

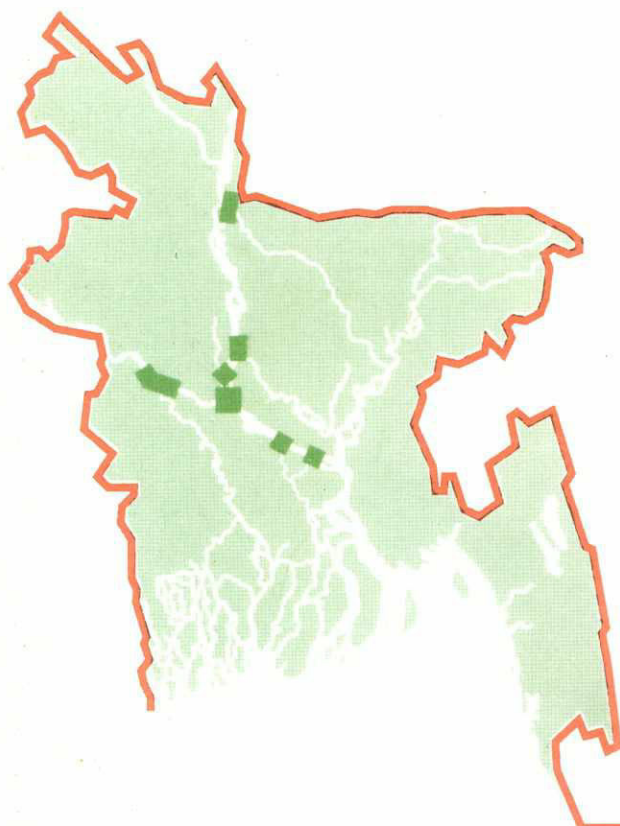
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FAP-24 (50)

GOVERNMENT OF BANGLADESH FLOOD PLAN COORDINATION ORGANIZATION

FAP 24 RIVER SURVEY PROJECT

BN 1981
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12

Survey Report 8
Flood season 1993
Volume III: Annexures 4, 5 & 6



DELFT HYDRAULICS
DANISH HYDRAULIC INSTITUTE
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HYDROLAND
APPROTECH

Project ALA/90/04 — Commission of the European Communities

Survey Report 8
Flood season 1993
Volume III: Annexures 4, 5 & 6



July 12 1994

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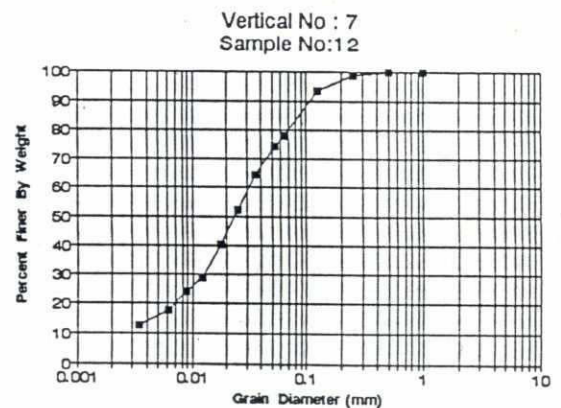
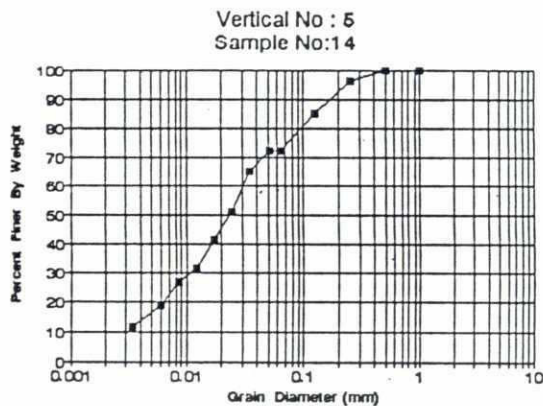
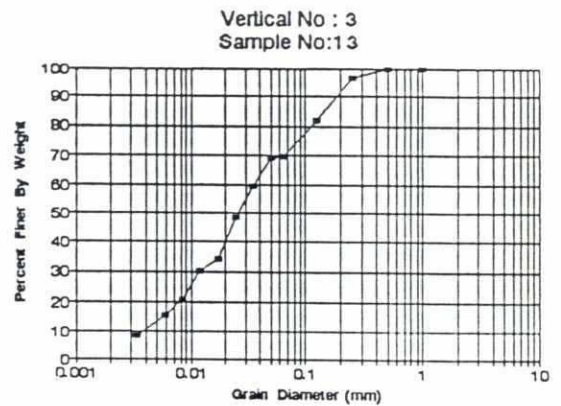
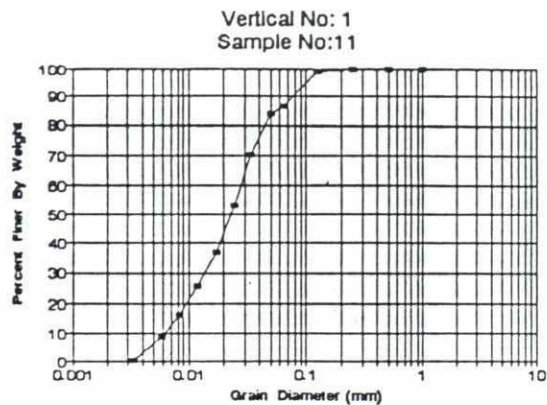
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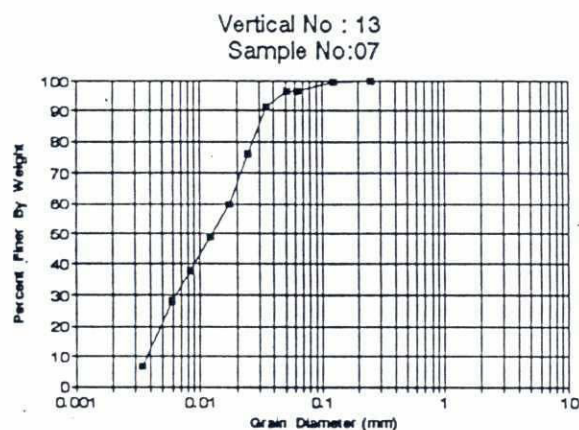
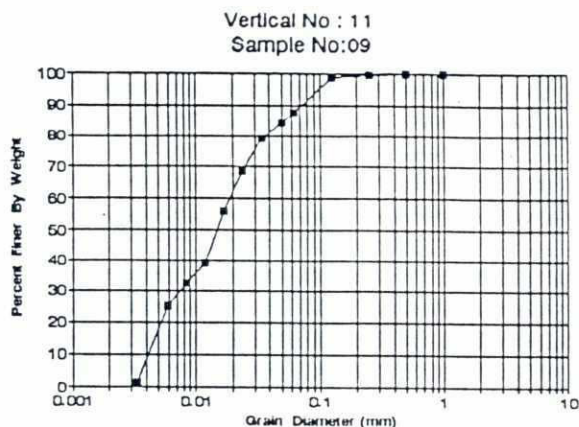
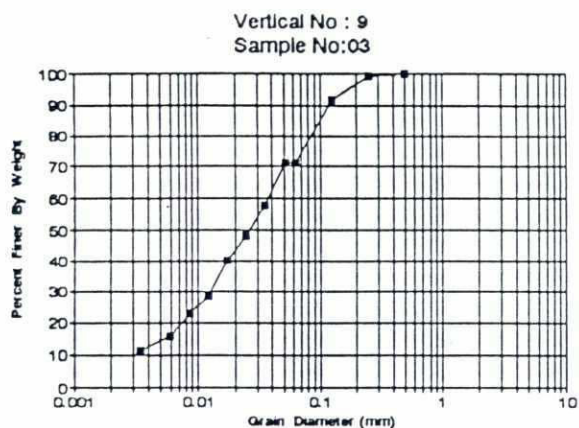
Volume I	Main Report
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	2. Summary and conclusion
	3. Description of survey areas and selection of measurement cross sections
	4. Summary of survey equipment and procedures
	5. Outline of survey data
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	References
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	Annexure 2 Water-level recordings
	Annexure 3 Vertical current velocity and suspended sediment profiles
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	Annexure 5 Grain size distribution of bed load samples (Helley-Smith trap sampler)
	Annexure 6 Grain size distribution of bed material samples

Location	Period	Bulletin no.	Dwg.
1 Bahadurabad	3-9 June 93 9-17 July 93 (23-24 Aug 93) 6-11 Sept 93	6 7 (10) 11	4.1 - 4.4 4.5 - 4.13 4.14 - 4.20
2 Sirajganj	21-30 July 93 (7 Sept 93) 24-27 Oct 93	8 (12) 23	4.21 - 4.27 4.28 - 4.33
(3) (Aricha)	(19 Sept 93)	(13)	
4 Hardinge Bridge	26-28 Sept 93	15	4.34 - 4.36
5 Baruria	3-8 Aug 93 (19 Sept 93) (1 Oct 93) 19-22 Oct 93	9 (14) (17) 22	4.37 - 4.41 4.42 - 4.46
6 Mawa	3-7 Oct 93	18	4.47 - 4.50
8 Tilly	15 Oct 93	21	4.51
9 Gorai	29-30 Sept 93	16	4.52
10 Arial Khan	8 Oct 93	19	4.53
11 Bhairab Bazar	11-12 Oct 93	20	4.54
() : Information in brackets relates to measurements of other types than those described in the present annexure			

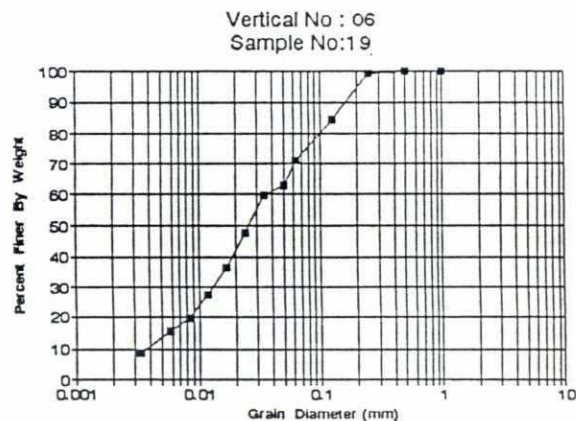
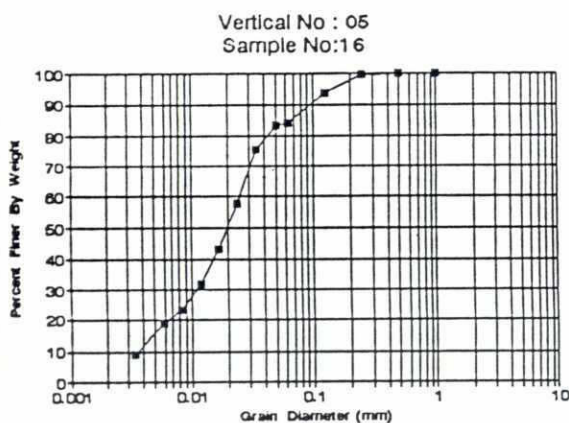
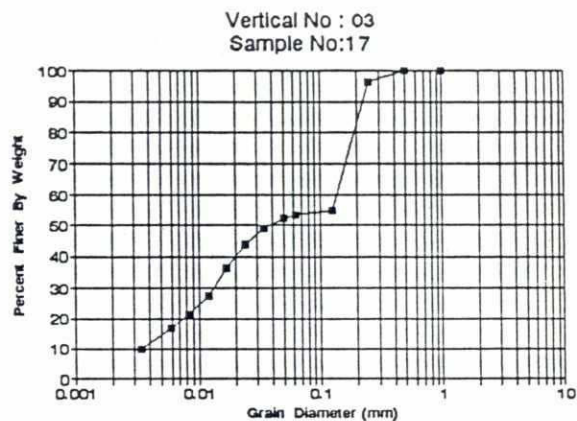
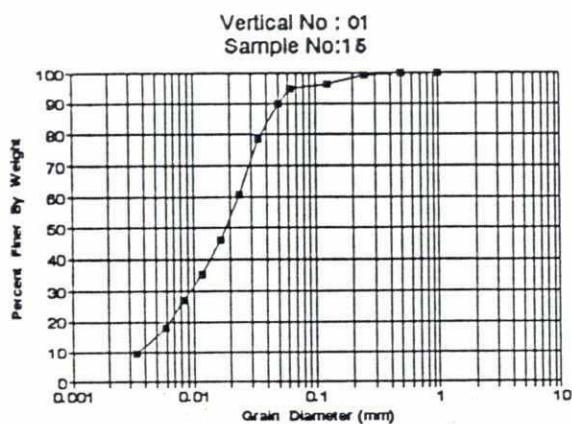
Annexure 4:
Grain size distribution
of suspended sediments
(Andreasen tube analysis)



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
11	07/06/93	11:29	0.008	0.017	0.023	0.076	2.500
13	07/06/93	13:36	0.006	0.018	0.025	0.185	4.583
14	07/06/93	16:55	0.005	0.014	0.023	0.178	5.113
12	07/06/93	17:30	0.005	0.016	0.024	0.106	4.067

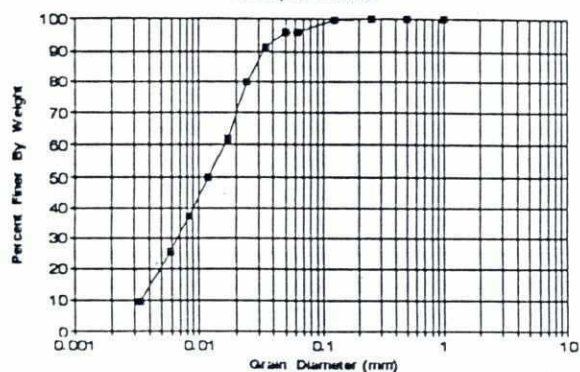


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
3	07/06/93	14:00	0.006	0.015	0.027	0.122	4.009
9	07/06/93	11:42	0.005	0.010	0.017	0.071	2.967
7	07/06/93	09:10	0.003	0.008	0.013	0.034	2.543

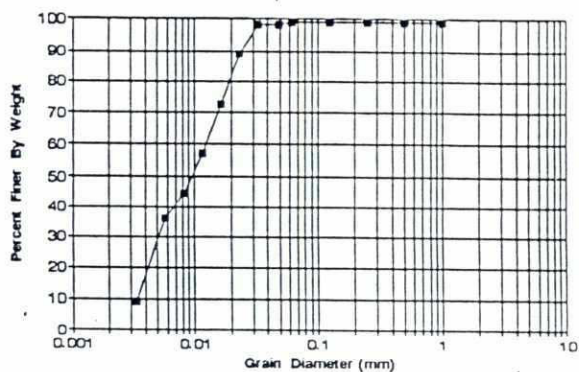


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
15	09/06/93	12:35	0.005	0.013	0.019	0.050	2.989
17	09/06/93	14:40	0.005	0.016	0.038	0.235	6.282
16	09/06/93	11:54	0.005	0.013	0.020	0.098	3.000
19	09/06/93	15:25	0.006	0.017	0.026	0.168	4.467

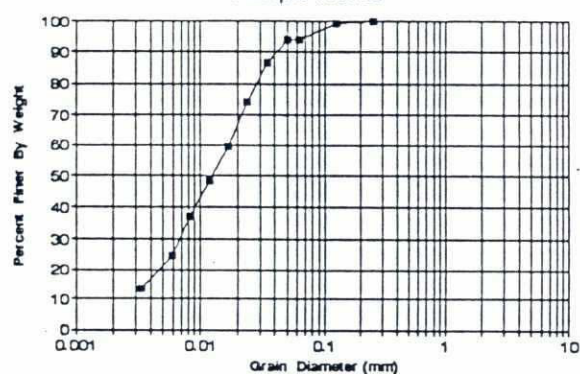
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Sample No:10



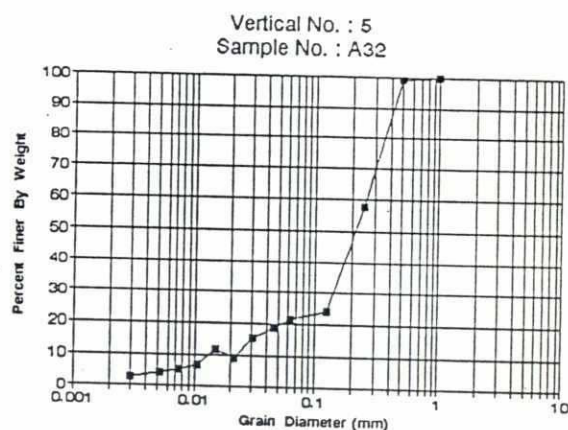
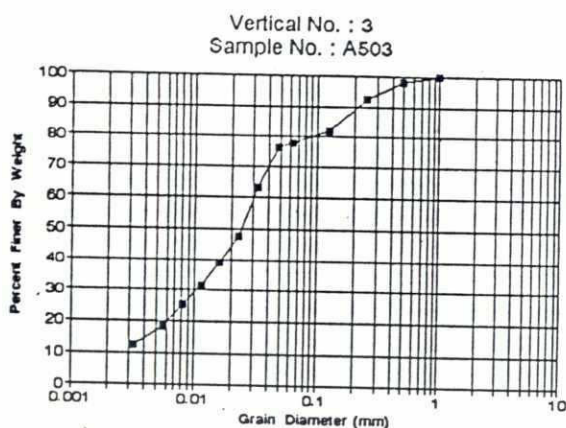
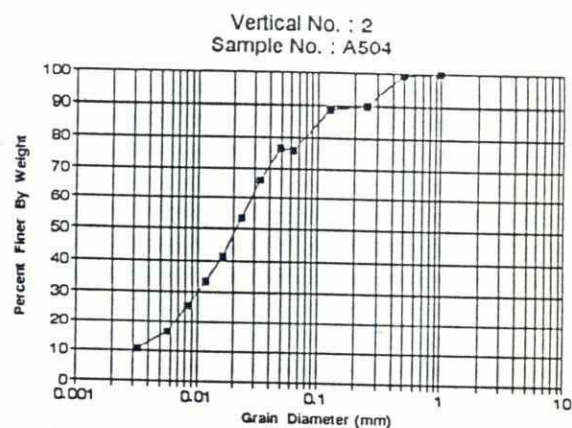
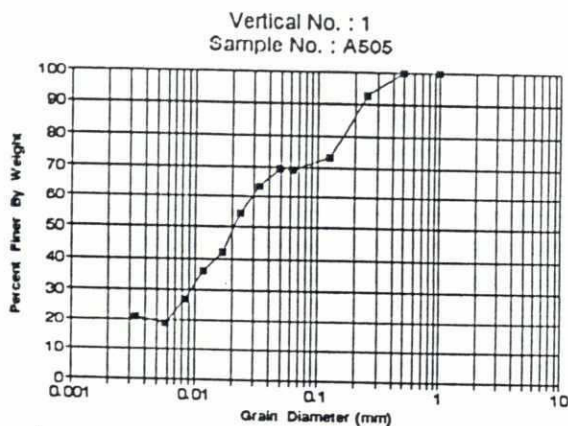
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Sample No:06



Vertical No : 5
Sample No:02

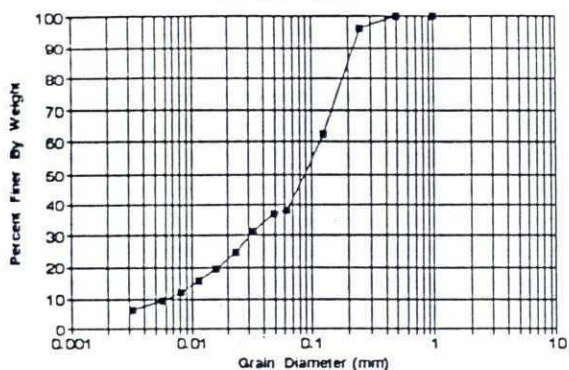


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
10	04/06/93	15:53	0.004	0.008	0.013	0.033	2.533
6	05/06/93	11:20	0.004	0.006	0.010	0.026	2.469
2	05/06/93	16:15	0.004	0.008	0.014	0.041	2.895

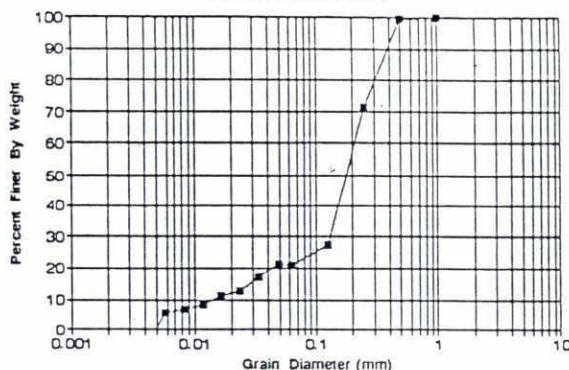


Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A505	13/07/93	15:45	-	0.012	0.021	0.225	-
A504	13/07/93	14:50	0.006	0.014	0.021	0.250	4.131
A503	13/07/93	14:00	0.004	0.015	0.025	0.210	5.778
A32	13/07/93	14:30	0.015	0.032	0.042	0.120	2.471

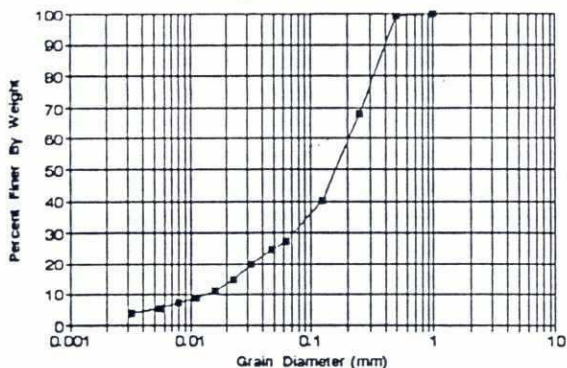
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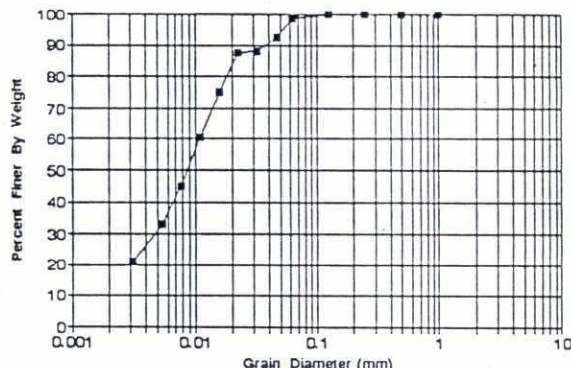
Vertical No.: 7
Sample No.: A502



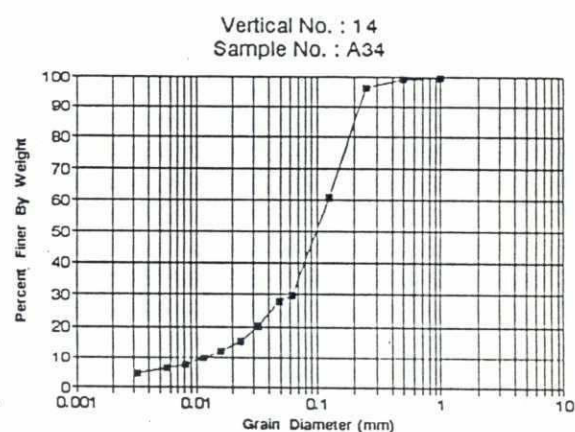
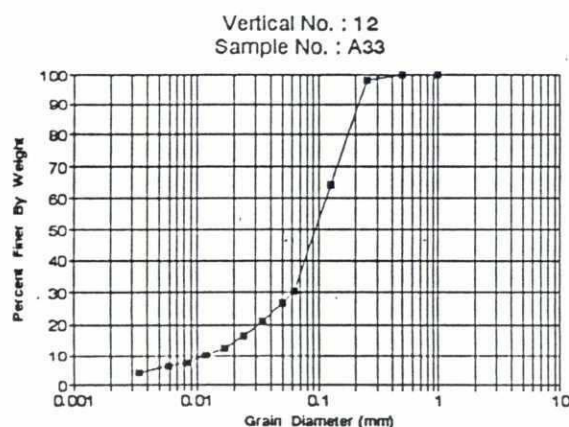
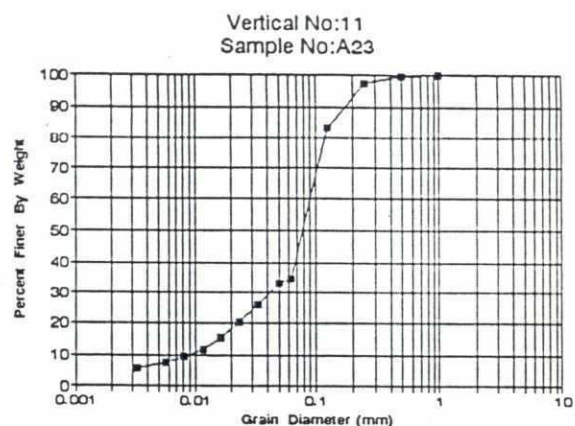
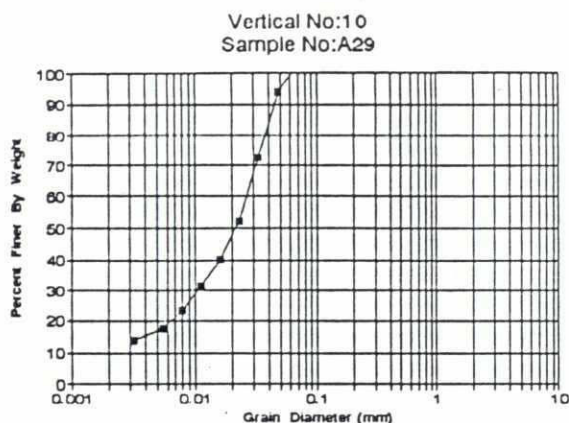
Vertical No.: 8
Sample No.: A501



Vertical No.: 9
Sample No.: A27



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A24	13/07/93	10:20	0.010	0.040	0.090	0.220	5.611
A502	13/07/93	09:10	0.030	0.150	0.180	0.400	3.972
A501	12/07/93	17:00	0.025	0.090	0.165	0.400	4.057
A27	12/07/93	15:10	-	0.006	0.008	0.039	-



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A29	12/07/93	13:45	0.003	0.013	0.022	0.045	4.575
A23	12/07/93	12:35	0.017	0.060	0.079	0.180	3.209
A33	12/07/93	11:00	0.025	0.070	0.094	0.218	2.864
A34	12/07/93	09:00	0.025	0.070	0.098	0.225	2.980



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Annexure 4: Grain size distribution of suspended sediments (Andreasen tube analysis)

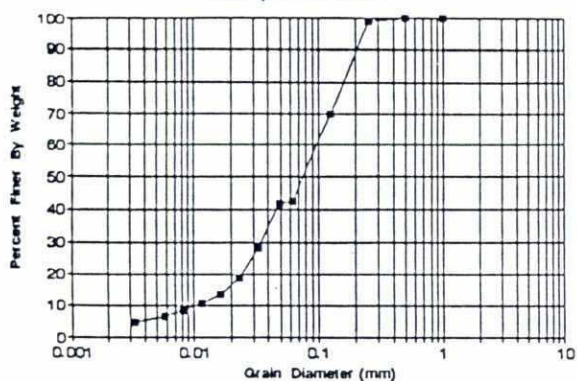
18 June 1994

CI

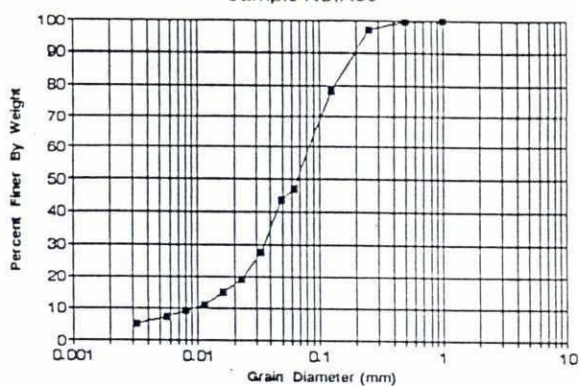
Bahadurabad, left channel
(positions on Dwg. 1.5)

Drawing
4.7

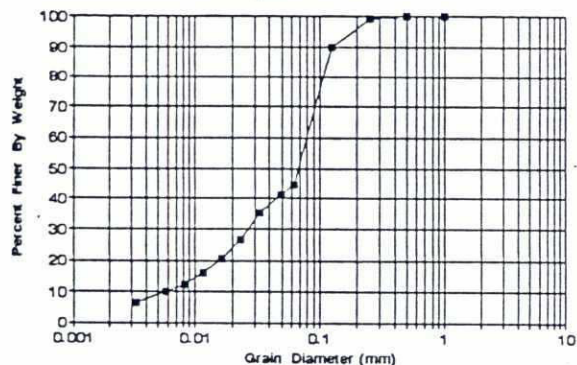
Vertical No. : 15
Sample No. : A18



Vertical No:18
Sample No:A30

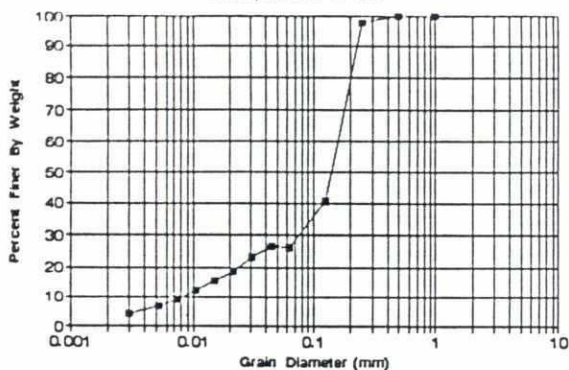


Vertical No. : 19
Sample No. : A17

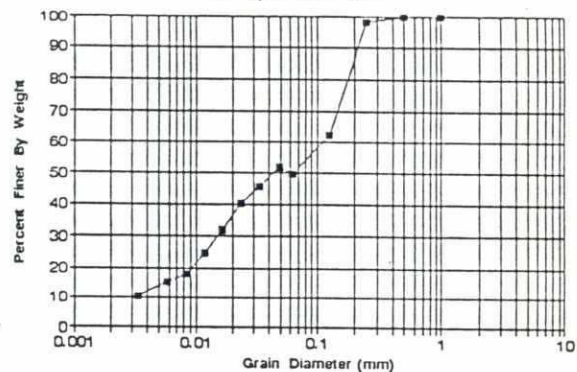


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A18	11/07/93	17:15	0.020	0.040	0.075	0.200	3.075
A30	10/07/93	15:45	0.006	0.018	0.027	0.045	3.083
A17	10/07/93	14:40	0.010	0.035	0.068	0.130	3.494

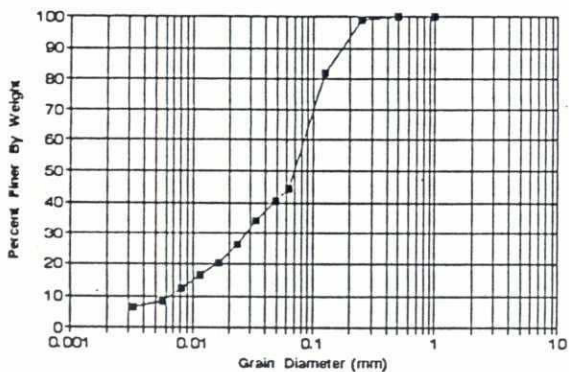
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Sample No. : A03



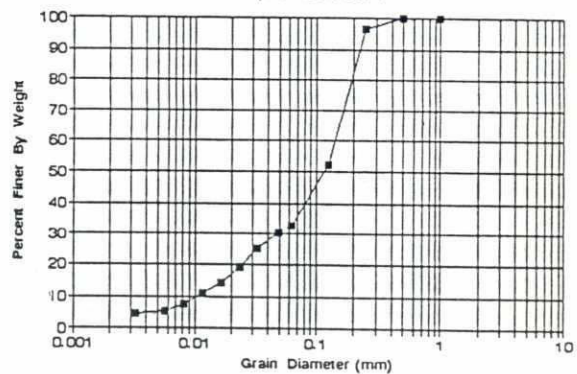
Vertical No. : 2
Sample No. : A19



Vertical No. : 3
Sample No. : A9

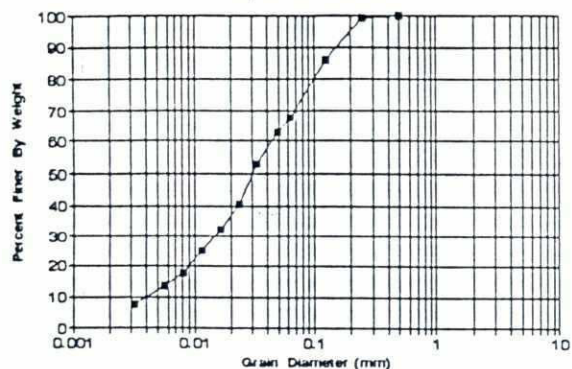


Vertical No. : 4
Sample No. : A14

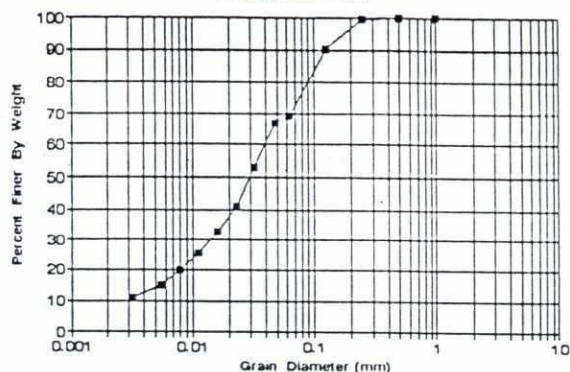


Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A3	17/07/93	12:05	0.015	0.095	0.150	0.225	5.715
A19	17/07/93	11:15	0.007	0.020	0.045	0.210	5.436
A9	17/07/93	10:20	0.015	0.035	0.070	0.180	3.405
A14	17/07/93	09:25	0.018	0.070	0.125	0.230	4.272

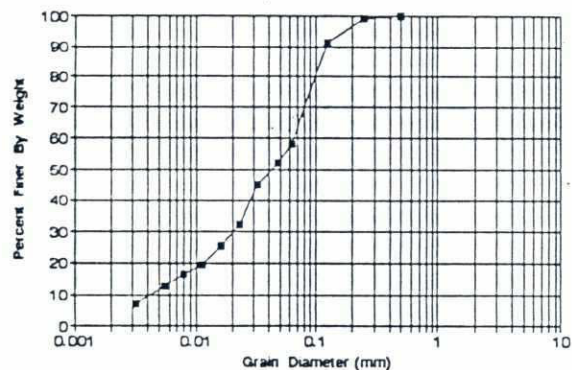
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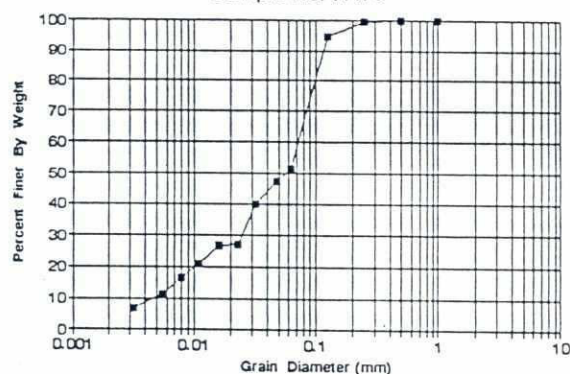
Vertical No. : 6
Sample No. : A5



Vertical No. : 7
Sample No. : A4



Vertical No. : 8
Sample No. : A10



Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A506	17/07/93	08:25	0.007	0.018	0.03	0.15	4.226
A5	16/07/93	17:10	0.005	0.018	0.03	0.13	4.667
A4	16/07/93	16:00	0.008	0.025	0.043	0.125	3.908
A10	16/07/93	15:00	0.007	0.028	0.058	0.13	4.815

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RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Report 8

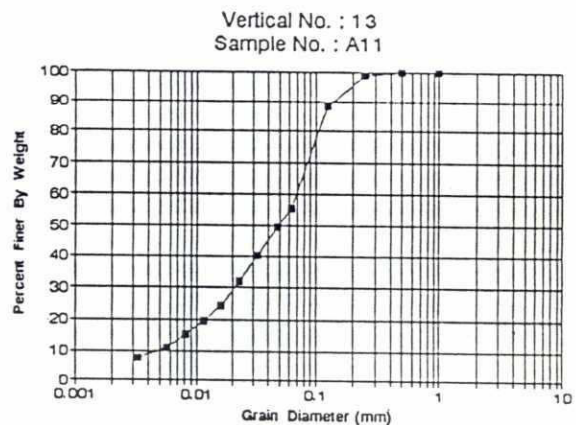
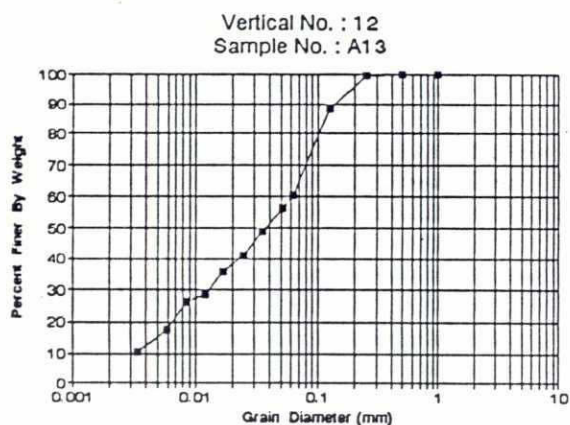
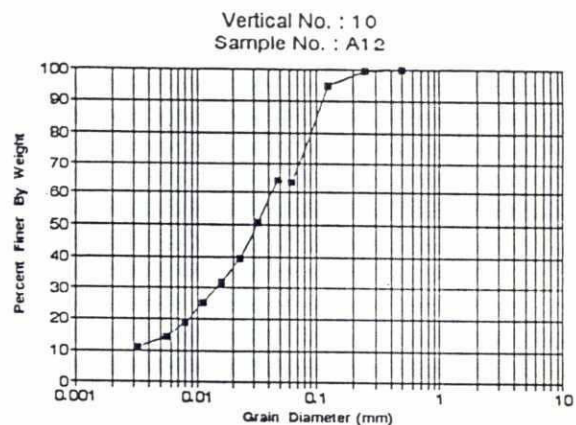
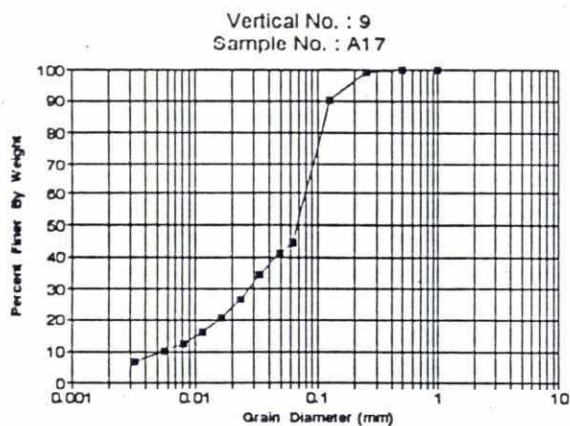
Annexure 4: Grain size distribution of suspended sediments (Andreasen tube analysis)

18 June 1994

CI

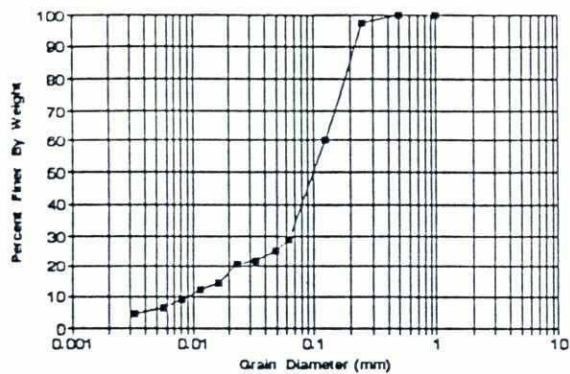
Bahadurabad, right channel
(positions on Dwg. 1.5)

Drawing
4.10

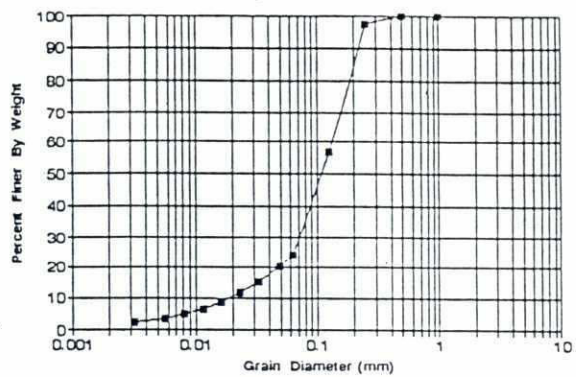


Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A17	16/07/93	14:10	0.010	0.035	0.069	0.130	4.283
A12	16/07/93	12:45	0.006	0.019	0.035	0.120	4.345
A13	16/07/93	11:00	0.005	0.018	0.035	0.150	5.286
A11	16/07/93	10:00	0.008	0.027	0.050	0.150	4.375

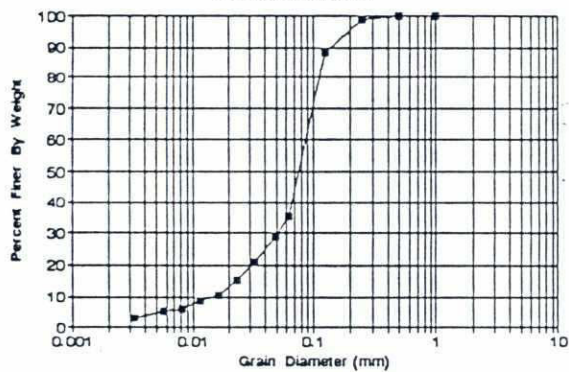
Vertical No. : 14
Sample No. : A6



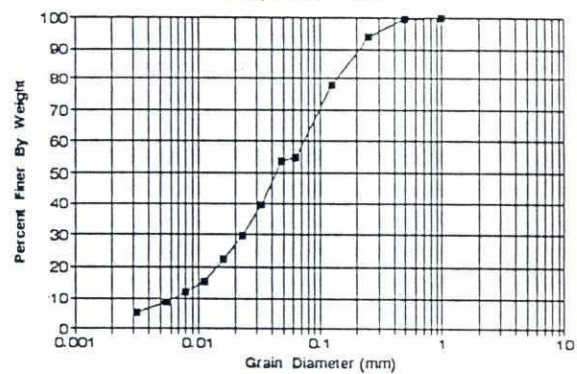
Vertical No. : 15
Sample No. : A08



Vertical No. : 17
Sample No. : A01

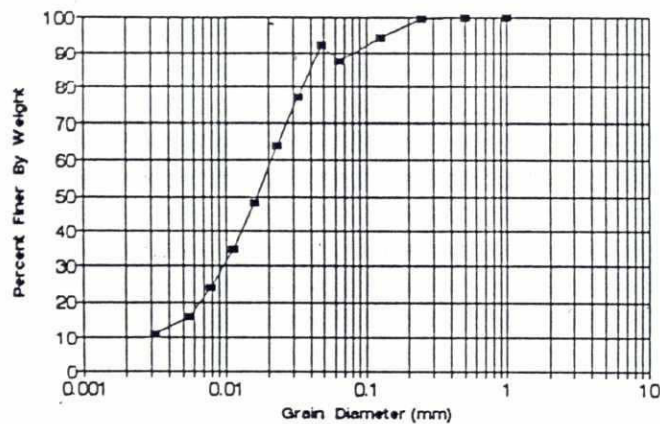


Vertical No. : 18
Sample No. : A15



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A6	16/07/93	08:50	0.019	0.075	0.100	0.225	3.632
A8	15/07/93	16:35	0.035	0.080	0.107	0.225	2.463
A1	15/07/93	14:30	0.025	0.065	0.075	0.150	2.333
A15	15/07/93	13:15	0.013	0.027	0.045	0.210	3.731

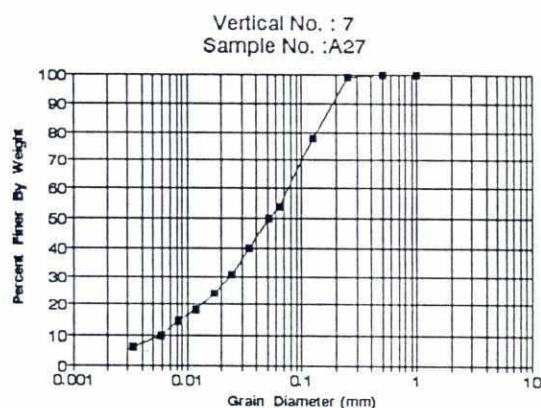
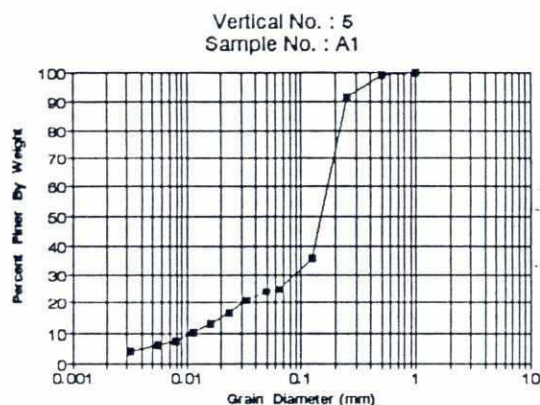
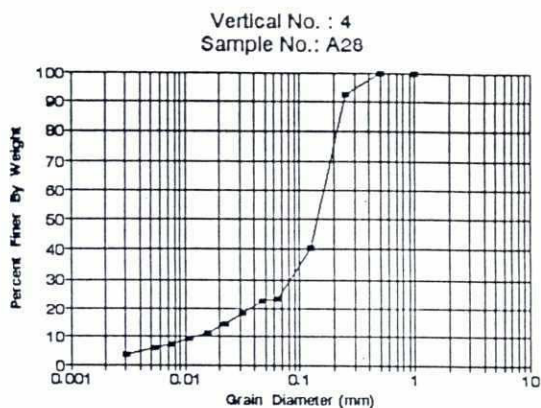
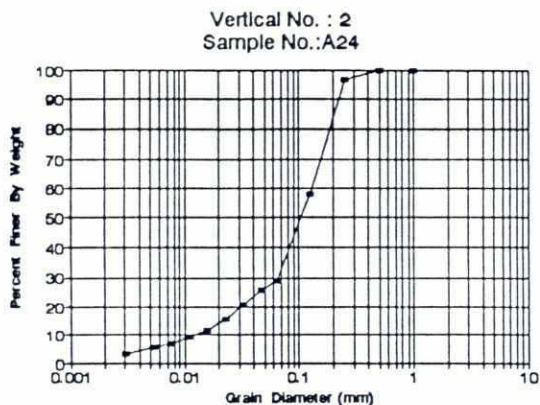
Vertical No. : 19
Sample No. : A7



Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A7	15/07/93	12:00	0.006	0.013	0.017	0.045	2.722

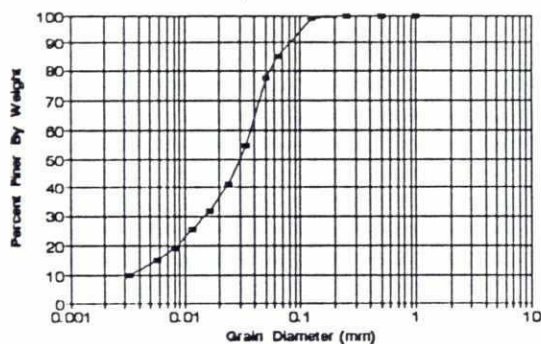


FAP 24  DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Report 8	
				Annexure 4: Grain size distribution of suspended sediments (Andreasen tube analysis)	
	18 June 1994	Bahadurabad, right channel (positions on Dwg. 1.5)			Drawing 4.13
	CI				

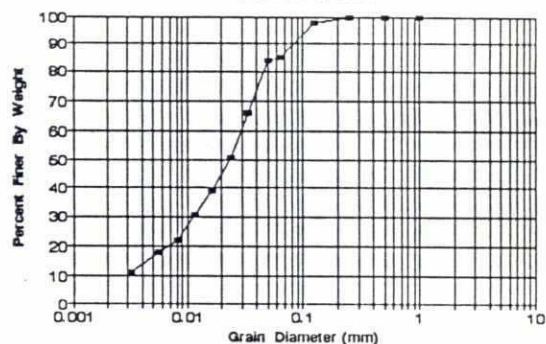


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A24	07/09/93	12:44	0.023	0.073	0.104	0.222	3.218
A28	07/09/93	16:47	0.026	0.101	0.142	0.241	3.512
A1	08/09/93	1042	0.022	0.116	0.149	0.245	4.227
A27	06/09/93	17:17	0.009	0.028	0.051	0.185	4.203

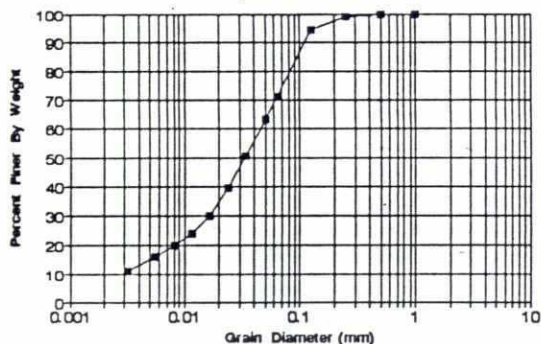
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Sample No. : A23



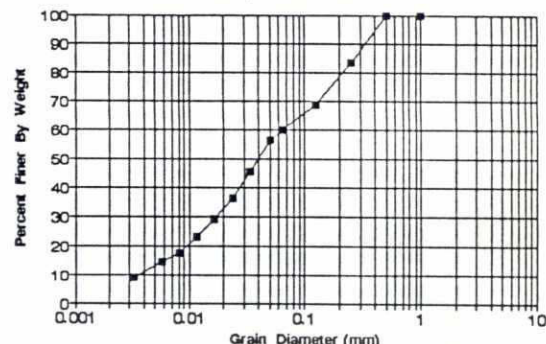
Vertical No. : 11
Sample No. : A332



Vertical No. : 13
Sample No. : A30



Vertical No. : 15
Sample No. : A26



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A23	06/09/93	15:03	0.007	0.019	0.030	0.080	3.324
A332	07/09/93	16:28	0.005	0.014	0.023	0.082	3.430
A30	07/09/93	14:42	0.006	0.020	0.033	0.110	4.239
A26	07/09/93	12:42	0.007	0.022	0.040	0.329	6.086

FAP 24



RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Report 8

Annexure 4: Grain size distribution of suspended sediments (Andreasen tube analysis)

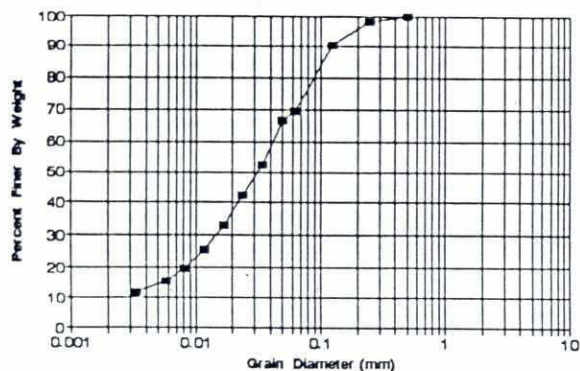
18 June 1994

CI

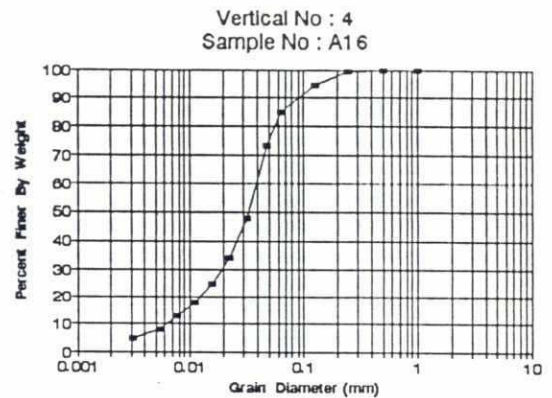
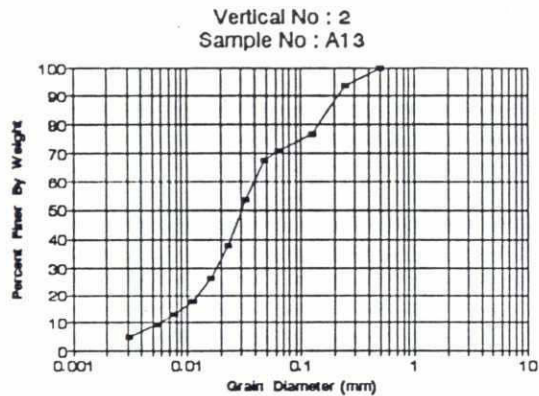
Bahadurabad, channel L-1
(positions on Dwg. 1.7)

Drawing
4.15

Vertical No.: 17
Sample No. : A25

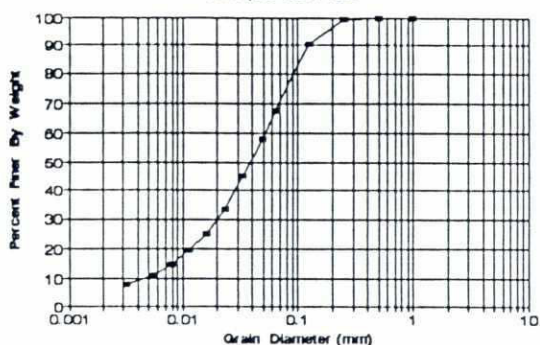


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A25	07/09/93	10:20	0.006	0.018	0.031	0.124	4.145

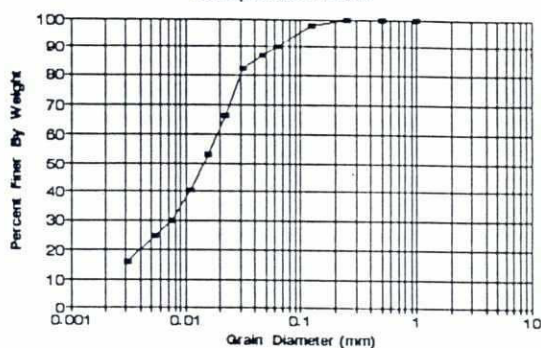


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A13	11/09/93	11:45	0.010	0.021	0.030	0.216	4.332
A16	11/09/93	13:50	0.010	0.023	0.033	0.091	2.608

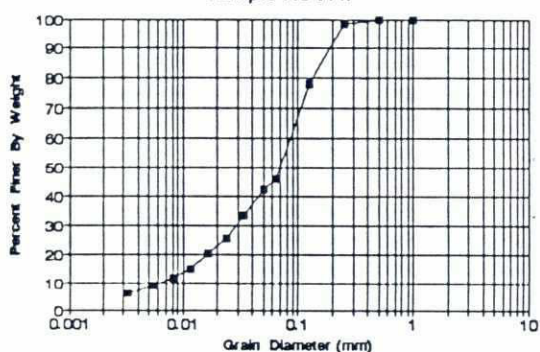
Vertical No. : 1
Sample No : A2



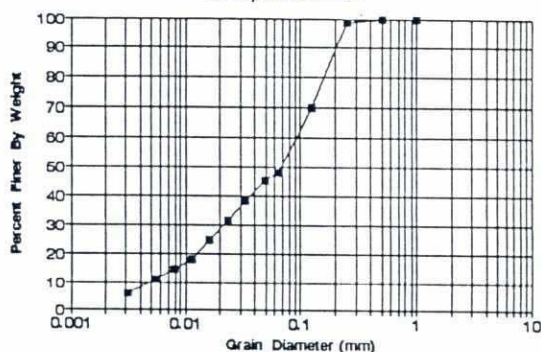
Vertical No.: 3
Sample No : A452



Vertical No. : 5
Sample No : A7

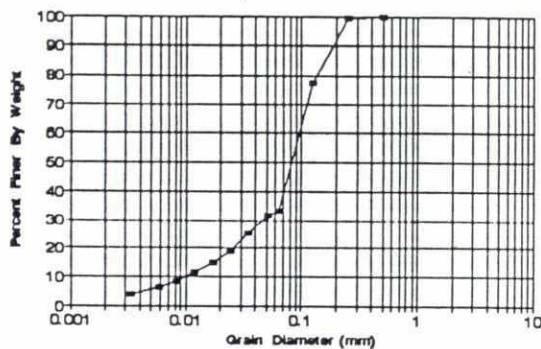


Vertical No : 7
Sample No : A5

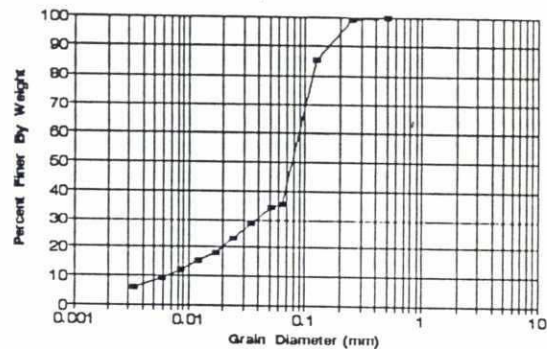


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A2	09/09/93	13:45	0.009	0.024	0.038	0.123	3.514
A452	10/09/93	12:05	0.003	0.009	0.014	0.061	3.655
A7	10/09/93	14:40	0.012	0.036	0.069	0.189	3.991
A5	09/09/93	16:00	0.009	0.027	0.067	0.202	5.028

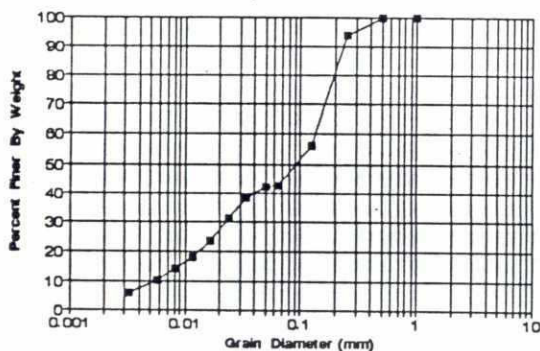
Vertical No : 9
Sample No : A454



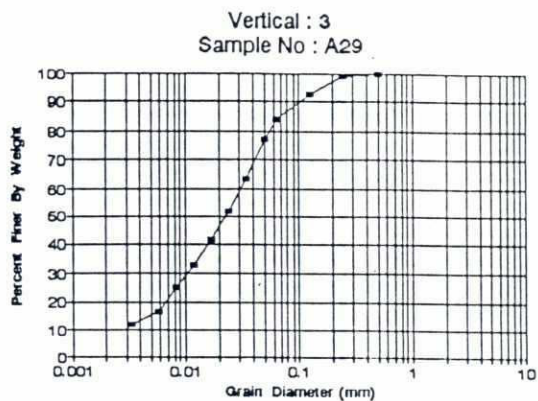
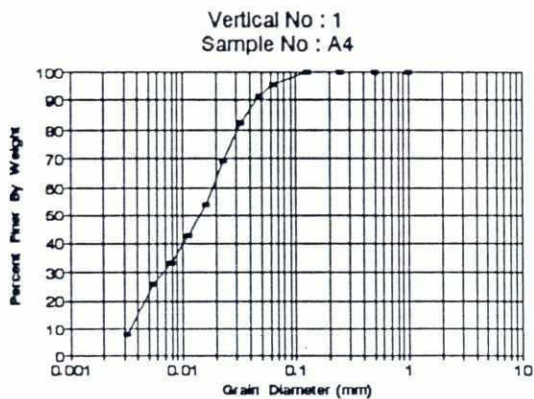
Vertical No : 11
Sample No: A8



Vertical No : 13
Sample No : A6

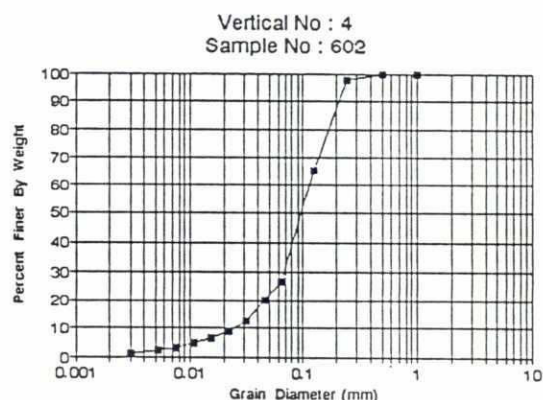
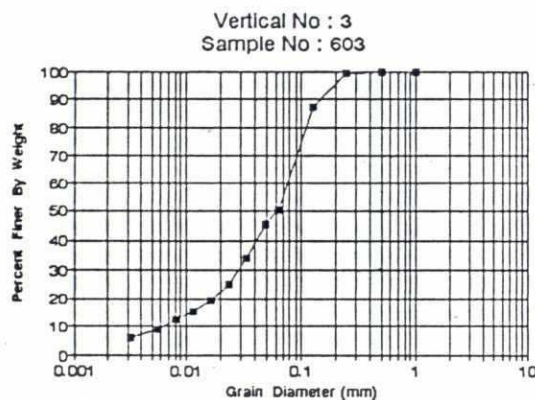
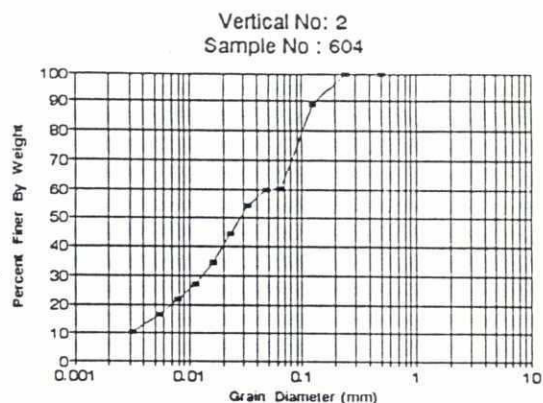
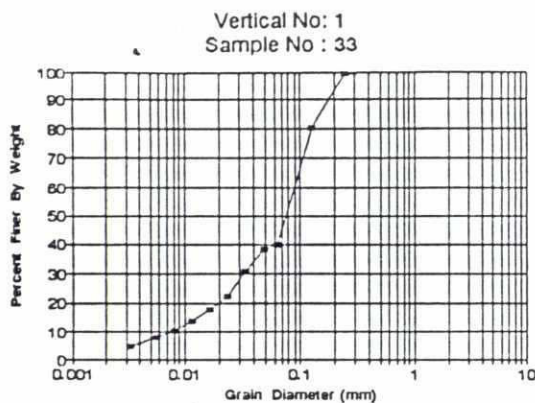


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A454	10/09/93	17:30	0.019	0.065	0.082	0.185	3.091
A8	10/09/93	16:10	0.014	0.054	0.077	0.157	3.644
A6	10/09/93	12:05	0.010	0.029	0.091	0.233	5.839



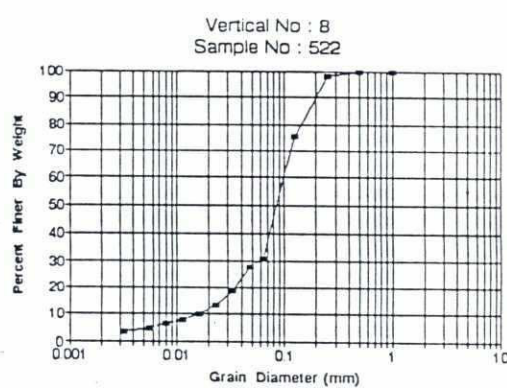
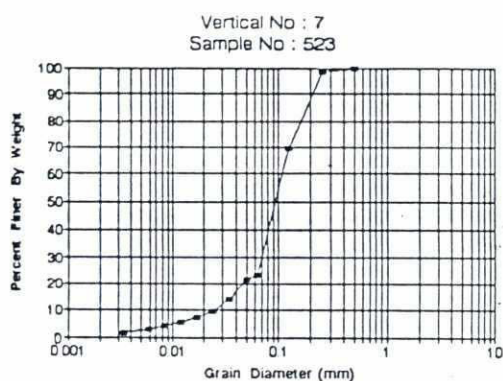
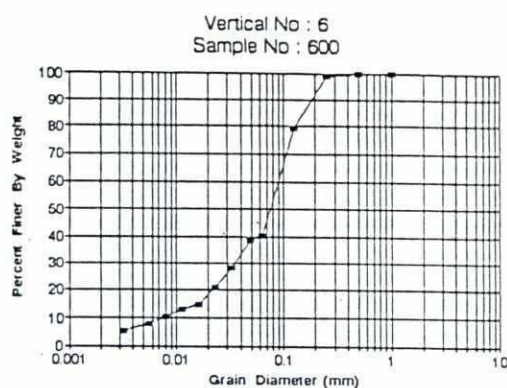
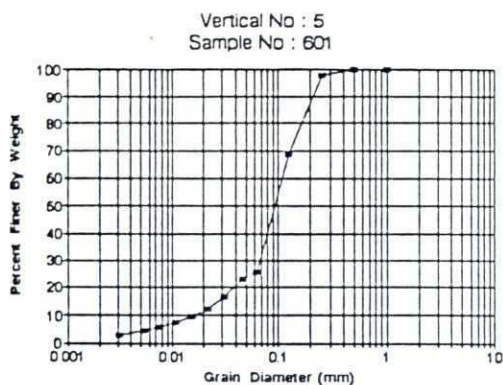
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A4	11/09/93	10:00	0.004	0.009	0.014	0.045	3.092
A29	11/09/93	11:05	0.006	0.013	0.023	0.101	3.460

