

ONSHORE

WELL VELOCITY SURVEY

HACKING #1

EP 13NT

NORTHERN TERRITORY

for

PACIFIC OIL & GAS PTY. LTD.

recorded by

VELOCITY DATA PTY. LTD.

processed by

VELSEIS PTY. LTD.
Brisbane, Australia
January 5, 1989.

303526

WELL VELOCITY SURVEY

HACKING #1

EP 13NT

NORTHERN TERRITORY

for

P A C I F I C O I L & G A S P T Y L T D

recorded by

VELOCITY DATA PTY. LTD.

processed by

VELSEIS PTY LTD

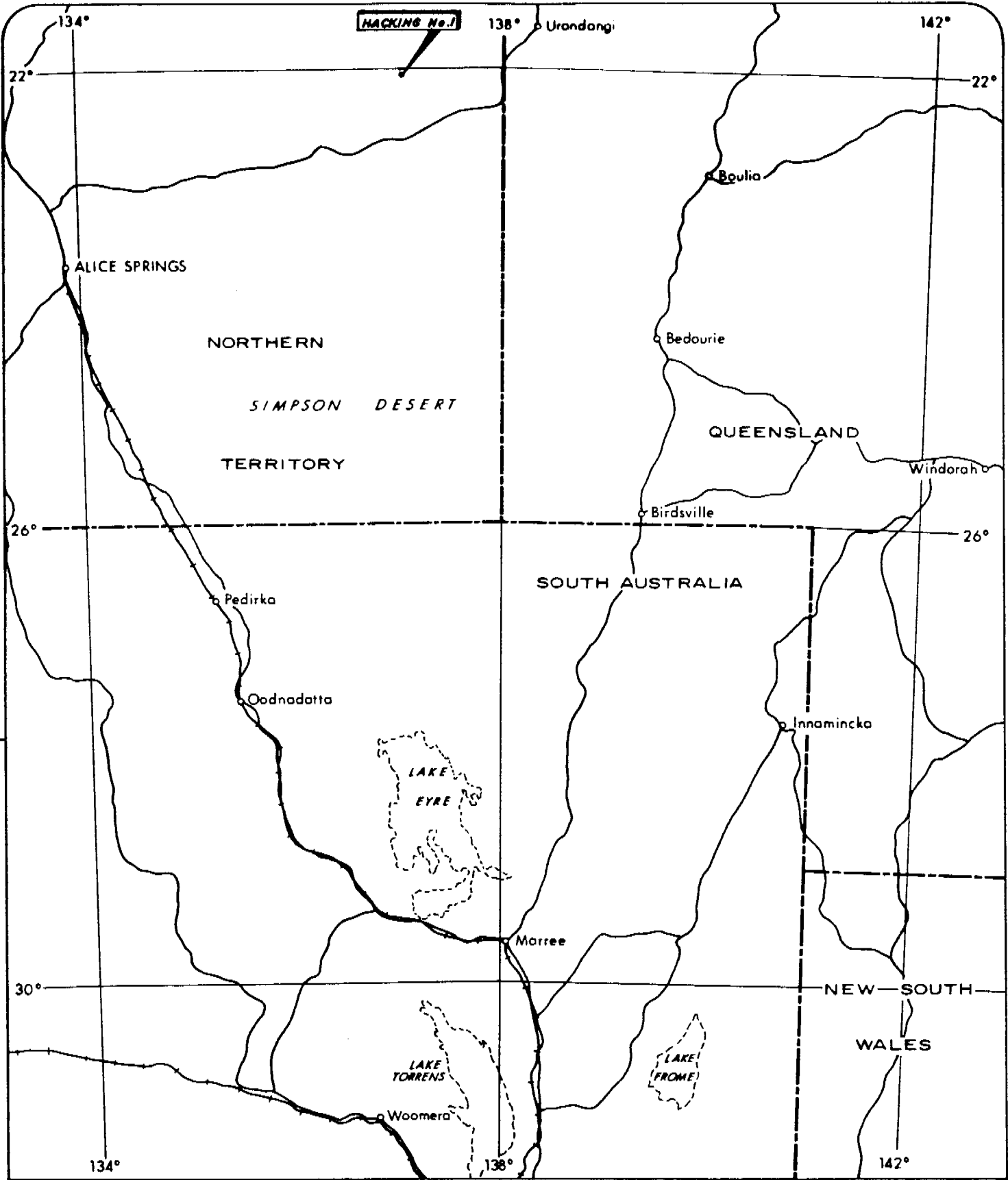
Brisbane, Australia

January 5, 1989

BARCODE N°: 100850.

CONTENTS

SUMMARY	...	...	...	1
GENERAL INFORMATION	...	...	...	1
EQUIPMENT	...	...	...	2
RECORDING	...	...	...	3
PROCESSING				
Elevation Data	...	...	...	3
Recorded Data	...	...	...	4
Correction for Instrument Delay and Shot Offset	...	...	...	4
Correction to Datum	...	...	...	4
Calibration of Sonic Log				
Method	...	...	...	5
Results	...	...	...	5
FIGURES				
Figure 1		Well location map		
Figure 2		Shot location sketch		
Figure 3		Time-depth and velocity curves		
Tables				
Table 1		Time-depth values		
Enclosures				
1.		Calculation Sheets		
2.		Copy of Analogu Records		



HACKING No.1
PACIFIC OIL AND GAS PTY. LTD.
WELL LOCATION MAP

Scale 1:5000000

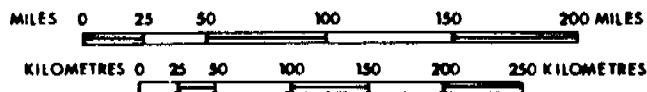
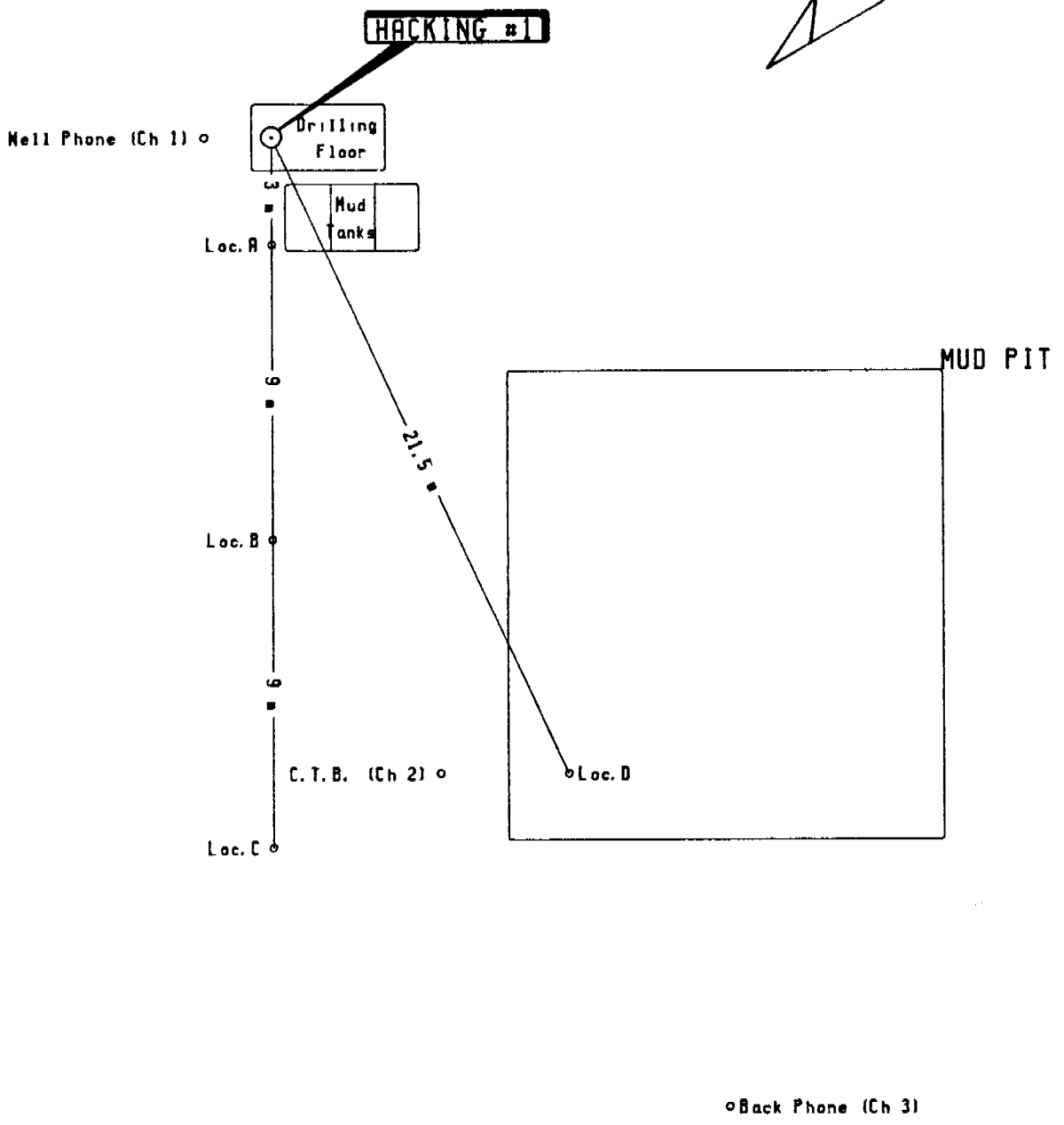


Figure 1



HACKING #1

PACIFIC OIL & GAS LTD.
 SHOT POINT LOCATION SKETCH



Figure 2

SUMMARY

Velocity Data Pty. Ltd. conducted a velocity survey for Pacific Oil & Gas Pty Ltd in the Hacking No.1 well, EP 13NT Northern Territory. The date of the survey was September 16th 1988.

The results of the survey, which are considered to be reliable, have been used to calibrate the sonic log.

Explosives were used as an energy source with shots being fired in the mud pit.

GENERAL INFORMATION

Name of Well	:	Hacking #1
Location (Figure 1)	:	EP 13NT, Northern Territory
Coordinates	:	Latitude 022 50' 16"
	:	Longitude 137 01' 03"
Date of Survey	:	September 16th, 1988
Wireline Logging	:	BPB Instruments.
Weather	:	Fine
Operational Base	:	Roma
Operator	:	G. Eather

EQUIPMENT

Downhole Tool

FM Monoline (48 mm)

Sensors:

4 SM6 4.5 Hz - 375 ohm connected in series
parallel.

Preamplifier:

-48 dB fixed gain

Time Delay:

4 milliseconds

Reference Geophone

Mark Products L1 (4.5 Hz)

Recording Instrument

VDLS 11/10 software controlled digital recording system utilising SIE OPA-10 floating point amplifiers for digital recording and SIE OPA-4 amplifiers for analog presentation. The system includes a DEC LSI-11 CPU, twin cassette tape unit and printer.

RECORDING

Energy Source : Explosive, AN-60
Shot Location : Mud pit
Charge Size : GDET to 4.0 (125 grm) sticks
Average Shot Depth : 1.0 metre
Average Shot Offset : 21.5 metres
Recording Geometry : Figure 2

Shots could not be recorded on tape and only paper monitors were available. Copies of the shots used are included with this report. (Enclosure 2)

The times were picked from the playouts the trace identification being as follows:

- i) second bottom trace time break.
- ii) top three traces well phone (the outputs of three different amplifier stages).

PROCESSING**Elevation Data**

Elevation of KB : 281.5 metres above sea level
Elevation of Ground : 279.0 metres above sea level
Elevation of Seismic Datum : 279.0 metres above sea level
Depth Surveyed : 1234.0 metres below KB
Total Depth : 1234.0 metres below KB
Depth of Casing : 249.6 metres below KB
Sonic Log Interval : 85.3 to 1234.2 metres below KB

PROCESSING**Recorded Data**

Number of Shots Used : 25
Number of Levels Recorded : 21
Data Quality : Poor
Noise Level : High
Rejected Shots : 6

Correction for Instrument Delay and Shot Offset

The 'corrected' times shown on the calculation sheet have been obtained via:

- (i) Subtraction of the tool delay (4msec) from the recorded arrival times
- (ii) geometric correction for non-verticality of ray paths resulting from shot offset.
- (iii) shot static correction to correct for the depth of shot below ground level at the well head using a correction velocity of 1000.0 m/sec
- (iv) readdition of the tool delay (4msec).

Correction to Datum

As no shot could be taken at datum it was necessary to introduce a value to compensate for the tool delay. This is the 4msec value applied to the datum level.

PROCESSING

Calibration of Sonic Log - Method

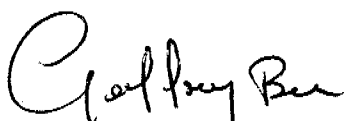
Sonic times were adjusted to checkshot times using a linear correction of the sonic transit times.

These differences arise as the sonic tool measures the local velocity characteristics of the formation with a high frequency signal, whereas the downhole geophone records the bulk velocity character using a signal of significantly lower frequency.

Calibration of Sonic Log - Results (Enclosure 1)

The discrepancies between shot and sonic interval velocities were generally small. The largest adjustment was 17.24 μ s/metre on the interval 380 to 438 metres below KB.

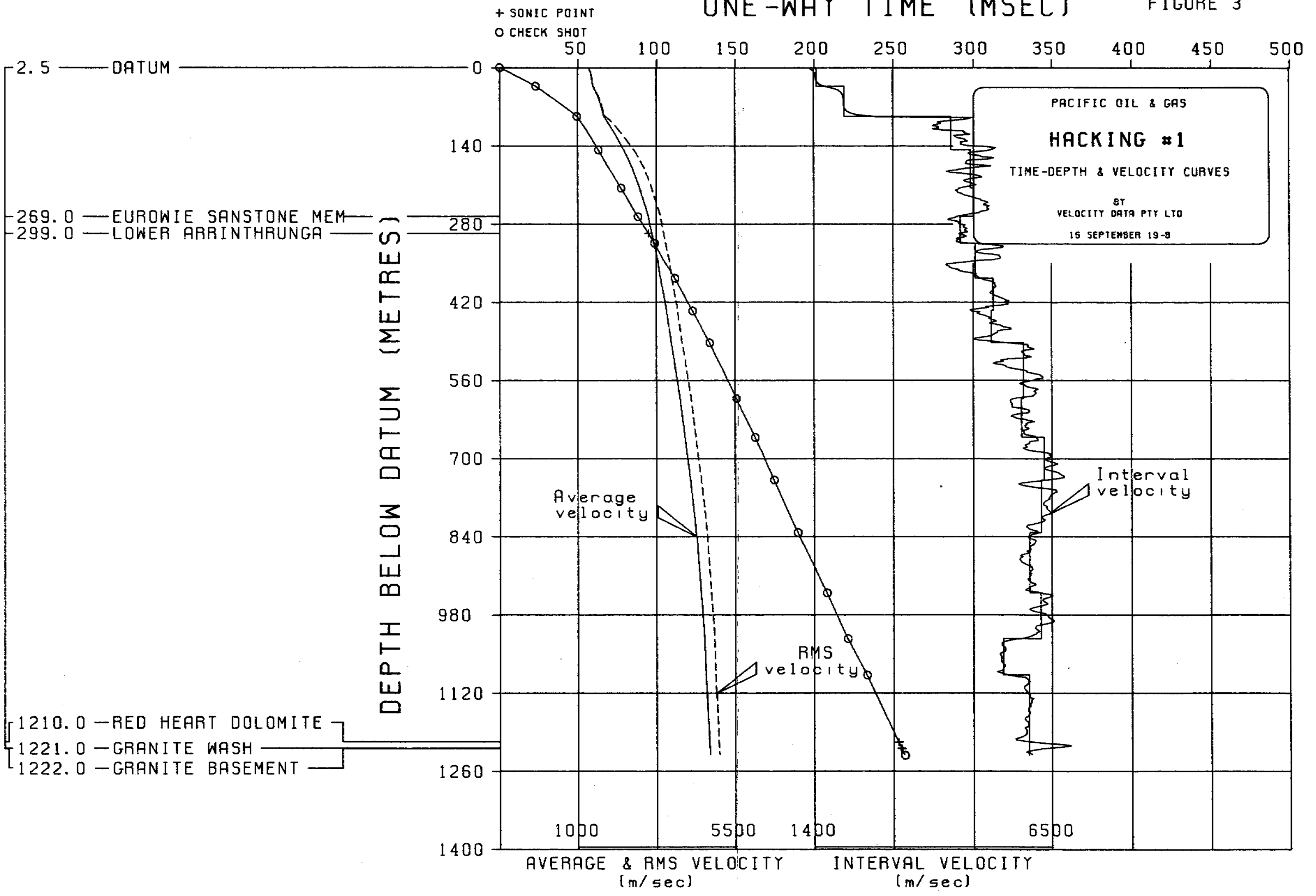
In aggregate, the shot and sonic interval times differed by -1.1 msec over the logged portion of the well.



