

APPENDIX 6

VELOCITY DATA

WELL VELOCITY SURVEY

WEST MEREENIE NO. 7

PL 4

NORTHERN TERRITORY

for

OILMIN N.L.

by

VELOCITY DATA PTY. LTD.

Brisbane, Australia

May 23, 1985

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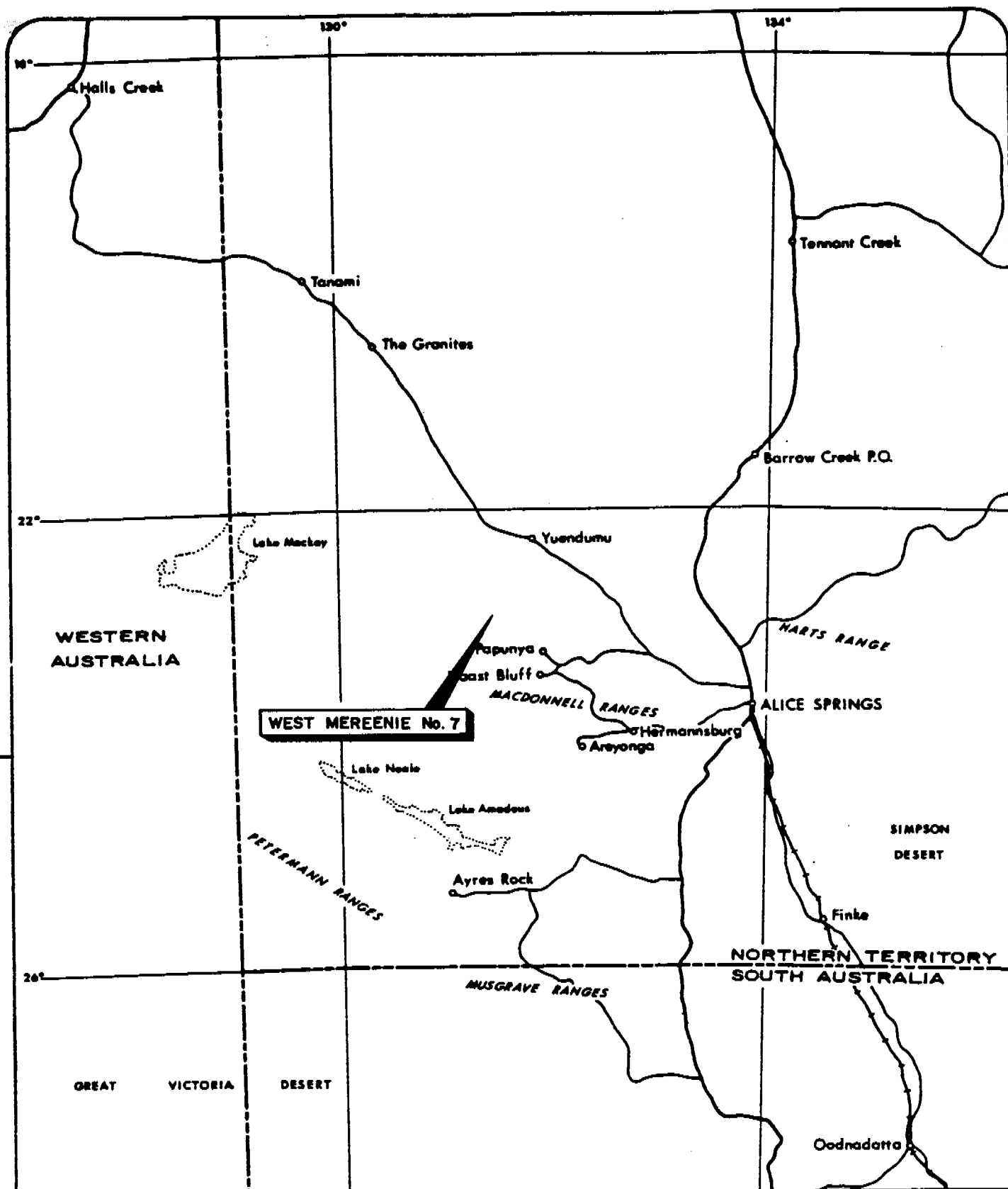
Figure 1	Well location map
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OILMIN N.L.  
**WEST MEREEENIE No. 7**  
 WELL LOCATION MAP

Scale 1:5000000

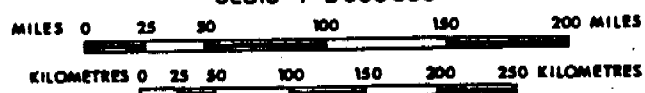
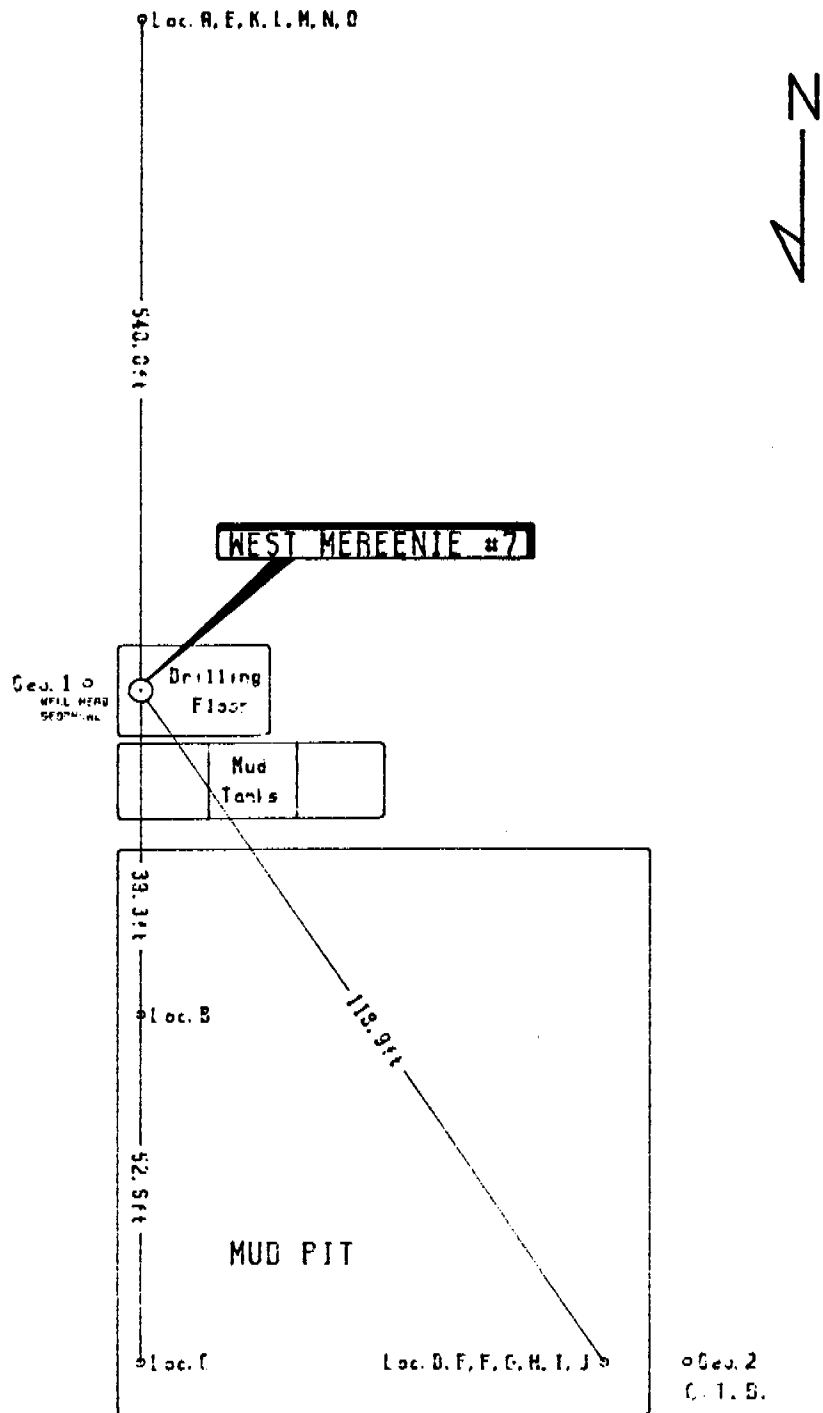