28

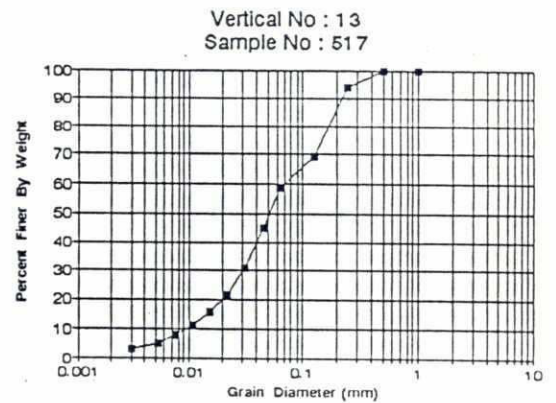
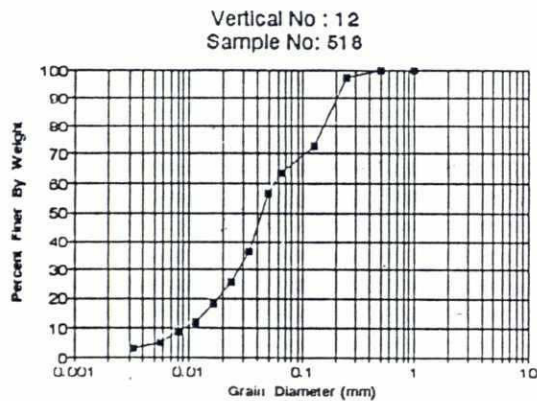
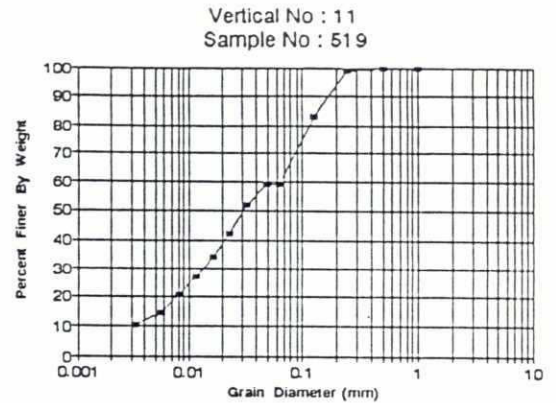
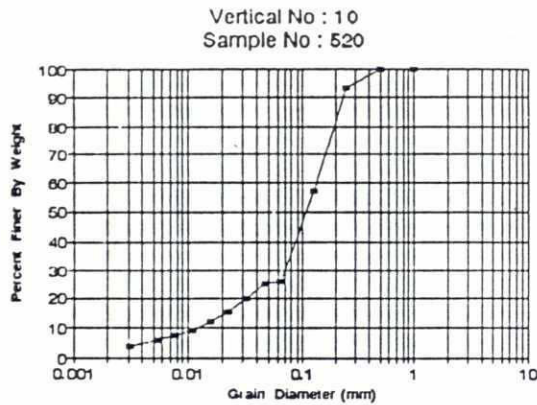


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
33	28/07/93	11:29	0.015	0.045	0.075	0.180	3.500
604	28/07/93	11:42	0.005	0.017	0.029	0.150	4.969
603	28/07/93	10:15	0.014	0.035	0.060	0.120	3.393
602	27/08/93	15:56	0.035	0.070	0.095	0.215	2.331

	18 June 1994	Sirajganj, left channel (positions on Dwg. 1.10)	Drawing 4.21
	CI		

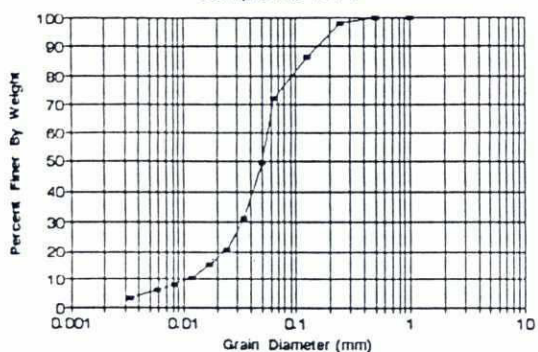


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
601	27/07/93	14:42	0.028	0.075	0.092	0.212	2.621
600	27/07/93	11:08	0.017	0.045	0.075	0.185	3.272
523	26/07/93	17:32	0.040	0.075	0.093	0.200	2.130
522	26/07/93	16:20	0.029	0.068	0.085	0.200	2.524

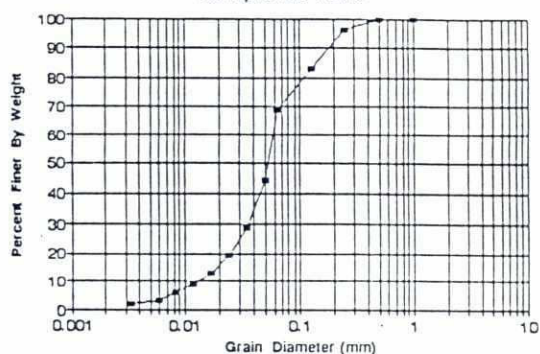


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
520	26/07/93	11:51	0.025	0.075	0.110	0.250	3.164
519	26/07/93	10:41	0.006	0.017	0.030	0.180	5.000
518	26/07/93	09:12	0.015	0.035	0.043	0.200	3.526
517	24/07/93	15:16	0.015	0.035	0.051	0.230	3.661

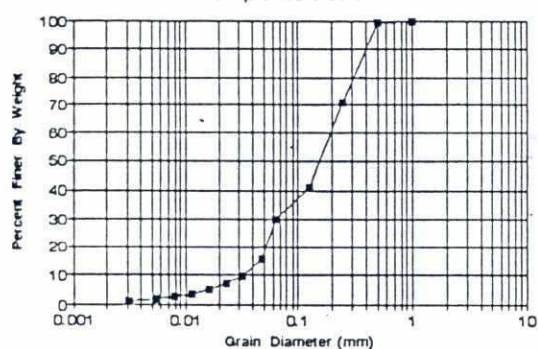
Vertical No : 14
Sample No : 516



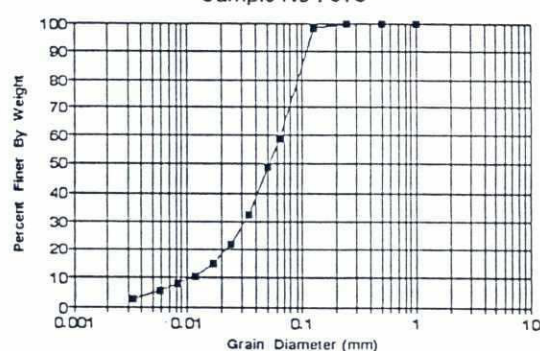
Vertical No : 15
Sample No : 515



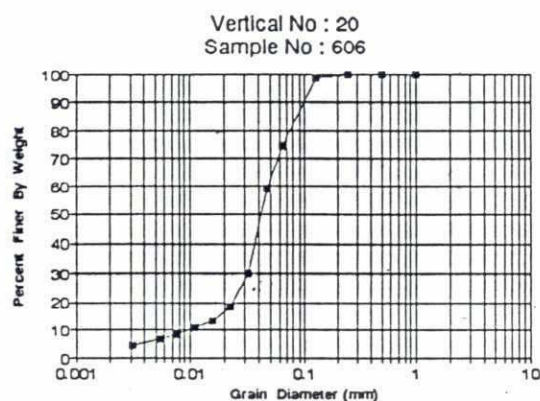
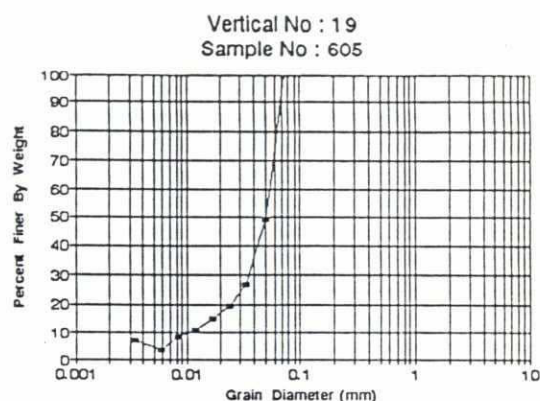
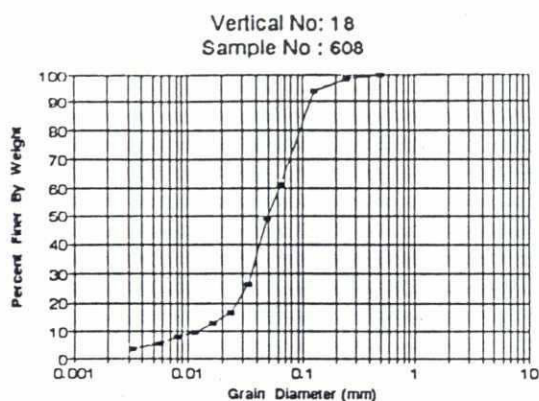
Vertical No : 16
Sample No : 514



Vertical No : 17
Sample No : 513

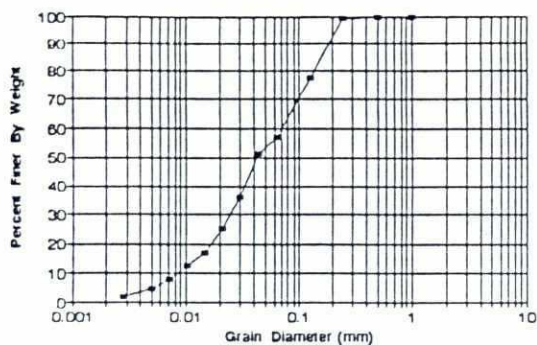


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
516	24/07/93	14:02	0.017	0.035	0.050	0.150	2.721
515	24/07/93	12:18	0.200	0.040	0.052	0.185	2.742
514	24/07/93	09:56	0.045	0.090	0.160	0.400	2.871
513	23/07/93	17:36	0.017	0.035	0.052	0.110	2.490

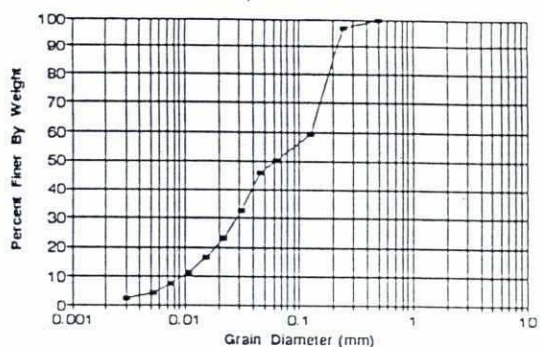


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
608	29/07/93	11:13	0.020	0.038	0.061	0.120	2.344
605	28/07/93	12:42	0.018	0.040	0.050	0.065	2.034
606	29/07/93	09:48	0.020	0.035	0.042	0.095	2.002

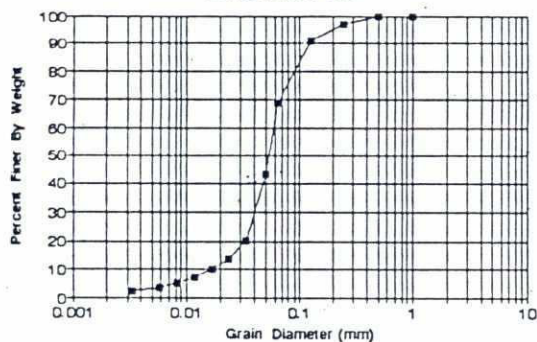
Vertical No: 1
Sample No : 613



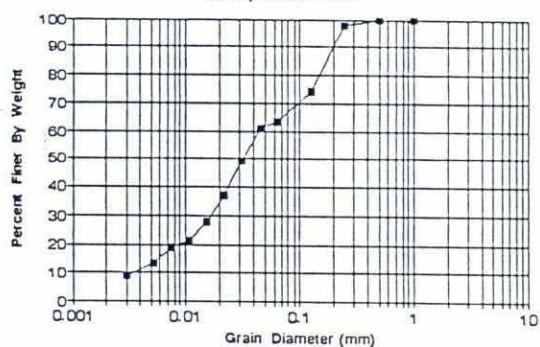
Vertical No: 2
Sample No: 612



Vertical No: 3
Sample No: 800

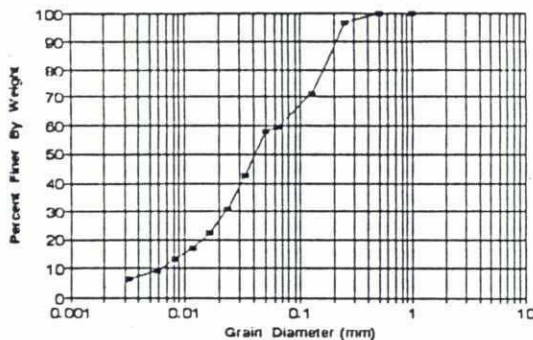


Vertical No: 4
Sample No: 609

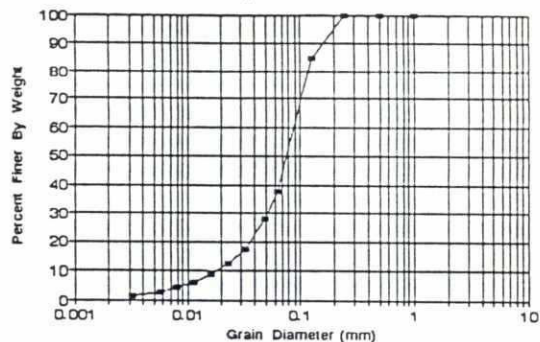


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
613	30/07/93	11:17	0.015	0.030	0.042	0.195	3.186
612	30/07/93	09:52	0.015	0.035	0.060	0.225	3.667
800	30/07/93	08:22	0.027	0.045	0.054	0.130	1.926
609	29/07/93	15:40	0.006	0.020	0.032	0.200	5.010

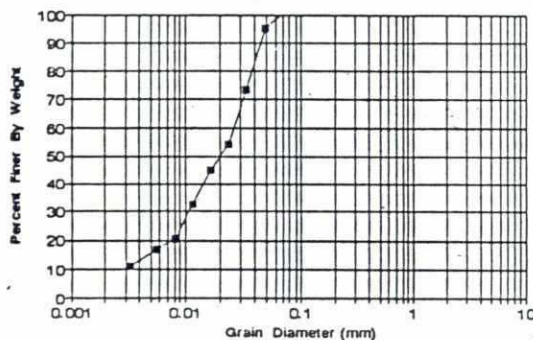
Vertical No: 5
Sample No: 610



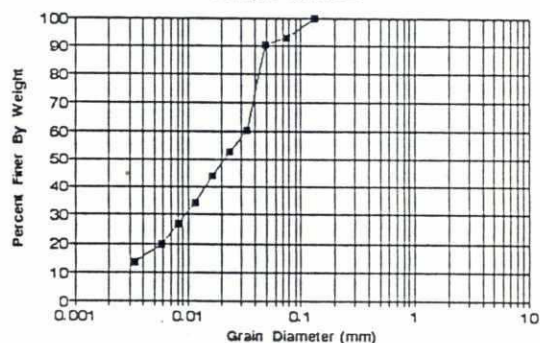
Vertical No : 9
Sample No : 700



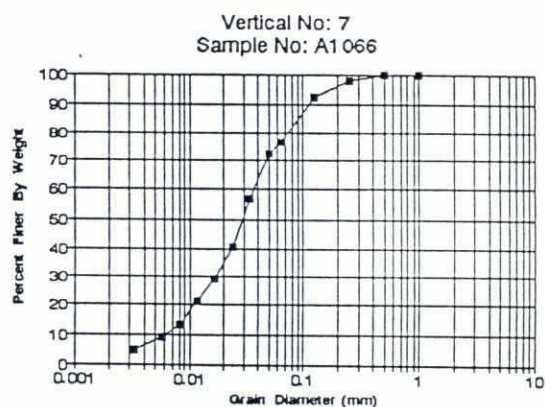
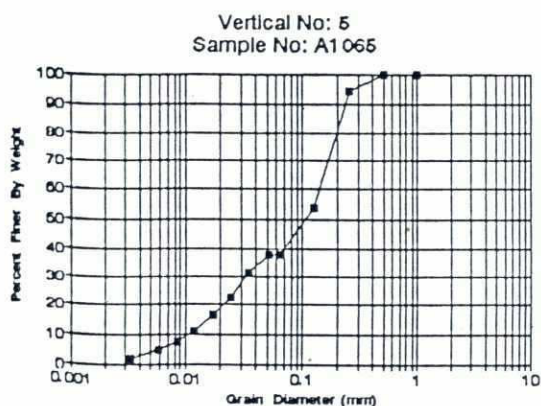
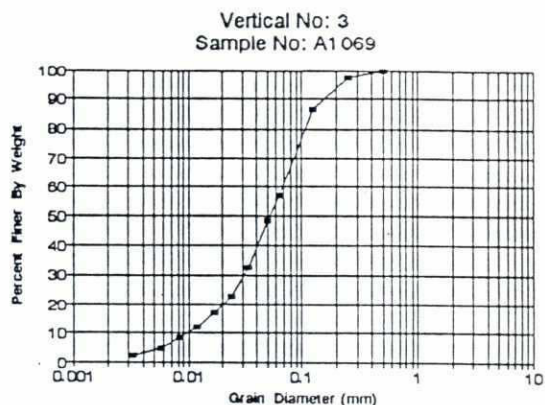
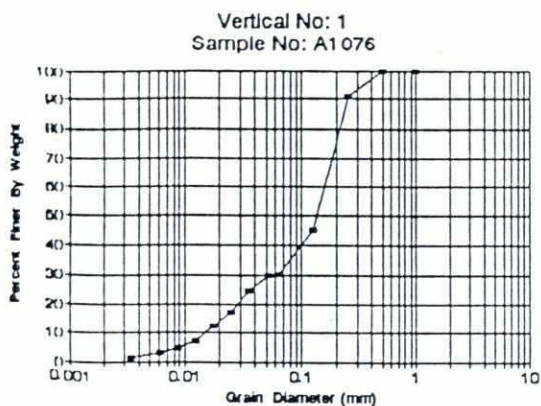
Vertical No : 12
Sample No : 34



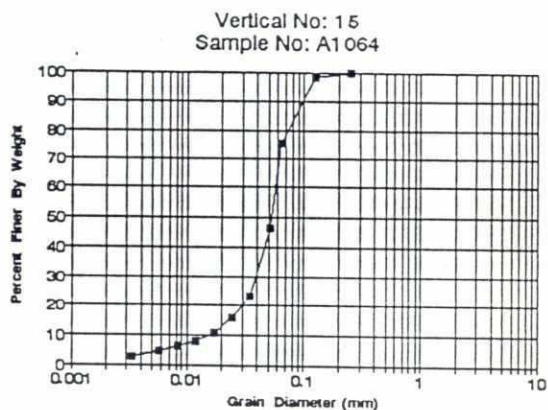
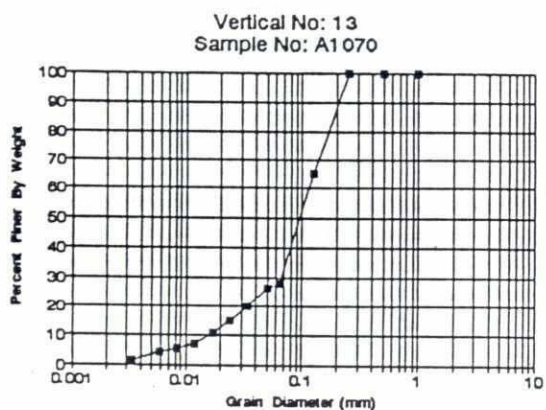
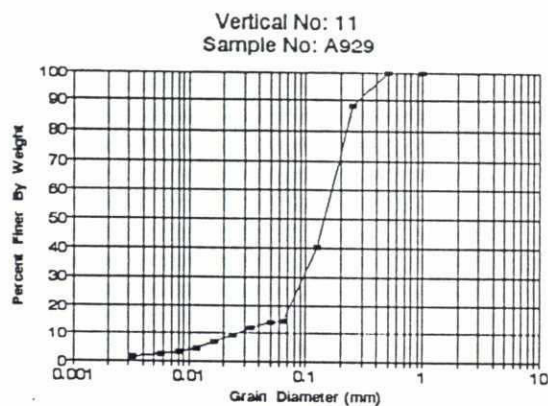
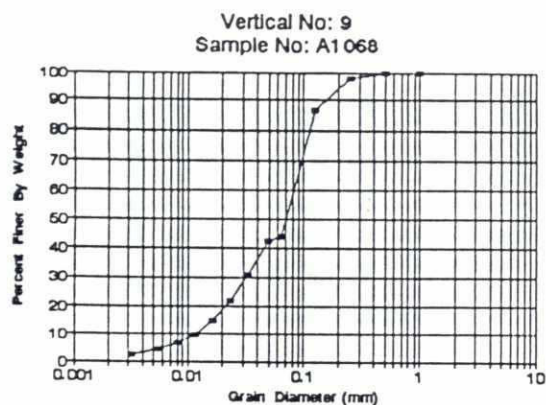
Vertical No : 13
Sample No : 32



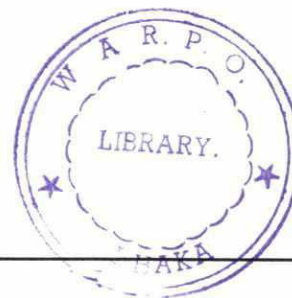
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
610	29/07/93	17:06	0.010	0.027	0.041	0.210	4.184
700	30/07/93	12:08	0.030	0.060	0.075	0.165	2.117
34	30/07/93	10:00	0.005	0.015	0.020	0.045	3.000
32	30/07/93	09:00	0.004	0.013	0.021	0.050	3.696



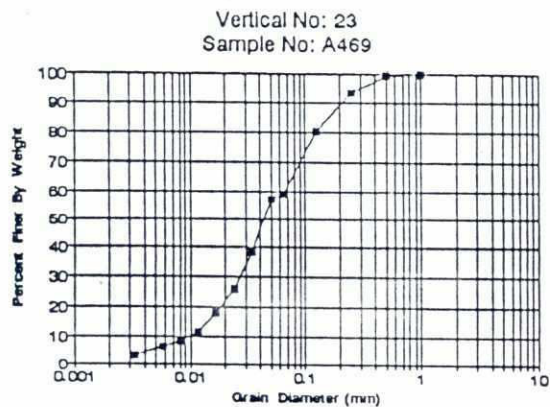
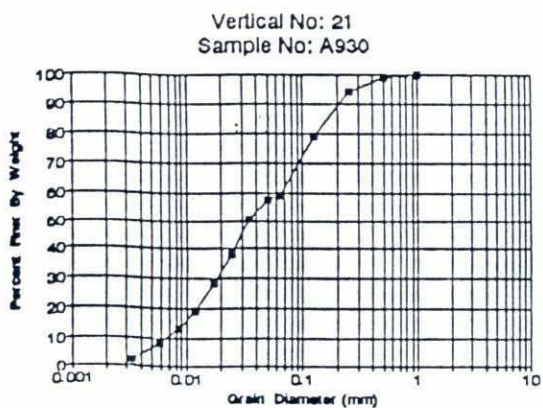
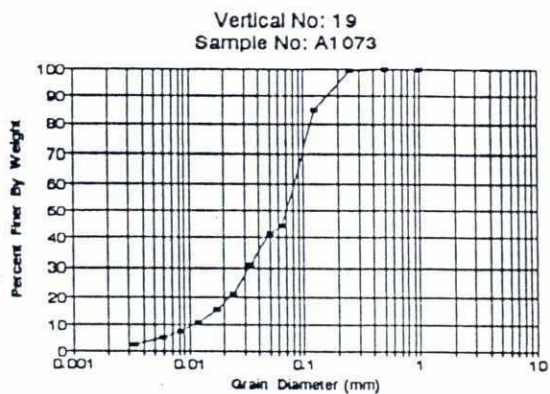
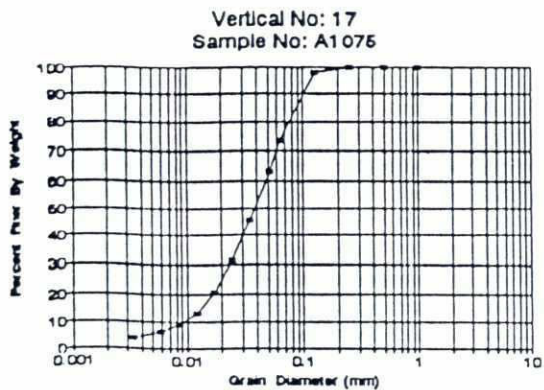
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A1076	26/10/93	10:15	0.023	0.078	0.134	0.246	3.749
A1069	26/10/93	12:02	0.016	0.036	0.052	0.155	2.760
A1065	26/10/93	13:42	0.016	0.042	0.106	0.232	4.303
A1066	26/10/93	15:24	0.009	0.020	0.029	0.113	3.111



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A1068	26/10/93	14:50	0.018	0.038	0.069	0.153	2.786
A929	26/10/93	12:20	0.066	0.108	0.143	0.278	1.905
A1070	26/10/93	08:32	0.026	0.072	0.094	0.205	2.776
A1064	25/10/93	15:17	0.024	0.042	0.052	0.097	1.862

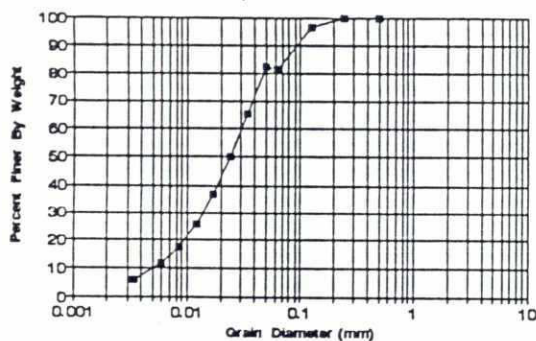


FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities DELFT - DHI		Survey Report 8	
		Annexure 4: Grain size distribution of suspended sediments (Andreasen tube analysis)	
	18 June 1994	Sirajganj, left channel (positions on Dwg. 1.12)	Drawing 4.29
	CI		

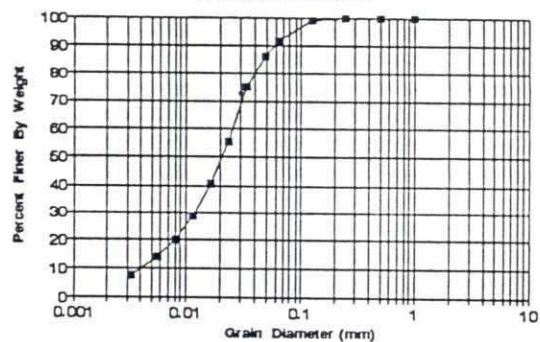


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A1075	25/10/93	14:50	0.014	0.027	0.038	0.100	2.462
A1073	25/10/93	12:24	0.018	0.039	0.069	0.158	2.801
A930	25/10/93	14:34	0.010	0.022	0.034	0.204	3.994
A469	25/10/93	12:48	0.015	0.031	0.043	0.207	3.201

Vertical No: 25
Sample No: A726

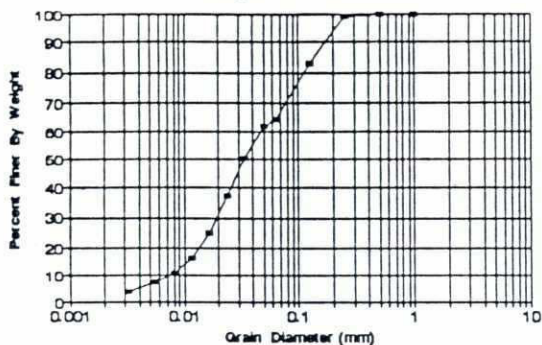


Vertical No: 27
Sample No: A859

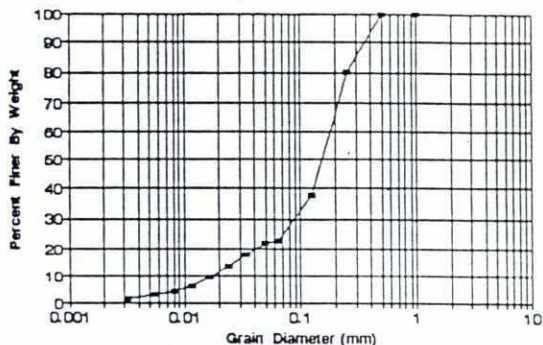


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A726	25/10/93	11:16	0.008	0.016	0.024	0.093	2.958
A859	25/10/93	06:05	0.006	0.014	0.021	0.059	2.845

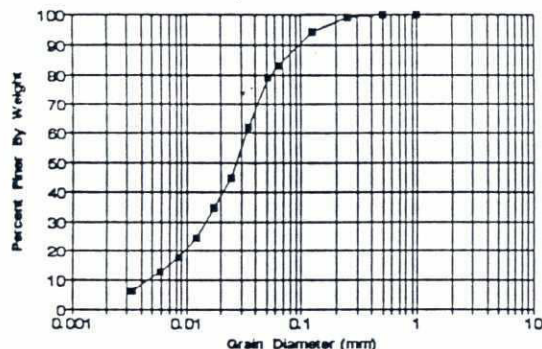
Vertical No: 1
Sample No: A927



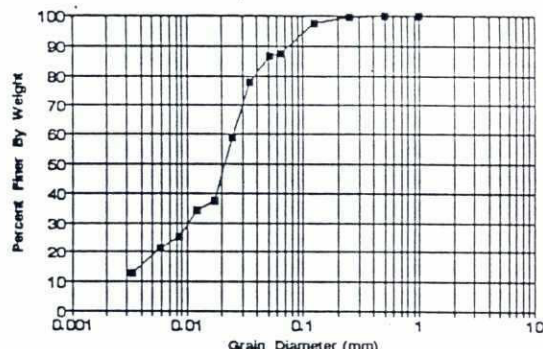
Vertical No: 3
Sample No: A928



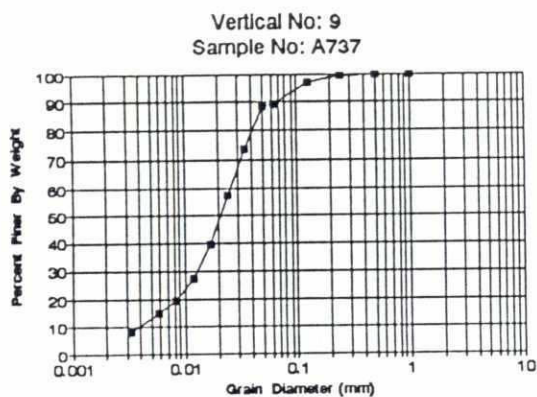
Vertical No: 5
Sample No: A1077



Vertical No: 7
Sample No: A1063



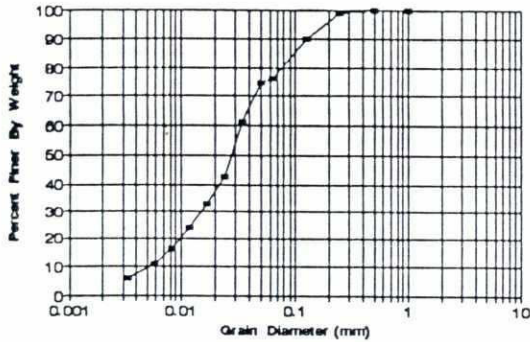
Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A927	27/10/93	09:41	0.011	0.022	0.033	0.170	3.485
A928	27/10/93	11:15	0.029	0.111	0.153	0.353	3.569
A1077	27/10/93	15:50	0.008	0.017	0.027	0.095	2.910
A1063	27/10/93	13:46	0.004	0.013	0.021	0.074	3.696



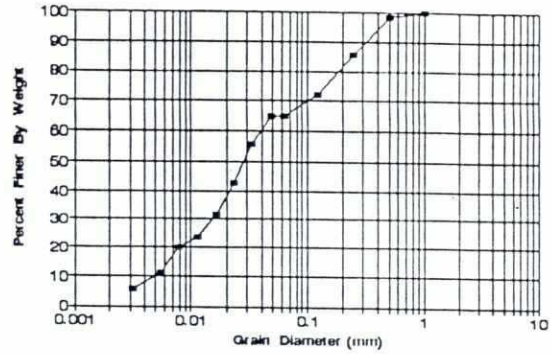
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A737	0.02903	11:05	0.006	0.015	0.021	0.067	2.821

	18 June 1994	Sirajganj, right channel (positions on Dwg. 1.12)	Drawing 4.33
	CI		

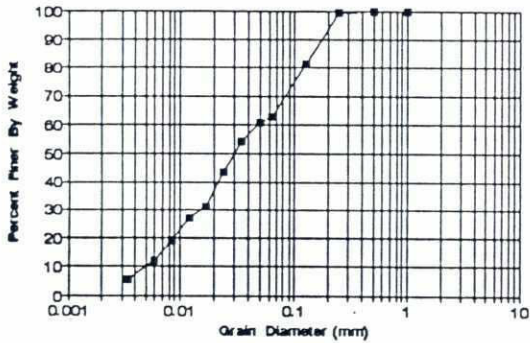
Vertical No: 1
Sample No: A456



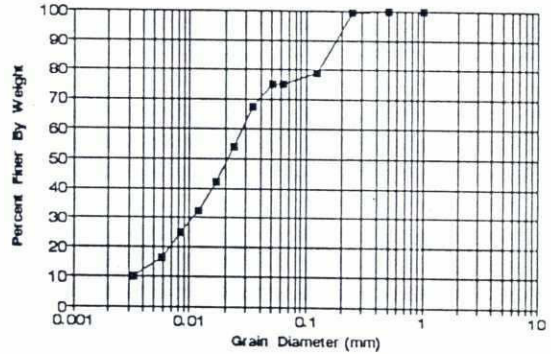
Vertical No: 3
Sample No: A470



Vertical No: 7
Sample No: A12



Vertical No: 9
Sample No: A455



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A456	26/09/93	16:15	0.008	0.019	0.028	0.125	3.359
A470	29/09/93	10:05	0.007	0.018	0.029	0.321	6.451
A12	28/09/93	14:45	0.007	0.019	0.030	0.178	4.376
A455	27/09/93	15:30	0.006	0.014	0.022	0.178	4.811

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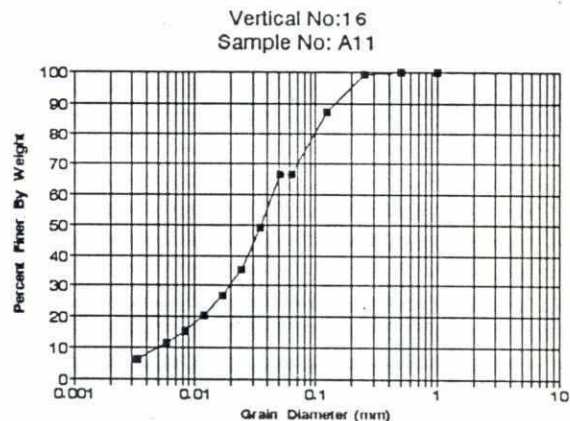
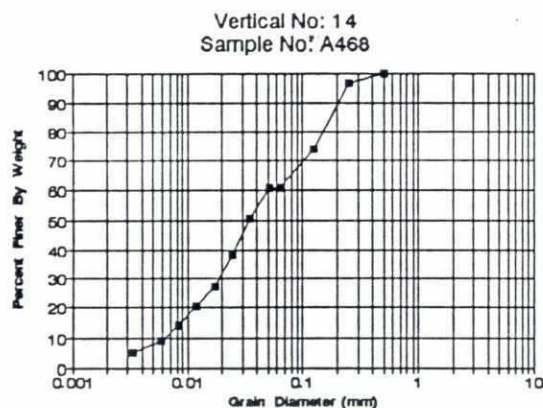
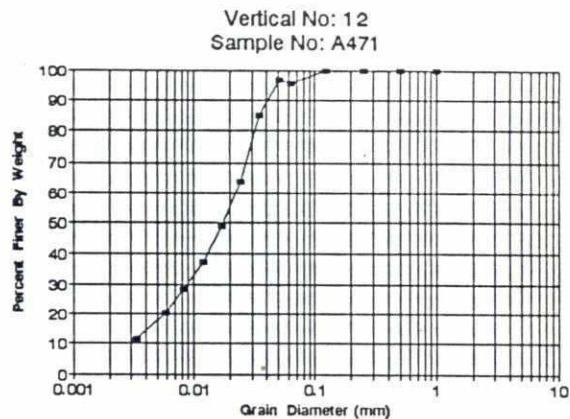
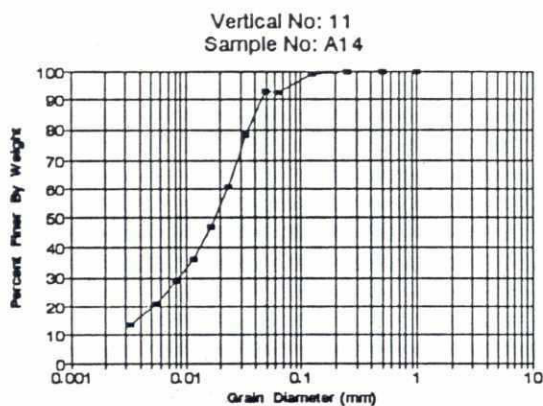
18 June 1994

CI

Hardinge Bridge
(positions on Dwg. 1.14)

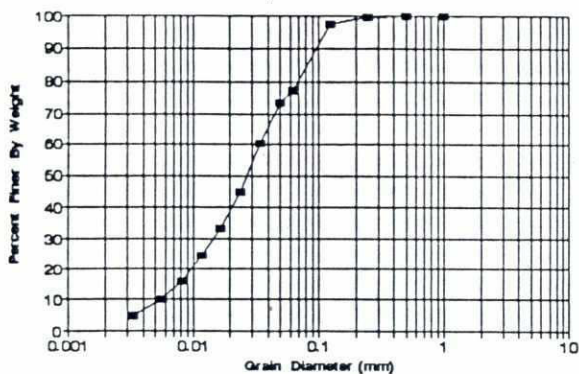
Drawing

4.34



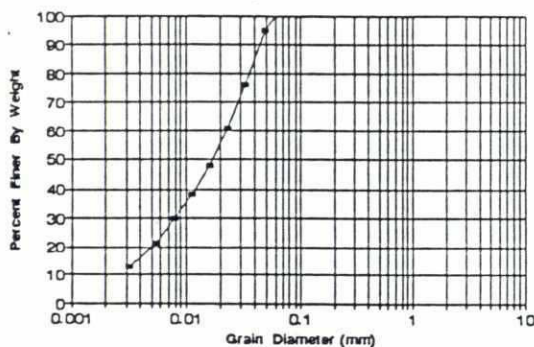
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A14	28/09/93	09:55	0.004	0.012	0.018	0.047	3.341
A471	27/09/93	12:00	0.004	0.011	0.018	0.041	3.000
A468	27/09/93	09:30	0.009	0.022	0.034	0.201	4.506
A11	26/09/93	17:25	0.009	0.025	0.036	0.151	3.673

Vertical No: 18
Sample No: A3

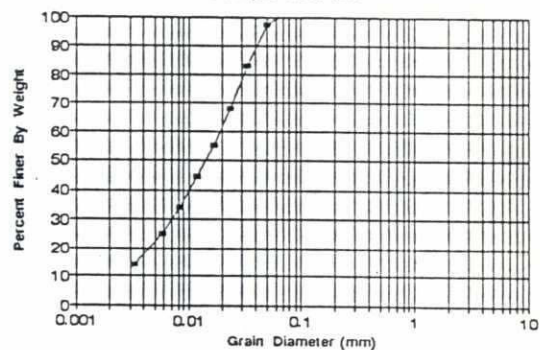


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A3	26/09/93	15:30	0.008	0.018	0.028	0.097	3.180

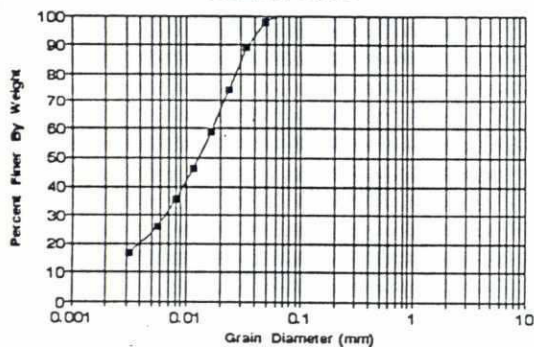
Vertical No:1
Sample No:A20



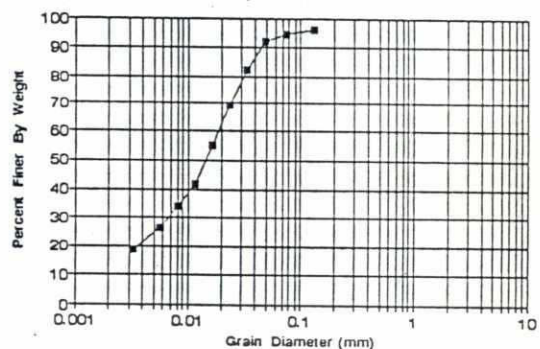
Vertical No:2
Sample No:A22



Vertical No:3
Sample No:A23

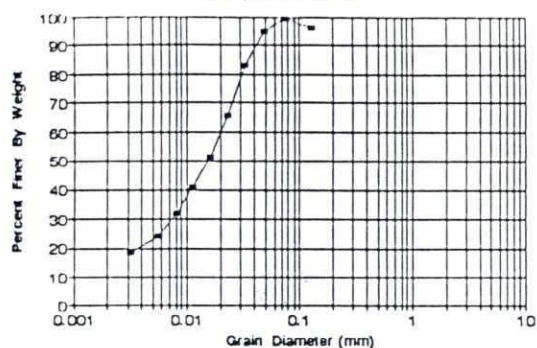


Vertical No:6
Sample No:A502

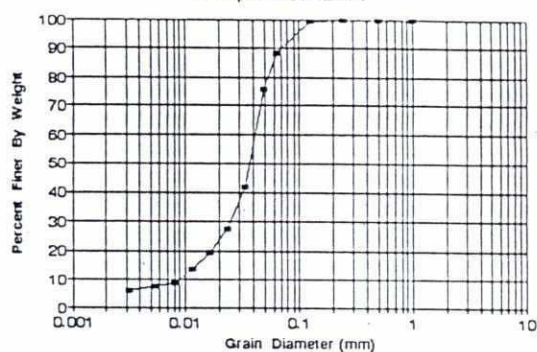


Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
20	03/08/93	13:28	0.004	0.010	0.017	0.045	3.301
22	03/08/93	15:22	0.004	0.080	0.015	0.040	3.309
23	03/08/93	16:42	0.003	0.008	0.013	0.035	3.321
502	05/08/93	09:48	-	0.008	0.015	0.045	-

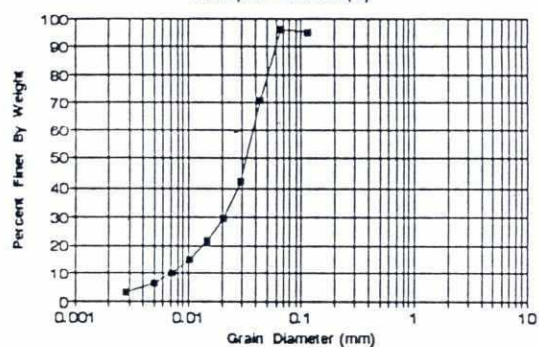
Vertical No:7
Sample No:A501



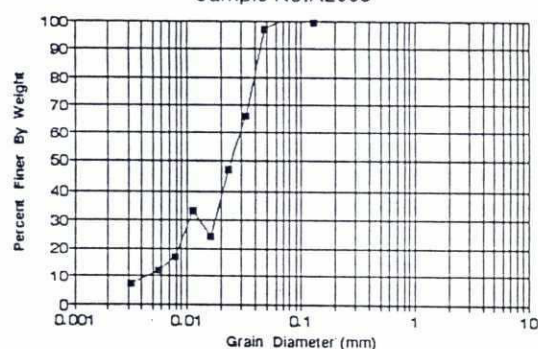
Vertical No:8
Sample No:A2000



Vertical No:9
Sample No:A31 (B)



Vertical No:10
Sample No:A2003



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
501	05/08/93	11:00	-	0.009	0.016	0.041	-
2000	05/08/93	12:08	0.012	0.025	0.035	0.055	3.158
31(B)	05/08/93	13:14	0.010	0.025	0.033	0.060	2.345
2003	05/08/93	14:50	0.008	0.019	0.025	0.045	2.467

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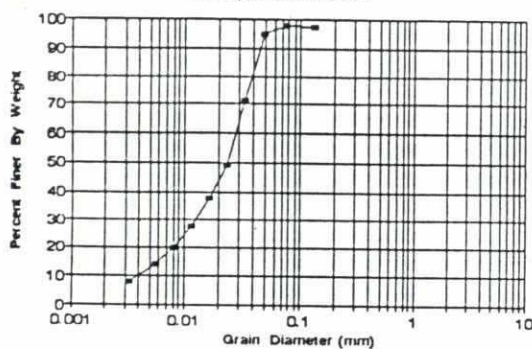
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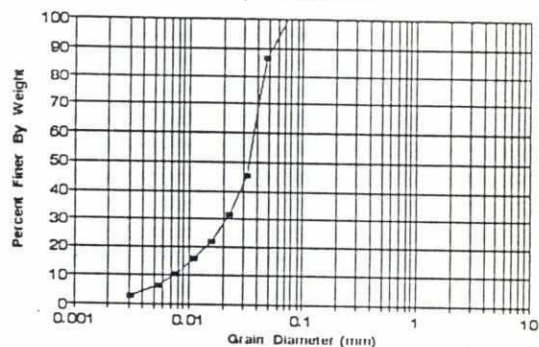
Baruria
(positions on Dwg. 1.16)

Drawing
4.38

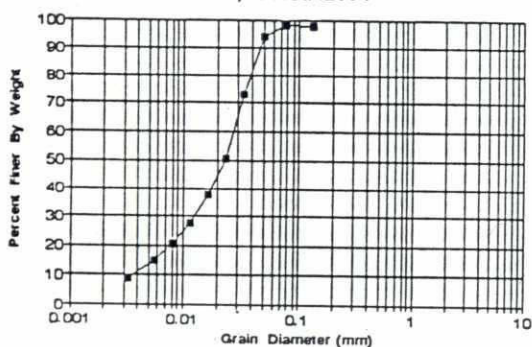
Vertical No:11
Sample No:A2001



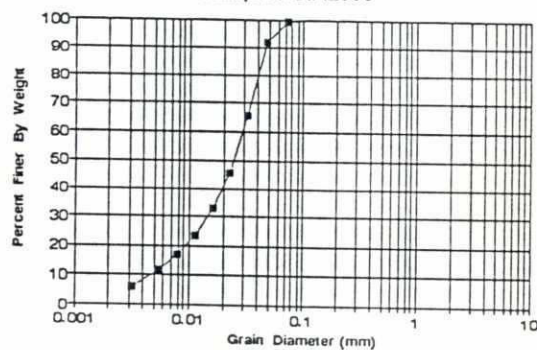
Vertical No:12
Sample No:A2002



Vertical No:14
Sample No:A2004

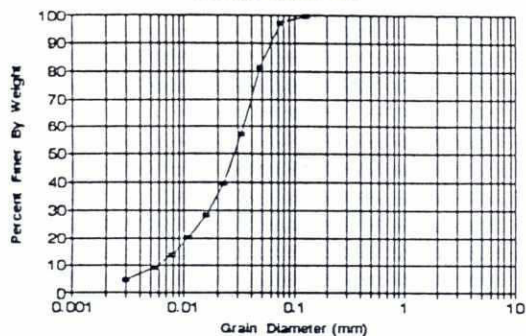


Vertical No:15
Sample No:A2005

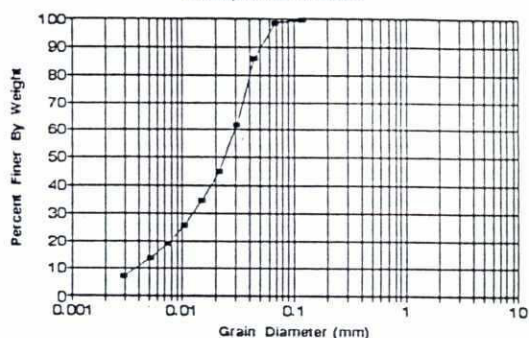


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
2001	05/08/93	16:00	0.007	0.016	0.025	0.045	2.763
2002	06/08/93	10:34	0.013	0.025	0.035	0.052	1.989
2004	07/08/93	09:49	0.006	0.015	0.024	0.046	2.875
2005	07/08/93	11:21	0.008	0.017	0.025	0.046	2.527

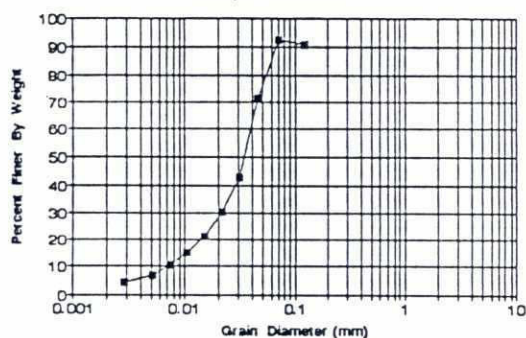
Vertical No:16
Sample No:A2007



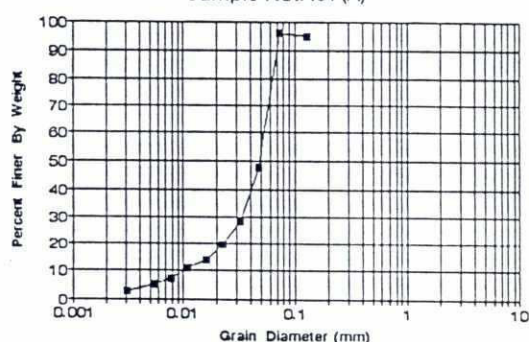
Vertical No:17
Sample No:A2009



Vertical No:18
Sample No:A2011

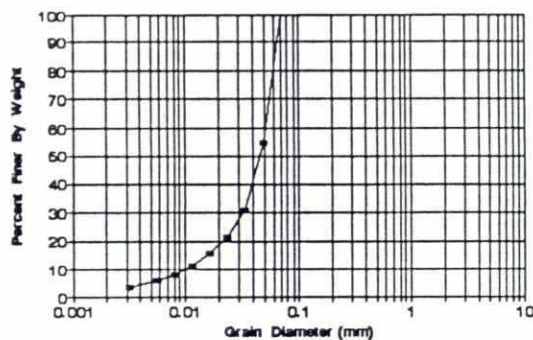


Vertical No:25
Sample No:A31 (A)

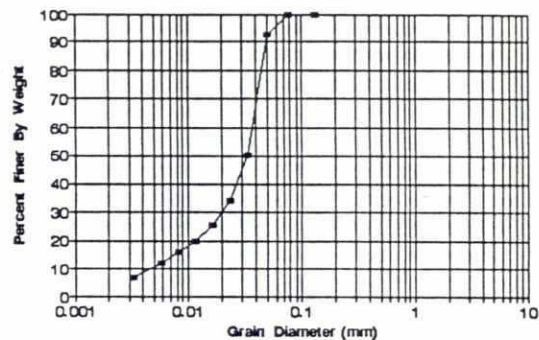


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
2007	07/08/93	13:02	0.009	0.020	0.027	0.060	2.518
2009	07/08/93	14:29	0.006	0.016	0.015	0.050	2.717
2011	07/08/93	16:09	0.013	0.025	0.035	0.065	2.203
31(A)	03/08/93	18:07	0.018	0.035	0.042	0.070	2.024

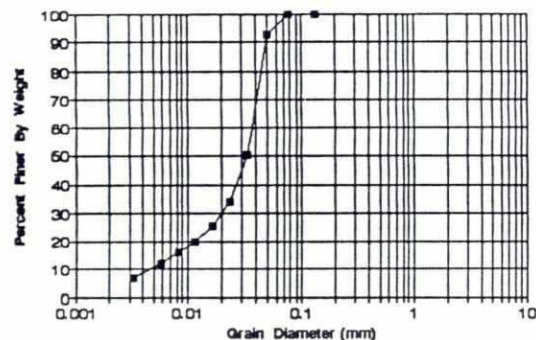
Vertical No:26
Sample No:A30



Vertical No:26
Sample No:A28

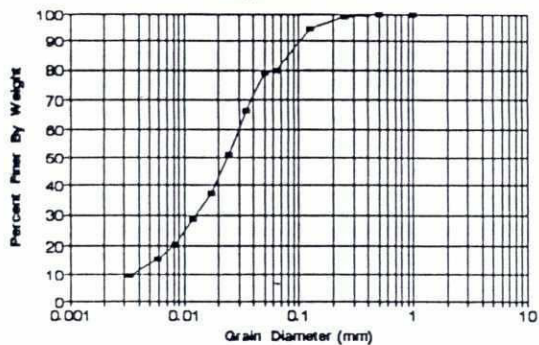


Vertical No:28
Sample No:A26

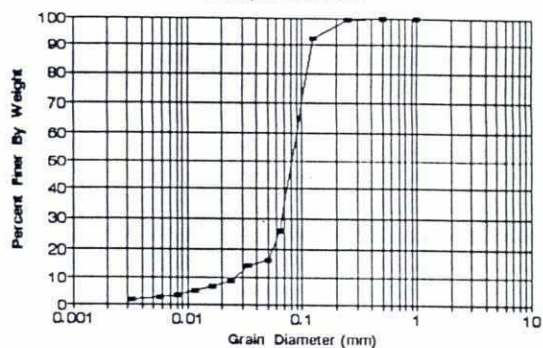


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
30	03/08/93	16:05	0.017	0.035	0.045	0.065	2.001
28	03/08/93	14:35	0.006	0.018	0.027	0.057	3.176
26	03/08/93	12:42	0.008	0.025	0.035	0.049	2.830

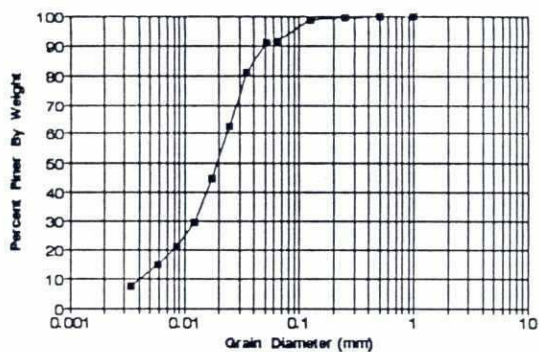
Vertical No: 1
Sample No: A30



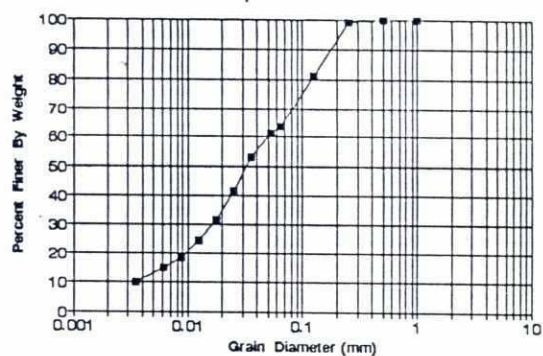
Vertical No: 2
Sample No: A28



Vertical No: 3
Sample No: A931

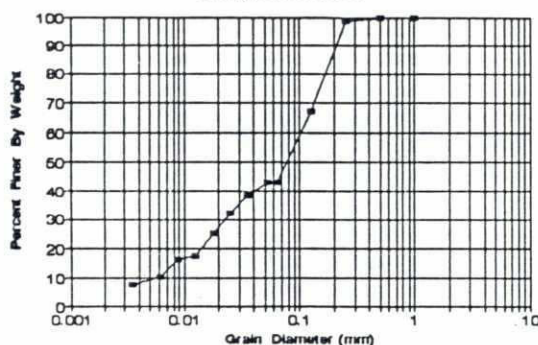


Vertical No: 4
Sample No: A935

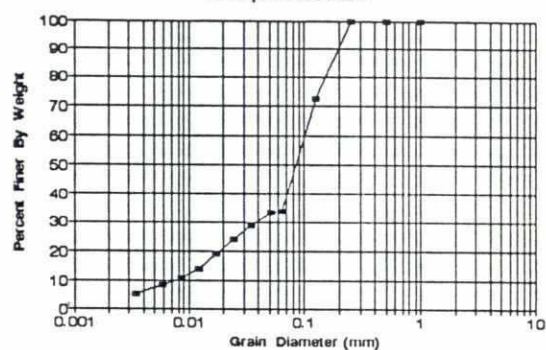


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A30	19/10/93	10:45	0.006	0.015	0.023	0.100	3.569
A28	19/10/93	15:10	0.048	0.069	0.081	0.122	1.547
A931	19/10/93	12:20	0.006	0.014	0.019	0.049	2.610
A935	19/10/93	11:35	0.007	0.020	0.032	0.175	4.458

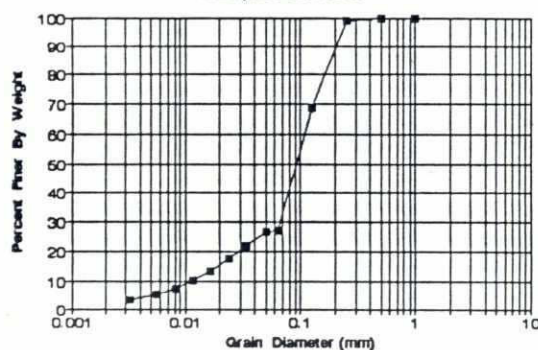
Vertical No: 5
Sample No: A453



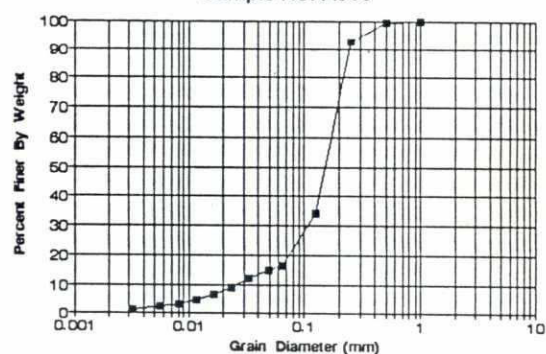
Vertical No: 6
Sample No: A24



Vertical No: 7
Sample No: A933



Vertical No: 8
Sample No: A936



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A453	19/10/93	14:33	0.009	0.030	0.076	0.207	5.413
A24	19/10/93	13:24	0.014	0.065	0.084	0.196	4.000
A933	19/10/93	16:03	0.020	0.071	0.092	0.202	3.262
A936	19/10/93	17:00	0.057	0.126	0.151	0.242	2.073

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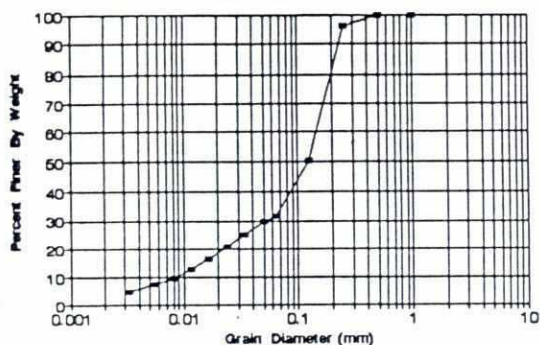
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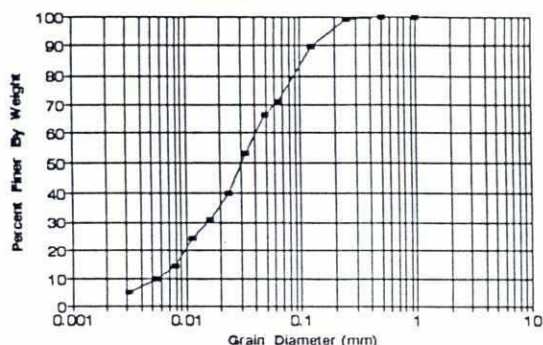
Baruria
(positions on Dwg. 1.18)

Drawing
4.43

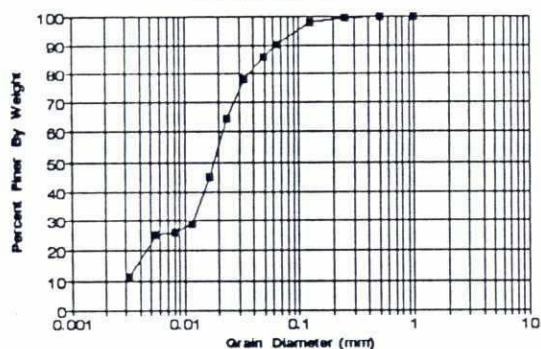
Vertical No: 9
Sample No: A858



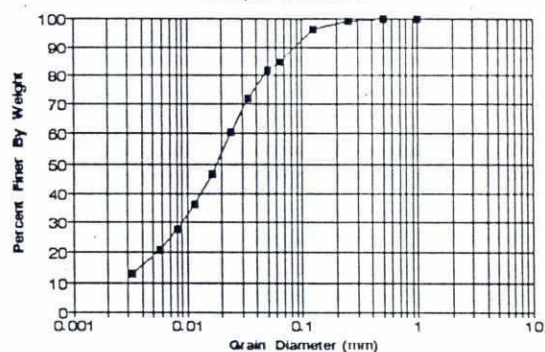
Vertical No: 11
Sample No: A851



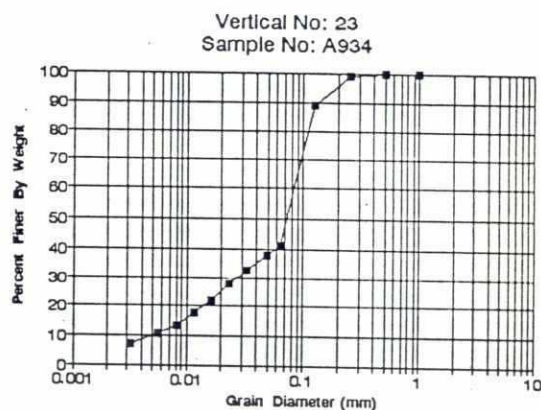
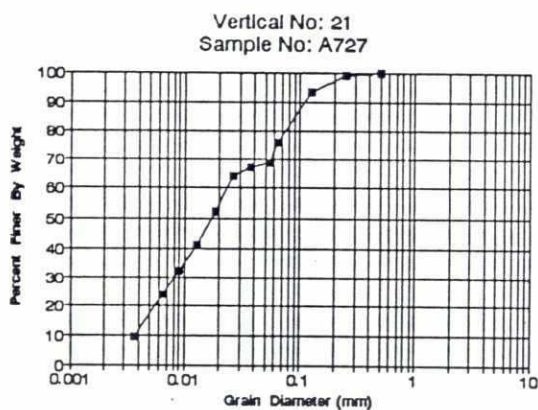
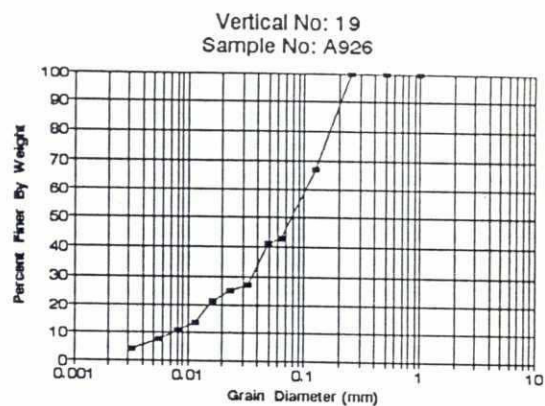
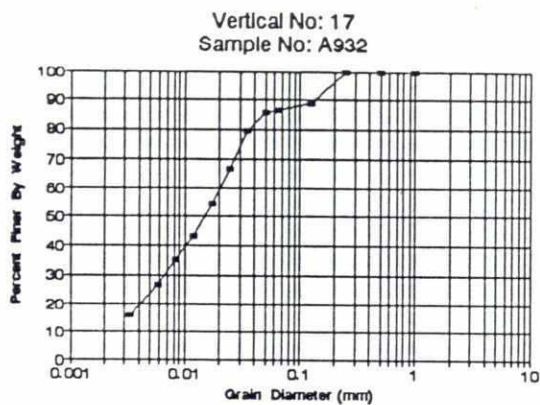
Vertical No: 13
Sample No: A332



Vertical No: 15
Sample No: A729



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A858	20/10/93	10:24	0.016	0.071	0.122	0.227	4.661
A851	20/10/93	13:00	0.008	0.019	0.030	0.127	3.558
A332	20/10/93	14:50	0.004	0.013	0.018	0.062	3.472
A729	21/10/93	09:35	0.004	0.011	0.018	0.085	-3.889



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A932	21/10/93	10:55	0.003	0.008	0.015	0.132	4.000
A926	21/10/93	12:30	0.013	0.042	0.077	0.203	4.124
A727	21/10/93	14:00	0.005	0.010	0.017	0.108	4.229
A934	21/10/93	13:15	0.010	0.039	0.072	0.133	4.406



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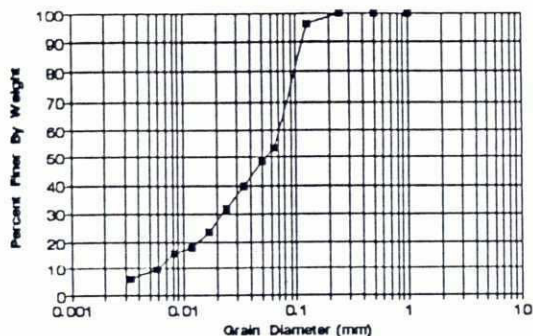
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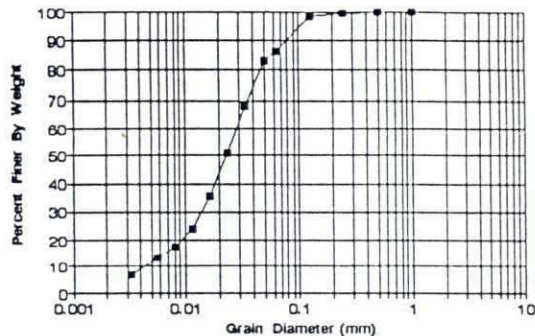
Baruria
(positions on Dwg. 1.18)

Drawing
4.45

Vertical No: 25
Sample No: A925



Vertical No: 27
Sample No: A855



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A925	21/10/93	12:00	0.008	0.028	0.055	0.113	4.374
A855	21/10/93	09:30	0.007	0.016	0.023	0.078	2.795



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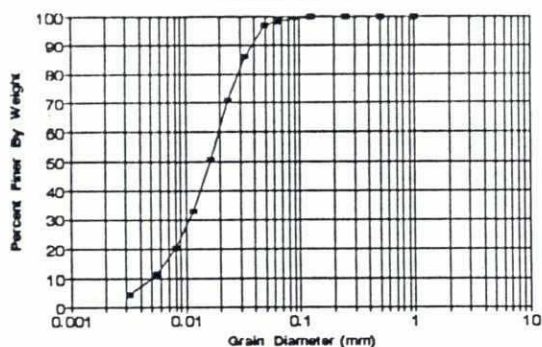
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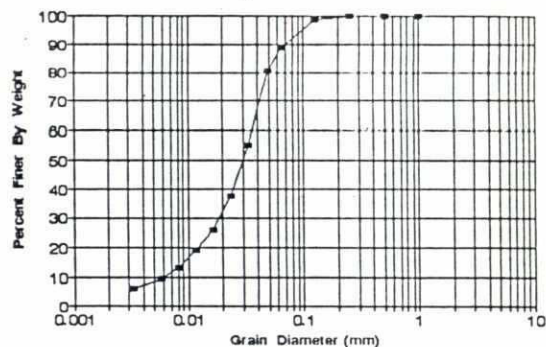
Baruria
(positions on Dwg. 1.18)