Geoffrey Bell
Geophysical Analyst.

ONE-WAY TIME (MSEC)

FIGURE 3



VELOCITY DATA PTY LTD

WELL SURVEY CALCULATIONS Page 1

Company : PACIFIC OIL & GAS
 Well : HACKING #1
 Elevations : Datum : 279.0 Ground : 279.0 Kelly : 281.5
 Shot data : Location Elevation Offset
 A 279.0 3.0
 B 279.0 12.0
 C 279.0 21.0
 D 279.0 21.5

Latitude : 022 50 16
 Longitude : 137 01 03

Survey date : 16-SEPT-88
 Survey units : METRES
 Times in milliseconds.

Rig identification : ROCKDRILL - RIG #20
 Energy source : AN-60
 Logger : BFB V331
 Near surface velocity
 for shot statics: 1000
 Instrument delay: 4.0 ms

SHOT CALCULATIONS

Shot No	Geophone depth		Shot Locn	Shot Depth	TIMES				Check shot interval		Velocities		
	Kelly	Datum			Record	Corr.	Avg.	Below datum	Distance	Time	Average	RMS	Interval
DATUM													
	2.5	0.0					4.0	0.0					
2	36.0	33.5	A	0.3	27.0	27.2	27.2	23.2	33.5	23.2	1444.0	1444.0	1444.0
5	90.0	87.5	B	0.3	51.0	50.9	N/U		54.0	26.3			2053.2
6	90.0	87.5	C	0.3	50.0	49.0	N/U						
7	90.0	87.5	D	1.0	54.0	53.5							
8	90.0	87.5	D	1.0	54.0	53.5	53.5	49.5			1767.7	1793.6	
31	150.0	147.5	D	1.0	67.0	67.3	67.3	63.3	60.0	13.8	2330.2	2576.2	4347.8
30	218.0	215.5	D	1.0	81.0	81.6	81.6	77.6	68.0	14.3	2777.1	3095.3	4755.2
									51.0	10.6			4811.3
EUROWIE SANDSTONE MEMBER													
29	269.0	266.5	D	1.0	91.0	91.7							
9	269.0	266.5	D	1.0	92.0	92.7	92.2	88.2	48.0	10.6	3021.5	3348.4	4528.3
28	317.0	314.5	D	1.0	102.0	102.8	102.8	98.8	63.0	13.0	3183.2	3494.1	4846.2
27	380.0	377.5	D	1.0	115.0	115.8	115.8	111.8	58.0	11.1	3376.6	3676.9	5225.2
26	438.0	435.5	D	1.0	126.0	126.9	126.9	122.9	57.0	11.0	3543.5	3842.5	5181.8
25	495.0	492.5	D	1.0	137.0	137.9	137.9	133.9	100.0	17.0	3678.1	3969.6	5882.4
24	595.0	592.5	D	1.0	154.0	154.9	154.9	150.9	70.0	12.0	3926.4	4228.5	5833.3
23	665.0	662.5	D	1.0	166.0	166.9	166.9	162.9	76.0	12.0	4066.9	4366.9	6333.3
22	741.0	738.5	D	1.0	178.0	178.9	178.9	174.9	94.0	15.0	4222.4	4529.2	6266.7
ARTHUR CREEK FORMATION													
21	756.0	753.5	D	1.0	179.0	179.9	N/U						
20	805.0	802.5	D	1.0	187.0	187.9	N/U						
19	835.0	832.5	D	1.0	193.0	193.9	193.9	189.9			4383.9	4689.9	

VELOCITY DATA PTY LTD

WELL SURVEY CALCULATIONS Page 2

Company : PACIFIC OIL & GAS
 Well : HACKING #1
 Elevations : Datum : 279.0 Ground : 279.0 Kelly : 281.5
 Shot data : Location Elevation Offset
 A 279.0 3.0
 B 279.0 12.0
 C 279.0 21.0
 D 279.0 21.5

Latitude : 022 50 16
 Longitude : 137 01 03

Survey date : 16-SEPT-88
 Survey units : METRES
 Times in milliseconds.

Rig identification : ROCKDRILL - RIG #20
 Energy source : AN-60
 Logger : BPB V331
 Near surface velocity
 for shot statics: 1000
 Instrument delay: 4.0 ms

SHOT CALCULATIONS

Shot No	Geophone depth		Shot Loen	Shot Depth	TIMES				Check shot interval		Velocities		
	Kelly	Datum			Record	Corr.	Avg.	Below datum	Distance	Time	Average	RMS	Interval
19	835.0	832.5	D	1.0	193.0	193.9	193.9	189.9			4383.9	4689.9	
									108.0	18.0			6000.0
10	900.0	897.5	D	1.0	204.0	204.9	N/U						
18	943.0	940.5	D	1.0	211.0	211.9	211.9	207.9	82.0	13.1	4523.8	4817.5	6259.5
17	1025.0	1022.5	D	1.0	224.0	225.0	225.0	221.0	65.0	12.0	4626.7	4914.7	5416.7
16	1090.0	1087.5	D	1.0	236.0	237.0	237.0	233.0	144.0	24.0	4667.4	4941.8	6000.0
14	1180.0	1177.5	D	1.0	256.0	257.0	N/U						
13	1234.0	1231.5	D	1.0	260.0	261.0	261.0	257.0			4791.8	5050.1	

Company : PACIFIC OIL & GAS
 Well : HACKING #1
 Elevations : Datum : 279.0 Ground : 279.0 Kelly : 281.5

Latitude : 022 50 16
 Longitude : 137 01 03

Survey date : 16-SEPT-88
 Survey units : METRES
 Times in milliseconds.

SONIC DRIFT

Geophone depth		Check shot times		Check shot interval		Sonic Int. time	Interval sonic drift		Cumulative drift msec
Kelly	Datum	Average	Below datum	Distance	Time		usec/m	msec	
DATUM									
2.5	0.0	4.0	0.0						
36.0	33.5	27.2	23.2	33.5	23.2				
90.0	87.5	53.5	49.5	54.0	26.3				
150.0	147.5	67.3	63.3	60.0	13.8	13.1	11.67	0.7	0.7
218.0	215.5	81.6	77.6	68.0	14.3	13.3	14.71	1.0	1.7
				51.0	10.6	10.8	-3.92	-0.2	1.5
EUROWIE SANDSTONE MEMBER									
269.0	266.5	92.2	88.2	48.0	10.6	10.0	12.50	0.6	2.1
317.0	314.5	102.8	98.8	63.0	13.0	12.2	12.70	0.8	2.9
380.0	377.5	115.8	111.8	58.0	11.1	10.1	17.24	1.0	3.9
438.0	435.5	126.9	122.9	57.0	11.0	10.7	5.26	0.3	4.2
495.0	492.5	137.9	133.9	100.0	17.0	17.6	-6.00	-0.6	3.6
595.0	592.5	154.9	150.9	70.0	12.0	12.2	-2.86	-0.2	3.4
665.0	662.5	166.9	162.9	76.0	12.0	12.8	-10.53	-0.8	2.6
741.0	738.5	178.9	174.9	94.0	15.0	15.5	-5.32	-0.5	2.1
835.0	832.5	193.9	189.9	108.0	18.0	18.5	-4.63	-0.5	1.6
943.0	940.5	211.9	207.9	82.0	13.1	14.5	-17.07	-1.4	0.2
1025.0	1022.5	225.0	221.0	65.0	12.0	11.8	3.08	0.2	0.4
1090.0	1087.5	237.0	233.0	144.0	24.0	25.5	-10.42	-1.5	-1.1
1234.0	1231.5	261.0	257.0						

Company : PACIFIC OIL & GAS
 Well : HACKING #1
 Elevations : Datum : 279.0 Ground : 279.0 Kelly : 281.5

Latitude : 022 50 16
 Longitude : 137 01 03

Survey date : 16-SEPT-88
 Survey units : METRES
 Times in milliseconds.

SONIC CALIBRATION

Geophone depth		Interval Distance	Original sonic times		Adjusted sonic times		Velocities		
Kelly	Datum		Interval	Cumulative	Interval	Calibrated	Average	RMS	Interval
DATUM									
2.5	0.0								
		33.5							1444.0
36.0	33.5							1444.0	1444.0
		54.0							2053.2
90.0	87.5							1767.7	1793.6
		60.0	13.1		13.8				4347.8
150.0	147.5			13.1		63.3		2330.2	2576.2
		68.0	13.3		14.3				4755.2
218.0	215.5			26.4		77.6		2777.1	3095.3
		51.0	10.8		10.6				4811.3
EUROWIE SANDSTONE MEMBER									
269.0	266.5			37.2		88.2		3021.5	3348.4
		30.0	6.3		6.7				4494.4
LOWER ARRINTHRUNGA									
299.0	296.5			43.5		94.9		3125.2	3441.5
		18.0	3.7		3.9				4586.0
317.0	314.5			47.2		98.8		3183.2	3494.1
		63.0	12.2		13.0				4846.2
380.0	377.5			59.4		111.8		3376.6	3677.0
		58.0	10.1		11.1				5225.2
438.0	435.5			69.5		122.9		3543.5	3842.5
		57.0	10.7		11.0				5181.8
495.0	492.5			80.2		133.9		3678.1	3969.6
		100.0	17.6		17.0				5882.4
595.0	592.5			97.8		150.9		3926.4	4228.6
		70.0	12.2		12.0				5833.3
665.0	662.5			110.0		162.9		4066.9	4366.9
		76.0	12.8		12.0				6333.3
741.0	738.5			122.8		174.9		4222.4	4529.2
		94.0	15.5		15.0				6266.7
835.0	832.5			138.3		189.9		4383.9	4689.9
		108.0	18.5		18.0				6000.0
943.0	940.5			156.8		207.9		4523.8	4817.5
		82.0	14.5		13.1				6259.5
1025.0	1022.5			171.3		221.0		4626.7	4914.8
		65.0	11.8		12.0				5416.7
1090.0	1087.5			183.1		233.0		4667.4	4941.9
		120.0	21.4		20.1				5955.3
RED HEART DOLOMITE									
1210.0	1207.5			204.5		253.1		4769.9	5030.0
		11.0	1.7		1.6				6938.2
GRANITE WASH									
1221.0	1218.5			206.2		254.7		4783.4	5044.1

Company : PACIFIC OIL & GAS
 Well : HACKING #1
 Elevations : Datum : 279.0 Ground : 279.0 Kelly : 281.5

Latitude : 022 50 16
 Longitude : 137 01 03

Survey date : 16-SEPT-88
 Survey units : METRES
 Times in milliseconds.

SONIC CALIBRATION

Geophone depth		Interval Distance	Original sonic times		Adjusted sonic times		----- Velocities -----			
Kelly ----	Datum		Interval	-- Cumulative	Interval	-- Calibrated	Average --	RMS --	Interval	
GRANITE WASH										
1221.0	1218.5	1.0	0.2	206.2	0.2	254.7	4783.4	5044.1	5274.8	
GRANITE BASEMENT										
1222.0	1219.5	12.0	2.2	206.4	2.1	254.9	4783.8	5044.3	5783.1	
1234.0	1231.5			208.6		257.0	4791.8	5050.7		

TABLE 1.

Time-Depth curve values

Page 1.

Well : HACKING #1

Client : PACIFIC OIL & GAS

Survey units : METRES

Datum : 279.0

Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
2.0	1.5	1320	1320	1320	82.0	47.2	1735	1761	2201
4.0	3.0	1338	1338	1357	84.0	48.1	1746	1772	2292
6.0	4.4	1353	1353	1383	86.0	48.9	1757	1785	2447
8.0	5.9	1364	1365	1401	88.0	50.1	1757	1812	2723
10.0	7.3	1374	1374	1413	90.0	50.4	1784	1867	5697
12.0	8.7	1382	1382	1422	92.0	50.8	1810	1914	5119
14.0	10.1	1388	1389	1428	94.0	51.3	1833	1949	4360
16.0	11.5	1394	1394	1433	96.0	51.8	1855	1983	4293
18.0	12.9	1398	1399	1438	98.0	52.3	1873	2006	3544
20.0	14.3	1403	1403	1443	100.0	52.8	1893	2033	3929
22.0	15.6	1407	1407	1450	102.0	53.3	1913	2063	4195
24.0	17.0	1411	1412	1459	104.0	53.7	1936	2097	4779
26.0	18.4	1416	1416	1472	106.0	54.2	1954	2121	3861
28.0	19.7	1421	1422	1493	108.0	54.9	1968	2137	3201
30.0	21.0	1427	1428	1525	110.0	55.3	1989	2168	4669
32.0	22.3	1436	1437	1575	112.0	55.8	2008	2193	4240
34.0	23.5	1447	1449	1659	114.0	56.3	2026	2216	3986
36.0	24.6	1462	1465	1766	116.0	56.6	2048	2250	5276
38.0	25.7	1478	1483	1851	118.0	57.0	2068	2281	5003
40.0	26.8	1495	1502	1911	120.0	57.5	2088	2310	4841
42.0	27.8	1512	1521	1953	122.0	57.9	2106	2332	4260
44.0	28.8	1528	1540	1982	124.0	58.4	2124	2355	4424
46.0	29.8	1544	1558	2002	126.0	58.9	2138	2371	3650
48.0	30.8	1560	1575	2015	128.0	59.3	2158	2400	5212
50.0	31.8	1574	1590	2024	130.0	59.7	2177	2427	5100
52.0	32.8	1588	1605	2030	132.0	60.1	2196	2454	5041
54.0	33.7	1601	1620	2034	134.0	60.5	2213	2475	4526
56.0	34.7	1613	1633	2037	136.0	61.1	2227	2490	3806
58.0	35.7	1625	1645	2039	138.0	61.5	2243	2509	4407
60.0	36.7	1636	1657	2041	140.0	61.9	2261	2535	5204
62.0	37.7	1646	1668	2042	142.0	62.3	2279	2557	4894
64.0	38.6	1657	1679	2044	144.0	62.7	2297	2583	5356
66.0	39.6	1666	1689	2046	146.0	63.0	2316	2611	5718
68.0	40.6	1675	1698	2049	148.0	63.4	2335	2637	5625
70.0	41.6	1684	1708	2053	150.0	63.8	2351	2658	4964
72.0	42.5	1693	1716	2060	152.0	64.2	2366	2676	4567
74.0	43.5	1701	1725	2070	154.0	64.7	2382	2695	4837
76.0	44.5	1709	1734	2085	156.0	65.1	2395	2709	4178
78.0	45.4	1718	1742	2108	158.0	65.5	2411	2730	5105
80.0	46.3	1726	1751	2144	160.0	65.9	2428	2752	5403

TABLE 1.

