

APPENDIX I

Bedload and Suspended Sediment results for Soil Site during 95/96 wet season

SUSPENDED SEDIMENT

DATE: 14/12/95
SOIL SITE

Time	Discharge l/s		Conc g/l	Total g
16:42:22	0.06366	16:42:22	0.14	
16:42:52	0.17486	16:42:52	0.23	0.03
16:43:22	0.20736	16:43:22	0.17	0.05
16:43:52	0.24174	16:43:52	0.44	0.09
16:44:22	0.24174	16:44:22	0.19	0.09
16:44:52	0.27800	16:44:52	0.18	0.06
16:45:22	0.31614	16:45:22	0.29	0.09
16:45:52	0.31614	16:45:52	0.31	0.12
16:46:22	0.35616	16:46:22	0.32	0.13
16:46:52	0.35616	16:46:52	0.19	0.11
16:47:22	0.39806	16:47:22	0.22	0.10
16:47:52	0.44184	16:47:52	0.32	0.14
16:48:22	0.44184	16:48:22	0.37	0.19
16:49:22	0.48750	16:49:22	0.27	0.37
16:50:22	0.53504	16:50:22	0.32	0.37
16:50:52	0.53504	16:50:52	0.22	0.18
16:51:22	0.53504	16:51:22	0.20	0.14
16:51:52	0.53504	16:51:52	0.20	0.13
16:52:22	0.53504	16:52:22	0.18	0.13
16:52:52	0.48750	16:52:52	0.17	0.11
16:53:22	0.48750	16:53:22	0.29	0.14
16:53:52	0.48750	16:53:52	0.25	0.16
16:54:52	0.48750	16:54:52	0.18	0.26
16:55:52	0.44184	16:55:52	0.16	0.19
16:56:52	0.35616	16:56:52	0.16	0.16
16:57:52	0.31614	16:57:52	0.11	0.11
16:58:52	0.27800	16:58:52	0.21	0.12
17:00:22	0.24174	17:00:22	0.19	0.19
17:01:52	0.20736	17:01:52	0.17	0.15
17:03:22	0.20736	17:03:22	0.21	0.15
17:04:52	0.14424	17:04:52	0.14	0.12
17:57:00	0.00000	17:57:00	0.00000	0.66
		TOTAL SUS. SED:		5.05

