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BHP PETROLEUM PTY LTD

WELL SEISMIC PROCESSING REPORT

Sonic Calibration and Geogram

LONGTOM-1

FIELD : WILDCAT

COUNTRY : AUSTRALIA

COORDINATES : 038 06" 00.03" S
: 148 18" 54.28" E

DATE OF SURVEY : 26 MAY 1995

REFERENCE NO. : SYJ-561117

INTERVAL : 2225 - 100 M

PETROLEUM DIVISION

13 MAY 1996

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1. Introduction

Check shot survey was recorded with the Combinable Seismic Imager tool (CSI) in the *Longtom-1* well. The survey was run on 25th May 1995. The data were stacked, the transit times were re-picked. The transit times of the well seismic survey were used as input for sonic calibration processing.

2. Data Acquisition

The data were acquired in one logging run using the three component Combinable Seismic Imager tool (CSI). An array of three sleeve air guns were used as the source. The gun was positioned 5 meters below mean sea level .

The check shot survey was shot as a standard offshore borehole seismic survey with the airgun suspended from a rig crane.

Table 1. Survey Parameters

Elevation of KB	25.3 M
Elevation of DF	25.0 M
Elevation of GL	- 56.25 M
Energy Source	3 X 150 cu in. airguns
Source Offset	50 M
Source Depth	5 M below MSL
Reference Sensor	Hydrophone
Hydrophone Offset	50 M
Hydrophone Depth	10 M below MSL
Source & Hyd. Azimuth	67 Degr.
Tool Type	CSI
Tool Combination	Stand Alone
De-coupled Geophones	Yes
Shaker Fitted	Yes
Number of Axis	3
Geophone Type	SM-4
Natural Frequency	10 Hz
Coil Resistance	3500 Om
Sensitivity	0.8 V.cm.sec.
Sampling Rate	1.0 ms.
Recording Time	3.0 sec.
Acquisition Unit	MAXIS
Recording Format	DLIS

3. Sonic Calibration Processing

3.1 Sonic Calibration

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

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

$$\frac{\Delta dr \text{ if } t}{\Delta dept\, h} < 0$$

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

For a positive drift $\frac{\Delta drift}{\Delta depth} > 0$, 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 µsec/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 Δ t 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 Open Hole Logs

The sonic log has been recorded from 2225 to 285.0 metres below DF. This sonic log has been edited to alleviate cycle skipping and spiky data. The density log has also been edited to take into account bad hole condition.

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

3.3 Correction to Datum and Velocity Modelling

The sonic calibration processing has been referenced to the seismic reference datum (SRD), 25.3 m below KB. Static corrections are applied to correct for source offset and source depth. This involves using an water velocity between the source position and SRD as 1524 m/sec.

3.4 Sonic Calibration Results

The top of the sonic log (285.0 metres below DF) is chosen as the origin for the calibration drift curve.

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

Table 2: Sonic Drift

Depth Interval (metres below KB)	Block Shift µsec/mt	Δt_{min} µsec/mt	Equiv Block shift µsec/mt
0.0 - 285.0	0.00	-	0.00
285.0 - 708.0	12.74	-	12.74
708.0 - 1355.0	14.84	-	14.84
1355.0 - 1885.0	2.83	-	2.83
1885.0 - 2024.0	-	191.86	- 46.70
2024.0 - 2225.0	-	218.14	-12.45

4. Synthetic Seismogram Processing

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

The presentations include both normal and reverse polarity on a time scale of 10 cm/sec.

GEOGRAM processing produces synthetic seismic traces based on reflection coefficients generated form 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 form 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 millisecs). Reflection coefficients are then computed using:

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

where:

ρ_1 = density of the layer above the reflection interface
ρ_2 = density of the layer below the reflection interface
v_1 = compressional wave velocity of the layer above the reflection interface
v_2 = compressional wave velocity of the layer below the reflection interface

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

4.3 Primaries with Transmission Loss

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

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

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

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

4.4 Primaries plus Multiples

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

4.5 Multiples Only

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

4.6 Wavelet

A theoretical wavelet is chosen to use for convolution with the reflection coefficients previoulsy 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 - Well Seismic Survey

1. Level number: the level number starting from the top level (includes any imposed shots).

2. Measured depth from KB: *dkb*, the depth in metres from kelly bushing.

3. Vertical depth form SRD: *dsrd*, the depth in metres from seismic reference datum.

4. Observed travel time HYD to GEO: *tim*0, the transit time picked form the stacked data by subtracting the surface sensor first break time from the downhole sensor first break time.

5. Vertical travel time SRC to GEO: *timv*, is corrected for source to hydrophone distance and for source offset.

6. Vertical travel time SRD to GEO: *shtm*, is *timv* corrected for the vertical distance between source and datum.

7. Average velocity SRD to GEO: the average seismic velocity from datum to the corresponding checkshot level, $\frac{dsrd}{shtm}$.

8. Delta depth between shots: $\Delta depth$, the vertical distance between each level.

9. Delta time between shots: $\Delta time$, the difference in vertical travel time (*shtm*),between each level.

10. Interval velocity between shots: the average seismic velocity between each level, $\frac{\Delta depth}{\Delta time}$.

A1-1 Geophysical Airgun Report - Vertical Incidence Survey

1. Level number: the level number starting from the top level (includes any imposed shots).

2. Measured depth from KB: *dkb*, the depth in metres from kelly bushing.

3. Vertical depth form SRD: *dsrd*, the depth in metres from seismic reference datum.

4. Observed travel time HYD to GEO: *tim*0, the transit time picked form the stacked data by subtracting the surface sensor first break time from the downhole sensor first break time.

5. Vertical travel time SRC to GEO: *timv*, is corrected for source to hydrophone distance and for source offset.

6. Vertical travel time SRD to GEO: *shtm*, is *timv* corrected for the vertical distance between source and datum.

7. Average velocity SRD to GEO: the average seismic velocity from datum to the corresponding checkshot level, $\frac{dsrd}{shtm}$.

8. Delta depth between shots: $\Delta depth$, the vertical distance between each level.

9. Delta time between shots: $\Delta time$, the difference in vertical travel time (*shtm*),between each level.

10. Interval velocity between shots: the average seismic velocity between each level, $\frac{\Delta depth}{\Delta time}$.

A2 Drift Computation Report

1. Level number: the level number starting from the top level (includes any imposed shots).

2. Vertical depth from KB: the depth in metres from kelly bushing

3. Vertical depth from SRD: the depth in metres from seismic reference datum.

4. Vertical travel time SRD to GEO: the calculated vertical travel time from datum to downhole geophone (see column 7, Geophysical Airgun Report).

5.Integrated raw sonic time: the raw sonic log is integrated from top to bottom and listed at each level. An initial value at the top of the sonic log is set equal to the checkshot time at that level. This may be an imposed shot if a shot was not taken at the top of the sonic.

6. Computed drift at level: the checkshot time minus the integrated raw sonic time.

7. Computed blk-shft correction: the drift gradient between any two checkshot levels $\left(\frac{\Delta \text{ drift}}{\Delta \text{ depth}}\right)$.

A3 Sonic Adjustment Parameter Report

1. Knee number: the knee number starting from the highest knee. (The first knees listed will generally be at SRD and the top of sonic. The drift imposed at these knees will normally be zero.)

2. Vertical depth from KB: the depth in metres from kelly bushing

3. Vertical depth from SRD: the depth in metres from seismic reference datum.

4. Drift at knee: the value of drift imposed at each knee.

5. Blockshift used: the change in drift divided by the change in depth between any two levels.

6. Delta-T minimum used: see section 4 of report for an explanation of Δt_{min}.

7. reduction factor: see section 4 of report.

8. Equivalent blockshift: the gradient of the imposed drift curve.

A4 Velocity Report

1. Level number: the level number starting from the top level (includes any imposed shots).

2. Vertical depth from KB: the depth in metres form kelly bushing.

3. Vertical depth from SRD: the depth in metres from seismic reference datum.

4. Vertical travel time SRD to GEOPH: the vertical travel time from SRD to downhole geophone (see column 7, Geophysical Airgun Report)

5. Integrated adjusted sonic time: the adjusted sonic log is integrated from top to bottom. An initial value at the top of the sonic is set equal the checkshot time at that level. (the adjusted sonic log is the drift corrected sonic log.)

6. Drift=shot time-raw sonic: the check shot time minus the raw integrated sonic time.

7. Residual=shot time-adj sonic: the check shot time minus the adjusted integrated sonic time. This is the difference between calculated drift and the imposed drift.

8. Adjusted interval velocity: the interval velocity calculated from the integrated adjusted sonic time at each level.

A5 Time Converted Velocity Report

the data in this listing has been resampled in time.

1. Two way travel time from SRD: this is the index for the data in this listing. The first value is at SRD (0 millisecs) and the sampling rate is 2 millisecs.

2. Measured depth from KB: the depth from KB at each corresponding value of two way time.

3. Vertical depth from SRD: the vertical depth from SRD at each corresponding value of two way time.

4. Average velocity SRD to GEO: the vertical depth from SRD divided by half the two way time.

5. RMS velocity: the root mean square velocity from datum to the corresponding value of two way time.

$$v_{rms} = \sqrt{\Sigma_1^n v_i^2 t_i / \Sigma^n_1 t_i}$$

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 = 1000 M).

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

where:

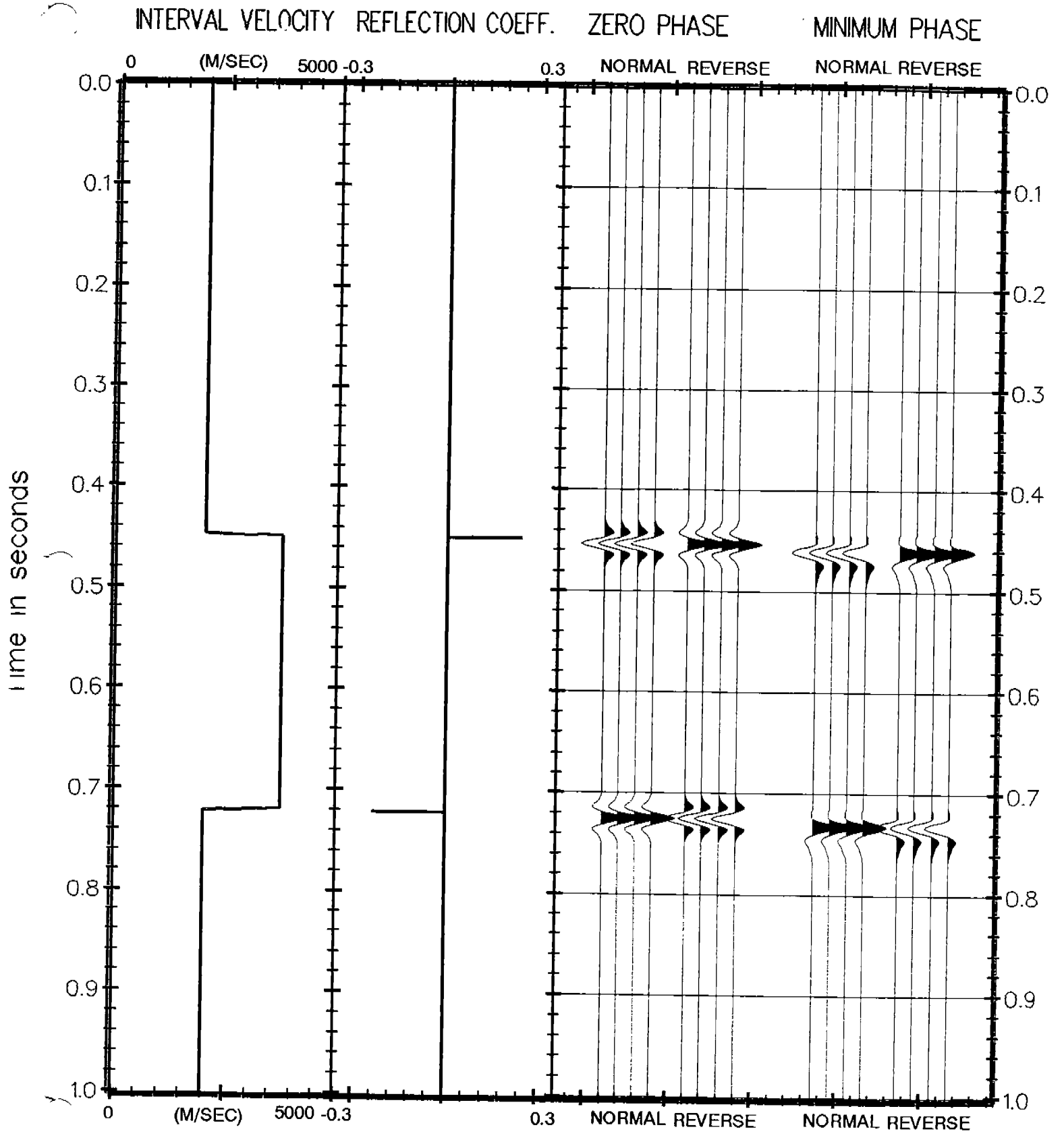
Δt = normal moveout (secs)
X = moveout distance (metres)
t = two way time (secs)
v_{rms} = rms velocity (metres / sec)

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

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

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

SCHLUMBERGER (SEG-1976) WAVELET POLARITY CONVENTION



AIR GUN REPORT

SCHLUMBERGER

GEOPHYSICAL AIRGUN REPORT

COMPANY : B H P PETROLEUM
WELL : LONGTOM-1
FIELD : WILDCAT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.561117/561118
LOGGED : 26-MAY-1995