Time-Depth curve values

Page 2.

Well : HACKING #1 Client : PACIFIC OIL & GAS
 Survey units : METRES Datum : 279.0
 Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
162.0	66.3	2445	2774	5441	242.0	83.3	2907	3268	4812
164.0	66.6	2461	2794	5144	244.0	83.6	2917	3280	5364
166.0	67.0	2477	2814	5262	246.0	84.0	2928	3292	5278
168.0	67.5	2490	2828	4479	248.0	84.5	2937	3300	4545
170.0	68.0	2500	2837	3741	250.0	84.8	2946	3310	5053
172.0	68.4	2515	2855	5133	252.0	85.2	2957	3322	5470
174.0	68.8	2529	2873	5125	254.0	85.6	2967	3333	5092
176.0	69.2	2544	2890	5104	256.0	86.0	2977	3344	5338
178.0	69.5	2560	2910	5535	258.0	86.4	2986	3352	4690
180.0	69.9	2574	2927	5115	260.0	86.8	2995	3361	4823
182.0	70.4	2585	2938	4305	262.0	87.2	3003	3369	4843
184.0	70.9	2595	2946	3890	264.0	87.7	3012	3377	4818
186.0	71.4	2606	2957	4321	266.0	88.1	3020	3384	4528
188.0	71.8	2618	2970	4538	268.0	88.6	3026	3389	4196
190.0	72.3	2628	2980	4233	270.0	89.0	3032	3394	4211
192.0	72.7	2642	2995	5107	272.0	89.5	3040	3401	4597
194.0	73.1	2655	3011	5231	274.0	89.9	3047	3407	4393
196.0	73.4	2669	3028	5337	276.0	90.4	3052	3411	4093
198.0	73.8	2682	3042	5011	278.0	90.9	3060	3418	4670
200.0	74.3	2692	3052	4461	280.0	91.2	3069	3426	5054
202.0	74.7	2703	3063	4423	282.0	91.7	3075	3432	4398
204.0	75.2	2713	3073	4434	284.0	92.1	3082	3438	4540
206.0	75.6	2725	3085	4811	286.0	92.6	3090	3445	4667
208.0	76.0	2737	3099	5127	288.0	93.0	3096	3451	4480
210.0	76.4	2749	3112	5106	290.0	93.4	3105	3459	5080
212.0	76.8	2760	3123	4629	292.0	93.8	3112	3466	4753
214.0	77.2	2771	3134	4767	294.0	94.3	3118	3471	4337
216.0	77.7	2780	3142	4232	296.0	94.7	3125	3477	4658
218.0	78.2	2789	3152	4521	298.0	95.1	3132	3484	4764
220.0	78.6	2798	3160	4322	300.0	95.6	3139	3489	4518
222.0	79.1	2808	3168	4452	302.0	96.0	3144	3494	4321
224.0	79.5	2817	3177	4423	304.0	96.5	3152	3501	4881
226.0	80.0	2827	3186	4536	306.0	96.9	3159	3508	4951
228.0	80.4	2836	3195	4584	308.0	97.3	3165	3513	4412
230.0	80.8	2846	3205	4689	310.0	97.8	3169	3515	3886
232.0	81.2	2856	3215	4725	312.0	98.3	3175	3520	4579
234.0	81.7	2866	3225	4874	314.0	98.7	3181	3526	4613
236.0	82.1	2876	3236	5021	316.0	99.1	3189	3534	5197
238.0	82.5	2886	3247	4665	318.0	99.5	3197	3542	5189
240.0	82.8	2897	3258	5206	320.0	99.8	3206	3552	5875

TABLE 1.

Time-Depth curve values

Page 3.

Well : HACKING #1

Client : PACIFIC OIL & GAS

Survey units : METRES

Datum : 279.0

Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
322.0	100.2	3215	3562	5739	402.0	116.5	3450	3781	5063
324.0	100.5	3223	3571	5331	404.0	116.9	3456	3786	5170
326.0	100.9	3230	3577	5007	406.0	117.3	3462	3792	5168
328.0	101.4	3235	3581	4343	408.0	117.7	3467	3797	5184
330.0	101.8	3240	3586	4526	410.0	118.0	3473	3804	5491
332.0	102.2	3248	3593	5223	412.0	118.4	3479	3809	5115
334.0	102.6	3255	3600	5044	414.0	118.8	3485	3815	5582
336.0	103.0	3263	3609	5615	416.0	119.2	3491	3821	5453
338.0	103.3	3271	3617	5530	418.0	119.5	3497	3828	5555
340.0	103.7	3278	3625	5308	420.0	119.9	3504	3835	5661
342.0	104.1	3285	3632	5170	422.0	120.2	3510	3841	5487
344.0	104.5	3293	3639	5242	424.0	120.6	3515	3845	5132
346.0	104.8	3300	3647	5486	426.0	121.0	3521	3852	5716
348.0	105.3	3306	3653	4828	428.0	121.3	3528	3859	5675
350.0	105.8	3309	3654	3938	430.0	121.7	3532	3863	4920
352.0	106.3	3313	3656	4069	432.0	122.2	3535	3864	4129
354.0	106.7	3316	3658	4109	434.0	122.6	3541	3870	5479
356.0	107.2	3320	3661	4230	436.0	123.0	3544	3873	4631
358.0	107.6	3326	3666	4741	438.0	123.4	3548	3876	4671
360.0	108.1	3330	3669	4313	440.0	123.8	3553	3881	5234
362.0	108.6	3334	3671	4088	442.0	124.2	3558	3885	4967
364.0	109.0	3338	3674	4416	444.0	124.6	3563	3889	5078
366.0	109.4	3344	3680	4941	446.0	125.0	3567	3892	4806
368.0	109.9	3349	3684	4720	448.0	125.4	3572	3897	5246
370.0	110.3	3355	3689	4866	450.0	125.8	3578	3903	5524
372.0	110.7	3360	3694	4812	452.0	126.2	3583	3908	5352
374.0	111.1	3366	3699	4869	454.0	126.6	3587	3911	4855
376.0	111.5	3372	3704	4835	456.0	126.9	3592	3916	5348
378.0	111.9	3378	3711	5308	458.0	127.3	3598	3922	5510
380.0	112.3	3384	3716	5052	460.0	127.7	3602	3926	5008
382.0	112.7	3390	3722	5111	462.0	128.1	3607	3930	5039
384.0	113.1	3396	3728	5189	464.0	128.4	3613	3936	5828
386.0	113.4	3402	3734	5319	466.0	128.8	3618	3942	5816
388.0	113.8	3409	3741	5354	468.0	129.1	3624	3948	5671
390.0	114.2	3415	3747	5285	470.0	129.5	3630	3954	5713
392.0	114.6	3421	3753	5089	472.0	129.9	3634	3958	5167
394.0	115.0	3427	3758	5230	474.0	130.3	3638	3961	4839
396.0	115.3	3433	3765	5412	476.0	130.7	3643	3965	5274
398.0	115.7	3439	3771	5213	478.0	131.0	3648	3971	5703
400.0	116.1	3445	3776	5120	480.0	131.4	3653	3976	5379

TABLE 1.

Time-Depth curve values

Page 4.

Well : HACKING #1 Client : PACIFIC OIL & GAS
 Survey units : METRES Datum : 279.0
 Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
482.0	131.8	3657	3979	4993	562.0	145.8	3854	4179	5710
484.0	132.2	3661	3982	4643	564.0	146.2	3859	4184	6146
486.0	132.6	3664	3984	4764	566.0	146.5	3863	4189	5775
488.0	133.1	3667	3987	4621	568.0	146.9	3868	4193	5520
490.0	133.5	3671	3990	4979	570.0	147.2	3872	4197	5713
492.0	133.8	3677	3996	5888	572.0	147.5	3877	4203	6326
494.0	134.1	3683	4003	6159	574.0	147.8	3882	4208	6270
496.0	134.5	3688	4008	5764	576.0	148.2	3887	4213	6048
498.0	134.8	3693	4013	5678	578.0	148.5	3892	4218	6170
500.0	135.2	3699	4020	6226	580.0	148.8	3897	4224	6153
502.0	135.5	3705	4026	6039	582.0	149.2	3902	4228	5985
504.0	135.8	3711	4033	6085	584.0	149.5	3907	4233	6094
506.0	136.1	3716	4039	6045	586.0	149.8	3912	4239	6297
508.0	136.5	3722	4045	6112	588.0	150.1	3917	4244	6169
510.0	136.8	3727	4049	5386	590.0	150.5	3921	4249	5953
512.0	137.2	3731	4054	5518	592.0	150.8	3925	4253	5842
514.0	137.5	3737	4060	6139	594.0	151.2	3929	4256	5246
516.0	137.9	3743	4066	6308	596.0	151.6	3932	4259	5313
518.0	138.2	3749	4072	6085	598.0	151.9	3936	4263	5708
520.0	138.5	3753	4077	5594	600.0	152.3	3941	4267	5826
522.0	138.9	3759	4083	6125	602.0	152.6	3945	4271	5913
524.0	139.2	3763	4087	5439	604.0	153.0	3948	4274	5307
526.0	139.7	3766	4089	4629	606.0	153.3	3952	4277	5481
528.0	140.0	3770	4093	5225	608.0	153.7	3956	4281	5590
530.0	140.4	3775	4098	5979	610.0	154.0	3960	4285	5927
532.0	140.8	3779	4102	5199	612.0	154.4	3964	4289	5886
534.0	141.2	3783	4105	5108	614.0	154.7	3969	4294	6269
536.0	141.5	3787	4109	5548	616.0	155.0	3974	4299	6255
538.0	141.9	3792	4114	5641	618.0	155.4	3978	4303	5816
540.0	142.2	3797	4119	6061	620.0	155.7	3982	4307	5946
542.0	142.6	3802	4124	5604	622.0	156.0	3986	4311	5733
544.0	142.9	3807	4129	5916	624.0	156.4	3989	4313	5216
546.0	143.2	3812	4135	6199	626.0	156.8	3993	4317	5670
548.0	143.6	3817	4140	6088	628.0	157.1	3996	4320	5494
550.0	143.9	3822	4145	5931	630.0	157.5	4001	4325	6376
552.0	144.2	3828	4152	6467	632.0	157.8	4006	4330	6156
554.0	144.5	3834	4158	6492	634.0	158.1	4010	4334	6034
556.0	144.8	3839	4164	6362	636.0	158.4	4014	4338	6103
558.0	145.1	3845	4170	6251	638.0	158.8	4018	4343	6043
560.0	145.5	3849	4175	5917	640.0	159.1	4022	4346	5564

TABLE 1.

Time-Depth curve values

Page 5.

Well : HACKING #1
 Survey units : METRES

Client : PACIFIC OIL & GAS
 Datum : 279.0

Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
642.0	159.5	4026	4350	5988	722.0	172.4	4187	4513	6665
644.0	159.6	4030	4354	6104	724.0	172.7	4191	4518	6546
646.0	160.1	4034	4358	5863	726.0	173.0	4196	4522	6555
648.0	160.5	4038	4362	6130	728.0	173.3	4200	4527	6658
650.0	160.8	4042	4366	5931	730.0	173.6	4204	4531	6740
652.0	161.1	4046	4370	5882	732.0	173.9	4209	4536	6739
654.0	161.5	4050	4373	5569	734.0	174.2	4213	4541	6758
656.0	161.8	4054	4377	5997	736.0	174.5	4217	4546	6814
658.0	162.2	4058	4381	6066	738.0	174.8	4221	4550	6607
660.0	162.5	4062	4385	5972	740.0	175.2	4225	4553	6007
662.0	162.8	4066	4389	6181	742.0	175.5	4228	4556	5927
664.0	163.1	4070	4394	6282	744.0	175.8	4231	4559	5831
666.0	163.5	4074	4398	6174	746.0	176.2	4234	4562	5782
668.0	163.8	4078	4402	5937	748.0	176.5	4237	4564	5554
670.0	164.1	4082	4406	6143	750.0	176.9	4240	4567	5733
672.0	164.4	4086	4410	6183	752.0	177.2	4244	4571	6470
674.0	164.8	4090	4413	5512	754.0	177.5	4248	4575	6597
676.0	165.1	4094	4417	6204	756.0	177.8	4252	4579	6626
678.0	165.5	4097	4420	5813	758.0	178.1	4256	4583	6673
680.0	165.8	4101	4423	5686	760.0	178.4	4260	4588	6574
682.0	166.1	4105	4428	6382	762.0	178.7	4264	4592	6601
684.0	166.5	4108	4431	5726	764.0	179.0	4268	4596	6613
686.0	166.8	4112	4435	6152	766.0	179.3	4271	4600	6336
688.0	167.1	4117	4440	6463	768.0	179.6	4275	4603	6438
690.0	167.4	4121	4444	6192	770.0	180.0	4279	4607	6427
692.0	167.8	4125	4448	6501	772.0	180.3	4283	4611	6512
694.0	168.1	4129	4453	6574	774.0	180.6	4286	4615	6498
696.0	168.4	4134	4458	6575	776.0	180.9	4290	4619	6424
698.0	168.7	4138	4462	6211	778.0	181.2	4294	4622	6250
700.0	169.0	4142	4466	6543	780.0	181.5	4297	4625	6125
702.0	169.3	4146	4471	6282	782.0	181.8	4301	4629	6402
704.0	169.6	4150	4474	6072	784.0	182.2	4304	4632	6398
706.0	170.0	4154	4479	6424	786.0	182.5	4308	4636	6399
708.0	170.3	4159	4483	6621	788.0	182.8	4311	4640	6364
710.0	170.5	4163	4488	6882	790.0	183.1	4315	4643	6398
712.0	170.8	4168	4493	6769	792.0	183.4	4318	4647	6358
714.0	171.2	4172	4497	6324	794.0	183.7	4322	4650	6458
716.0	171.5	4175	4501	6096	796.0	184.0	4326	4654	6513
718.0	171.8	4179	4505	6052	798.0	184.3	4329	4658	6511
720.0	172.1	4183	4509	6397	800.0	184.6	4333	4661	6519

TABLE 1.

Time-Depth curve values

Page 6.