SUSPENDED SEDIMENT

DATE 10/1/96

SOIL SITE

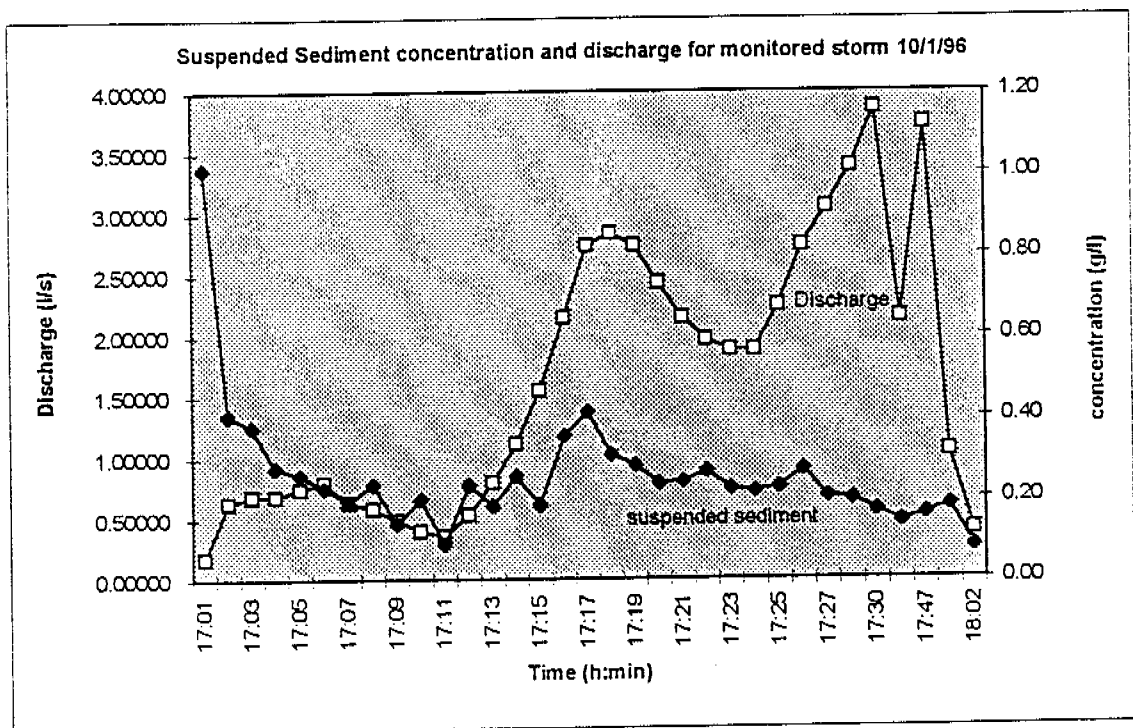
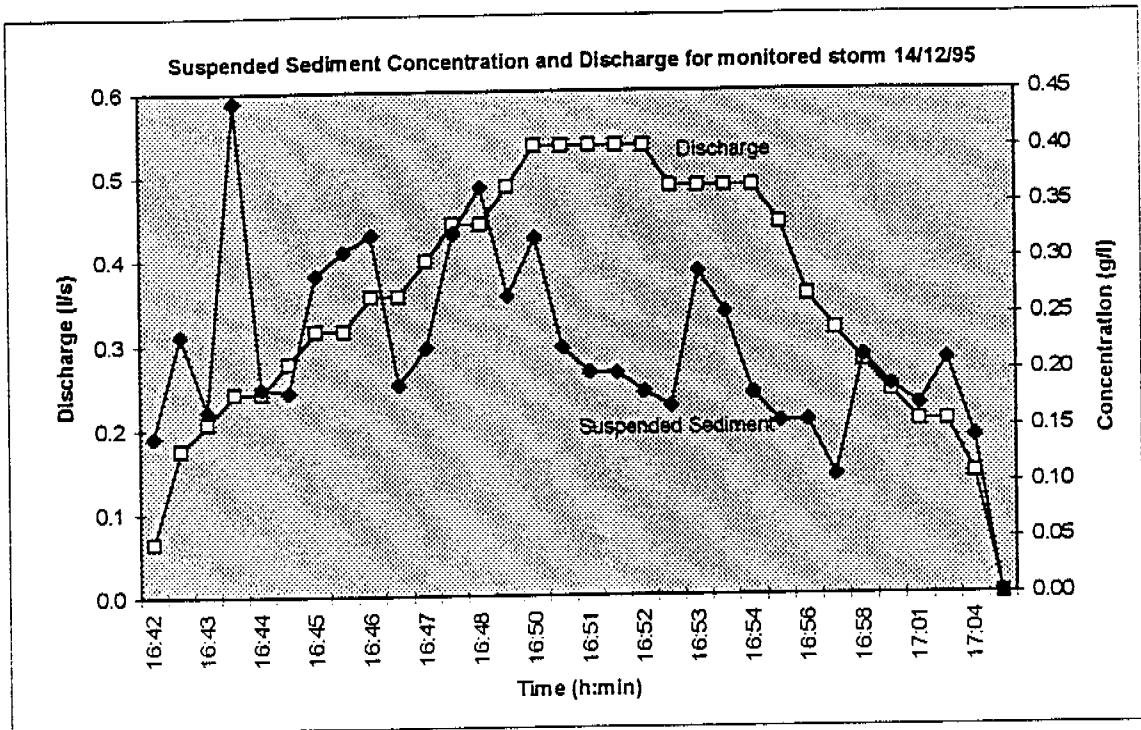
Time	Discharge l/s		Conc g/l	Total g
0.71	0.17486	17:01:20	1.01	
0.71	0.63576	17:02:20	0.41	0.72
0.71	0.68894	17:03:20	0.38	0.65
0.71	0.68894	17:04:20	0.28	0.56
0.71	0.74400	17:05:20	0.26	0.48
0.71	0.80094	17:06:20	0.23	0.47
0.71	0.63576	17:07:20	0.19	0.38
0.71	0.58446	17:08:20	0.24	0.33
0.71	0.48750	17:09:20	0.14	0.25
0.72	0.39806	17:10:20	0.20	0.19
0.72	0.35616	17:11:20	0.09	0.13
0.72	0.53504	17:12:20	0.23	0.18
0.72	0.80094	17:13:20	0.18	0.35
0.72	1.11384	17:14:20	0.26	0.52
0.72	1.55136	17:15:20	0.19	0.73
0.72	2.14734	17:16:20	0.35	1.24
0.72	2.73150	17:17:20	0.41	2.33
0.72	2.83544	17:18:20	0.31	2.50
0.72	2.73150	17:19:20	0.28	2.04
0.72	2.43096	17:20:20	0.24	1.67
0.72	2.14734	17:21:20	0.24	1.37
0.72	1.96766	17:22:20	0.27	1.31
0.72	1.88064	17:23:20	0.22	1.18
0.73	1.66064	17:24:20	0.22	1.03
0.73	2.24000	17:25:20	0.23	1.14
0.73	2.73150	17:26:20	0.27	1.55
0.73	3.04896	17:27:20	0.20	1.72
0.73	3.38334	17:28:20	0.20	1.62
0.73	3.65550	17:30:20	0.17	3.33
0.73	2.14734	17:35:20	0.14	5.86
0.74	3.73464	17:47:20	0.16	13.45
0.75	1.04750	17:57:20	0.18	10.26
0.76	0.39806	18:02:20	0.08	1.18
0.77	0.00000	18:34:20	0.00000	0.64
TOTAL SUS. LOAD:				61.35