Drawing
4.46

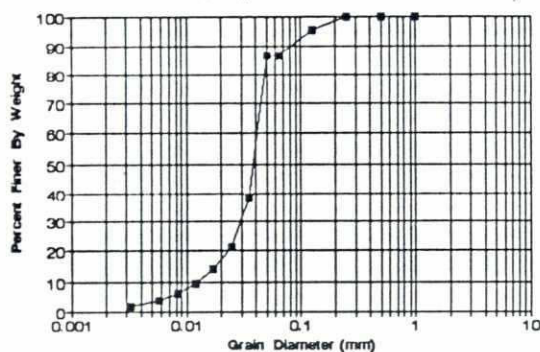
Vertical No: 1
Sample No: A9



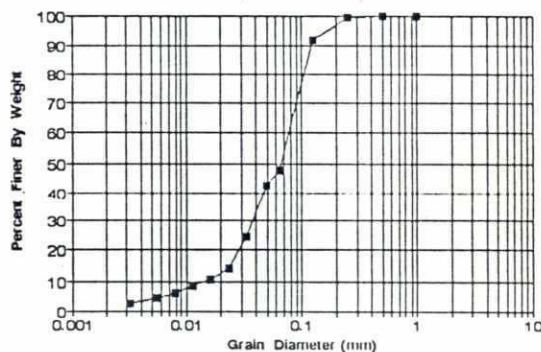
Vertical No: 3
Sample No: A473



Vertical No: 5
Sample No: A457

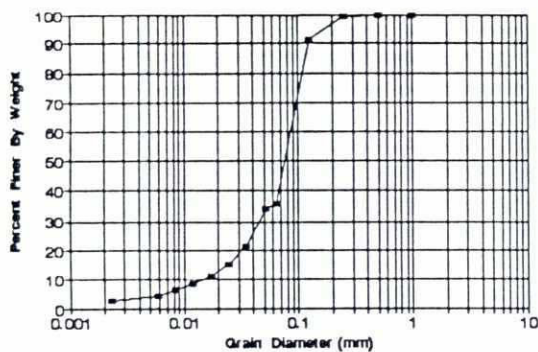


Vertical No: 7
Sample No: A734

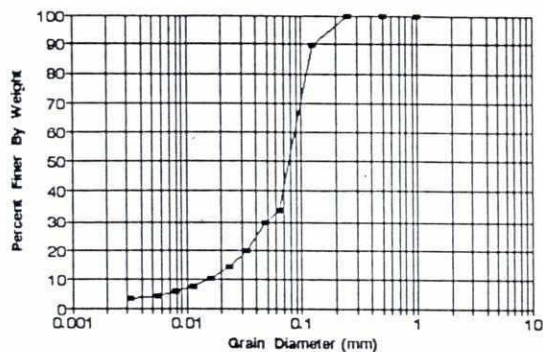


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A9	05/10/93	08:35	0.007	0.012	0.016	0.038	2.143
A473	04/10/93	09:45	0.010	0.022	0.030	0.066	2.400
A457	04/10/93	15:30	0.019	0.032	0.038	0.080	1.658
A734	05/10/93	09:30	0.025	0.041	0.065	0.121	2.146

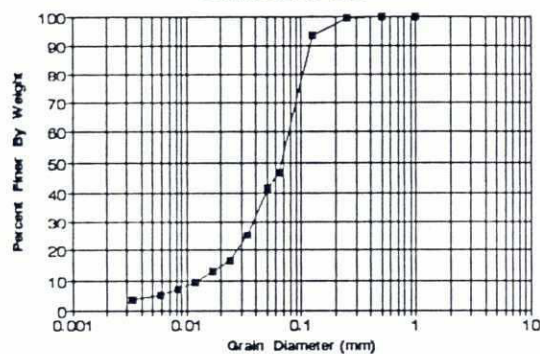
Vertical No: 9
Sample No: A10



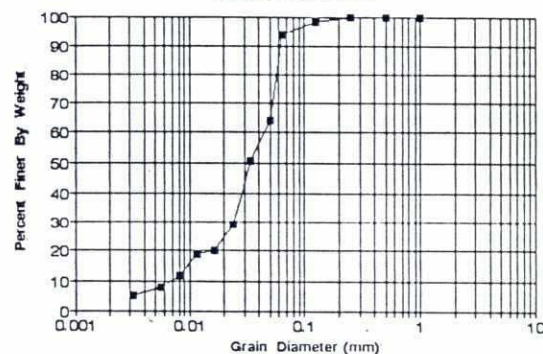
Vertical No: 13
Sample No: A738



Vertical No: 15
Sample No: A728



Vertical No: 17
Sample No: A736



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A10	03/10/93	12:50	0.026	0.058	0.075	0.123	2.202
A738	05/10/93	13:30	0.026	0.064	0.077	0.125	2.234
A728	05/10/93	15:43	0.022	0.043	0.066	0.119	2.326
A736	03/10/93	15:15	0.010	0.026	0.033	0.061	2.529

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Annexure 4: Grain size distribution of suspended sediments (Andreassen tube analysis)

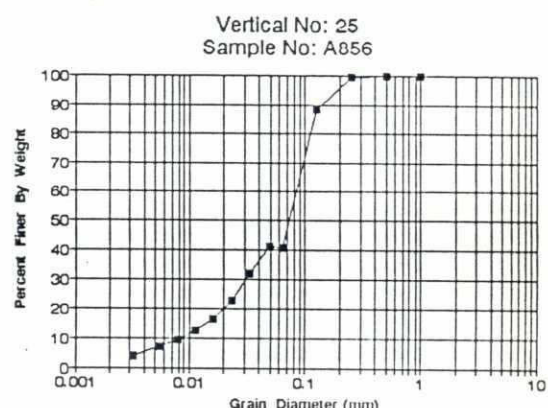
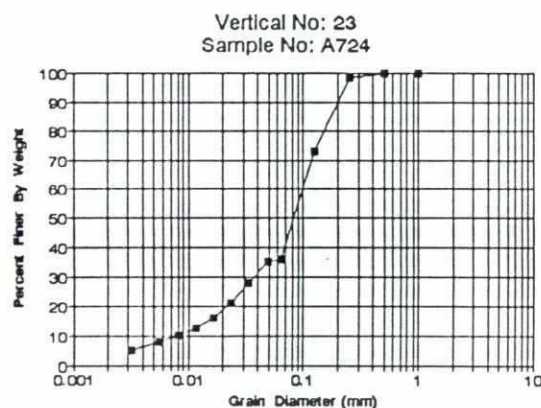
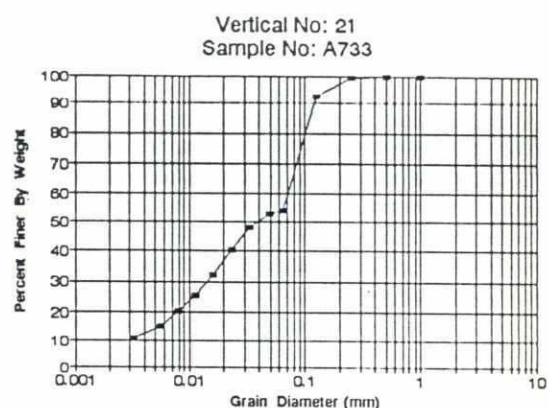
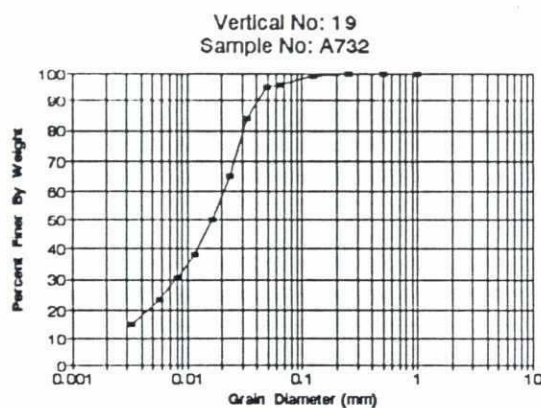
18 June 1994

CI

Mawa
(positions on Dwg. 1.20)

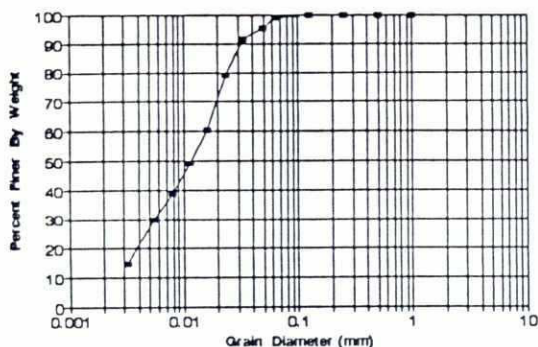
Drawing
4.48

CS

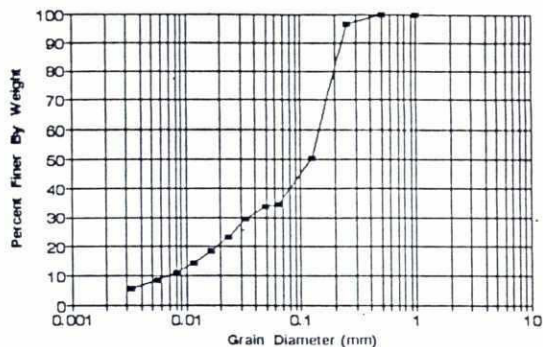


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A732	04/10/93	14:13	0.003	0.010	0.016	0.041	3.698
A733	04/10/93	16:11	0.006	0.018	0.039	0.119	4.622
A724	06/10/93	15:20	0.016	0.049	0.081	0.198	3.568
A856	07/10/93	12:05	0.016	0.038	0.072	0.140	3.069

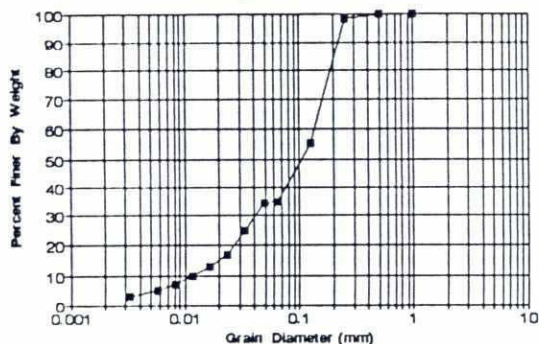
Vertical No: 27
Sample No: A725



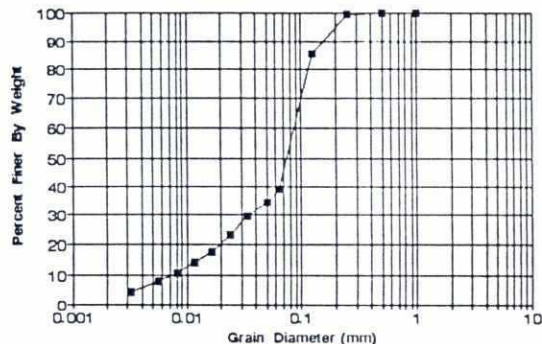
Vertical No: 29
Sample No: A723



Vertical No: 31
Sample No: A730

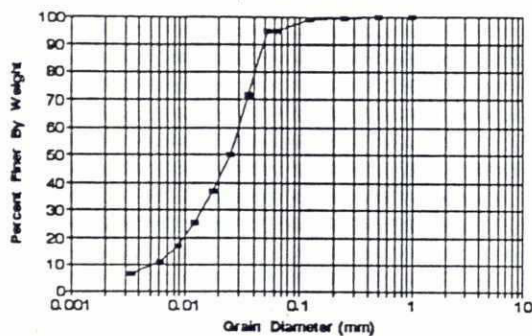


Vertical No: 33
Sample No: A458

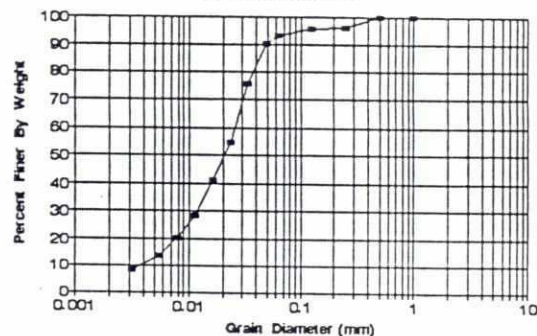


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A725	05/10/93	15:27	0.003	0.007	0.012	0.031	3.125
A723	07/10/93	16:41	0.013	0.064	0.122	0.227	5.541
A730	06/10/93	12:25	0.022	0.063	0.104	0.218	3.316
A458	06/10/93	10:09	0.014	0.051	0.074	0.155	3.670

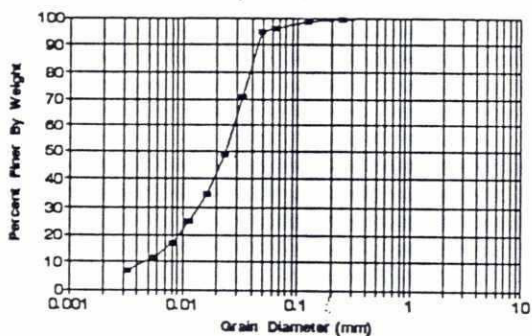
Vertical No: 2
Sample No: A854



Vertical No: 3
Sample No: A731

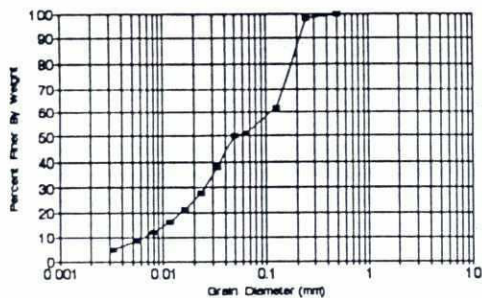


Vertical No: 4
Sample No: A467

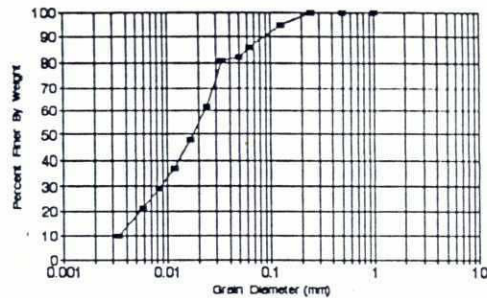


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A854	16/10/93	11:05	0.008	0.016	0.025	0.048	2.443
A731	16/10/93	12:20	0.006	0.014	0.020	0.049	2.717
A467	16/10/93	10:40	0.007	0.016	0.024	0.046	2.568

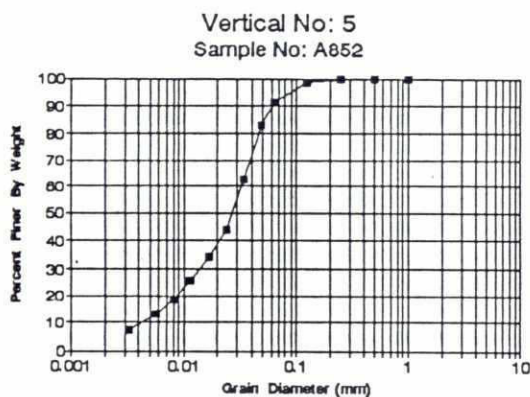
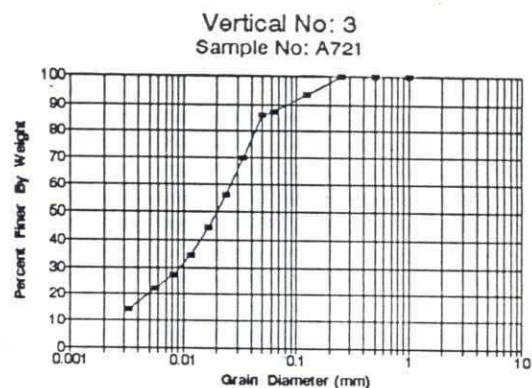
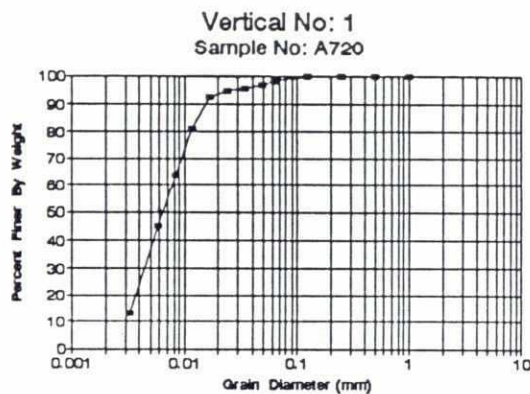
Vertical No:02
Sample No:A15



Vertical No:04
Sample No:A472

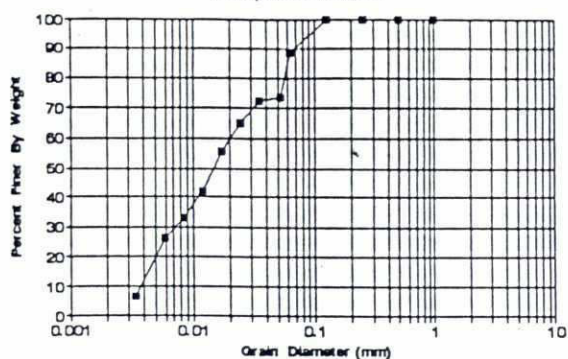


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A15	29/09/93	14:14	0.013	0.030	0.050	0.220	3.900
A472	29/09/93	16:52	0.004	0.012	0.018	0.050	3.210

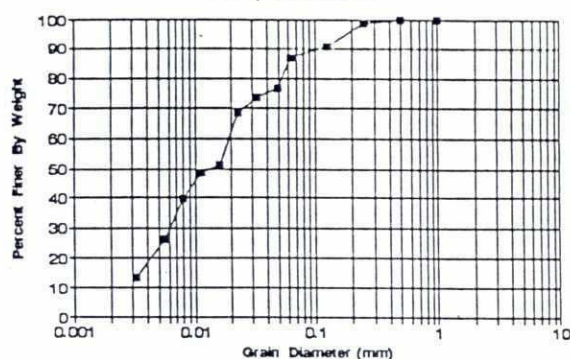


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A720	08/10/93	10:55	0.003	0.005	0.006	0.015	2.083
A721	08/10/93	12:40	0.004	0.012	0.020	0.084	3.700
A852	08/10/93	11:00	0.007	0.017	0.026	0.061	2.838

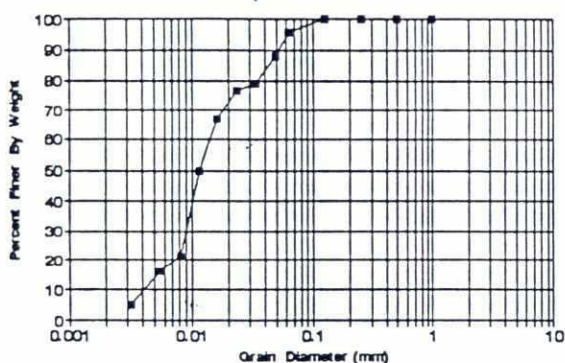
Vertical No: 2
Sample No: A735



Vertical No: 4
Sample No: A857



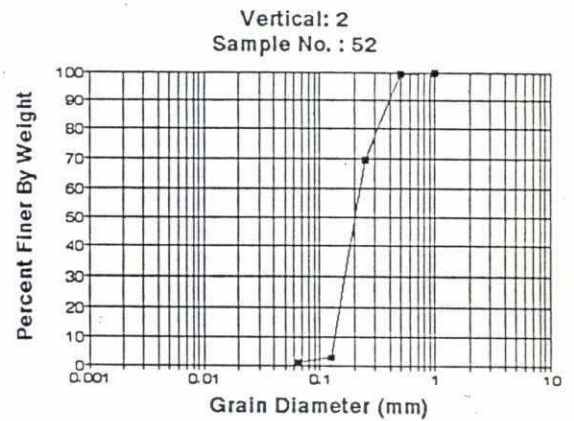
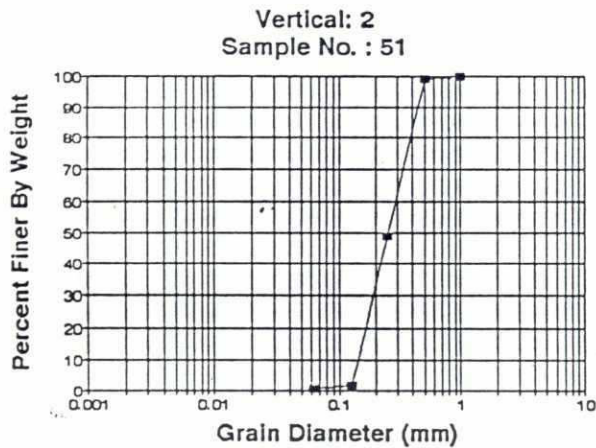
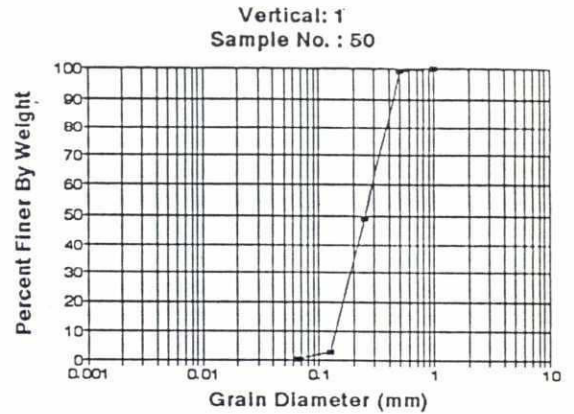
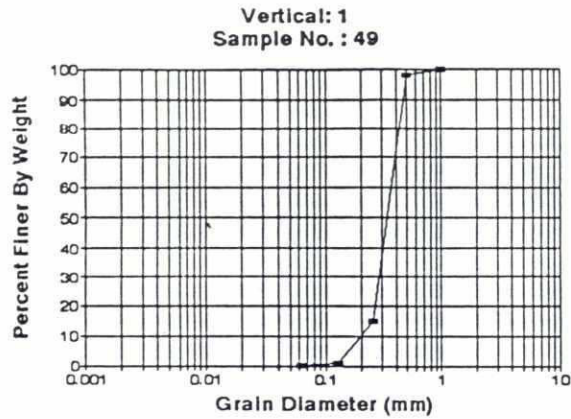
Vertical No: 6
Sample No: A331



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A735	12/10/93	12:40	0.004	0.009	0.015	0.069	3.875
A857	12/10/93	15:03	0.004	0.007	0.013	0.110	3.894
A331	12/10/93	16:55	0.006	0.010	0.011	0.053	2.826

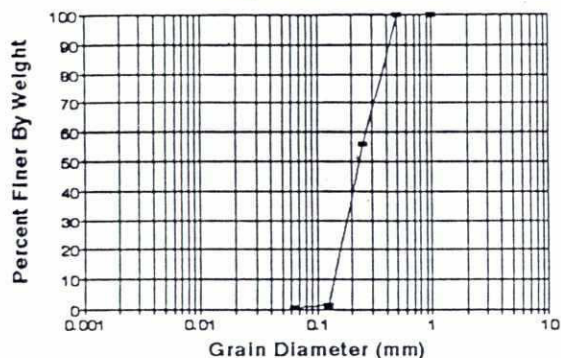
Location	Period	Bulletin no.	Dwg.
1 Bahadurabad	3-9 June 93 9-17 July 93 (23-24 Aug 93) 6-11 Sept 93	6 7 (10) 11	5.1 - 5.14 5.15 - 5.33 5.34 - 5.43
2 Sirajganj	21-30 July 93 (7 Sept 93) (24-27 Oct 93)	8 (12) (23)	5.44 - 5.58
(3) (Aricha)	(19 Sept 93)	(13)	
4 Hardinge Bridge	26-28 Sept 93	15	5.59 - 5.62
5 Baruria	3-8 Aug 93 (19 Sept 93) (1 Oct 93) 19-22 Oct 93	9 (14) (17) 22	5.63 - 5.72 5.73 - 5.79
6 Mawa	3-7 Oct 93	18	5.80 - 5.86
8 (Tilly)	(15 Oct 93)	(21)	
9 Gorai	29-30 Sept 93	16	5.87
10 Arial Khan	8 Oct 93	19	5.88
11 (Bhairab Bazar)	(11-12 Oct 93)	(20)	
() : Information in brackets relates to measurements of other types than those described in the present annexure			

Annexure 5:
Grain size distribution
of bed load samples
(Helley-Smith trap sampler)

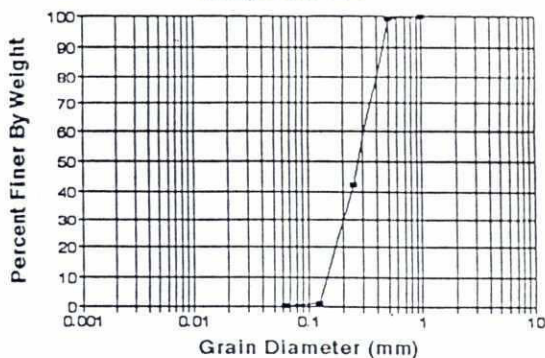


Sample No.	Time	Date	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
49	11:15	07/06/93	226.00	0.024780	0.295	0.335	0.380	1.329
50	11:20	07/06/93	653.50	0.071655	0.202	0.253	0.312	1.365
51	13:10	07/06/93	720.00	0.078947	0.204	0.254	0.312	1.617
52	13:15	07/06/93	628.00	0.068859	0.174	0.203	0.238	1.564

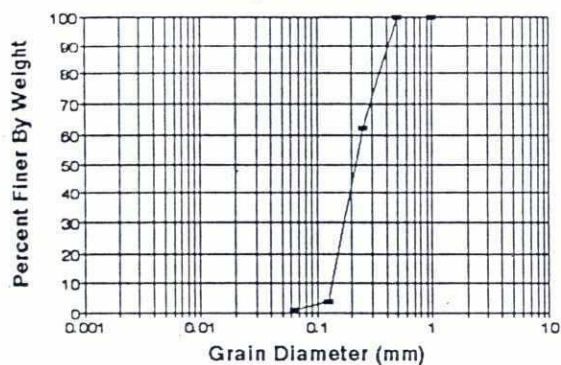
Vertical: 3
Sample No. : 53



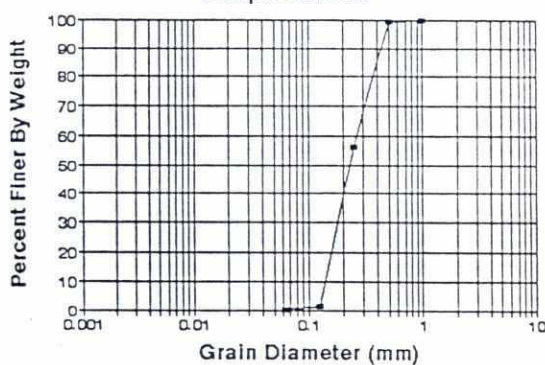
Vertical: 3
Sample No. : 54



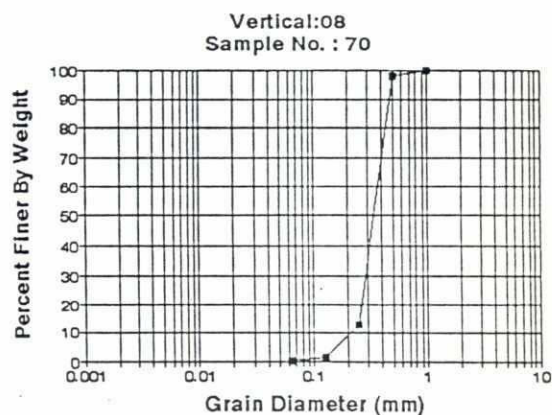
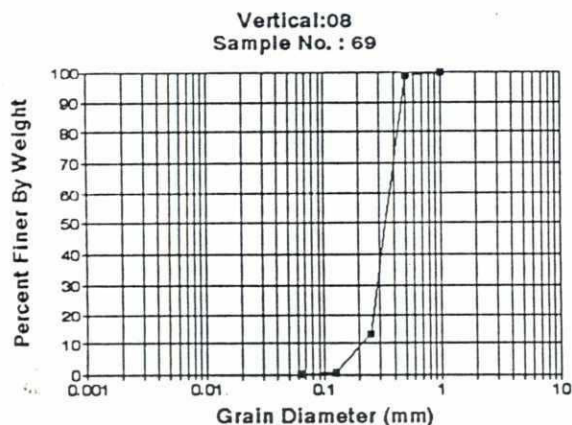
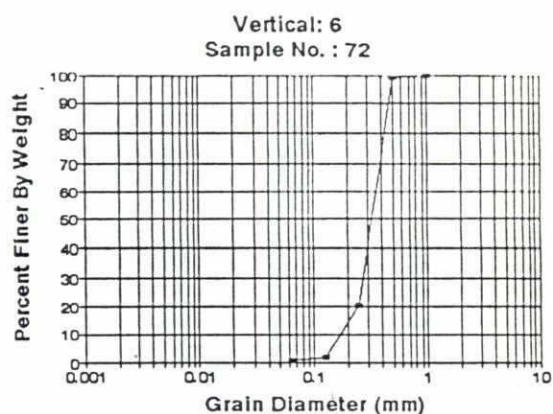
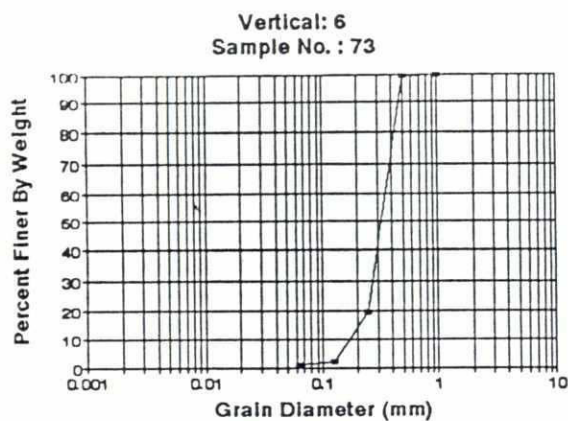
Vertical: 4
Sample No. : 55



Vertical: 4
Sample No. : 56



Sample No.	Time	Date	Total Weight (g m)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
53	13:35	07/06/93	1009.00	0.11064	0.192	0.232	0.289	1.616
54	13:40	07/06/93	1323.00	0.14507	0.220	0.273	0.329	1.613
55	15:35	07/06/93	726.00	0.07961	0.181	0.217	0.264	1.610
56	15:40	07/06/93	1567.00	0.17119	0.190	0.230	0.286	1.612



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
73	10:30	08/06/93	1680.00	0.73684	0.286	0.326	0.371	1.421
72	10:35	08/06/93	1608.00	0.70526	0.285	0.325	0.370	1.435
69	15:42	08/06/93	2594.00	0.28443	0.298	0.337	0.381	1.317
70	15:48	08/06/93	1606.50	0.17615	0.300	0.339	0.383	1.319

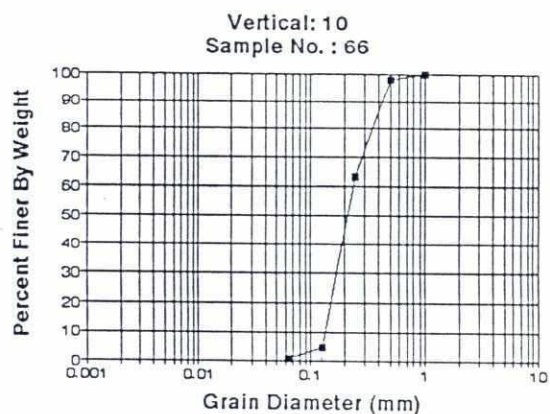
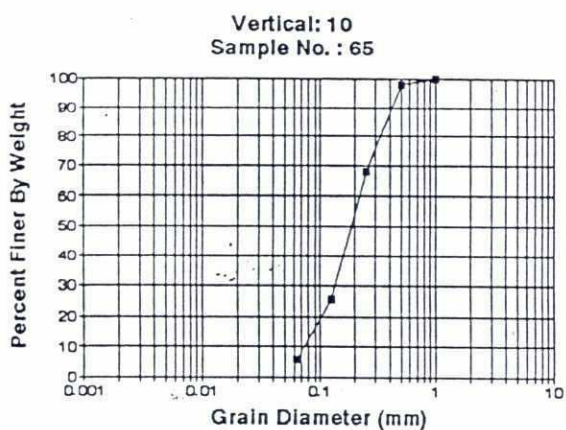
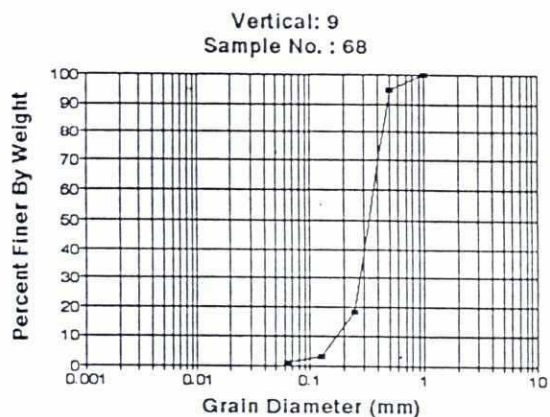
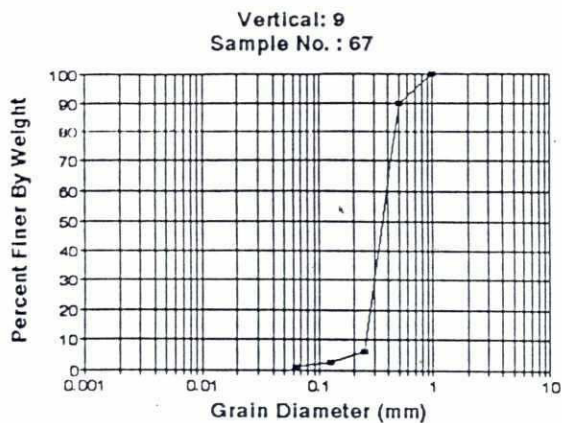


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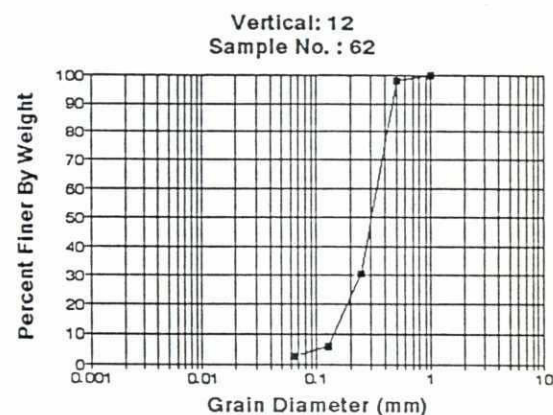
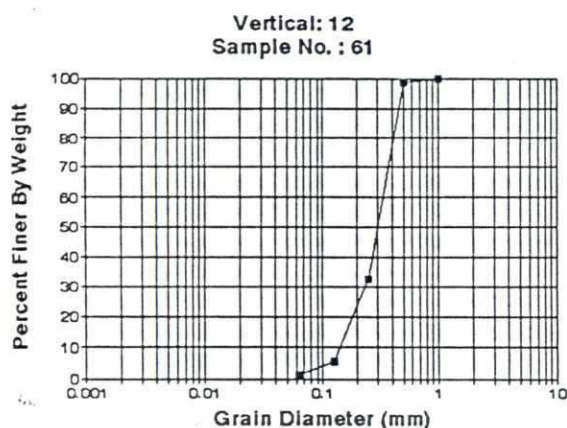
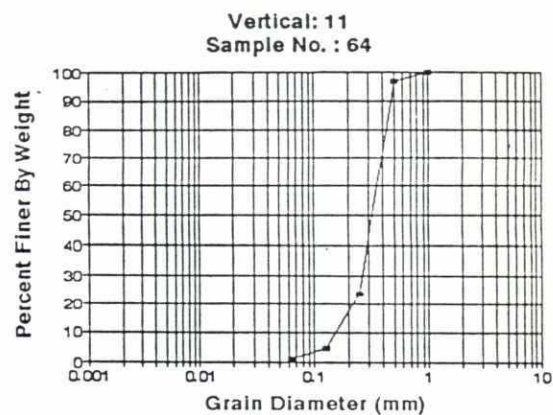
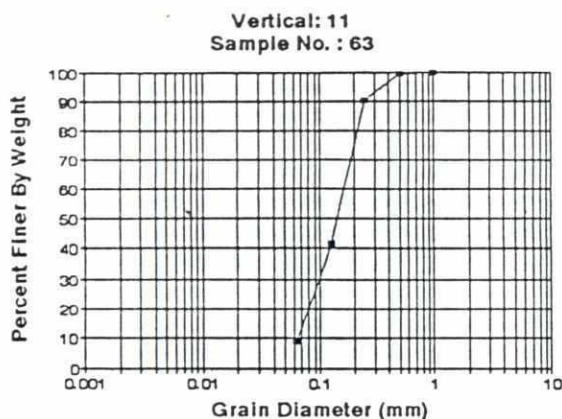
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Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)

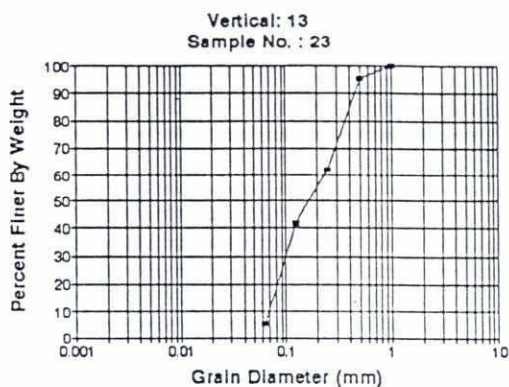
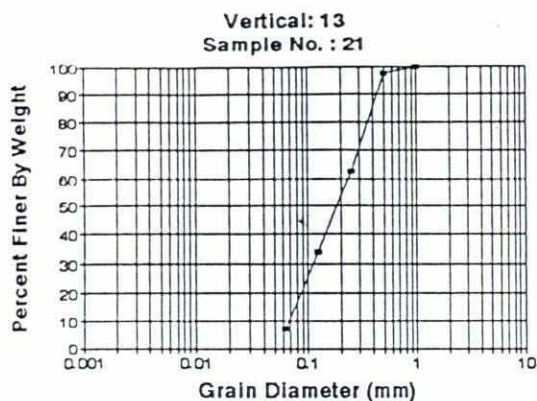
	18 June 1994	Bahadurabad, channel L-1 (positions on Dwg. 1.2)	Drawing 5.3
	CI		



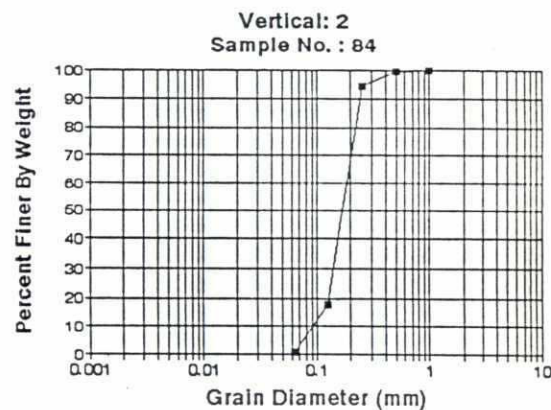
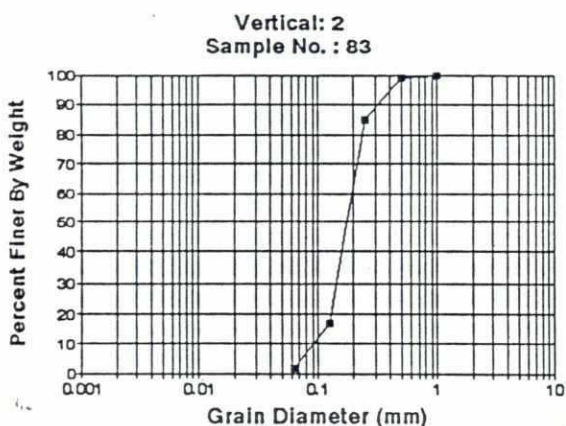
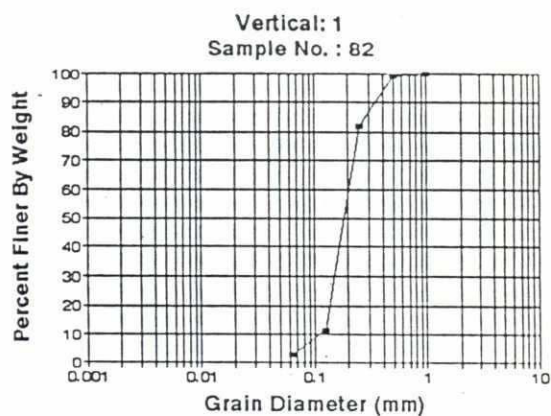
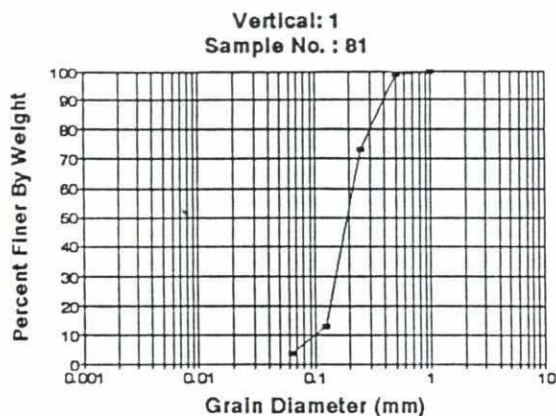
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M ² s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
67	14:00	07/06/93	163.00	0.01787	0.318	0.360	0.407	1.422
68	14:15	07/06/93	1675.50	0.18366	0.291	0.333	0.382	1.006
65	12:15	07/06/93	255.50	0.2802	0.146	0.186	0.238	1.634
66	12:20	07/06/93	2885.00	0.31664	0.179	0.214	0.260	1.774



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
63	11:40	07/06/93	204.00	0.02237	0.109	0.141	0.174	1.774
64	11:45	07/06/93	49.09	0.00538	0.279	0.321	0.370	1.535
61	10:35	07/06/93	49.00	0.00537	0.257	0.300	0.351	1.635
62	10:30	07/06/93	17.48	0.00192	0.262	0.306	0.357	1.631



Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (m.m)	D50 (m.m)	D65 (mm)	Standard Deviation
21	07/06/93	09:10	4.00	0.0004386	0.128	0.183	0.260	2.199
23	07/06/93	09:15	2.65	0.0002900	0.110	0.166	0.265	2.268



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg / M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
81	12:35	09/06/93	286.00	0.03136	q	0.191	0.227	1.617
82	12:45	09/06/93	529.00	0.09090	0.157	0.182	0.212	1.447
83	14:00	09/06/93	318.00	0.03487	0.150	0.175	0.204	1.444
84	14:05	09/06/93	1252.50	0.13734	0.146	0.167	0.192	1.402

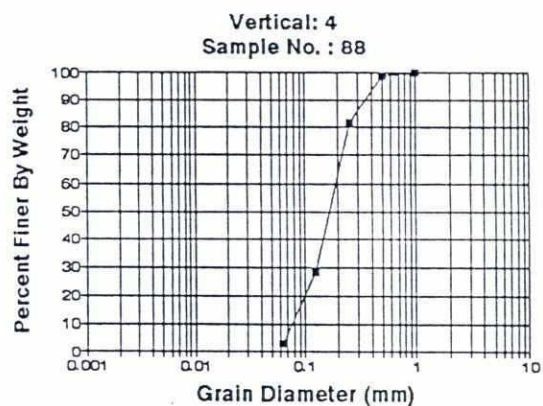
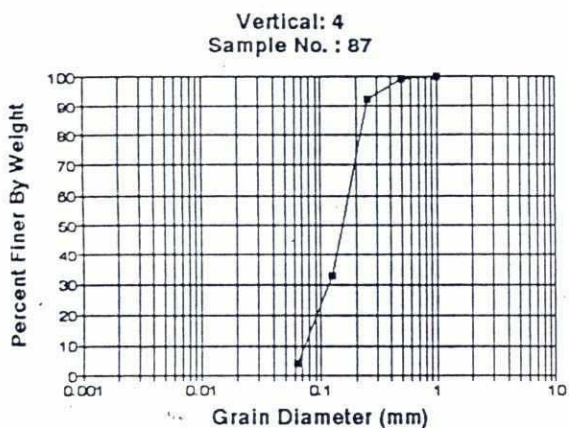
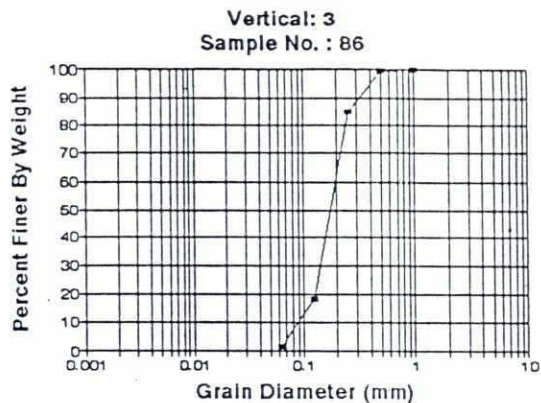
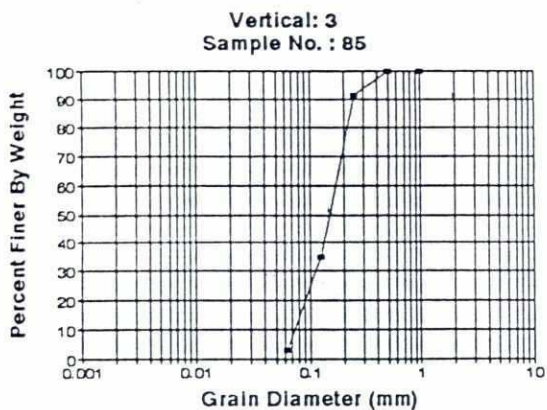


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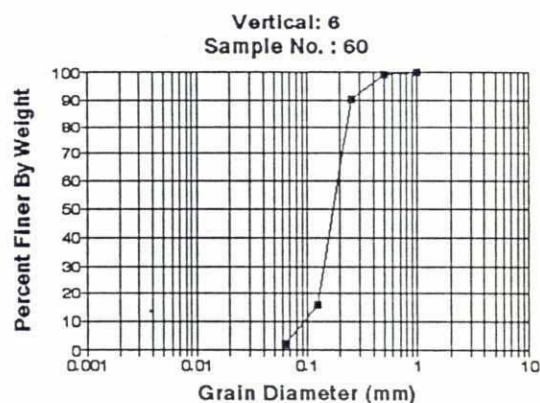
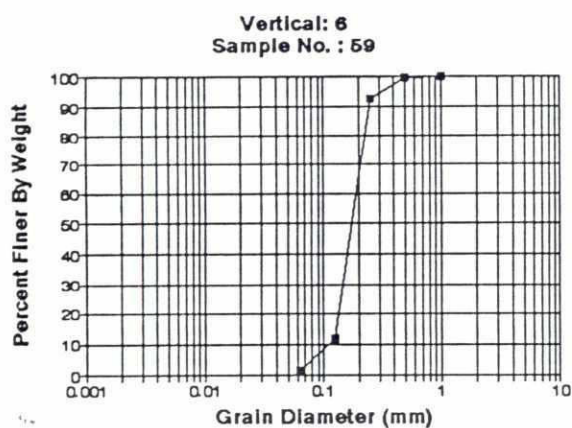
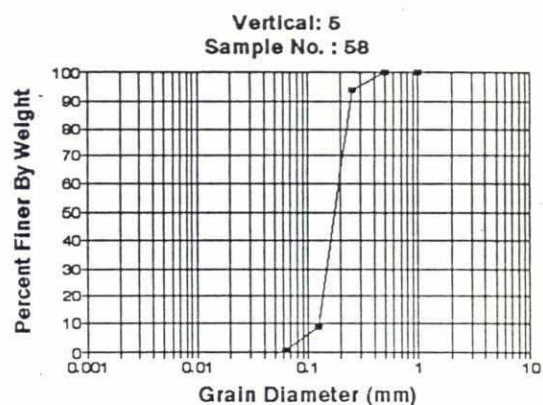
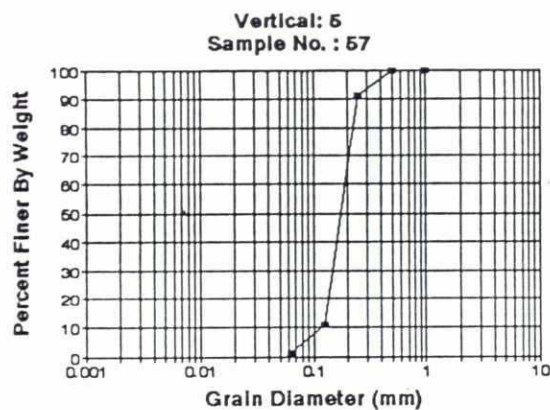
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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

	18 June 1994	Bahadurabad, channel L-2 (positions on Dwg. 1.2)	Drawing 5.7
	CI		

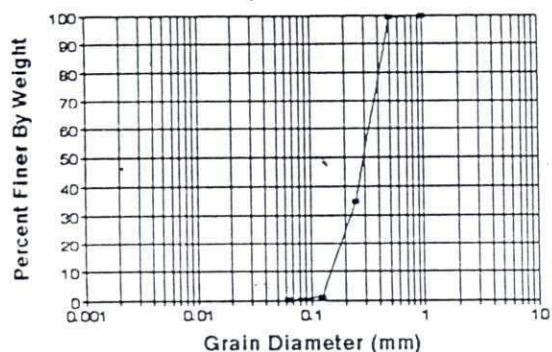


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
85	09/06/93	14:53	312.00	0.03421	0.125	0.150	0.180	1.664
86	09/06/93	14:50	772.00	0.08465	0.149	0.174	0.204	1.476
87	09/06/93	15:45	381.00	0.04178	0.128	0.152	0.182	1.662
88	09/06/93	16:00	550.00	0.06031	0.137	0.166	0.201	1.748

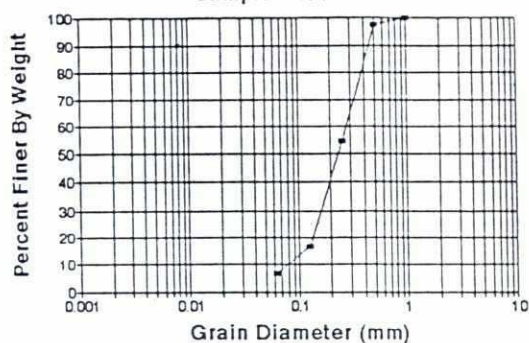


Sample No.	Time	Date	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
57	11:35	09/06/93	443.00	0.04863	0.154	0.175	0.199	1.339
58	11:40	09/06/93	795.00	0.08717	0.155	0.175	0.198	1.318
59	15:25	09/06/93	468.00	0.05132	0.152	0.173	0.197	1.336
60	15:30	09/06/93	387.00	0.04243	0.150	0.172	0.198	1.369

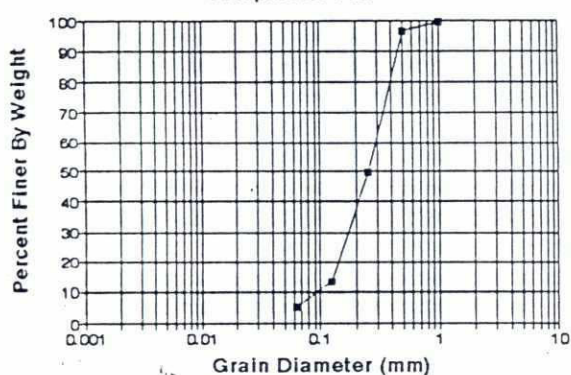
Vertical: 1
Sample No. : 01



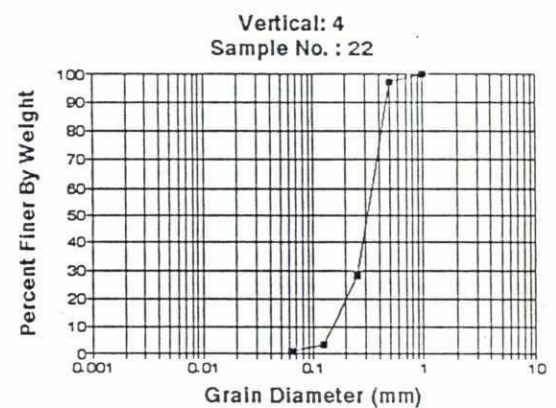
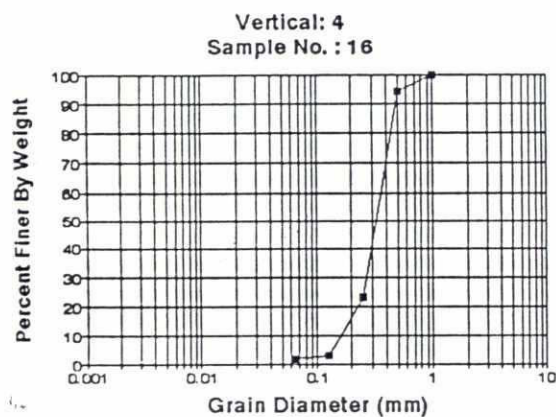
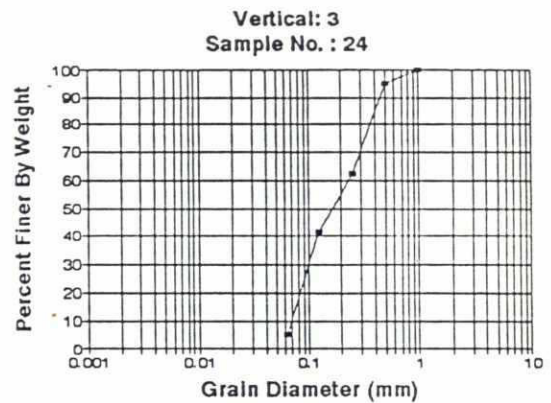
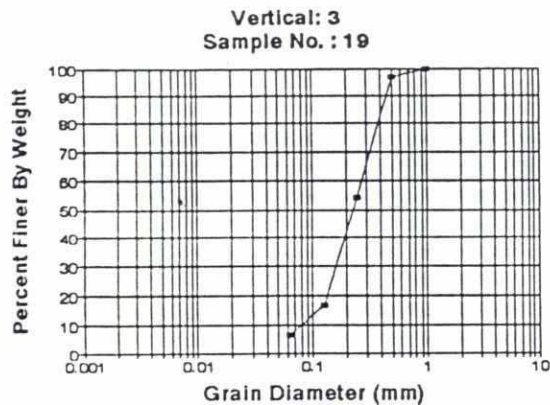
Vertical: 2
Sample No. : 06



Vertical: 2
Sample No. : 08



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1	15:50	04/06/93	938.00	0.10285	0.251	0.295	0.346	1.588
6	16:30	05/06/93	3.17	0.00035	0.175	0.231	0.297	1.851
8	16:35	05/06/93	12.00	0.00132	0.189	0.250	0.313	1.775



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
19	11:15	06/06/93	3.193	0.000350	0.175	0.231	0.298	1.855
24	11:30	06/06/93	39.722	0.004355	0.110	0.166	0.265	2.268
16	10:00	06/06/93	34.810	0.007634	0.280	0.324	0.375	1.527
22	10:15	06/06/93	68.000	0.007456	0.268	0.311	0.362	1.578



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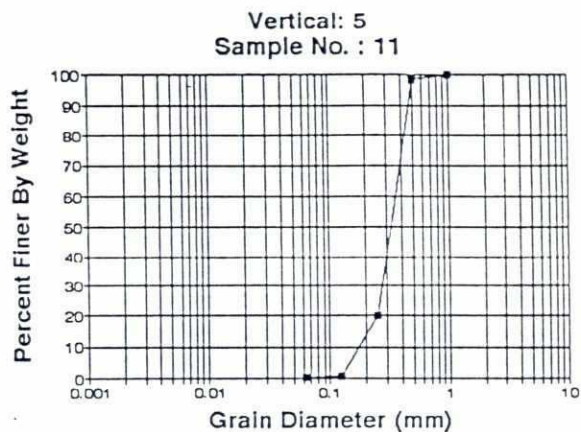
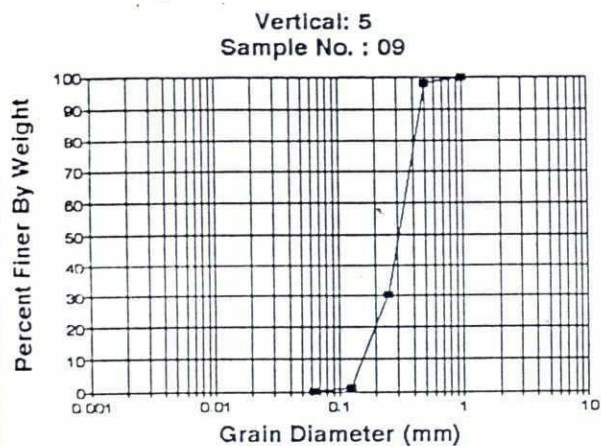
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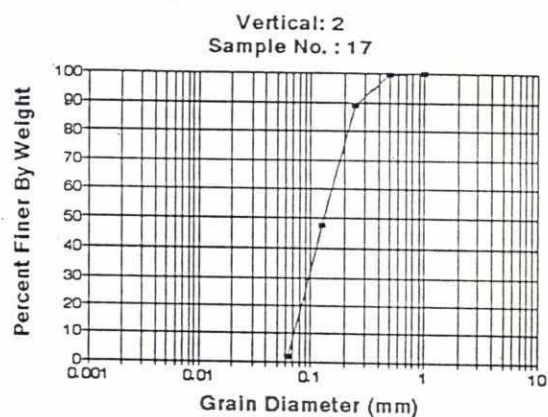
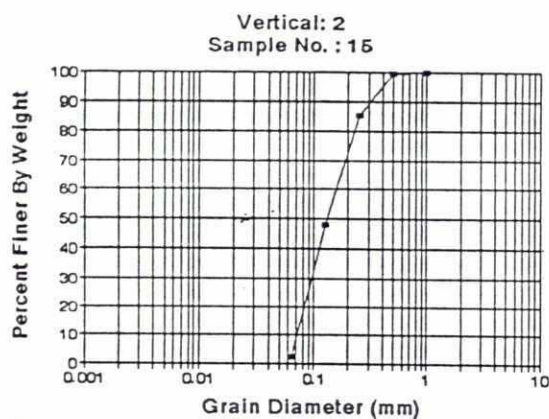
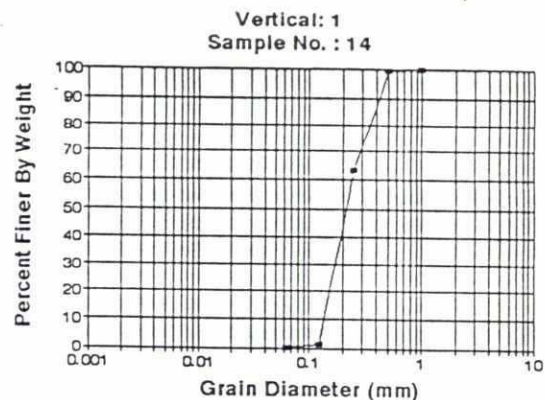
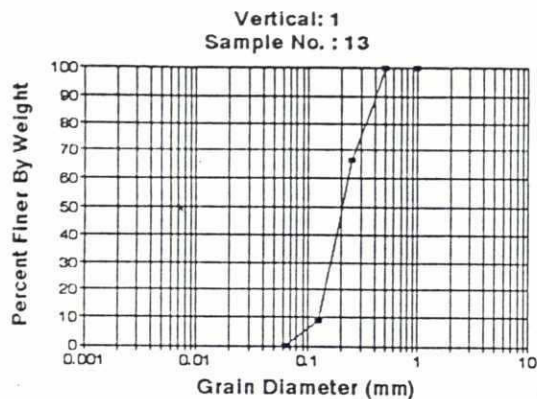
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Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)

	18 June 1994	Bahadurabad, channel L-3 (positions on Dwg. 1.3)	Drawing 5.11
	CI		



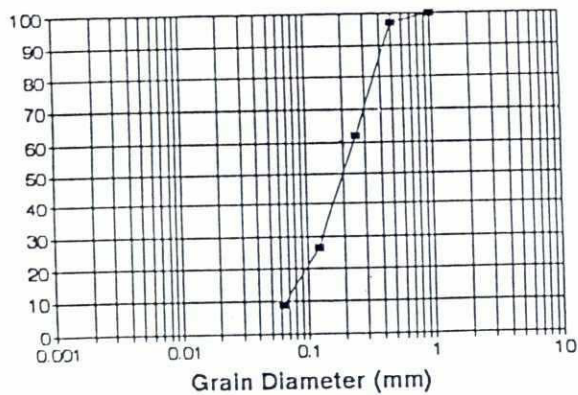
Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
9	16:15	05/06/93	284.000	0.062281	0.263	0.306	0.357	1.569
11	16:20	05/06/93	33.212	0.007283	0.285	0.325	0.372	1.433



Sample No.	Time	Date	Total Weight(gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
13	09:37	06/06/93	1657.000	0.181688	0.171	0.205	0.245	1.629
14	09:45	06/06/93	216.500	0.023684	0.182	0.215	0.259	1.594
15	10:26	06/06/93	119.200	0.013070	0.103	0.130	0.171	1.775
17	10:42	06/06/93	277.000	0.030370	0.103	0.130	0.167	1.718

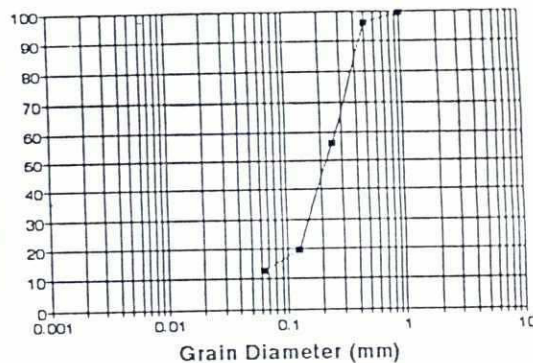
Percent Finer By Weight

Vertical: 4
Sample No. : 18

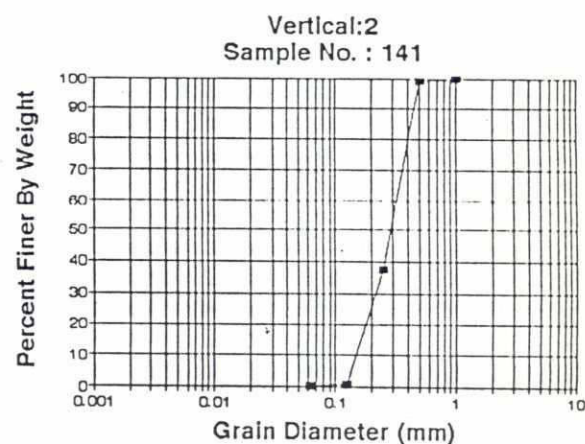
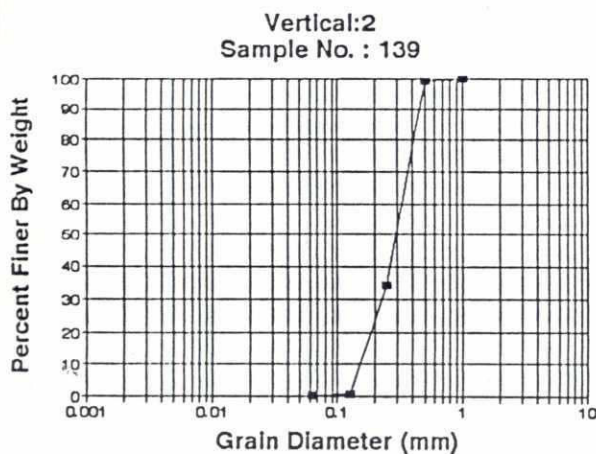
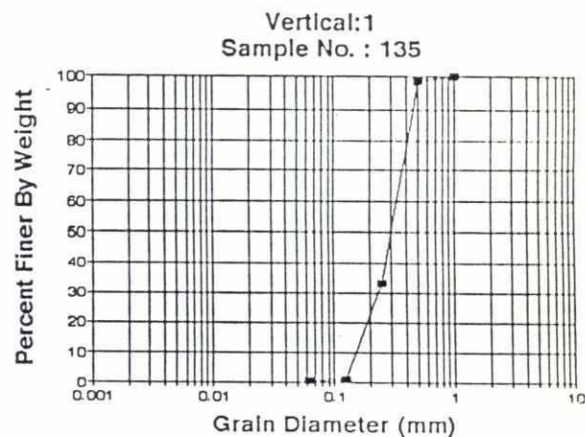
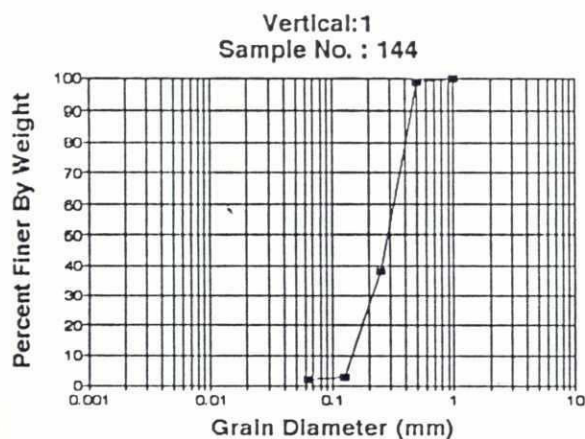