Well : HACKING #1
 Survey units : METRES
 Calibrated sonic interval velocities used from

Client : PACIFIC OIL & GAS
 Datum : 279.0
 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
802.0	184.9	4336	4665	6393	882.0	198.2	4451	4770	5760
804.0	185.3	4340	4668	6264	884.0	198.5	4453	4772	5850
806.0	185.6	4343	4671	6143	886.0	198.9	4456	4774	5813
808.0	185.9	4346	4674	6238	888.0	199.2	4458	4776	5881
810.0	186.2	4350	4678	6357	890.0	199.5	4460	4779	5917
812.0	186.5	4353	4681	6540	892.0	199.9	4463	4781	6066
814.0	186.8	4357	4685	6515	894.0	200.2	4466	4784	6089
816.0	187.2	4360	4688	6082	896.0	200.5	4469	4786	6170
818.0	187.5	4362	4690	5889	898.0	200.8	4471	4789	6107
820.0	187.8	4365	4693	6026	900.0	201.2	4474	4791	5934
822.0	188.2	4368	4695	5966	902.0	201.5	4476	4793	6161
824.0	188.5	4371	4698	5894	904.0	201.8	4479	4795	5981
826.0	188.9	4374	4700	5935	906.0	202.2	4481	4798	6020
828.0	189.2	4377	4703	6065	908.0	202.5	4484	4800	5965
830.0	189.5	4380	4706	6144	910.0	202.8	4487	4802	6168
832.0	189.8	4383	4709	6319	912.0	203.2	4489	4805	6012
834.0	190.1	4386	4712	6305	914.0	203.5	4492	4807	6033
836.0	190.5	4389	4715	6193	916.0	203.8	4494	4809	5918
838.0	190.8	4392	4717	5915	918.0	204.2	4496	4811	5906
840.0	191.2	4394	4719	5673	920.0	204.5	4499	4813	5971
842.0	191.5	4397	4722	6027	922.0	204.8	4501	4815	6162
844.0	191.8	4400	4725	6087	924.0	205.2	4504	4818	6218
846.0	192.1	4403	4728	6269	926.0	205.5	4506	4820	6033
848.0	192.5	4406	4731	6188	928.0	205.8	4509	4823	6316
850.0	192.8	4409	4733	6161	930.0	206.1	4512	4825	6118
852.0	193.1	4412	4736	6082	932.0	206.5	4514	4827	5794
854.0	193.4	4415	4738	6044	934.0	206.8	4516	4829	5794
856.0	193.8	4418	4741	6184	936.0	207.1	4519	4831	6167
858.0	194.1	4420	4744	6032	938.0	207.5	4521	4833	5853
860.0	194.4	4423	4746	5925	940.0	207.8	4523	4835	5989
862.0	194.8	4426	4748	5960	942.0	208.1	4526	4838	6253
864.0	195.1	4428	4751	5923	944.0	208.4	4529	4840	6507
866.0	195.4	4431	4754	6391	946.0	208.7	4532	4844	6648
868.0	195.8	4434	4756	6026	948.0	209.0	4535	4846	6558
870.0	196.1	4436	4758	5529	950.0	209.4	4538	4849	6303
872.0	196.4	4439	4760	6084	952.0	209.7	4540	4851	6216
874.0	196.8	4441	4762	5902	954.0	210.0	4543	4854	6148
876.0	197.1	4444	4764	5723	956.0	210.3	4545	4856	6241
878.0	197.5	4446	4766	5814	958.0	210.6	4548	4859	6435
880.0	197.8	4448	4768	5818	960.0	211.0	4551	4862	6477

TABLE 1.

Time-Depth curve values

Page 7.

Well : HACKING #1

Client : PACIFIC OIL & GAS

Survey units : METRES

Datum : 279.0

Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
962.0	211.3	4553	4864	6361	1042.0	224.6	4640	4940	5599
964.0	211.6	4556	4867	6458	1044.0	224.9	4641	4941	5516
966.0	211.9	4559	4869	6020	1046.0	225.3	4642	4942	5380
968.0	212.2	4561	4871	5945	1048.0	225.7	4644	4943	5444
970.0	212.6	4563	4873	5884	1050.0	226.1	4645	4944	5414
972.0	212.9	4565	4874	5909	1052.0	226.4	4646	4944	5247
974.0	213.3	4567	4877	6139	1054.0	226.8	4647	4945	5418
976.0	213.6	4570	4879	6241	1056.0	227.2	4648	4946	5436
978.0	213.9	4573	4881	6353	1058.0	227.5	4650	4947	5546
980.0	214.2	4575	4884	6509	1060.0	227.9	4651	4948	5341
982.0	214.5	4578	4887	6477	1062.0	228.3	4652	4948	5354
984.0	214.8	4581	4889	6232	1064.0	228.7	4653	4949	5357
986.0	215.1	4583	4892	6397	1066.0	229.0	4655	4950	5442
988.0	215.4	4586	4894	6460	1068.0	229.4	4656	4951	5524
990.0	215.7	4589	4897	6624	1070.0	229.7	4657	4952	5555
992.0	216.0	4592	4900	6671	1072.0	230.1	4659	4953	5449
994.0	216.4	4594	4903	6445	1074.0	230.5	4660	4953	5472
996.0	216.7	4597	4905	6448	1076.0	230.8	4661	4954	5433
998.0	217.0	4599	4907	6248	1078.0	231.2	4662	4955	5426
1000.0	217.3	4602	4909	6073	1080.0	231.6	4664	4956	5444
1002.0	217.6	4604	4911	6000	1082.0	231.9	4665	4957	5530
1004.0	218.0	4606	4913	5882	1084.0	232.3	4666	4957	5199
1006.0	218.3	4608	4915	6395	1086.0	232.7	4666	4957	4968
1008.0	218.6	4611	4917	6188	1088.0	233.1	4668	4958	5614
1010.0	218.9	4613	4920	6257	1090.0	233.4	4670	4960	5917
1012.0	219.3	4615	4922	6162	1092.0	233.8	4671	4961	5908
1014.0	219.6	4617	4924	6036	1094.0	234.1	4673	4963	5892
1016.0	219.9	4620	4925	6049	1096.0	234.4	4675	4964	5950
1018.0	220.3	4622	4927	6133	1098.0	234.8	4677	4966	6039
1020.0	220.6	4624	4929	5952	1100.0	235.1	4679	4968	6047
1022.0	220.9	4626	4931	5932	1102.0	235.4	4681	4969	6101
1024.0	221.3	4628	4932	5687	1104.0	235.8	4683	4971	5907
1026.0	221.6	4629	4933	5476	1106.0	236.1	4684	4972	5808
1028.0	222.0	4630	4934	5407	1108.0	236.4	4686	4974	5902
1030.0	222.4	4632	4935	5376	1110.0	236.8	4688	4975	5920
1032.0	222.8	4633	4936	5430	1112.0	237.1	4689	4977	5882
1034.0	223.1	4634	4936	5403	1114.0	237.5	4691	4978	5890
1036.0	223.5	4635	4937	5442	1116.0	237.8	4693	4979	5826
1038.0	223.9	4637	4938	5444	1118.0	238.1	4695	4981	5989
1040.0	224.2	4638	4939	5531	1120.0	238.5	4697	4983	6044

TABLE 1.

Time-Depth curve values

Page 8.

Well : HACKING #1

Client : PACIFIC OIL & GAS

Survey units : METRES

Datum : 279.0

Calibrated sonic interval velocities used from 88.0 to 1230.0

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
1122.0	238.8	4698	4984	5981	1176.0	247.8	4745	5024	6184
1124.0	239.1	4700	4986	5948	1178.0	248.2	4747	5026	5905
1126.0	239.5	4702	4987	6016	1180.0	248.5	4749	5027	5829
1128.0	239.8	4704	4989	6060	1182.0	248.8	4750	5028	5923
1130.0	240.1	4706	4990	6018	1184.0	249.2	4752	5030	5949
1132.0	240.5	4707	4992	6048	1186.0	249.5	4753	5031	5840
1134.0	240.8	4710	4994	6299	1188.0	249.8	4755	5032	5998
1136.0	241.1	4711	4995	5845	1190.0	250.2	4756	5034	5951
1138.0	241.5	4713	4997	6028	1192.0	250.5	4758	5035	5972
1140.0	241.8	4715	4998	6028	1194.0	250.9	4760	5036	5879
1142.0	242.1	4717	5000	6027	1196.0	251.2	4761	5037	5895
1144.0	242.5	4718	5001	6027	1198.0	251.5	4763	5039	5879
1146.0	242.8	4720	5003	6027	1200.0	251.9	4764	5040	5805
1148.0	243.1	4722	5004	5977	1202.0	252.2	4765	5041	5679
1150.0	243.5	4723	5006	5869	1204.0	252.6	4767	5042	5569
1152.0	243.8	4725	5007	5981	1206.0	253.0	4768	5042	5459
1154.0	244.1	4727	5009	5988	1208.0	253.3	4769	5043	5976
1156.0	244.5	4729	5010	6059	1210.0	253.6	4772	5046	6904
1158.0	244.8	4731	5012	6134	1212.0	253.9	4774	5049	7014
1160.0	245.1	4732	5013	5885	1214.0	254.2	4776	5051	6836
1162.0	245.5	4734	5015	5880	1216.0	254.5	4779	5054	6957
1164.0	245.8	4735	5016	5935	1218.0	254.7	4781	5056	6785
1166.0	246.1	4737	5017	5972	1220.0	255.1	4783	5058	6300
1168.0	246.5	4739	5019	5835	1222.0	255.4	4784	5059	5738
1170.0	246.8	4740	5020	5804	1224.0	255.8	4786	5060	5739
1172.0	247.2	4742	5021	5976	1226.0	256.1	4787	5061	6040
1174.0	247.5	4744	5023	6037	1228.0	256.4	4789	5062	6035

VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 1

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 20.0

ENERGY SOURCE : AN-60

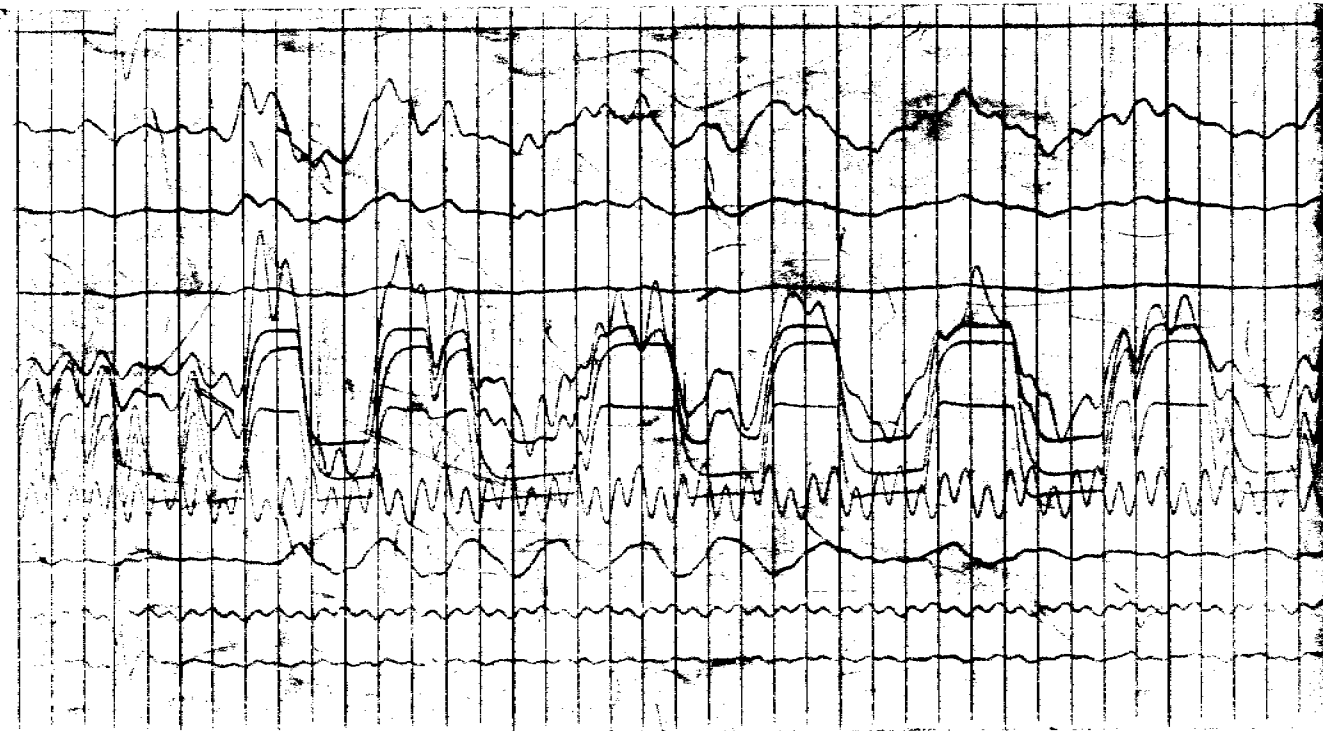
SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : A

Velocity Data - Brisbane



PR881079 8

VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 3

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 70.0

ENERGY SOURCE : AN-60

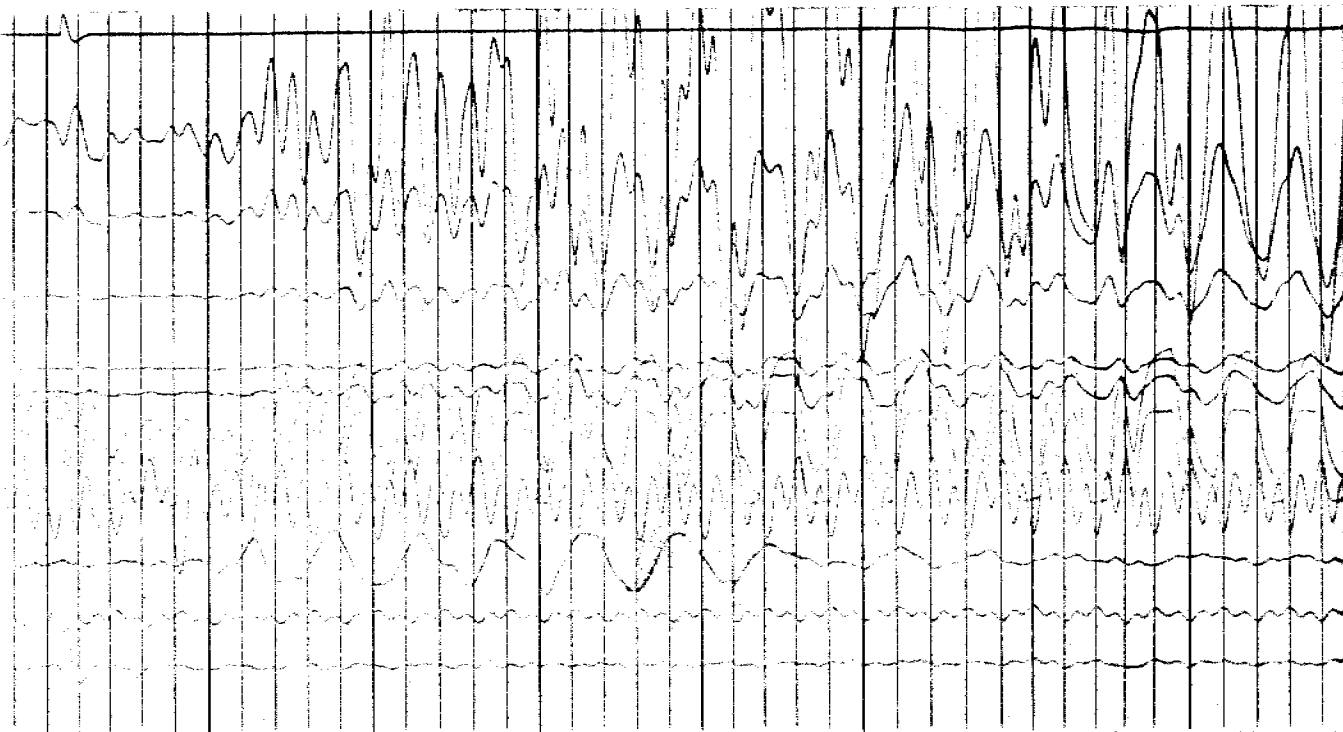
SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : A