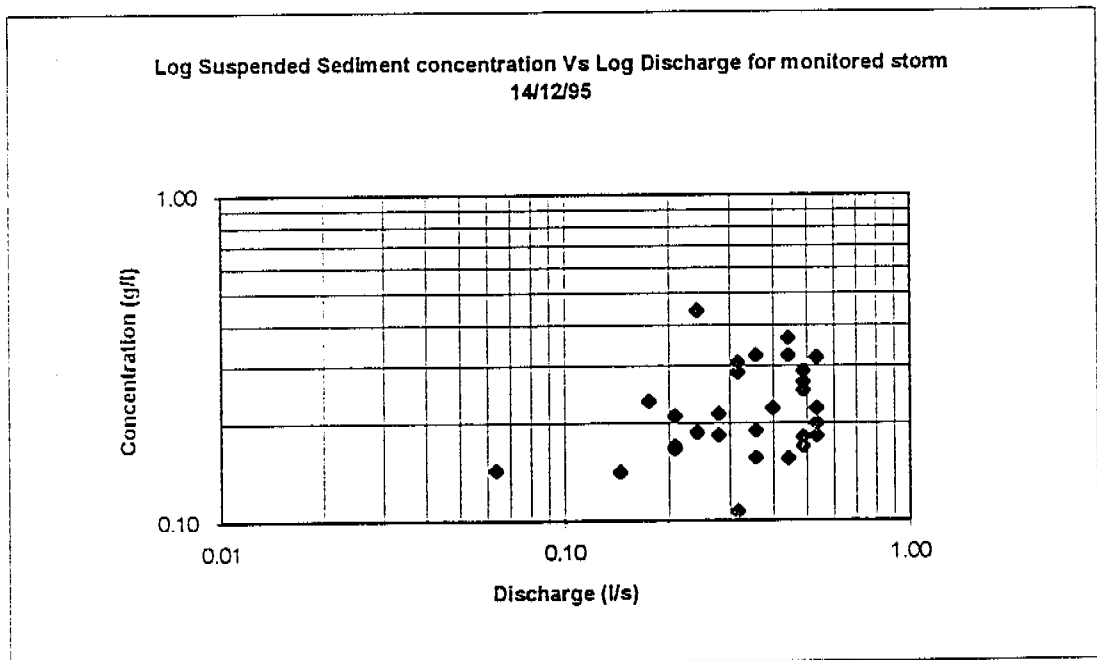
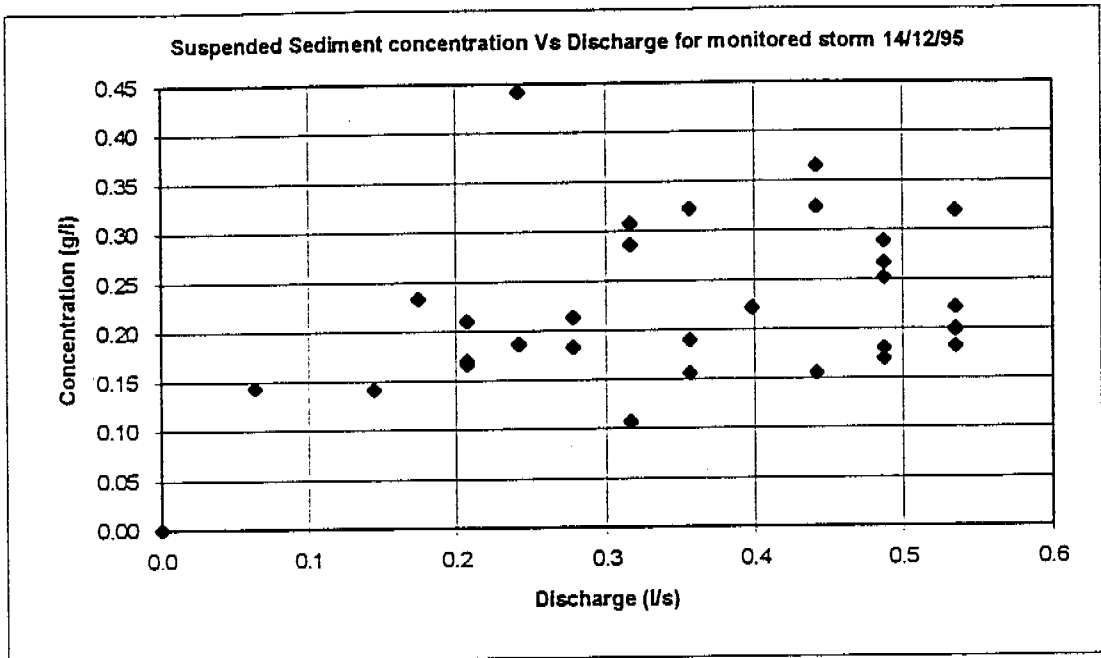
SOIL SITE BEDLOAD