Figure 1



## WEST MEREENIE #7

OILMIN N. L.  
SHOT POINT LOCATION SKETCH



Figure 2

1.

SUMMARY

Velocity Data Pty. Ltd. conducted a velocity survey for Oilmin N.L. in the West Mereenie No. 7 well, PL 4, Northern Territory. The date of the survey was May 23, 1985.

Explosives were used as an energy source with shots being fired in two mud pits.

GENERAL INFORMATION

Name of Well	: West Mereenie No. 7
Location (Figure 1)	: PL 4, Northern Territory
Coordinates	: Latitude 023°57'25"S Longitude 131°28'14"E
Date of Survey	: May 23, 1985
Weather	: Fine
Operational Base	: Roma
Operator	: N. Delfos
Client Representative	: D. Catherall

2.

## EQUIPMENT

### Recording Instruments

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.

### Downhole Geophone

Geophone WLS 1050 Wall-lock

#### Downhole sensors:

6 HSI 4.5Hz 215 ohm, high temperature (300°F) detectors connected in series parallel. Frequency response 8-300Hz within 3db.

Preamplifier - 48db fixed gain.  
Frequency response 5-200Hz within 3db.

### Reference Geophone

Mark L1 7.5Hz

RECORDING

Energy Source	: Explosives - AN-60
Shot Location	: Mud pit
Charge Size	: 1 to 6 (125 gm) sticks
Average Shot Depth	: 1.8 feet
Recording Geometry	: Figure 2

Shots were recorded on digital cassette tape and later transcribed to nine track tape (SEG-Y format) in Velocity Data's Brisbane centre. Printouts of the shots used are included with this report. (Enclosure 2)

The sample rate was 1 ms with 0.5 ms sampling over a 200 ms window encompassing the first arrivals. The scale of the graphic display varies with signal strength and is noted on each playout.

The times were picked from the printouts using the numerical value of the signal strength. (Enclosure 2)

COMPUTINGBasic Information

Elevation of K.B.	: 2530 feet A.S.L.
Elevation of Ground	: 2510 feet A.S.L.
Elevation of Seismic Datum	: 3132 feet A.S.L.
Depth Surveyed	: 4818 feet below K.B.
Depth of Casing	: 4765 feet below K.B.



COMPUTINGRecorded Data

Number of Shots Used	: 21
Number of Levels Recorded	: 14
Data Quality	: Good
Noise Level	: Low
Rejected Shots	: Nil

Correction to Datum

Several shots were taken from varying offsets to datum.

Number of Shots Used	: 3
Datum Correction Time	: 42.6 ms

An instrument lag of 4 ms has been taken into consideration when determining the datum correction. The lag is not of consequence for the remainder of the calculations since it is applied to both the datum and downhole shots.

Variations in observed travel times to some levels from well head and offset pits are attributable to differences in elevation and near surface velocity profiles at the pit locations. These variations have been corrected before inclusion in the calculation sheet.

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.

Additional calibration points were selected between shots where apparent velocity changes were observed on the sonic log.

5.

### COMPUTING


#### Trace Playouts (Figure 4)

Figure 4A is a plot of all traces used. No filter or gain recovery has been applied.

Figure 4B is a plot to scale in depth and time of selected traces. No filter or gain recovery has been applied.

Figure 4C is a plot to scale in depth and time of selected traces with a 5Hz - 40Hz filter and a gain recovery function of  $t^{2.0}$  applied.

Figure 4D is a plot of selected surface traces. No filter or gain recovery has been applied.

  
Ken Denkinson  
Geophysicist

## VELOCITY DATA PTY LTD

## WELL SURVEY CALCULATIONS Page 1

Company : OILMIN N. L.

Well : WEST MEREEENIE #7

Elevations : Datum : 2132.0 Ground : 2510.0 Kelly : 2530.0

Shot data : Location Elevation Offset

A	2509.0	6.0
B	2509.0	42.0
C	2509.0	94.0
D	2509.0	125.0
E	2509.0	145.0
F	2509.0	162.0
G	2509.0	184.0
H	2509.0	200.0
I	2509.0	269.0
J	2509.0	311.0
K	2509.0	348.0
L	2509.0	390.0
M	2509.0	451.0
N	2509.0	59.0
O	2509.0	275.0

Latitude : 023 57 25

Longitude : 131 28 14

Survey date : 23-MAY-85

Survey units : FEET

Times in milliseconds.

Rig identification : OILMIN - SL 750

Energy source : AN-60

Logger :

## 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 ( 2132 FEET )														
1	398.0	0.0	B	1.5	45.0	44.7								
2	398.0	0.0	C	2.5	48.0	46.6								
3	398.0	0.0	D	1.5	51.0	48.4	46.6	0.0						
22	1000.0	602.0	D	5.0	98.0	97.2	97.2	50.6	602.0	50.6			11897.2	
										604.0	51.7	11897.2	11897.2	11682.8
CARMICHAEL SANDSTONE														
21	1604.0	1206.0	E	5.0	149.5	148.9	148.9	102.3						
										315.0	24.6	11788.9	11789.3	12804.9
UPPER STOKES SILTST.														
19	1919.0	1521.0	E	4.0	176.0	175.5								
20	1919.0	1521.0	E	5.0	172.0	171.5	173.5	126.9			11985.8	11992.9		
18	2318.0	1920.0	F	4.0	198.5	198.0	198.0	151.4	399.0	24.5	12681.6	12785.7	16285.7	
										455.0	38.0			11973.7
LOWER STOKES (2774)														
4	2773.0	2375.0	G	1.5	236.0	235.5								
17	2773.0	2375.0	G	3.5	237.0	236.5	236.0	189.4			12539.6	12627.0		
										280.0	17.4			16091.9
UPPER STAIRWAY(3054)														
16	3053.0	2655.0	H	2.5	254.0	253.4	253.4	206.8			12838.5	12954.3		
										167.0	13.5			12370.4
MID. STAIRWAY (3222)														
8	3220.0	2822.0	H	4.5	267.5	267.0								
15	3220.0	2822.0	M	1.8	269.5	266.9	266.9	220.3			12809.8	12919.3		

## VELOCITY DATA PTY LTD

## WELL SURVEY CALCULATIONS Page 2

Company : OILMIN N. L.