Percent Finer By Weight

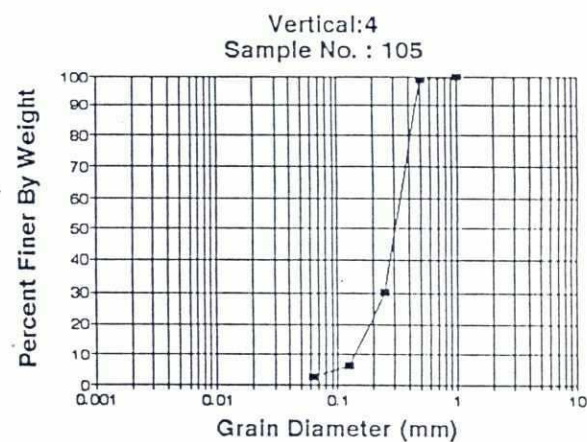
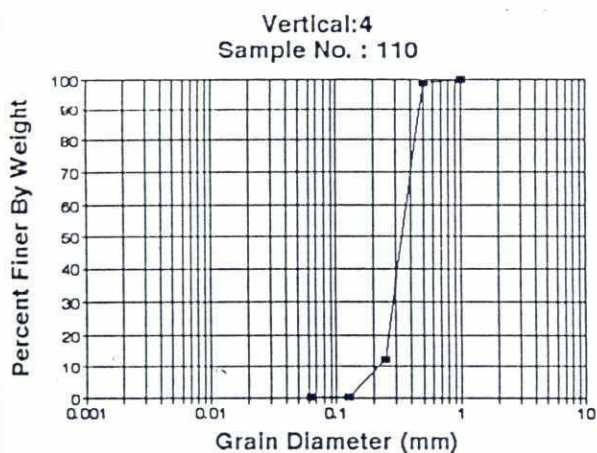
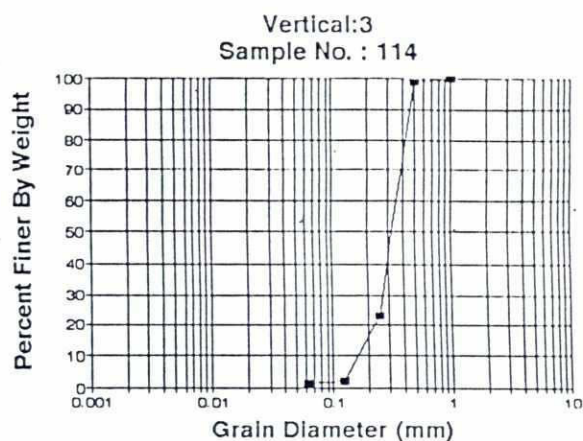
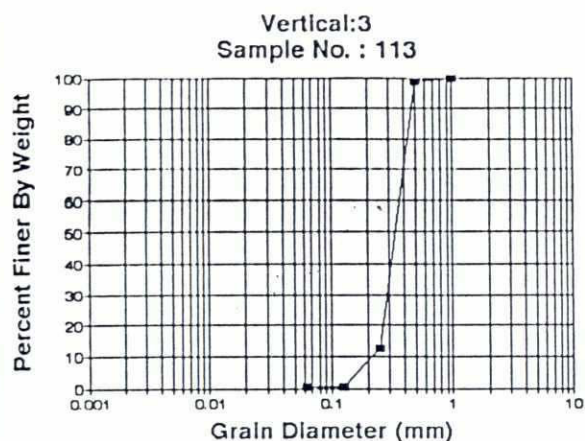
Vertical: 4
Sample No. : 20



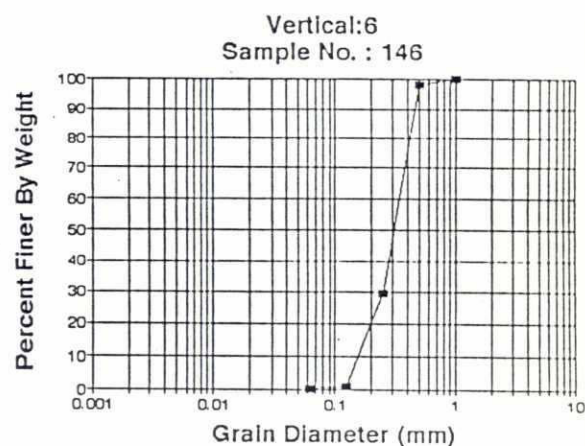
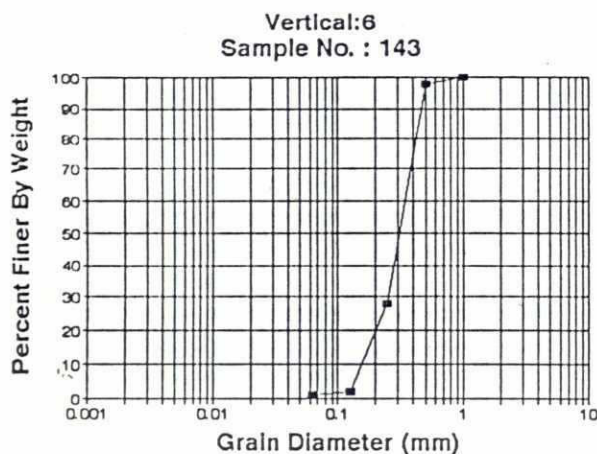
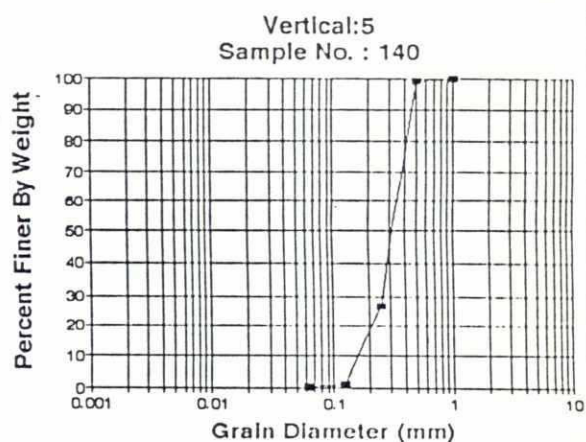
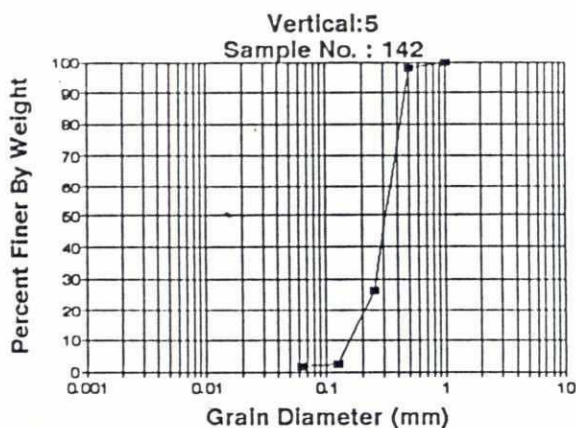
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
18	12:55	06/06/93	8.000	0.000887	0.148	0.198	0.265	2.165
20	13:10	06/06/93	4.633	0.000508	0.167	0.222	0.290	2.157



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
144	15:45	13/07/93	9.800	0.00107456	0.235	0.286	0.340	1.622
135	15:50	13/07/93	29.065	0.0031869	0.255	0.299	0.351	1.587
139	14:50	13/07/93	255.000	0.2796	0.252	0.295	0.347	1.578
141	15:00	13/07/93	631.500	0.06918	0.238	0.287	0.340	1.591

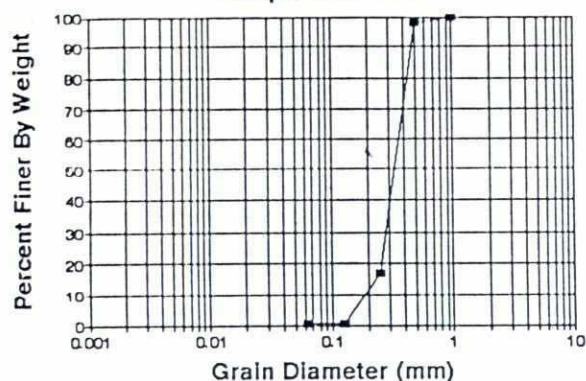


Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
113	14:00	13/07/93	109.00	0.01195	0.300	0.338	0.381	1.314
114	14:05	13/07/93	11.40	0.0012503	0.279	0.320	0.367	1.485
110	13:00	13/07/93	220.50	0.2417	0.300	0.339	0.382	1.312
105	13:05	13/07/93	367.00	0.04024	0.263	0.305	0.355	1.625

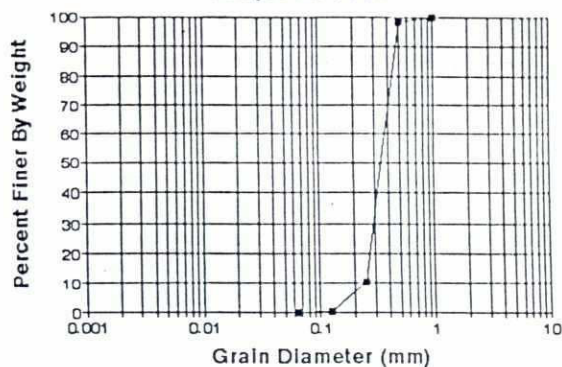


Sample No	Time	Date	Total Weight (gm)	Transport Rate (kg/M·s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
142	11:30	13/07/93	26.87	0.00294627	0.271	0.314	0.363	1.545
140	11:35	13/07/93	255.00	0.02796	0.270	0.312	0.360	1.527
143	10:15	13/07/93	35.01	0.0038386	0.268	0.311	0.361	1.555
146	10:20	13/07/93	58.80	0.0064473	0.265	0.308	0.358	1.555

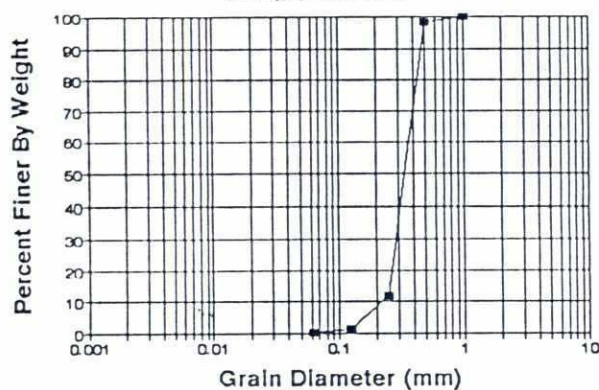
Vertical:7
Sample No. : 108



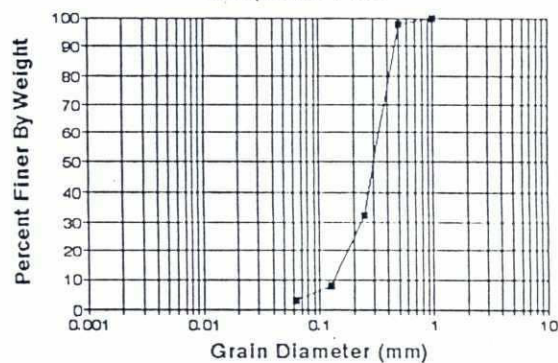
Vertical:7
Sample No. : 109



Vertical:8
Sample No. : 99



Vertical:8
Sample No. : 100



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
108	09:05	13/07/93	205.500	0.02253	0.292	0.331	0.377	1.359
109	09:15	13/07/93	188.500	0.02066	0.303	0.341	0.384	1.309
99	16:50	12/07/93	29.831	0.01308	0.301	0.340	0.383	1.312
100	17:00	12/07/93	13.107	0.00574868	0.256	0.301	0.353	1.670

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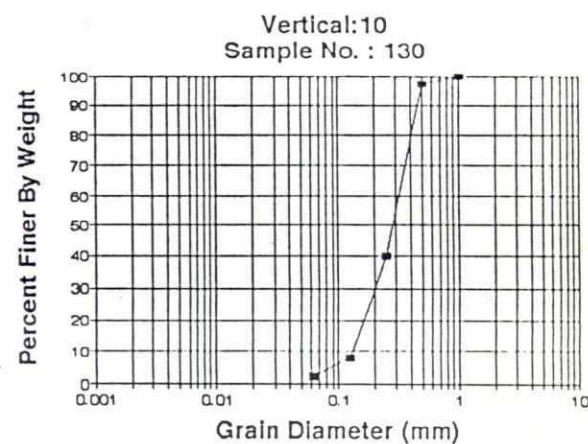
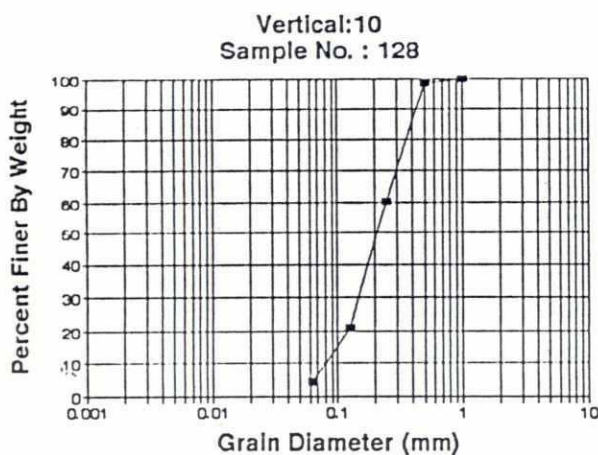
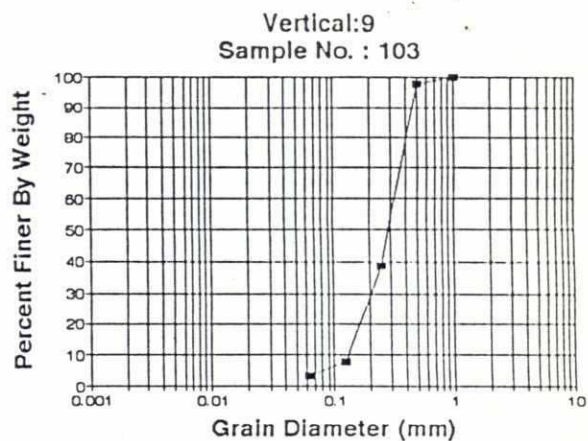
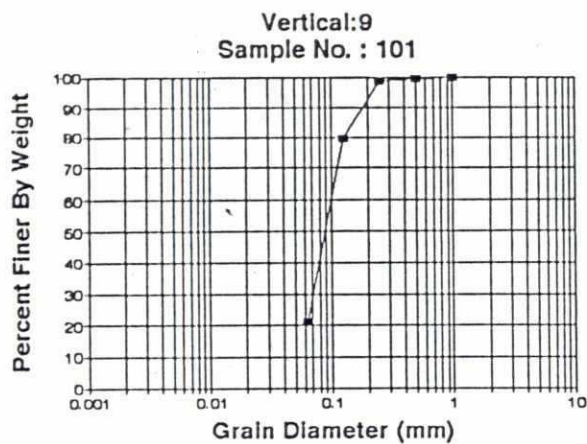
Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

CI

Bahadurabad, left channel
(positions on Dwg. 1.5)

Drawing
5.18



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
101	15:10	12/07/93	112.000	0.049122	0.074	0.088	0.106	1.700
103	15:20	12/07/93	7.009	0.00307412	0.229	0.850	0.340	1.696
128	13:55	12/07/93	17.306	0.0004386	0.161	0.209	0.273	1.936
130	14:05	12/07/93	5.184	0.0027368	0.224	0.282	0.338	1.700



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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

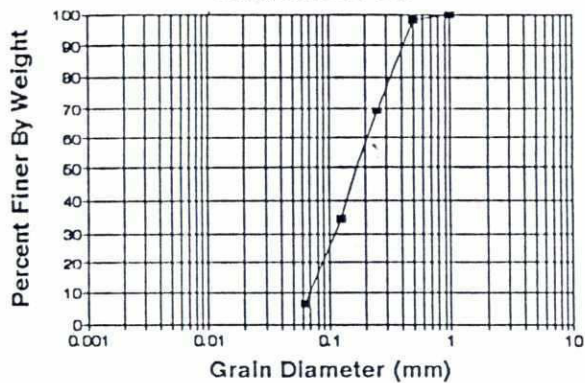
18 June 1994

CI

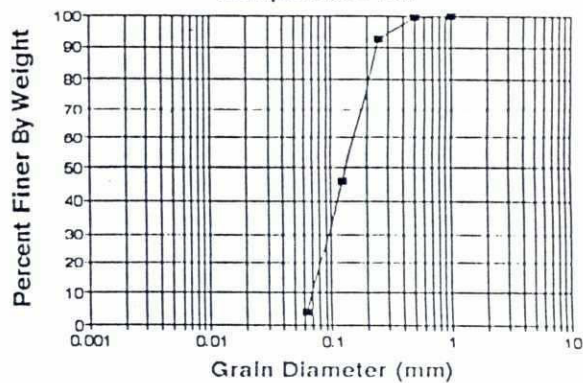
Bahadurabad, left channel
(positions on Dwg. 1.5)

Drawing
5.19

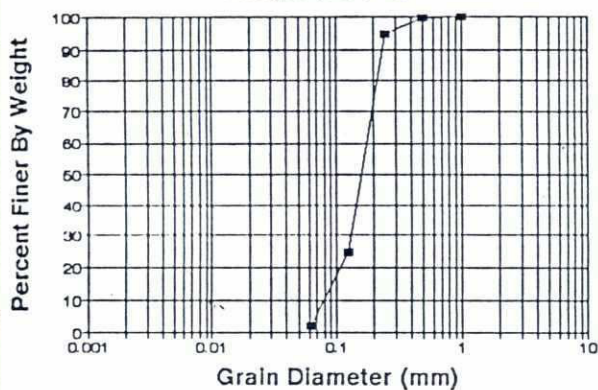
Vertical:11
Sample No. : 136



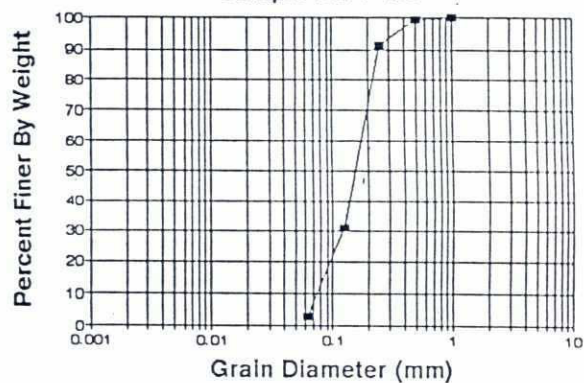
Vertical:11
Sample No. : 137



Vertical:12
Sample No. : 21

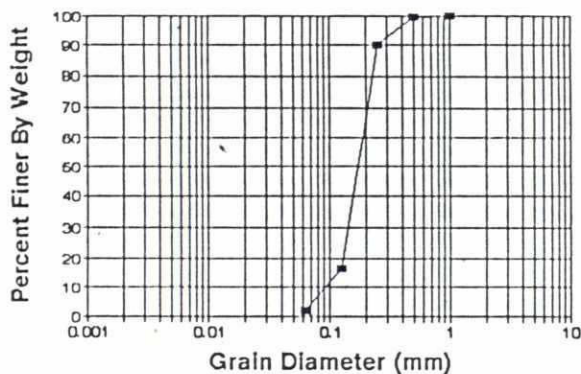


Vertical:12
Sample No. : 150

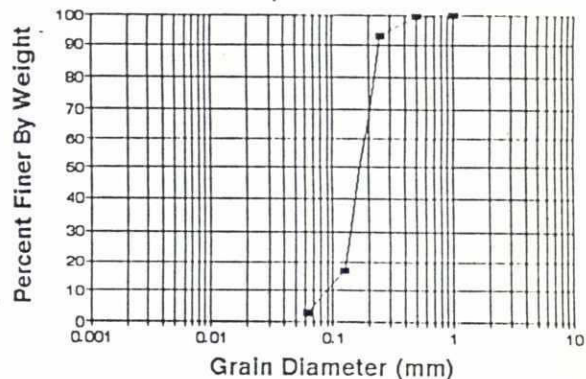


Sample No	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
136	12:35	12/07/93	180.00	0.078947	0.126	0.170	0.229	2.126
137	12:45	12/07/93	487.00	0.213596	0.105	0.133	0.166	1.702
21	11:00	12/07/93	444.50	0.194956	0.139	0.161	0.187	1.537
150	11:05	12/07/93	367.00	0.16046	0.131	0.156	0.185	1.634

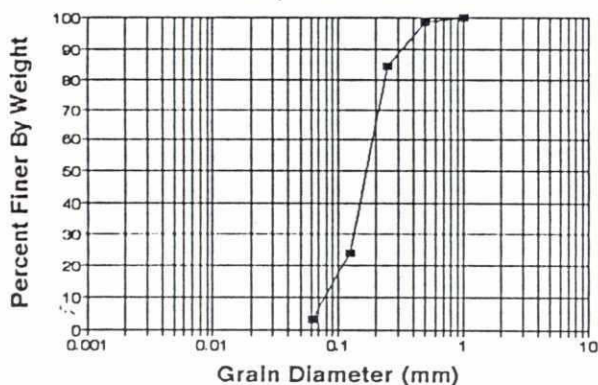
Vertical:13
Sample No. : 65



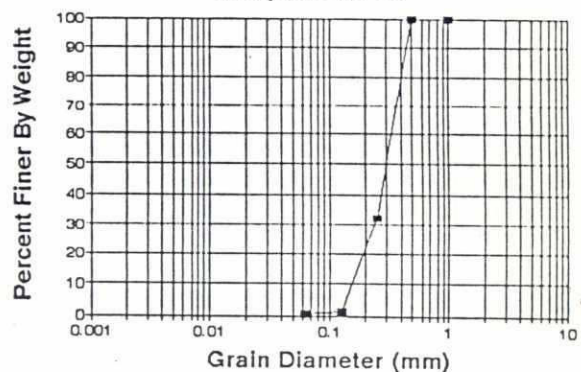
Vertical:13
Sample No. : 127



Vertical:14
Sample No. : 62



Vertical:14
Sample No. : 70



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
65	10:30	12/07/93	496.30	0.21767	0.149	0.171	0.198	1.394
127	10:35	12/07/93	1065.50	0.46732	0.147	0.169	0.194	1.394
62	09:00	12/07/93	404.80	0.17754	0.142	0.169	0.200	1.617
70	09:15	12/07/93	278.50	0.12215	0.257	0.300	0.350	1.570

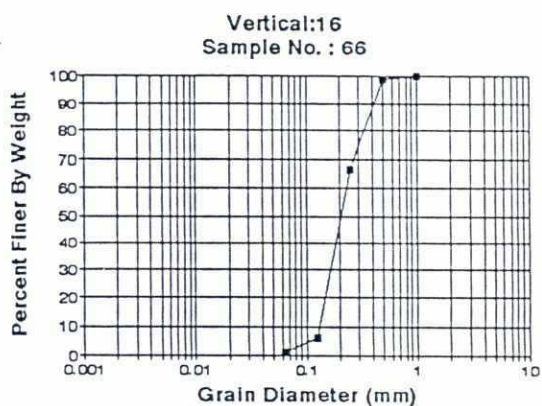
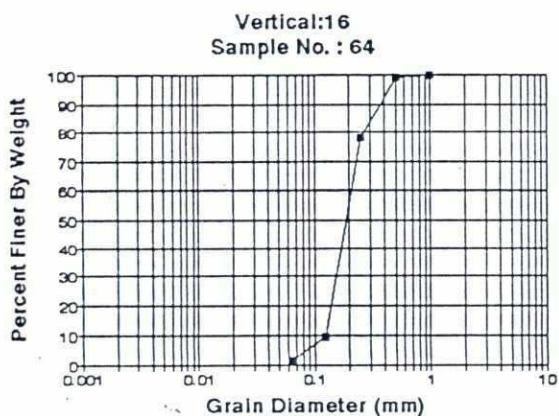
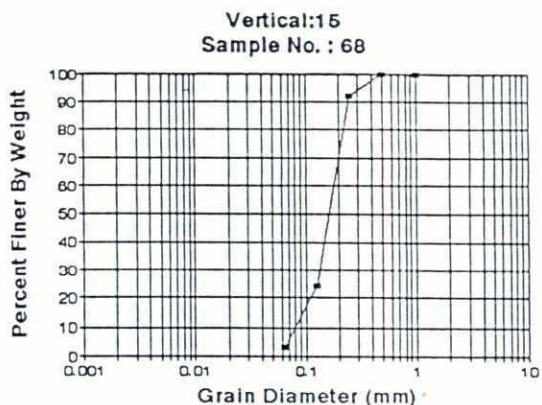
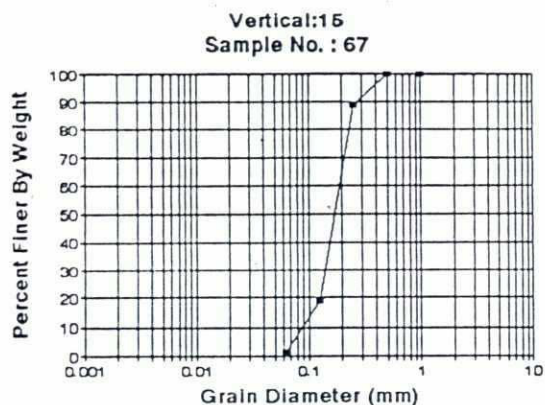


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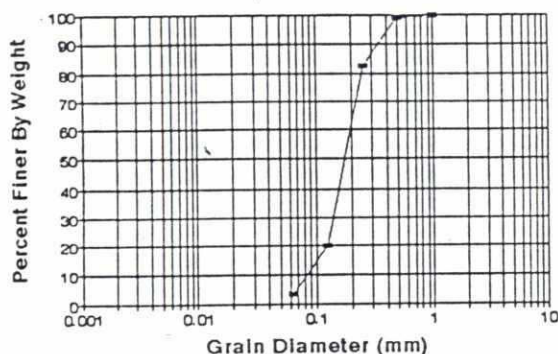
Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

	18 June 1994	Bahadurabad, left channel (positions on Dwg. 1.5)	Drawing 5.21
	CI		

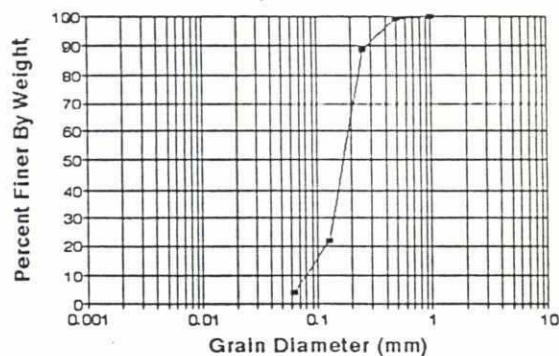


Smample No	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
67	17:15	11/07/93	192.00	0.08421	0.147	0.170	0.197	1.459
68	17:25	11/07/93	531.50	0.23311	0.139	0.163	0.190	1.563
64	16:20	11/07/93	789.30	0.34618	0.161	0.188	0.219	1.513
66	16:25	11/07/93	931.50	0.40833	0.174	0.207	0.246	1.621

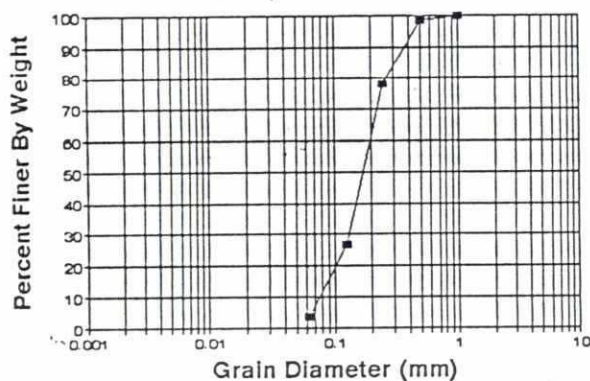
Vertical:17
Sample No. : 61



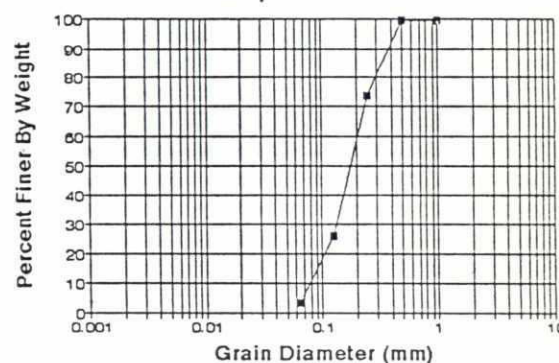
Vertical:17
Sample No. : 63



Vertical:18
Sample No. : 115

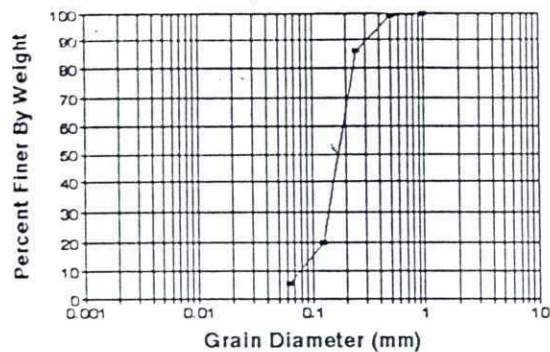


Vertical:18
Sample No. : 116

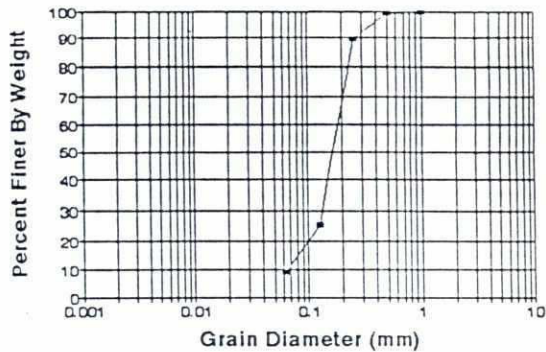


Sample No.	Time	Date	Total weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
61	14:30	11/07/93	332.00	0.0364	0.148	0.175	0.206	1.578
63	14:35	10/07/93	594.50	0.06513	0.143	0.167	0.195	1.545
115	15:45	10/07/93	741.50	0.0813	0.140	0.171	0.210	1.834
116	15:50	10/07/93	304.50	0.03338	0.143	0.177	0.220	1.894

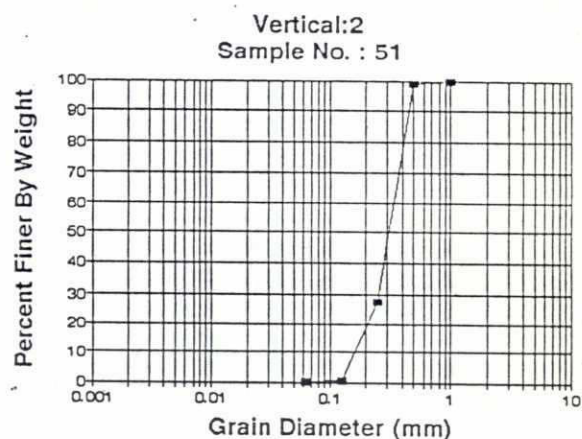
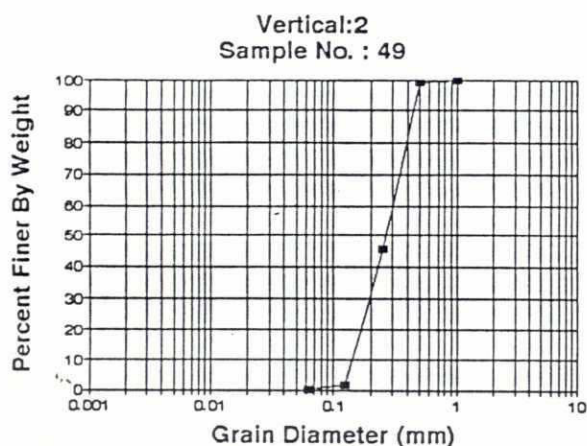
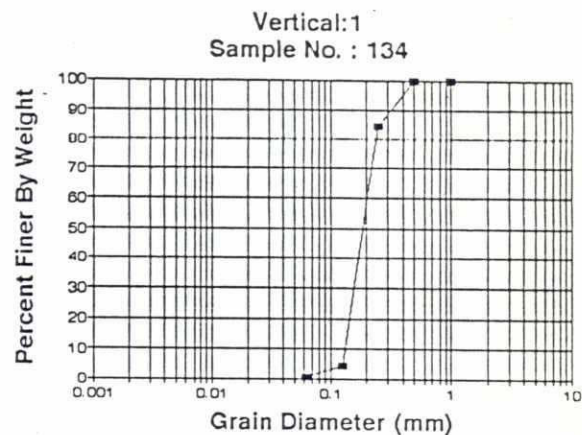
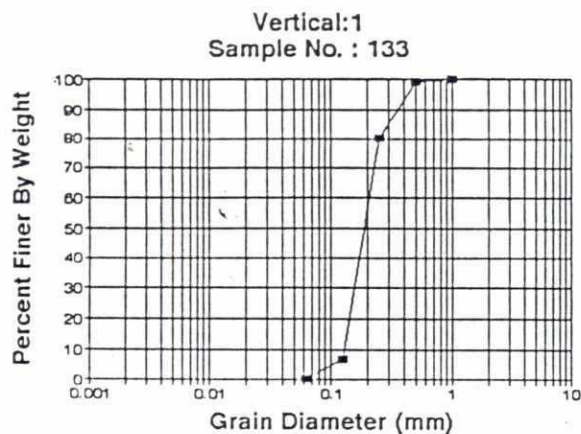
Vertical:19
Sample No. : 111



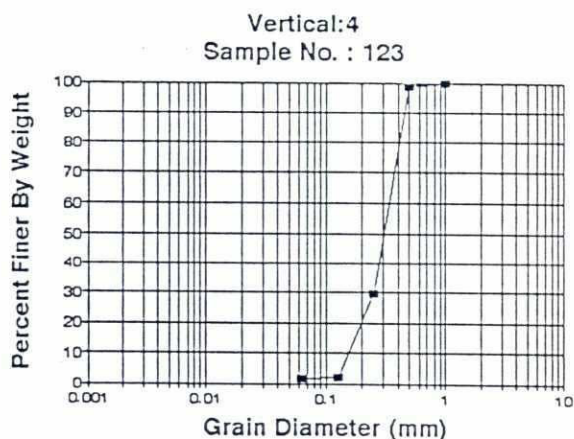
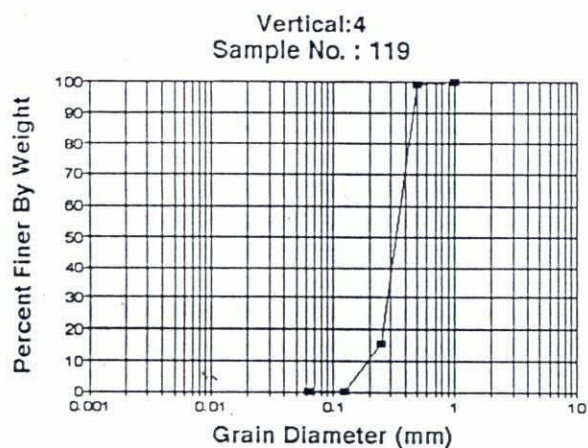
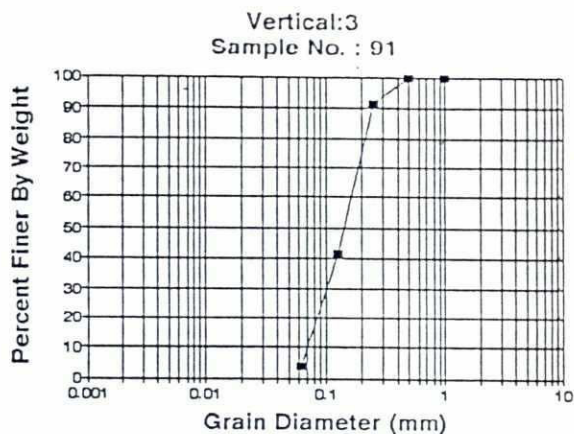
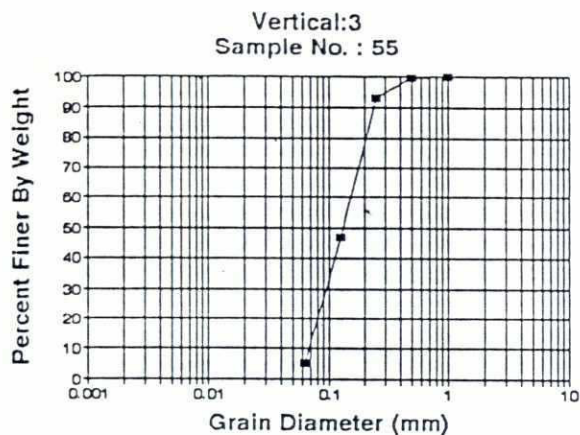
Vertical:19
Sample No. : 112



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
111	14:40	10/07/93	439.00	0.04813	0.146	0.171	0.200	1.544
112	14:50	10/07/93	448.50	0.49122	0.138	0.163	0.192	1.694

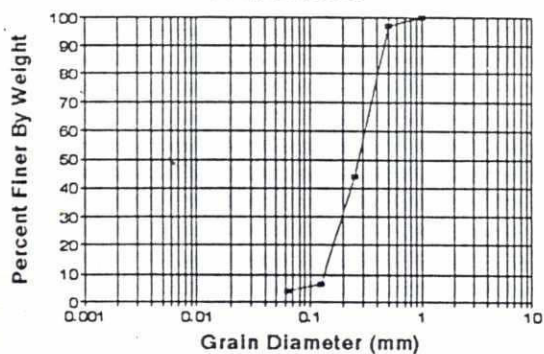


Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
133	12:00	17/07/93	257.20	0.028280	0.163	0.188	0.216	1.452
134	12:05	17/07/93	701.00	0.076860	0.163	0.185	0.211	1.343
49	11:10	17/07/93	367.50	0.040296	0.212	0.265	0.322	1.621
51	11:15	17/07/93	71.50	0.007840	0.269	0.311	0.360	1.535

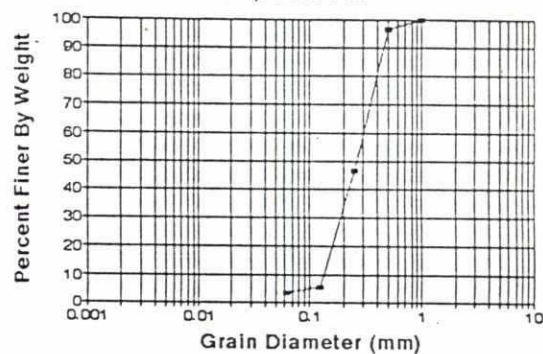


Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
55	10:20	17/07/93	289.20	0.031710	0.103	0.131	0.164	1.705
91	10:30	17/07/93	391.70	0.042949	0.111	0.141	0.173	1.702
119	09:30	17/07/93	60.00	0.006579	0.294	0.333	0.377	1.326
123	09:35	17/07/93	22.63	0.002481	0.264	0.306	0.356	1.569

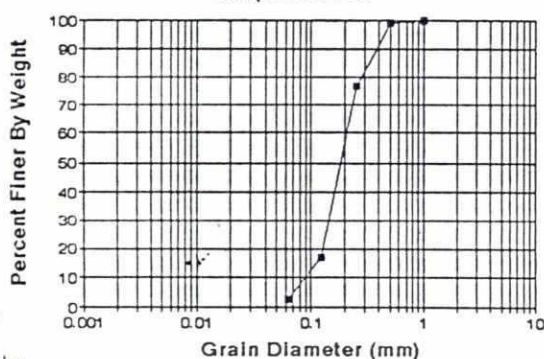
Vertical:5
Sample No. : 56



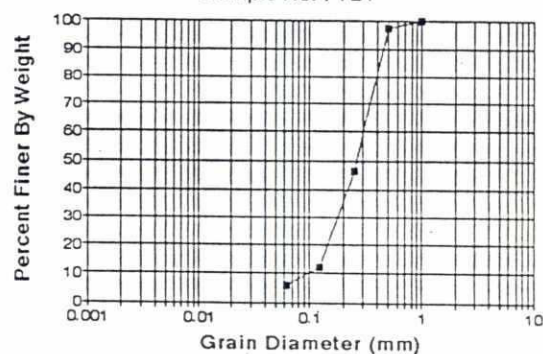
Vertical:5
Sample No. : 87



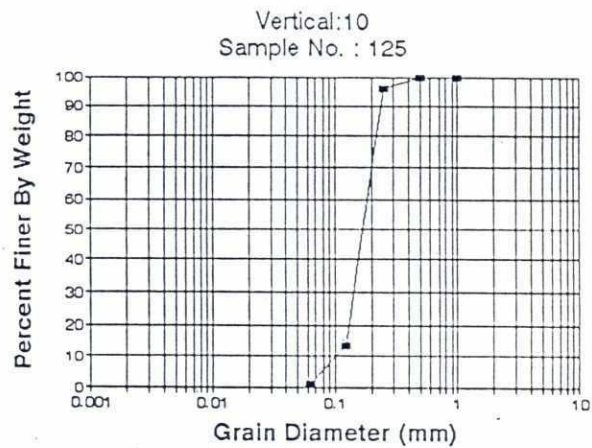
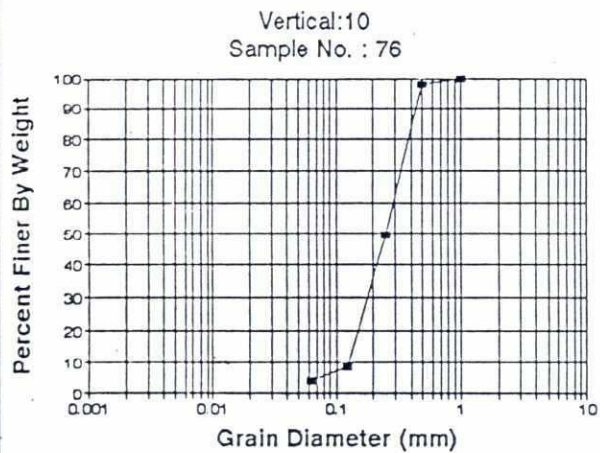
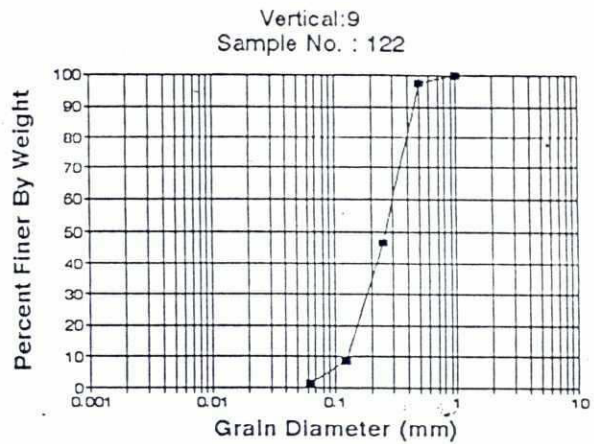
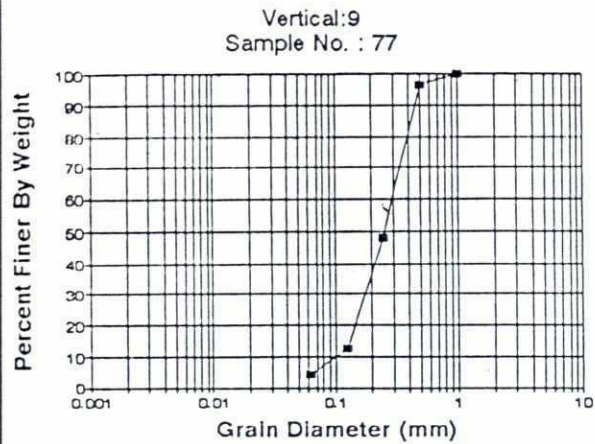
Vertical:6
Sample No. : 88



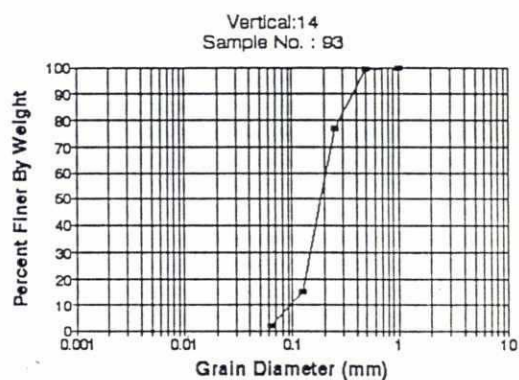
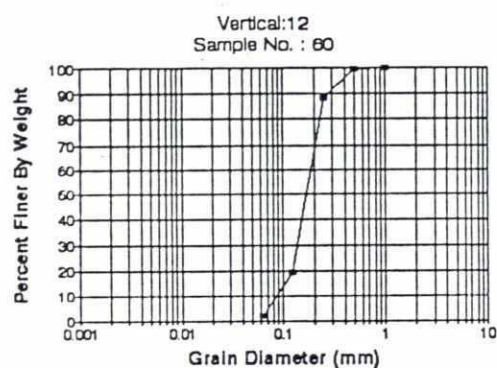
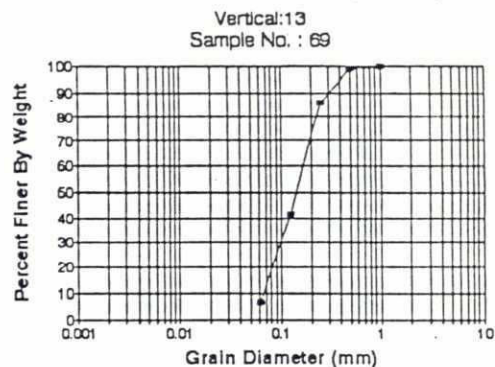
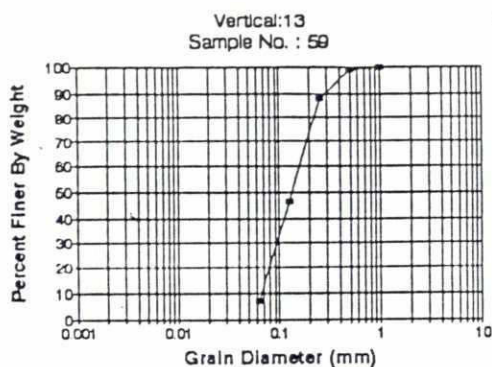
Vertical:6
Sample No. : 124



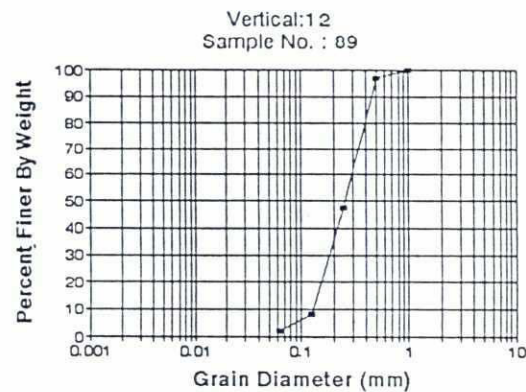
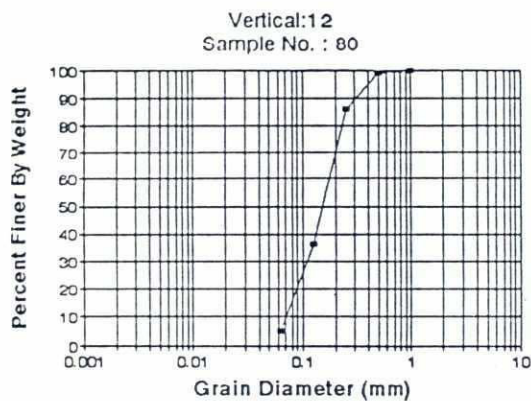
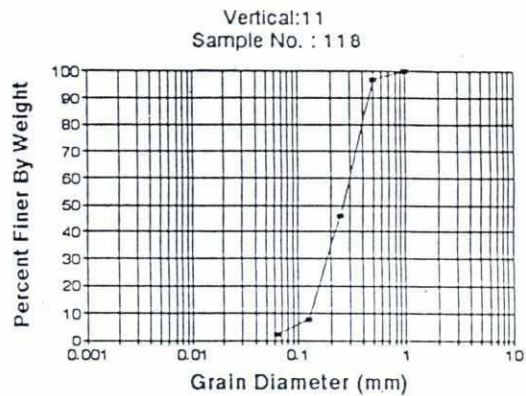
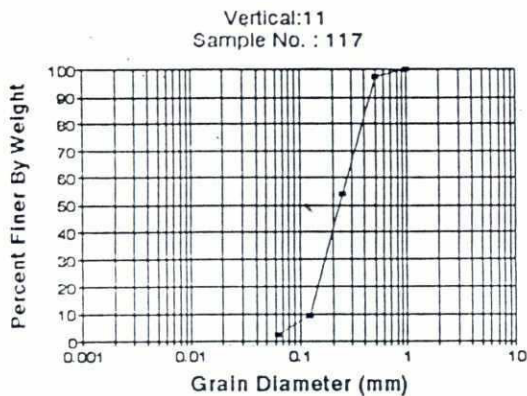
Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
56	08:20	17/07/93	7.08	0.000760	0.212	0.271	0.329	1.686
57	08:30	17/07/93	8.63	0.009169	0.207	0.264	0.324	1.679
88	17:00	16/07/93	27.31	0.002995	0.154	0.183	0.218	1.615
124	17:10	16/07/93	4.30	0.000471	0.199	0.263	0.322	1.760



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
77	14:00	16/07/93	6.40	0.000702	0.194	0.258	0.319	1.775
122	14:10	16/07/93	6.36	0.000697	0.201	0.261	0.320	1.708
76	12:40	16/07/93	18.76	0.002057	0.196	0.252	0.312	1.699
125	12:50	16/07/93	426.70	0.046780	0.150	0.170	0.193	1.329



Sample No	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
59	10:00	16/07/93	243.00	0.026647	0.102	0.132	0.170	1.787
69	10:15	16/07/93	243.90	0.026644	0.110	0.142	0.180	1.795
60	08:50	16/07/93	684.70	0.075076	0.146	0.170	0.198	1.486
93	09:00	16/07/93	352.00	0.038590	0.156	0.184	0.218	1.570



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
117	12:35	16/07/93	24.98	0.002739	0.186	0.235	0.298	1.709
118	12:45	16/07/93	24.58	0.002695	0.204	0.264	0.323	1.704
80	11:10	16/07/93	167.50	0.018366	0.121	0.151	0.186	1.745
89	11:15	16/07/93	51.35	0.005631	0.201	0.259	0.319	1.704

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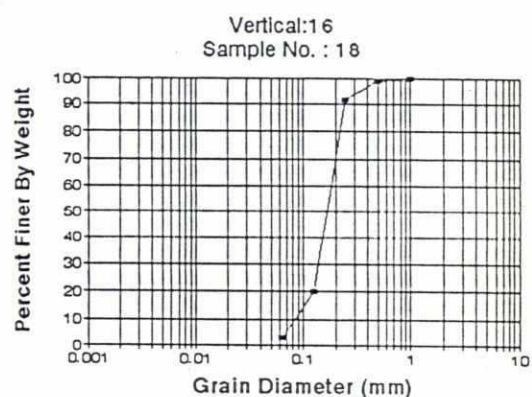
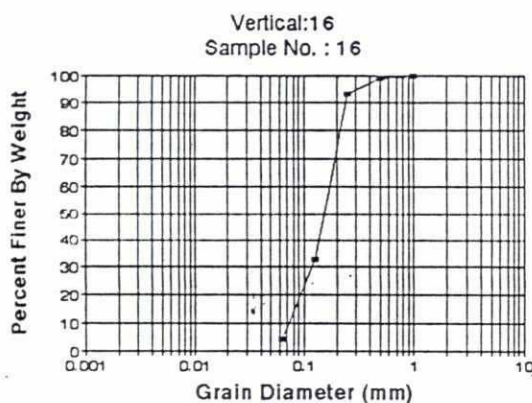
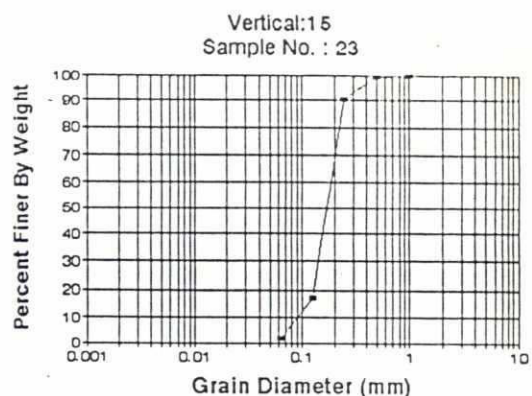
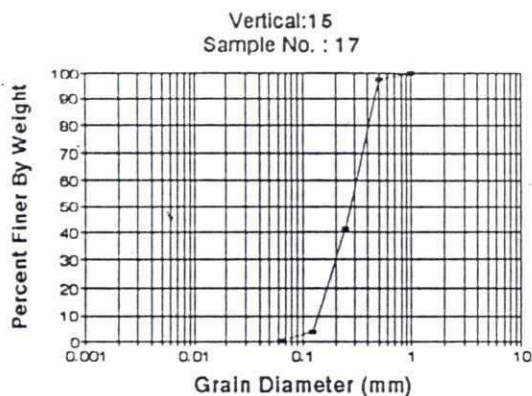
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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

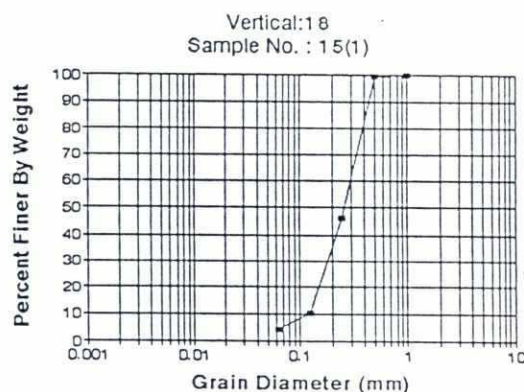
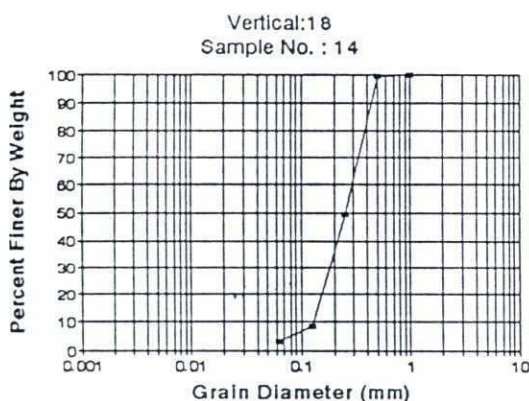
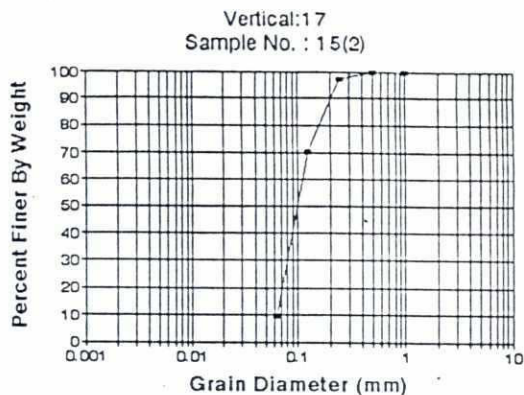
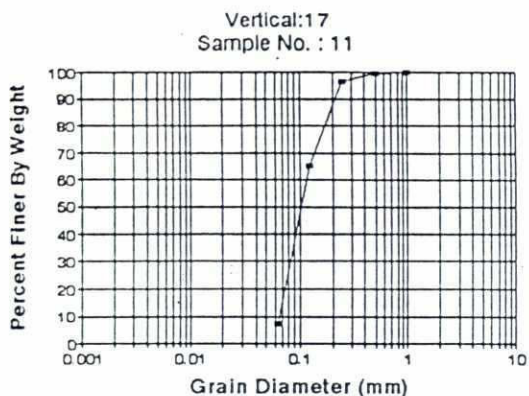
18 June 1994

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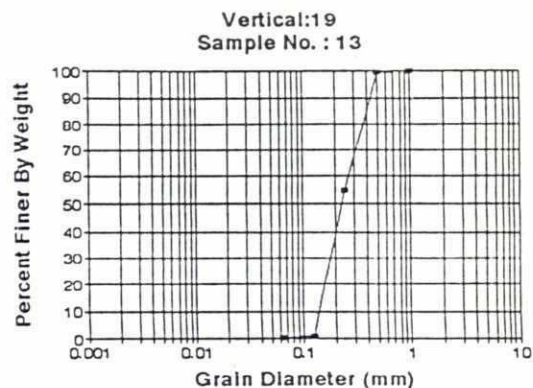
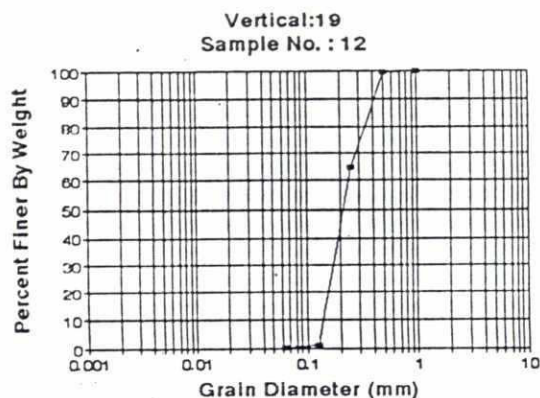
Bahadurabad, right channel
(positions on Dwg. 1.5)Drawing
5.30



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
17	16:35	15/07/93	109.00	0.011950	0.222	0.278	0.334	1.652
23	16:45	15/07/93	628.70	0.068936	0.148	0.17	0.196	1.418
16	15:25	15/07/93	503.50	0.055208	0.128	0.152	0.181	1.645
18	15:35	15/07/93	704.50	0.077190	0.145	0.167	0.193	1.482



Sample No	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
11	14:30	15/07/93	696.50	0.076370	0.088	0.105	0.125	1.650
15(2)	14:35	15/07/93	665.50	0.072971	0.084	0.099	0.117	1.617
14	13:15	15/07/93	438.00	0.048030	0.196	0.252	0.310	1.689
15(1)	13:25	15/07/93	370.30	0.040603	0.202	0.263	0.320	1.719



Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
12	12:00	15/07/93	470.00	0.051535	0.181	0.213	0.251	1.586
13	12:05	15/07/93	281.50	0.030866	0.195	0.236	0.294	1.611

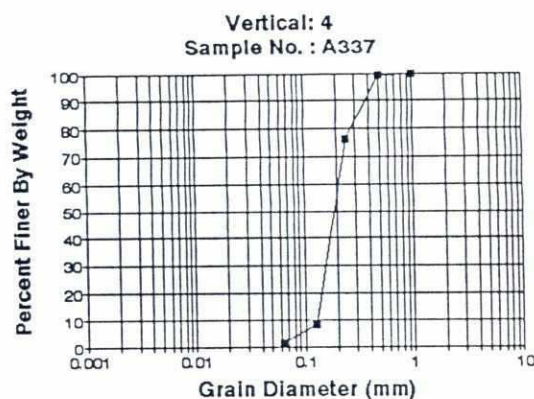
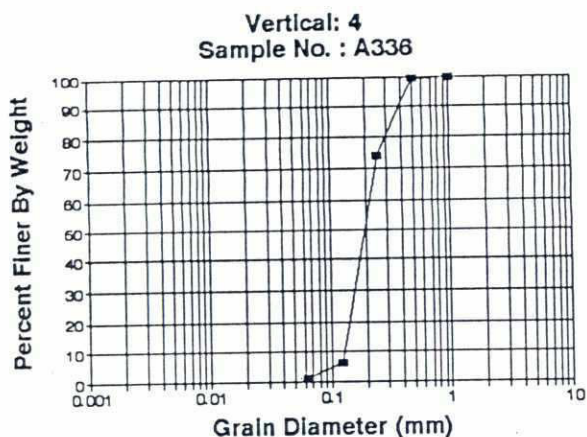
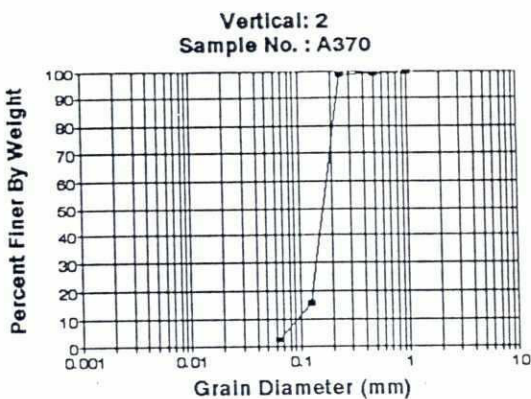
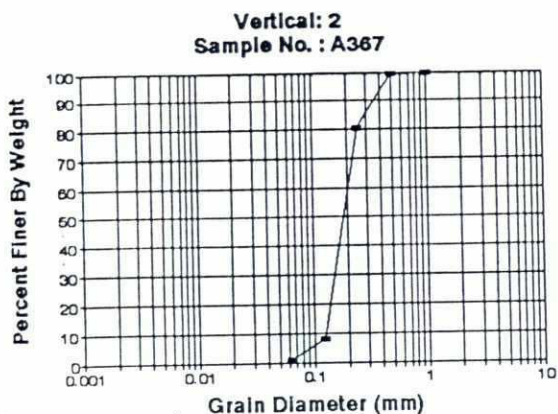


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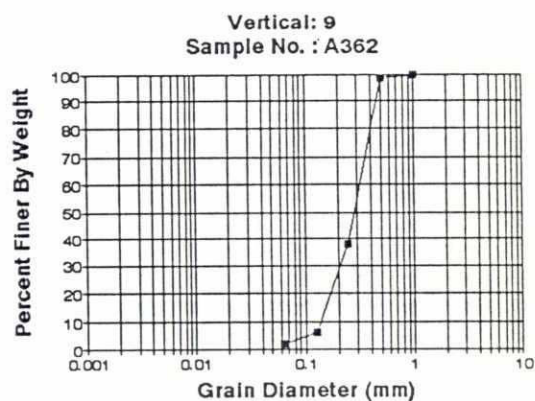
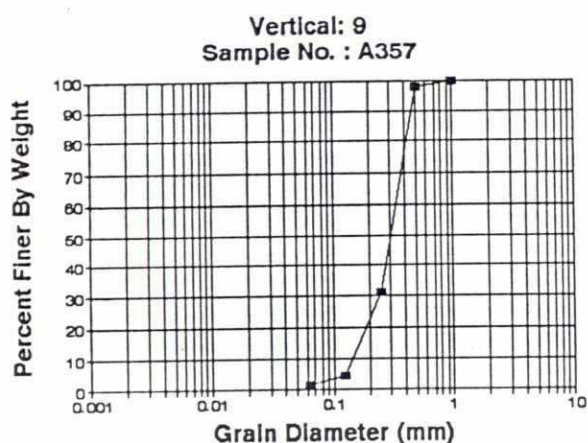
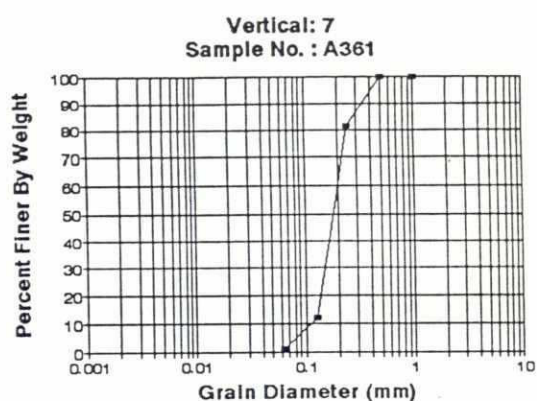
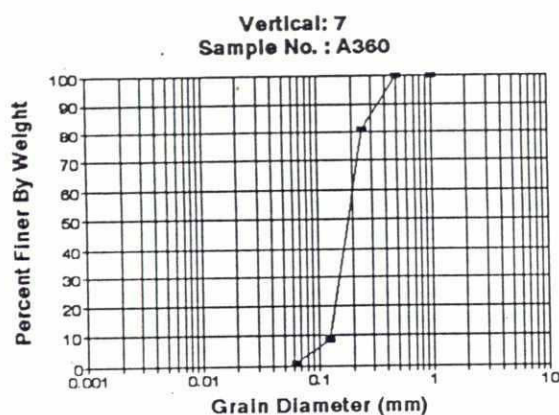
Survey Report 8

Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

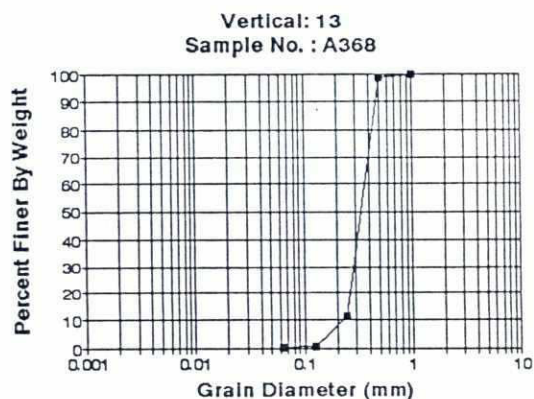
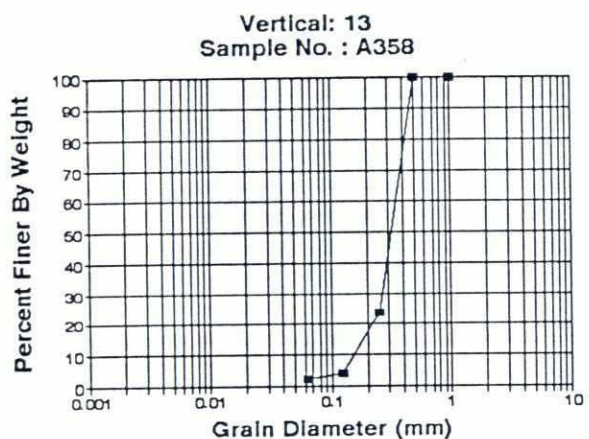
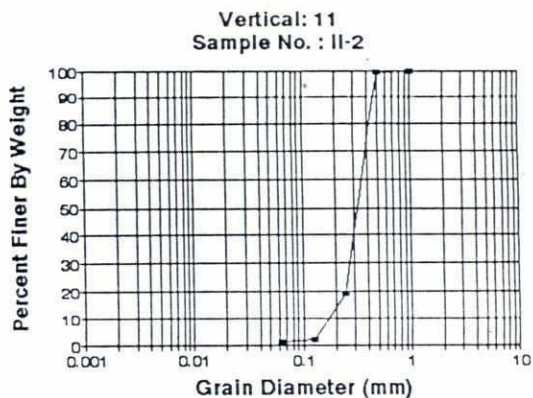
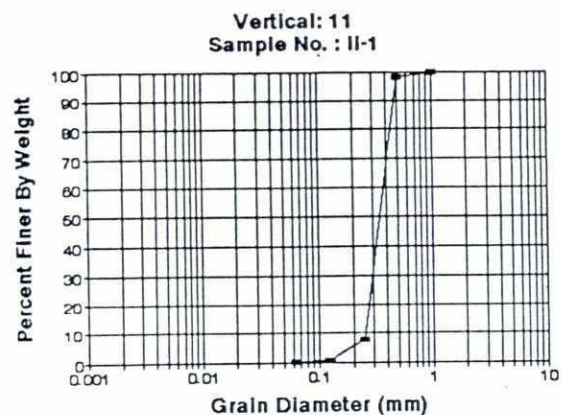
	18 June 1994	Bahadurabad, right channel (positions on Dwg. 1.5)	Drawing 5.33
	CI		