LONG DEFINITIONS

GLOBAL

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

MATRIX

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

SAMPLED

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

(GLOBAL PARAMETERS)		(VALUE)	
ELEV OF KB AB. MSL (WST)	KB	25.0000	M
ELEV OF SRD AB. MSL(WST)	SRD	0	M
Elevation of Kelly Bushi	EKB	25.0000	M
ELEV OF GL AB. SRD(WST)	GL	-56.2500	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	-5.0	46.0	19.5	-10.0	46.0	19.5

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

	MD @ KB M	VD @ KB M	VD @ SRD M	E-W COORD M	N-S COORD M
1	81.3	81.3	56.3	0	0
2	100.0	100.0	75.0	0	0
3	250.0	250.0	225.0	0	0
4	400.0	400.0	375.0	0	0
5	550.0	550.0	525.0	0	0
6	700.0	700.0	675.0	0	0
7	850.0	850.0	825.0	0	0
8	1000.0	1000.0	975.0	0	0
9	1050.0	1050.0	1025.0	0	0
10	1104.0	1104.0	1079.0	0	0
11	1150.0	1150.0	1125.0	0	0
12	1201.0	1201.0	1176.0	0	0
13	1249.5	1249.5	1224.5	0	0
14	1269.0	1269.0	1244.0	0	0
15	1299.5	1299.5	1274.5	0	0
16	1353.0	1353.0	1328.0	0	0
17	1405.0	1405.0	1380.0	0	0
18	1450.0	1450.0	1425.0	0	0
19	1500.0	1500.0	1475.0	0	0
20	1526.0	1526.0	1501.0	0	0
21	1560.0	1560.0	1535.0	0	0
22	1600.0	1600.0	1575.0	0	0
23	1650.0	1650.0	1625.0	0	0
24	1700.0	1700.0	1675.0	0	0
25	1750.0	1750.0	1725.0	0	0
26	1800.0	1800.0	1775.0	0	0
27	1850.0	1850.0	1825.0	0	0
28	1900.0	1900.0	1875.0	0	0
29	1935.0	1935.0	1910.0	0	0
30	1950.0	1950.0	1925.0	0	0
31	2000.0	2000.0	1975.0	0	0
32	2050.0	2050.0	2025.0	0	0
33	2100.0	2100.0	2075.0	0	0

34	2135.0	2135.0	2110.0	0	0
35	2150.0	2150.0	2125.0	0	0
36	2200.0	2200.0	2175.0	0	0
37	2225.0	2225.0	2200.0	0	0

LEVEL NUMBER	MEASUR DEPTH FROM KB M	VERTIC DEPTH FROM SRD 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	81.3	56.3	0	43.69	33.62	36.90	1524			
								18.8	9.33	2010
2	100.0	75.0	18.8	49.50	42.95	46.23	1622			
								150.0	72.59	2067
3	250.0	225.0	168.8	115.20	115.53	118.82	1894			
								150.0	66.99	2239
4	400.0	375.0	318.8	180.90	182.52	185.80	2018			
								150.0	60.54	2478
5	550.0	525.0	468.8	240.90	243.06	246.34	2131			
								150.0	60.38	2484
6	700.0	675.0	618.8	301.00	303.44	306.72	2201			
								150.0	61.37	2444
7	850.0	825.0	768.8	362.20	364.80	368.08	2241			
								150.0	60.61	2475
8	1000.0	975.0	918.8	422.70	425.42	428.70	2274			
								50.0	19.73	2534
9	1050.0	1025.0	968.8	442.40	445.15	448.43	2286			
								54.0	20.13	2682
10	1104.0	1079.0	1022.8	462.50	465.28	468.56	2303			
								46.0	17.82	2581
11	1150.0	1125.0	1068.8	480.30	483.10	486.38	2313			
								51.0	18.52	2753
12	1201.0	1176.0	1119.8	498.80	501.62	504.90	2329			
								48.5	16.82	2883
13	1249.5	1224.5	1168.3	515.60	518.45	521.73	2347			
								19.5	6.81	2864
14	1269.0	1244.0	1187.8	522.40	525.25	528.53	2354			
								30.5	10.31	2958
15	1299.5	1274.5	1218.3	532.70	535.57	538.85	2365			
								53.5	19.32	2769
16	1353.0	1328.0	1271.8	552.00	554.88	558.17	2379			
								52.0	16.92	3074
17	1405.0	1380.0	1323.8	568.90	571.80	575.08	2400			
								45.0	14.31	3144
18	1450.0	1425.0	1368.8	583.20	586.12	589.40	2418			
								50.0	16.02	3122
19	1500.0	1475.0	1418.8	599.20	602.13	605.41	2436			
								26.0	8.21	3168
20	1526.0	1501.0	1444.7	607.40	610.34	613.62	2446			
								34.0	10.81	3145
21	1560.0	1535.0	1478.8	618.20	621.15	624.43	2458			
								40.0	12.71	3147
22	1600.0	1575.0	1518.8	630.90	633.86	637.14	2472			
								50.0	16.81	2974
23	1650.0	1625.0	1568.8	647.70	650.67	653.95	2485			
								50.0	15.71	3182
24	1700.0	1675.0	1618.8	663.40	666.38	669.66	2501			

LEVEL NUMBER	MEASUR DEPTH FROM KB M	VERTIC DEPTH FROM SRD 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
25	1750.0	1725.0	1668.8	679.10	682.09	685.37	2517	50.0	15.71	3183
26	1800.0	1775.0	1718.8	695.20	698.20	701.48	2530	50.0	16.11	3104
27	1850.0	1825.0	1768.8	711.50	714.51	717.79	2543	50.0	16.31	3066
28	1900.0	1875.0	1818.8	727.30	730.32	733.60	2556	50.0	15.81	3163
29	1935.0	1910.0	1853.8	735.70	738.73	742.01	2574	35.0	8.41	4163
30	1950.0	1925.0	1868.8	738.80	741.83	745.11	2584	15.0	3.10	4834
31	2000.0	1975.0	1918.8	747.90	750.94	754.22	2619	50.0	9.11	5489
32	2050.0	2025.0	1968.8	759.70	762.75	766.03	2644	50.0	11.81	4234
33	2100.0	2075.0	2018.8	771.60	774.65	777.94	2667	50.0	11.91	4199
34	2135.0	2110.0	2053.8	780.50	783.56	786.84	2682	35.0	8.90	3930
35	2150.0	2125.0	2068.8	784.10	787.16	790.44	2688	15.0	3.60	4164
36	2200.0	2175.0	2118.8	796.20	799.27	802.55	2710	50.0	12.11	4130
37	2225.0	2200.0	2143.8	802.20	805.27	808.55	2721	25.0	6.00	4164

DRIFT COMPUTATION REPORT

DRIFT COMPUTATION REPORT

COMPANY : B H P PETROLEUM
WELL : LONGTOM-1
FIELD : WILDCAT
STATE : VICTORIA
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EKB - Elevation of Kelly Bushing
GL - Elevation of Users Reference (Generally Ground Level) Above SRD
XSTART - TOP OF ZONE PROCESSED BY WST
XSTOP - BOTTOM OF ZONE PROCESSED BY WST
GAD001 - RAW SONIC CHANNEL NAME USED FOR WST SONIC ADJUSTMENT
UNFDEN - UNIFORM DENSITY VALUE

ZONE

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

SAMPLED

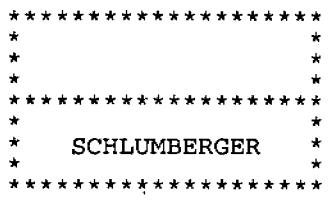
SHOT - Shot number
DKB - Measured Depth from Kelly-Bushing
DSRD - Depth from SRD
DGL - Vertical Depth Relative to Ground Level (User's Reference)
SHTM - Shot time (WST)
RAWS - Raw Sonic (WST)
SHDR - Drift at Shot or Knee
BLSH - Block Shift between Shots or Knee

(GLOBAL PARAMETERS)		(VALUE)	
ELEV OF KB AB. MSL (WST)	KB	25.0000	M
ELEV OF SRD AB. MSL(WST)	SRD	0	M
Elevation of Kelly Bushi	EKB	25.0000	M
ELEV OF GL AB. SRD(WST)	GL	-56.2500	M
TOP OF ZONE PROCD (WST)	XSTART	0	M
BOT OF ZONE PROCD (WST)	XSTOP	0	M
RAW SONIC CH NAME (WST)	GAD001	DT.EDI.ATT.002.FLP.*	
UNIFORM DENSITY VALUE	UNFDEN	2.30000	G/C3

(ZONED PARAMETERS)		(VALUE)		(LIMITS)		
LAYER OPTION FLAG DENS	LOFDEN	1.000000		30479.7	-	0
USER SUPPLIED DENSITY DA	LAYDEN	0	G/C3	0	-	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-SHFT CORRECTION US/M
1	81.3	56.3	0	36.90	36.90	0	0
2	100.0	75.0	18.8	46.23	46.23	0	0
3	121.0	96.0	39.8	56.39	56.39	0	0
4	250.0	225.0	168.8	118.82	119.51	-.70	-5.41
5	400.0	375.0	318.8	185.80	184.35	1.45	14.32
6	550.0	525.0	468.8	246.34	243.01	3.33	12.56
7	700.0	675.0	618.8	306.72	301.60	5.12	11.91
8	850.0	825.0	768.8	368.08	360.64	7.45	15.50
9	1000.0	975.0	918.8	428.70	418.86	9.84	15.96
10	1050.0	1025.0	968.8	448.43	437.53	10.90	21.22
11	1104.0	1079.0	1022.8	468.56	457.11	11.45	10.16
12	1150.0	1125.0	1068.8	486.38	473.88	12.50	22.84
13	1201.0	1176.0	1119.8	504.90	491.89	13.01	10.02
14	1249.5	1224.5	1168.3	521.73	507.84	13.89	18.02
15	1269.0	1244.0	1187.8	528.53	514.45	14.09	10.38
16	1299.5	1274.5	1218.3	538.85	524.57	14.28	6.14
17	1353.0	1328.0	1271.8	558.17	542.92	15.25	18.17
18	1405.0	1380.0	1323.8	575.08	560.19	14.90	-6.72
19	1450.0	1425.0	1368.8	589.40	573.93	15.47	12.67
20	1500.0	1475.0	1418.8	605.41	589.95	15.47	-.01
21	1526.0	1501.0	1444.7	613.62	598.05	15.57	4.12
22	1560.0	1535.0	1478.8	624.43	608.56	15.87	8.75
23	1600.0	1575.0	1518.8	637.14	621.36	15.78	-2.32
24	1650.0	1625.0	1568.8	653.95	637.63	16.32	10.82

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-SHFT CORRECTION US/M
25	1700.0	1675.0	1618.8	669.66	653.70	15.96	-7.14
26	1750.0	1725.0	1668.8	685.37	669.25	16.12	3.20
27	1800.0	1775.0	1718.8	701.48	685.92	15.56	-11.28
28	1850.0	1825.0	1768.8	717.79	701.53	16.26	14.00
29	1900.0	1875.0	1818.8	733.60	717.63	15.97	-5.73
30	1935.0	1910.0	1853.8	742.01	728.00	14.01	-56.12
31	1950.0	1925.0	1868.8	745.11	731.45	13.66	-23.27
32	2000.0	1975.0	1918.8	754.22	743.66	10.56	-61.98
33	2050.0	2025.0	1968.8	766.03	756.67	9.35	-24.12
34	2100.0	2075.0	2018.8	777.94	769.01	8.92	-8.58
35	2135.0	2110.0	2053.8	786.84	778.57	8.27	-18.73
36	2150.0	2125.0	2068.8	790.44	782.43	8.01	-17.29
37	2200.0	2175.0	2118.8	802.55	794.75	7.80	-4.28
38	2224.7	2199.7	2143.5	808.49	801.00	7.49	-12.41
39	2225.0	2200.0	2143.8	808.55			



SONIC ADJUSTMENT PARAMETER REPORT

COMPANY : B H P PETROLEUM
WELL : LONGTOM-1
FIELD : WILDCAT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.561117/561118
LOGGED : 26-MAY-1995

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 ADJUSTMNENT 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
DGL - 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)		
ORIG OF ADJ DATA (WST)	SRCDRF	: 2.00000		
CONS SONIC ADJST (WST)	CONADJ	: 24.6063	US/M	
UNIFORM EARTH VELOCITY	UNERTH	: 1524.00	M/S	

(ZONED PARAMETERS)		(VALUE)		(LIMITS)		
USER DRIFT ZONE (WST)	ZDRIFT	: 7.500000	MS	2225.00	-	2024.20
		10.00000		2024.20		1885.00
		16.50000		1885.00		1355.80
		15.00000		1355.80		708.800
		5.400000		708.800		285.000
		0		285.000		0
ADJUSMNT MODE (WST)	ADJOPZ	:-999.2500		30479.7	-	0
USER DELTA-T MIN (WST)	ADJUSZ	:-999.2500	US/M	30479.7	-	0
LAYER OPTION FLAG VELOC	LOFVEL	: 0		30479.7	-	0
USER VELOC (WST)	LAYVEL	: 2067.000	M/S	121.000	-	100.000
		2010.000		100.000		81.3000
		1524.000		81.3000		0

KNEE NUMBER	VERTICAL DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	VERTICAL DEPTH FROM GL M	DRIFT AT KNEE MS	BLOCKSHIFT USED US/M	DELTA-T MINIMUM USED US/M	REDUCTION FACTOR G	EQUIVALENT BLOCKSHIFT US/M
					0			0
2	285.0	260.0	203.8	0	12.74			12.74
3	708.8	683.8	627.6	5.40	14.84			14.84
4	1355.8	1330.8	1274.5	15.00	2.83			2.83
5	1885.0	1860.0	1803.8	16.50		191.86	.35	-46.70
6	2024.2	1999.2	1942.9	10.00		218.14	.83	-12.45
7	2225.0	2200.0	2143.8	7.50				