Well : WEST MEREEENIE #7

Elevations : Datum : 2132.0 Ground : 2510.0 Kelly : 2530.0

Shot data : Location Elevation Offset

A	2509.0	6.0
B	2509.0	42.0
C	2509.0	94.0
D	2509.0	125.0
E	2509.0	145.0
F	2509.0	162.0
G	2509.0	184.0
H	2509.0	200.0
I	2509.0	269.0
J	2509.0	311.0
K	2509.0	348.0
L	2509.0	390.0
M	2509.0	451.0
N	2509.0	59.0
O	2509.0	275.0

Latitude : 023 57 25

Longitude : 131 28 14

Survey date : 23-MAY-85

Survey units : FEET

Times in milliseconds.

Rig identification : OILMIN - SL 750

Energy source : AN-60

Logger :

## SHOT CALCULATIONS

Shot No	Geophone depth Kelly -- Datum		Shot Locn	Shot Depth	TIMES				Check shot interval		Velocities		
					Record	Corr.	Avg.	Below datum	Distance	Time	Average	RMS	Interval
15	3220.0	2822.0	M	1.8	269.5	266.9	266.9	220.3			12809.8	12919.3	
									432.0	30.8			14026.0
LOWER STAIRWAY(3658)													
6	3652.0	3254.0	I	3.5	298.0	297.2							
14	3652.0	3254.0	L	1.8	300.0	298.3	297.7	251.1			12959.0	13060.1	
									236.0	14.4			16388.9
5	3888.0	3490.0	J	2.5	313.5	312.5							
13	3888.0	3490.0	K	1.8	313.0	311.7	312.1	265.5			13145.0	13262.1	
									262.0	20.7			12657.0
12	4150.0	3752.0	O	1.8	333.5	332.8	332.8	286.2			13109.7	13219.2	
									329.0	23.0			14304.3
11	4479.0	4081.0	E	1.8	356.0	355.8	355.8	309.2			13198.6	13303.0	
									212.0	12.2			17377.1
10	4691.0	4293.0	N	1.8	368.0	368.0	368.0	321.4			13357.2	13480.1	
									127.0	7.0			18142.9
9	4818.0	4420.0	A	2.0	375.0	375.0	375.0	328.4			13459.2	13596.2	

# ONE-WAY TIME (MSEC)

FIGURE 3

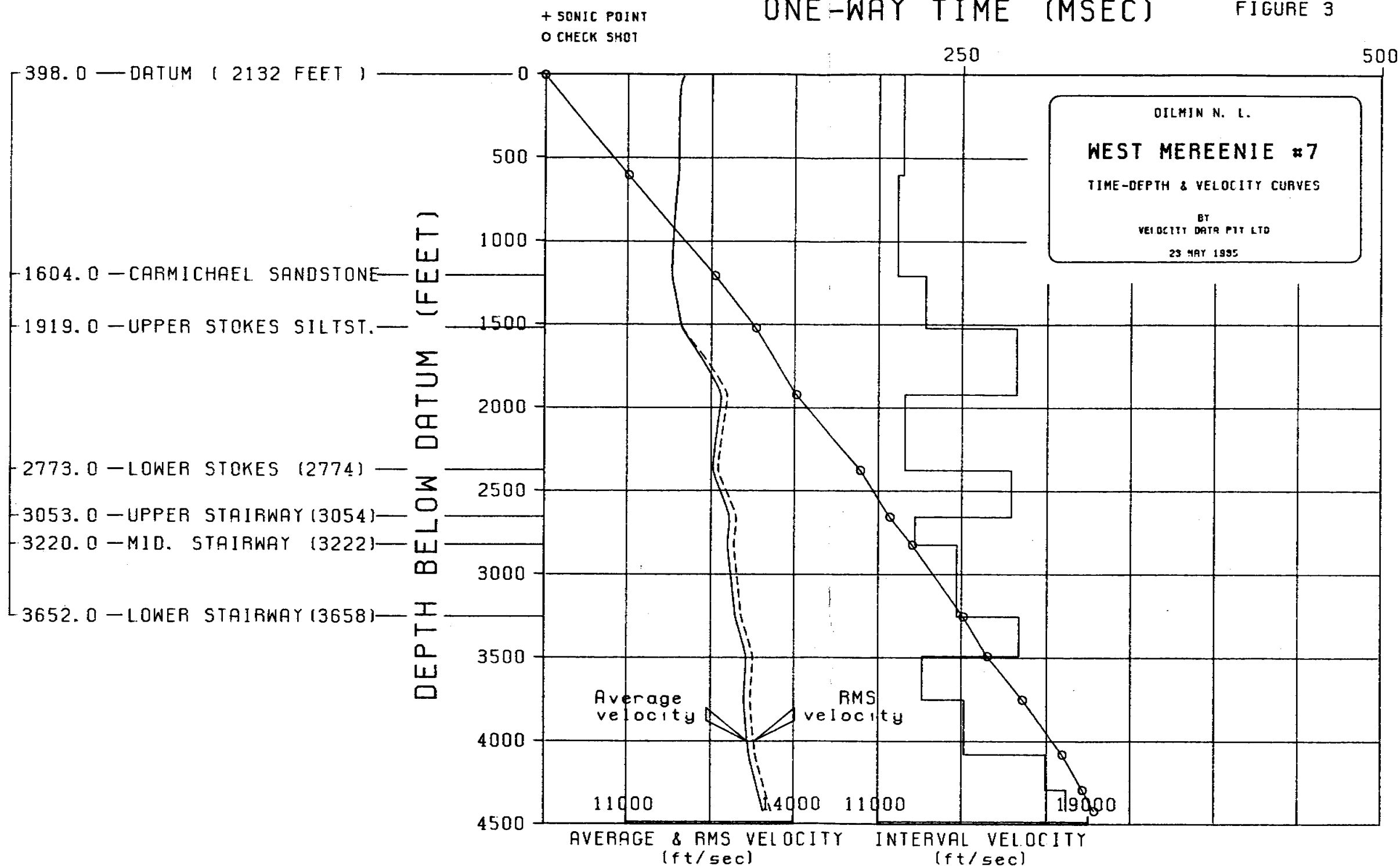


TABLE 1.

## Time-Depth curve values

Page 1.