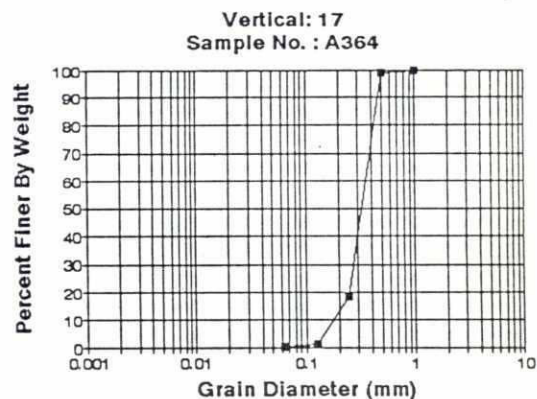
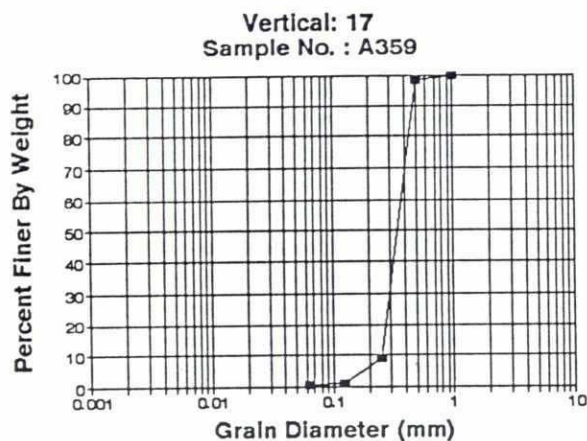
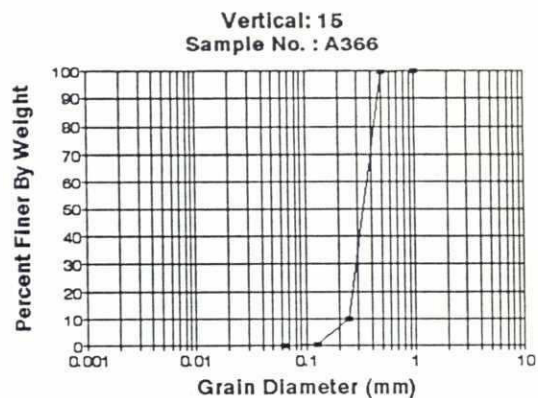
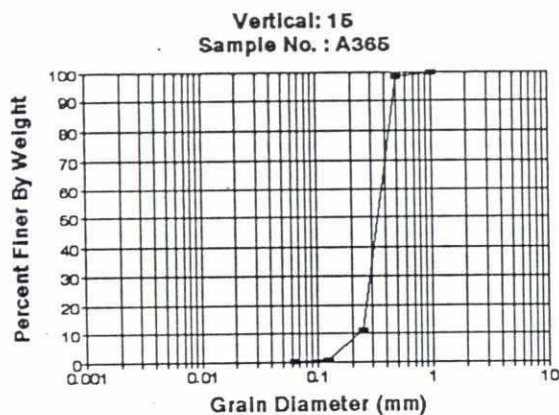
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A367	07/09/93	12:44	1751.50	0.192050	0.162	0.187	0.216	1.457
A370	07/09/93	12:54	959.00	0.105153	0.147	0.166	0.189	1.330
A336	07/09/93	16:35	1918.00	0.420614	0.168	0.196	0.228	1.547
A337	07/09/93	16:45	1365.00	0.299342	0.164	0.191	0.223	1.532



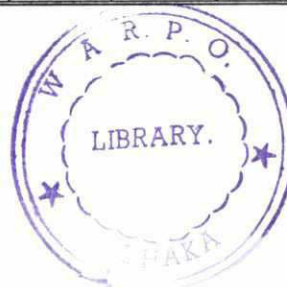
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A360	06/09/93	17:10	1369.50	0.150165	0.161	0.186	0.214	1.444
A361	06/09/93	17:17	521.00	0.057127	0.157	0.182	0.212	1.455
A357	06/09/93	15:15	10.00	0.000274	0.261	0.304	0.355	1.612
A362	06/09/93	15:20	5.58	0.000306	0.235	0.287	0.341	1.664

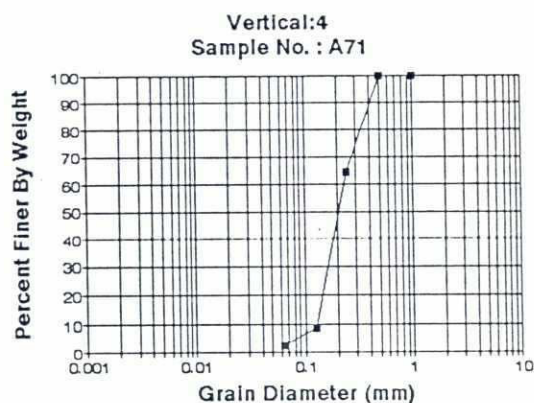
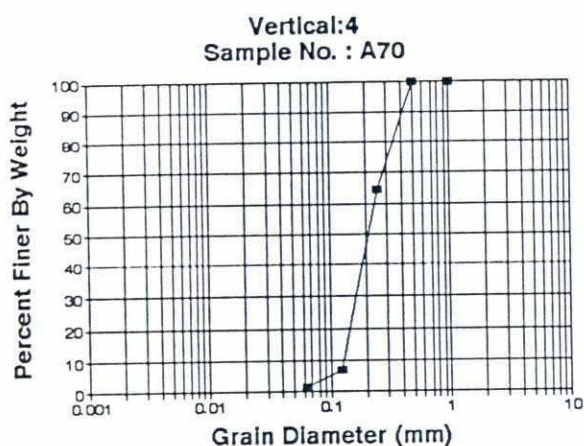
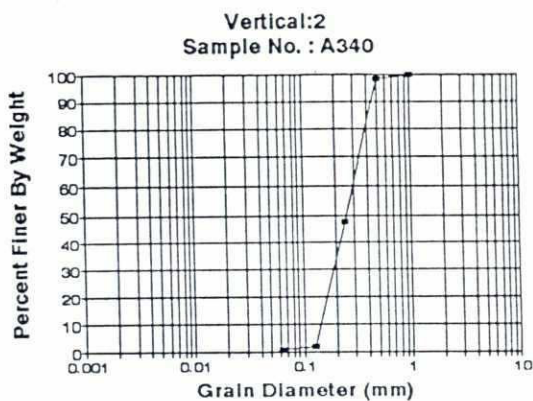
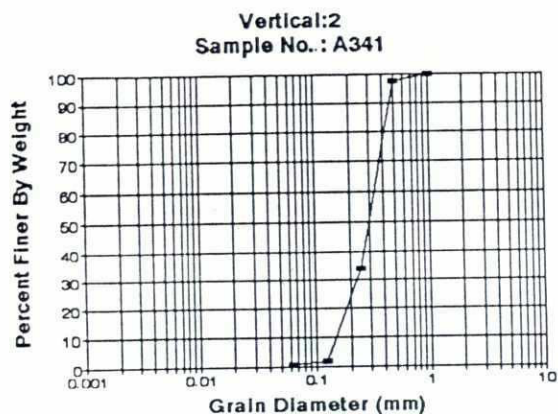


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
II-1	07/09/93	16:15	57.081	0.006259	0.308	0.346	0.388	1.298
II-2	07/09/93	16:25	19.500	0.002138	0.286	0.326	0.372	1.419
A358	07/09/93	14:35	7.981	0.000875	0.277	0.317	0.364	1.517
A368	07/09/93	14:42	92.000	0.010088	0.302	0.340	0.383	1.312

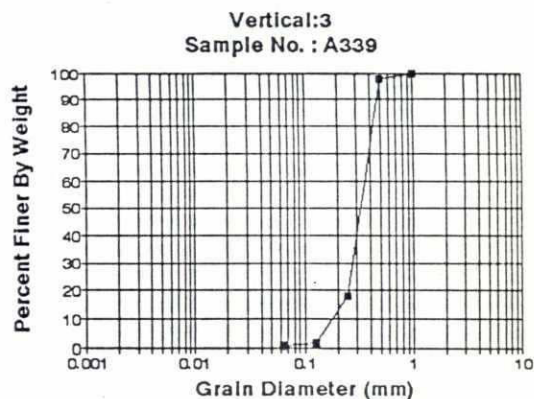
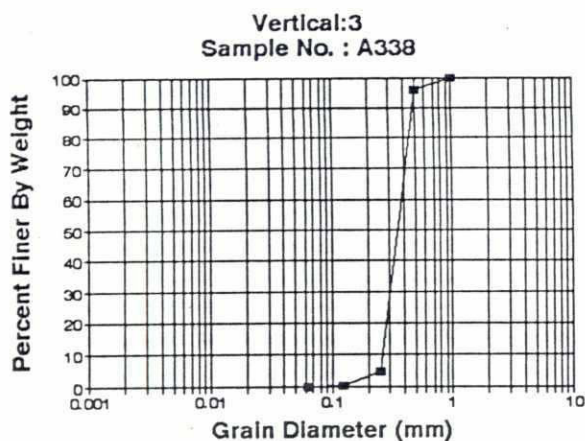
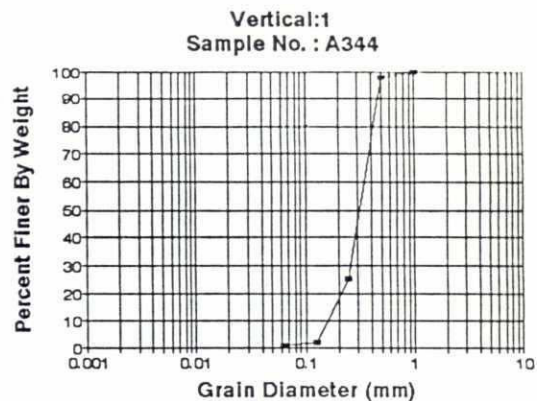
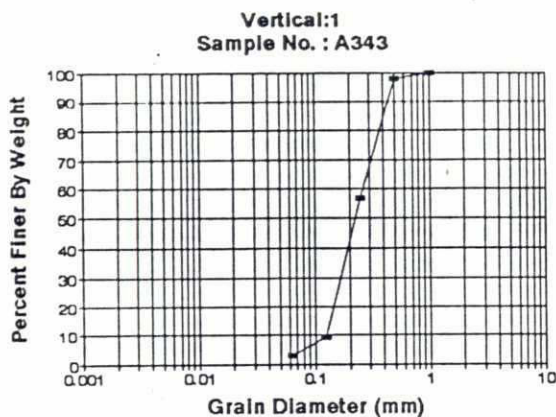


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A365	07/09/93	12:08	1184.00	0.129824	0.302	0.340	0.383	1.312
A366	07/09/93	12:14	947.50	0.103893	0.304	0.341	0.383	1.302
A359	07/09/93	10:10	48.50	0.005318	0.306	0.344	0.386	1.301
A364	07/09/93	10:20	1813.50	0.099424	0.288	0.327	0.373	1.401



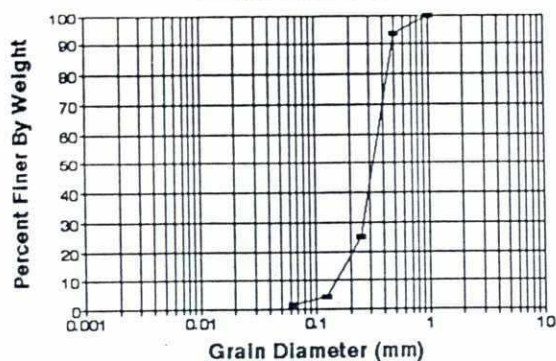


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A341	11/09/93	11:45	155.50	0.008525	0.253	0.298	0.351	1.601
A340	11/09/93	11:55	1850.00	0.101425	0.206	0.258	0.317	1.629
A70	11/09/93	13:45	779.00	0.042708	0.175	0.210	0.253	1.626
A71	11/09/93	13:55	765.00	0.041941	0.173	0.209	0.254	1.643

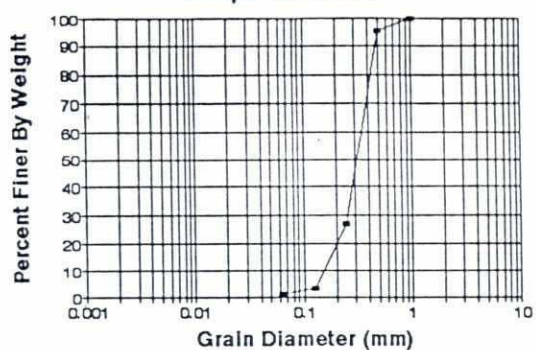


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A343	09/09/93	13:35	1.981	0.000109	0.182	0.226	0.286	1.693
A344	09/09/93	13:45	9.072	0.000497	0.274	0.316	0.365	1.529
A338	10/09/93	12:05	417.000	0.022862	0.314	0.352	0.395	1.296
A339	10/09/93	12:15	11.453	0.000628	0.290	0.330	0.376	1.390

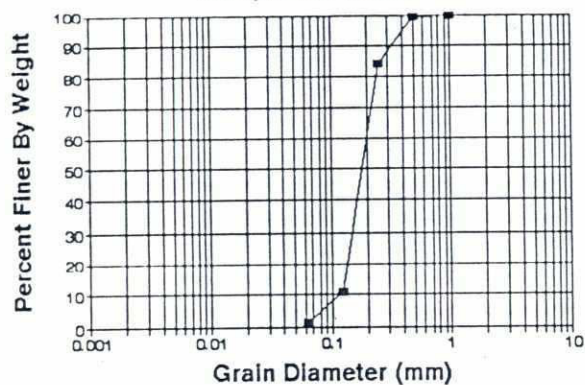
Vertical:5
Sample No. : A105



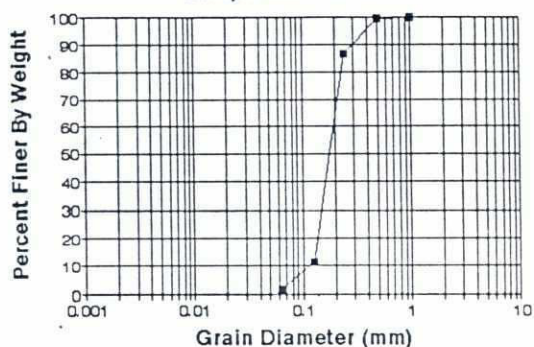
Vertical:5
Sample No. : A106



Vertical:7
Sample No. : A109



Vertical:7
Sample No. : A110



Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A105	10/09/93	14:35	27.500	0.003015	0.276	0.322	0.375	1.577
A106	10/09/93	14:40	16.009	0.001755	0.271	0.316	0.367	1.579
A109	09/09/93	15:50	368.500	0.040406	0.157	0.181	0.208	1.379
A110	09/09/93	16:00	442.000	0.048465	0.155	0.178	0.205	1.370

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RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Report 8

Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)

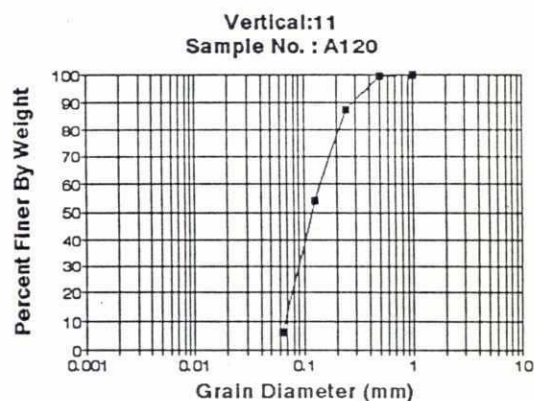
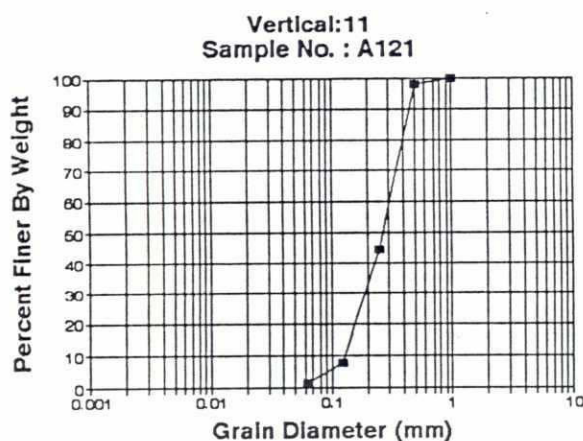
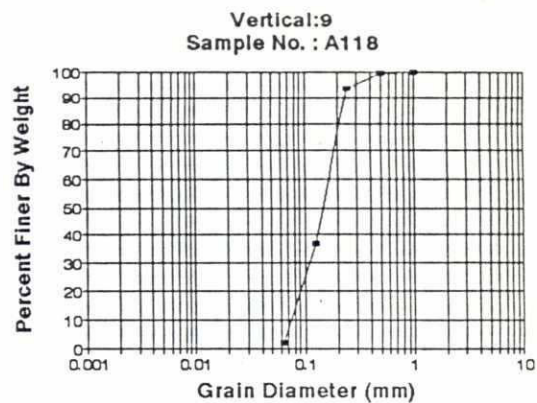
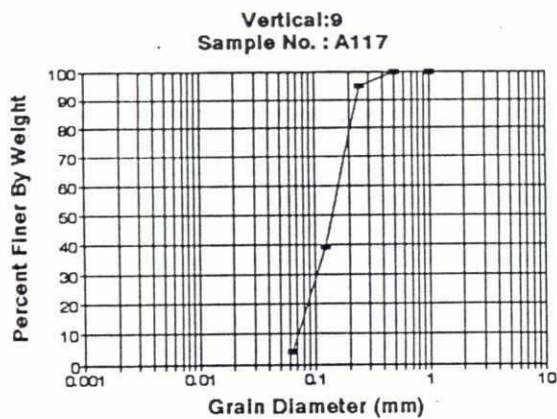
18 June 1994

CI

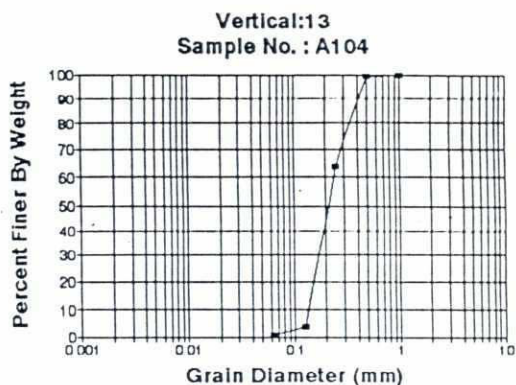
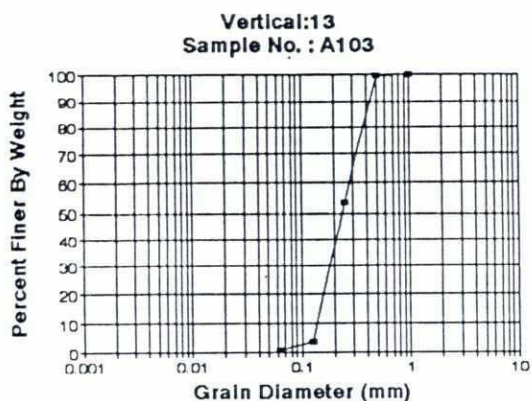
Bahadurabad, channel L-3
(positions on Dwg. 1.8)

Drawing
5.40

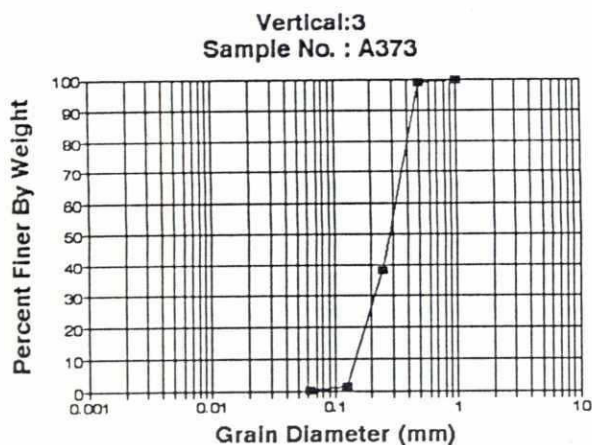
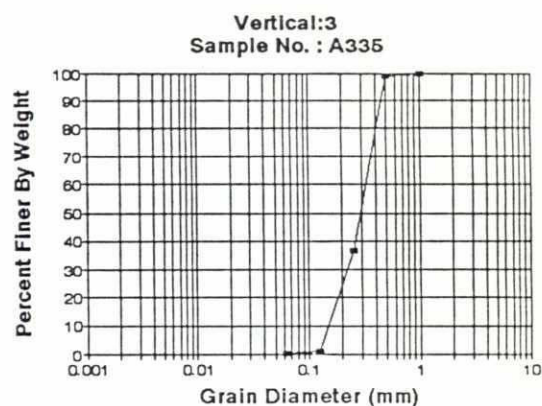
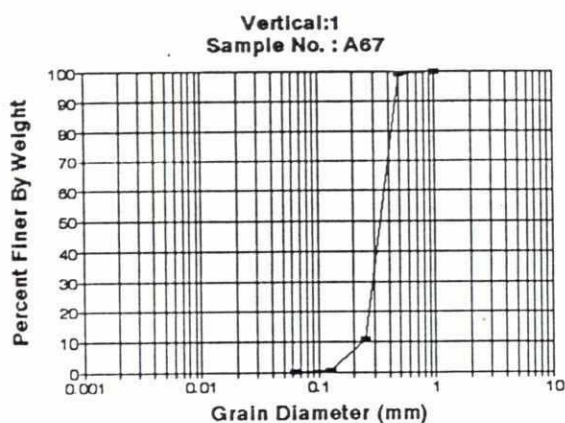
26



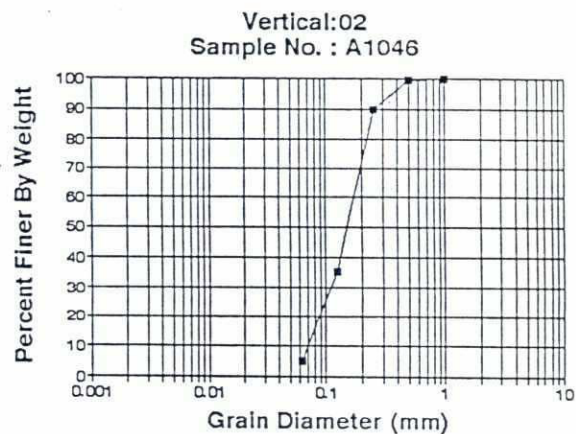
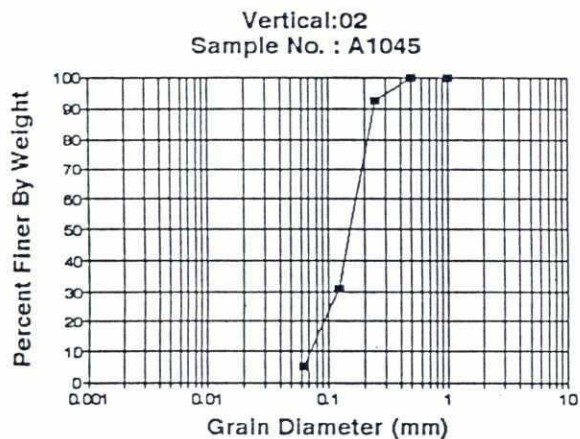
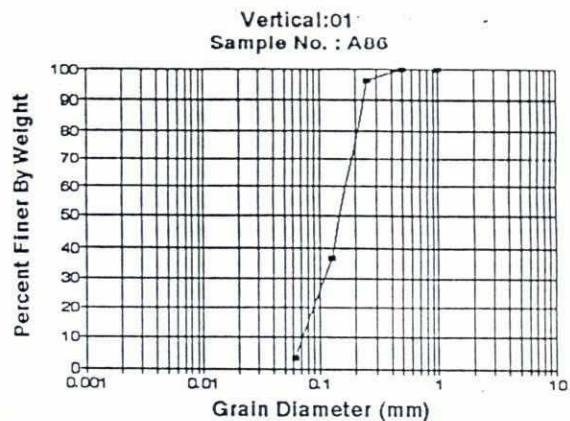
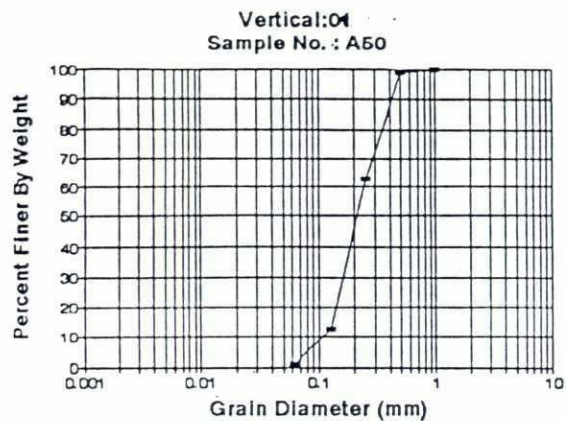
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg / M - s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A117	10/09/93	17:25	335.500	0.036787	0.116	0.144	0.173	1.657
A118	10/09/93	17:30	492.500	0.054002	0.121	0.147	0.177	1.644
A121	10/09/93	16:15	16.500	0.002906	0.208	0.268	0.326	1.698
A120	10/09/93	16:20	121.800	0.013355	0.095	0.118	0.157	1.791



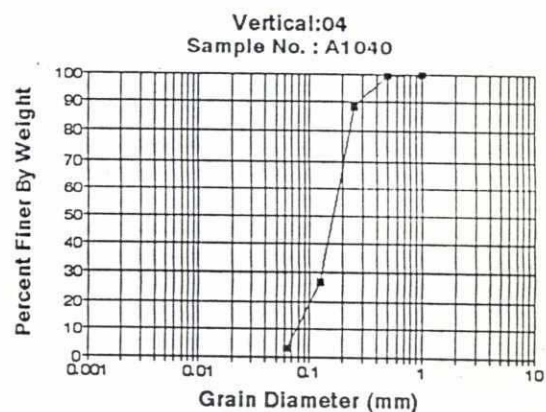
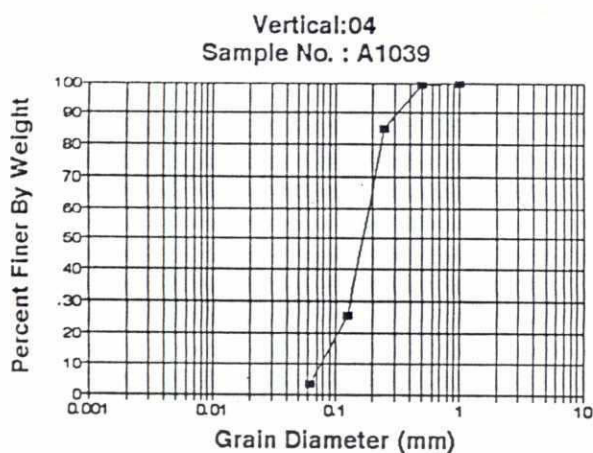
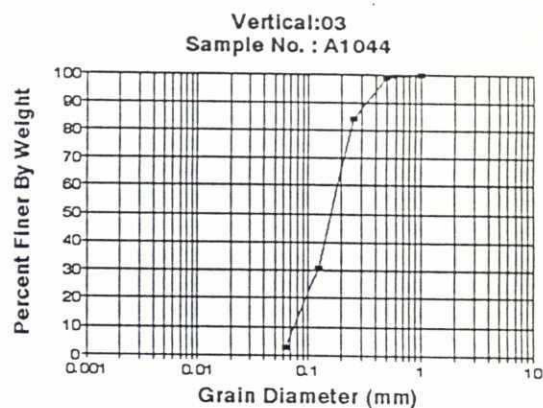
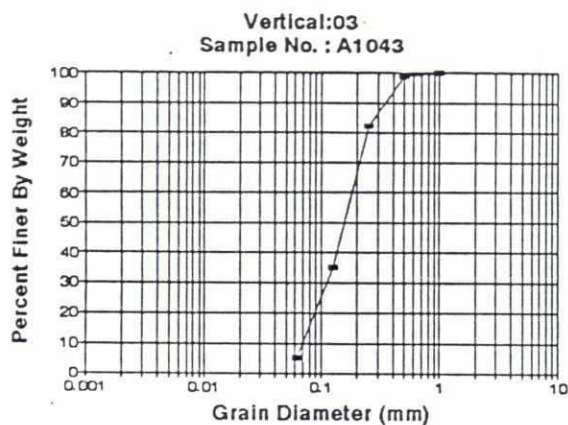
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A103	10/09/93	11:55	1611.000	0.176645	0.193	0.238	0.298	1.633
A104	10/09/93	12:05	1970.000	0.216009	0.180	0.214	0.257	1.610



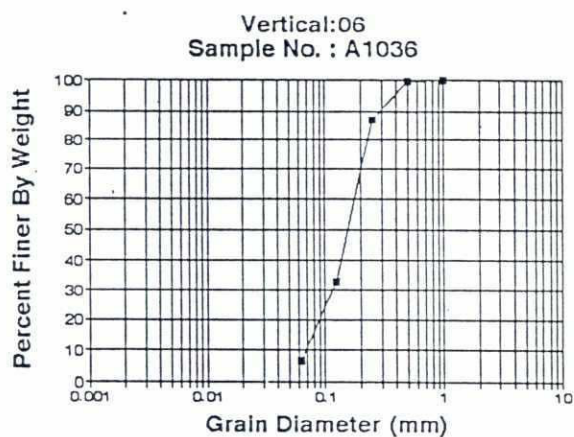
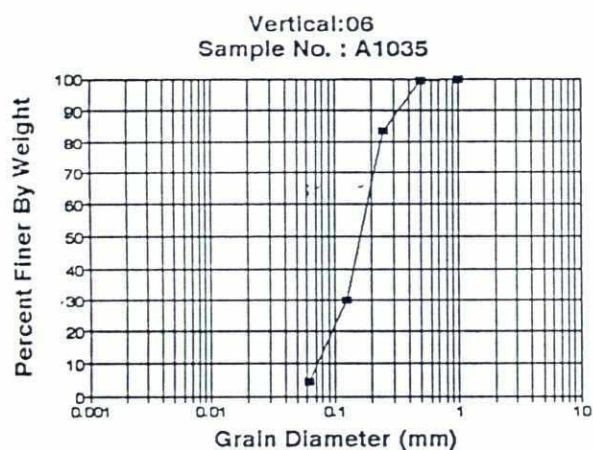
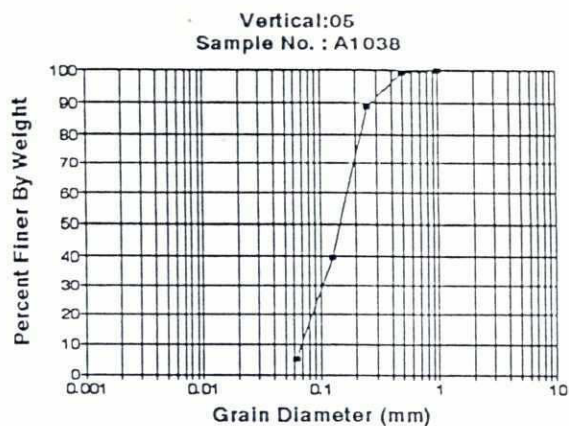
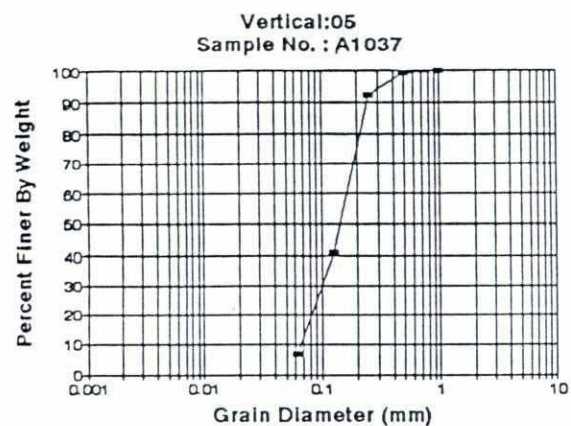
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A67	11/09/93	10:00	36.14	0.003963	0.303	0.340	0.383	1.304
A335	11/09/93	11:10	549.00	0.030099	0.242	0.290	0.343	1.599
A373	11/09/93	11:15	1573.00	0.086239	0.235	0.286	0.339	1.610



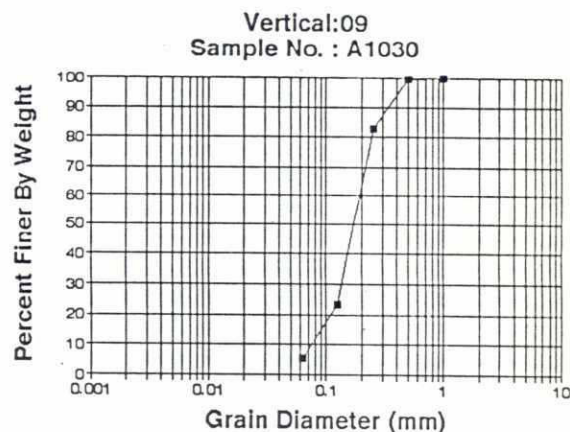
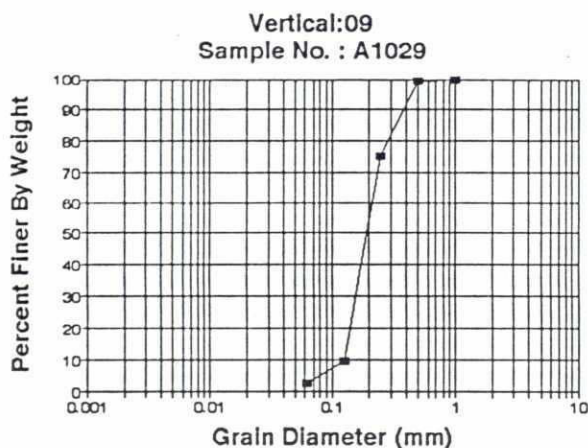
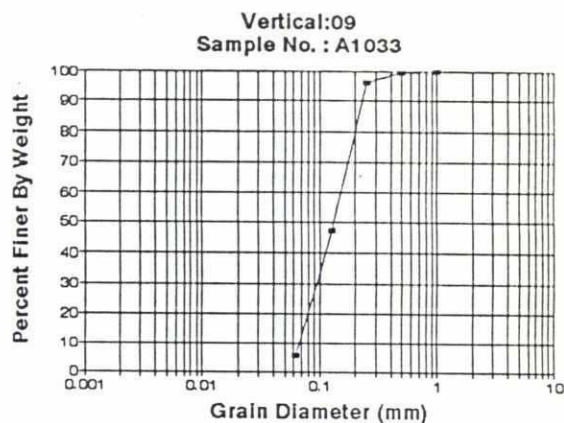
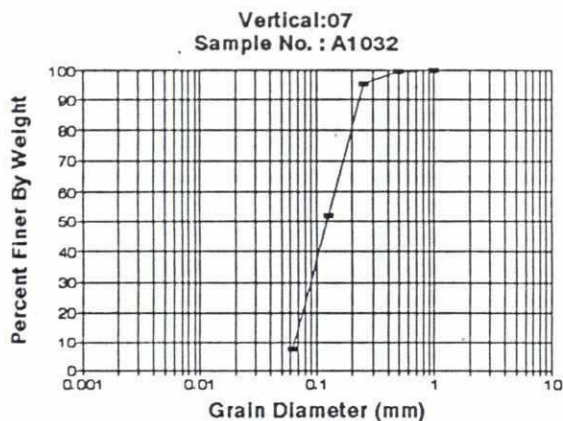
Sample No.	Time	Date	Total Weight (gm.)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
50	11:28	28/07/93	66.00	0.028947	0.170	0.210	0.261	1.697
86	11:29	28/07/93	590.00	0.258772	0.120	0.146	0.174	1.633
1045	11:42	28/07/93	214.50	0.094078	0.131	0.155	0.183	1.655
1046	11:42	28/07/93	146.00	0.064035	0.123	0.150	0.182	1.699



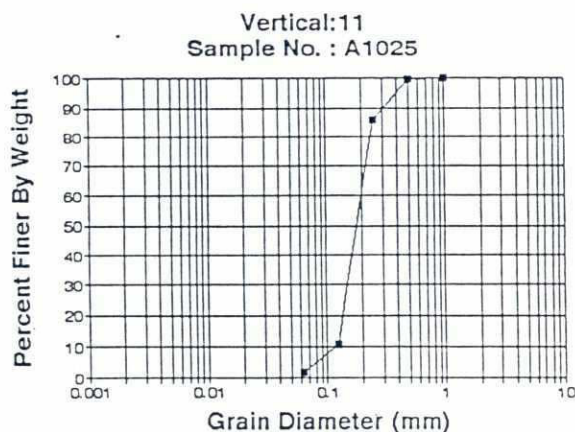
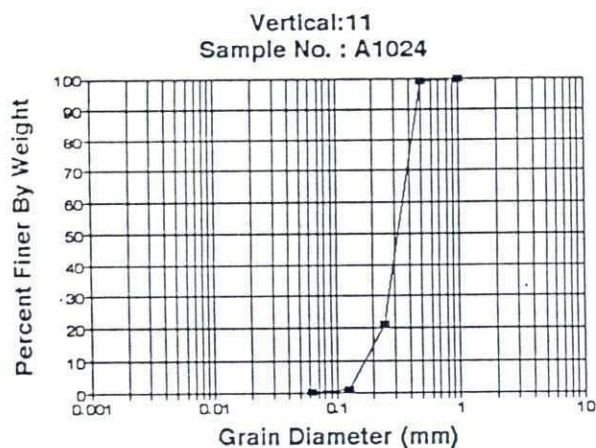
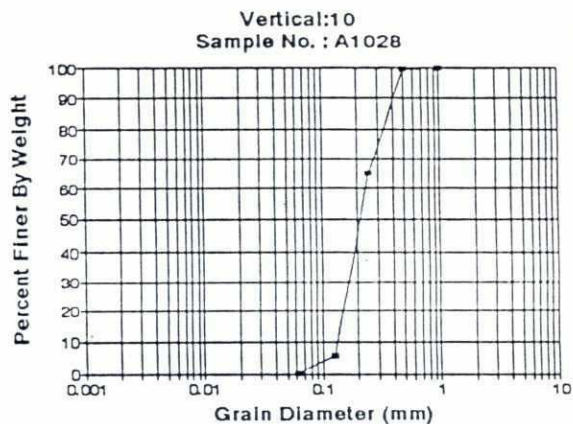
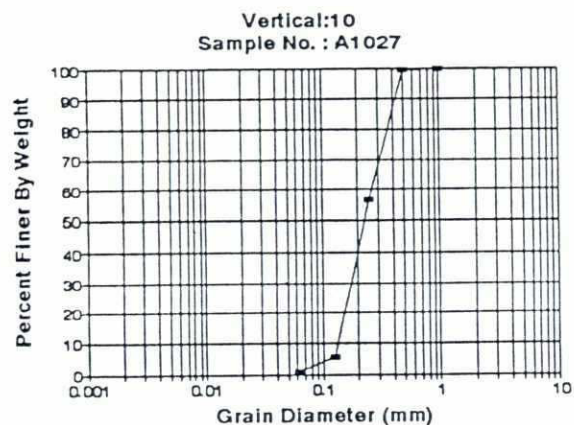
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1043	10:15	28/07/93	268.00	0.1175438	0.125	0.156	0.194	1.834
1044	10:15	28/07/93	281.50	0.123245	0.132	0.161	0.196	1.699
1039	15:56	27/07/93	458.50	0.201096	0.140	0.166	0.198	1.636
1040	15:56	27/07/93	404.00	0.177190	0.137	0.162	0.192	1.625



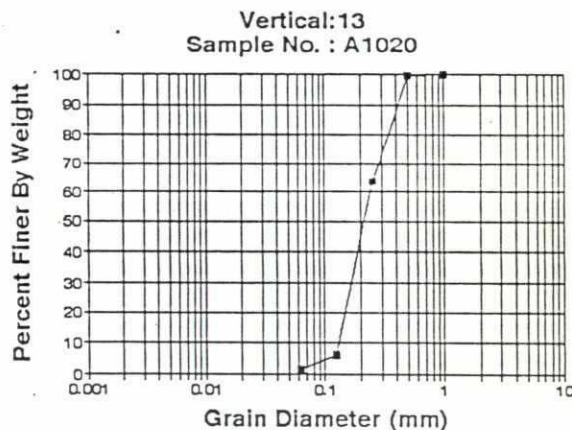
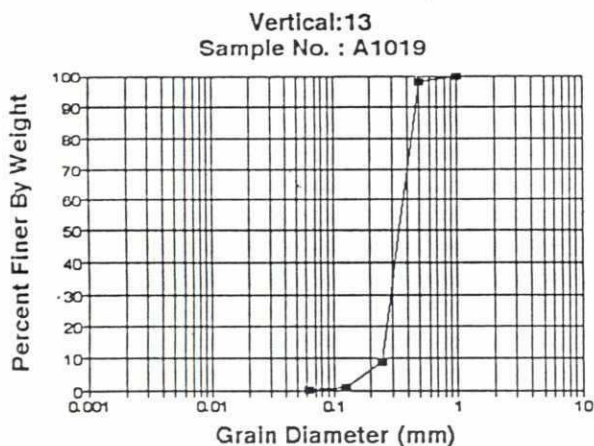
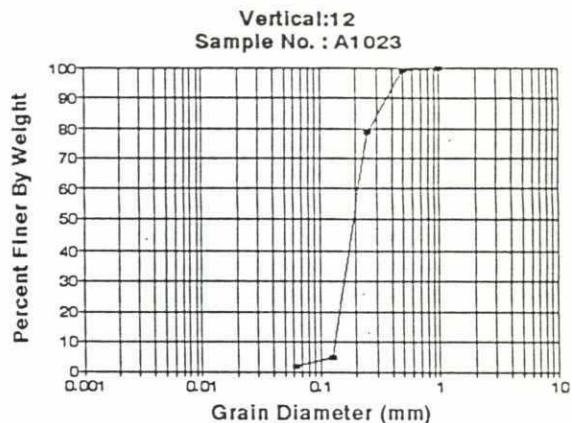
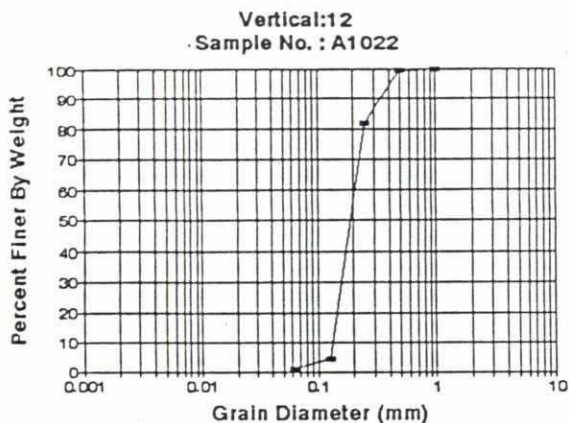
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1037	14:42	27/07/93	440.50	0.193200	0.111	0.141	0.173	1.722
1038	14:42	27/07/93	151.50	0.066447	0.114	0.145	0.179	1.736
1035	11:08	27/07/93	437.50	0.191886	0.134	0.162	0.196	1.723
1036	11:08	27/07/93	322.00	0.141228	0.129	0.156	0.189	1.732



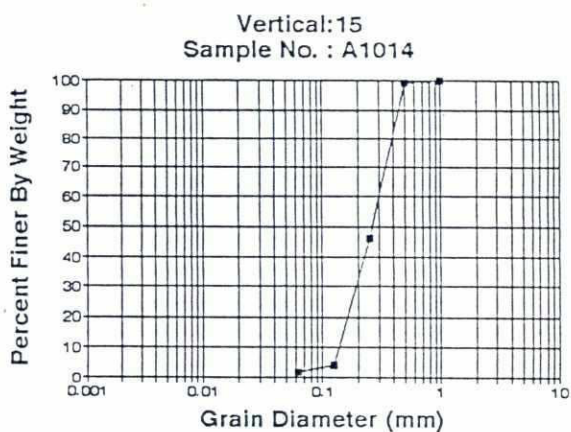
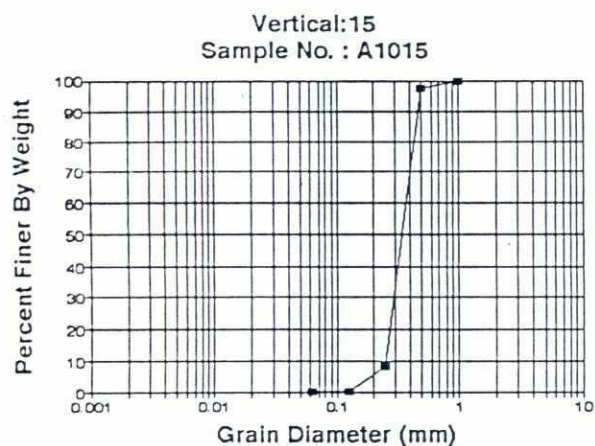
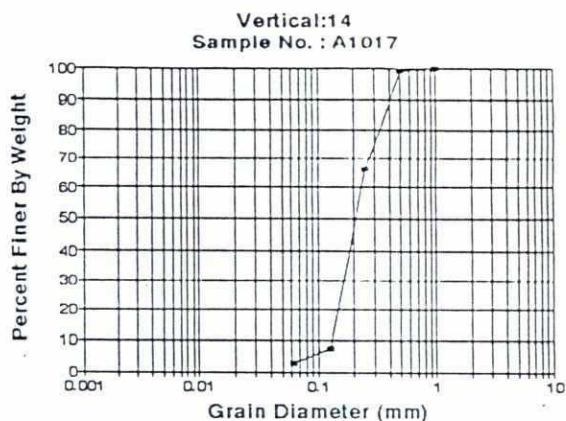
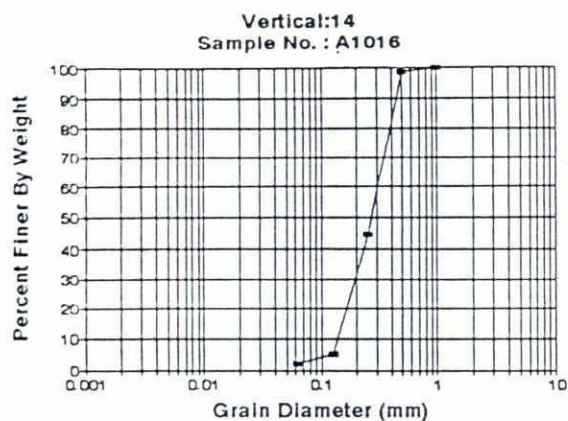
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1032	17:32	26/07/93	313.00	0.137280	0.096	0.122	0.154	1.700
1033	17:32	26/07/93	544.50	0.238816	0.102	0.130	0.161	1.674
1029	14:56	26/07/93	433.50	0.191013	0.163	0.191	0.224	1.553
1030	14:56	26/07/93	310.50	0.135965	0.143	0.170	0.203	1.672



Sample No	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1027	11:51	26/07/93	1587.50	0.696272	0.187	0.229	0.287	1.644
1028	11:51	26/07/93	1699.50	0.745395	0.176	0.210	0.250	1.616
1024	10:42	26/07/93	76.10	0.016688	0.283	0.323	0.369	1.446
1025	10:42	26/07/93	410.50	0.0900219	0.156	0.179	0.206	1.368



Sample No.	Time	Date	Total Weight(gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1022	09:12	26/07/93	887.00	0.194520	0.164	0.188	0.215	1.399
1023	09:12	26/07/93	850.50	0.186513	0.166	0.191	0.220	1.465
1019	15:16	24/07/93	339.60	0.074474	0.307	0.344	0.387	1.304
1020	15:16	24/07/93	629.50	0.138048	0.177	0.212	0.256	1.627



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1016	14:02	24/07/93	844.00	0.1850877	0.211	0.267	0.325	1.661
1017	14:02	24/07/93	620.20	0.136008	0.173	0.207	0.247	1.627
1015	12:18	24/07/93	181.00	0.039692	0.308	0.346	0.389	1.305
1014	12:18	24/07/93	846.50	0.185526	0.207	0.262	0.319	1.642

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RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

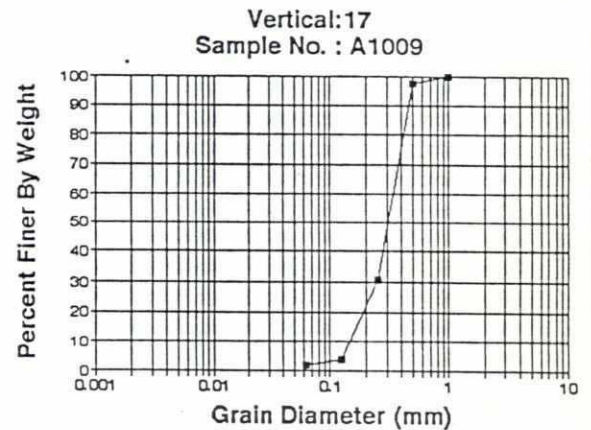
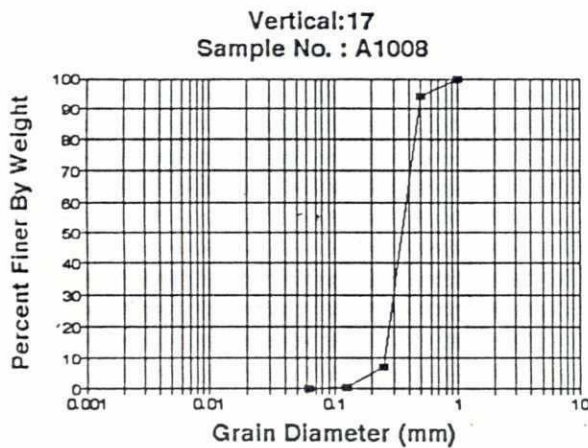
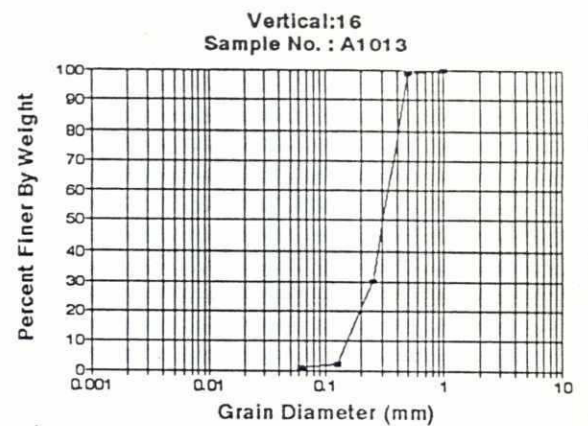
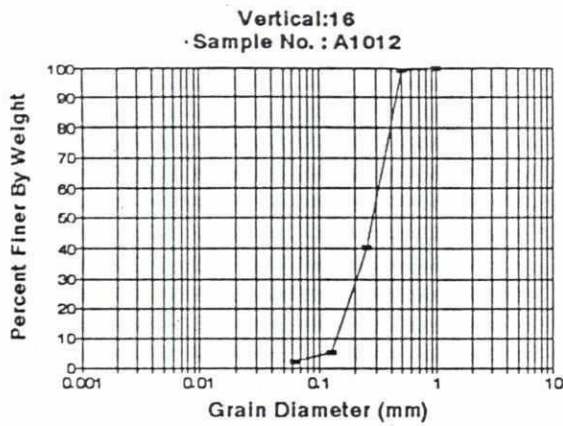
Survey Report 8

Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

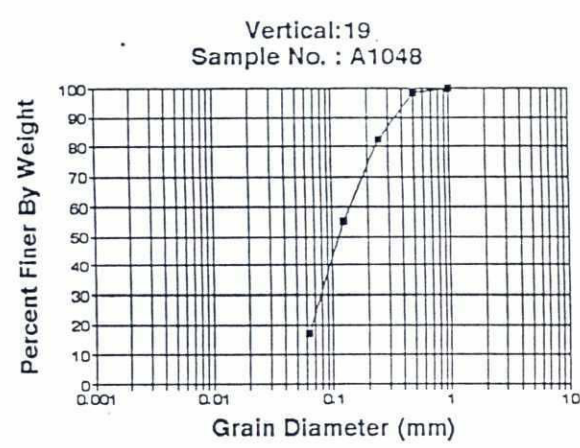
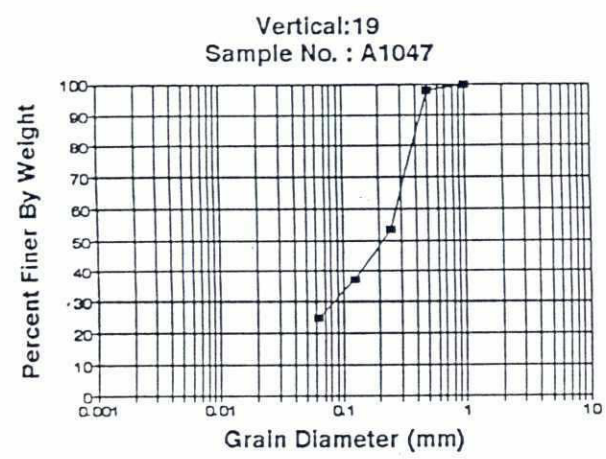
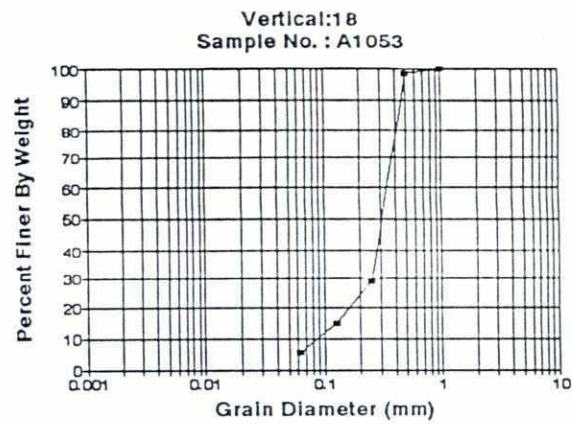
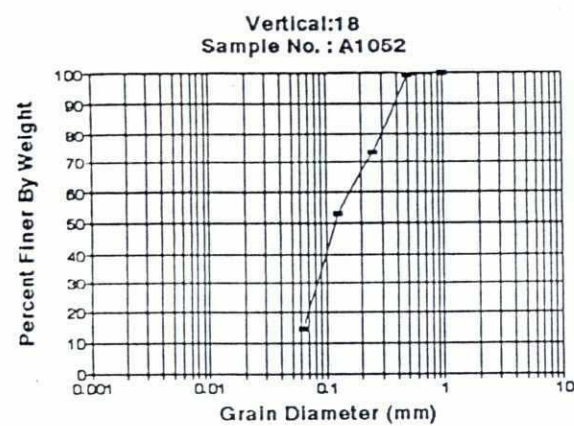
18 June 1994

CI

Sirajganj, left channel
(positions on Dwg. 1.10)Drawing
5.50

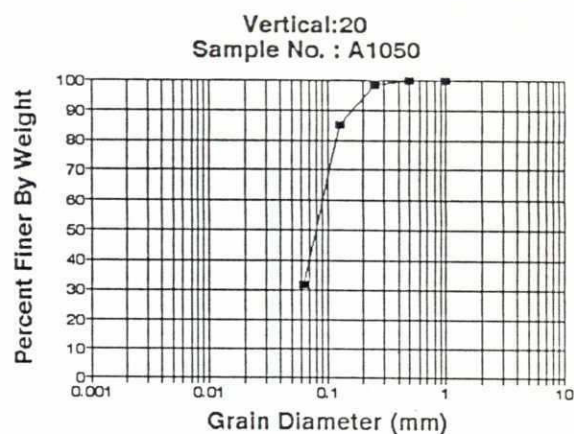
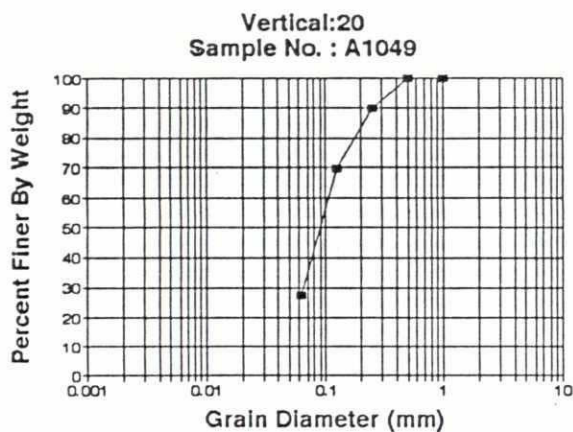


Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1012	09:56	24/07/93	838.00	0.183770	0.225	0.280	0.334	1.650
1013	09:56	24/07/93	1488.50	0.326425	0.262	0.305	0.355	1.576
1008	17:36	23/07/93	540.00	0.118420	0.313	0.352	0.397	1.309
1009	17:36	23/07/93	1146.00	0.251316	0.261	0.305	0.356	1.609



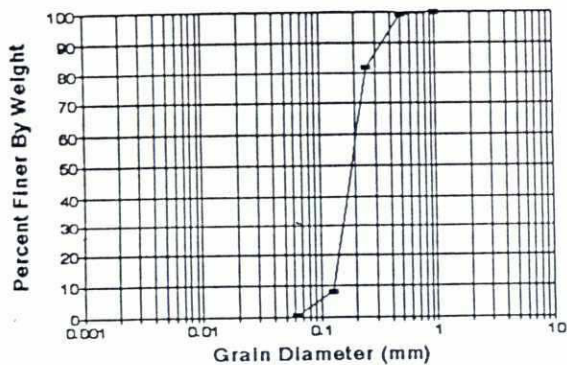
Sample No.	Time	Date	Total Weith (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1052	11:13	29/07/93	338.50	0.037116	0.091	0.119	0.188	2.310
1053	11:13	29/07/93	669.50	0.073410	0.266	0.309	0.356	1.871
1047	12:42	28/07/93	14.82	0.0065008	0.110	0.213	0.298	
1048	12:42	28/07/93	108.50	0.047588	0.087	0.113	0.159	

FAP 24  RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Report 8	
		Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)	
	18 June 1994	Sirajganj, left channel (positions on Dwg. 1.10)	Drawing 5.52
	CI		

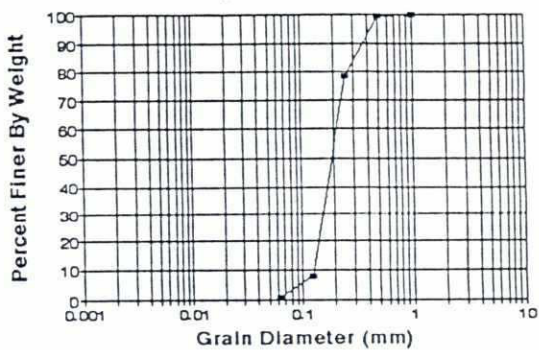


Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1049	09:48	29/07/93	27.27	0.0029898	0.071	0.091	0.116	-
1050	09:48	29/07/93	237.50	0.026040	0.066	0.080	0.096	-

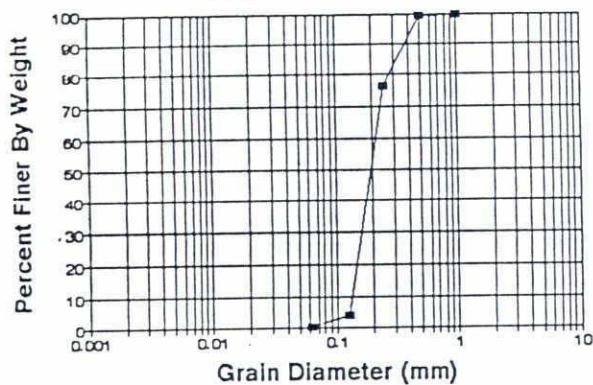
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Sample No. : A1068



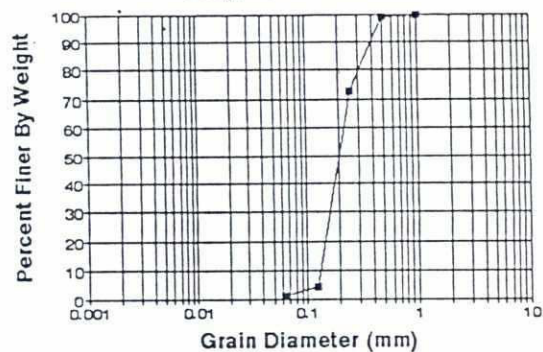
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Sample No. : A1069



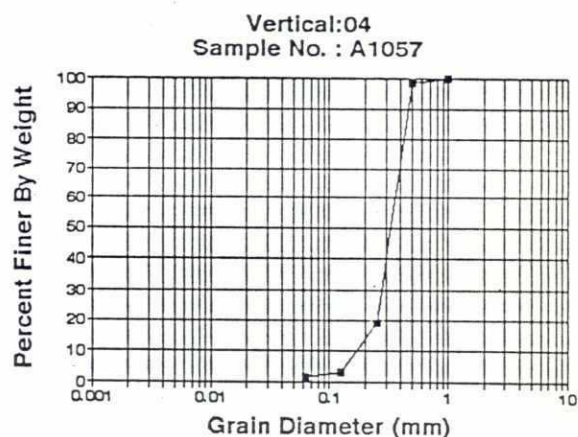
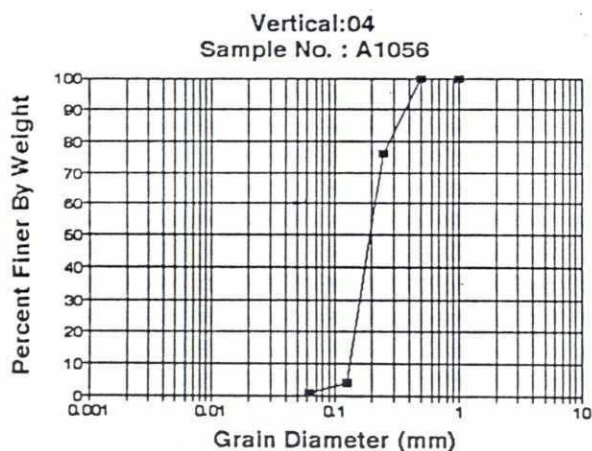
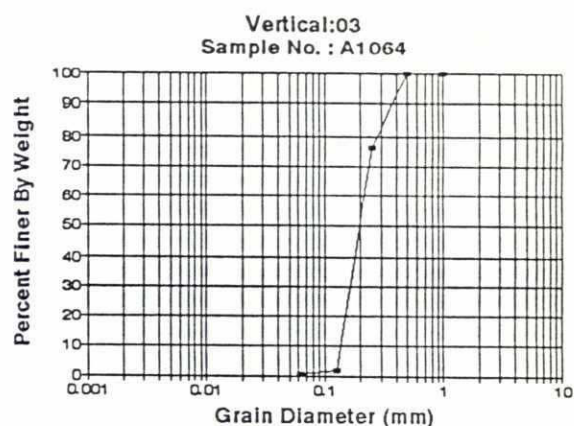
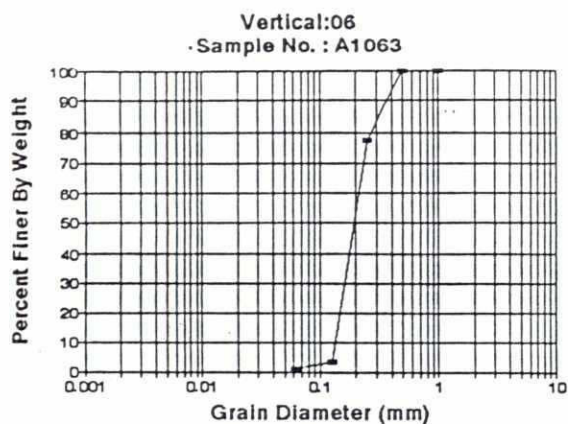
Vertical:02
Sample No. : A1066



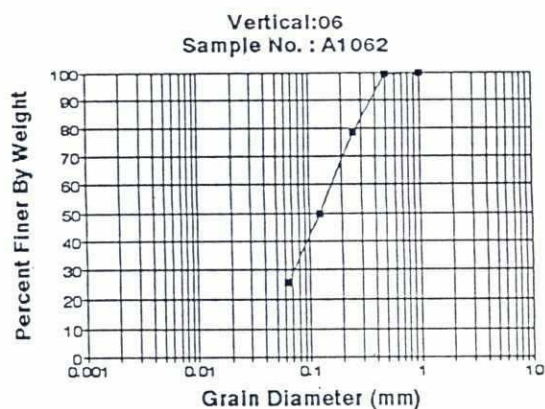
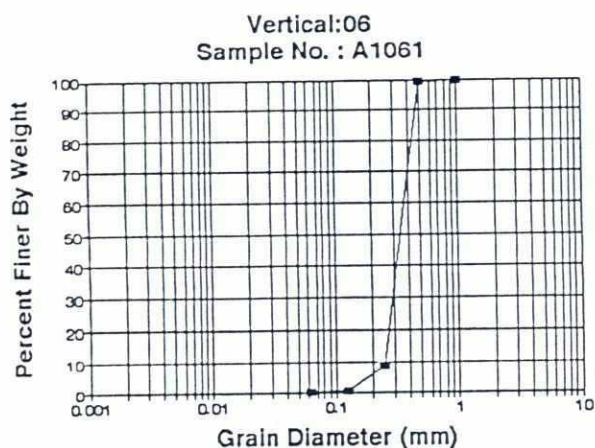
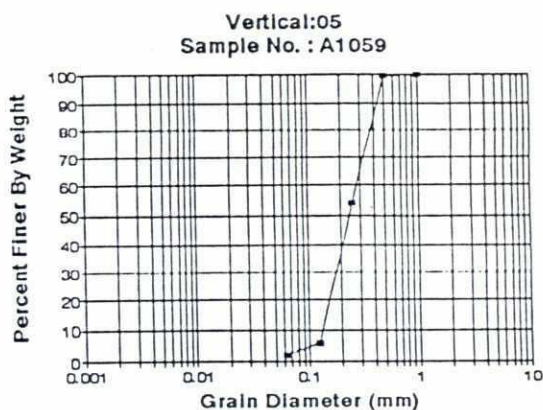
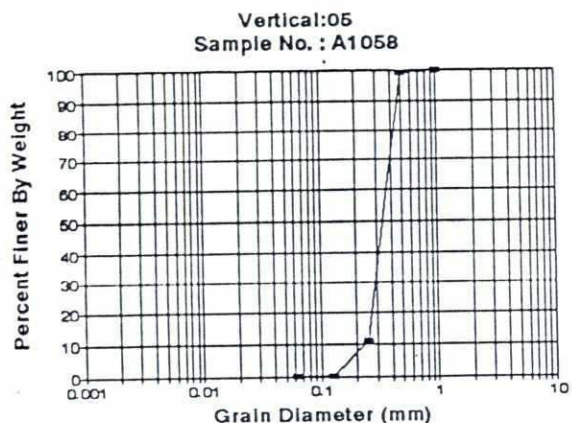
Vertical:02
Sample No. : A1067