SCHLUMBERGER

VELOCITY REPORT

COMPANY : B H P PETROLEUM
WELL : LONGTOM-1
FIELD : WILDCAT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.561117/561118
LOGGED : 26-MAY-1995

LONG DEFINITIONS

GLOBAL

KB - Elevation of the KELLY-BUSHING Above MSL or MWL
SRD - Elevation of the Seismic Reference Datum Above MSL or MWL
EKB - Elevation of Kelly Bushing
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 - Shot number
DKB - 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

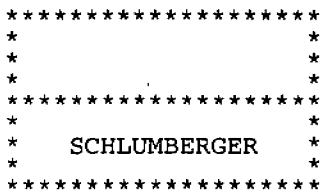
(GLOBAL PARAMETERS)		(VALUE)	
ELEV OF KB AB. MSL (WST)	KB	25.0000	M
ELEV OF SRD AB. MSL(WST)	SRD	0	M
Elevation of Kelly Bushi	EKB	25.0000	M
ELEV OF GL AB. SRD(WST)	GL	-56.2500	M
UNIFORM EARTH VELOCITY	UNERTH	1524.00	M/S

(ZONED PARAMETERS)		(VALUE)		(LIMITS)
LAYER OPTION FLAG VELOC	LOFVEL	0		30479.7 - 0
USER VELOC (WST)	LAYVEL	2067.000	M/S	121.000 - 100.000
		2010.000		100.000 81.3000
		1524.000		81.3000 0

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	81.3	56.3	0	36.90	36.90	0	0	1524
2	100.0	75.0	18.8	46.23	46.23	0	0	2010
3	121.0	96.0	39.8	56.39	56.40	0	-.01	2064
4	250.0	225.0	168.8	118.82	119.50	-.70	-.69	2044
5	400.0	375.0	318.8	185.80	185.80	1.45	0	2262
6	550.0	525.0	468.8	246.34	246.37	3.33	-.03	2477
7	700.0	675.0	618.8	306.72	306.87	5.12	-.15	2479
8	850.0	825.0	768.8	368.08	368.12	7.45	-.04	2449
9	1000.0	975.0	918.8	428.70	428.56	9.84	.13	2482
10	1050.0	1025.0	968.8	448.43	447.97	10.90	.46	2576
11	1104.0	1079.0	1022.8	468.56	468.36	11.45	.20	2649
12	1150.0	1125.0	1068.8	486.38	485.81	12.50	.57	2635
13	1201.0	1176.0	1119.8	504.90	504.58	13.01	.32	2717
14	1249.5	1224.5	1168.3	521.73	521.24	13.89	.49	2912
15	1269.0	1244.0	1187.8	528.53	528.14	14.09	.40	2826
16	1299.5	1274.5	1218.3	538.85	538.71	14.28	.13	2884
17	1353.0	1328.0	1271.8	558.17	557.86	15.25	.31	2795
18	1405.0	1380.0	1323.8	575.08	575.30	14.90	-.21	2981
19	1450.0	1425.0	1368.8	589.40	589.18	15.47	.22	3243
20	1500.0	1475.0	1418.8	605.41	605.33	15.47	.09	3096
21	1526.0	1501.0	1444.7	613.62	613.50	15.57	.12	3179
22	1560.0	1535.0	1478.8	624.43	624.11	15.87	.32	3207
23	1600.0	1575.0	1518.8	637.14	637.03	15.78	.11	3095
24	1650.0	1625.0	1568.8	653.95	653.44	16.32	.51	3048

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
25	1700.0	1675.0	1618.8	669.66	669.65	15.96	.01	3084
26	1750.0	1725.0	1668.8	685.37	685.35	16.12	.03	3186
27	1800.0	1775.0	1718.8	701.48	702.16	15.56	-.68	2973
28	1850.0	1825.0	1768.8	717.79	717.91	16.26	-.12	3176
29	1900.0	1875.0	1818.8	733.60	733.04	15.97	.56	3304
30	1935.0	1910.0	1853.8	742.01	741.02	14.01	.99	4389
31	1950.0	1925.0	1868.8	745.11	744.09	13.66	1.02	4878
32	2000.0	1975.0	1918.8	754.22	754.59	10.56	-.37	4764
33	2050.0	2025.0	1968.8	766.03	766.42	9.35	-.39	4225
34	2100.0	2075.0	2018.8	777.94	778.51	8.92	-.57	4136
35	2135.0	2110.0	2053.8	786.84	787.73	8.27	-.89	3794
36	2150.0	2125.0	2068.8	790.44	791.49	8.01	-1.05	3991
37	2200.0	2175.0	2118.8	802.55	803.56	7.80	-1.01	4142
38	2224.7	2199.7	2143.5	808.49	809.66	7.49	-1.17	4055
39	2225.0	2200.0	2143.8	808.55	809.70		-1.15	6941

TIME CONVERTED VELOCITY REPORT



TIME CONVERTED VELOCITY REPORT

COMPANY : B H P PETROLEUM
WELL : LONGTOM-1
FIELD : WILDCAT
STATE : VICTORIA
COUNTRY : AUSTRALIA
REFERENCE: SYJ.561117/561118
LOGGED : 26-MAY-1995

LONG DEFINITIONS

GLOBAL

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

MATRIX

MVODIS - MOVE-OUT DISTANCE FROM BOREHOLE

ZONE

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

SAMPLED

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

(GLOBAL PARAMETERS)		(VALUE)	
ELEV OF KB AB. MSL (WST)	KB	25.0000	M
ELEV OF SRD AB. MSL(WST)	SRD	0	M
ELEV OF GL AB. SRD(WST)	GL	-56.2500	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)		(VALUE)		(LIMITS)		
LAYER OPTION FLAG VELOC	LOFVEL	: 0		30479.7	-	0
USER VELOC (WST)	LAYVEL	: 2067.000	M/S	121.000	-	100.000
		2010.000		100.000		81.3000
		1524.000		81.3000		0
LAYER OPTION FLAG DENS	LOFDEN	:-1.000000		30479.7	-	0
USER SUPPLIED DENSITY DA	LAYDEN	: 0	G/C3	0	-	0

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
0	25.0	0						1524
2.00	26.5	1.5	1524	1524	654.17	982.25	1310.34	1524
4.00	28.0	3.0	1524	1524	652.18	980.26	1308.34	1524
6.00	29.6	4.6	1524	1524	650.20	978.27	1306.35	1524
8.00	31.1	6.1	1524	1524	648.22	976.28	1304.36	1524
10.00	32.6	7.6	1524	1524	646.24	974.30	1302.37	1524
12.00	34.1	9.1	1524	1524	644.28	972.32	1300.39	1524
14.00	35.7	10.7	1524	1524	642.32	970.35	1298.41	1524
16.00	37.2	12.2	1524	1524	640.36	968.38	1296.43	1524
18.00	38.7	13.7	1524	1524	638.41	966.42	1294.46	1524
20.00	40.2	15.2	1524	1524	636.47	964.46	1292.49	1524
22.00	41.8	16.8	1524	1524	634.54	962.50	1290.52	1524
24.00	43.3	18.3	1524	1524	632.61	960.54	1288.56	1524
26.00	44.8	19.8	1524	1524	630.68	958.60	1286.59	1524
28.00	46.3	21.3	1524	1524	628.77	956.65	1284.63	1524
30.00	47.9	22.9	1524	1524	626.85	954.71	1282.68	1524
32.00	49.4	24.4	1524	1524	624.95	952.77	1280.73	1524
34.00	50.9	25.9	1524	1524	623.05	950.84	1278.78	1524
36.00	52.4	27.4	1524	1524	621.15	948.91	1276.83	1524
38.00	54.0	29.0	1524	1524	619.27	946.99	1274.89	1524
40.00	55.5	30.5	1524	1524	617.39	945.06	1272.95	1524
42.00	57.0	32.0	1524	1524	615.51	943.15	1271.01	1524
44.00	58.5	33.5	1524	1524	613.64	941.24	1269.07	1524
46.00	60.1	35.1	1524	1524	611.78	939.33	1267.14	

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	61.6	36.6	1524	1524	609.92	937.42	1265.21	1524
50.00	63.1	38.1	1524	1524	608.07	935.52	1263.29	1524
52.00	64.6	39.6	1524	1524	606.23	933.62	1261.37	1524
54.00	66.1	41.1	1524	1524	604.39	931.73	1259.45	1524
56.00	67.7	42.7	1524	1524	602.55	929.84	1257.53	1524
58.00	69.2	44.2	1524	1524	600.73	927.96	1255.62	1524
60.00	70.7	45.7	1524	1524	598.91	926.08	1253.71	1524
62.00	72.2	47.2	1524	1524	597.09	924.20	1251.80	1524
64.00	73.8	48.8	1524	1524	595.28	922.33	1249.90	1524
66.00	75.3	50.3	1524	1524	593.48	920.46	1247.99	1524
68.00	76.8	51.8	1524	1524	591.68	918.60	1246.10	1524
70.00	78.3	53.3	1524	1524	589.89	916.74	1244.20	1524
72.00	79.9	54.9	1524	1524	588.11	914.88	1242.31	1573
74.00	81.4	56.4	1525	1525	585.76	912.17	1239.27	2010
76.00	83.4	58.4	1538	1540	577.77	900.96	1224.89	2010
78.00	85.5	60.5	1550	1554	570.27	890.48	1211.47	2010
80.00	87.5	62.5	1562	1567	563.20	880.65	1198.92	2010
82.00	89.5	64.5	1573	1579	556.53	871.40	1187.14	2010
84.00	91.5	66.5	1583	1591	550.21	862.67	1176.04	2010
86.00	93.5	68.5	1593	1602	544.20	854.40	1165.57	2010
88.00	95.5	70.5	1602	1612	538.48	846.56	1155.66	2010
90.00	97.5	72.5	1611	1622	533.02	839.10	1146.25	2010
92.00	99.5	74.5	1620	1632	527.79	831.98	1137.30	2054
94.00	101.6	76.6	1629	1642	522.36	824.55	1127.92	

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	103.6	78.6	1638	1652	517.04	817.27	1118.75	2067
98.00	105.7	80.7	1647	1661	511.94	810.32	1110.00	2067
100.00	107.8	82.8	1656	1670	507.03	803.66	1101.65	2067
102.00	109.8	84.8	1664	1679	502.32	797.27	1093.65	2067
104.00	111.9	86.9	1671	1687	497.77	791.14	1085.99	2067
106.00	114.0	89.0	1679	1695	493.39	785.24	1078.63	2067
108.00	116.0	91.0	1686	1703	489.15	779.55	1071.56	2067
110.00	118.1	93.1	1693	1710	485.05	774.06	1064.75	2067
112.00	120.2	95.2	1700	1717	481.07	768.75	1058.18	1890
114.00	122.1	97.1	1703	1720	478.40	765.41	1054.23	1798
116.00	123.9	98.9	1705	1722	476.33	762.98	1051.50	1805
118.00	125.7	100.7	1706	1723	474.25	760.52	1048.73	1832
120.00	127.5	102.5	1708	1725	472.03	757.85	1045.68	1805
122.00	129.3	104.3	1710	1726	470.00	755.46	1042.99	1944
124.00	131.3	106.3	1714	1730	467.19	751.88	1038.71	1937
126.00	133.2	108.2	1717	1733	464.48	748.45	1034.62	1856
128.00	135.0	110.0	1719	1735	462.27	745.76	1031.53	1884
130.00	136.9	111.9	1722	1738	459.93	742.88	1028.18	1900
132.00	138.8	113.8	1725	1740	457.55	739.92	1024.72	1902
134.00	140.7	115.7	1727	1743	455.19	737.00	1021.30	1981
136.00	142.7	117.7	1731	1747	452.46	733.49	1017.10	1929
138.00	144.6	119.6	1734	1749	450.04	730.46	1013.53	1893
140.00	146.5	121.5	1736	1752	447.83	727.75	1010.39	1913
142.00	148.4	123.4	1739	1754	445.56	724.93	1007.10	

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
144.00	150.4	125.4	1741	1757	443.23	722.01	1003.67	1932
146.00	152.3	127.3	1744	1759	440.92	719.12	1000.28	1935
148.00	154.3	129.3	1747	1762	438.63	716.25	996.92	1937
150.00	156.2	131.2	1749	1764	436.34	713.38	993.54	1945
152.00	158.2	133.2	1752	1767	434.00	710.42	990.05	1963
154.00	160.1	135.1	1754	1769	431.92	707.85	987.08	1911
156.00	162.0	137.0	1757	1771	429.67	705.01	983.74	1958
158.00	164.0	139.0	1759	1774	427.41	702.16	980.38	1966
160.00	166.0	141.0	1762	1777	425.11	699.24	976.93	1982
162.00	168.0	143.0	1765	1780	422.72	696.18	973.28	2011
164.00	170.0	145.0	1768	1783	420.38	693.19	969.73	2008
166.00	172.1	147.1	1772	1786	417.85	689.89	965.76	2063
168.00	174.2	149.2	1776	1791	415.19	686.38	961.50	2105
170.00	176.3	151.3	1780	1795	412.46	682.77	957.10	2131
172.00	178.5	153.5	1785	1801	409.42	678.66	952.02	2221
174.00	180.5	155.5	1788	1803	407.18	675.79	948.61	2032
176.00	182.7	157.7	1791	1807	404.71	672.55	944.70	2103
178.00	184.8	159.8	1795	1811	402.17	669.19	940.62	2131
180.00	186.9	161.9	1799	1815	399.59	665.77	936.47	2150
182.00	189.1	164.1	1803	1819	397.05	662.40	932.37	2153
184.00	191.2	166.2	1806	1822	394.77	659.43	928.81	2091
186.00	193.3	168.3	1809	1825	392.54	656.53	925.33	2088
188.00	195.4	170.4	1812	1828	390.32	653.63	921.85	2094
190.00	197.3	172.3	1814	1830	388.63	651.55	919.48	1939