Well : WEST MEREENIE #7

Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
10.0	0.8	11986	11986	11986	410.0	34.4	11904	11904	11898
20.0	1.7	11970	11970	11954	420.0	35.3	11904	11904	11898
30.0	2.5	11958	11958	11934	430.0	36.1	11903	11903	11898
40.0	3.3	11949	11949	11921	440.0	37.0	11903	11903	11898
50.0	4.2	11942	11942	11913	450.0	37.8	11903	11903	11898
60.0	5.0	11936	11936	11907	460.0	38.6	11903	11903	11898
70.0	5.9	11931	11931	11904	470.0	39.5	11903	11903	11897
80.0	6.7	11928	11928	11902	480.0	40.3	11903	11903	11897
90.0	7.5	11925	11925	11900	490.0	41.2	11903	11903	11897
100.0	8.4	11922	11922	11899	500.0	42.0	11903	11903	11897
110.0	9.2	11920	11920	11899	510.0	42.8	11902	11902	11896
120.0	10.1	11918	11918	11898	520.0	43.7	11902	11902	11895
130.0	10.9	11917	11917	11898	530.0	44.5	11902	11902	11894
140.0	11.7	11915	11915	11898	540.0	45.4	11902	11902	11891
150.0	12.6	11914	11914	11898	550.0	46.2	11902	11902	11888
160.0	13.4	11913	11913	11898	560.0	47.1	11901	11901	11882
170.0	14.3	11912	11912	11898	570.0	47.9	11901	11901	11874
180.0	15.1	11911	11911	11898	580.0	48.7	11900	11900	11861
190.0	16.0	11911	11911	11898	590.0	49.6	11899	11899	11840
200.0	16.8	11910	11910	11898	600.0	50.4	11898	11898	11809
210.0	17.6	11909	11909	11898	610.0	51.3	11895	11895	11764
220.0	18.5	11909	11909	11898	620.0	52.1	11893	11893	11726
230.0	19.3	11908	11908	11898	630.0	53.0	11890	11890	11703
240.0	20.2	11908	11908	11898	640.0	53.8	11886	11886	11687
250.0	21.0	11908	11908	11898	650.0	54.7	11883	11883	11677
260.0	21.8	11907	11907	11898	660.0	55.6	11880	11880	11671
270.0	22.7	11907	11907	11898	670.0	56.4	11877	11877	11667
280.0	23.5	11907	11907	11898	680.0	57.3	11873	11874	11665
290.0	24.4	11906	11906	11898	690.0	58.1	11870	11871	11663
300.0	25.2	11906	11906	11898	700.0	59.0	11867	11868	11662
310.0	26.0	11906	11906	11898	710.0	59.8	11864	11865	11661
320.0	26.9	11905	11905	11898	720.0	60.7	11861	11862	11661
330.0	27.7	11905	11905	11898	730.0	61.6	11859	11859	11660
340.0	28.6	11905	11905	11898	740.0	62.4	11856	11856	11660
350.0	29.4	11905	11905	11898	750.0	63.3	11853	11854	11660
360.0	30.2	11905	11905	11898	760.0	64.1	11851	11851	11660
370.0	31.1	11904	11904	11898	770.0	65.0	11848	11849	11660
380.0	31.9	11904	11904	11898	780.0	65.8	11846	11846	11660
390.0	32.8	11904	11904	11898	790.0	66.7	11843	11844	11660
400.0	33.6	11904	11904	11898	800.0	67.6	11841	11841	11660

TABLE 1.

## Time-Depth curve values

Page 2.

Well : WEST MEREENIE #7

Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
810.0	68.4	11839	11839	11660	1210.0	102.6	11790	11791	12155
820.0	69.3	11836	11837	11660	1220.0	103.4	11795	11795	12352
830.0	70.1	11834	11835	11660	1230.0	104.2	11800	11801	12488
840.0	71.0	11832	11833	11660	1240.0	105.0	11806	11807	12577
850.0	71.9	11830	11831	11660	1250.0	105.8	11812	11813	12634
860.0	72.7	11828	11829	11660	1260.0	106.6	11818	11820	12672
870.0	73.6	11826	11827	11660	1270.0	107.4	11825	11827	12696
880.0	74.4	11824	11825	11660	1280.0	108.2	11831	11833	12712
890.0	75.3	11822	11823	11660	1290.0	109.0	11838	11840	12722
900.0	76.1	11821	11821	11660	1300.0	109.8	11844	11846	12728
910.0	77.0	11819	11819	11660	1310.0	110.5	11850	11853	12733
920.0	77.9	11817	11818	11660	1320.0	111.3	11857	11859	12736
930.0	78.7	11815	11816	11660	1330.0	112.1	11863	11866	12737
940.0	79.6	11814	11814	11660	1340.0	112.9	11869	11872	12739
950.0	80.4	11812	11813	11660	1350.0	113.7	11875	11878	12739
960.0	81.3	11810	11811	11660	1360.0	114.5	11881	11884	12740
970.0	82.1	11809	11809	11660	1370.0	115.3	11887	11890	12741
980.0	83.0	11807	11808	11660	1380.0	116.0	11892	11896	12742
990.0	83.9	11806	11806	11660	1390.0	116.8	11898	11902	12744
1000.0	84.7	11804	11805	11660	1400.0	117.6	11904	11908	12746
1010.0	85.6	11803	11803	11660	1410.0	118.4	11909	11914	12749
1020.0	86.4	11801	11802	11660	1420.0	119.2	11915	11920	12754
1030.0	87.3	11800	11801	11660	1430.0	120.0	11921	11925	12762
1040.0	88.1	11799	11799	11660	1440.0	120.7	11926	11931	12774
1050.0	89.0	11797	11798	11660	1450.0	121.5	11932	11937	12793
1060.0	89.9	11796	11797	11660	1460.0	122.3	11937	11943	12822
1070.0	90.7	11795	11795	11661	1470.0	123.1	11943	11949	12868
1080.0	91.6	11794	11794	11661	1480.0	123.9	11949	11955	12940
1090.0	92.4	11792	11793	11662	1490.0	124.6	11956	11962	13053
1100.0	93.3	11791	11792	11663	1500.0	125.4	11964	11970	13234
1110.0	94.1	11790	11791	11666	1510.0	126.1	11973	11980	13525
1120.0	95.0	11789	11789	11669	1520.0	126.8	11985	11992	14003
1130.0	95.9	11788	11788	11674	1530.0	127.5	11999	12009	14723
1140.0	96.7	11787	11787	11681	1540.0	128.2	12016	12028	15347
1150.0	97.6	11786	11787	11694	1550.0	128.8	12035	12049	15776
1160.0	98.4	11785	11786	11713	1560.0	129.4	12054	12072	16065
1170.0	99.3	11785	11786	11742	1570.0	130.0	12074	12095	16258
1180.0	100.1	11785	11786	11788	1580.0	130.6	12094	12118	16383
1190.0	101.0	11786	11786	11860	1590.0	131.3	12114	12142	16465
1200.0	101.8	11787	11788	11975	1600.0	131.9	12134	12166	16519

TABLE 1.

## Time-Depth curve values

Page 3.