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1068	11:15	30/07/90	665.30	0.145899	0.161	0.185	0.213	0.142
1069	11:15	30/07/93	621.00	0.136184	0.163	0.189	0.219	1.486
1066	09:50	30/07/93	588.50	0.129057	0.168	0.194	0.224	1.502
1067	09:50	30/07/93	392.50	0.0860745	0.170	0.198	0.231	1.548



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1063	08:22	30/07/93	1506.50	0.165186	0.168	0.193	0.222	1.475
1064	08:22	30/07/93	2214.50	0.242818	0.170	0.196	0.225	1.484
1056	15:40	29/07/93	1189.00	0.260745	0.168	0.194	0.224	1.500
1057	15:40	29/07/93	32.97	0.014462	0.287	0.327	0.373	1.416



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1058	17:06	29/07/93	76.00	0.016667	0.302	0.34	0.382	1.307
1059	17:06	29/07/93	279.00	0.061184	0.191	0.237	0.296	1.651
1061	18:06	29/07/93	43.84	0.00916404	0.305	0.343	0.384	1.298
1062	18:06	29/07/93	13.80	0.00151327	0.082	0.125	0.18	-

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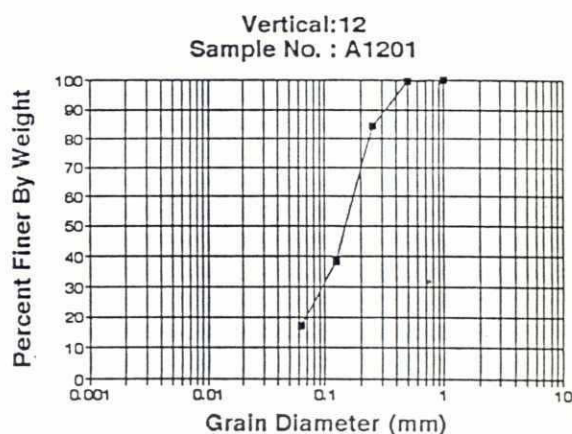
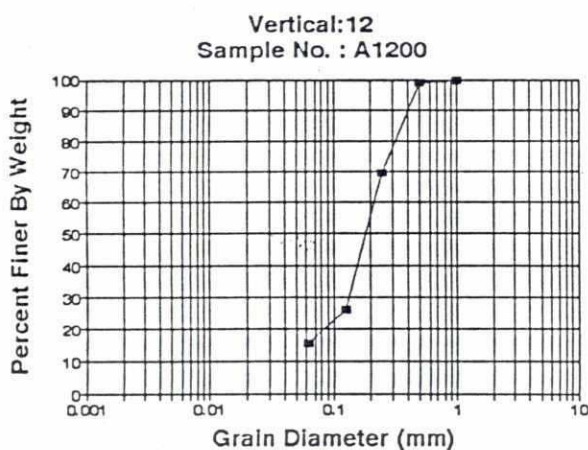
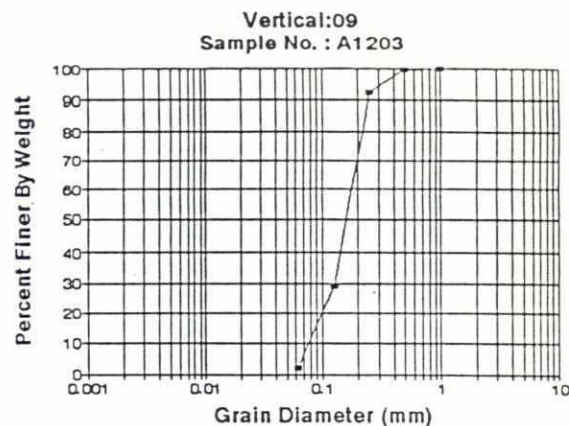
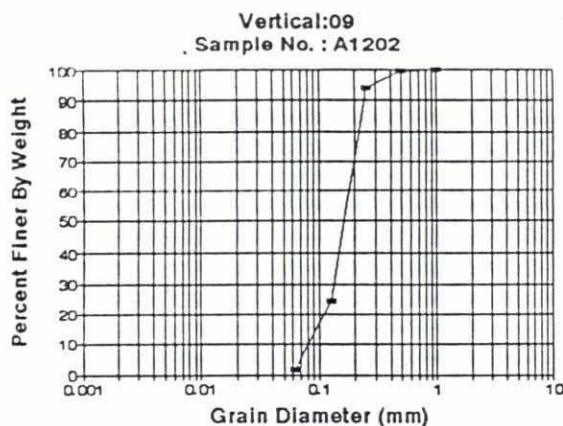
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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

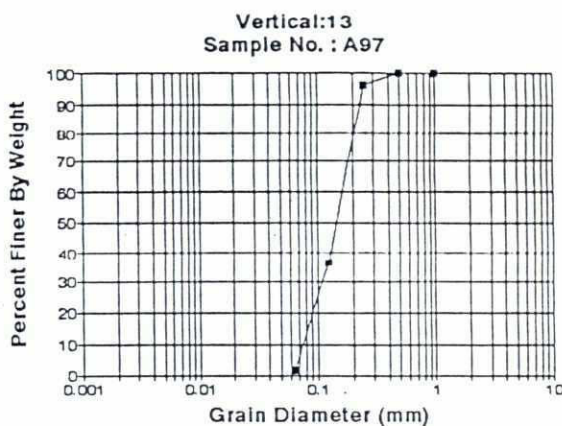
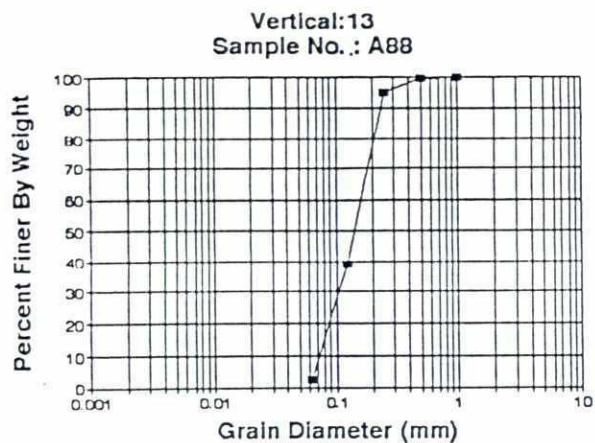
CI

Sirajganj, right channel
(positions on Dwg. 1.10)Drawing
5.56



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1202	12:02	30/07/93	753.50	0.16524	0.139	0.162	0.188	1.536
1203	12:02	30/07/93	569.50	0.12489	0.133	0.157	0.185	1.598
1200	10:02	30/07/93	3.14	0.00034375	0.144	0.183	0.232	2.389
1201	10:02	30/07/93	2.24	0.00024572	0.112	0.149	0.187	-

580



Sample No.	Time	Date	Total Weight (gm)	Transport Tate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
88	09:00	30/07/93	660.00	0.072368	0.116	0.143	0.172	1.641
97	09:00	30/07/93	496.00	0.054386	0.122	0.146	0.174	1.612



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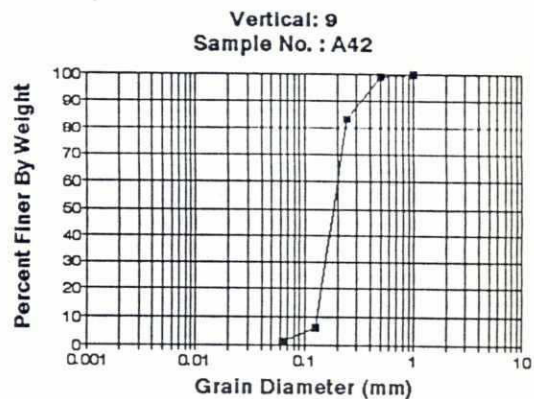
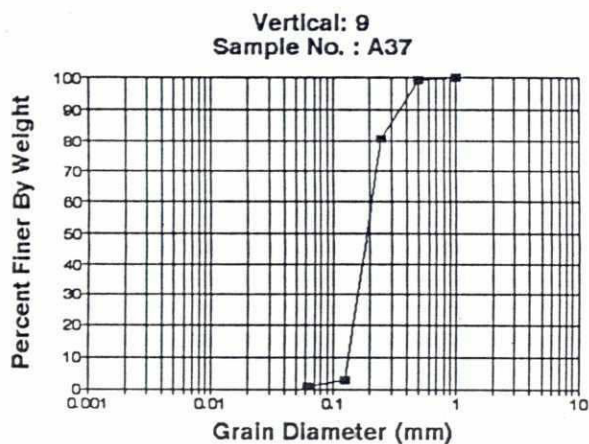
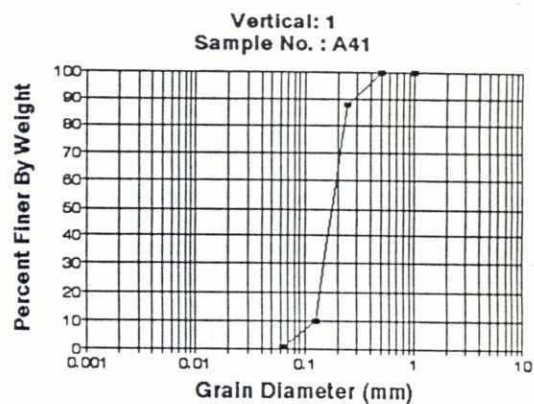
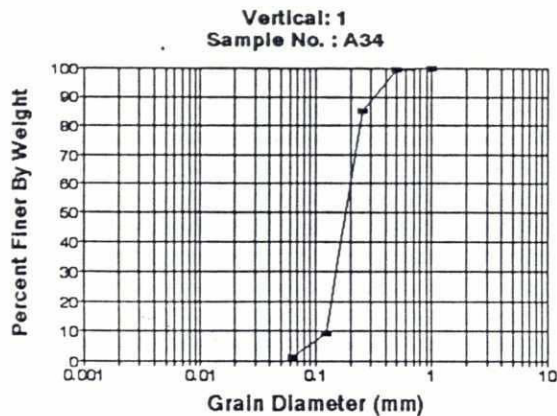
Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

CI

Sirajganj, right channel
(positions on Dwg. 1.10)

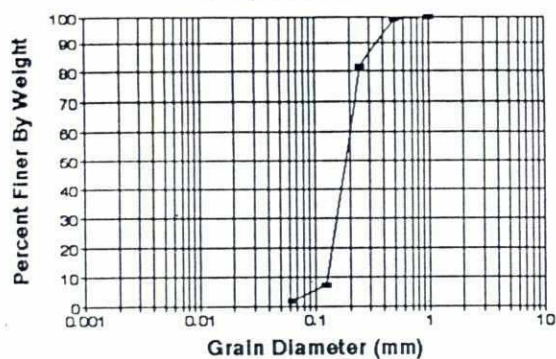
Drawing
5.58



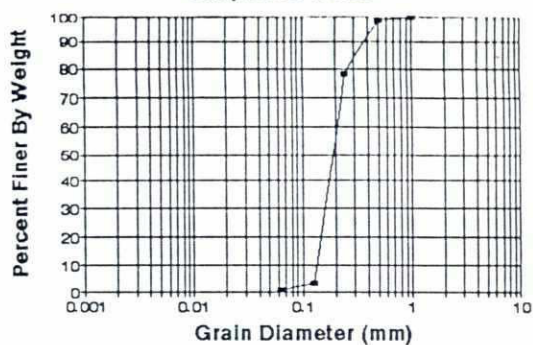
Sample No.	Date	Time	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A34	26/09/93	16:20	1283.50	0.281469	0.158	0.181	0.208	1.363
A41	26/09/93	16:28	795.50	0.174452	0.156	0.179	0.204	1.354
A37	27/09/93	15:25	2086.00	0.457456	0.166	0.190	0.217	1.421
A42	27/09/93	15:35	1453.00	0.318640	0.162	0.185	0.212	1.370

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				Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)	
	18 June 1994	Hardinge Bridge (positions on Dwg. 1.14)			Drawing 5.59
	CI				

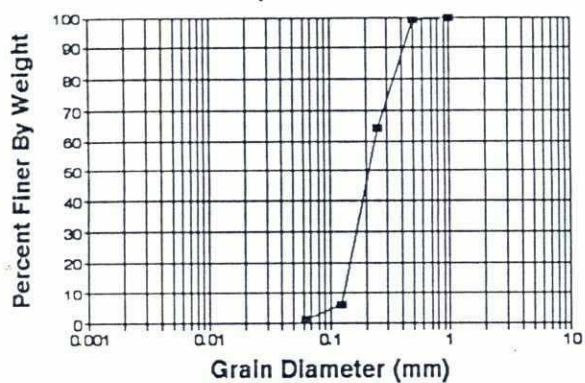
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Sample No. : A51



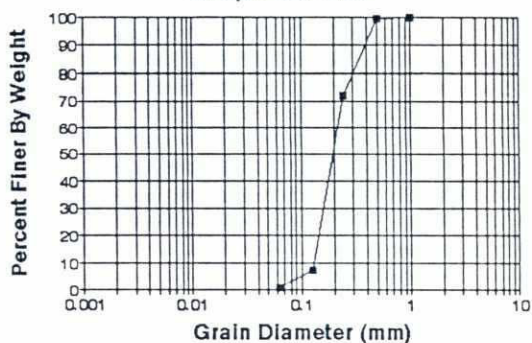
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Sample No. : A126



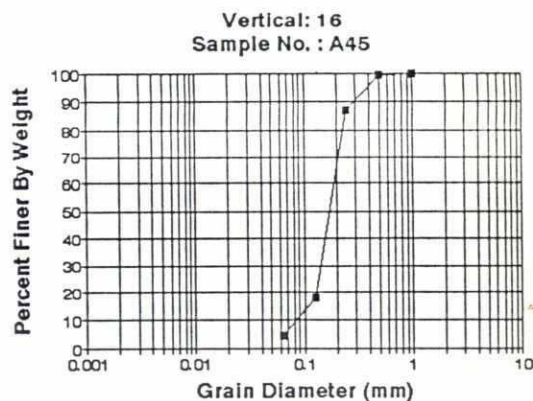
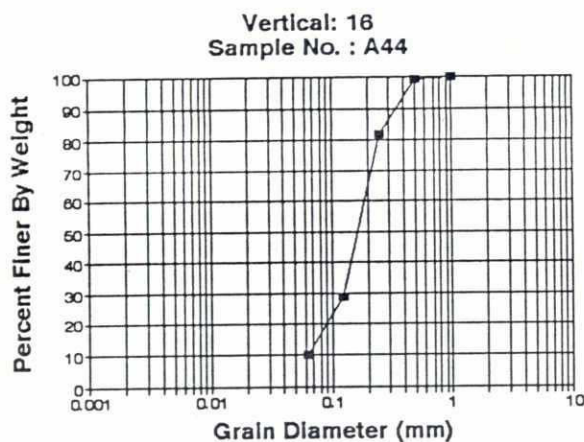
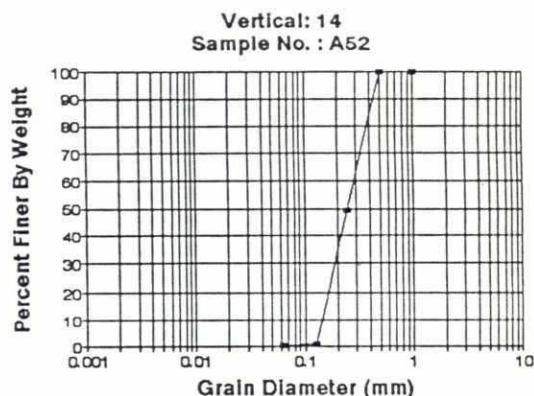
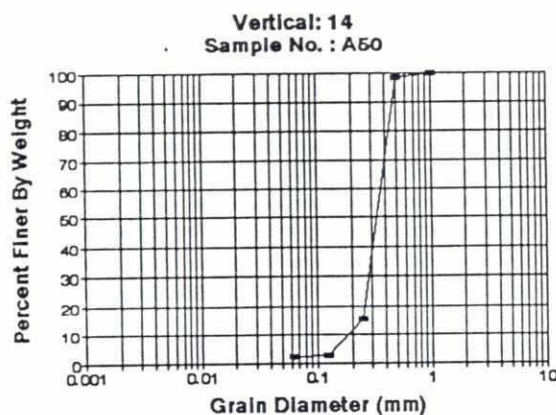
Vertical: 12
Sample No. : A40



Vertical: 12
Sample No. : A54



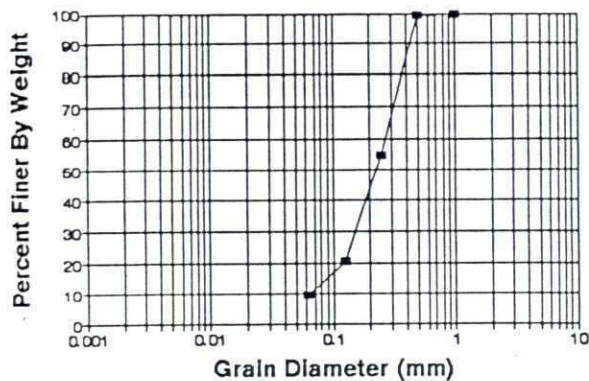
Sample No.	Date	Time	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A51	28/09/93	09:45	791.50	0.173574	0.162	0.186	0.214	1.423
A126	28/09/93	10:00	2527.30	0.554230	0.168	0.193	0.222	1.480
A40	27/09/93	11:55	265.30	0.058179	0.176	0.211	0.253	1.627
A54	27/09/93	12:05	313.00	0.068640	0.169	0.198	0.233	1.584



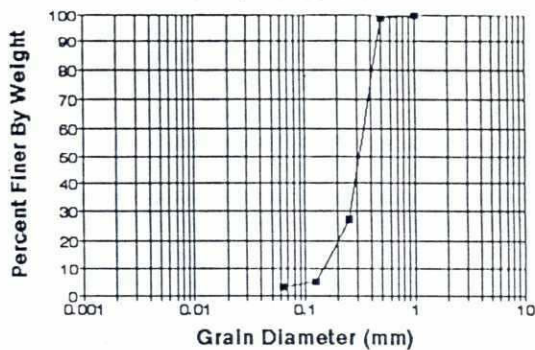
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A50	27/09/93	09:25	61.00	0.013377	0.294	0.333	0.378	1.331
A52	27/09/93	09:35	853.00	0.187060	0.203	0.252	0.310	1.613
A44	26/0993	17:20	136.00	0.014945	0.135	0.165	0.200	1.885
A45	26/09/93	17:30	437.50	0.047971	0.148	0.172	0.200	1.474

582

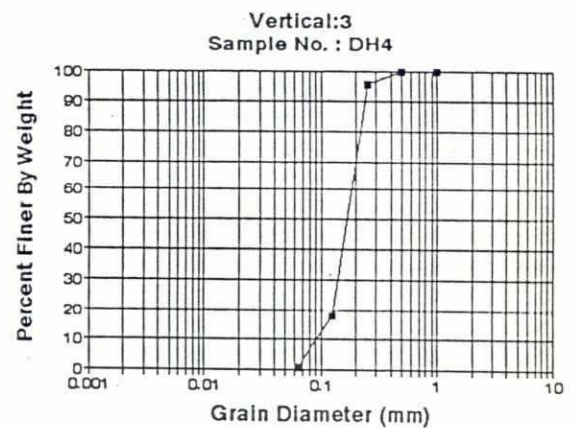
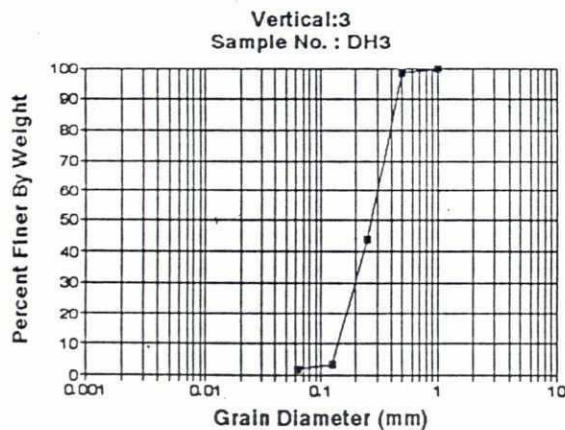
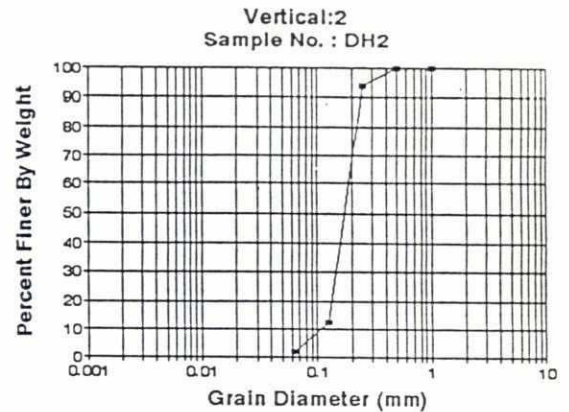
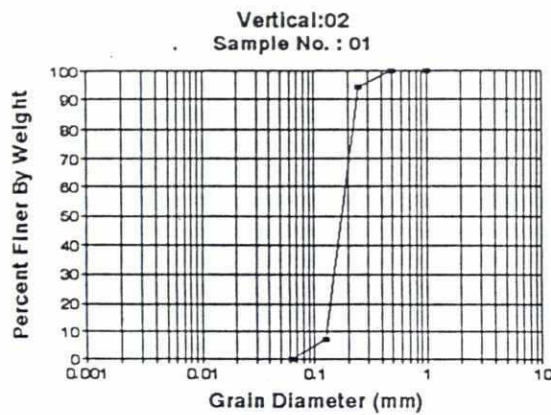
Vertical: 18
Sample No. : A35



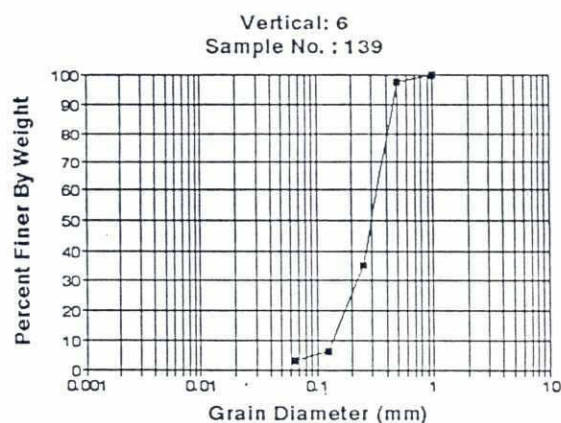
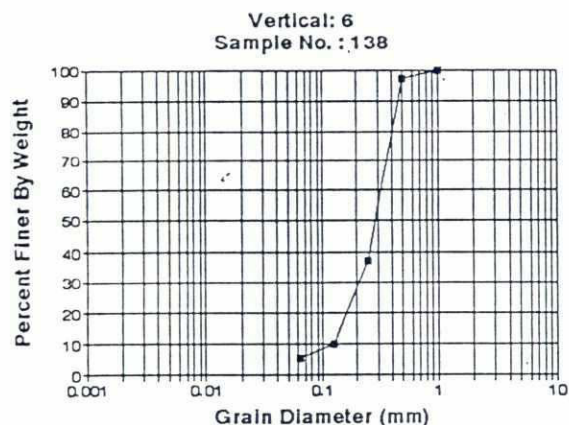
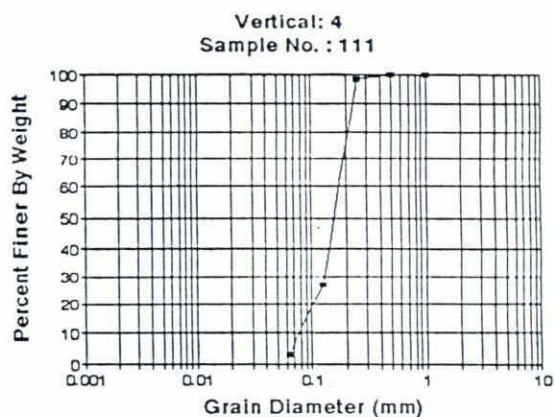
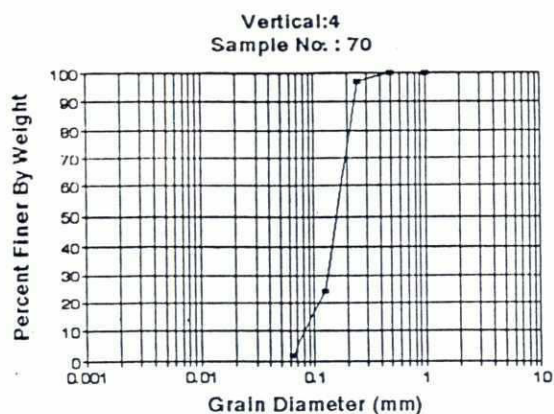
Vertical: 18
Sample No. : A36



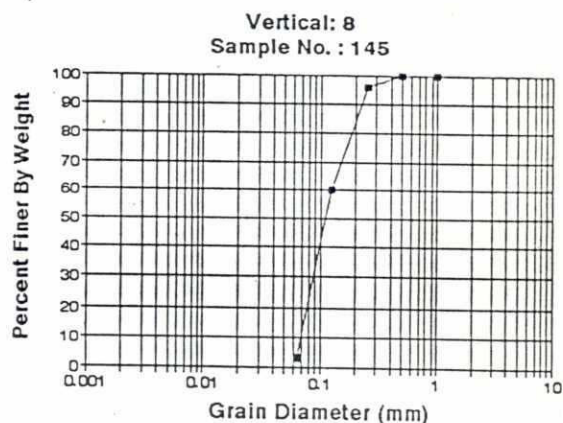
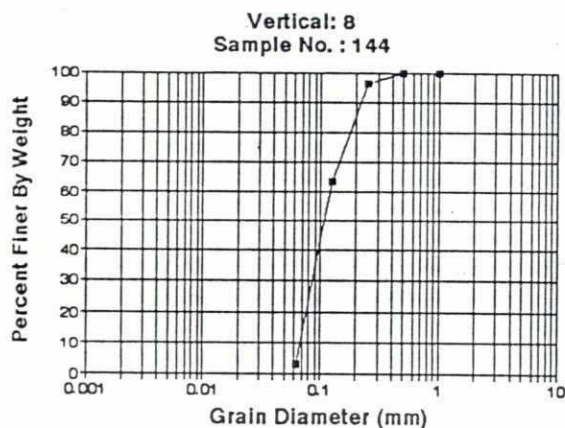
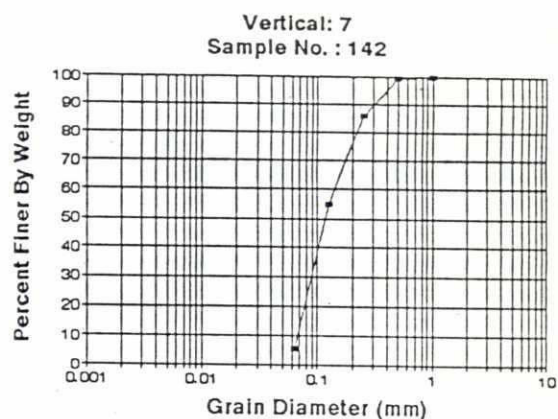
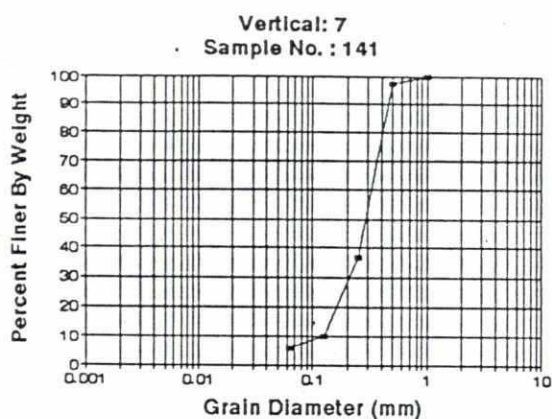
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D35 (mm)	D35 (mm)	Standard Deviation
A35	26/09/93	15:35	79.00	0.008662	0.167	0.226	0.293	2.074
A36	26/09/93	15:40	45.50	0.004989	0.269	0.311	0.360	1.585



Smample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1	15:22	03/08/93	291.80	0.031996	0.156	0.176	0.198	1.310
2	15:29	03/08/93	354.00	0.038816	0.152	0.172	0.196	1.335
3	16:38	03/08/93	9.80	0.0010746	0.215	0.270	0.327	1.643
4	16:42	03/08/93	333.50	0.03656	0.146	0.166	0.190	1.393



Sample No	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
70	18:05	03/08/93	1180.50	0.12944	0.138	0.16	0.138	1.515
111	18:15	03/08/93	1430.50	0.156853	0.138	0.156	0.138	1.556
138	09:48	05/08/93	6.00	0.0006579	0.235	0.289	0.235	1.739
139	09:56	05/08/93	5.00	0.0005482	0.247	0.294	0.247	1.666



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
141	11:00	05/08/93	8.50	*****	0.239	0.291	0.345	1.734
142	11:05	05/08/93	41.00	0.0044956	0.095	0.116	0.156	1.820
144	12:08	05/08/93	687.50	0.07538	0.090	0.107	0.129	1.635
145	12:18	05/08/93	408.50	0.04479	0.092	0.111	0.137	1.646

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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

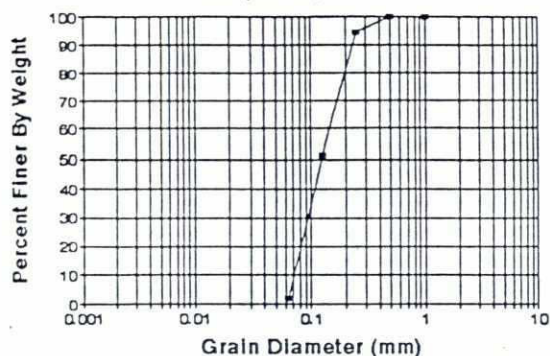
CI

Baruria
(positions on Dwg. 1.16)

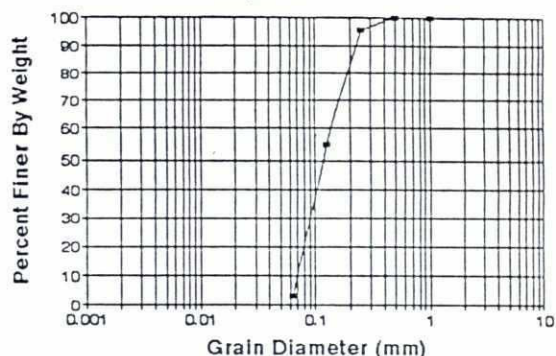
Drawing
5.65

526

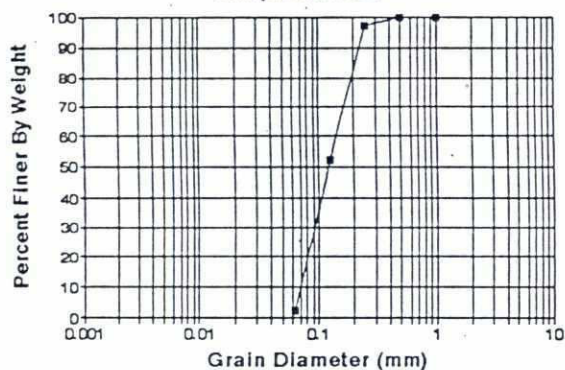
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Sample No. : 106



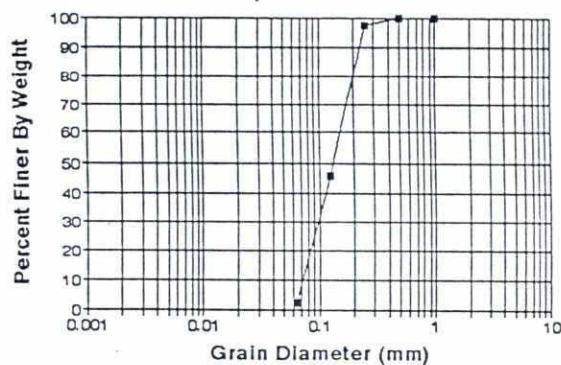
Vertical: 9
Sample No. : DH7



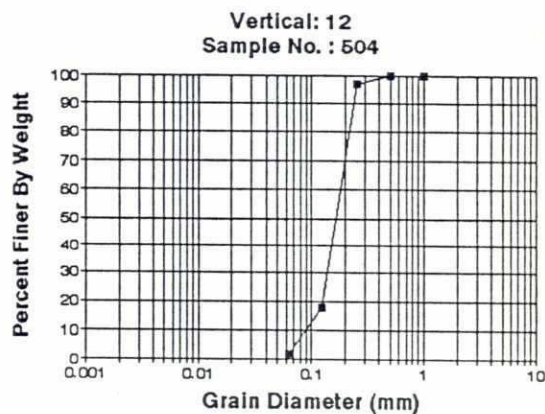
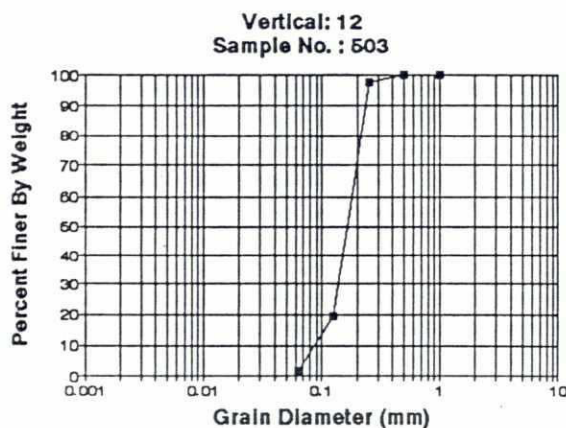
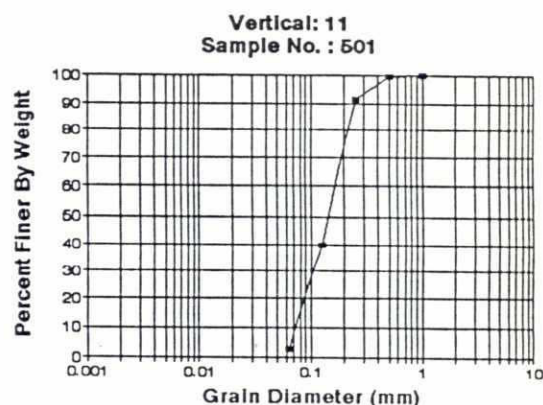
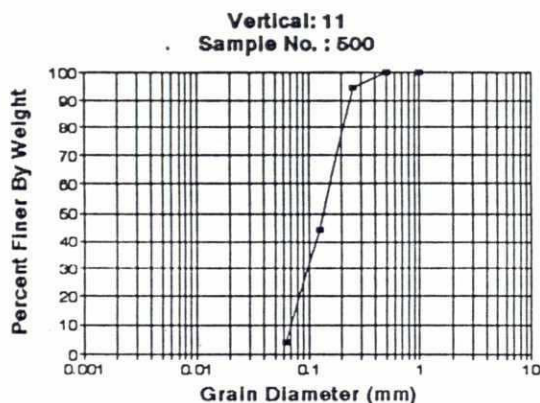
Vertical: 10
Sample No. : 63



Vertical: 10
Sample No. : 100



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
106	13:14	05/08/93	565.00	0.0619517	0.100	0.123	0.156	1.656
107	13:20	05/08/93	657.50	0.072094	0.096	0.117	0.149	1.656
63	14:56	05/08/93	786.50	0.08618	0.099	0.121	0.152	1.639
100	14:50	05/08/93	1246.00	0.1366228	0.105	0.132	0.161	1.634



Sample No.	Time	Date	Total Weight (gm)	Transport Tate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
500	16:05	05/08/93	393.00	0.086184	0.107	0.135	0.166	1.677
501	16:00	05/08/93	383.00	0.0839912	0.114	0.143	0.175	1.684
503	10:42	05/08/93	911.50	0.19989	0.143	0.164	0.187	1.419
504	10:35	05/08/93	800.50	0.175548	0.145	0.166	0.189	1.387



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Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

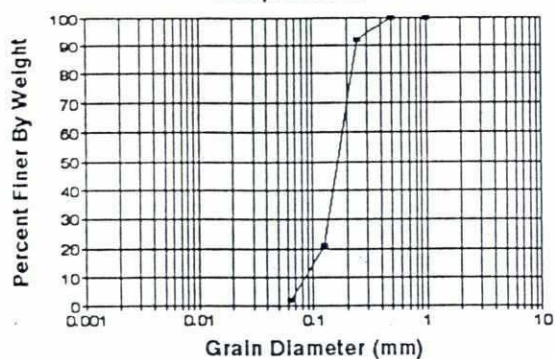
18 June 1994

CI

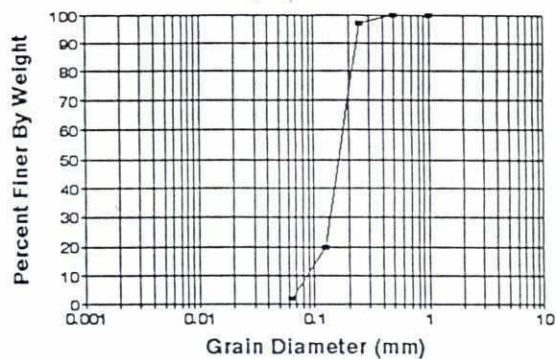
Baruria
(positions on Dwg. 1.16)

Drawing
5:67

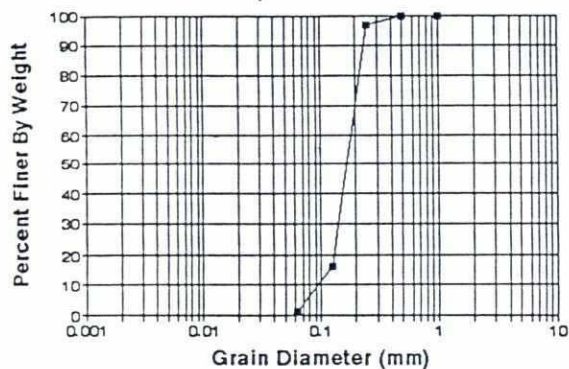
Vertical: 12
Sample No. : 5



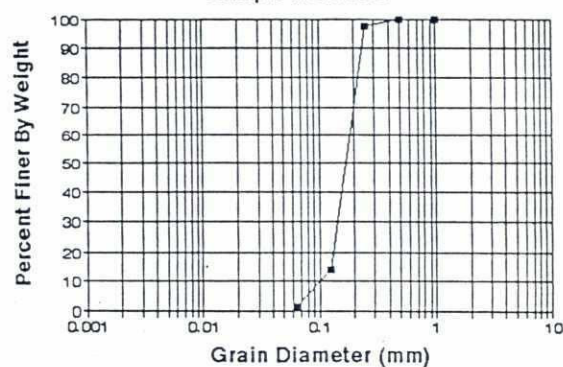
Vertical: 12
Sample No. : 61



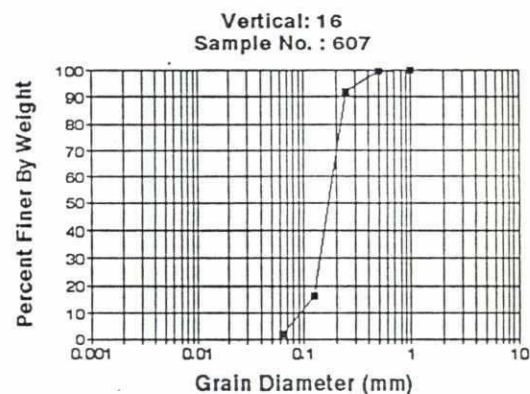
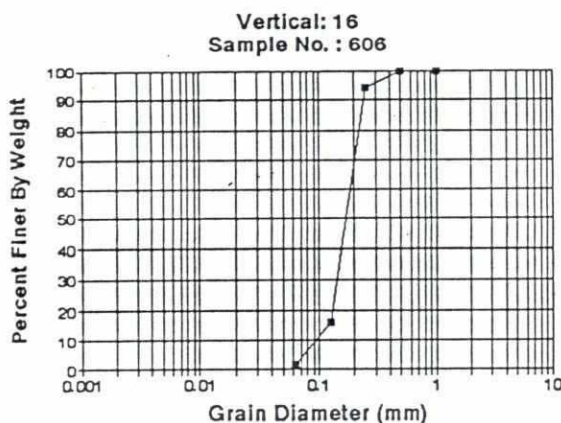
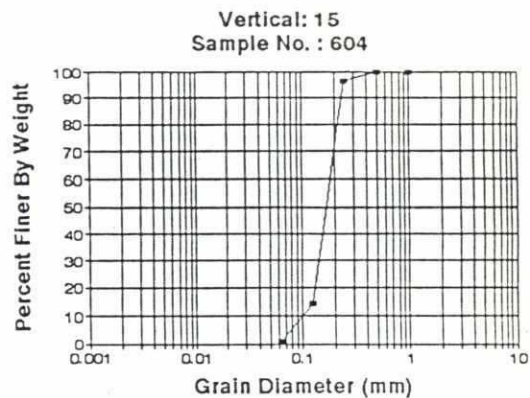
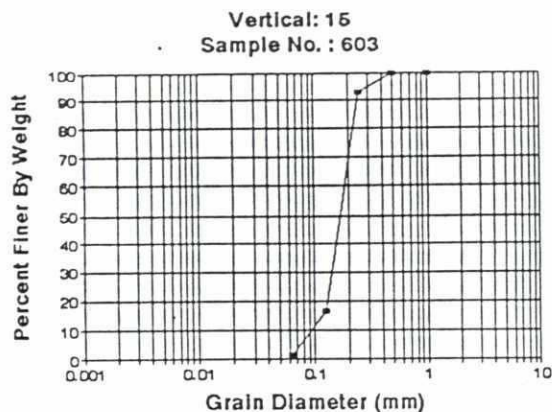
Vertical: 14
Sample No. : 601



Vertical: 14
Sample No. : 602

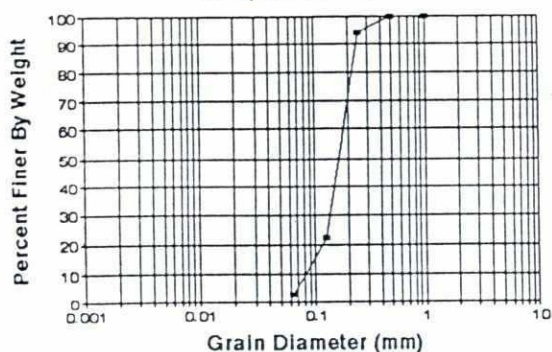


Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
5	16:05	06/08/93	1031.00	0.285307	0.144	0.166	0.192	1.486
61	16:10	06/08/93	754.00	0.16535	0.143	0.164	0.188	1.436
601	09:49	07/08/93	719.00	0.157675	0.147	0.167	0.190	1.344
602	09:55	07/08/93	1110.00	0.24342	0.149	0.169	0.191	1.325

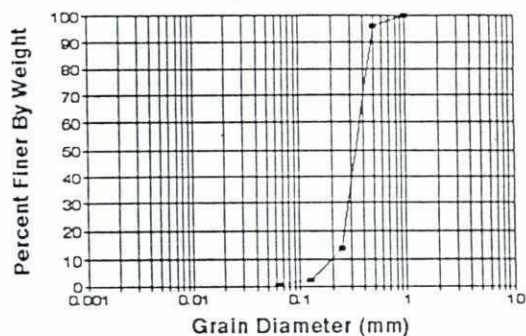


Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
603	11:25	07/08/93	769.50	0.16864	0.148	0.169	0.194	1.376
604	11:21	07/08/93	855.50	0.187609	0.149	0.169	0.192	1.331
606	13:03	07/08/93	981.50	0.21524	0.148	0.169	0.193	1.365
607	13:10	07/08/93	495.00	0.108526	0.148	0.170	0.195	1.376

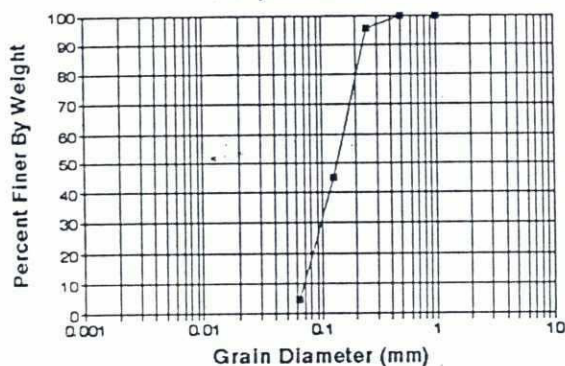
Vertical: 23
Sample No. : 136



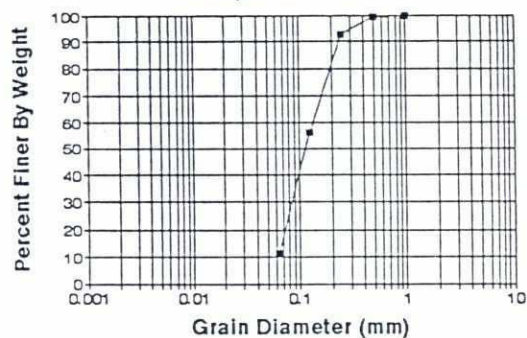
Vertical: 23
Sample No. : 137



Vertical: 24
Sample No. : 112



Vertical: 24
Sample No. : 127



Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
136	13:05	04/08/93	262.50	0.057565	0.141	0.163	0.189	1.511
137	13:10	04/08/93	26.70	0.0058553	0.298	0.338	0.384	1.333
112	10:37	04/08/93	287.00	0.062938	0.106	0.134	0.164	1.676
127	10:45	04/08/93	142.50	0.03125	0.090	0.113	0.147	1.781

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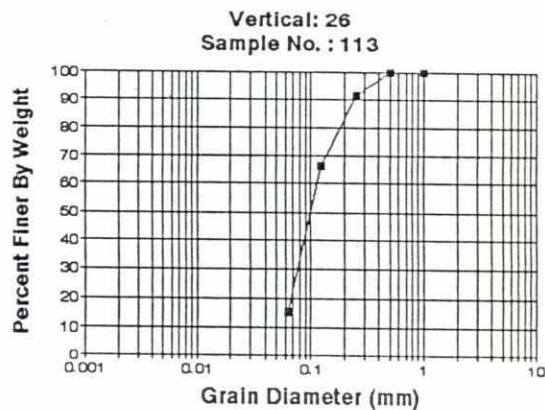
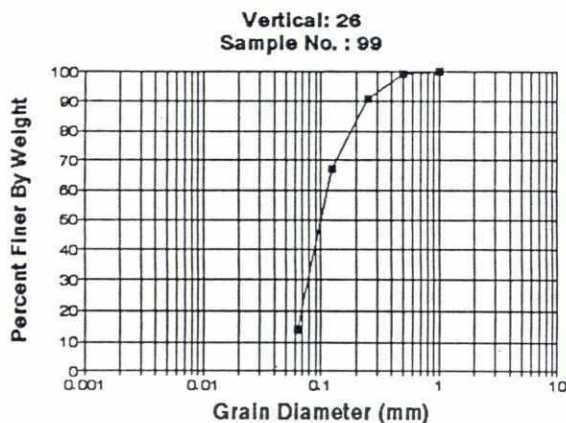
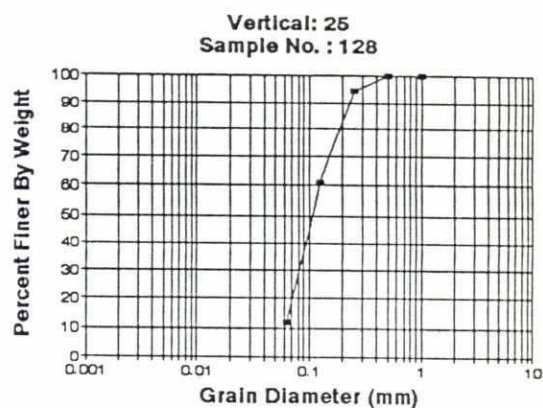
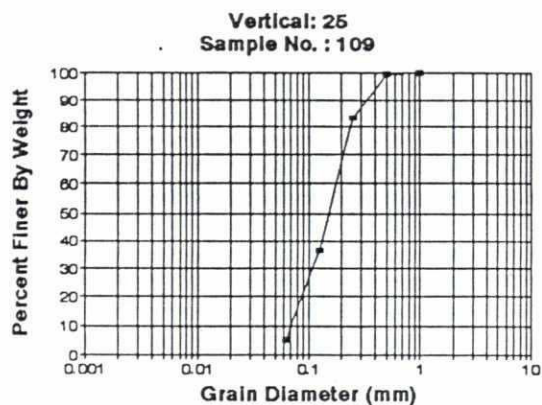
Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

CI

Baruria
(positions on Dwg. 1.16)

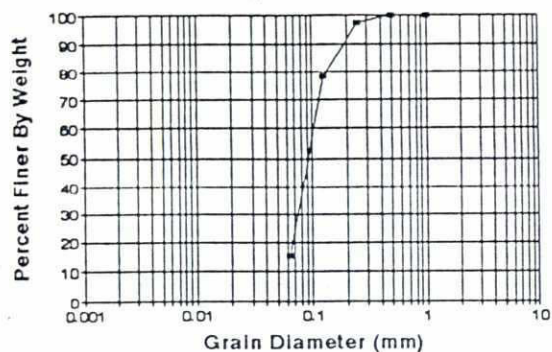
Drawing
5.70



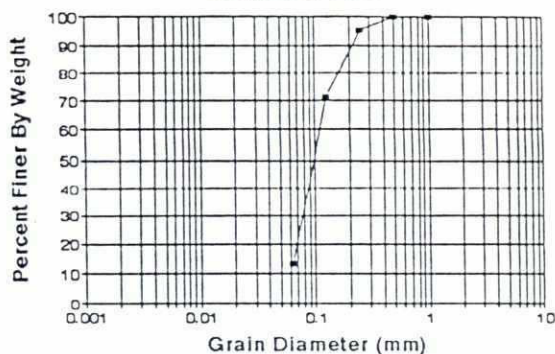
Sample No.	Time	Date	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
109	18:08	03/08/93	68.80	0.015088	0.120	0.152	0.190	0.180
128	18:15	03/08/93	230.50	0.050548	0.087	0.108	0.136	1.741
99	16:05	03/08/93	363.50	0.079715	0.083	0.100	0.122	1.794
113	16:10	03/08/93	233.50	0.051206	0.082	0.101	0.123	1.789

522

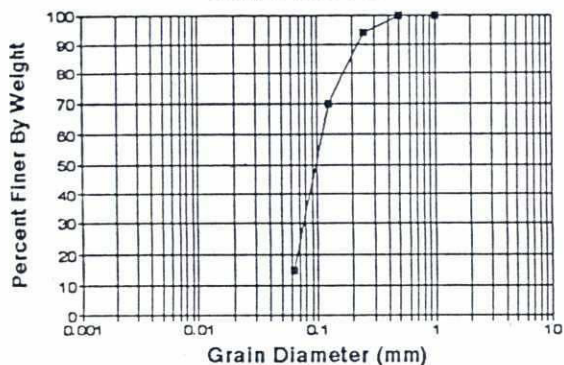
Vertical:27
Sample No. : 66



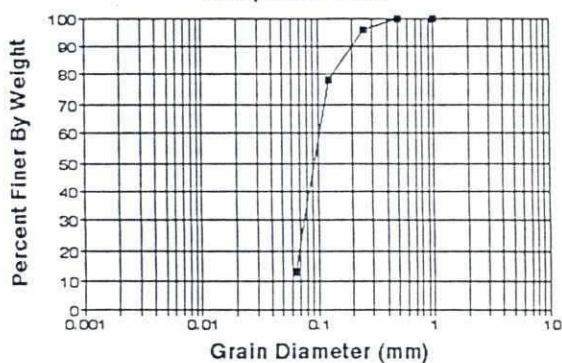
Vertical: 27
Sample No. : 130



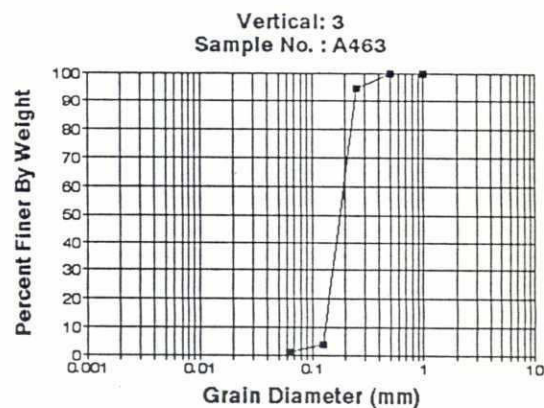
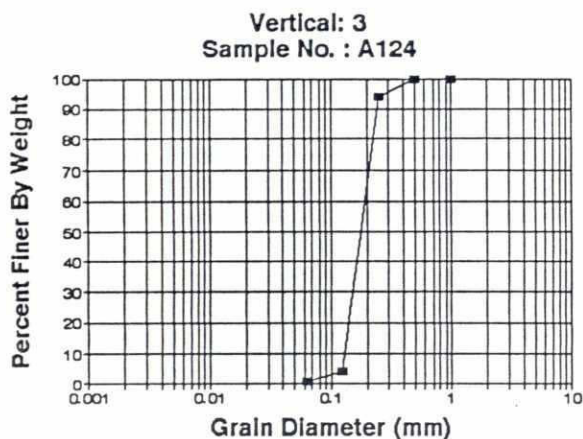
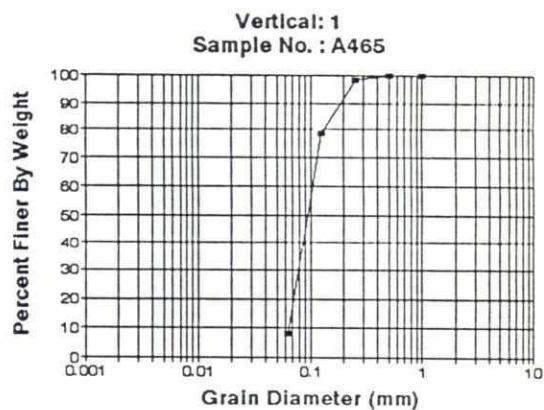
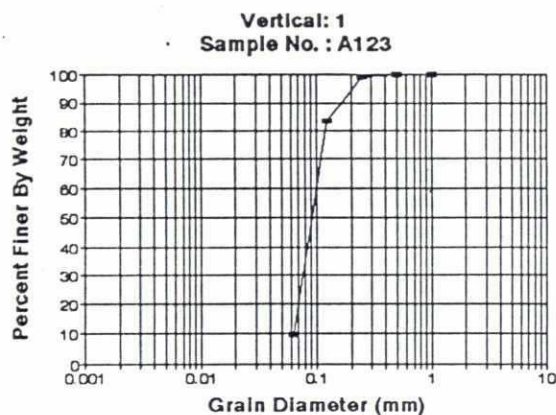
Vertical:28
Sample No. : 103



Vertical: 28
Sample No. : 105



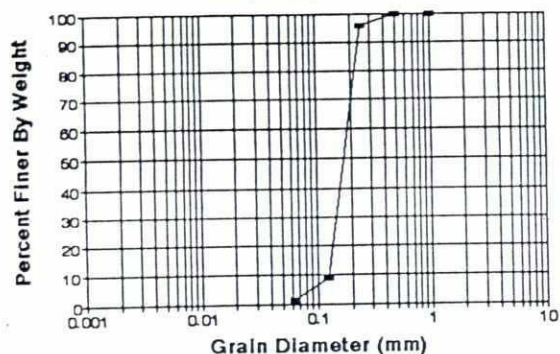
Sample No.	Time	Date	Total Weight (gm)	Transport Rate (kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
66	14:36	03/08/93	369.00	0.080921	0.078	0.092	0.108	1.562
130	14:40	03/08/93	182.00	0.039912	0.081	0.097	0.116	1.674
103	12:45	03/08/93	207.00	0.45394	0.081	0.098	0.118	1.720
105	12:48	03/08/93	251.00	0.055044	0.079	0.093	0.109	1.565



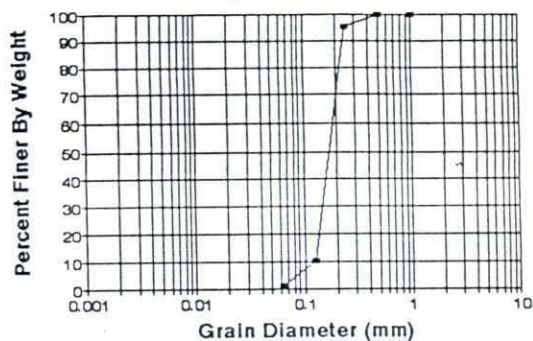
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A123	19/10/93	10:40	251.000	0.027522	0.080	0.092	0.105	1.382
A465	19/10/93	10:45	116.000	0.012719	0.082	0.095	0.110	1.493
A124	19/10/93	12:12	2113.000	0.231689	0.159	0.178	0.200	1.301
A463	19/10/93	12:20	1310.000	0.143640	0.159	0.178	0.199	1.299

505

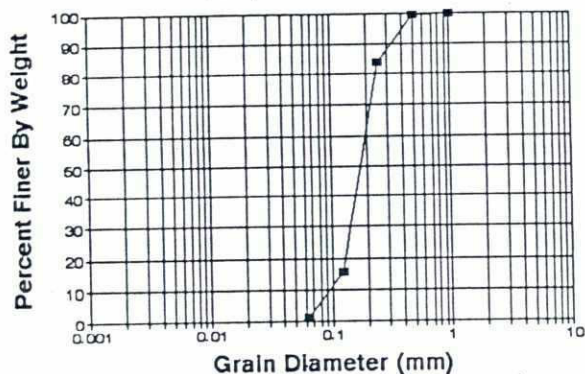
Vertical: 5
Sample No. : A48



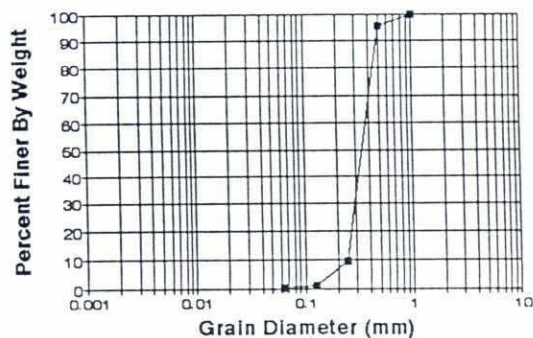
Vertical: 5
Sample No. : A459



Vertical: 7
Sample No. : A740



Vertical: 7
Sample No. : A565



Sample No.	Date	Time	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A48	19/10/93	14:33	733.50	0.160855	0.154	0.173	0.196	1.314
A459	19/10/93	14:43	571.00	0.125219	0.153	0.173	0.195	1.319
A740	19/10/93	16:03	276.00	0.060526	0.152	0.177	0.206	1.420
A565	19/10/93	16:10	48.50	0.010636	0.302	0.346	0.390	1.315



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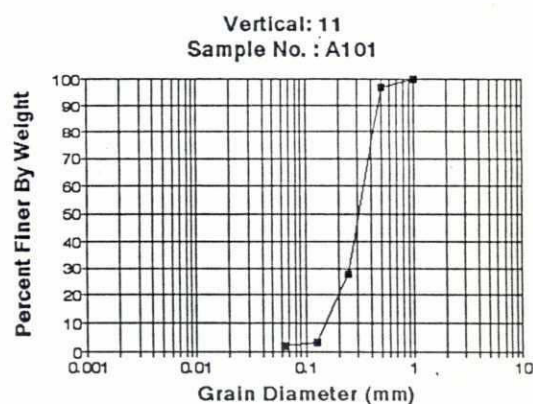
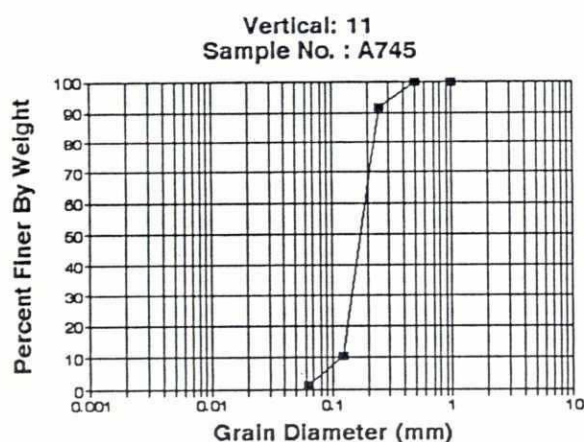
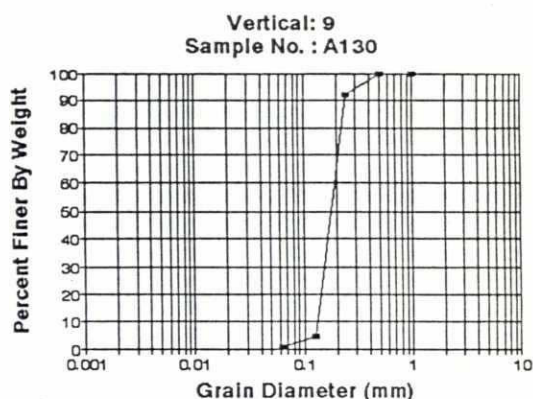
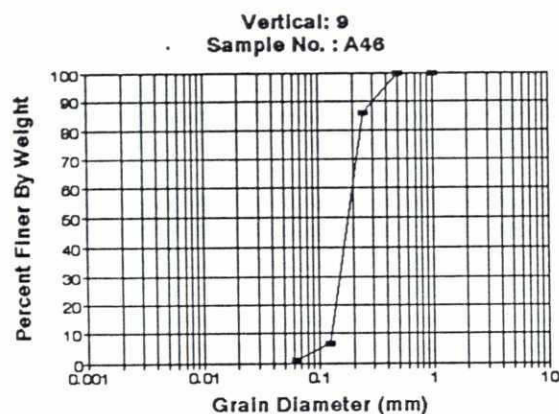
Annexure 5: Grain size distribution of bed load samples
(Helley-Smith trap sampler)

18 June 1994

CI

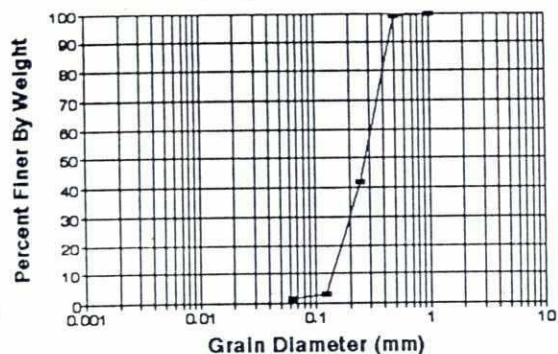
Baruria
(positions on Dwg. 1.18)

Drawing
5.74

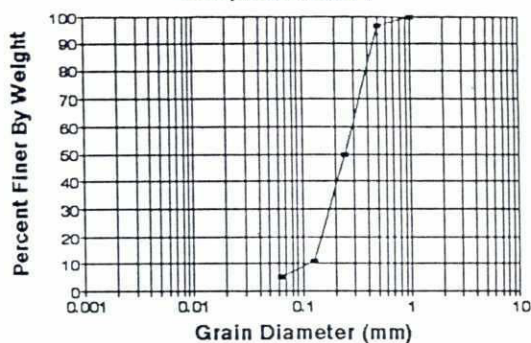


Sample No.	Date	Time	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A46	20/10/93	10:05	572.500	0.125548	0.160	0.183	0.209	1.345
A130	20/10/93	10:14	1092.000	0.239474	0.159	0.179	0.202	1.310
A745	20/10/93	12:55	880.000	0.096491	0.154	0.175	0.199	1.337
A101	20/10/93	13:03	12.497	0.001370	0.269	0.312	0.363	1.575

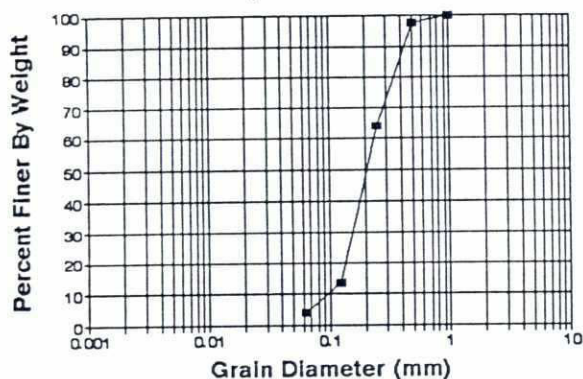
Vertical: 15
Sample No. : A708



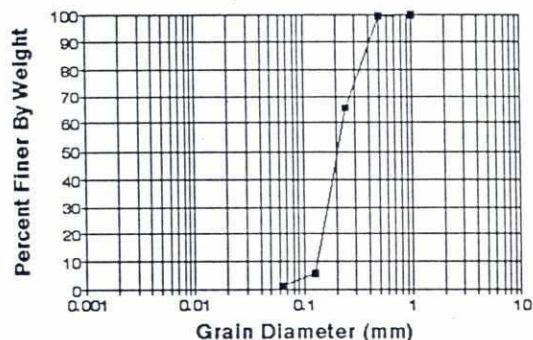
Vertical: 15
Sample No. : A717



Vertical: 17
Sample No. : A127



Vertical: 17
Sample No. : A350



Sample No.	Date	Time	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A708	21/10/93	09:31	11.855	0.000520	0.222	0.277	0.332	1.631
A717	21/10/93	09:39	2.196	0.000096	0.192	0.250	0.313	1.742
A127	21/10/93	10:50	1.819	0.000080	0.168	0.270	0.257	1.718
A350	21/10/93	11:04	7.034	0.000309	0.176	0.209	0.249	1.617