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	199.4	174.4	1817	1833	386.31	648.48	915.77	2140
194.00	201.6	176.6	1820	1836	384.06	645.53	912.22	2126
196.00	203.7	178.7	1824	1840	381.69	642.37	908.39	2173
198.00	205.9	180.9	1827	1843	379.50	639.49	904.92	2129
200.00	208.0	183.0	1830	1846	377.48	636.87	901.79	2084
202.00	210.0	185.0	1832	1848	375.47	634.24	898.66	2092
204.00	212.1	187.1	1834	1850	373.62	631.87	895.88	2042
206.00	214.1	189.1	1836	1852	371.85	629.62	893.25	2023
208.00	216.3	191.3	1839	1856	369.60	626.61	889.59	2192
210.00	218.5	193.5	1842	1859	367.50	623.83	886.24	2152
212.00	220.6	195.6	1846	1862	365.37	620.99	882.80	2174
214.00	222.8	197.8	1849	1865	363.23	618.13	879.34	2185
216.00	225.0	200.0	1851	1868	361.24	615.51	876.19	2141
218.00	227.0	202.0	1853	1870	359.51	613.27	873.56	2058
220.00	229.2	204.2	1856	1873	357.51	610.61	870.35	2163
222.00	231.3	206.3	1859	1875	355.60	608.09	867.34	2137
224.00	233.5	208.5	1861	1878	353.63	605.47	864.17	2170
226.00	235.6	210.6	1864	1881	351.77	603.00	861.21	2140
228.00	237.8	212.8	1867	1884	349.75	600.28	857.92	2207
230.00	240.0	215.0	1869	1886	347.87	597.78	854.91	2162
232.00	242.2	217.2	1872	1889	345.93	595.18	851.76	2195
234.00	244.4	219.4	1875	1892	343.94	592.49	848.50	2222
236.00	246.7	221.7	1878	1896	341.90	589.71	845.10	2255
238.00	248.9	223.9	1881	1898	340.03	587.21	842.08	2193

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
240.00	251.1	226.1	1884	1902	338.03	584.49	838.75	2258
242.00	253.3	228.3	1887	1904	336.21	582.03	835.78	2197
244.00	255.5	230.5	1889	1907	334.41	579.60	832.85	2196
246.00	257.7	232.7	1892	1910	332.56	577.10	829.81	2223
248.00	259.9	234.9	1895	1912	330.80	574.74	826.96	2194
250.00	262.1	237.1	1897	1915	329.05	572.37	824.10	2203
252.00	264.4	239.4	1900	1917	327.25	569.93	821.13	2229
254.00	266.6	241.6	1902	1920	325.53	567.60	818.32	2206
256.00	268.8	243.8	1905	1922	323.80	565.26	815.48	2216
258.00	271.0	246.0	1907	1925	322.04	562.85	812.55	2242
260.00	273.2	248.2	1910	1927	320.35	560.56	809.78	2217
262.00	275.4	250.4	1912	1930	318.71	558.33	807.09	2203
264.00	277.6	252.6	1914	1932	317.12	556.18	804.50	2187
266.00	279.9	254.9	1917	1935	315.33	553.71	801.47	2290
268.00	282.2	257.2	1919	1937	313.67	551.44	798.72	2236
270.00	284.5	259.5	1922	1940	311.90	548.99	795.71	2301
272.00	286.6	261.6	1923	1941	310.48	547.08	793.44	2136
274.00	288.8	263.8	1925	1944	308.94	544.99	790.91	2204
276.00	291.0	266.0	1927	1945	307.46	542.98	788.50	2179
278.00	293.2	268.2	1929	1947	305.99	540.99	786.10	2182
280.00	295.3	270.3	1931	1949	304.55	539.03	783.75	2175
282.00	297.5	272.5	1933	1951	303.10	537.06	781.38	2185
284.00	299.7	274.7	1935	1953	301.63	535.05	778.96	2202
286.00	301.9	276.9	1936	1954	300.19	533.08	776.58	2197

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	304.1	279.1	1938	1956	298.75	531.10	774.19	2205
290.00	306.3	281.3	1940	1958	297.30	529.11	771.78	2215
292.00	308.5	283.5	1942	1960	295.89	527.19	769.46	2197
294.00	310.8	285.8	1944	1962	294.45	525.18	767.02	2232
296.00	313.0	288.0	1946	1964	293.04	523.25	764.68	2211
298.00	315.2	290.2	1948	1966	291.60	521.24	762.23	2246
300.00	317.4	292.4	1950	1967	290.20	519.30	759.87	2227
302.00	319.7	294.7	1952	1970	288.77	517.30	757.44	2254
304.00	321.9	296.9	1953	1971	287.42	515.43	755.17	2212
306.00	324.1	299.1	1955	1973	286.07	513.57	752.91	2217
308.00	326.3	301.3	1957	1974	284.79	511.80	750.78	2183
310.00	328.6	303.6	1958	1976	283.42	509.89	748.45	2247
312.00	330.8	305.8	1960	1978	282.01	507.90	746.01	2281
314.00	333.1	308.1	1962	1980	280.67	506.01	743.70	2249
316.00	335.4	310.4	1964	1982	279.30	504.09	741.35	2268
318.00	337.7	312.7	1967	1985	277.85	502.02	738.78	2334
320.00	340.0	315.0	1969	1986	276.50	500.11	736.44	2275
322.00	342.3	317.3	1971	1989	275.00	497.95	733.73	2385
324.00	344.7	319.7	1973	1991	273.61	495.96	731.28	2320
326.00	347.0	322.0	1975	1993	272.26	494.04	728.91	2304
328.00	349.3	324.3	1977	1995	270.94	492.17	726.60	2290
330.00	351.5	326.5	1979	1997	269.67	490.36	724.39	2267
332.00	353.9	328.9	1981	1999	268.32	488.42	721.98	2331
334.00	356.2	331.2	1983	2002	266.97	486.47	719.56	2341

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
								2402
336.00	358.6	333.6	1986	2004	265.54	484.39	716.96	2381
338.00	361.0	336.0	1988	2007	264.16	482.39	714.45	2502
340.00	363.5	338.5	1991	2010	262.61	480.11	711.56	2291
342.00	365.8	340.8	1993	2012	261.39	478.34	709.39	2382
344.00	368.2	343.2	1995	2014	260.05	476.39	706.94	2388
346.00	370.5	345.5	1997	2016	258.71	474.44	704.50	2460
348.00	373.0	348.0	2000	2019	257.29	472.34	701.85	2380
350.00	375.4	350.4	2002	2021	255.99	470.45	699.48	2435
352.00	377.8	352.8	2005	2024	254.63	468.44	696.95	2458
354.00	380.3	355.3	2007	2027	253.26	466.41	694.38	2365
356.00	382.6	357.6	2009	2029	252.02	464,60	692.12	2335
358.00	385.0	360.0	2011	2031	250.83	462.87	689.96	2370
360.00	387.3	362.3	2013	2033	249.61	461.07	687.72	2211
362.00	389.6	364.6	2014	2034	248.60	459.62	685.94	2226
364.00	391.8	366.8	2015	2035	247.57	458.14	684.13	2061
366.00	393.8	368.8	2016	2035	246.73	456.98	682.76	2080
368.00	395.9	370.9	2016	2035	245.88	455.79	681.35	2130
370.00	398.1	373.1	2017	2036	244.98	454,52	679.82	2425
372.00	400.5	375.5	2019	2038	243.75	452.68	677.49	2533
374.00	403.0	378.0	2021	2041	242.39	450.63	674.87	2424
376.00	405.4	380.4	2024	2043	241.18	448.83	672.59	2341
378.00	407.8	382.8	2025	2045	240.08	447.20	670.55	2474
380.00	410.3	385.3	2028	2047	238.84	445.33	668.16	2462
382.00	412.7	387.7	2030	2050	237.62	443.49	665.83	

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	415.3	390.3	2033	2053	236.32	441.51	663.28	2545
386.00	417.7	392.7	2035	2055	235.18	439.81	661.14	2409
388.00	420.1	395.1	2037	2057	234.02	438.05	658.90	2448
390.00	422.6	397.6	2039	2059	232.79	436.18	656.50	2513
392.00	425.2	400.2	2042	2063	231.47	434.14	653.87	2608
394.00	427.5	402.5	2043	2064	230.52	432.75	652.13	2274
396.00	429.7	404.7	2044	2064	229.70	431.55	650.68	2156
398.00	432.1	407.1	2046	2066	228.56	429.83	648.47	2467
400.00	434.6	409.6	2048	2069	227.46	428.16	646.35	2444
402.00	436.6	411.6	2048	2069	226.75	427.14	645.12	2063
404.00	439.2	414.2	2050	2071	225.59	425.36	642.85	2513
406.00	441.8	416.8	2053	2074	224.34	423.43	640.33	2609
408.00	444.2	419.2	2055	2076	223.27	421.80	638.25	2451
410.00	446.9	421.9	2058	2079	221.99	419.79	635.63	2668
412.00	449.3	424.3	2060	2081	220.96	418.21	633.61	2437
414.00	452.0	427.0	2063	2085	219.64	416.14	630.90	2717
416.00	454.7	429.7	2066	2088	218.39	414.18	628.33	2675
418.00	457.4	432.4	2069	2091	217.15	412.23	625.78	2676
420.00	460.1	435.1	2072	2094	215.92	410.30	623.26	2677
422.00	462.6	437.6	2074	2097	214.80	408.54	620.98	2587
424.00	465.3	440.3	2077	2100	213.65	406.74	618.63	2622
426.00	468.0	443.0	2080	2103	212.43	404.81	616.09	2712
428.00	470.5	445.5	2082	2105	211.42	403.24	614.06	2503
430.00	472.8	447.8	2083	2106	210.63	402.05	612.57	2266

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	475.2	450.2	2084	2107	209.70	400.60	610.71	2442
434.00	477.7	452.7	2086	2109	208.73	399.09	608.76	2485
436.00	480.4	455.4	2089	2112	207.57	397.24	606.33	2703
438.00	482.9	457.9	2091	2114	206.60	395.72	604.35	2514
440.00	485.7	460.7	2094	2118	205.41	393.82	601.84	2755
442.00	488.3	463.3	2096	2120	204.35	392.13	599.63	2634
444.00	490.4	465.4	2096	2120	203.72	391.20	598.48	2119
446.00	492.4	467.4	2096	2120	203.21	390.46	597.62	1957
448.00	494.3	469.3	2095	2119	202.73	389.78	596.83	1914
450.00	496.7	471.7	2097	2120	201.85	388.40	595.04	2453
452.00	499.0	474.0	2097	2121	201.14	387.31	593.68	2243
454.00	501.4	476.4	2099	2122	200.29	385.98	591.95	2434
456.00	504.1	479.1	2102	2126	199.18	384.20	589.59	2739
458.00	506.6	481.6	2103	2127	198.33	382.85	587.84	2458
460.00	509.3	484.3	2106	2130	197.24	381.09	585.50	2746
462.00	512.2	487.2	2109	2134	196.04	379.11	582.85	2891
464.00	515.1	490.1	2113	2138	194.83	377.14	580.20	2903
466.00	518.0	493.0	2116	2142	193.70	375.28	577.71	2844
468.00	520.5	495.5	2117	2143	192.85	373.94	575.95	2505
470.00	522.9	497.9	2119	2144	192.11	372.77	574.44	2375
472.00	525.2	500.2	2120	2145	191.37	371.60	572.94	2377
474.00	527.6	502.6	2121	2146	190.64	370.44	571.45	2378
476.00	530.0	505.0	2122	2147	189.91	369.29	569.96	2380
478.00	532.4	507.4	2123	2148	189.19	368.14	568.47	2382

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	534.8	509.8	2124	2149	188.46	367.00	566.99	2383
482.00	537.1	512.1	2125	2150	187.75	365.86	565.51	2385
484.00	539.5	514.5	2126	2152	187.03	364.72	564.04	2386
486.00	541.9	516.9	2127	2153	186.33	363.59	562.57	2388
488.00	544.3	519.3	2128	2154	185.62	362.46	561.11	2390
490.00	546.7	521.7	2129	2155	184.92	361.34	559.65	2391
492.00	549.1	524.1	2130	2156	184.22	360.23	558.19	2393
494.00	551.5	526.5	2132	2157	183.53	359.11	556.75	2394
496.00	553.9	528.9	2133	2158	182.80	357.93	555.20	2457
498.00	556.7	531.7	2135	2161	181.84	356.35	553.07	2779
500.00	559.1	534.1	2136	2162	181.19	355.31	551.71	2352
502.00	561.3	536.3	2137	2162	180.63	354.42	550.57	2222
504.00	563.3	538.3	2136	2161	180.18	353.73	549.72	2026
506.00	565.6	540.6	2137	2162	179.57	352.77	548.48	2292
508.00	568.1	543.1	2138	2163	178.84	351.57	546.90	2506
510.00	570.5	545.5	2139	2164	178.17	350.48	545.47	2416
512.00	573.2	548.2	2141	2166	177.37	349.16	543.70	2625
514.00	575.6	550.6	2143	2168	176.67	348.01	542.18	2477
516.00	578.3	553.3	2144	2170	175.88	346.71	540.43	2626
518.00	580.9	555.9	2146	2172	175.08	345.37	538.64	2655
520.00	583.4	558.4	2148	2173	174.41	344.26	537.16	2472
522.00	585.7	560.7	2148	2173	173.84	343.35	535.99	2286
524.00	588.1	563.1	2149	2174	173.20	342.30	534.60	2425
526.00	590.4	565.4	2150	2175	172.61	341.35	533.35	2342