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 2

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 36.0

ENERGY SOURCE : AN-60

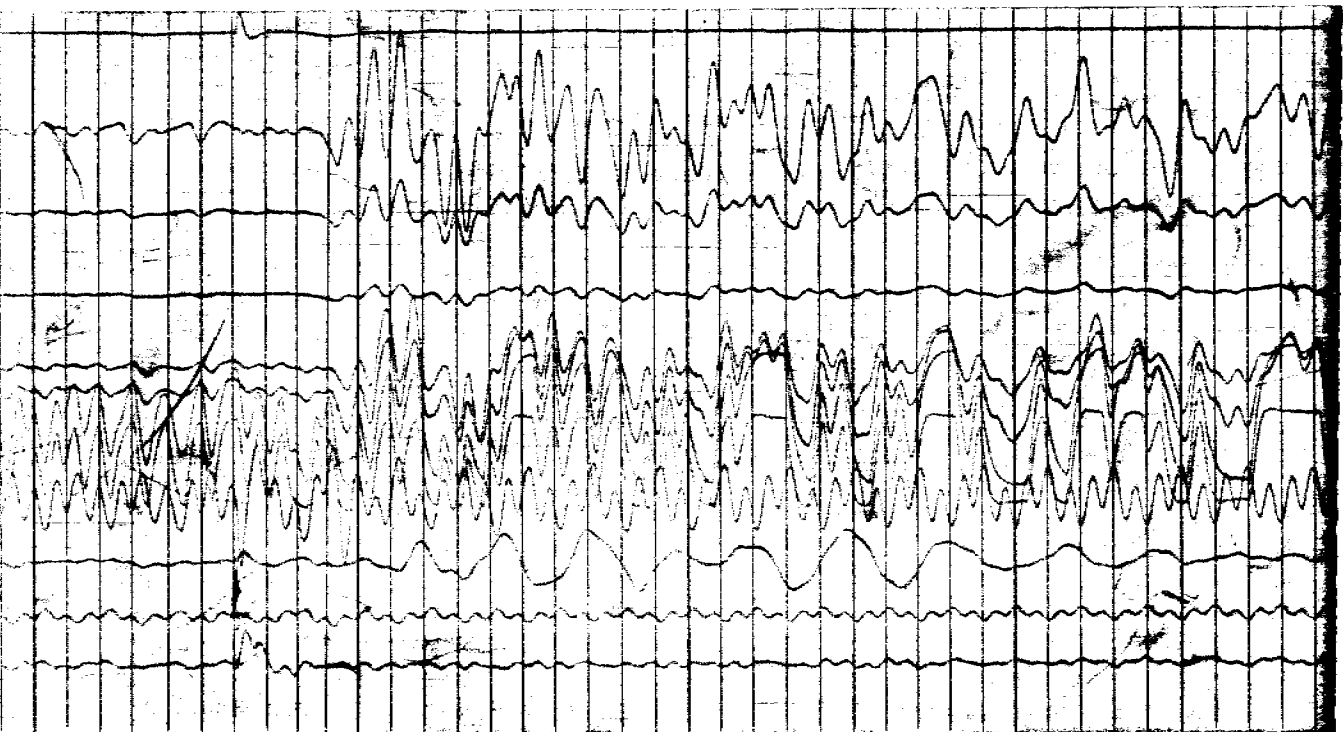
SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : A

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 4

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 90.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : A

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 5

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 90.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : B

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 6

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 90.0

ENERGY SOURCE : AN-60

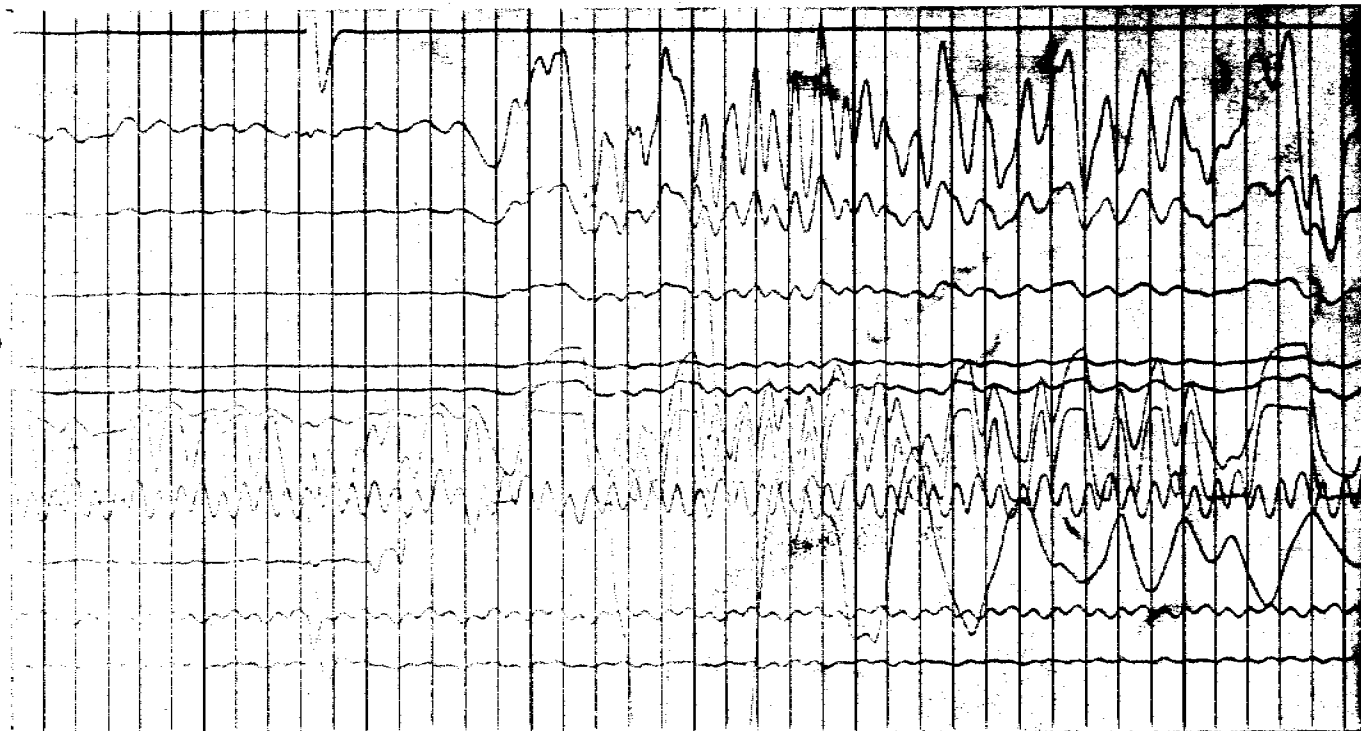
SHOT DEPTH : 0.3

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : C

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 7

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 90.0

ENERGY SOURCE : AN-60

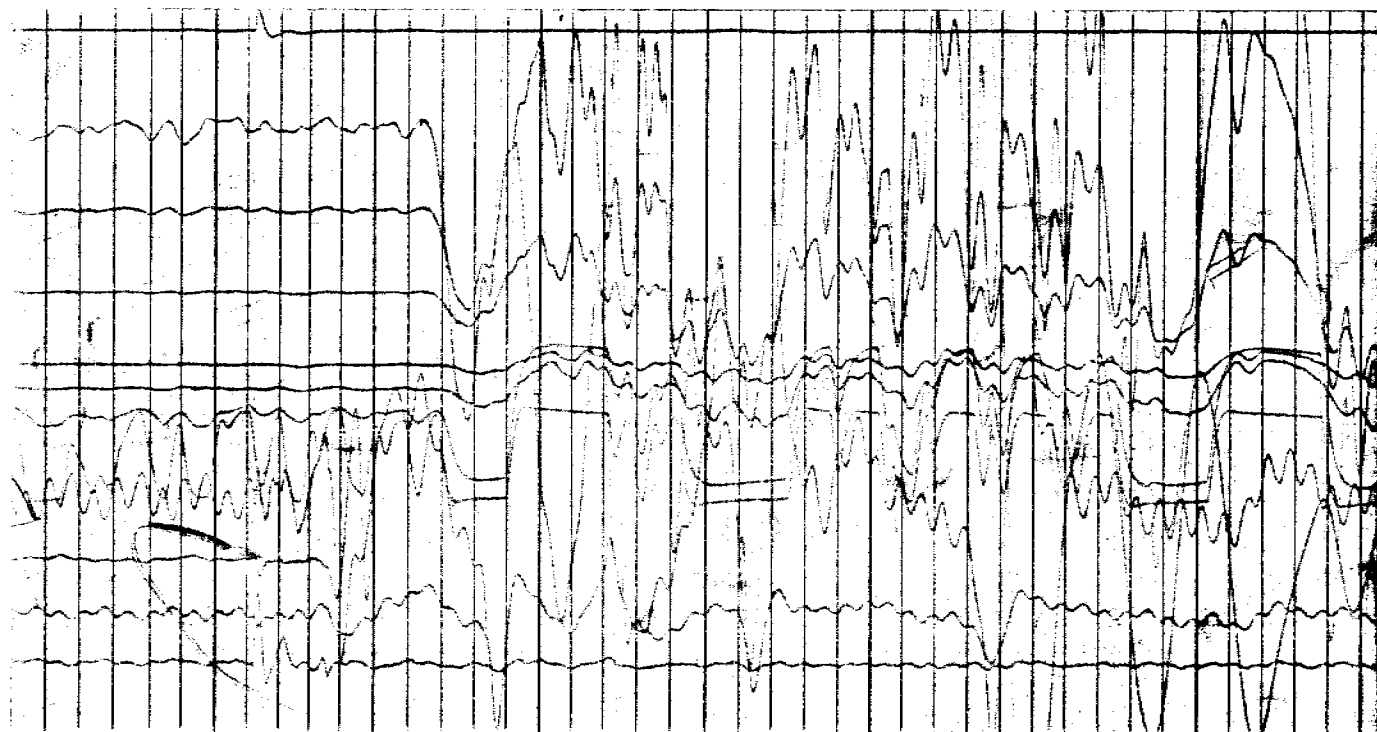
SHOT DEPTH : 1.0

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 8

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 90.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : GDET