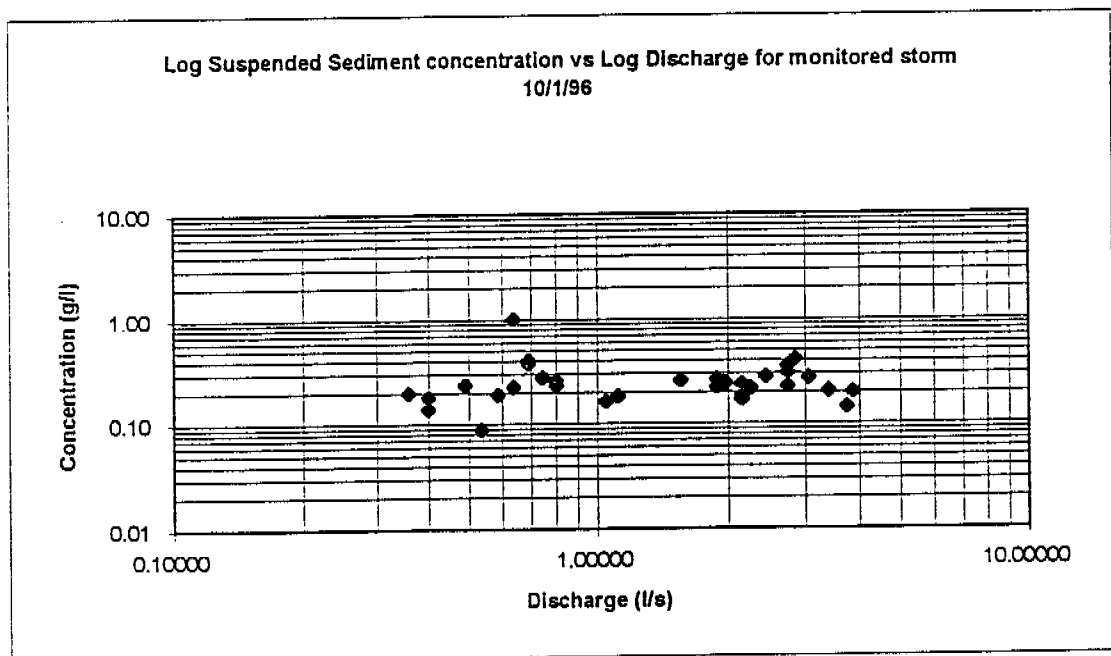
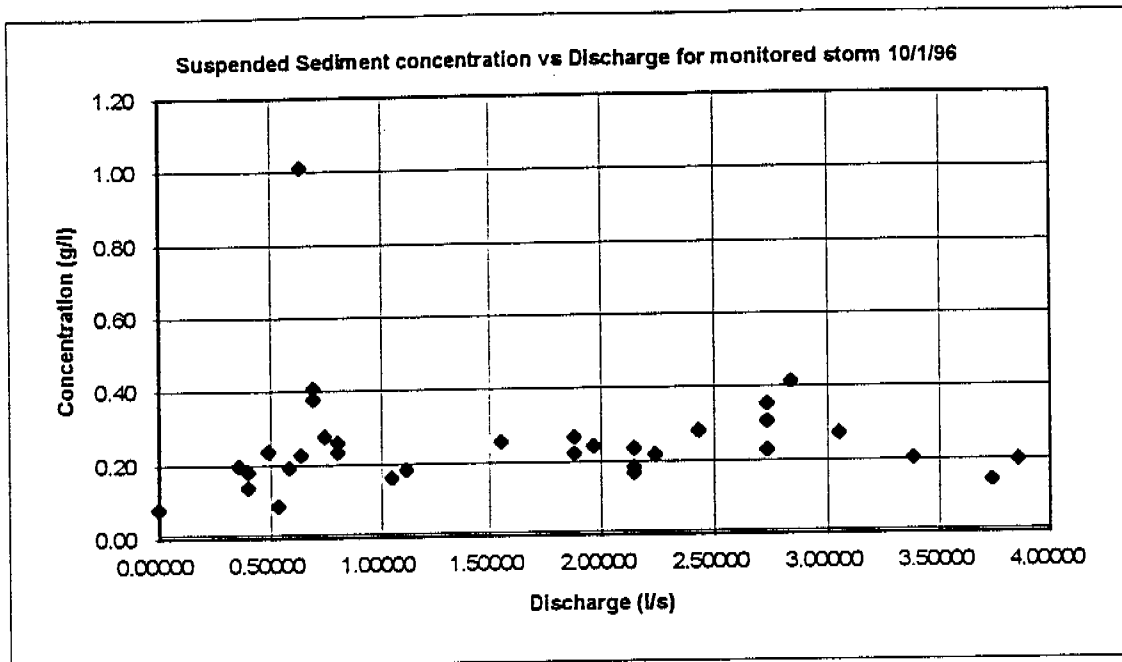
Sample Name	Date + Time	Time	Container Mass	O.D. Mass +container	Total O.D. mass	Rainfall Counts (0.2)	Rainfall (mm)
S121195	11/12/95 12:00	20:00-22:00 8/12/95	12.73 12.7	839.16 444.32	826.43 431.62 1258.05	355	71
S121395	3/12/95 14:30	16:30-18:00 11/12/95	12.75 12.78 12.74	48.25 106.46 388.73	35.5 93.68 375.99 505.17	139	27.8
S121495	14/12/95 12:30	21:20 13/12 til 4:00 14/12	12.78 12.85	142.85 14.69	130.07 1.84 131.91	113	22.6
S121495M	14/12/95 18:15 MONITORED	16:00- 18:00	12.63 12.54	245.99 119.87	233.36 107.33 340.69	74	14.8
S121995	19/12/95 9:30	18:00 18/12	12.57 12.75	424.9 14.2	412.33 1.45 413.78	106	21.2
S122895	28/12/95 11:30	19:30-20:15 27/12/95	12.62 12.52 12.62 12.55	15.1 248.51 370.41 765.07	2.48 235.99 357.79 752.52 1348.78	217	43.4
S122995	29/12/95	28/12/95 afternoon	12.61 12.51	159.51 17	146.9 4.49 151.39		19
S011095	10/1/96 19:00 MONITORED	5-7pm 10/1/96	12.61 12.65 12.75 12.71 12.71	481.09 865.99 709.59 72.39 178.8	468.48 853.34 696.84 59.68 166.09 2244.43	444	88.8
S011296	12/1/96	01/11/95	12.78 12.79	43.36 163.75	30.58 150.96 181.54	87	17.4
S011596	15/1/96	3 storms over weekend	12.58 12.55	1438.71 526.76	1426.13 514.21 1940.34	531	106.2
S011796	17/1/96 9:30	17:00-18:00	13	62.43	49.43		