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	592.7	567.7	2150	2175	172.09	340.51	532.27	2225
530.00	595.0	570.0	2151	2176	171.51	339.56	531.02	2347
532.00	597.4	572.4	2152	2177	170.90	338.56	529.71	2396
534.00	599.8	574.8	2153	2178	170.28	337.54	528.35	2428
536.00	602.4	577.4	2154	2179	169.61	336.42	526.84	2525
538.00	604.7	579.7	2155	2180	169.06	335.52	525.67	2313
540.00	607.1	582.1	2156	2181	168.44	334.49	524.29	2451
542.00	609.8	584.8	2158	2183	167.70	333.24	522.61	2657
544.00	612.4	587.4	2160	2185	166.97	332.02	520.95	2644
546.00	614.9	589.9	2161	2186	166.34	330.97	519.54	2488
548.00	617.2	592.2	2161	2186	165.82	330.12	518.43	2293
550.00	620.0	595.0	2164	2189	165.04	328.78	516.59	2772
552.00	622.5	597.5	2165	2190	164.41	327.72	515.16	2521
554.00	625.0	600.0	2166	2191	163.81	326.71	513.82	2467
556.00	627.4	602.4	2167	2192	163.23	325.75	512.52	2438
558.00	629.9	604.9	2168	2193	162.65	324.78	511.23	2441
560.00	632.3	607.3	2169	2194	162.08	323.83	509.96	2431
562.00	634.6	609.6	2169	2194	161.58	323.00	508.86	2310
564.00	637.1	612.1	2170	2195	161.00	322.03	507.56	2457
566.00	639.6	614.6	2172	2196	160.41	321.03	506.20	2501
568.00	642.0	617.0	2173	2197	159.84	320.07	504.91	2464
570.00	644.3	619.3	2173	2198	159.35	319.25	503.83	2306
572.00	646.5	621.5	2173	2198	158.93	318.56	502.93	2170
574.00	648.7	623.7	2173	2198	158.48	317.82	501.95	2231

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
576.00	651.2	626.2	2174	2199	157.90	316.83	500.61	2513
578.00	653.9	628.9	2176	2201	157.24	315.70	499.07	2660
580.00	656.4	631.4	2177	2202	156.68	314.74	497.77	2497
582.00	658.8	633.8	2178	2202	156.16	313.86	496.58	2416
584.00	661.2	636.2	2179	2203	155.64	312.98	495.39	2419
586.00	663.7	638.7	2180	2204	155.09	312.05	494.13	2473
588.00	666.2	641.2	2181	2205	154.54	311.10	492.84	2504
590.00	668.8	643.8	2182	2207	153.94	310.07	491.43	2600
592.00	671.4	646.4	2184	2208	153.33	309.02	489.98	2632
594.00	674.1	649.1	2185	2210	152.72	307.95	488.51	2655
596.00	676.6	651.6	2187	2211	152.18	307.03	487.25	2500
598.00	679.1	654.1	2188	2212	151.62	306.07	485.94	2551
600.00	681.7	656.7	2189	2213	151.08	305.15	484.67	2518
602.00	684.3	659.3	2191	2215	150.47	304.07	483.19	2687
604.00	686.9	661.9	2192	2216	149.91	303.10	481.85	2582
606.00	689.7	664.7	2194	2218	149.28	302.01	480.33	2731
608.00	692.5	667.5	2196	2221	148.59	300.79	478.62	2867
610.00	695.1	670.1	2197	2222	148.06	299.86	477.34	2564
612.00	697.8	672.8	2199	2224	147.47	298.83	475.92	2671
614.00	700.3	675.3	2200	2225	146.95	297.93	474.67	2545
616.00	702.9	677.9	2201	2226	146.41	296.99	473.37	2590
618.00	705.7	680.7	2203	2228	145.77	295.85	471.78	2820
620.00	708.4	683.4	2205	2230	145.20	294.84	470.37	2693
622.00	711.0	686.0	2206	2231	144.68	293.94	469.12	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
624.00	713.3	688.3	2206	2231	144.26	293.21	468.13	2352
626.00	715.6	690.6	2206	2232	143.86	292.53	467.21	2293
628.00	717.9	692.9	2207	2232	143.47	291.86	466.31	2267
630.00	720.3	695.3	2207	2232	143.03	291.09	465.25	2428
632.00	722.9	697.9	2208	2233	142.54	290.23	464.06	2537
634.00	725.6	700.6	2210	2235	141.98	289.24	462.67	2710
636.00	728.5	703.5	2212	2238	141.32	288.07	461.02	2925
638.00	731.1	706.1	2213	2239	140.82	287.17	459.77	2610
640.00	733.7	708.7	2215	2240	140.34	286.33	458.59	2553
642.00	736.1	711.1	2215	2241	139.89	285.54	457.51	2472
644.00	738.5	713.5	2216	2241	139.48	284.84	456.54	2376
646.00	741.0	716.0	2217	2242	139.02	284.03	455.41	2522
648.00	743.4	718.4	2217	2243	138.61	283.30	454.41	2410
650.00	745.8	720.8	2218	2243	138.21	282.60	453.45	2375
652.00	748.3	723.3	2219	2244	137.78	281.84	452.40	2468
654.00	750.7	725.7	2219	2244	137.35	281.09	451.36	2465
656.00	753.3	728.3	2220	2245	136.90	280.29	450.24	2529
658.00	756.0	731.0	2222	2247	136.39	279.38	448.95	2694
660.00	758.5	733.5	2223	2248	135.95	278.60	447.87	2519
662.00	760.8	735.8	2223	2248	135.58	277.94	446.95	2357
664.00	763.2	738.2	2224	2248	135.19	277.27	446.03	2368
666.00	765.6	740.6	2224	2249	134.82	276.61	445.13	2347
668.00	767.9	742.9	2224	2249	134.46	275.97	444.25	2336
670.00	770.2	745.2	2225	2249	134.09	275.33	443.36	2339

COMPANY : [illegible]ETROLEUM WELL : LONGTOM-1 AGE 17

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	772.6	747.6	2225	2250	133.71	274.65	442.41	2406
674.00	775.1	750.1	2226	2250	133.32	273.96	441.46	2415
676.00	777.6	752.6	2227	2251	132.89	273.19	440.37	2554
678.00	780.1	755.1	2227	2252	132.49	272.48	439.38	2459
680.00	782.5	757.5	2228	2252	132.10	271.78	438.41	2448
682.00	785.1	760.1	2229	2254	131.65	270.98	437.27	2612
684.00	787.7	762.7	2230	2254	131.24	270.23	436.21	2538
686.00	790.0	765.0	2230	2255	130.89	269.63	435.37	2318
688.00	792.3	767.3	2231	2255	130.55	269.01	434.53	2335
690.00	794.7	769.7	2231	2255	130.20	268.40	433.67	2347
692.00	797.0	772.0	2231	2256	129.85	267.76	432.78	2379
694.00	799.5	774.5	2232	2256	129.47	267.10	431.85	2435
696.00	801.8	776.8	2232	2256	129.13	266.48	430.99	2356
698.00	804.2	779.2	2233	2257	128.78	265.86	430.12	2376
700.00	806.7	781.7	2233	2257	128.39	265.16	429.13	2502
702.00	809.1	784.1	2234	2258	128.04	264.53	428.26	2386
704.00	811.5	786.5	2234	2258	127.71	263.93	427.41	2352
706.00	813.8	788.8	2235	2258	127.37	263.33	426.58	2345
708.00	816.1	791.1	2235	2259	127.05	262.75	425.77	2331
710.00	818.5	793.5	2235	2259	126.71	262.15	424.93	2360
712.00	820.8	795.8	2235	2259	126.40	261.58	424.13	2315
714.00	823.1	798.1	2236	2259	126.07	261.00	423.31	2342
716.00	825.5	800.5	2236	2260	125.73	260.38	422.45	2400
718.00	828.0	803.0	2237	2260	125.37	259.73	421.53	2463

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	830.5	805.5	2238	2261	125.00	259.06	420.57	2502
722.00	832.9	807.9	2238	2261	124.66	258.45	419.71	2405
724.00	835.3	810.3	2238	2262	124.32	257.84	418.84	2414
726.00	837.7	812.7	2239	2262	124.00	257.25	418.02	2373
728.00	840.1	815.1	2239	2262	123.67	256.66	417.18	2388
730.00	842.5	817.5	2240	2263	123.34	256.06	416.33	2408
732.00	844.9	819.9	2240	2263	123.01	255.46	415.48	2410
734.00	847.3	822.3	2241	2264	122.68	254.85	414.62	2419
736.00	849.7	824.7	2241	2264	122.37	254.28	413.82	2369
738.00	852.1	827.1	2241	2264	122.05	253.71	413.00	2380
740.00	854.6	829.6	2242	2265	121.70	253.06	412.08	2508
742.00	857.1	832.1	2243	2266	121.35	252.42	411.16	2505
744.00	859.5	834.5	2243	2266	121.03	251.84	410.33	2408
746.00	861.9	836.9	2244	2266	120.71	251.26	409.51	2396
748.00	864.3	839.3	2244	2267	120.40	250.69	408.71	2387
750.00	866.6	841.6	2244	2267	120.10	250.15	407.93	2353
752.00	869.0	844.0	2245	2267	119.79	249.58	407.12	2399
754.00	871.6	846.6	2246	2268	119.42	248.90	406.14	2598
756.00	874.1	849.1	2246	2269	119.09	248.29	405.27	2482
758.00	876.6	851.6	2247	2269	118.77	247.71	404.43	2442
760.00	878.9	853.9	2247	2270	118.47	247.15	403.64	2391
762.00	881.3	856.3	2248	2270	118.17	246.61	402.86	2380
764.00	883.8	858.8	2248	2271	117.85	246.00	401.99	2493
766.00	886.3	861.3	2249	2271	117.53	245.41	401.13	2478

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	888.9	863.9	2250	2272	117.17	244.75	400.19	2593
770.00	891.3	866.3	2250	2272	116.88	244.21	399.41	2391
772.00	893.7	868.7	2250	2273	116.59	243.68	398.64	2381
774.00	896.0	871.0	2251	2273	116.31	243.16	397.91	2344
776.00	898.3	873.3	2251	2273	116.03	242.65	397.18	2338
778.00	900.8	875.8	2251	2273	115.74	242.11	396.40	2409
780.00	903.3	878.3	2252	2274	115.41	241.49	395.50	2559
782.00	905.8	880.8	2253	2275	115.10	240.92	394.68	2464
784.00	908.6	883.6	2254	2276	114.71	240.18	393.60	2786
786.00	911.3	886.3	2255	2277	114.34	239.50	392.60	2689
788.00	913.8	888.8	2256	2278	114.03	238.92	391.75	2516
790.00	916.3	891.3	2256	2279	113.72	238.34	390.92	2504
792.00	918.6	893.6	2257	2279	113.45	237.83	390.18	2373
794.00	921.0	896.0	2257	2279	113.18	237.33	389.46	2362
796.00	923.4	898.4	2257	2279	112.90	236.82	388.73	2385
798.00	925.9	900.9	2258	2280	112.59	236.24	387.88	2534
800.00	928.3	903.3	2258	2280	112.32	235.73	387.14	2400
802.00	930.9	905.9	2259	2281	112.01	235.16	386.31	2527
804.00	933.4	908.4	2260	2282	111.71	234.58	385.47	2534
806.00	935.8	910.8	2260	2282	111.43	234.06	384.71	2434
808.00	938.3	913.3	2261	2282	111.14	233.53	383.94	2456
810.00	940.7	915.7	2261	2283	110.87	233.02	383.21	2408
812.00	943.2	918.2	2261	2283	110.59	232.49	382.43	2466
814.00	945.6	920.6	2262	2284	110.31	231.95	381.65	2484

TWO-WAY TRAVEL TIME FROM SRD MS	MEASURED DEPTH FROM KB M	VERTICAL DEPTH FROM SRD M	AVERAGE VELOCITY SRD/GEO M/S	RMS VELOCITY M/S	FIRST NORMAL MOVEOUT MS	SECOND NORMAL MOVEOUT MS	THIRD NORMAL MOVEOUT MS	INTERVAL VELOCITY M/S
816.00	948.1	923.1	2262	2284	110.03	231.44	380.90	2432
818.00	950.6	925.6	2263	2285	109.74	230.89	380.10	2519
820.00	953.2	928.2	2264	2285	109.44	230.32	379.26	2567
822.00	955.7	930.7	2264	2286	109.14	229.76	378.44	2547
824.00	958.2	933.2	2265	2287	108.85	229.22	377.64	2530
826.00	960.8	935.8	2266	2287	108.57	228.68	376.84	2523
828.00	963.3	938.3	2266	2288	108.27	228.11	376.02	2570
830.00	965.9	940.9	2267	2289	107.99	227.57	375.22	2530
832.00	968.3	943.3	2268	2289	107.71	227.06	374.47	2486
834.00	970.8	945.8	2268	2290	107.44	226.54	373.70	2495
836.00	973.4	948.4	2269	2290	107.16	226.00	372.92	2530
838.00	975.9	950.9	2269	2291	106.88	225.49	372.16	2492
840.00	978.5	953.5	2270	2292	106.59	224.92	371.32	2617
842.00	981.0	956.0	2271	2292	106.30	224.38	370.53	2553
844.00	983.6	958.6	2272	2293	106.02	223.85	369.73	2562
846.00	986.2	961.2	2272	2294	105.72	223.27	368.88	2646
848.00	988.8	963.8	2273	2294	105.45	222.75	368.12	2522
850.00	991.3	966.3	2274	2295	105.18	222.24	367.37	2515
852.00	993.8	968.8	2274	2295	104.92	221.75	366.64	2479
854.00	996.2	971.2	2274	2296	104.68	221.28	365.95	2430
856.00	998.6	973.6	2275	2296	104.43	220.83	365.28	2411
858.00	1001.1	976.1	2275	2296	104.18	220.35	364.57	2463
860.00	1003.5	978.5	2276	2297	103.94	219.88	363.89	2438
862.00	1006.0	981.0	2276	2297	103.69	219.40	363.18	2474