Well : WEST MEREENIE #7

Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
1610.0	132.5	12155	12189	16552	2010.0	158.8	12661	12764	11842
1620.0	133.1	12175	12213	16575	2020.0	159.6	12657	12759	11827
1630.0	133.7	12195	12236	16590	2030.0	160.4	12652	12754	11818
1640.0	134.3	12214	12259	16598	2040.0	161.3	12648	12750	11812
1650.0	134.9	12234	12282	16605	2050.0	162.1	12643	12745	11808
1660.0	135.5	12253	12305	16608	2060.0	163.0	12639	12740	11805
1670.0	136.1	12273	12327	16611	2070.0	163.8	12635	12736	11804
1680.0	136.7	12292	12349	16612	2080.0	164.7	12631	12731	11803
1690.0	137.3	12311	12371	16613	2090.0	165.5	12626	12726	11802
1700.0	137.9	12329	12393	16614	2100.0	166.4	12622	12722	11802
1710.0	138.5	12348	12414	16614	2110.0	167.2	12618	12717	11801
1720.0	139.1	12367	12435	16614	2120.0	168.1	12614	12713	11801
1730.0	139.7	12385	12456	16614	2130.0	168.9	12610	12708	11801
1740.0	140.3	12403	12477	16614	2140.0	169.8	12606	12704	11801
1750.0	140.9	12421	12498	16613	2150.0	170.6	12602	12700	11801
1760.0	141.5	12439	12518	16613	2160.0	171.5	12598	12695	11801
1770.0	142.1	12457	12538	16612	2170.0	172.3	12594	12691	11801
1780.0	142.7	12474	12558	16609	2180.0	173.2	12590	12687	11801
1790.0	143.3	12491	12578	16606	2190.0	174.0	12586	12683	11801
1800.0	143.9	12509	12597	16601	2200.0	174.8	12582	12679	11802
1810.0	144.5	12526	12617	16595	2210.0	175.7	12579	12675	11802
1820.0	145.1	12543	12636	16582	2220.0	176.5	12575	12671	11802
1830.0	145.7	12559	12655	16563	2230.0	177.4	12571	12667	11803
1840.0	146.3	12576	12673	16535	2240.0	178.2	12568	12663	11805
1850.0	146.9	12592	12691	16491	2250.0	179.1	12564	12659	11806
1860.0	147.5	12608	12709	16423	2260.0	179.9	12560	12655	11810
1870.0	148.1	12623	12726	16319	2270.0	180.8	12557	12651	11814
1880.0	148.8	12638	12742	16159	2280.0	181.6	12553	12647	11822
1890.0	149.4	12651	12757	15917	2290.0	182.5	12550	12644	11833
1900.0	150.0	12664	12770	15553	2300.0	183.3	12547	12640	11852
1910.0	150.7	12674	12781	15022	2310.0	184.2	12544	12637	11880
1920.0	151.4	12682	12788	14263	2320.0	185.0	12541	12634	11924
1930.0	152.1	12685	12791	13367	2330.0	185.8	12539	12631	11994
1940.0	152.9	12685	12791	12763	2340.0	186.7	12537	12629	12103
1950.0	153.7	12684	12789	12402	2350.0	187.5	12536	12627	12277
1960.0	154.6	12681	12786	12181	2360.0	188.3	12536	12627	12559
1970.0	155.4	12678	12782	12042	2370.0	189.0	12538	12628	13023
1980.0	156.2	12674	12778	11955	2380.0	189.8	12542	12633	13797
1990.0	157.1	12670	12773	11900	2390.0	190.4	12550	12641	14669
2000.0	157.9	12666	12769	11864	2400.0	191.1	12559	12651	15306



TABLE 1.

## Time-Depth curve values

Page 4.

Well : WEST MEREEENIE #7

Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
2410.0	191.7	12570	12662	15745	2810.0	219.4	12810	12925	12445
2420.0	192.3	12581	12675	16042	2820.0	220.1	12810	12924	12693
2430.0	193.0	12593	12688	16238	2830.0	220.9	12811	12924	13064
2440.0	193.6	12605	12701	16367	2840.0	221.7	12813	12926	13391
2450.0	194.2	12617	12715	16451	2850.0	222.4	12815	12928	13612
2460.0	194.8	12629	12728	16506	2860.0	223.1	12818	12931	13756
2470.0	195.4	12641	12742	16541	2870.0	223.8	12822	12934	13852
2480.0	196.0	12653	12755	16563	2880.0	224.6	12825	12937	13914
2490.0	196.6	12665	12769	16578	2890.0	225.3	12829	12941	13953
2500.0	197.2	12677	12782	16586	2900.0	226.0	12832	12944	13980
2510.0	197.8	12689	12795	16591	2910.0	226.7	12836	12948	13996
2520.0	198.4	12701	12809	16592	2920.0	227.4	12840	12951	14007
2530.0	199.0	12713	12822	16591	2930.0	228.1	12843	12954	14014
2540.0	199.6	12724	12835	16586	2940.0	228.8	12847	12958	14018
2550.0	200.2	12736	12848	16579	2950.0	229.6	12851	12961	14021
2560.0	200.8	12748	12861	16566	2960.0	230.3	12854	12965	14023
2570.0	201.4	12759	12873	16544	2970.0	231.0	12858	12968	14024
2580.0	202.0	12770	12886	16512	2980.0	231.7	12861	12972	14025
2590.0	202.6	12781	12898	16461	2990.0	232.4	12865	12975	14025
2600.0	203.3	12792	12910	16382	3000.0	233.1	12869	12978	14026
2610.0	203.9	12803	12921	16262	3010.0	233.8	12872	12982	14026
2620.0	204.5	12813	12932	16076	3020.0	234.6	12876	12985	14026
2630.0	205.1	12822	12942	15797	3030.0	235.3	12879	12988	14026
2640.0	205.8	12830	12950	15382	3040.0	236.0	12883	12991	14026
2650.0	206.4	12836	12957	14777	3050.0	236.7	12886	12995	14026
2660.0	207.2	12840	12960	13946	3060.0	237.4	12889	12998	14026
2670.0	207.9	12841	12961	13202	3070.0	238.1	12893	13001	14026
2680.0	208.7	12841	12960	12755	3080.0	238.8	12896	13004	14026
2690.0	209.5	12840	12958	12483	3090.0	239.5	12900	13007	14027
2700.0	210.3	12838	12956	12315	3100.0	240.3	12903	13011	14027
2710.0	211.1	12835	12953	12211	3110.0	241.0	12906	13014	14027
2720.0	212.0	12833	12950	12146	3120.0	241.7	12910	13017	14029
2730.0	212.8	12830	12947	12107	3130.0	242.4	12913	13020	14030
2740.0	213.6	12827	12944	12087	3140.0	243.1	12916	13023	14033
2750.0	214.4	12824	12941	12080	3150.0	243.8	12919	13026	14036
2760.0	215.3	12821	12937	12084	3160.0	244.5	12923	13029	14041
2770.0	216.1	12818	12934	12102	3170.0	245.2	12926	13032	14050
2780.0	216.9	12816	12931	12137	3180.0	246.0	12929	13035	14062
2790.0	217.7	12813	12929	12196	3190.0	246.7	12933	13038	14083
2800.0	218.6	12812	12926	12291	3200.0	247.4	12936	13042	14113

TABLE 1.

## Time-Depth curve values

Page 5.