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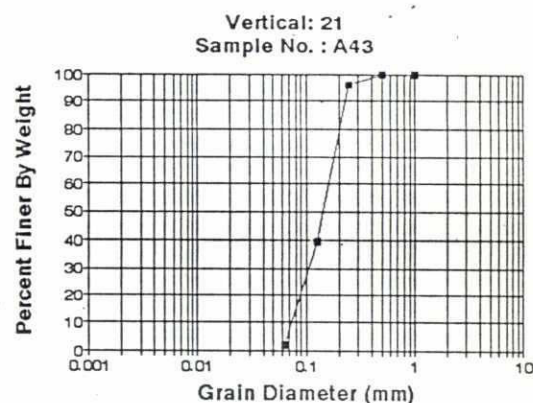
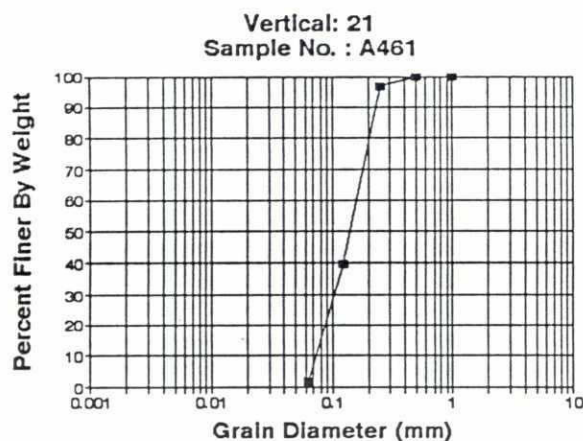
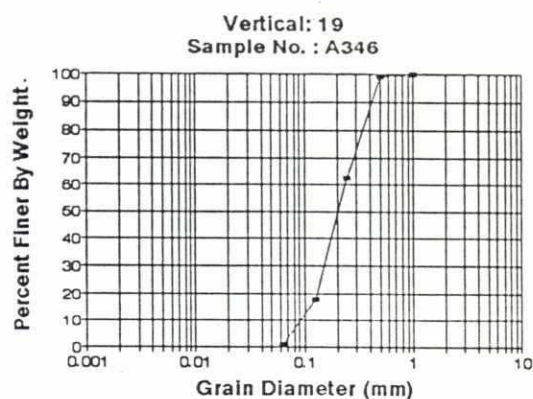
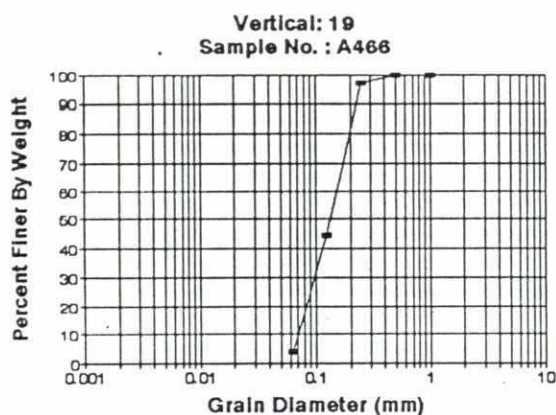
Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)

18 June 1994

CI

Baruria
(positions on Dwg. 1.18)

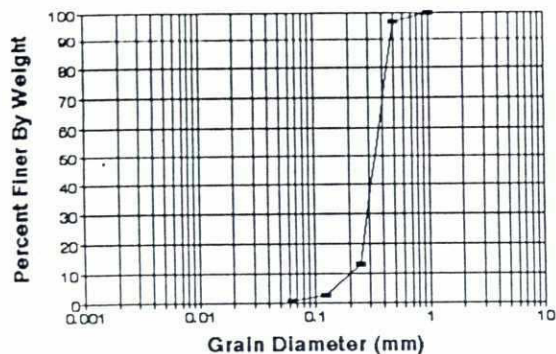
Drawing
5.76



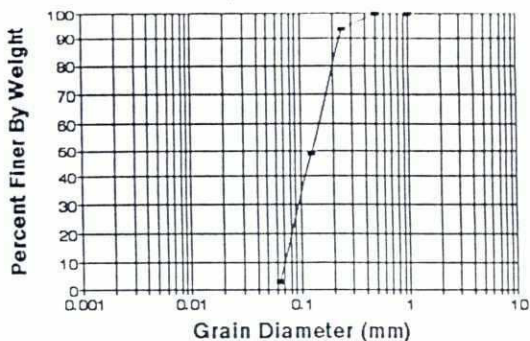
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A466	21/10/93	12:21	372.00	0.016316	0.107	0.134	0.164	1.643
A346	21/10/93	12:31	54.00	0.002368	0.163	0.205	0.260	1.798
A461	21/10/93	13:50	1166.50	0.051162	0.115	0.142	0.170	1.630
A43	21/10/93	14:00	50.86	0.002231	0.115	0.142	0.170	1.634

260

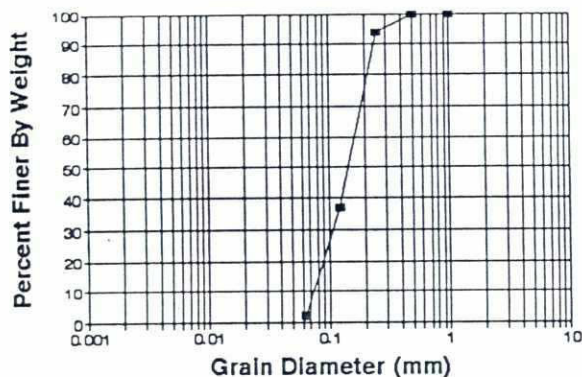
Vertical: 23
Sample No. : A353



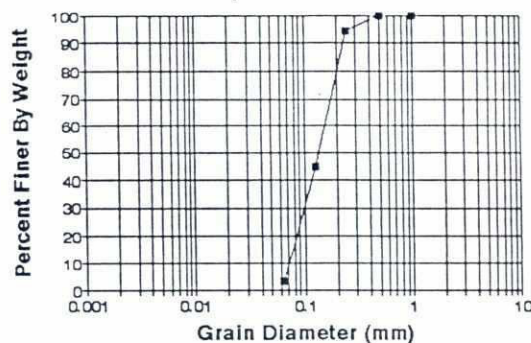
Vertical: 23
Sample No. : A695



Vertical: 25
Sample No. : A690



Vertical: 25
Sample No. : A696



Sample No.	Date	Time	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A353	21/10/93	13:05	31.904	0.001749	0.300	0.340	0.385	1.327
A695	21/10/93	13:16	849.500	0.046573	0.102	0.127	0.160	1.671
A690	21/10/93	11:50	690.500	0.037856	0.120	0.146	0.176	1.651
A696	21/10/93	11:55	450.000	0.024671	0.106	0.134	0.166	1.669



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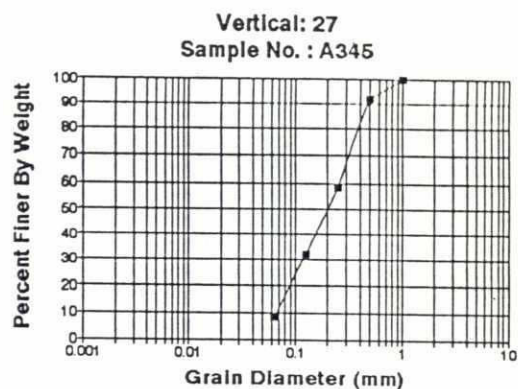
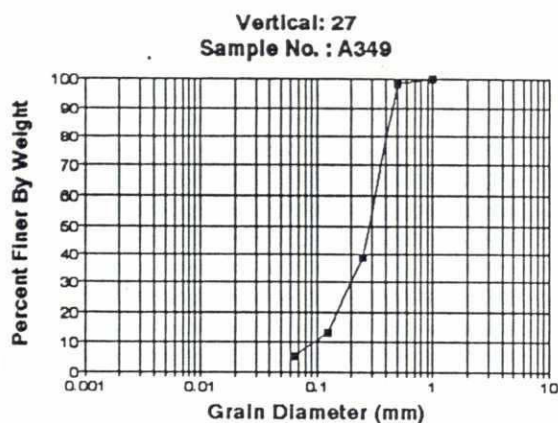
Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)

18 June 1994

CI

Baruria
(positions on Dwg. 1.18)

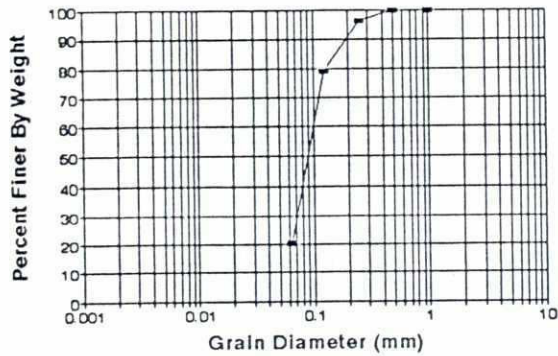
Drawing
5.78



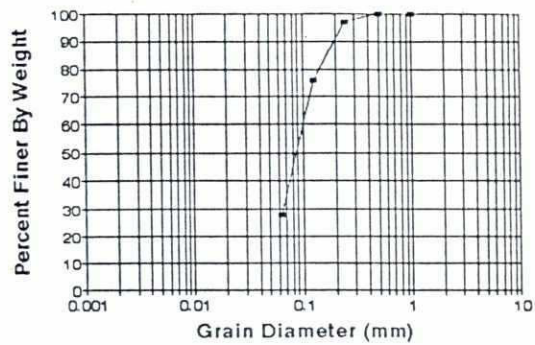
Sample No.	Date	Time	Total Weight (gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A349	21/10/93	09:30	2.697	0.000148	0.225	0.284	0.339	1.797
A345	21/10/93	09:24	6.413	0.000703	0.135	0.200	0.286	2.337



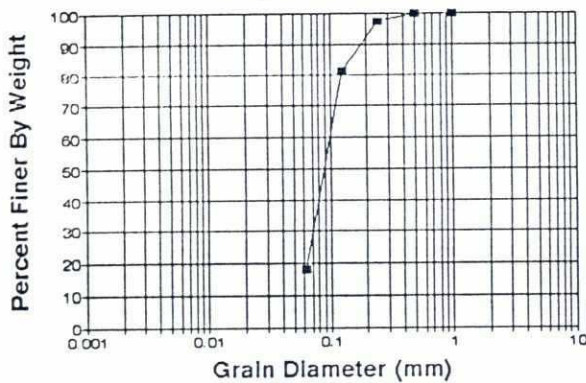
Vertical: 7
Sample No. : A115



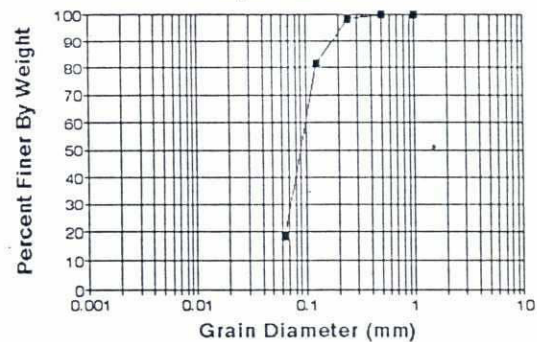
Vertical: 7
Sample No. : A87



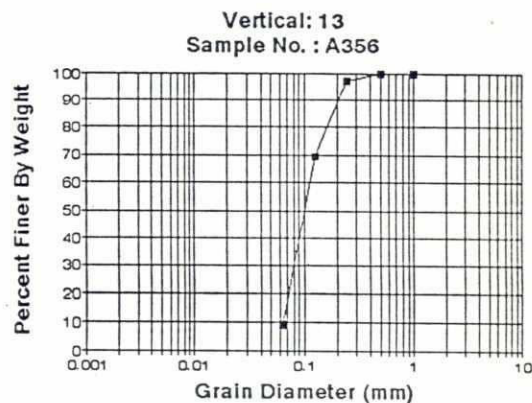
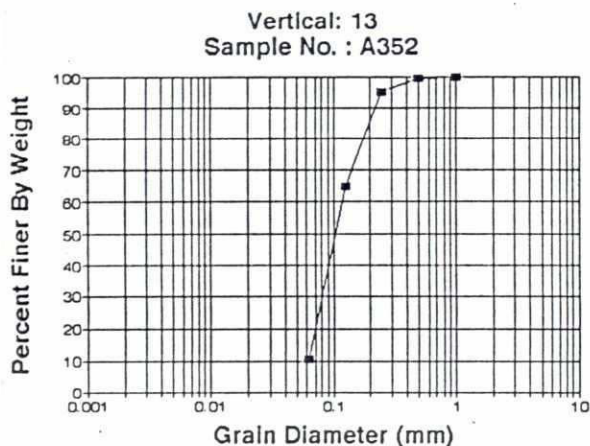
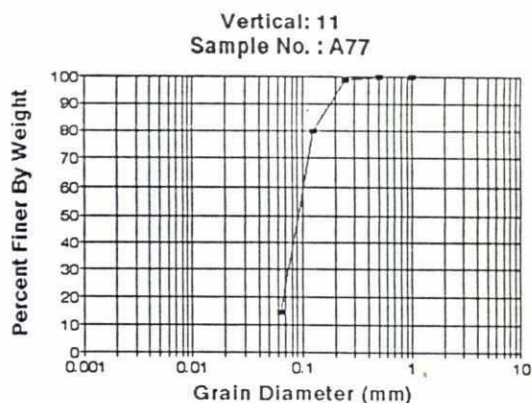
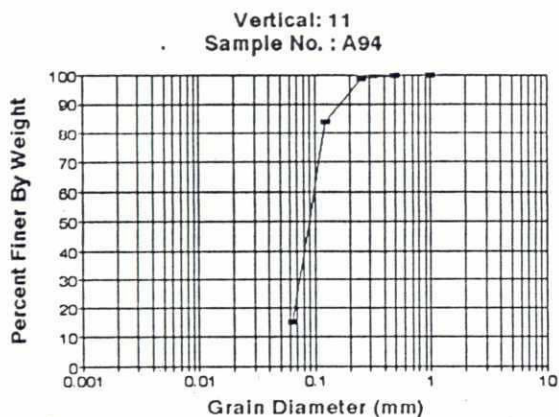
Vertical: 9
Sample No. : A89



Vertical: 9
Sample No. : A97



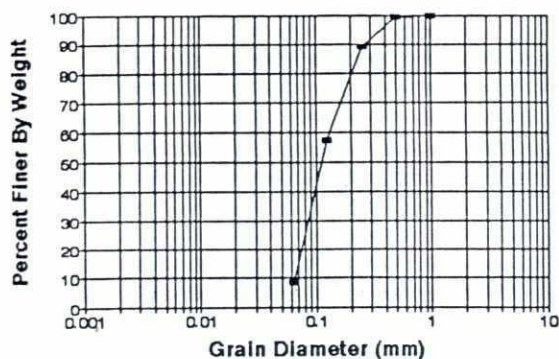
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A115	05/10/93	09:05	102.000	0.022368	0.075	0.089	0.106	-
A87	05/10/93	08:55	165.500	0.036184	0.070	0.086	0.107	-
A89	03/10/93	12:35	433.500	0.047533	0.076	0.089	0.105	-
A97	03/10/93	12:40	663.000	0.072697	0.075	0.089	0.105	-



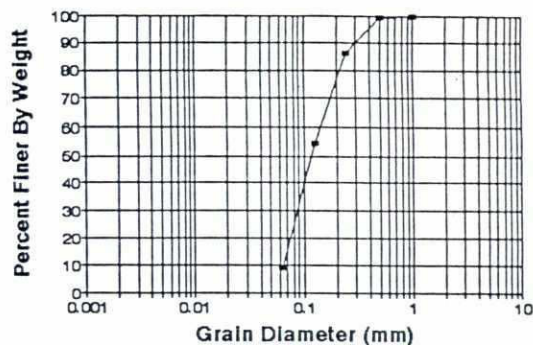
Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A94	05/10/93	11:50	219.000	0.048026	0.077	0.089	0.104	1.420
A77	05/10/93	11:42	174.000	0.038158	0.078	0.091	0.107	1.508
A352	05/10/93	13:30	181.000	0.039693	0.086	0.104	0.125	1.697
A356	05/10/93	13:37	206.000	0.045175	0.084	0.100	0.119	1.635

267

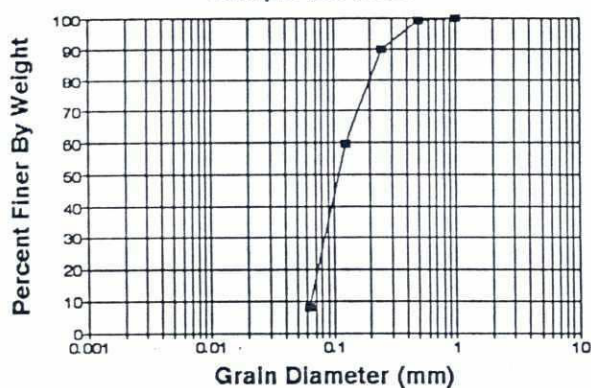
Vertical: 15
Sample No. : A355



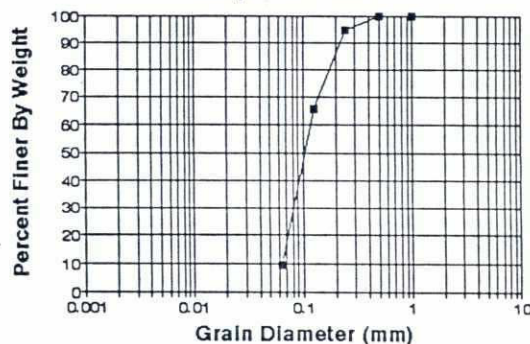
Vertical: 15
Sample No. : A348



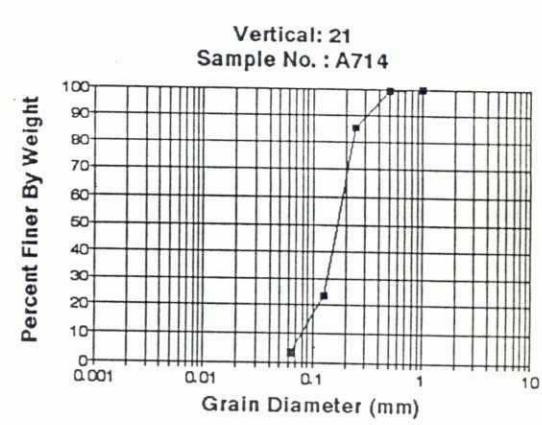
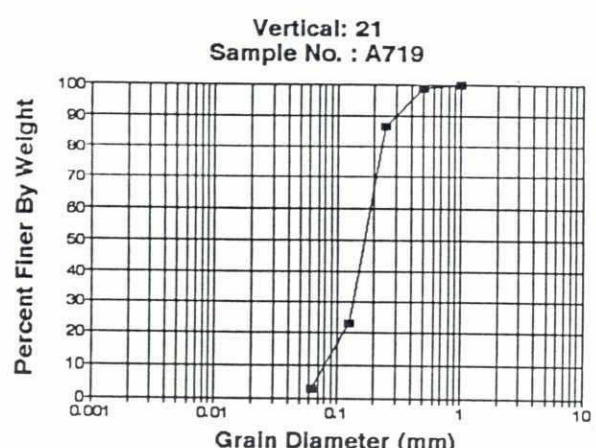
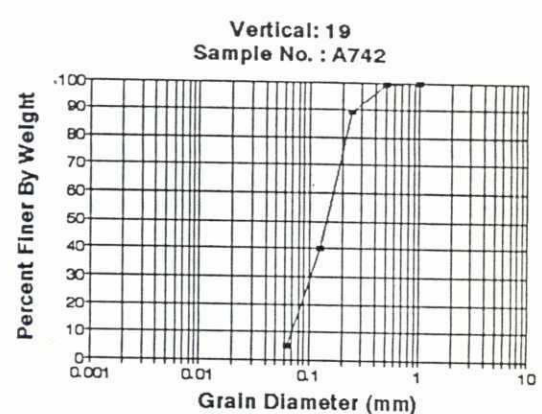
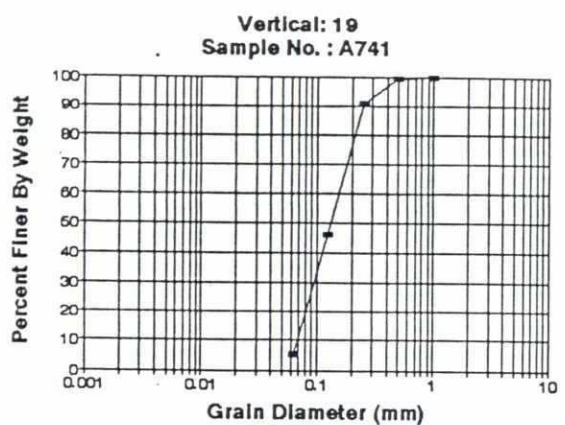
Vertical: 17
Sample No. : A53



Vertical: 17
Sample No. : A47



Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A355	05/10/93	15:49	96.000	0.021053	0.091	0.112	0.147	1.796
A348	05/10/93	14:40	101.300	0.022215	0.093	0.116	0.157	1.859
A53	03/10/93	15:10	307.000	0.067325	0.090	0.110	0.142	1.781
A47	03/10/93	15:22	208.700	0.045768	0.086	0.104	0.125	1.697

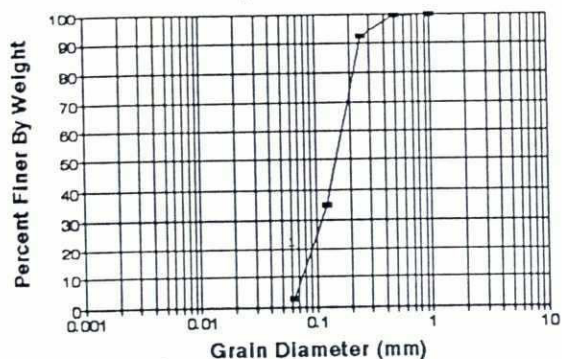


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A741	04/10/93	13:49	238.800	0.053268	0.103	0.132	0.167	1.728
A742	04/10/93	14:02	179.500	0.039364	0.113	0.144	0.178	1.732
A719	04/10/93	16:11	486.500	0.106689	0.143	0.168	0.198	1.566
A714	04/10/93	16:00	417.500	0.091557	0.142	0.168	0.199	1.607

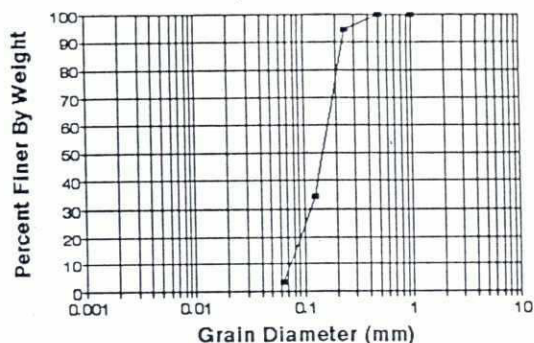
FAP 24  DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Report 8	
				Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)	
	18 June 1994	Mawa (positions on Dwg. 1.20)			Drawing 5.83
	CI				

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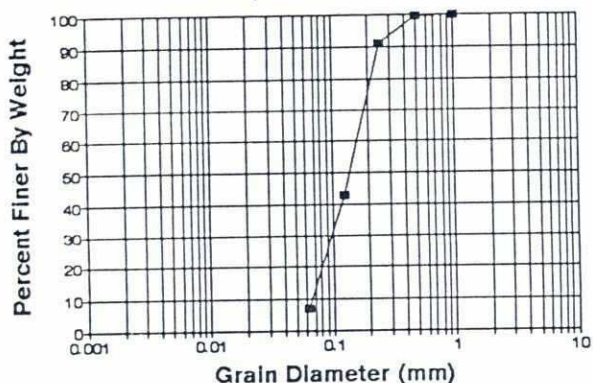
Vertical: 23
Sample No. : A700



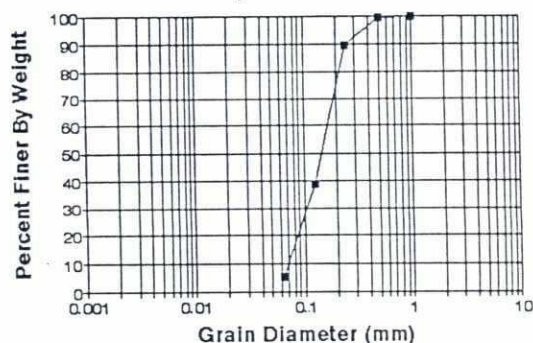
Vertical: 23
Sample No. : A49



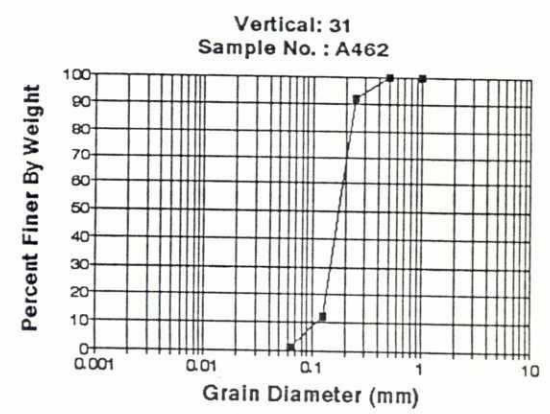
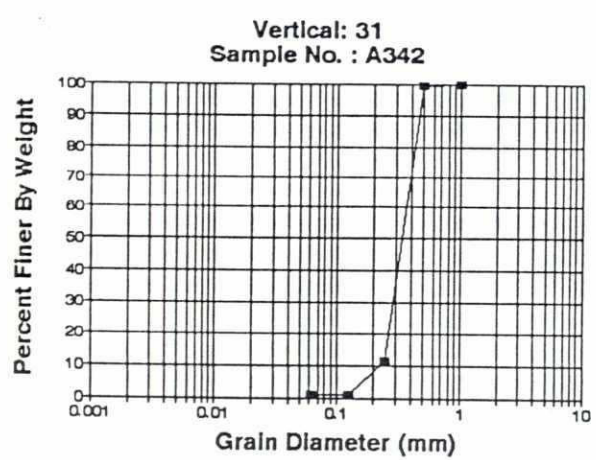
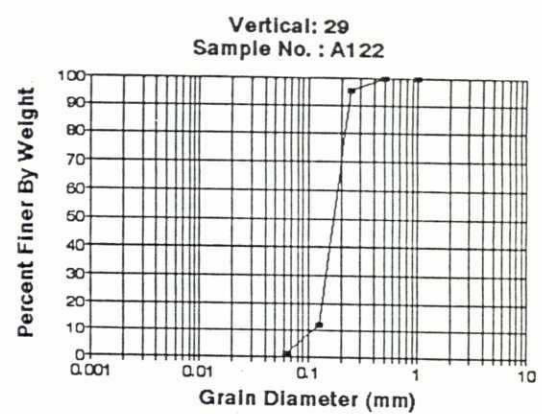
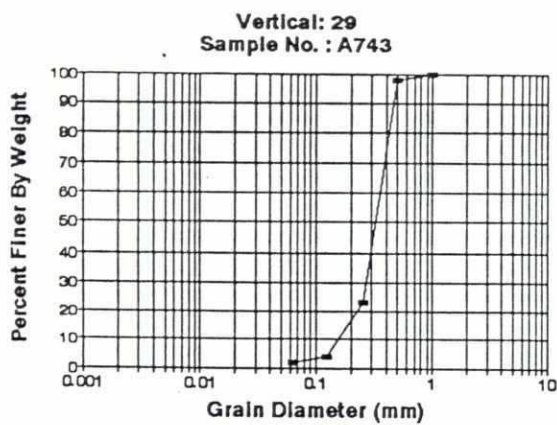
Vertical: 25
Sample No. : A464



Vertical: 25
Sample No. : A86



Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A700	06/10/93	15:15	422.500	0.092654	0.124	0.149	0.179	1.656
A49	06/10/93	15:05	574.500	0.125987	0.126	0.150	0.178	1.644
A464	07/10/93	12:00	269.000	0.058991	0.108	0.138	0.172	1.739
A86	07/10/93	11:49	331.000	0.072588	0.116	0.146	0.178	1.727

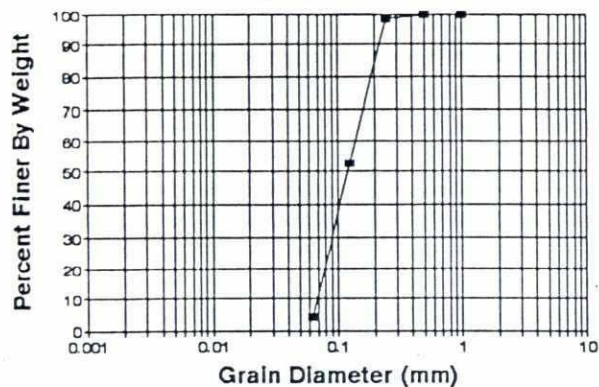


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A743	07/10/93	16:35	19.623	0.004303	0.279	0.321	0.369	1.513
A122	0.00753	16:30	940.000	0.206140	0.151	0.172	0.195	1.329
A342	06/10/93	12:13	2800.000	0.614035	0.301	0.339	0.381	1.304
A462	06/10/93	12:20	2254.000	0.494298	0.152	0.174	0.198	1.344

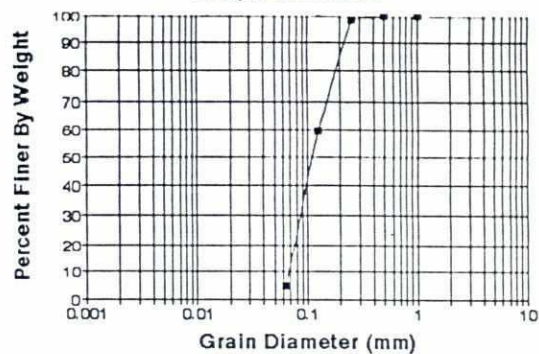


FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities DELFT - DHI		Survey Report 8	
		Annexure 5: Grain size distribution of bed load samples (Helley-Smith trap sampler)	
	18 June 1994	Mawa (positions on Dwg. 1.20)	Drawing 5.85
	CI		

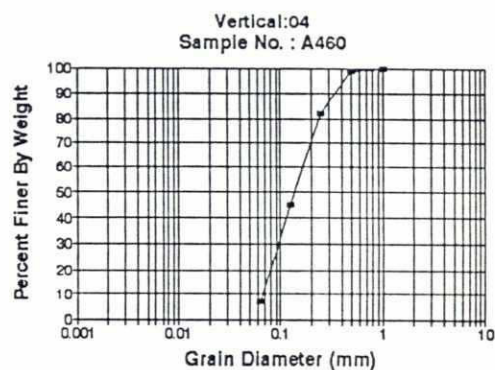
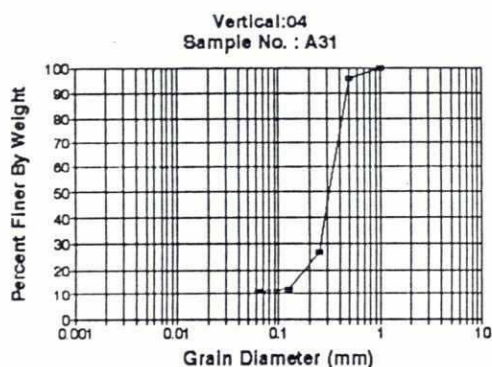
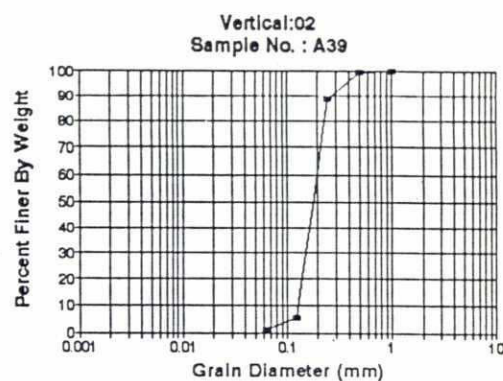
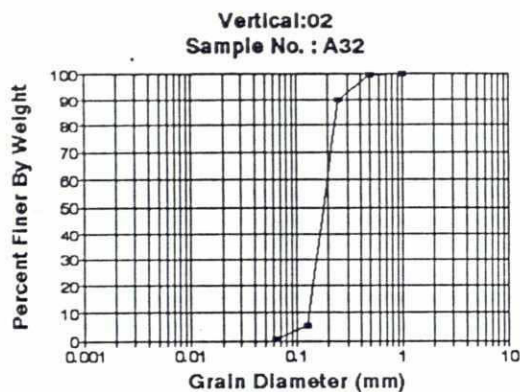
Vertical: 33
Sample No. : A347



Vertical: 33
Sample No. : A351

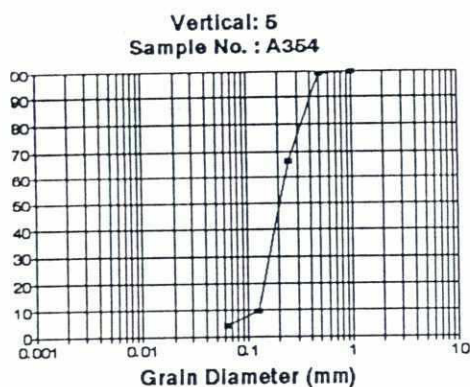
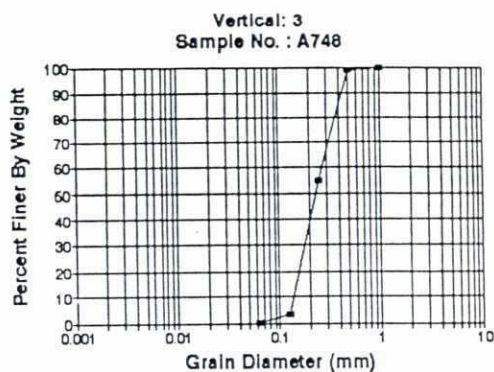
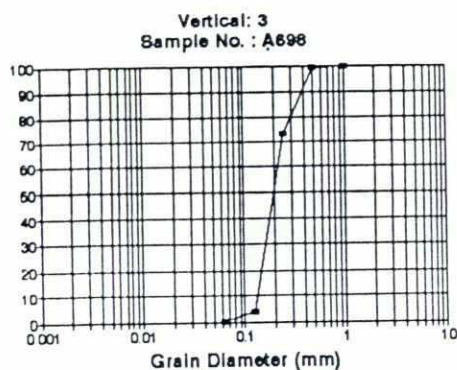


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A347	06/10/93	09:55	1260.000	0.276316	0.098	0.121	0.151	1.637
351	06/10/93	10:05	634.500	0.139145	0.092	0.111	0.138	1.640



Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A32	29/09/93	13:40	1754.500	0.384760	0.159	0.180	0.204	1.323
A39	29/09/93	14:10	1232.500	0.270285	0.160	0.181	0.205	1.328
A31	29/09/93	16:40	9.208	0.002019	0.271	0.315	0.366	1.753
A460	29/09/93	16:50	127.000	0.013925	0.104	0.137	0.182	1.911

580

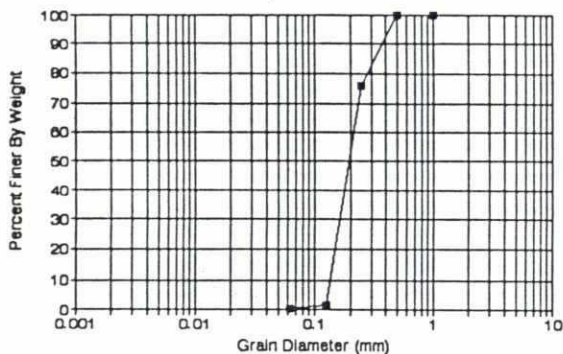


Sample No.	Date	Time	Total Weight(gm)	Transport Rate(kg/M-s)	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A698	08/10/93	13:35	100.00	0.005482	0.171	0.198	0.230	1.541
A748	08/10/93	12:45	18.10	0.000992	0.191	0.233	0.291	1.633
A354	08/10/93	10:55	10.83	0.000594	0.170	0.205	0.246	1.647

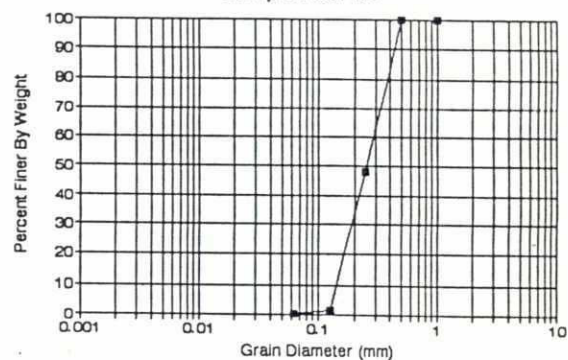
Location	Period	Bulletin no.	Dwg.
1 Bahadurabad	3-9 June 93 9-17 July 93 (23-24 Aug 93) 6-11 Sept 93	6 7 (10) 11	6.1 - 6.8 6.9 - 6.14 6.15 - 6.19
2 Sirajganj	21-30 July 93 (7 Sept 93) 24-27 Oct 93	8 (12) 23	6.20 - 6.24 6.25 - 6.30
(3) (Aricha)	(19 Sept 93)	(13)	
4 Hardinge Bridge	26-28 Sept 93	15	6.31
5 Baruria	3-8 Aug 93 (19 Sept 93) (1 Oct 93) 19-22 Oct 93	9 (14) (17) 22	6.32 - 6.34 6.35 - 6.38
6 Mawa	3-7 Oct 93	18	6.39 - 6.43
8 Tilly	15 Oct 93	21	6.44
9 Gorai	29-30 Sept 93	16	6.45
10 Arial Khan	8 Oct 93	19	6.46
11 Bhairab Bazar	11-12 Oct 93	20	6.47
() : Information in brackets relates to measurements of other types than those described in the present annexure			

Annexure 6:
Grain size distribution
of bed material samples

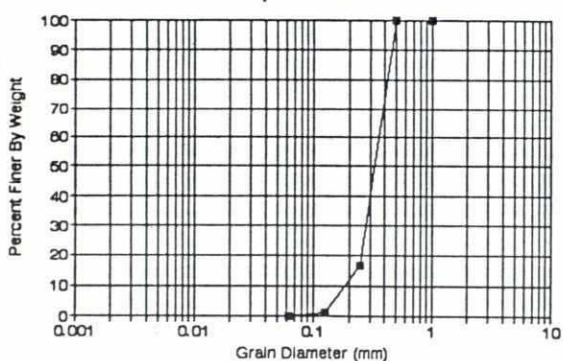
Vertical No: 3
Sample No:09



Vertical No: 6
Sample No:14A



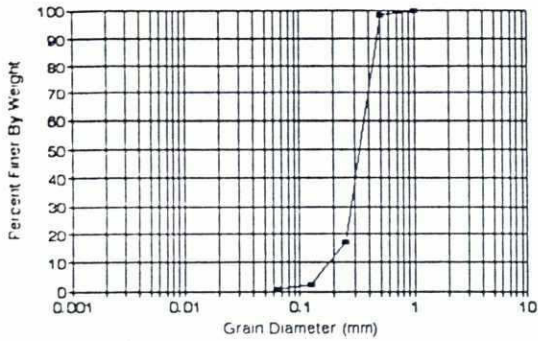
Vertical No: 07
Sample No:A13



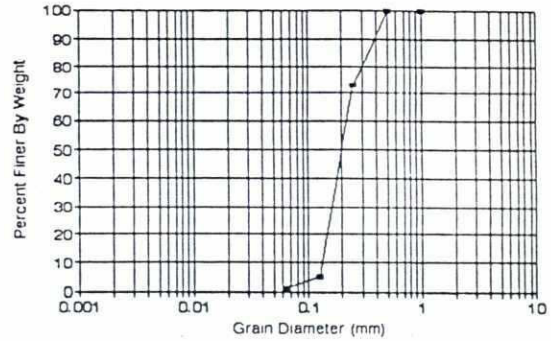
Sample No.	Date	Time	D16 (mm)	D35 (mm)	LD50 (mm)	D90 (mm)	Standard Deviation
9	07/06/93	13:36	0.148	0.171	0.196	0.286	1.486
14A	08/06/93	10:32	0.163	0.206	0.257	0.425	1.615
A13	07/06/93	16:50	0.123	0.291	0.33	0.461	1.345

586

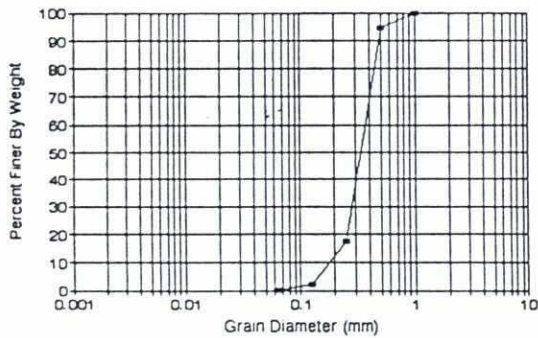
Vertical No: 8
Sample No: A12



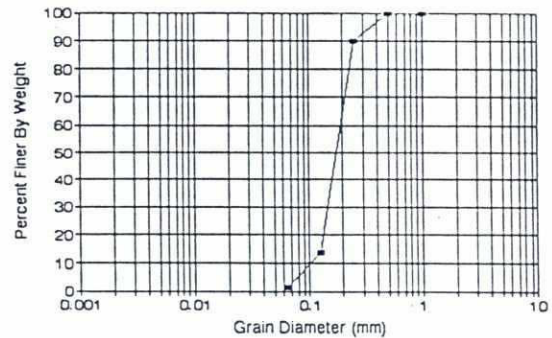
Vertical No: 8
Sample No: 11



Vertical No: 9
Sample No: A11



Vertical No: 10
Sample No: A10



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A12	07/06/93	15:47	0.121	0.292	0.332	0.479	1.362
11	07/06/93	15:40	0.136	0.17	0.198	0.396	1.546
A11	07/06/93	14:00	0.118	0.293	0.335	0.384	1.395
A10	07/06/93	12:15	0.131	0.152	0.174	0.252	1.364

FAP 24



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Annexure 6:
Grain size distribution of bed material samples

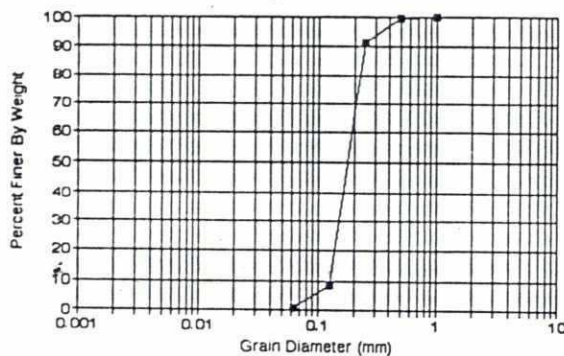
18 June 1994

CI

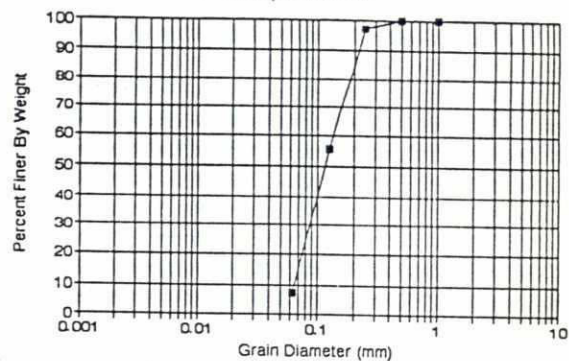
Bahadurabad, channel L-1
(positions on Dwg. 1.2)

Drawing
6.2

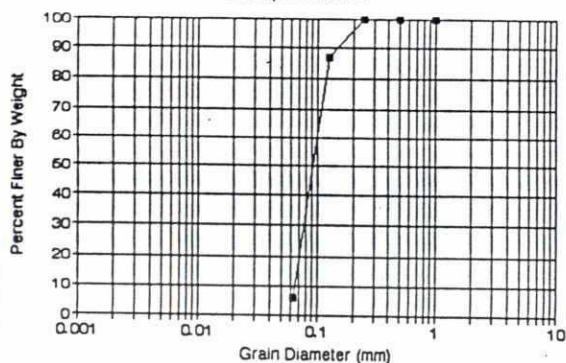
Vertical No: 11
Sample No: A9



Vertical No: 12
Sample No: A8



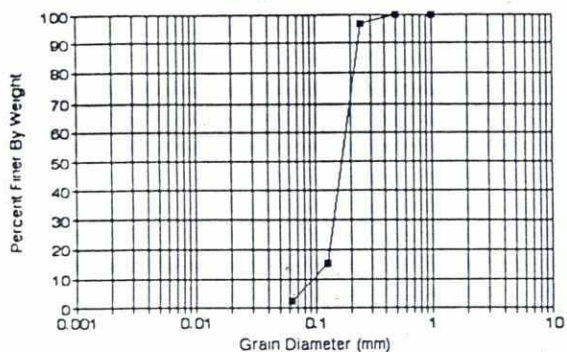
Vertical No: 13
Sample No: A7



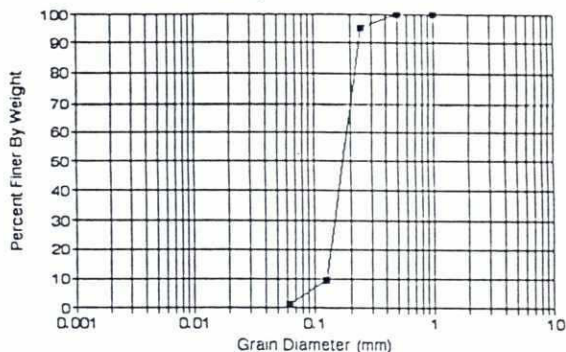
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A9	07/06/93	11:41	0.132	0.156	0.177	0.245	1.329
A8	07/06/93	10:35	0.070	0.093	0.116	0.225	1.679
A7	07/06/93	09:15	0.070	0.081	0.091	0.150	1.330

500

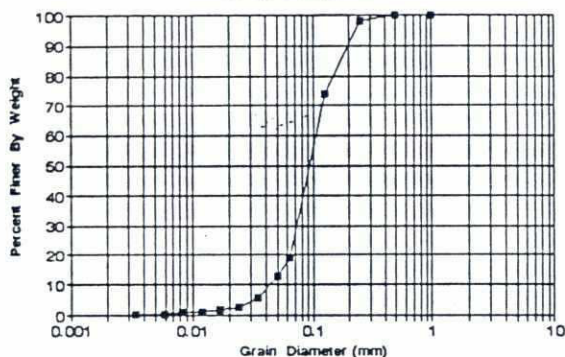
Vertical No: 01
Sample No:15A



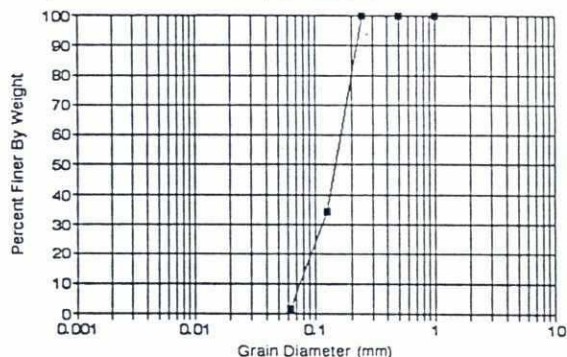
Vertical No: 02
Sample No:16A



Vertical No:03
Sample No:17A



Vertical No: 04
Sample No:18A



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A15	09/06/93	12:35	0.127	0.148	0.168	0.236	1.330
A16	09/06/93	14:00	0.131	0.154	0.174	0.241	1.314
A17	09/06/93	14:50	0.056	0.077	0.093	0.200	1.723
A18	09/06/93	15:45	0.082	0.125	0.147	0.255	1.582



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Annexure 6:
Grain size distribution of bed material samples

18 June 1994

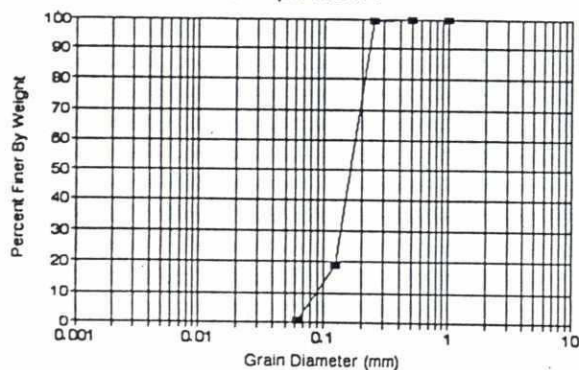
CI

Bahadurabad, channel L-2
(positions on Dwg. 1.2)

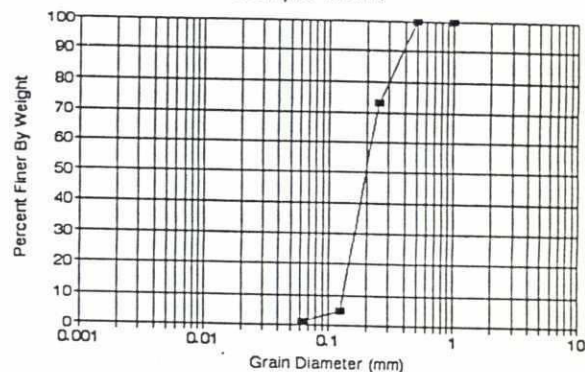
Drawing
6.4

225

Vertical No: 05
Sample No:10



Vertical No: 8
Sample No:11



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
10	09/06/93	11:35	0.116	0.143	0.163	0.225	1.399
11	09/06/93	14:50	0.088	0.131	0.152	0.225	1.558



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Annexure 6:
Grain size distribution of bed material samples

18 June 1994

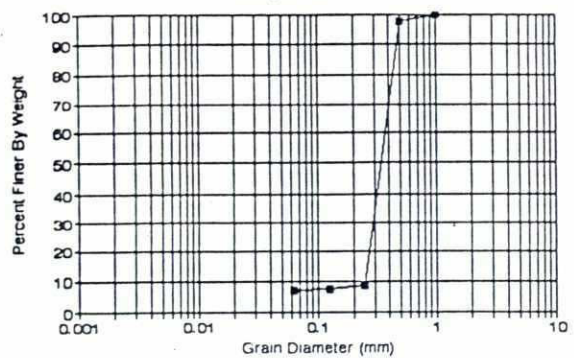
CI

Bahadurabad, channel L-2
(positions on Dwg. 1.2)

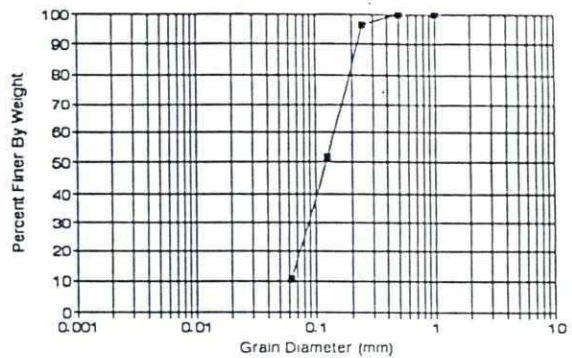
Drawing
6.5

502

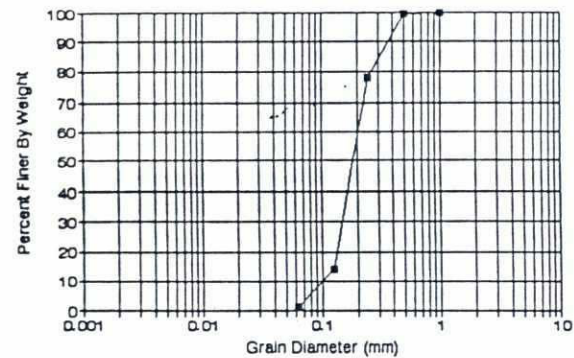
Vertical No: 1
Sample No:1c



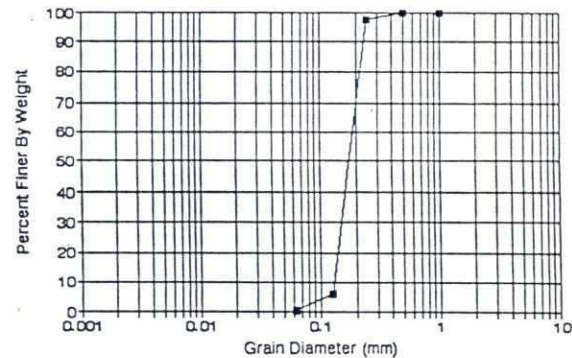
Vertical No: 2
Sample No:3c



Vertical No: 3
Sample No:5A



Vertical No: 4
Sample No:4A



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
1C	04/06/93	15:53	0.200	0.307	0.345	0.481	1.303
3C	05/06/93	16:32	0.070	0.095	0.122	0.228	1.728
A5	06/06/93	11:15	0.136	0.157	0.185	0.381	1.544
A4	07/06/93	10:00	0.141	0.156	0.175	0.229	1.294



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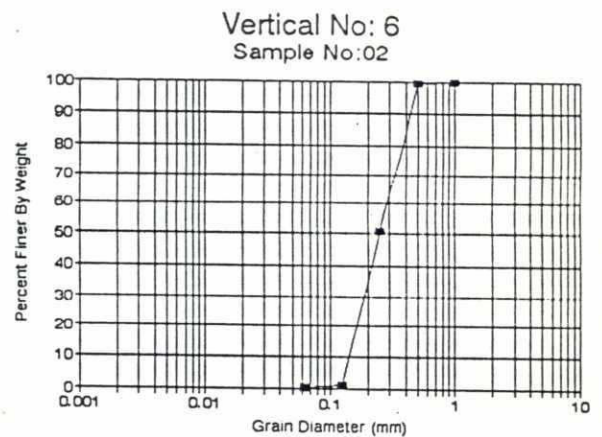
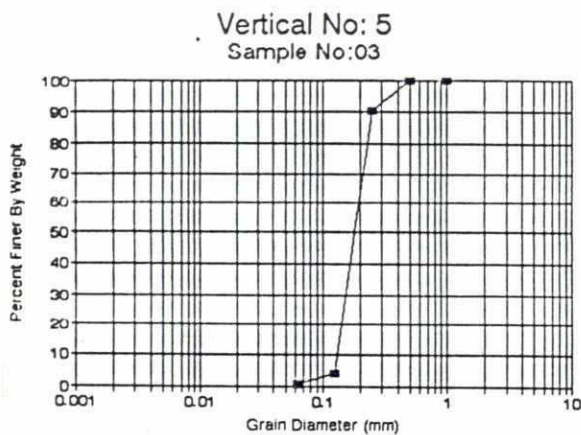
Annexure 6:
Grain size distribution of bed material samples

18 June 1994

CI

Bahadurabad, channel L-3
(positions on Dwg. 1.3)

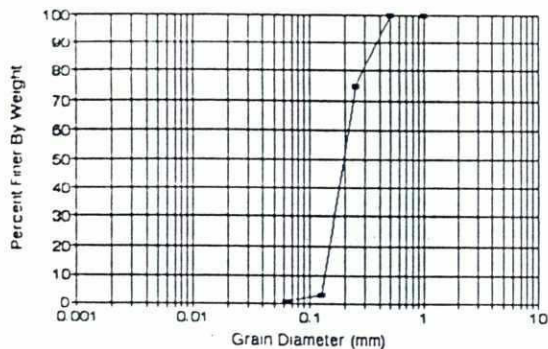
Drawing
6.6



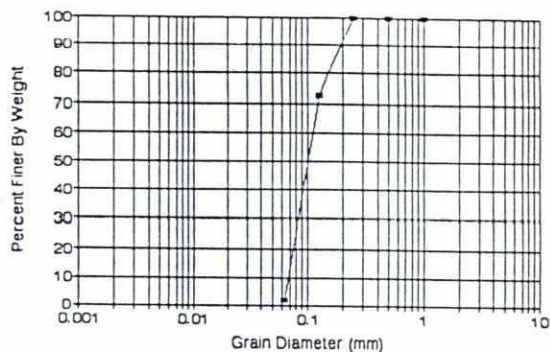
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
3	07/06/93	16:14	0.145	0.160	0.181	0.249	1.310
2	07/06/93	14:05	0.157	0.201	0.247	0.426	1.614

208

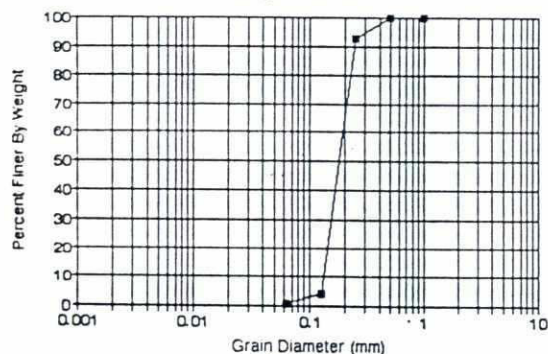
Vertical No: 1
Sample No: 05



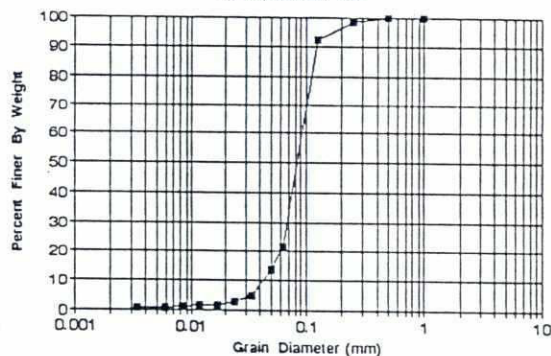
Vertical No: 2
Sample No: 06



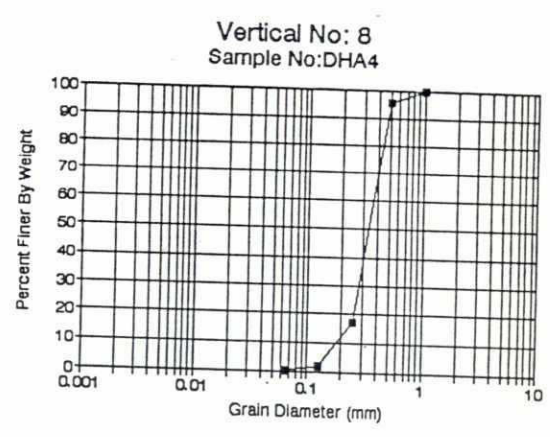
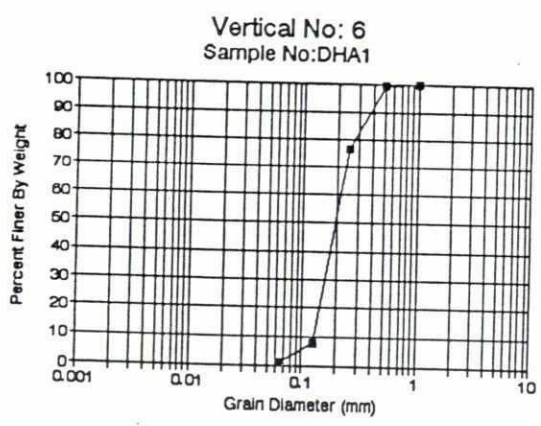
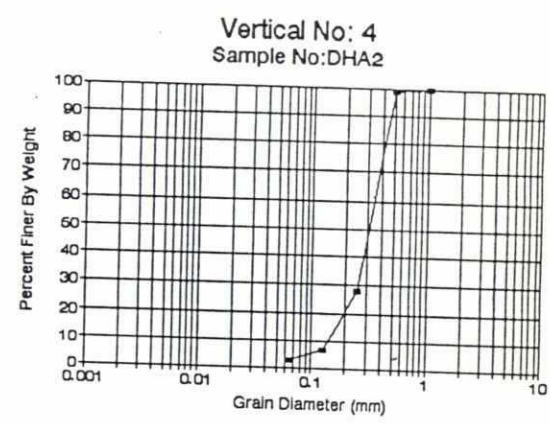
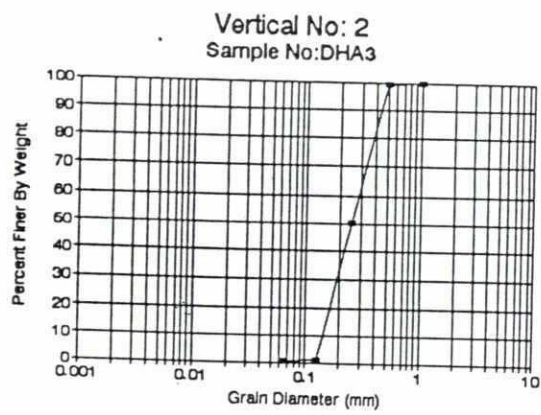
Vertical No: 3
Sample No: 07



Vertical No: 4
Sample No: 08



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
5	06/06/93	09:35	0.147	0.170	0.197	0.389	1.513
6	06/06/93	10:26	0.074	0.087	0.100	0.200	1.524
7	06/06/93	12:08	0.145	0.159	0.179	0.235	1.307
8	06/06/93	12:55	0.054	0.072	0.083	0.136	1.461

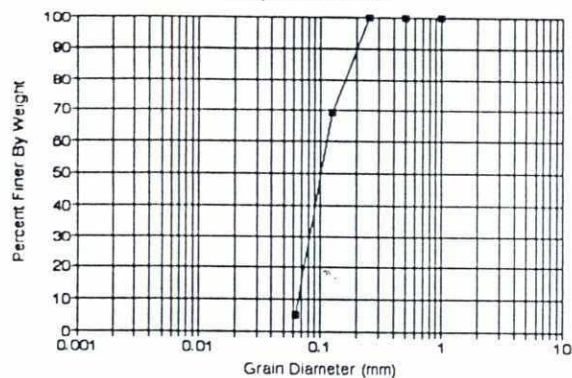


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-3	13/07/93	14:50	0.150	0.201	0.248	0.450	1.616
DHA-2	13/07/93	13:00	0.160	0.268	0.310	0.450	1.614
DHA-1	13/07/93	10:18	0.150	0.164	0.191	0.400	1.516
DHA-4	12/07/93	17:00	0.250	0.293	0.334	0.490	1.389

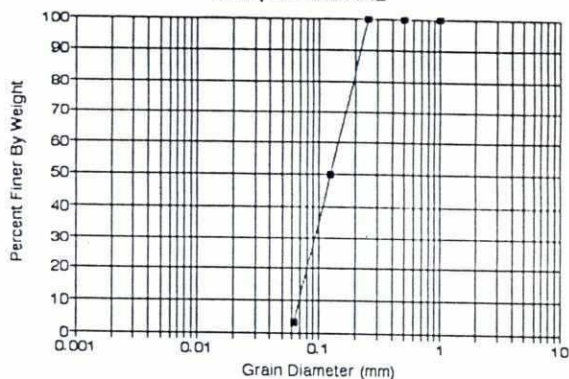
FAP 24 DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey report 8	
				Annexure 6: Grain size distribution of bed material samples	
	18 June 1994	Bahadurabad, left channel (positions on Dwg. 1.5)			Drawing 6.9
	CI				

500

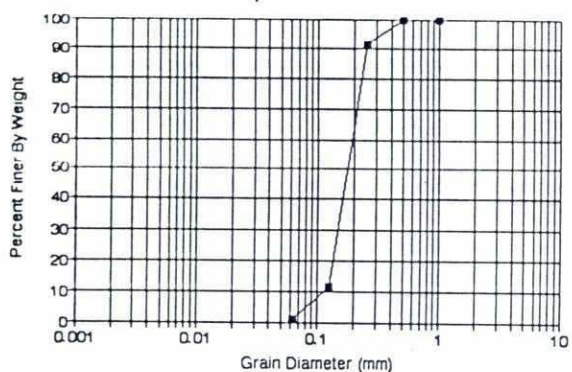
Vertical No: 10
Sample No:DHA3



Vertical No: 12
Sample No:DHA2

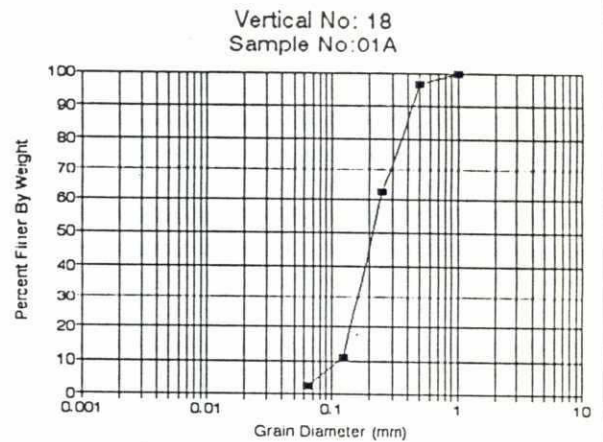
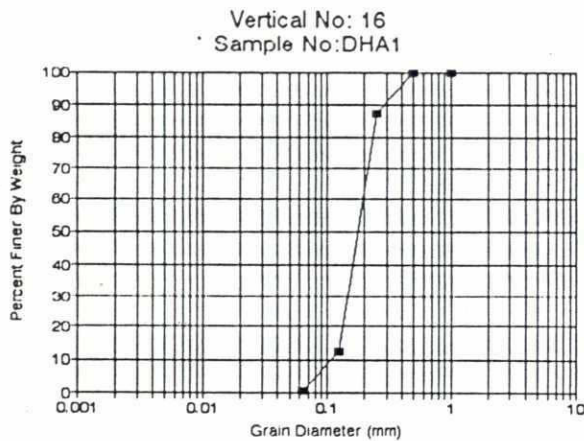


Vertical No: 14
Sample No:DHA1



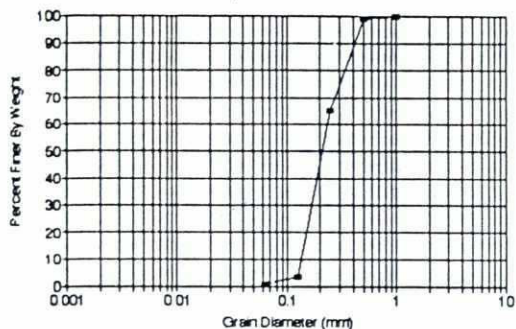
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-3	12/07/93	13:55	0.070	0.087	0.102	0.200	1.576
DHA-2	12/07/93	11:00	0.075	0.100	0.125	0.210	1.630
DHA-1	12/07/93	09:05	0.135	0.153	0.174	0.250	1.342