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
864.00	1008.5	983.5	2277	2298	103.42	218.89	362.42	2551
866.00	1010.9	985.9	2277	2298	103.18	218.43	361.75	2426
868.00	1013.4	988.4	2277	2299	102.93	217.96	361.04	2482
870.00	1015.9	990.9	2278	2299	102.69	217.50	360.37	2437
872.00	1018.4	993.4	2278	2299	102.43	217.01	359.63	2527
874.00	1021.0	996.0	2279	2300	102.16	216.49	358.87	2581
876.00	1023.5	998.5	2280	2301	101.91	216.00	358.14	2530
878.00	1026.2	1001.2	2281	2302	101.62	215.45	357.31	2684
880.00	1028.9	1003.9	2282	2303	101.33	214.88	356.45	2729
882.00	1031.6	1006.6	2283	2304	101.04	214.32	355.62	2696
884.00	1034.3	1009.3	2284	2305	100.75	213.76	354.77	2718
886.00	1037.0	1012.0	2284	2305	100.48	213.24	354.00	2631
888.00	1039.6	1014.6	2285	2306	100.22	212.73	353.23	2616
890.00	1042.2	1017.2	2286	2307	99.95	212.21	352.45	2635
892.00	1044.8	1019.8	2286	2308	99.70	211.73	351.73	2558
894.00	1047.4	1022.4	2287	2308	99.43	211.20	350.94	2659
896.00	1050.1	1025.1	2288	2309	99.16	210.69	350.18	2634
898.00	1052.9	1027.9	2289	2311	98.86	210.10	349.27	2844
900.00	1055.7	1030.7	2290	2312	98.57	209.53	348.42	2774
902.00	1058.3	1033.3	2291	2312	98.32	209.05	347.69	2587
904.00	1061.1	1036.1	2292	2314	98.01	208.45	346.78	2870
906.00	1063.8	1038.8	2293	2315	97.75	207.94	346.01	2665
908.00	1066.4	1041.4	2294	2315	97.51	207.47	345.32	2553
910.00	1068.8	1043.8	2294	2315	97.28	207.04	344.67	2487

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	1071.5	1046.5	2295	2316	97.04	206.56	343.94	2614
914.00	1074.1	1049.1	2296	2317	96.78	206.05	343.17	2683
916.00	1076.8	1051.8	2297	2318	96.51	205.53	342.39	2709
918.00	1079.4	1054.4	2297	2319	96.27	205.06	341.69	2588
920.00	1082.1	1057.1	2298	2319	96.01	204.56	340.92	2690
922.00	1084.8	1059.8	2299	2320	95.75	204.05	340.15	2716
924.00	1087.5	1062.5	2300	2321	95.51	203.58	339.44	2616
926.00	1090.0	1065.0	2300	2322	95.27	203.12	338.74	2591
928.00	1092.6	1067.6	2301	2322	95.05	202.68	338.08	2550
930.00	1095.2	1070.2	2301	2323	94.82	202.23	337.40	2577
932.00	1097.8	1072.8	2302	2323	94.58	201.76	336.69	2632
934.00	1100.4	1075.4	2303	2324	94.34	201.30	335.99	2618
936.00	1103.0	1078.0	2304	2325	94.11	200.84	335.29	2621
938.00	1105.6	1080.6	2304	2325	93.88	200.39	334.63	2577
940.00	1108.2	1083.2	2305	2326	93.65	199.95	333.95	2585
942.00	1110.8	1085.8	2305	2326	93.43	199.52	333.30	2561
944.00	1113.5	1088.5	2306	2327	93.18	199.03	332.55	2718
946.00	1116.4	1091.4	2307	2329	92.90	198.47	331.70	2898
948.00	1118.8	1093.8	2308	2329	92.71	198.09	331.13	2422
950.00	1121.6	1096.6	2309	2330	92.45	197.59	330.36	2773
952.00	1124.2	1099.2	2309	2331	92.23	197.15	329.70	2600
954.00	1126.7	1101.7	2310	2331	92.03	196.75	329.09	2499
956.00	1129.5	1104.5	2311	2332	91.76	196.24	328.30	2824
958.00	1132.0	1107.0	2311	2333	91.56	195.83	327.68	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
960.00	1134.6	1109.6	2312	2333	91.34	195.41	327.04	2586
962.00	1137.2	1112.2	2312	2334	91.13	194.99	326.40	2570
964.00	1139.8	1114.8	2313	2334	90.91	194.55	325.73	2639
966.00	1142.5	1117.5	2314	2335	90.68	194.11	325.06	2653
968.00	1145.2	1120.2	2315	2336	90.44	193.63	324.32	2763
970.00	1147.8	1122.8	2315	2337	90.22	193.20	323.68	2601
972.00	1150.5	1125.5	2316	2337	90.01	192.79	323.04	2604
974.00	1153.0	1128.0	2316	2338	89.81	192.38	322.42	2563
976.00	1155.6	1130.6	2317	2338	89.60	191.97	321.79	2590
978.00	1158.2	1133.2	2317	2339	89.40	191.57	321.19	2550
980.00	1160.8	1135.8	2318	2339	89.19	191.16	320.56	2603
982.00	1163.6	1138.6	2319	2340	88.95	190.68	319.82	2807
984.00	1166.1	1141.1	2319	2341	88.74	190.28	319.20	2578
986.00	1168.8	1143.8	2320	2341	88.53	189.85	318.55	2662
988.00	1171.7	1146.7	2321	2343	88.27	189.34	317.76	2889
990.00	1174.2	1149.2	2322	2343	88.09	188.97	317.20	2501
992.00	1176.8	1151.8	2322	2344	87.88	188.57	316.58	2619
994.00	1179.5	1154.5	2323	2344	87.67	188.14	315.92	2680
996.00	1182.0	1157.0	2323	2345	87.47	187.76	315.34	2544
998.00	1184.7	1159.7	2324	2345	87.26	187.34	314.70	2661
1000.00	1187.8	1162.8	2326	2347	86.98	186.76	313.80	3119
1002.00	1190.9	1165.9	2327	2349	86.69	186.19	312.90	3114
1004.00	1194.0	1169.0	2329	2351	86.41	185.62	312.01	3111
1006.00	1196.8	1171.8	2330	2352	86.18	185.18	311.33	2765

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	1199.4	1174.4	2330	2352	85.98	184.78	310.72	2638
1010.00	1202.1	1177.1	2331	2353	85.78	184.38	310.10	2651
1012.00	1204.5	1179.5	2331	2353	85.61	184.04	309.58	2450
1014.00	1207.2	1182.2	2332	2354	85.42	183.66	308.99	2612
1016.00	1210.1	1185.1	2333	2355	85.17	183.16	308.22	2953
1018.00	1213.0	1188.0	2334	2356	84.93	182.67	307.46	2927
1020.00	1216.1	1191.1	2335	2358	84.67	182.15	306.65	3035
1022.00	1219.0	1194.0	2337	2359	84.43	181.67	305.90	2921
1024.00	1221.9	1196.9	2338	2360	84.20	181.21	305.19	2873
1026.00	1224.6	1199.6	2338	2361	83.99	180.79	304.53	2767
1028.00	1227.4	1202.4	2339	2362	83.78	180.36	303.86	2794
1030.00	1230.4	1205.4	2341	2363	83.55	179.89	303.13	2930
1032.00	1233.3	1208.3	2342	2364	83.30	179.40	302.36	2988
1034.00	1236.4	1211.4	2343	2366	83.05	178.90	301.58	3023
1036.00	1239.5	1214.5	2345	2368	82.80	178.38	300.76	3100
1038.00	1242.5	1217.5	2346	2369	82.55	177.89	300.00	3010
1040.00	1245.6	1220.6	2347	2371	82.30	177.37	299.19	3096
1042.00	1248.8	1223.8	2349	2372	82.03	176.83	298.34	3172
1044.00	1251.9	1226.9	2350	2374	81.78	176.31	297.52	3121
1046.00	1255.2	1230.2	2352	2376	81.49	175.72	296.59	3335
1048.00	1258.3	1233.3	2354	2378	81.24	175.23	295.81	3067
1050.00	1261.2	1236.2	2355	2379	81.02	174.78	295.11	2931
1052.00	1263.6	1238.6	2355	2379	80.87	174.48	294.65	2436
1054.00	1266.1	1241.1	2355	2379	80.72	174.18	294.18	2452

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	1268.6	1243.6	2355	2379	80.56	173.87	293.70	2496
1058.00	1271.7	1246.7	2357	2381	80.32	173.37	292.92	3088
1060.00	1274.7	1249.7	2358	2382	80.09	172.91	292.20	3006
1062.00	1277.9	1252.9	2359	2384	79.83	172.39	291.37	3209
1064.00	1281.0	1256.0	2361	2386	79.60	171.91	290.62	3070
1066.00	1283.9	1258.9	2362	2387	79.39	171.48	289.94	2941
1068.00	1286.9	1261.9	2363	2388	79.17	171.04	289.25	2960
1070.00	1289.8	1264.8	2364	2389	78.95	170.60	288.55	2986
1072.00	1292.8	1267.8	2365	2390	78.74	170.16	287.86	2973
1074.00	1295.3	1270.3	2366	2391	78.58	169.85	287.39	2526
1076.00	1297.5	1272.5	2365	2390	78.48	169.64	287.06	2127
1078.00	1300.3	1275.3	2366	2391	78.28	169.24	286.44	2857
1080.00	1303.2	1278.2	2367	2392	78.08	168.84	285.81	2873
1082.00	1306.2	1281.2	2368	2393	77.87	168.41	285.13	2982
1084.00	1308.9	1283.9	2369	2394	77.69	168.05	284.56	2753
1086.00	1311.5	1286.5	2369	2394	77.54	167.75	284.09	2531
1088.00	1314.2	1289.2	2370	2395	77.37	167.39	283.53	2738
1090.00	1317.2	1292.2	2371	2396	77.16	166.96	282.85	3011
1092.00	1319.9	1294.9	2372	2397	76.98	166.61	282.30	2726
1094.00	1322.8	1297.8	2373	2398	76.79	166.22	281.69	2873
1096.00	1325.7	1300.7	2374	2399	76.60	165.84	281.08	2866
1098.00	1328.6	1303.6	2375	2400	76.41	165.44	280.45	2929
1100.00	1330.8	1305.8	2374	2400	76.30	165.22	280.11	2214
1102.00	1333.4	1308.4	2375	2400	76.15	164.91	279.64	2580

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	1336.2	1311.2	2375	2401	75.97	164.55	279.06	2808
1106.00	1339.2	1314.2	2376	2402	75.77	164.15	278.43	2955
1108.00	1342.1	1317.1	2377	2403	75.59	163.77	277.83	2884
1110.00	1344.9	1319.9	2378	2404	75.40	163.40	277.24	2859
1112.00	1347.6	1322.6	2379	2404	75.24	163.06	276.71	2729
1114.00	1350.5	1325.5	2380	2405	75.06	162.70	276.13	2844
1116.00	1353.4	1328.4	2381	2406	74.87	162.31	275.52	2926
1118.00	1356.1	1331.1	2381	2407	74.71	161.98	275.00	2722
1120.00	1359.1	1334.1	2382	2408	74.52	161.59	274.39	2954
1122.00	1362.2	1337.2	2384	2409	74.31	161.15	273.69	3138
1124.00	1365.2	1340.2	2385	2411	74.11	160.75	273.05	2998
1126.00	1368.2	1343.2	2386	2412	73.92	160.36	272.43	2991
1128.00	1371.2	1346.2	2387	2413	73.73	159.98	271.82	2959
1130.00	1374.2	1349.2	2388	2414	73.54	159.59	271.20	2993
1132.00	1377.2	1352.2	2389	2415	73.35	159.20	270.58	2993
1134.00	1380.0	1355.0	2390	2416	73.19	158.86	270.04	2801
1136.00	1382.9	1357.9	2391	2417	73.01	158.49	269.46	2934
1138.00	1385.6	1360.6	2391	2417	72.85	158.17	268.95	2753
1140.00	1388.5	1363.5	2392	2418	72.69	157.83	268.41	2812
1142.00	1391.5	1366.5	2393	2419	72.50	157.45	267.81	2997
1144.00	1394.4	1369.4	2394	2420	72.32	157.07	267.21	2982
1146.00	1397.7	1372.7	2396	2422	72.10	156.64	266.50	3220
1148.00	1400.7	1375.7	2397	2423	71.91	156.24	265.88	3056
1150.00	1404.0	1379.0	2398	2425	71.70	155.80	265.16	3263