Well : WEST MEREENIE #7

Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
3210.0	248.1	12939	13045	14163	3610.0	274.9	13132	13250	12455
3220.0	248.8	12943	13049	14240	3620.0	275.7	13130	13247	12452
3230.0	249.5	12947	13052	14361	3630.0	276.5	13128	13245	12452
3240.0	250.2	12952	13057	14554	3640.0	277.3	13126	13243	12451
3250.0	250.8	12957	13062	14863	3650.0	278.1	13124	13241	12453
3260.0	251.5	12963	13068	15353	3660.0	278.9	13122	13239	12456
3270.0	252.1	12970	13076	15843	3670.0	279.7	13120	13236	12463
3280.0	252.7	12978	13085	16179	3680.0	280.5	13118	13234	12471
3290.0	253.3	12986	13094	16403	3690.0	281.3	13116	13232	12486
3300.0	254.0	12995	13103	16549	3700.0	282.1	13115	13230	12510
3310.0	254.6	13003	13112	16646	3710.0	282.9	13113	13228	12547
3320.0	255.2	13012	13122	16707	3720.0	283.7	13112	13227	12604
3330.0	255.7	13021	13132	16747	3730.0	284.5	13110	13225	12695
3340.0	256.3	13029	13141	16773	3740.0	285.3	13110	13224	12838
3350.0	256.9	13038	13151	16787	3750.0	286.0	13110	13224	13067
3360.0	257.5	13047	13160	16795	3760.0	286.8	13110	13224	13410
3370.0	258.1	13055	13170	16797	3770.0	287.5	13112	13225	13709
3380.0	258.7	13064	13179	16796	3780.0	288.2	13114	13227	13909
3390.0	259.3	13073	13189	16789	3790.0	289.0	13116	13229	14042
3400.0	259.9	13081	13198	16774	3800.0	289.7	13119	13232	14127
3410.0	260.5	13089	13207	16752	3810.0	290.4	13121	13234	14183
3420.0	261.1	13098	13216	16713	3820.0	291.1	13124	13236	14219
3430.0	261.7	13106	13225	16653	3830.0	291.8	13127	13239	14243
3440.0	262.3	13114	13234	16564	3840.0	292.5	13129	13241	14258
3450.0	262.9	13122	13242	16422	3850.0	293.2	13132	13244	14268
3460.0	263.5	13129	13250	16209	3860.0	293.9	13135	13247	14274
3470.0	264.2	13135	13257	15887	3870.0	294.6	13137	13249	14279
3480.0	264.8	13141	13263	15412	3880.0	295.3	13140	13252	14280
3490.0	265.5	13145	13267	14728	3890.0	296.0	13143	13254	14283
3500.0	266.2	13147	13268	13908	3900.0	296.7	13146	13257	14284
3510.0	267.0	13148	13269	13347	3910.0	297.4	13148	13259	14285
3520.0	267.7	13147	13268	13010	3920.0	298.1	13151	13262	14285
3530.0	268.5	13146	13267	12803	3930.0	298.8	13154	13264	14287
3540.0	269.3	13145	13265	12672	3940.0	299.5	13156	13267	14287
3550.0	270.1	13143	13263	12590	3950.0	300.2	13159	13269	14289
3560.0	270.9	13141	13261	12537	3960.0	300.9	13162	13272	14290
3570.0	271.7	13140	13259	12504	3970.0	301.6	13164	13274	14292
3580.0	272.5	13138	13256	12483	3980.0	302.3	13167	13277	14298
3590.0	273.3	13136	13254	12470	3990.0	303.0	13169	13279	14306
3600.0	274.1	13134	13252	12461	4000.0	303.7	13172	13282	14315

TABLE 1.

## Time-Depth curve values

Page 6.

Well : WEST MEREEENIE #7

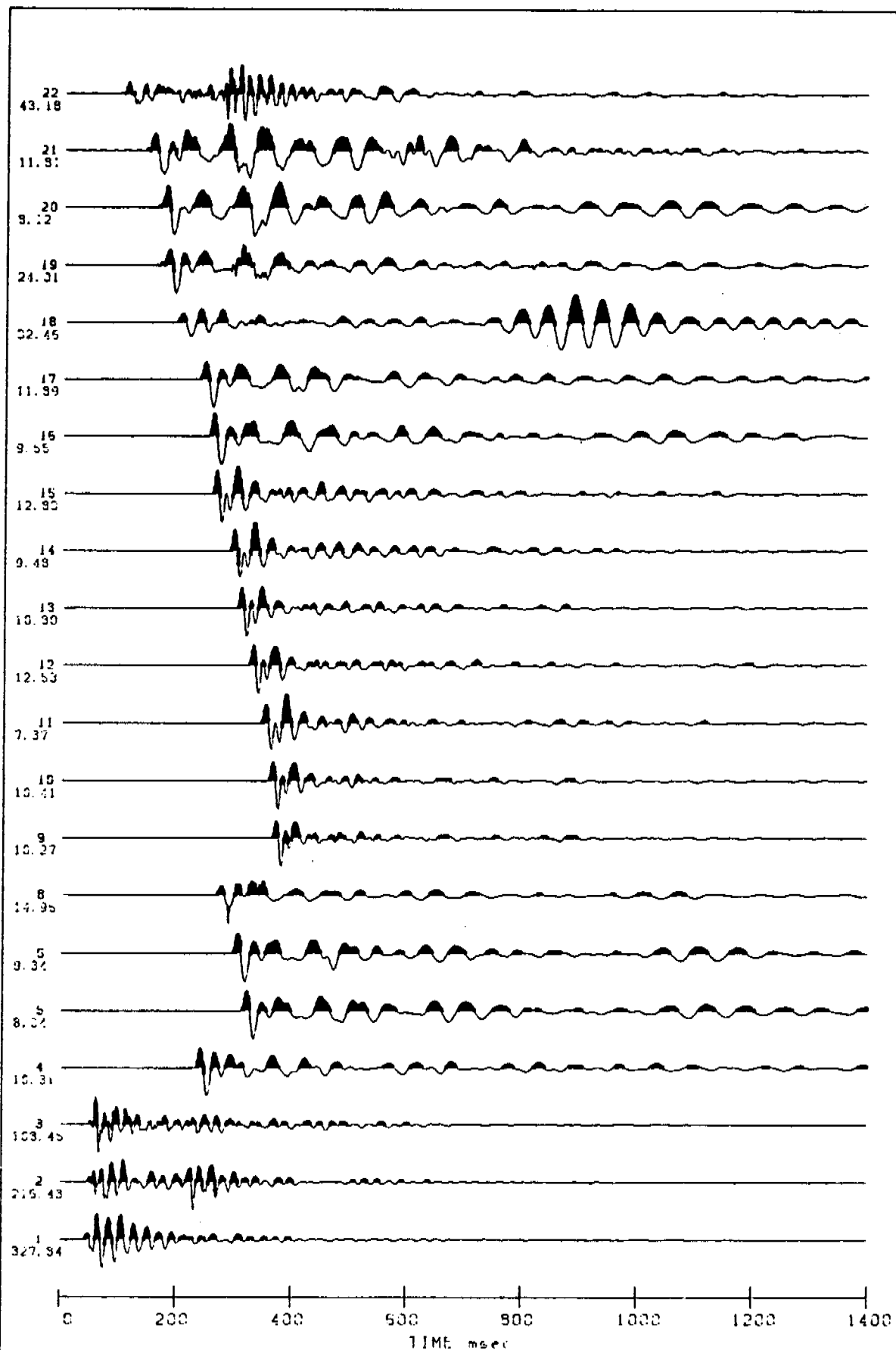
Client : OILMIN N. L.

Survey units : FEET

Datum : 2132.0

Velocities derived from fitted time-depth curve.

