_BARCODE = PE906041
NAME = Synthetic Seismogram (25Hz)
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L7
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAM
DESCRIPTION = 25Hz zero phase Geogram 20cm/sec
synthetic seismogram for Kingfish-9.
REMARKS =
DATE_CREATED = 30/04/1992
DATE_RECEIVED =
W_NO = W1060
WELL_NAME = KINGFISH-9
CONTRACTOR = SCHLUMBERGER
CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603396

This is an enclosure indicator page.
The enclosure PE603396 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603396 has the following characteristics:

- ITEM_BARCODE = PE603396
- CONTAINER_BARCODE = PE906041
- NAME = Synthetic Seismogram (35Hz)
- BASIN = GIPPSLAND
- ON_OFF = OFFSHORE
- PERMIT = VIC/L7
- TYPE = WELL
- SUBTYPE = SYNTH_SEISMOGRAM
- DESCRIPTION = 35Hz zero phase Geogram 20cm/sec
synthetic seismogram for Kingfish-9.
- REMARKS =
- DATE_CREATED = 30/04/1992
- DATE_RECEIVED =
- W_NO = W1060
- WELL_NAME = KINGFISH-9
- CONTRACTOR = SCHLUMBERGER
- CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603397

This is an enclosure indicator page.
The enclosure PE603397 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603397 has the following characteristics:

ITEM_BARCODE = PE603397
CONTAINER_BARCODE = PE906041
 NAME = Synthetic Seismogram (35Hz)
 BASIN = GIPPSLAND
 PERMIT = VIC/L7
 TYPE = WELL
 SUBTYPE = SYNTH_SEISMOGRAPH
DESCRIPTION = 35Hz min phase Geogram 20cm/sec
 synthetic seismogram for Kingfish-9.
REMARKS =
DATE_CREATED = 30/04/1992
DATE_RECEIVED =
 W_NO = W1060
 WELL_NAME = KINGFISH-9
 CONTRACTOR = SCHLUMBERGER
 CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603398

This is an enclosure indicator page.
The enclosure PE603398 is enclosed within the
container PE906041 at this location in this
document.

The enclosure PE603398 has the following characteristics:

ITEM_BARCODE = PE603398
CONTAINER_BARCODE = PE906041
 NAME = Synthetic Seismogram (45Hz)
 BASIN = GIPPSLAND
 PERMIT = VIC/L7
 TYPE = WELL
 SUBTYPE = SYNTH_SEISMOGRAPH
DESCRIPTION = 45Hz zero phase Geogram 20cm/sec
 synthetic seismogram for Kingfish-9.
REMARKS =
DATE_CREATED = 30/04/1992
DATE_RECEIVED =
 W_NO = W1060
 WELL_NAME = KINGFISH-9
 CONTRACTOR = SCHLUMBERGER
CLIENT_OP_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)