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 9

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 269.0

ENERGY SOURCE : AN-60

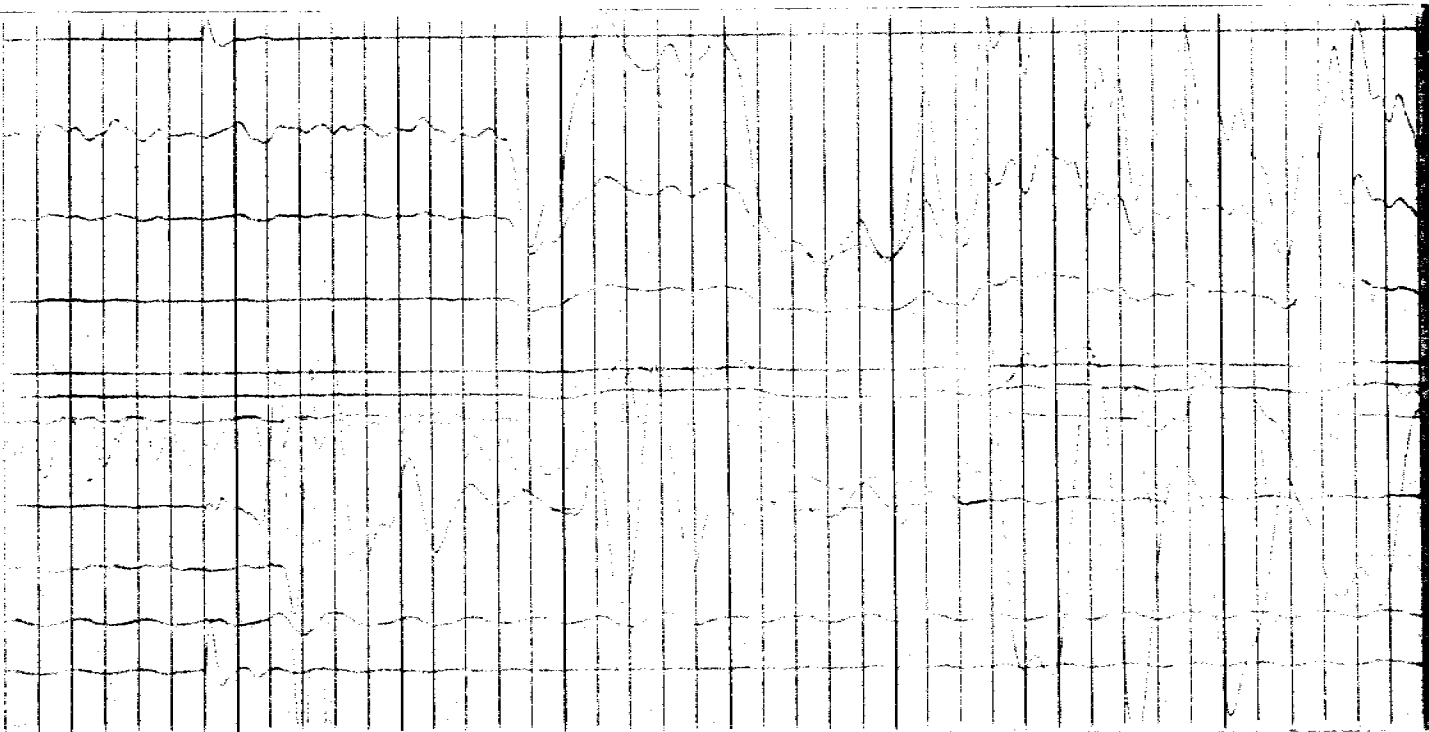
SHOT DEPTH : 1.0

CHARGE SIZE : 1

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 10

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 900.0

ENERGY SOURCE : AN-60

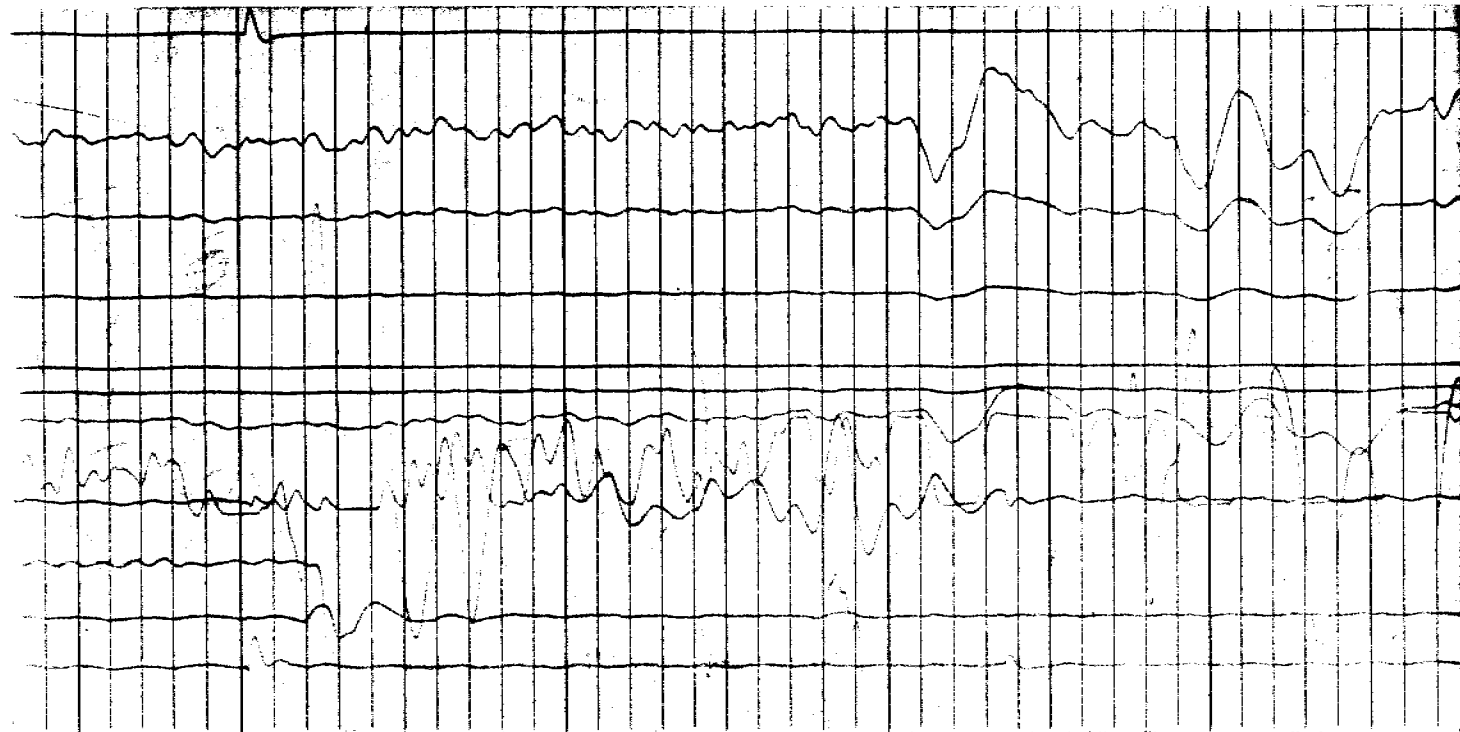
SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 11