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	1407.2	1382.2	2400	2427	71.48	155.35	264.45	3268
1154.00	1410.2	1385.2	2401	2428	71.30	154.98	263.86	2998
1156.00	1413.2	1388.2	2402	2429	71.13	154.62	263.28	2975
1158.00	1416.6	1391.6	2403	2431	70.90	154.15	262.52	3387
1160.00	1419.7	1394.7	2405	2432	70.71	153.75	261.89	3106
1162.00	1422.9	1397.9	2406	2434	70.51	153.34	261.22	3211
1164.00	1425.8	1400.8	2407	2435	70.34	153.00	260.69	2885
1166.00	1428.9	1403.9	2408	2436	70.16	152.62	260.08	3082
1168.00	1431.8	1406.8	2409	2437	69.99	152.28	259.53	2951
1170.00	1435.1	1410.1	2410	2438	69.79	151.86	258.86	3217
1172.00	1438.4	1413.4	2412	2440	69.58	151.43	258.16	3320
1174.00	1442.6	1417.6	2415	2444	69.24	150.72	257.01	4209
1176.00	1445.9	1420.9	2416	2446	69.04	150.29	256.32	3312
1178.00	1449.5	1424.5	2418	2448	68.80	149.80	255.52	3556
1180.00	1452.4	1427.4	2419	2449	68.64	149.46	254.98	2968
1182.00	1455.5	1430.5	2420	2450	68.47	149.10	254.41	3052
1184.00	1459.7	1434.7	2423	2454	68.14	148.43	253.31	4186
1186.00	1462.8	1437.8	2425	2456	67.96	148.04	252.69	3185
1188.00	1465.9	1440.9	2426	2457	67.78	147.68	252.11	3093
1190.00	1469.2	1444.2	2427	2459	67.59	147.28	251.46	3275
1192.00	1472.3	1447.3	2428	2460	67.42	146.93	250.90	3085
1194.00	1475.5	1450.5	2430	2461	67.24	146.56	250.30	3163
1196.00	1478.6	1453.6	2431	2462	67.07	146.20	249.73	3101
1198.00	1481.8	1456.8	2432	2464	66.88	145.82	249.11	3239

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	1484.6	1459.6	2433	2464	66.75	145.53	248.65	2813
1202.00	1487.2	1462.2	2433	2465	66.63	145.28	248.25	2621
1204.00	1490.0	1465.0	2434	2465	66.49	145.00	247.80	2794
1206.00	1492.8	1467.8	2434	2466	66.36	144.72	247.36	2797
1208.00	1496.0	1471.0	2435	2467	66.18	144.36	246.77	3183
1210.00	1498.9	1473.9	2436	2468	66.04	144.06	246.30	2874
1212.00	1502.1	1477.1	2437	2469	65.86	143.69	245.69	3236
1214.00	1505.3	1480.3	2439	2471	65.69	143.33	245.11	3179
1216.00	1508.5	1483.5	2440	2472	65.52	142.98	244.53	3178
1218.00	1511.7	1486.7	2441	2474	65.34	142.60	243.93	3266
1220.00	1515.0	1490.0	2443	2475	65.16	142.23	243.33	3231
1222.00	1518.1	1493.1	2444	2476	65.00	141.90	242.80	3087
1224.00	1521.3	1496.3	2445	2478	64.83	141.54	242.21	3248
1226.00	1524.5	1499.5	2446	2479	64.66	141.18	241.63	3208
1228.00	1527.4	1502.4	2447	2480	64.52	140.90	241.18	2885
1230.00	1530.3	1505.3	2448	2481	64.38	140.61	240.71	2925
1232.00	1533.5	1508.5	2449	2482	64.22	140.27	240.16	3155
1234.00	1536.6	1511.6	2450	2483	64.06	139.94	239.63	3113
1236.00	1539.5	1514.5	2451	2484	63.92	139.66	239.16	2931
1238.00	1542.7	1517.7	2452	2485	63.76	139.31	238.60	3206
1240.00	1545.7	1520.7	2453	2486	63.61	139.01	238.11	3014
1242.00	1548.7	1523.7	2454	2487	63.47	138.71	237.64	2987
1244.00	1551.9	1526.9	2455	2488	63.31	138.38	237.10	3159
1246.00	1555.7	1530.7	2457	2491	63.09	137.91	236.33	3777

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	1559.6	1534.6	2459	2494	62.85	137.40	235.49	3926
1250.00	1562.9	1537.9	2461	2495	62.68	137.05	234.92	3294
1252.00	1566.1	1541.1	2462	2496	62.52	136.72	234.39	3159
1254.00	1569.2	1544.2	2463	2497	62.37	136.41	233.89	3108
1256.00	1572.3	1547.3	2464	2499	62.22	136.09	233.36	3173
1258.00	1575.4	1550.4	2465	2500	62.07	135.78	232.86	3118
1260.00	1578.7	1553.7	2466	2501	61.91	135.45	232.32	3239
1262.00	1581.9	1556.9	2467	2502	61.76	135.13	231.80	3163
1264.00	1584.9	1559.9	2468	2503	61.62	134.84	231.32	3068
1266.00	1588.2	1563.2	2469	2505	61.46	134.51	230.79	3239
1268.00	1591.1	1566.1	2470	2505	61.33	134.23	230.34	2983
1270.00	1594.1	1569.1	2471	2506	61.20	133.96	229.91	2937
1272.00	1597.0	1572.0	2472	2507	61.08	133.69	229.47	2955
1274.00	1599.9	1574.9	2472	2508	60.96	133.45	229.07	2855
1276.00	1602.7	1577.7	2473	2508	60.84	133.20	228.68	2818
1278.00	1605.5	1580.5	2473	2509	60.73	132.97	228.30	2779
1280.00	1608.2	1583.2	2474	2509	60.62	132.75	227.94	2723
1282.00	1611.0	1586.0	2474	2509	60.51	132.52	227.57	2748
1284.00	1613.7	1588.7	2475	2510	60.40	132.29	227.19	2794
1286.00	1616.4	1591.4	2475	2510	60.30	132.07	226.84	2689
1288.00	1619.6	1594.6	2476	2511	60.15	131.76	226.34	3209
1290.00	1622.9	1597.9	2477	2513	60.00	131.45	225.82	3233
1292.00	1626.2	1601.2	2479	2514	59.85	131.12	225.29	3302
1294.00	1629.4	1604.4	2480	2515	59.70	130.81	224.78	3241

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	1632.6	1607.6	2481	2516	59.56	130.51	224.30	3171
1298.00	1635.8	1610.8	2482	2518	59.42	130.21	223.81	3189
1300.00	1639.0	1614.0	2483	2519	59.27	129.91	223.32	3203
1302.00	1642.2	1617.2	2484	2520	59.13	129.61	222.82	3232
1304.00	1645.4	1620.4	2485	2521	58.99	129.32	222.34	3171
1306.00	1648.6	1623.6	2486	2522	58.85	129.03	221.87	3161
1308.00	1651.8	1626.8	2488	2524	58.71	128.72	221.36	3291
1310.00	1655.2	1630.2	2489	2525	58.55	128.40	220.83	3361
1312.00	1658.5	1633.5	2490	2526	58.41	128.09	220.33	3290
1314.00	1661.8	1636.8	2491	2528	58.26	127.78	219.81	3314
1316.00	1664.9	1639.9	2492	2529	58.13	127.51	219.37	3093
1318.00	1667.9	1642.9	2493	2530	58.01	127.25	218.95	3038
1320.00	1670.9	1645.9	2494	2530	57.89	127.00	218.55	2977
1322.00	1674.0	1649.0	2495	2531	57.77	126.74	218.12	3087
1324.00	1677.3	1652.3	2496	2533	57.62	126.43	217.61	3319
1326.00	1680.4	1655.4	2497	2534	57.50	126.17	217.19	3065
1328.00	1683.4	1658.4	2498	2534	57.38	125.92	216.77	3043
1330.00	1686.2	1661.2	2498	2535	57.28	125.71	216.44	2764
1332.00	1689.0	1664.0	2498	2535	57.18	125.50	216.09	2781
1334.00	1691.8	1666.8	2499	2536	57.08	125.28	215.74	2830
1336.00	1694.9	1669.9	2500	2537	56.95	125.03	215.32	3083
1338.00	1698.0	1673.0	2501	2537	56.83	124.77	214.90	3078
1340.00	1701.1	1676.1	2502	2538	56.71	124.52	214.48	3094
1342.00	1704.3	1679.3	2503	2540	56.58	124.23	214.01	3273

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	1707.6	1682.6	2504	2541	56.44	123.94	213.53	3292
1346.00	1710.9	1685.9	2505	2542	56.30	123.65	213.06	3293
1348.00	1714.2	1689.2	2506	2543	56.17	123.37	212.60	3246
1350.00	1717.4	1692.4	2507	2544	56.04	123.10	212.16	3195
1352.00	1720.5	1695.5	2508	2545	55.92	122.84	211.73	3146
1354.00	1723.8	1698.8	2509	2547	55.79	122.56	211.26	3312
1356.00	1727.0	1702.0	2510	2548	55.66	122.29	210.81	3232
1358.00	1730.3	1705.3	2511	2549	55.53	122.01	210.36	3246
1360.00	1733.3	1708.3	2512	2550	55.42	121.78	209.98	3019
1362.00	1736.2	1711.2	2513	2550	55.32	121.57	209.64	2866
1364.00	1739.3	1714.3	2514	2551	55.20	121.32	209.22	3156
1366.00	1742.5	1717.5	2515	2552	55.08	121.05	208.79	3209
1368.00	1745.7	1720.7	2516	2553	54.96	120.80	208.37	3150
1370.00	1748.9	1723.9	2517	2554	54.83	120.54	207.94	3214
1372.00	1752.0	1727.0	2517	2555	54.72	120.31	207.55	3071
1374.00	1755.2	1730.2	2519	2556	54.60	120.04	207.12	3247
1376.00	1758.2	1733.2	2519	2557	54.49	119.82	206.76	2966
1378.00	1761.2	1736.2	2520	2558	54.39	119.59	206.38	3037
1380.00	1764.4	1739.4	2521	2559	54.27	119.34	205.97	3181
1382.00	1767.6	1742.6	2522	2560	54.15	119.09	205.56	3189
1384.00	1770.5	1745.5	2522	2560	54.05	118.89	205.23	2875
1386.00	1773.2	1748.2	2523	2561	53.97	118.71	204.92	2770
1388.00	1776.0	1751.0	2523	2561	53.88	118.52	204.62	2767
1390.00	1778.8	1753.8	2523	2561	53.79	118.33	204.31	2781

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	1781.5	1756.5	2524	2562	53.70	118.15	204.01	2752
1394.00	1784.3	1759.3	2524	2562	53.62	117.98	203.73	2706
1396.00	1787.0	1762.0	2524	2562	53.54	117.80	203.43	2728
1398.00	1790.0	1765.0	2525	2563	53.43	117.57	203.06	3064
1400.00	1793.3	1768.3	2526	2564	53.32	117.33	202.66	3207
1402.00	1796.5	1771.5	2527	2565	53.20	117.08	202.25	3215
1404.00	1799.5	1774.5	2528	2566	53.10	116.86	201.89	3046
1406.00	1802.5	1777.5	2528	2566	53.00	116.66	201.55	2951
1408.00	1805.7	1780.7	2529	2567	52.89	116.42	201.15	3191
1410.00	1808.7	1783.7	2530	2568	52.79	116.20	200.80	3040
1412.00	1811.7	1786.7	2531	2569	52.69	115.99	200.45	3009
1414.00	1814.9	1789.9	2532	2570	52.57	115.75	200.05	3214
1416.00	1818.0	1793.0	2532	2570	52.47	115.53	199.68	3091
1418.00	1821.1	1796.1	2533	2571	52.36	115.30	199.31	3119
1420.00	1824.4	1799.4	2534	2573	52.25	115.05	198.90	3299
1422.00	1827.8	1802.8	2536	2574	52.12	114.79	198.46	3362
1424.00	1831.1	1806.1	2537	2575	52.01	114.55	198.06	3266
1426.00	1834.3	1809.3	2538	2576	51.90	114.32	197.67	3206
1428.00	1837.4	1812.4	2538	2577	51.79	114.09	197.30	3175
1430.00	1840.5	1815.5	2539	2578	51.69	113.87	196.94	3096
1432.00	1843.8	1818.8	2540	2579	51.58	113.63	196.54	3257
1434.00	1847.0	1822.0	2541	2580	51.47	113.40	196.15	3249
1436.00	1850.3	1825.3	2542	2581	51.36	113.16	195.76	3251
1438.00	1853.5	1828.5	2543	2582	51.25	112.93	195.37	3243

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	1856.9	1831.9	2544	2583	51.13	112.68	194.96	3327
1442.00	1860.2	1835.2	2545	2584	51.02	112.44	194.57	3297
1444.00	1863.3	1838.3	2546	2585	50.92	112.23	194.22	3107
1446.00	1866.1	1841.1	2546	2585	50.84	112.06	193.92	2851
1448.00	1869.0	1844.0	2547	2586	50.75	111.88	193.63	2880
1450.00	1871.8	1846.8	2547	2586	50.67	111.70	193.34	2829
1452.00	1874.7	1849.7	2548	2587	50.59	111.53	193.06	2844
1454.00	1877.5	1852.5	2548	2587	50.51	111.36	192.77	2835
1456.00	1880.4	1855.4	2549	2587	50.43	111.18	192.47	2890
1458.00	1883.2	1858.2	2549	2588	50.34	111.01	192.19	2852
1460.00	1886.7	1861.7	2550	2589	50.22	110.75	191.76	3461
1462.00	1891.1	1866.1	2553	2592	50.03	110.33	191.06	4400
1464.00	1895.4	1870.4	2555	2596	49.85	109.94	190.40	4318
1466.00	1899.8	1874.8	2558	2599	49.66	109.53	189.72	4378
1468.00	1904.1	1879.1	2560	2602	49.48	109.14	189.06	4318
1470.00	1908.4	1883.4	2563	2605	49.29	108.75	188.41	4327
1472.00	1912.8	1887.8	2565	2608	49.11	108.35	187.74	4373
1474.00	1917.2	1892.2	2567	2611	48.93	107.97	187.09	4332
1476.00	1921.4	1896.4	2570	2614	48.76	107.59	186.47	4285
1478.00	1925.9	1900.9	2572	2618	48.57	107.19	185.79	4467
1480.00	1930.4	1905.4	2575	2621	48.38	106.78	185.10	4517
1482.00	1934.9	1909.9	2577	2625	48.19	106.37	184.42	4484
1484.00	1939.9	1914.9	2581	2629	47.96	105.89	183.60	4957
1486.00	1944.7	1919.7	2584	2633	47.75	105.43	182.83	4821