APPENDIX J

Sediment graphs for Soil Site during 95/96 wet season







APPENDIX K

Vegetation results for Soil Site during 95/96 wet season

VEGETATION ANALYSIS OF SOIL SITE

% COVER : 4 permanent quadrats

QUADRAT SIZE : 1m * 1m

1. Each of the 4 sites were selected and pegged out.
2. The 1m square PVC pipe was placed on quadrat
3. Photograph was taken (standing on box at trough end of plot)
4. Average grass height was measured
This was done by taking atleast 10 measurements of total grass height (full length of strand) using a metre ruler- the same one each date
5. % cover of quadrat was estimated
6. the % similarity between the quadrat and the rest of the plot was estimated
7. Photographs were taken (4 in total) of the plot, using same reference point to centre photo each date

DATE	QUAD	% VEG (%)	APPROX. % SIMILARITY (%)	AVERAGE GRASS HT. (m)
20/12/95	1	85	50	0.55
	2	40	25	0.4
	3	10	10	0.1
	4	40	15	0.35
2/1/96	1	85	50	0.7
	2	40	25	0.5
	3	20	10	0.15
	4	40	15	0.5
8/1/96	1	85	60	0.78
	2	40	20	0.6
	3	30	10	0.25
	4	50	10	0.75
15/1/96	1	90	50	0.9
	2	40	20	0.7
	3	40	10	0.45
	4	60	20	0.85
22/1/96	1	90	60	1.05
	2 *	30	15	0.8
	3	40	10	0.32
	4	60	15	1
29/1/96	1	90	60	1.2
	2	35	10	1
	3	50	10	0.5
	4	60	20	1.5
5/2/96	1	90	60	1.4
	2	35	10	1
	3	50	10	0.6
	4	60	20	1.6
12/2/96	1	90	60	1.8
	2	35	10	1.2
	3	50	10	0.7
	4	65	20	2

* %vegetation at quad 2: SHORTER GRASS IS DYING OFF

WEIGHTING OVER ENTIRE SITE:

% veg of site = $\text{sum}(\% \text{ veg at quad} \times \% \text{ similarity} / 100)$

average grass height = $\text{sum}(\text{av. grass height at quad} \times \% \text{ similarity} / 100)$

DATE	vegetation cover	biomass	average grass height
20/12/95	59.5	18.5125	0.4375
2/01/96	60.5	47.8395	0.565
8/01/96	67	27.403	0.688
15/01/96	69	46.875	0.805
22/01/96	71.5	59.488	0.932
29/01/96	74.5	75.159	1.17
5/02/96	74.5	38.27	1.32
12/02/96	75.5	41.133	1.67

VEGETATION ANALYSIS OF SOIL SITE

BIOMASS : 4 QUADRATS EACH SAMPLING DAY

QUADRAT SIZE : 20cm *20cm

1. Site was selected. All vegetation, including roots, were removed and placed in a paper bag of known weight.

2. The samples were placed in oven at 100C in the paper bags.

3. The dry weight of vegetation and bag was recorded.

NOTE: The samples were taken on the site, this produces a negligible error as less than 1% of the site has been sampled for biomass

DATE	SAMPLE	BAG WT g	DRY BAG & VEG WT g	DRY VEG WT g	% SIMILARITY WITH REST OF SITE
20/12/95	1	48.57	77.52	28.95	50
	2	48.25	51.51	3.26	25
	3	48.39	59.39	11	10
	4	47.7	61.85	14.15	15
2/1/96	1	48.56	120.73	72.17	50
	2	45.49	83.48	37.99	25
	3	54.19	56.69	2.5	10
	4	48.28	61.66	13.38	15
8/1/96	1	48.25	82.22	33.97	60
	2	48.45	69.9	21.45	20
	3	52.29	63.23	10.94	10
	4	48.08	64.45	16.37	10
15/1/96	1	47.61	116.29	68.68	50
	2	18.87	42.47	23.6	20
	3	19.12	31.49	12.37	10
	4	19.01	51.9	32.89	20
22/1/96	1	47	125.51	78.51	60
	2	19.1	31.76	12.66	15
	3	19.1	34.23	15.13	10
	4	19.02	78.82	59.8	15
29/1/96	1	47.96	143.71	95.75	60
	2	18.95	56.92	37.97	10
	3	19.01	56.25	37.24	10
	4	19.05	69.99	50.94	20
5/2/96	1	47.48	94.35	46.87	60
	2	19.13	38.74	19.61	10
	3	19.07	38.66	19.59	10
	4	19	50.14	31.14	20
12/2/96	1	47.69	98.58	50.89	60
	2	19.18	38.93	19.75	10
	3	19.16	39.52	20.36	10
	4	19.13	52.07	32.94	20