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1234.0

ENERGY SOURCE : AN-60

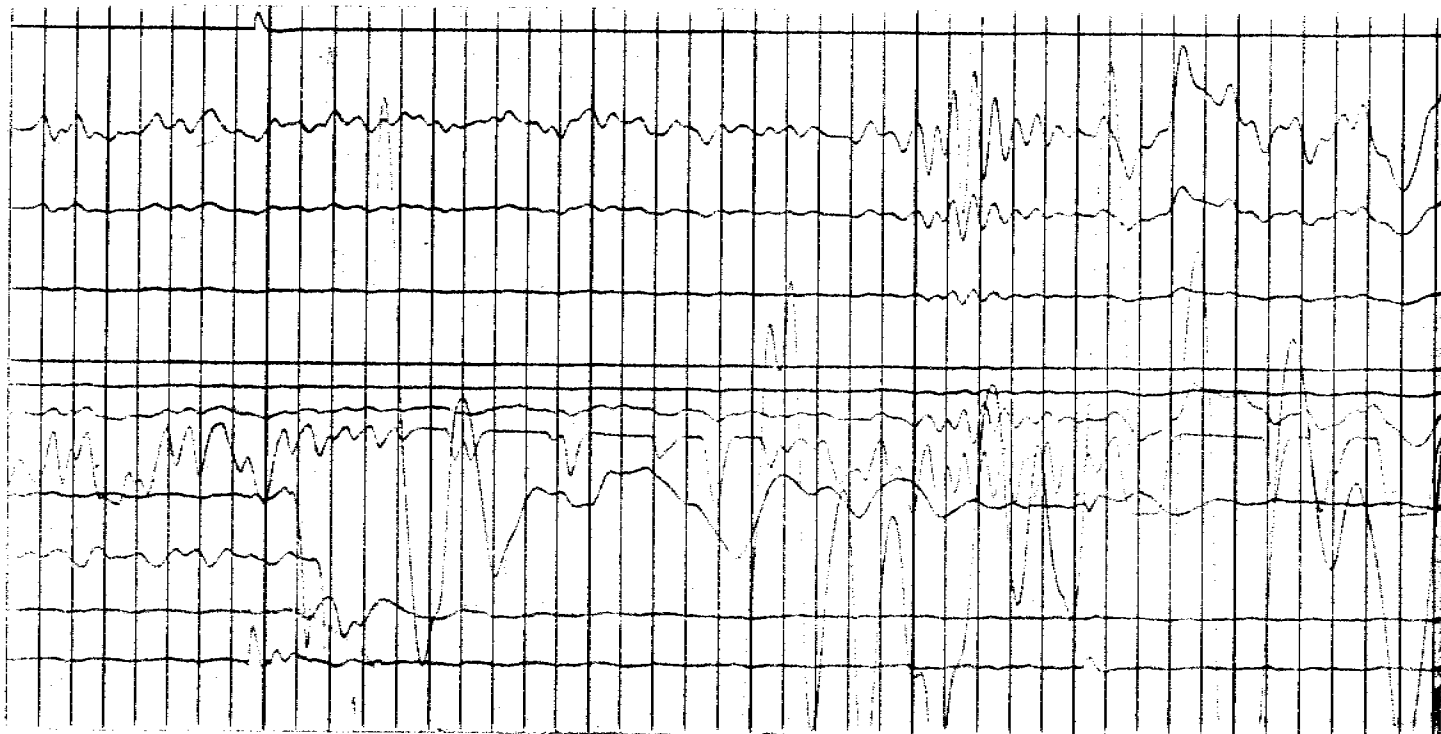
SHOT DEPTH : 1.0

CHARGE SIZE : 3

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 12

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1234.0

ENERGY SOURCE : AN-60

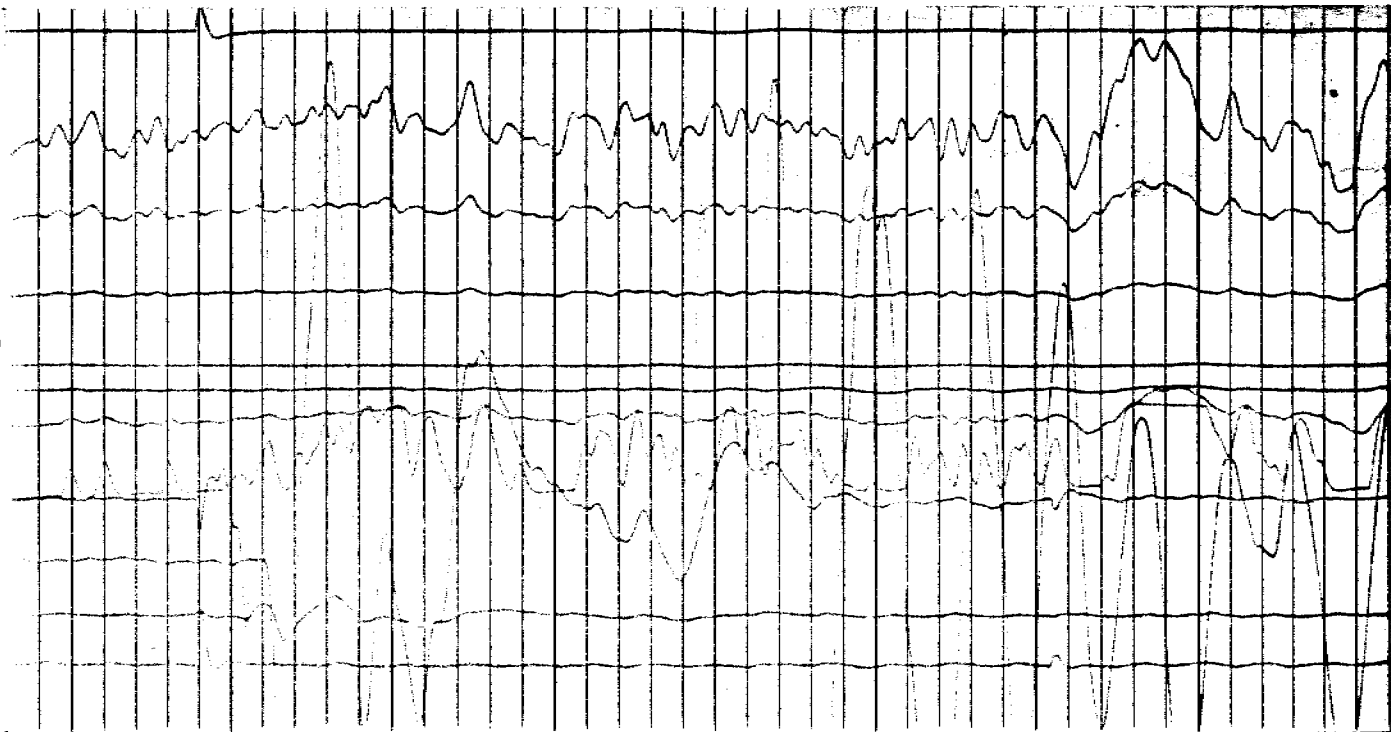
SHOT DEPTH : 1.0

CHARGE SIZE : 4

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 13

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1234.0

ENERGY SOURCE : AN-60

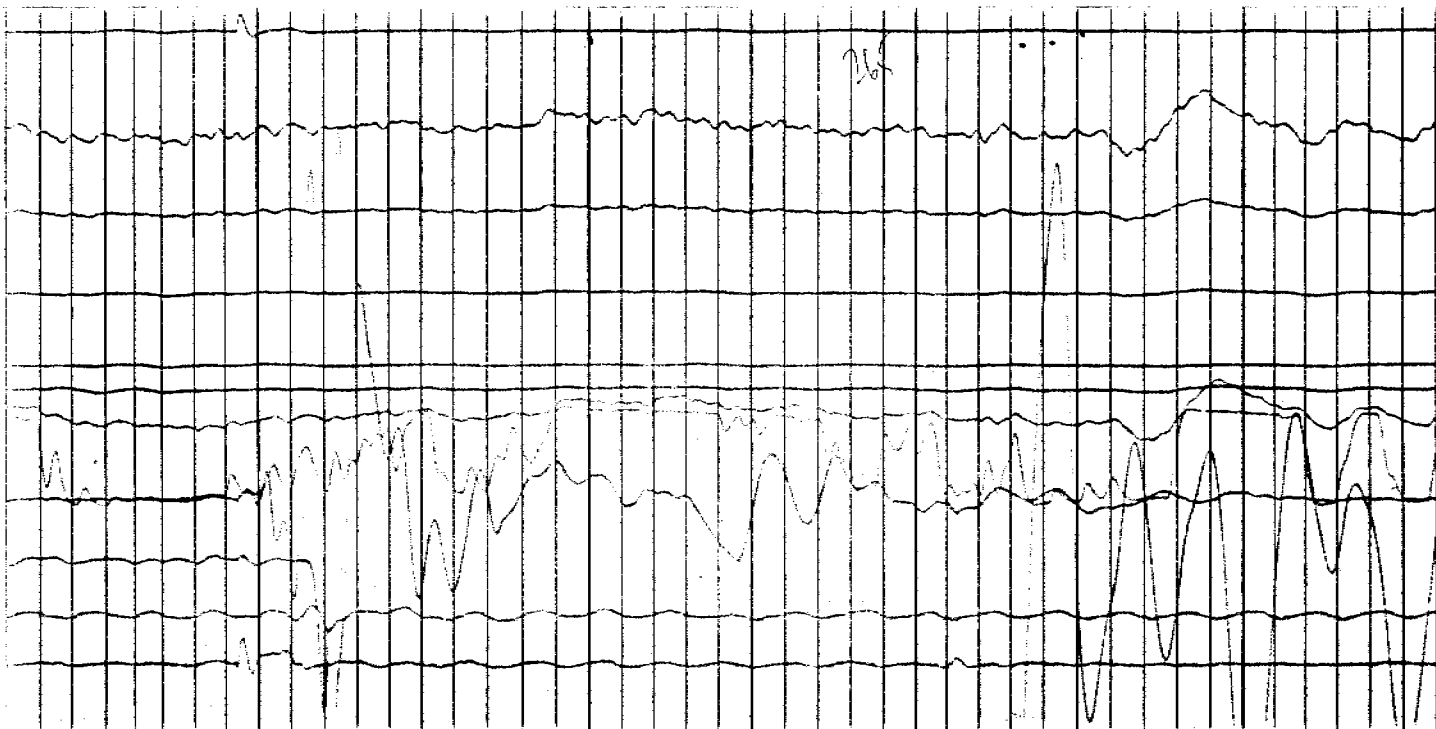
SHOT DEPTH : 1.0

CHARGE SIZE : 4

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 14

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1180.0

ENERGY SOURCE : AN-60

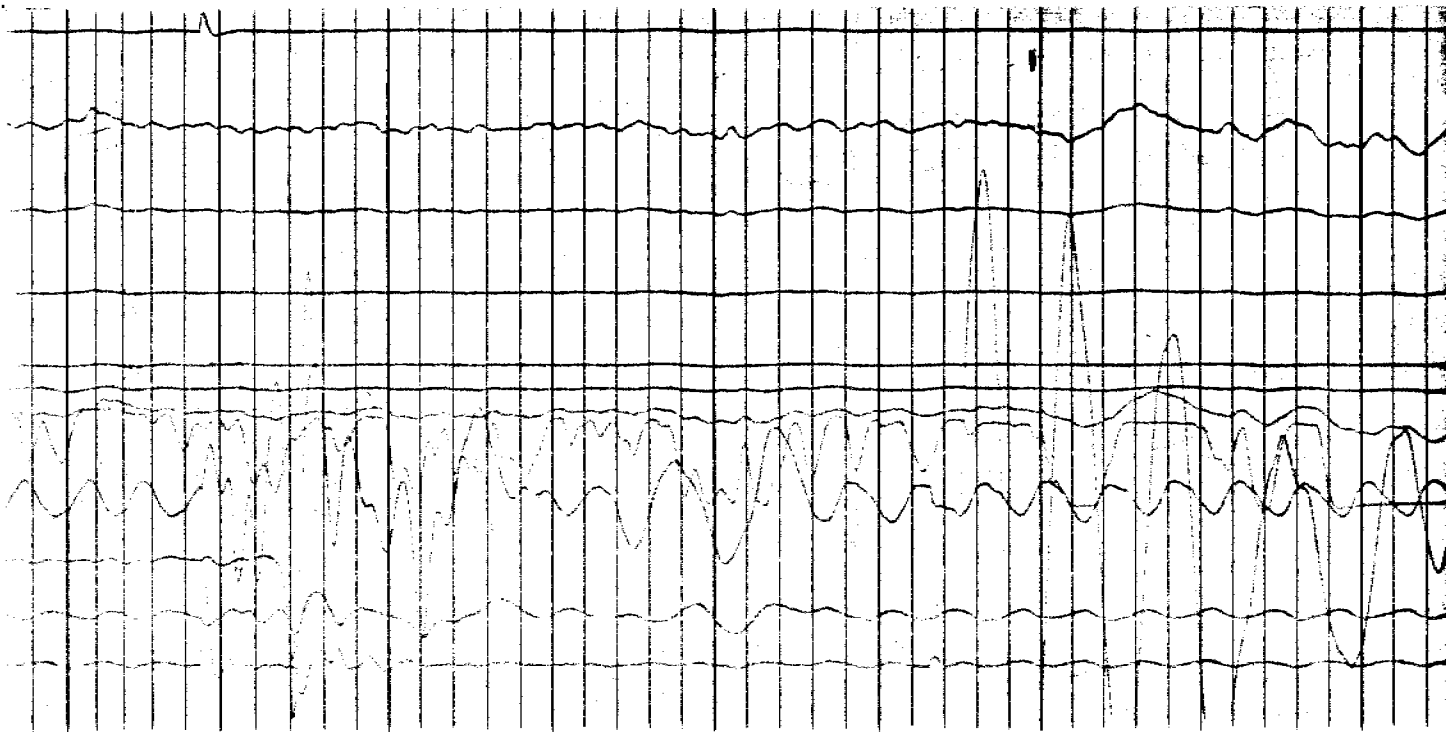
SHOT DEPTH : 1.0

CHARGE SIZE : 4

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 15

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1180.0

ENERGY SOURCE : AN-60

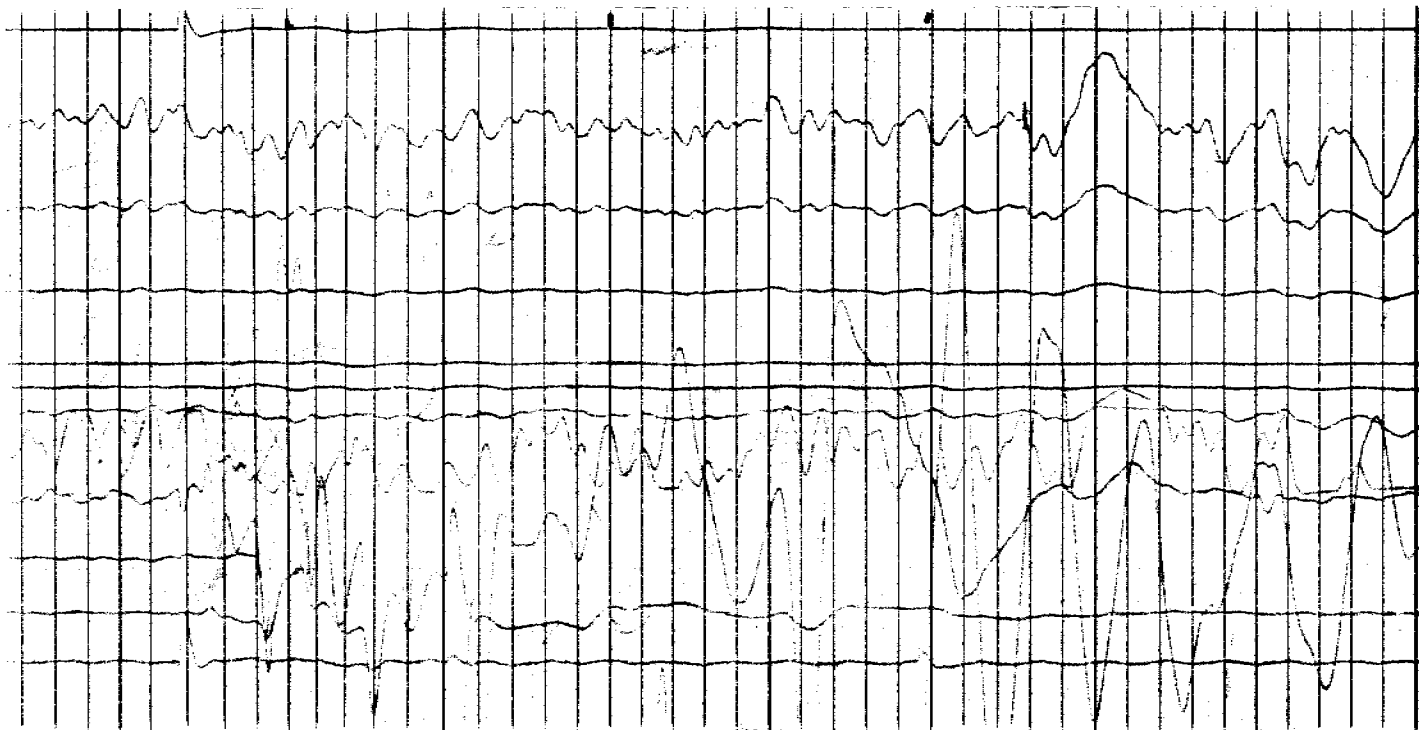
SHOT DEPTH : 1.0

CHARGE SIZE : 4

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 16

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1090.0

ENERGY SOURCE : AN-60

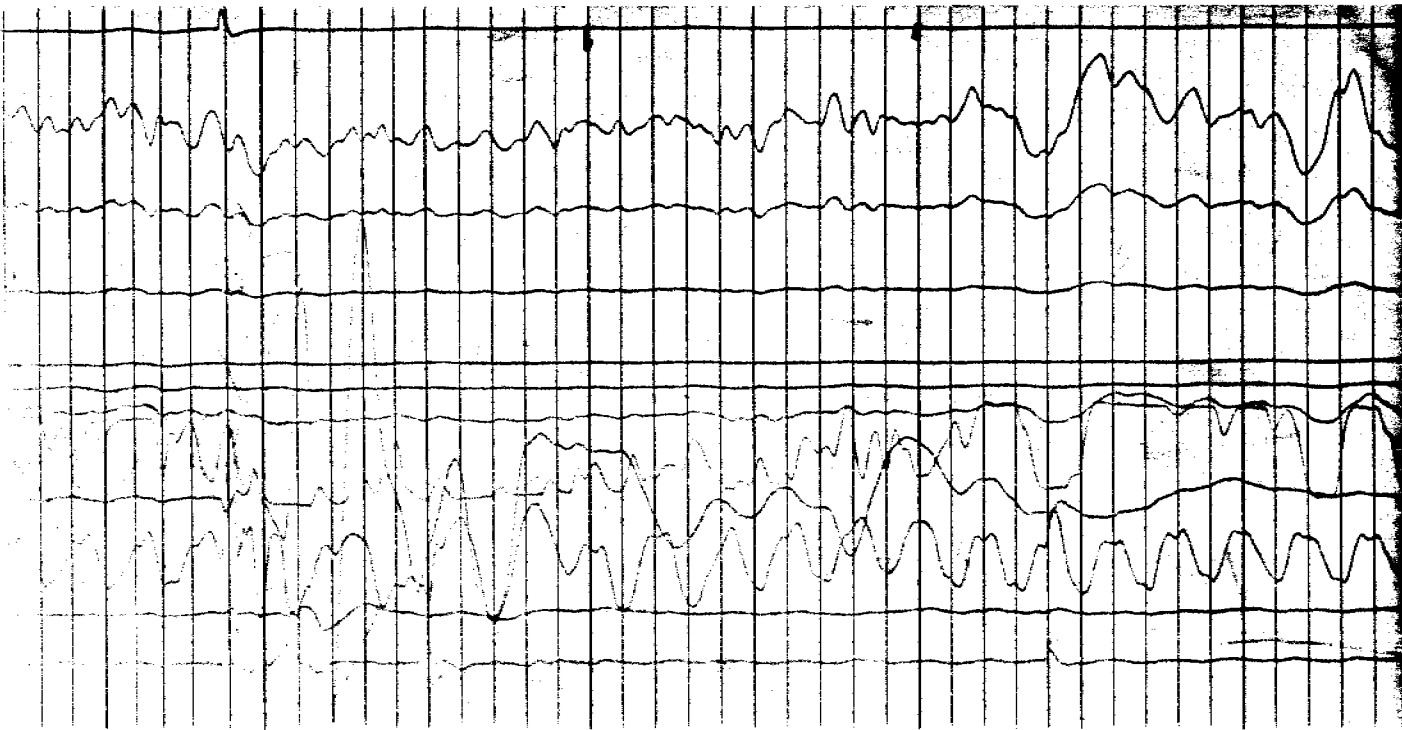
SHOT DEPTH : 1.0

CHARGE SIZE : 3

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 17

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 1025.0

ENERGY SOURCE : AN-60

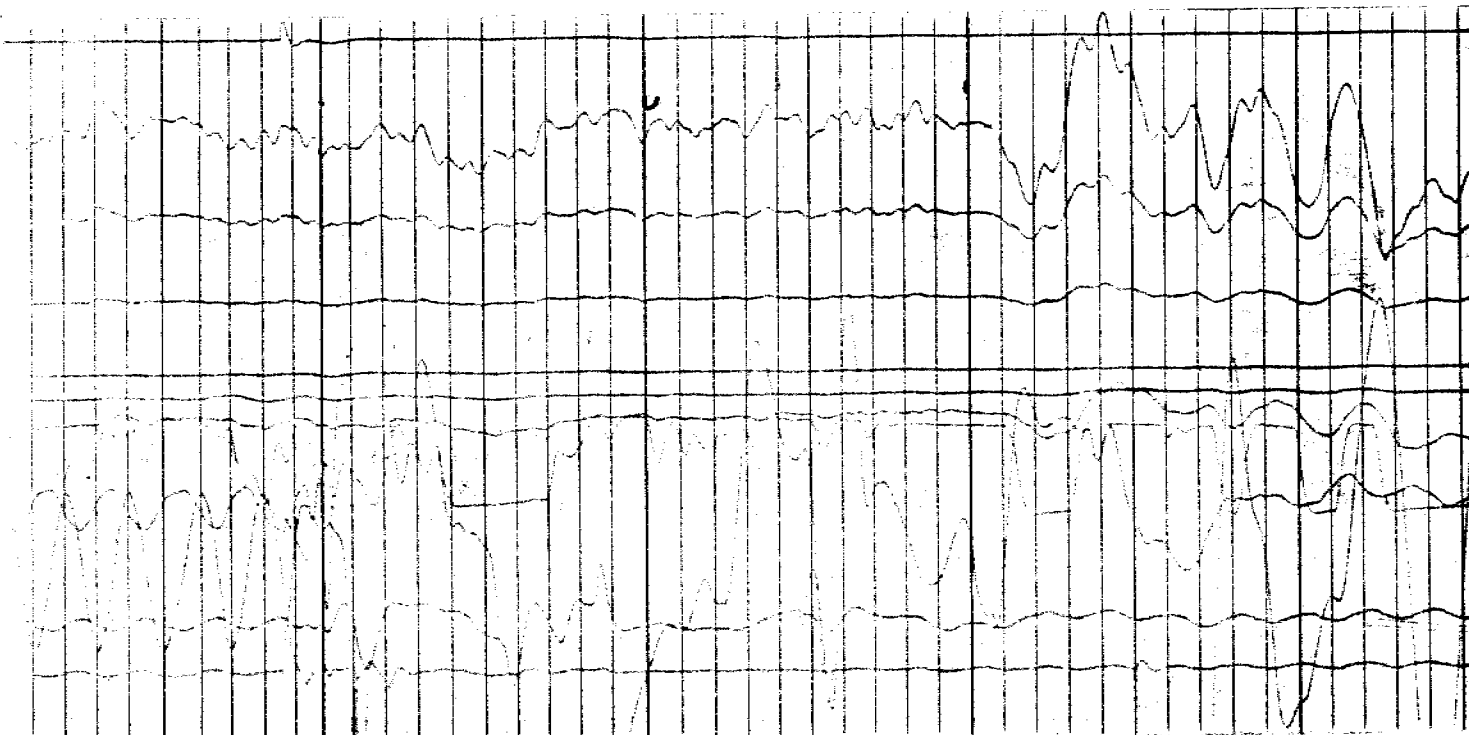
SHOT DEPTH : 1.0

CHARGE SIZE : 3

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 18

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 943.0

ENERGY SOURCE : AN-60

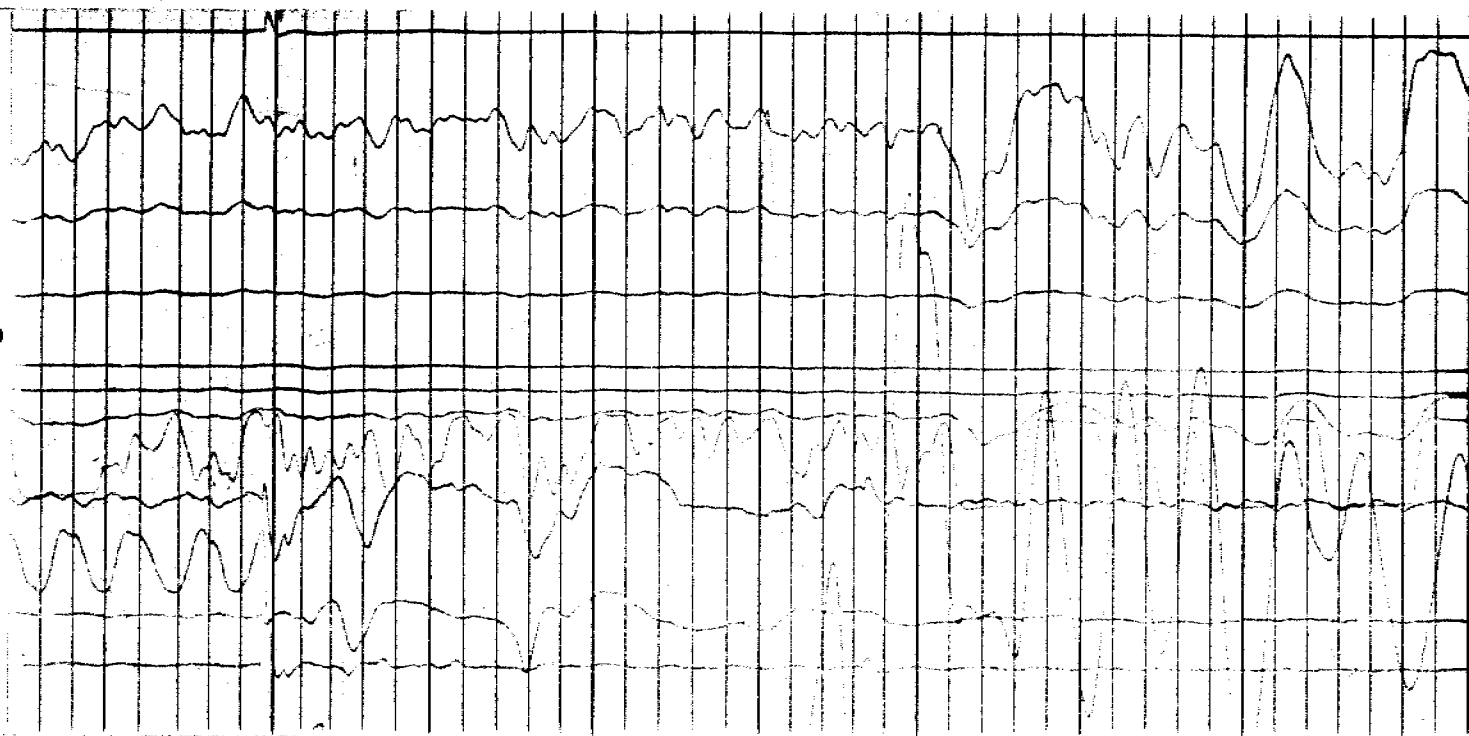
SHOT DEPTH : 1.0

CHARGE SIZE : 3

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 19

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 835.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 20