Datum Depth	One-way time(ms)	-----VELOCITIES-----			Datum Depth	One-way time(ms)	-----VELOCITIES-----		
		Average	RMS	Interval			Average	RMS	Interval
4010.0	304.4	13175	13284	14332	4220.0	317.3	13301	13422	17564
4020.0	305.1	13177	13287	14359	4230.0	317.8	13309	13430	17570
4030.0	305.8	13180	13289	14399	4240.0	318.4	13317	13439	17580
4040.0	306.5	13183	13292	14464	4250.0	319.0	13324	13448	17593
4050.0	307.1	13186	13295	14565	4260.0	319.5	13332	13456	17613
4060.0	307.8	13190	13298	14725	4270.0	320.1	13339	13465	17643
4070.0	308.5	13193	13302	14980	4280.0	320.7	13347	13473	17689
4080.0	309.1	13198	13307	15396	4290.0	321.2	13355	13482	17763
4090.0	309.8	13204	13313	16010	4300.0	321.8	13363	13491	17872
4100.0	310.4	13210	13320	16531	4310.0	322.3	13371	13500	17966
4110.0	311.0	13217	13328	16882	4320.0	322.9	13379	13509	18032
4120.0	311.5	13225	13336	17119	4330.0	323.5	13387	13518	18074
4130.0	312.1	13232	13344	17274	4340.0	324.0	13395	13527	18102
4140.0	312.7	13240	13353	17373	4350.0	324.6	13403	13536	18124
4150.0	313.3	13247	13361	17441	4360.0	325.1	13411	13545	18141
4160.0	313.8	13255	13370	17484	4370.0	325.7	13419	13555	18157
4170.0	314.4	13263	13379	17513	4380.0	326.2	13427	13564	18177
4180.0	315.0	13271	13387	17528	4390.0	326.8	13435	13573	18202
4190.0	315.6	13278	13396	17543	4400.0	327.3	13443	13582	18240
4200.0	316.1	13286	13405	17551	4410.0	327.9	13451	13591	18299
4210.0	316.7	13294	13413	17557	4420.0	328.4	13459	13601	18387