COMPANY : H)ETROLEUM WELL : LONGTOM-1) AGE 34)

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	1949.5	1924.5	2587	2638	47.54	104.97	182.06	4857
1490.00	1954.3	1929.3	2590	2642	47.34	104.53	181.32	4764
1492.00	1959.1	1934.1	2593	2646	47.13	104.08	180.56	4843
1494.00	1963.8	1938.8	2595	2650	46.94	103.67	179.86	4669
1496.00	1968.6	1943.6	2598	2654	46.73	103.23	179.13	4802
1498.00	1973.2	1948.2	2601	2657	46.55	102.83	178.46	4623
1500.00	1978.1	1953.1	2604	2661	46.35	102.40	177.73	4836
1502.00	1983.0	1958.0	2607	2666	46.14	101.96	176.98	4907
1504.00	1987.6	1962.6	2610	2669	45.96	101.56	176.32	4648
1506.00	1992.4	1967.4	2613	2673	45.77	101.15	175.62	4761
1508.00	1997.2	1972.2	2616	2677	45.58	100.74	174.93	4777
1510.00	2001.9	1976.9	2618	2681	45.40	100.34	174.26	4748
1512.00	2006.7	1981.7	2621	2685	45.21	99.94	173.58	4758
1514.00	2011.3	1986.3	2624	2688	45.04	99.56	172.94	4652
1516.00	2015.9	1990.9	2627	2692	44.86	99.19	172.32	4605
1518.00	2020.7	1995.7	2629	2695	44.68	98.79	171.64	4810
1520.00	2025.2	2000.2	2632	2699	44.52	98.45	171.07	4479
1522.00	2029.2	2004.2	2634	2701	44.40	98.18	170.62	3965
1524.00	2033.2	2008.2	2635	2703	44.27	97.91	170.16	4012
1526.00	2037.0	2012.0	2637	2704	44.16	97.67	169.76	3769
1528.00	2040.7	2015.7	2638	2706	44.05	97.44	169.37	3744
1530.00	2044.6	2019.6	2640	2708	43.94	97.20	168.95	3852
1532.00	2048.3	2023.3	2641	2709	43.83	96.97	168.56	3731
1534.00	2052.4	2027.4	2643	2712	43.70	96.69	168.10	4098

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	2056.7	2031.7	2645	2714	43.56	96.38	167.58	4336
1538.00	2060.9	2035.9	2648	2717	43.43	96.09	167.09	4210
1540.00	2065.1	2040.1	2649	2719	43.30	95.82	166.63	4122
1542.00	2069.3	2044.3	2652	2722	43.17	95.52	166.13	4283
1544.00	2073.5	2048.5	2653	2724	43.04	95.25	165.66	4148
1546.00	2077.5	2052.5	2655	2726	42.92	94.99	165.24	4003
1548.00	2081.4	2056.4	2657	2728	42.81	94.75	164.82	3946
1550.00	2085.5	2060.5	2659	2730	42.69	94.49	164.38	4083
1552.00	2089.6	2064.6	2661	2733	42.56	94.22	163.93	4109
1554.00	2093.7	2068.7	2662	2735	42.44	93.96	163.49	4085
1556.00	2097.9	2072.9	2664	2737	42.32	93.69	163.04	4181
1558.00	2101.9	2076.9	2666	2739	42.21	93.45	162.62	4005
1560.00	2105.6	2080.6	2667	2740	42.11	93.24	162.27	3684
1562.00	2109.5	2084.5	2669	2742	42.00	93.01	161.88	3917
1564.00	2113.4	2088.4	2671	2744	41.90	92.78	161.49	3871
1566.00	2117.1	2092.1	2672	2746	41.80	92.57	161.13	3762
1568.00	2120.9	2095.9	2673	2747	41.70	92.35	160.77	3785
1570.00	2124.8	2099.8	2675	2749	41.60	92.13	160.40	3849
1572.00	2128.5	2103.5	2676	2750	41.50	91.92	160.05	3752
1574.00	2132.2	2107.2	2678	2752	41.41	91.72	159.70	3698
1576.00	2136.0	2111.0	2679	2753	41.31	91.51	159.35	3770
1578.00	2140.0	2115.0	2681	2755	41.20	91.27	158.95	4044
1580.00	2144.2	2119.2	2683	2758	41.08	91.02	158.52	4164
1582.00	2148.1	2123.1	2684	2759	40.98	90.79	158.14	3921

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	2152.0	2127.0	2686	2761	40.88	90.57	157.76	3932
1586.00	2156.2	2131.2	2688	2763	40.76	90.32	157.34	4162
1588.00	2160.4	2135.4	2689	2766	40.65	90.07	156.92	4169
1590.00	2164.5	2139.5	2691	2768	40.54	89.83	156.51	4098
1592.00	2168.5	2143.5	2693	2770	40.43	89.60	156.12	4053
1594.00	2172.8	2147.8	2695	2772	40.31	89.34	155.68	4294
1596.00	2176.8	2151.8	2696	2774	40.21	89.13	155.31	3932
1598.00	2180.9	2155.9	2698	2776	40.10	88.88	154.90	4168
1600.00	2185.2	2160.2	2700	2778	39.98	88.63	154.47	4297
1602.00	2189.0	2164.0	2702	2780	39.89	88.43	154.14	3789
1604.00	2193.3	2168.3	2704	2782	39.78	88.18	153.71	4257
1606.00	2197.6	2172.6	2706	2785	39.66	87.93	153.29	4282
1608.00	2201.9	2176.9	2708	2787	39.54	87.68	152.86	4333
1610.00	2206.2	2181.2	2710	2789	39.43	87.43	152.43	4328
1612.00	2210.3	2185.3	2711	2791	39.33	87.21	152.05	4060
1614.00	2214.0	2189.0	2712	2793	39.24	87.02	151.74	3704
1616.00	2218.0	2193.0	2714	2795	39.14	86.81	151.38	4012
1618.00	2222.0	2197.0	2716	2796	39.05	86.60	151.02	4025

ENCLOSURES

PE600684

This is an enclosure indicator page.
The enclosure PE600684 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600684 has the following characteristics:

ITEM_BARCODE	= PE600684
CONTAINER_BARCODE	= PE906538
NAME	= Drift Corrected Sonic
BASIN	= GIPPSLAND
ONSHORE?	= N
DATA_TYPE	= WELL
DATA_SUB_TYPE	= WELL_LOG
DESCRIPTION	= Drift Corrected Sonic
REMARKS	=
DATE_WRITTEN	= 23-JUN-1995
DATE_PROCESSED	=
DATE_RECEIVED	= 13-MAY-1996
RECEIVED_FROM	= BHP Petroleum Pty Ltd
WELL_NAME	= Longtom -1
CONTRACTOR	= Schlumberger
AUTHOR	=
ORIGINATOR	= BHP Petroleum Pty Ltd
TOP_DEPTH	= 2225
BOTTOM_DEPTH	= 100
ROW_CREATED_BY	= xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600685

This is an enclosure indicator page.
The enclosure PE600685 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600685 has the following characteristics:

ITEM_BARCODE	= PE600685
CONTAINER_BARCODE	= PE906538
NAME	= Vertical Seismic Profile
BASIN	= GIPPSLAND
ONSHORE?	= N
DATA_TYPE	= WELL
DATA_SUB_TYPE	= VELOCITY_CHART
DESCRIPTION	= Vertical Seismic Profile
REMARKS	=
DATE_WRITTEN	= 23-JUN-1995
DATE_PROCESSED	=
DATE_RECEIVED	= 13-MAY-1996
RECEIVED_FROM	= BHP Petroleum Pty Ltd
WELL_NAME	= Longtom -1
CONTRACTOR	= Schlumberger
AUTHOR	=
ORIGINATOR	= BHP Petroleum Pty Ltd
TOP_DEPTH	= 2237
BOTTOM_DEPTH	= 80
ROW_CREATED_BY	= xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600686

This is an enclosure indicator page.
The enclosure PE600686 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600686 has the following characteristics:

ITEM_BARCODE	PE600686
CONTAINER_BARCODE	PE906538
NAME	DISPL* Amplitude Spectrum
BASIN	GIPPSLAND
ONSHORE?	N
DATA_TYPE	WELL
DATA_SUB_TYPE	DIAGRAM
DESCRIPTION	DISPL* Amplitude Spectrum, Well Seismic Survey, Plot 1A (enclosure from Seismic Processing Report--attachment to WCR) for Longtom-1
REMARKS	PAGES: 1
DATE_WRITTEN	
DATE_PROCESSED	
DATE_RECEIVED	
RECEIVED_FROM	BHP Petroleum Pty Ltd
WELL_NAME	Longtom -1
CONTRACTOR	Schlumberger
AUTHOR	
ORIGINATOR	BHP Petroleum Pty Ltd
TOP_DEPTH	100
BOTTOM_DEPTH	2225
ROW_CREATED_BY	xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600687

This is an enclosure indicator page.
The enclosure PE600687 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600687 has the following characteristics:

ITEM_BARCODE	= PE600687
CONTAINER_BARCODE	= PE906538
NAME	= Geogram 25Hz
BASIN	= GIPPSLAND
ONSHORE?	= N
DATA_TYPE	= WELL
DATA_SUB_TYPE	= SYNTH_SEISMOGRAM
DESCRIPTION	= Geogram (Synthetic Seismogram) 25Hz
REMARKS	=
DATE_WRITTEN	= 23-JUN-1995
DATE_PROCESSED	=
DATE_RECEIVED	= 13-MAY-1996
RECEIVED_FROM	= BHP Petroleum Pty Ltd
WELL_NAME	= Longtom -1
CONTRACTOR	= Schlumberger
AUTHOR	=
ORIGINATOR	= BHP Petroleum Pty Ltd
TOP_DEPTH	= 2237
BOTTOM_DEPTH	= 80
ROW_CREATED_BY	= xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600688

This is an enclosure indicator page.
The enclosure PE600688 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600688 has the following characteristics:

ITEM_BARCODE	= PE600688
CONTAINER_BARCODE	= PE906538
NAME	= Geogram 35Hz
BASIN	= GIPPSLAND
ONSHORE?	= N
DATA_TYPE	= WELL
DATA_SUB_TYPE	= SYNTH_SEISMOGRAM
DESCRIPTION	= Geogram (Synthetic Seismogram) 35 Hz
REMARKS	=
DATE_WRITTEN	= 23-JUN-1995
DATE_PROCESSED	=
DATE_RECEIVED	= 13-MAY-1996
RECEIVED_FROM	= BHP Petroleum Pty Ltd
WELL_NAME	= Longtom -1
CONTRACTOR	= Schlumberger
AUTHOR	=
ORIGINATOR	= BHP Petroleum Pty Ltd
TOP_DEPTH	= 2237
BOTTOM_DEPTH	= 80
ROW_CREATED_BY	= xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600689

This is an enclosure indicator page.
The enclosure PE600689 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600689 has the following characteristics:

ITEM_BARCODE	PE600689
CONTAINER_BARCODE	PE906538
NAME	Seismic Calibration Log
BASIN	GIPPSLAND
ONSHORE?	N
DATA_TYPE	WELL
DATA_SUB_TYPE	VELOCITY_CHART
DESCRIPTION	Seismic Calibration Log - Adjusted Continuous Velocity Log
REMARKS	
DATE_WRITTEN	23-JUN-1995
DATE_PROCESSED	
DATE_RECEIVED	13-MAY-1996
RECEIVED_FROM	BHP Petroleum Pty Ltd
WELL_NAME	Longtom -1
CONTRACTOR	Schlumberger
AUTHOR	
ORIGINATOR	BHP Petroleum Pty Ltd
TOP_DEPTH	2237
BOTTOM_DEPTH	80
ROW_CREATED_BY	xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)

PE600690

This is an enclosure indicator page.
The enclosure PE600690 is enclosed within the container PE906538 at this location in this document.

The enclosure PE600690 has the following characteristics:

ITEM_BARCODE	PE600690
CONTAINER_BARCODE	PE906538
NAME	Geogram 45Hz
BASIN	GIPPSLAND
ONSHORE?	N
DATA_TYPE	WELL
DATA_SUB_TYPE	SYNTH_SEISMOGRAM
DESCRIPTION	Geogram (Synthetic Seismogram)
REMARKS	
DATE_WRITTEN	23-JUN-1995
DATE_PROCESSED	
DATE_RECEIVED	13-MAY-1996
RECEIVED_FROM	BHP Petroleum Pty Ltd
WELL_NAME	Longtom -1
CONTRACTOR	Schlumberger
AUTHOR	
ORIGINATOR	BHP Petroleum Pty Ltd
TOP_DEPTH	2237
BOTTOM_DEPTH	80
ROW_CREATED_BY	xls_kb00

(Inserted by DNRE - Vic Govt Mines Dept)