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 805.0

ENERGY SOURCE : AN-60

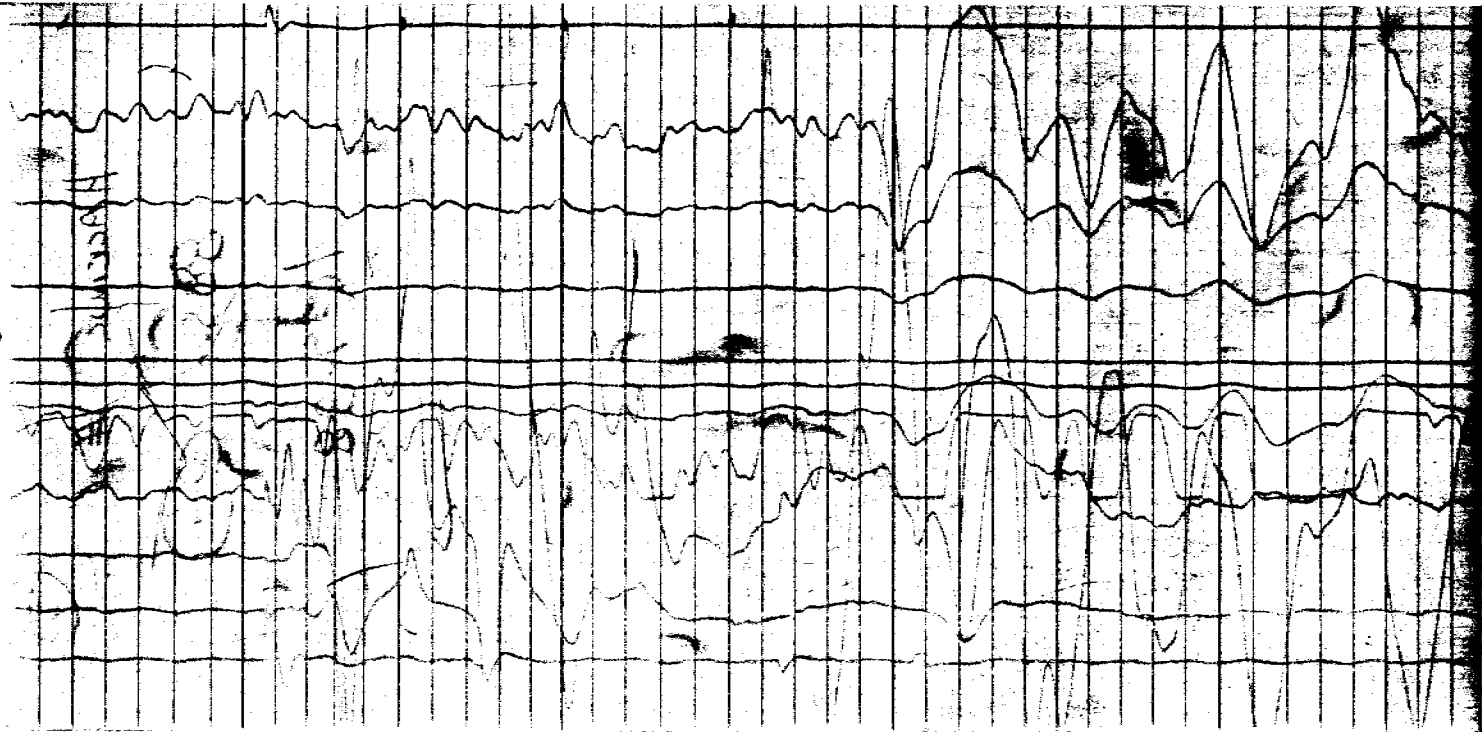
SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 21

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 756.0

ENERGY SOURCE : AN-60

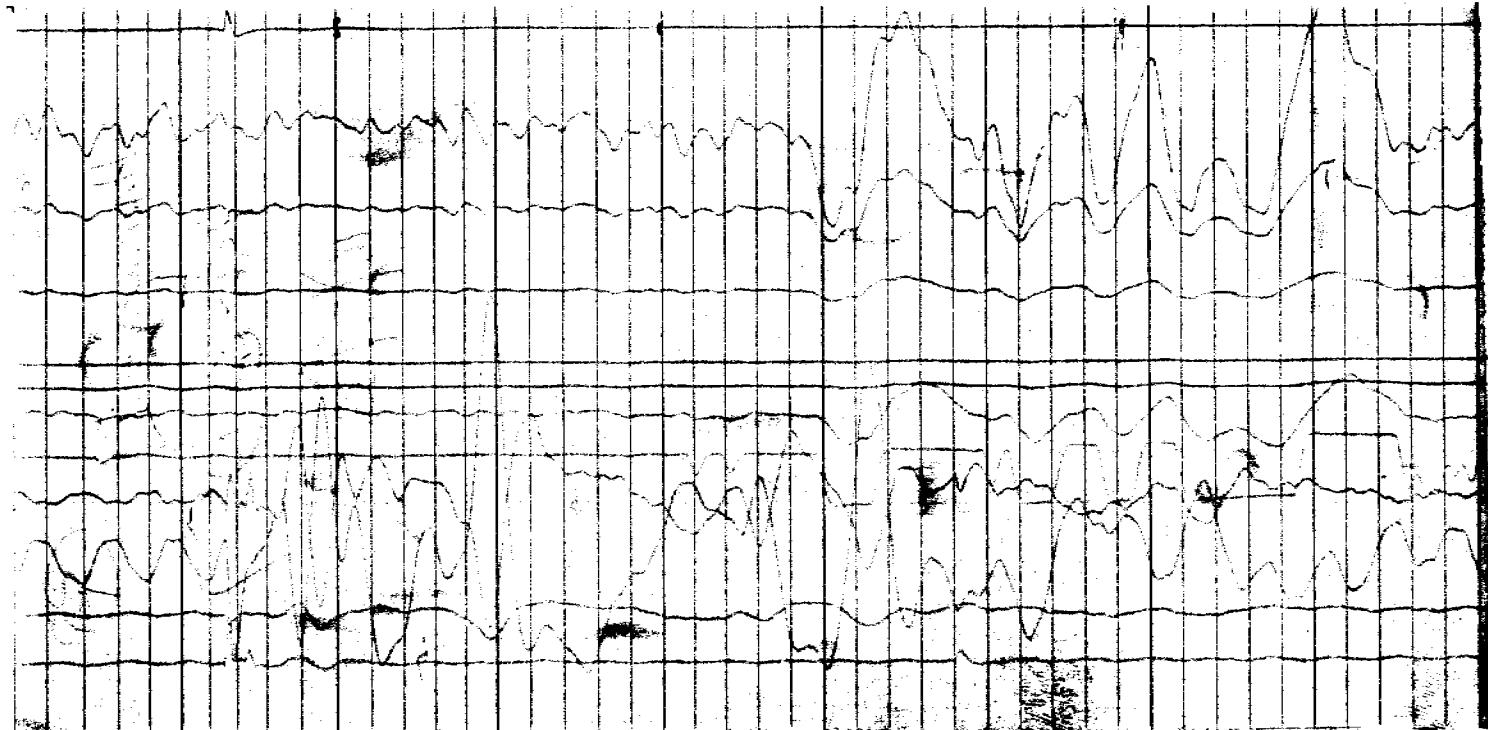
SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 22

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 741.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 23

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 665.0

ENERGY SOURCE : AN-60

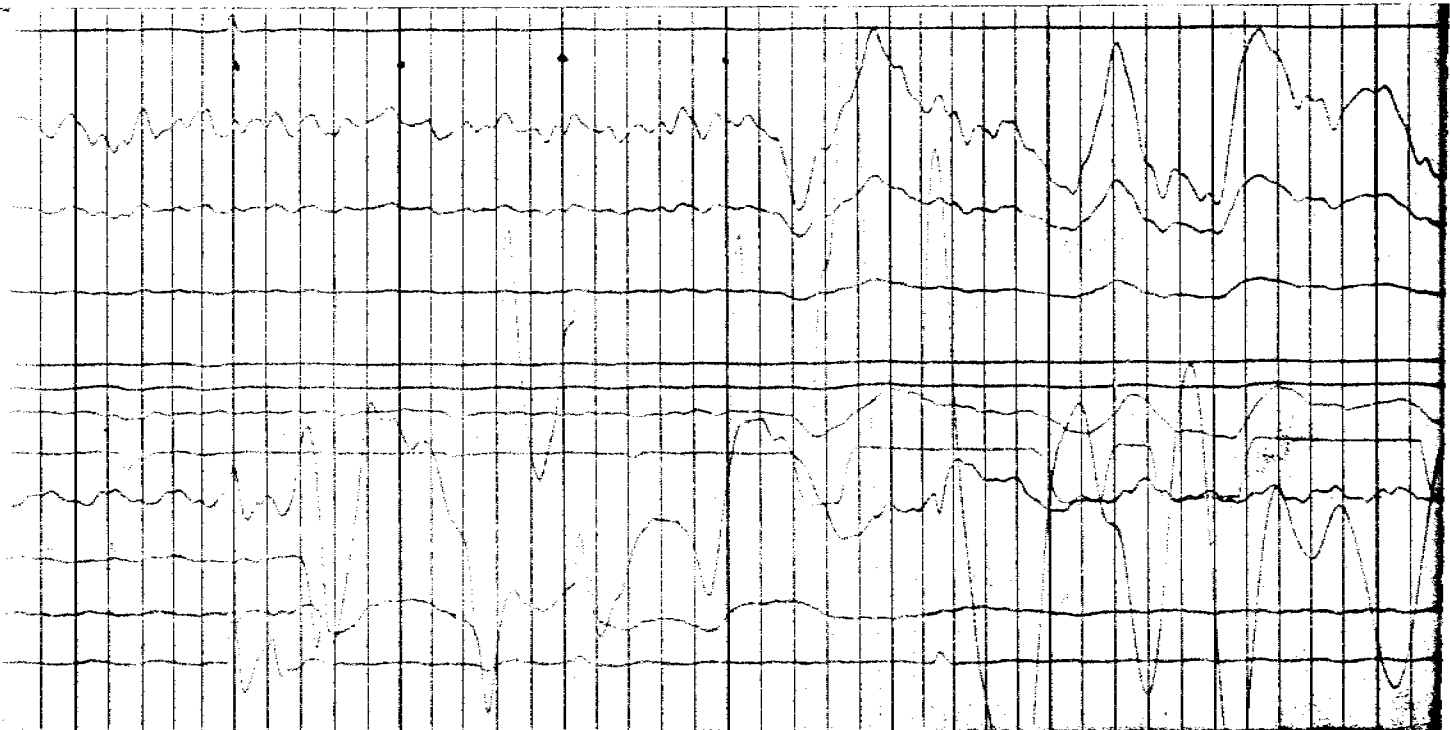
SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 24

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 595.0

ENERGY SOURCE : AN-60

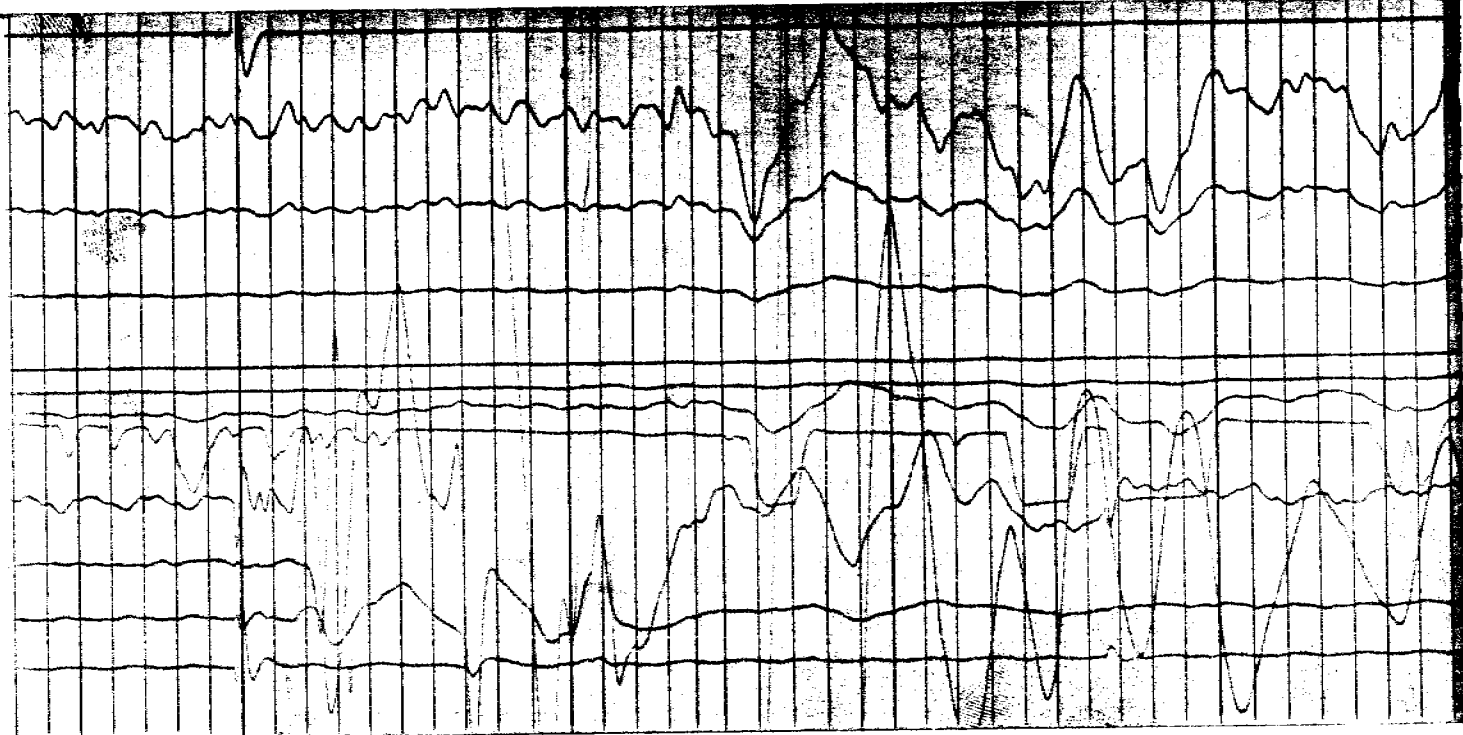
SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 25

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 495.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 26

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 438.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 27

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 380.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 28

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 317.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 29

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 269.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 30

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 218.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane



VELOCITY SURVEY

PACIFIC OIL & GAS

HACKING #1

SHOT NO. : 31

ELEV. K.B. : 268.5

DEPTH BELOW K.B. : 150.0

ENERGY SOURCE : AN-60

SHOT DEPTH : 1.0

CHARGE SIZE : 2

SURVEY UNITS : METRES

SHOT LOCATION : D

Velocity Data - Brisbane