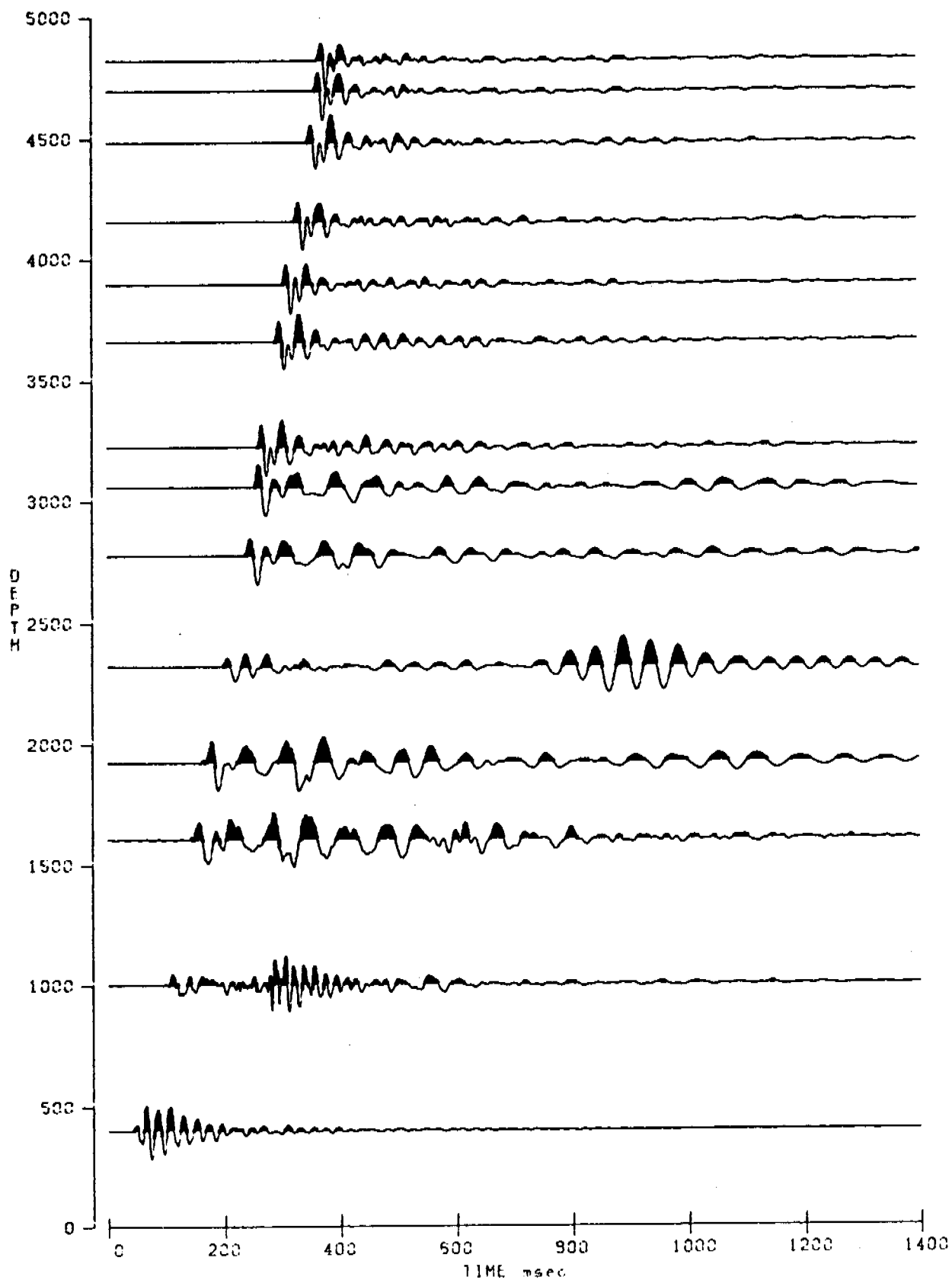


## WEST MERENIE #7

VELOCITY SURVEY TRACE DISPLAY  
Filter OUT-OUT  
No gain recovery

Figure 4A



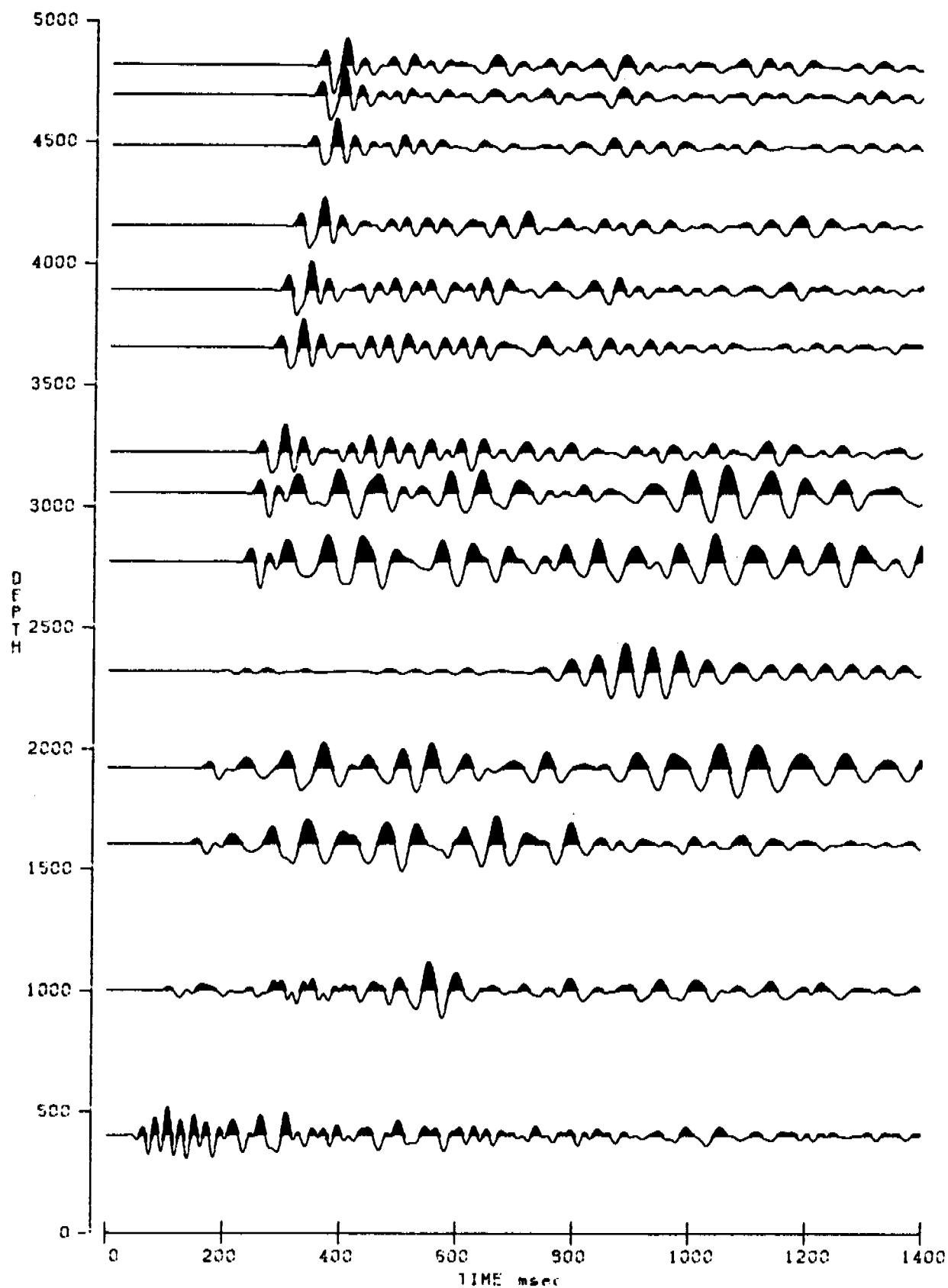


## WEST MERREENIE #7

VELOCITY SURVEY TRACE DISPLAY  
Filter OUT-OUT  
No gain recovery



Figure 4B



## WEST MEREENIE #7

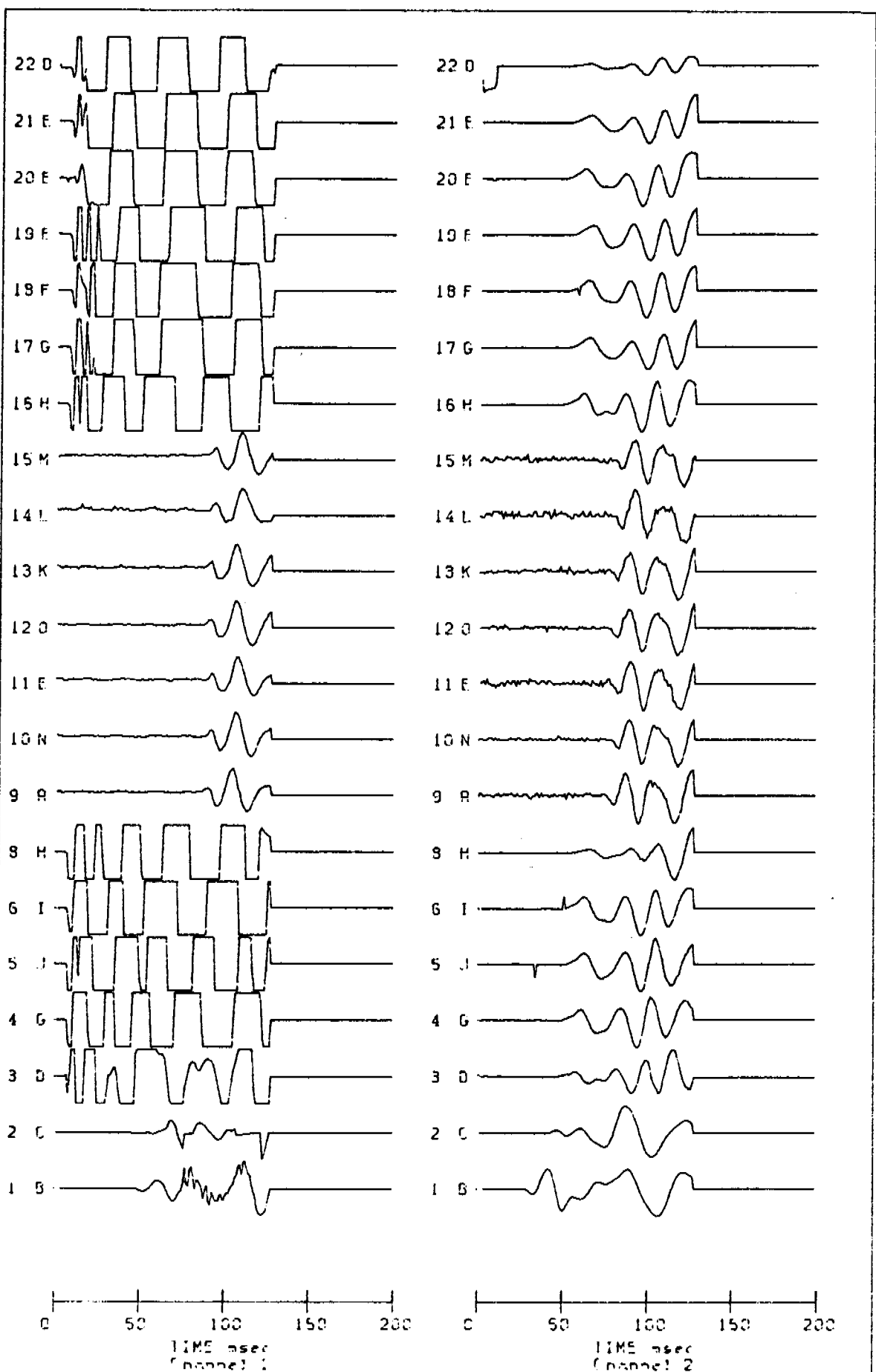
VELOCITY SURVEY TRACE DISPLAY

Filter 5-40

Gain 12.0



Figure 40



## WEST MERREENIE #7

VELOCITY SURVEY TRACE DISPLAY  
Auxiliary channels  
Filter: OUT-OUT

Figure 4D