Scanned

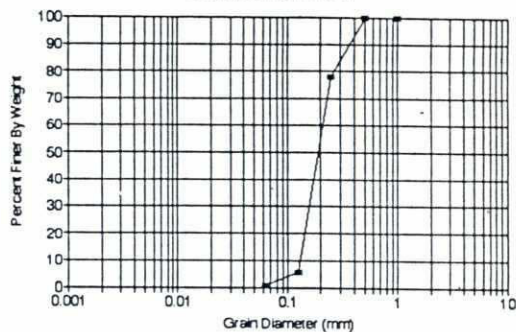


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	11/07/93	16:25	0.140	0.154	0.177	0.300	1.370
01A	10/07/93	15:45	0.150	0.173	0.212	0.450	1.706

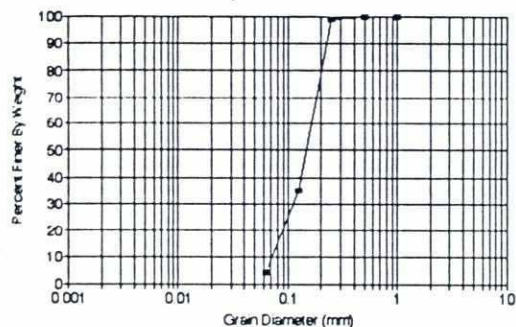
Vertical No. : 2
Sample No:DHA2



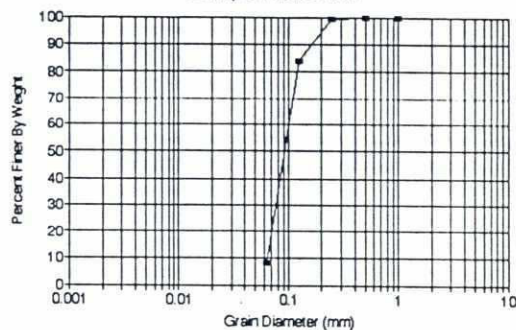
Vertical No: 4
Sample No:DHA1



Vertical No: 6
Sample No:DHA5

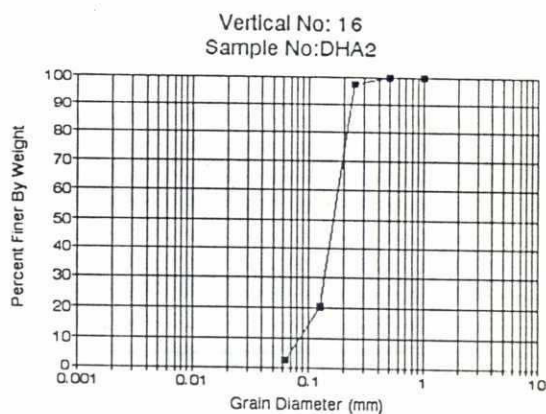
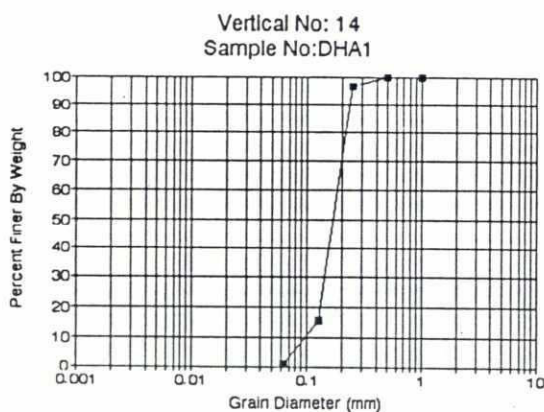
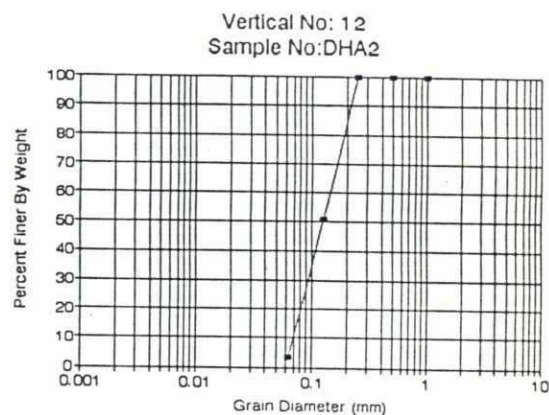
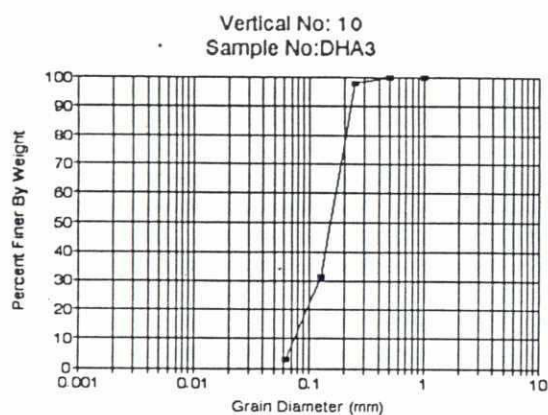


Vertical No: 8
Sample No:DHA4



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA2	17/07/93	11:15	0.158	0.178	0.211	0.403	1.602
DHA1	17/07/93	09:30	0.151	0.165	0.191	0.374	1.480
DHA5	16/07/93	17:08	0.080	0.125	0.147	0.228	1.617
DHA4	16/07/93	15:00	0.069	0.080	0.092	0.176	1.361

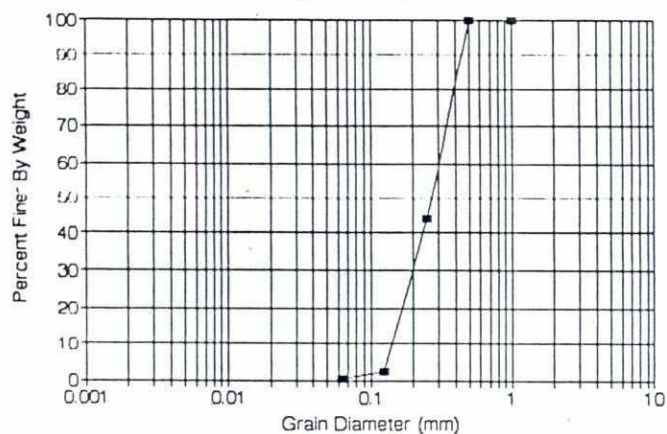
806



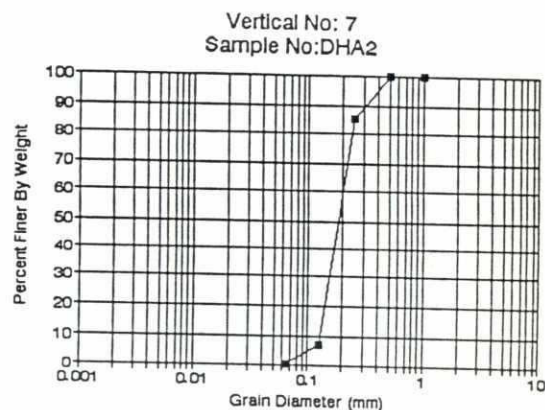
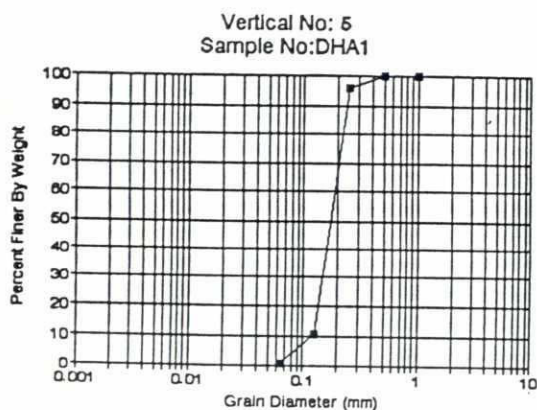
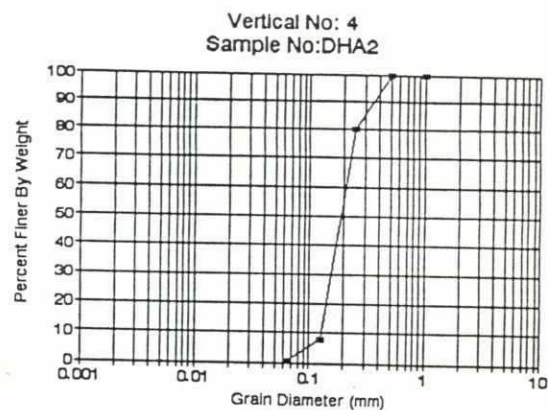
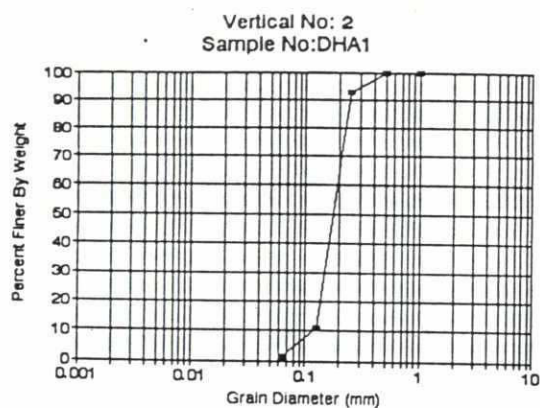
Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-3	16/07/93	12:45	0.082	0.130	0.152	0.232	1.594
DHA-2	16/07/93	11:00	0.075	0.100	0.124	0.215	1.622
DHA-1	16/07/93	09:00	0.130	0.148	0.168	0.242	1.339
DHA-2	15/07/93	15:25	0.100	0.142	0.163	0.235	1.454

2507

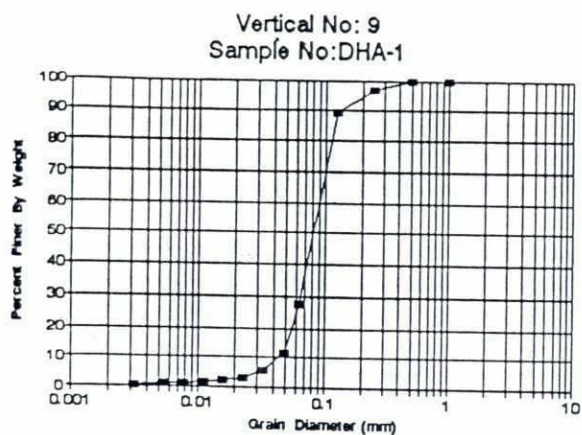
Vertical No: 18
Sample No: DHA1



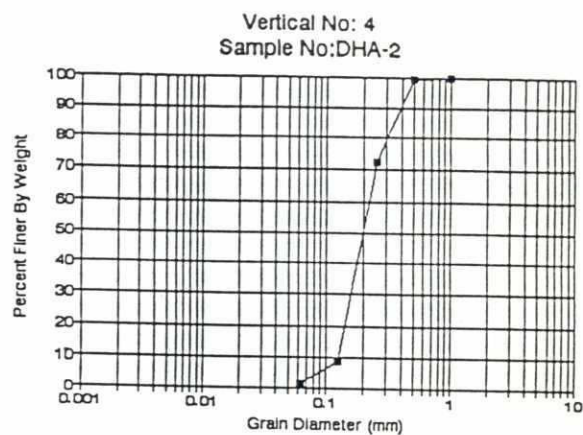
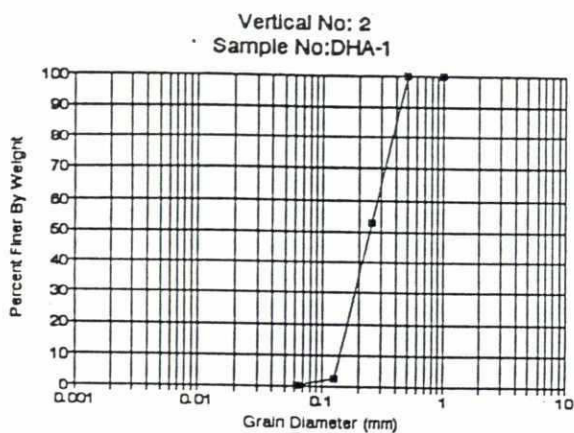
Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	15/07/93	13:15	0.164	0.215	0.27	0.418	1.621



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	07/09/93	12:50	0.131	0.153	0.174	0.241	1.333
DHA-2	07/09/93	16:47	0.134	0.162	0.187	0.361	1.460
DHA-1	08/09/93	10:50	0.132	0.152	0.172	0.237	1.321
DHA-2	06/09/93	17:20	0.141	0.160	0.183	0.311	1.353



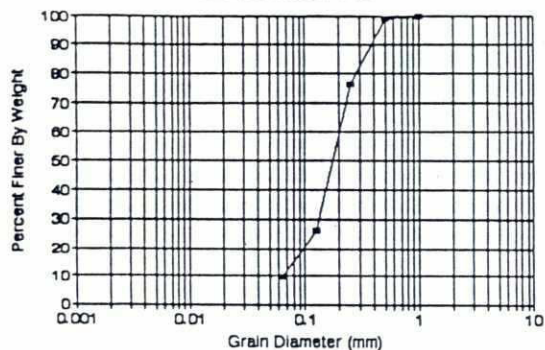
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	06/09/93	15:10	0.052	0.068	0.081	0.129	1.507



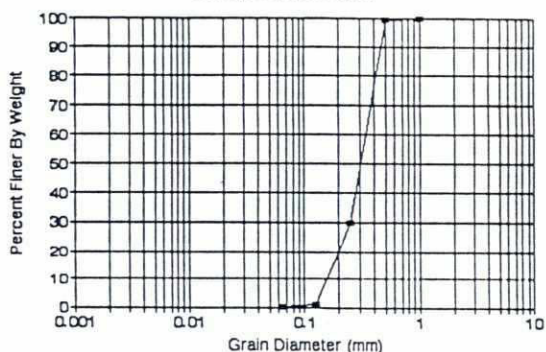
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	11/09/93	11:50	0.150	0.195	0.240	0.432	1.625
DHA-2	11/09/93	13:48	0.135	0.166	0.196	0.391	1.583

500

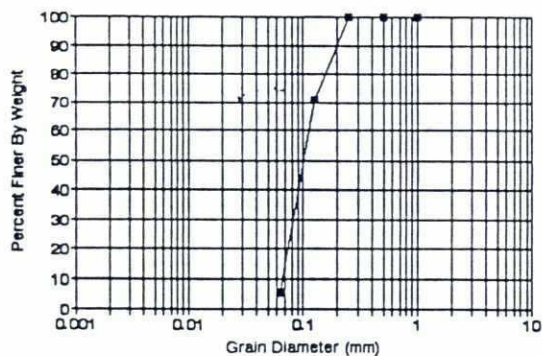
Vertical No: 1
Sample No: DHA-1



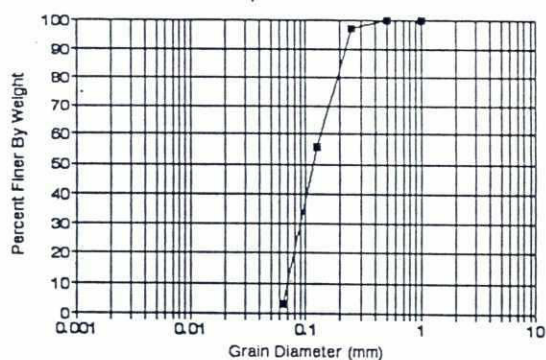
Vertical No: 3
Sample No: DHA-1



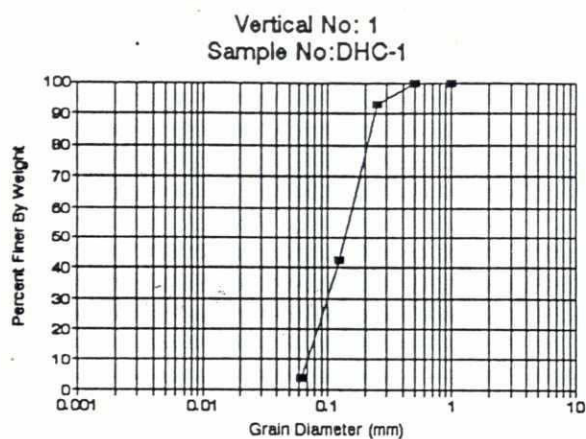
Vertical No: 9
Sample No: P-9



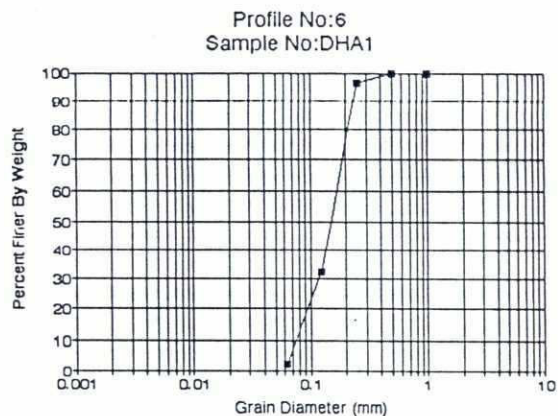
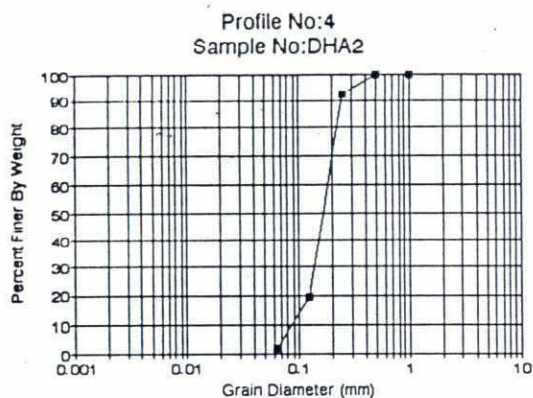
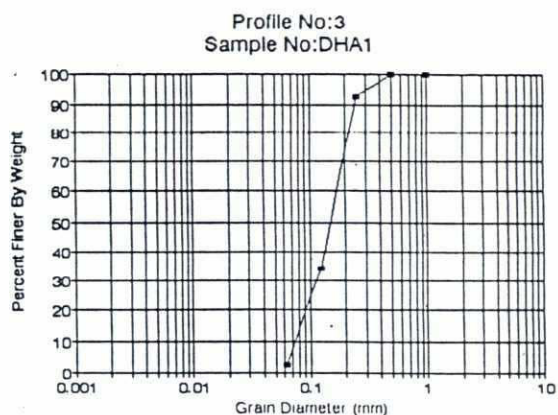
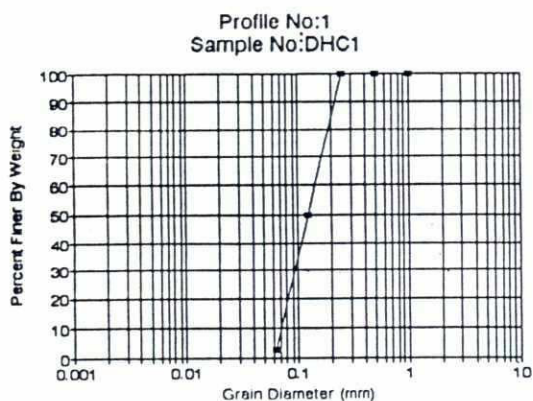
Vertical No: 11
Sample No: P-11



sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	09/09/93	13:45	0.082	0.141	0.174	0.380	1.969
DHA-1	10/09/93	12:10	0.179	0.263	0.306	0.455	1.556
P-9	10/09/93	17:30	0.070	0.086	0.100	0.197	1.569
P-11	10/09/93	16:15	0.074	0.096	0.116	0.219	1.650

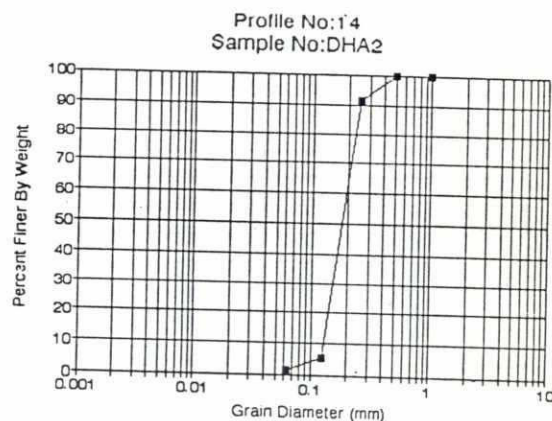
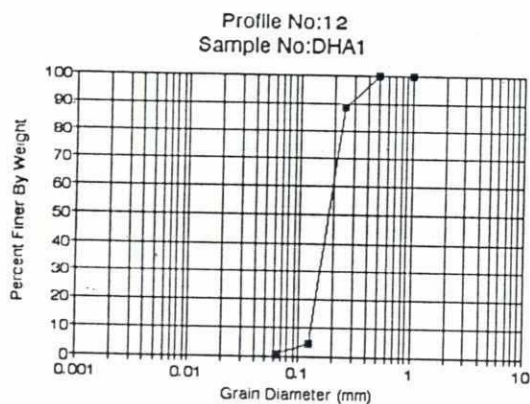
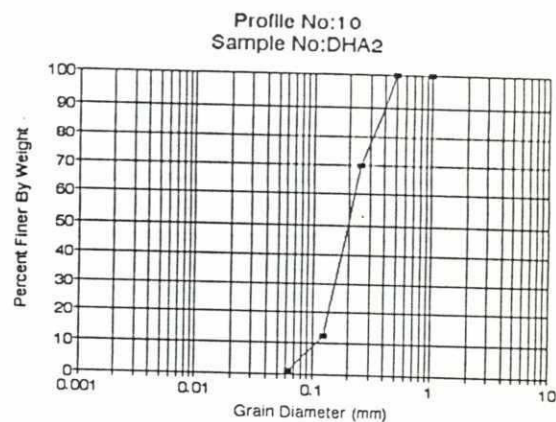
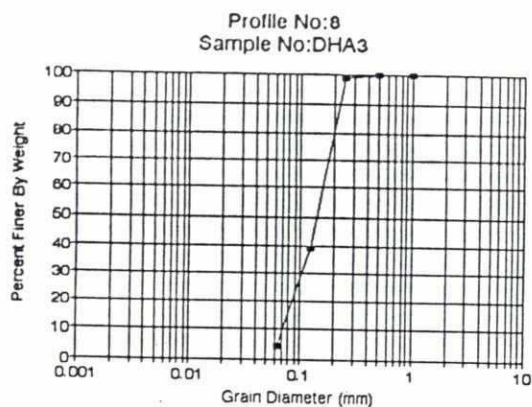


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-1	11/09/93	09:50	0.078	0.110	0.139	0.240	1.686



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC1	28/07/93	11:30	0.076	0.101	0.125	0.218	1.626
DHA1	28/07/93	10:15	0.083	0.126	0.151	0.242	1.647
DHA2	27/07/93	15:55	0.103	0.145	0.167	0.243	1.451
DHA1	27/07/93	11:08	0.084	0.129	0.151	0.230	1.600

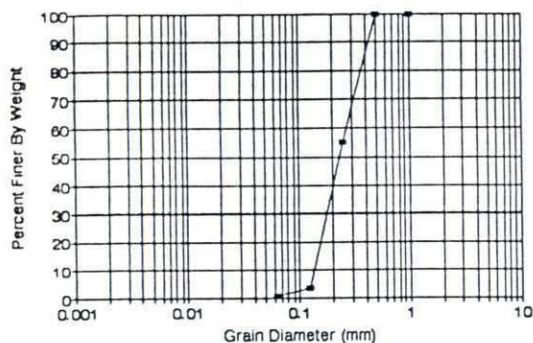
544



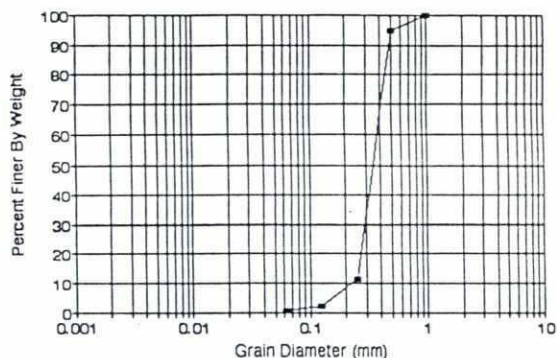
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA3	26/07/93	16:20	0.080	0.115	0.142	0.224	1.638
DHA2	26/07/93	11:51	0.132	0.164	0.196	0.400	1.634
DHA1	26/07/93	09:15	0.147	0.161	0.182	0.258	1.324
DHA2	24/07/93	14:01	0.143	0.159	0.179	0.243	1.315

849

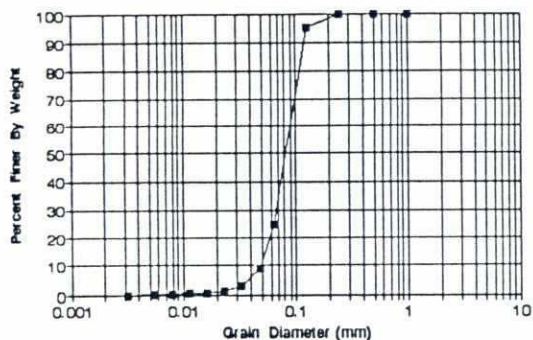
Profile No:16
Sample No:DHA1



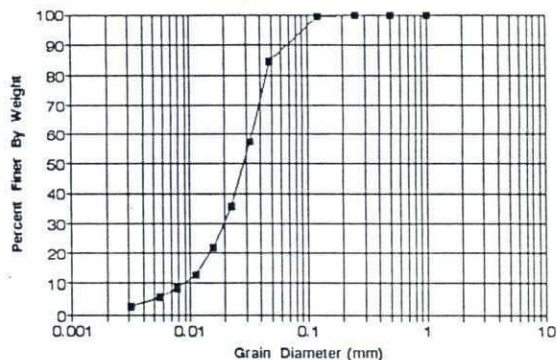
Profile No:18
Sample No:DHA2



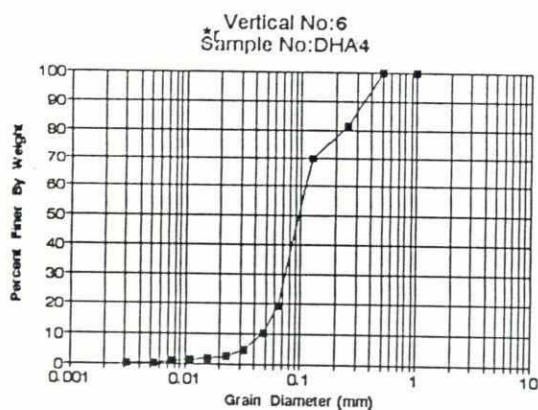
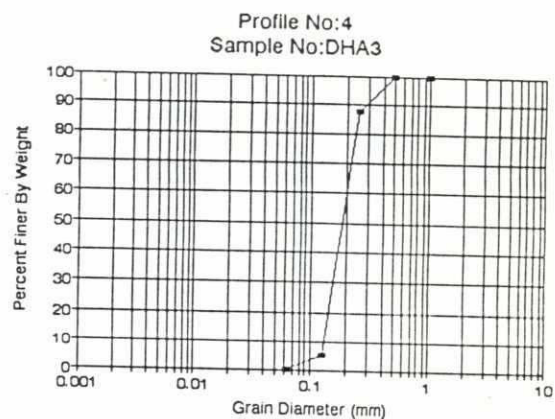
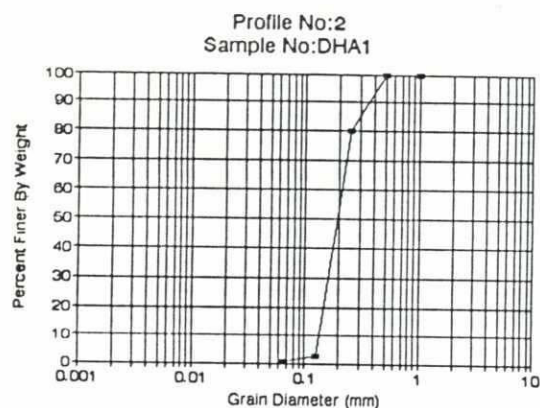
Vertical No:20
Sample No:DHA1



Profile No :22
Sample No:DHC1



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA1	24/07/93	09:55	0.163	0.191	0.233	0.412	1.626
DHA2	29/07/93	11:15	0.273	0.304	0.344	0.492	1.328
DHA1	29/07/93	09:48	0.055	0.070	0.080	0.130	1.477
DHC1	29/07/93	10:15	0.014	0.024	0.029	0.065	1.846

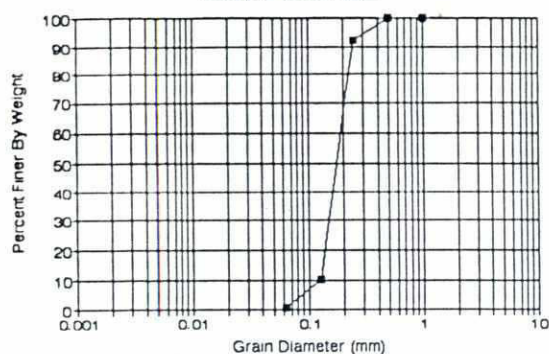


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA1	30/07/93	09:50	0.148	0.167	0.191	0.367	1.432
DHA3	29/07/93	15:40	0.137	0.160	0.182	0.282	1.329
DHA4	29/07/93	18:05	0.055	0.080	0.095	0.350	2.443

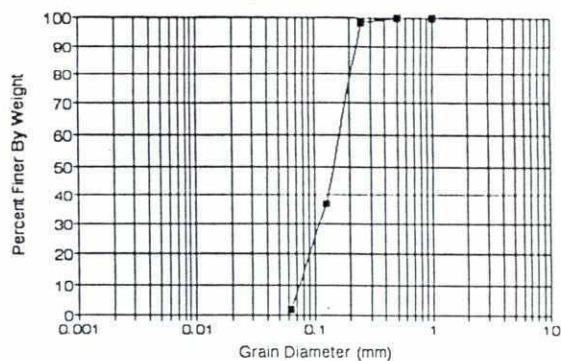
	18 June 1994	Sirajganj, right channel (positions on Dwg. 1.10)	Drawing 6.23
	CI		

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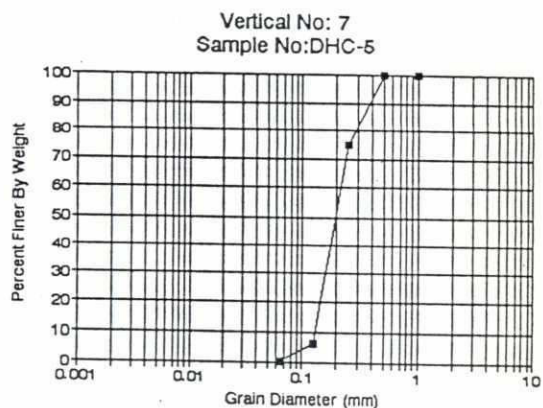
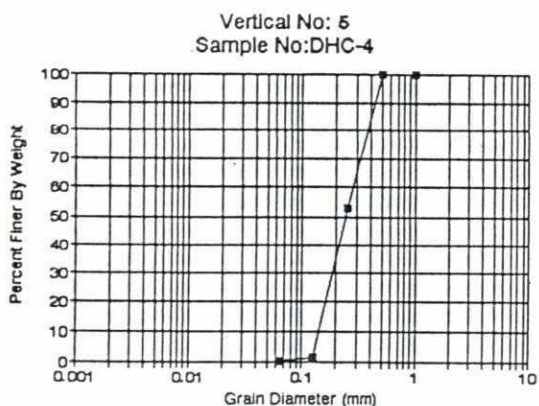
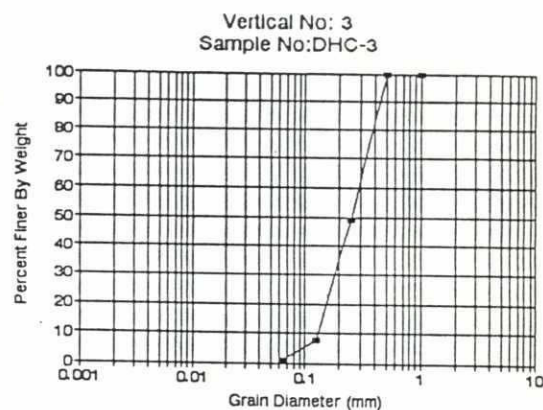
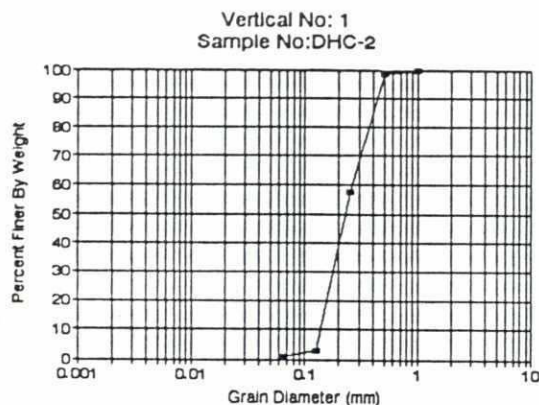
Profile No:9
Sample No:DHC2



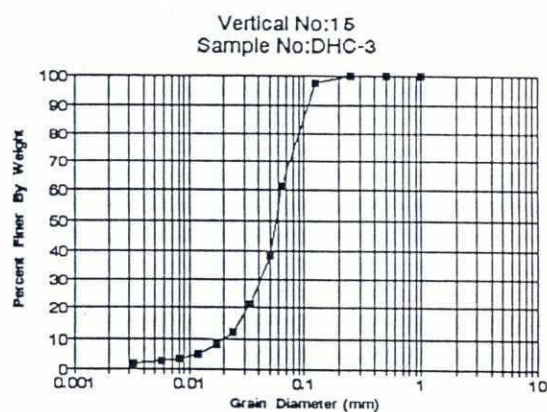
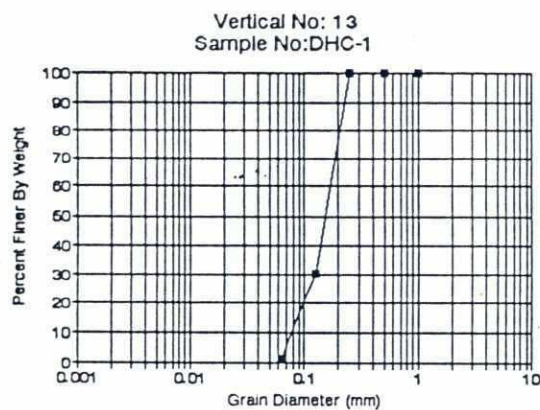
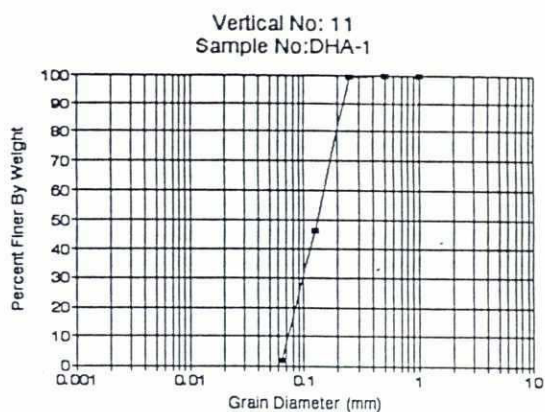
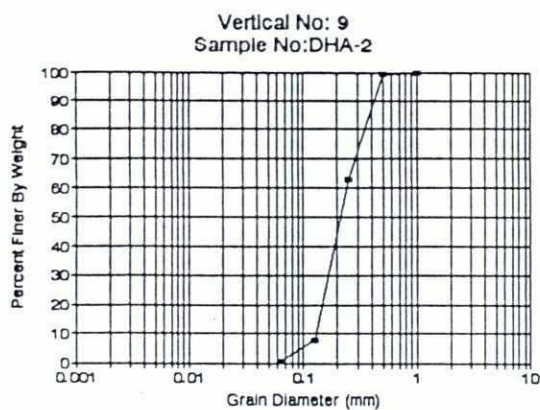
Profile No:13
Sample No:DHC1



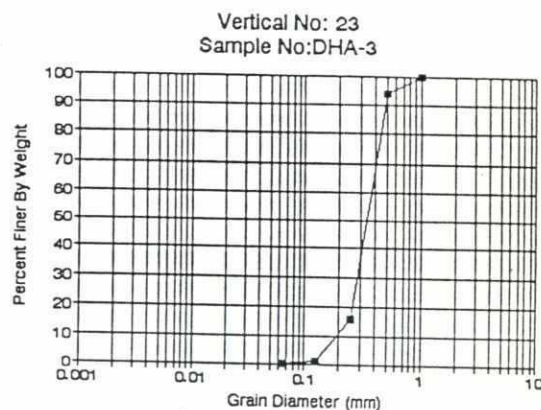
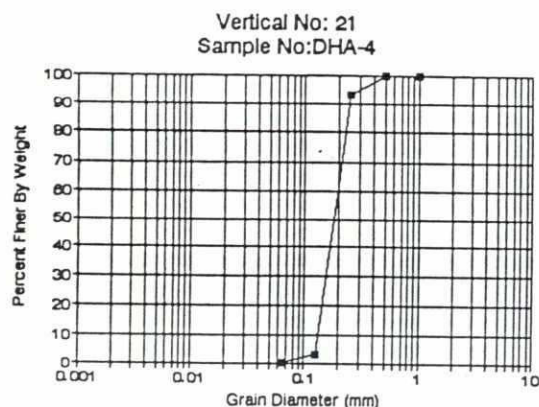
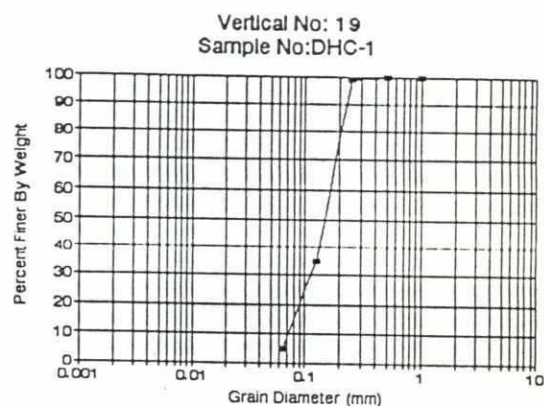
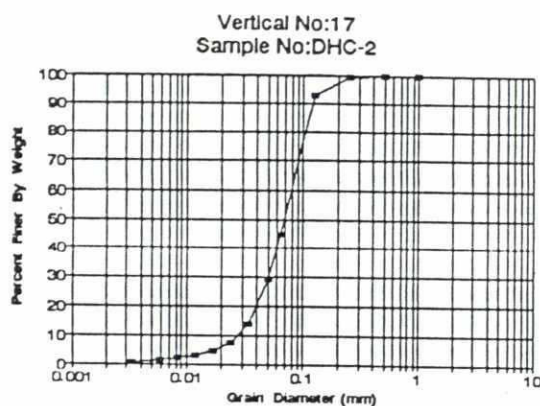
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC2	30/07/93	12:05	0.138	0.154	0.175	0.243	1.334
DHC1	30/07/93	09:00	0.083	0.120	0.145	0.231	1.605



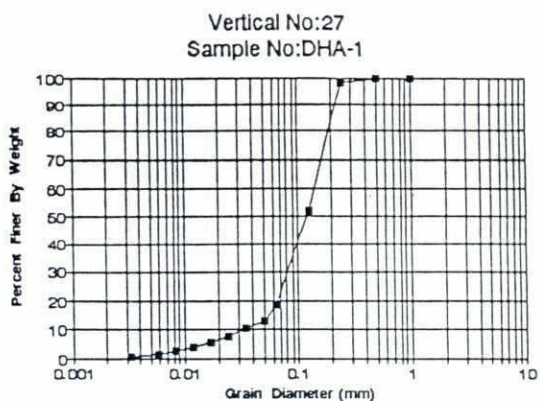
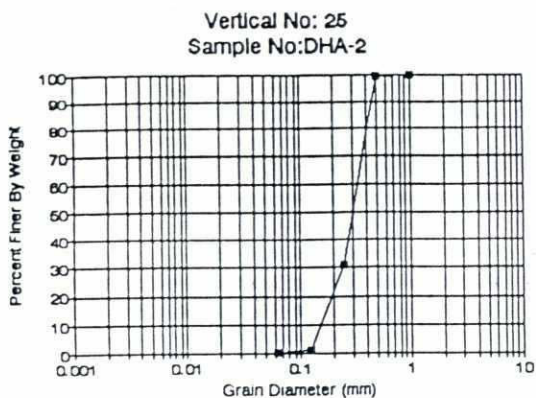
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-2	26/10/93	10:15	0.148	0.188	0.227	0.433	1.628
DHC-3	26/10/93	11:57	0.144	0.198	0.253	0.438	1.677
DHC-4	26/10/93	13:37	0.152	0.196	0.241	0.432	1.614
DHC-5	26/10/93	15:18	0.137	0.167	0.194	0.379	1.535



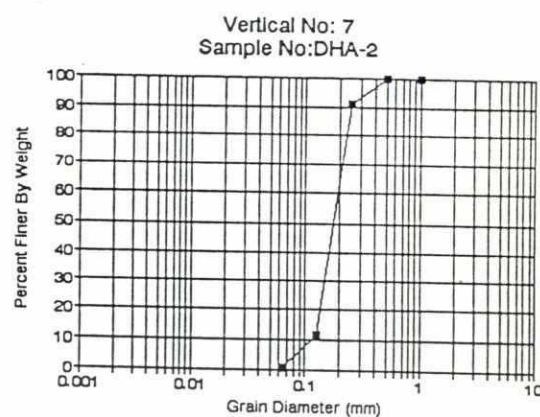
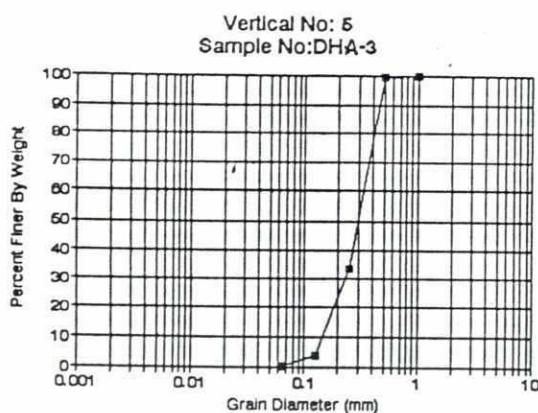
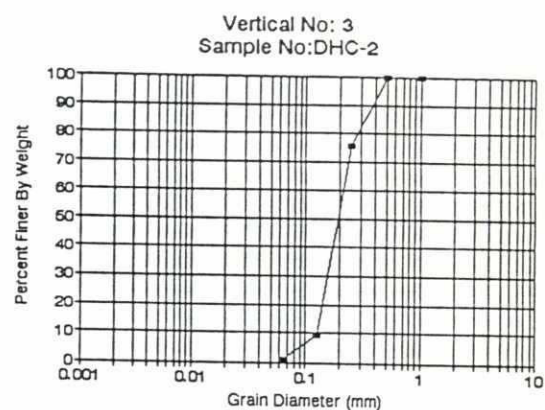
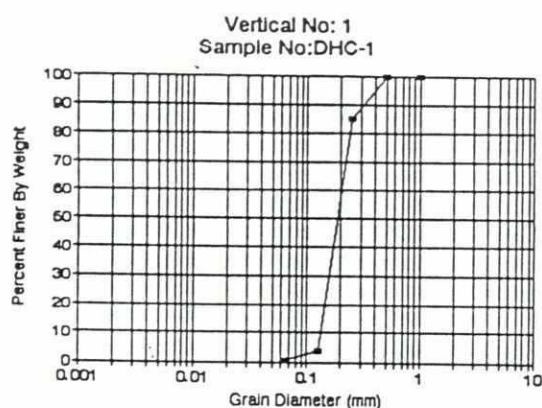
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-2	26/10/93	14:43	0.139	0.176	0.213	0.418	1.642
DHA-1	26/10/93	12:12	0.079	0.105	0.131	0.221	1.608
DHC-1	26/10/93	08:26	0.089	0.131	0.152	0.227	1.555
DHC-3	25/10/93	16:12	0.028	0.047	0.056	0.108	1.866



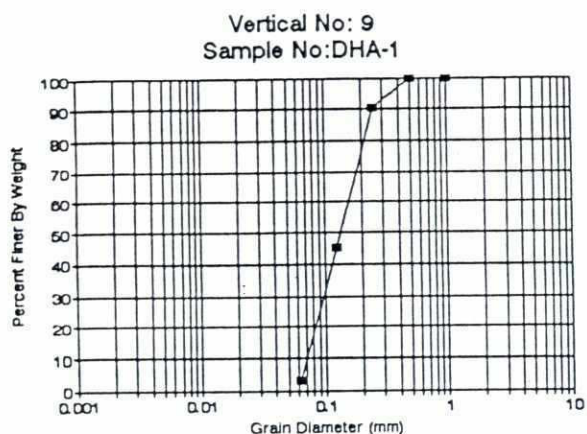
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-2	25/10/93	14:41	0.036	0.055	0.068	0.120	1.753
DHC-1	25/10/93	12:24	0.081	0.125	0.147	0.227	1.632
DHA-4	25/10/93	14:34	0.138	0.160	0.179	0.245	1.299
DHA-3	25/10/93	12:43	0.248	0.296	0.338	0.482	1.357



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-2	25/10/93	11:16	0.177	0.260	0.303	0.455	1.562
DHA-1	25/10/93	09:11	0.056	0.088	0.120	0.221	1.913

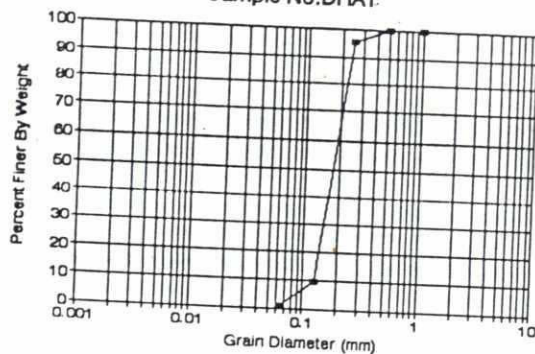


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-1	27/10/93	09:35	0.138	0.163	0.185	0.312	1.338
DHC-2	27/10/93	11:10	0.134	0.164	0.191	0.376	1.543
DHA-3	27/10/93	15:45	0.165	0.253	0.296	0.296	1.613
DHA-2	27/10/93	13:39	0.13	0.153	0.175	0.175	1.345

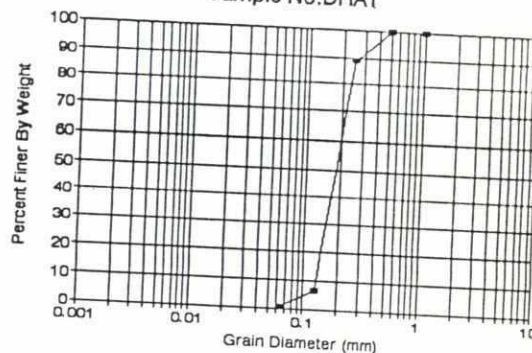


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	27/10/93	11:07	0.078	0.106	0.135	0.248	1.702

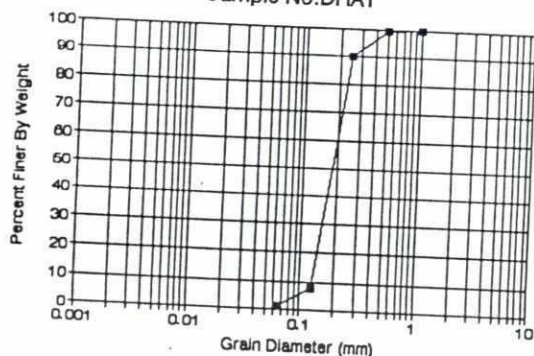
Vertical No: 1
Sample No: DHA1.



Vertical No: 9
Sample No: DHA1

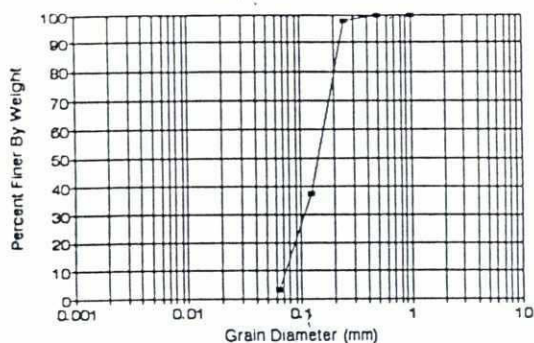


Vertical No: 11
Sample No: DHA1

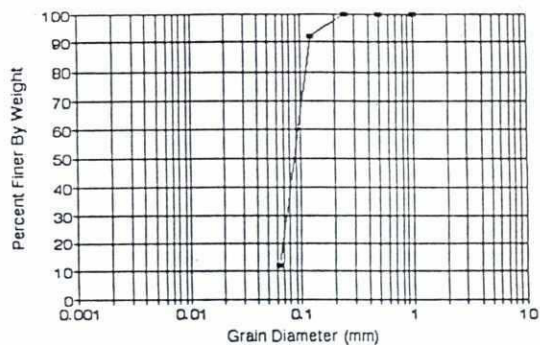


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	26/09/93	16:20	0.132	0.154	0.173	0.243	1.314
DHA-1	27/09/93	15:37	0.136	0.159	0.180	0.253	1.333
DHA-1	28/09/93	10:00	0.134	0.157	0.179	0.251	1.333

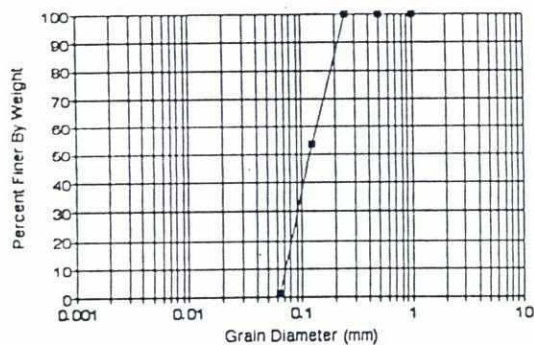
Vertical No: 1
Sample No: DHC1



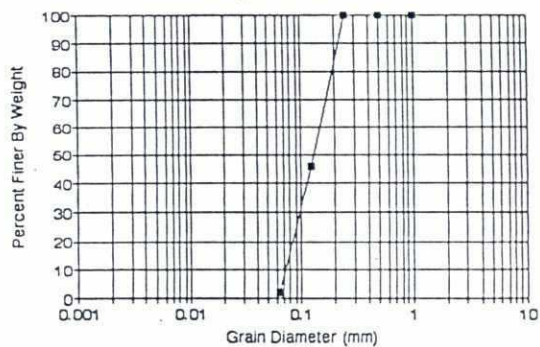
Vertical No: 6
Sample No: DHA1



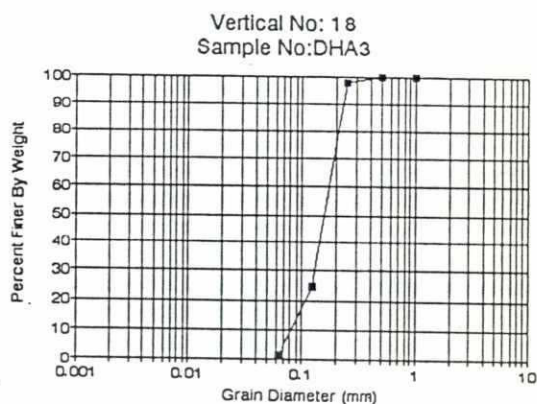
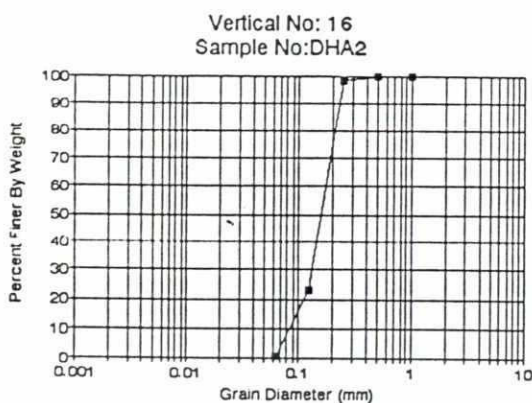
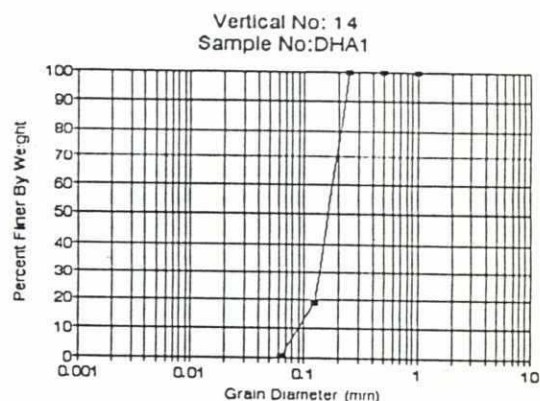
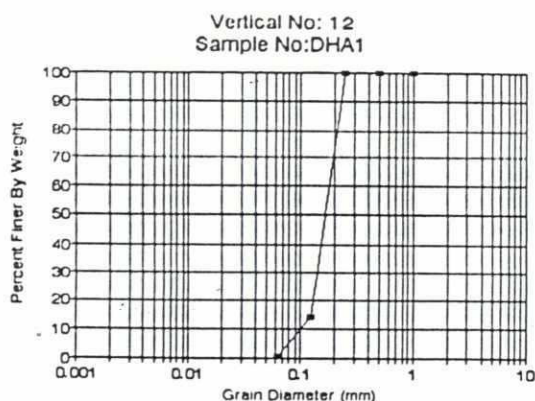
Vertical No: 8
Sample No: DHA2



Vertical No: 10
Sample No: DHA3



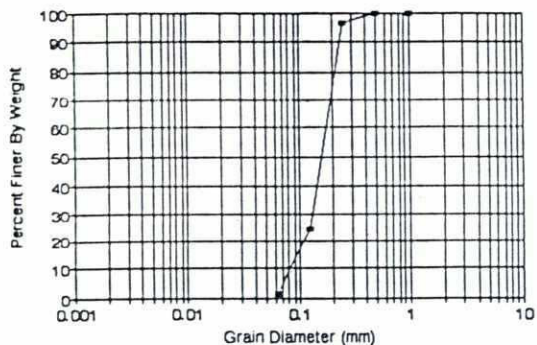
Sample No.	Date	Time	D15 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-1	03/08/93	13:28	0.080	0.118	0.144	0.228	1.628
DHA-1	05/08/93	09:48	0.068	0.077	0.087	0.137	1.342
DHA-2	05/08/93	12:05	0.078	0.098	0.119	0.216	1.611
DHA-3	05/08/93	16:00	0.080	0.106	0.132	0.220	1.608



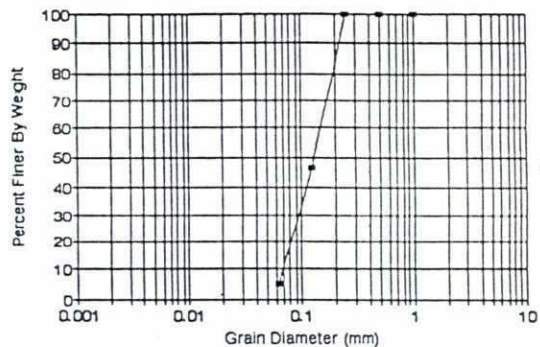
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	06/08/93	10:34	0.134	0.148	0.167	0.229	1.316
DHA-1	07/08/93	09:49	0.125	0.144	0.163	0.233	1.396
DHA-2	07/08/93	13:03	0.100	0.139	0.160	0.236	1.484
DHA-3	07/08/93	16:09	0.096	0.138	0.159	0.238	1.517

892

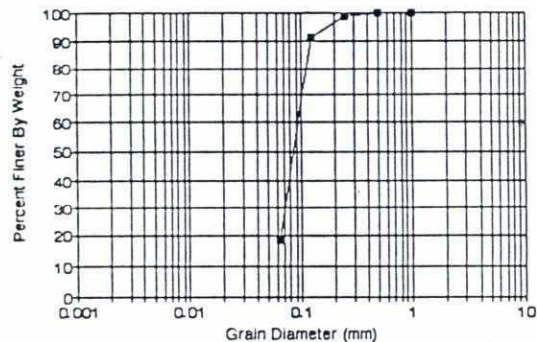
Vertical No: 22
Sample No: DHA2



Vertical No: 24
Sample No: DHA1



Vertical No: 28
Sample No: DHA1



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-2	04/08/93	14:40	0.097	0.138	0.160	0.241	1.518
DHA-1	04/08/93	10:37	0.076	0.103	0.131	0.226	1.648
DHA-1	03/08/93	12:45	0.059	0.074	0.085	0.121	



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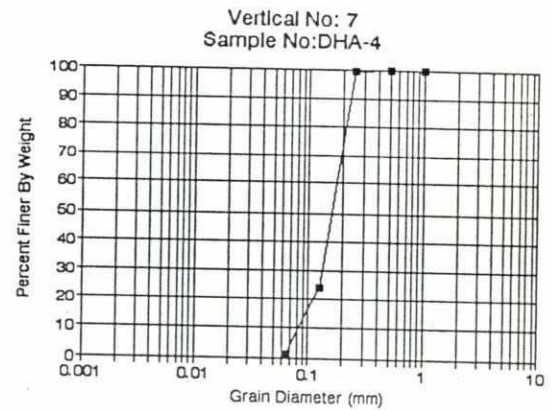
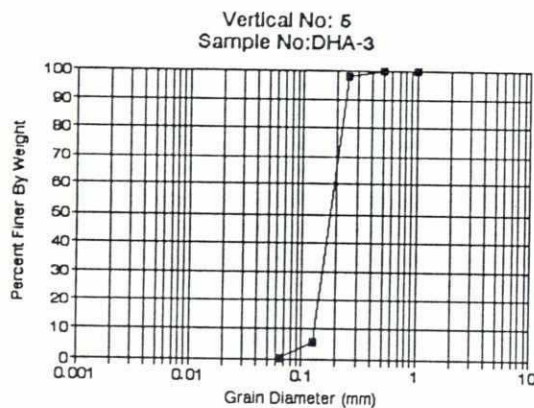
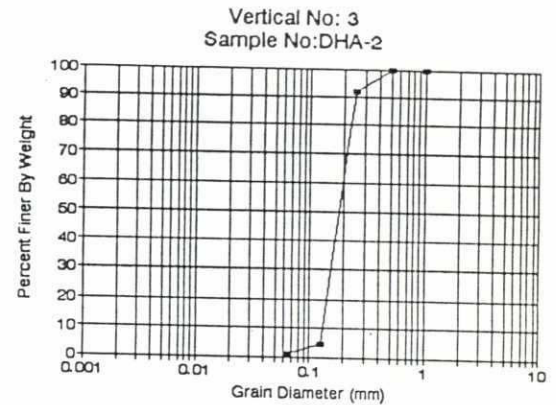
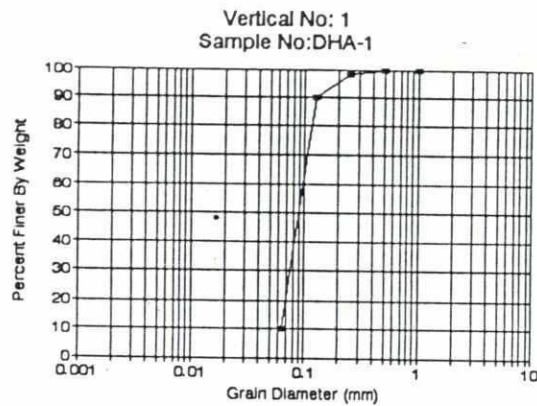
Annexure 6:
Grain size distribution of bed material samples

18 June 1994

CI

Baruria
(positions on Dwg. 1.16)

Drawing
6.34

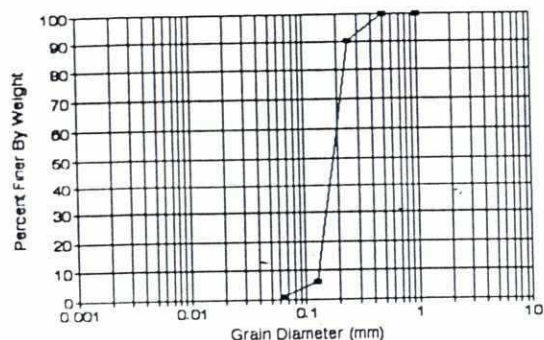


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	19/10/93	10:40	0.066	0.078	0.089	0.125	1.343
DHA-2	19/10/93	12:27	0.136	0.159	0.179	0.245	1.307
DHA-3	19/10/93	14:43	0.135	0.156	0.174	0.236	1.291
DHA-4	19/10/93	16:10	0.098	0.138	0.159	0.229	1.494

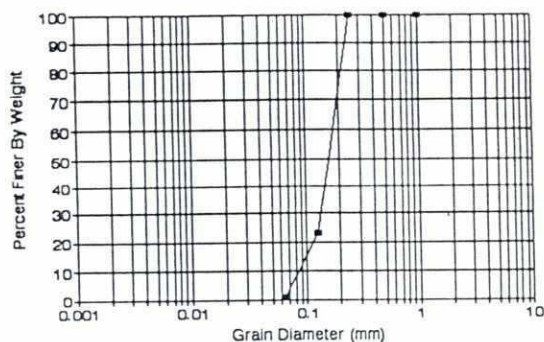
	18 June 1994	Baruria (positions on Dwg. 1.18)	Drawing 6.35
	CI		

565

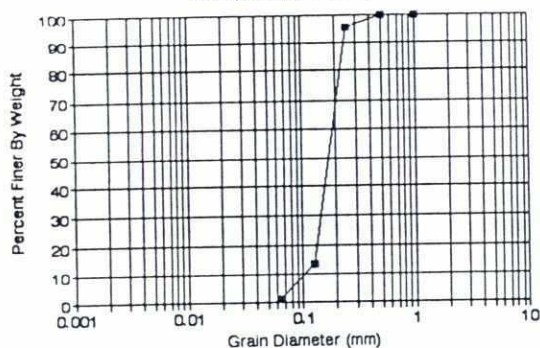
Vertical No: 9
Sample No:DHA-1



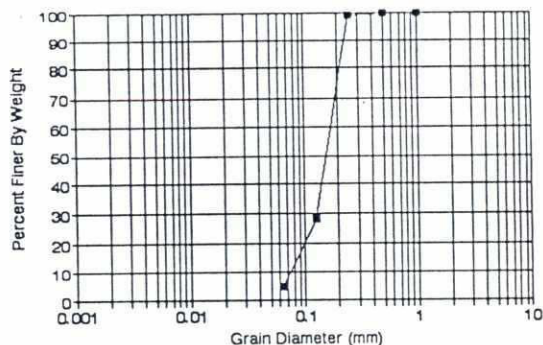
Vertical No: 11
Sample No:DHA-2



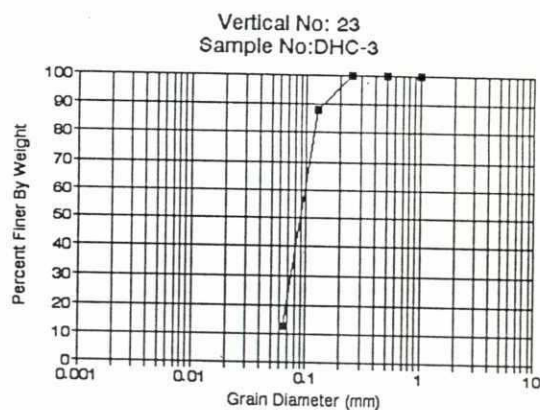
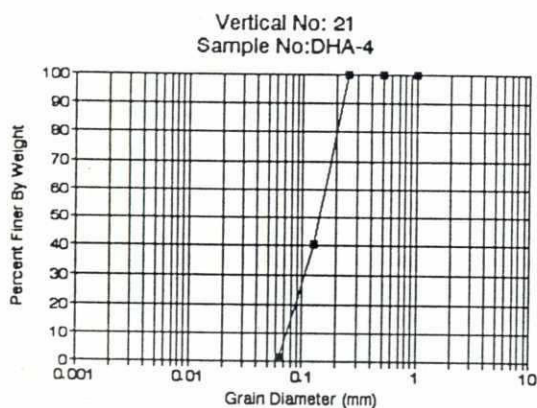
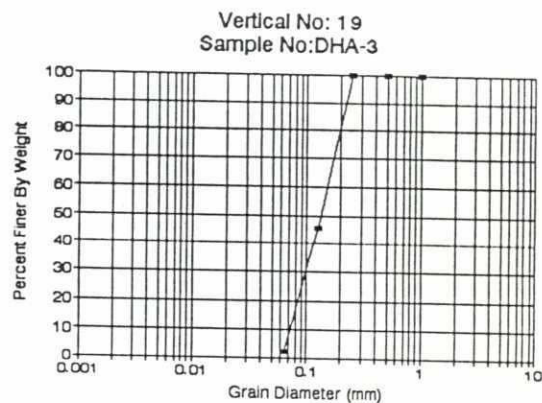
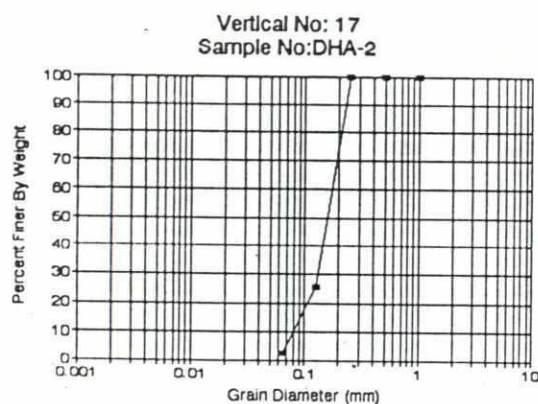
Vertical No: 13
Sample No:DHA-3



Vertical No: 15
Sample No:DHA-1

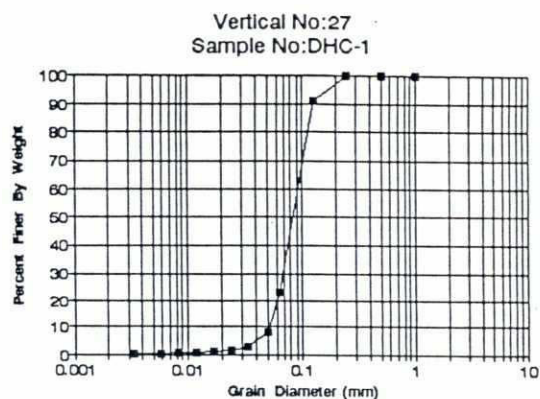
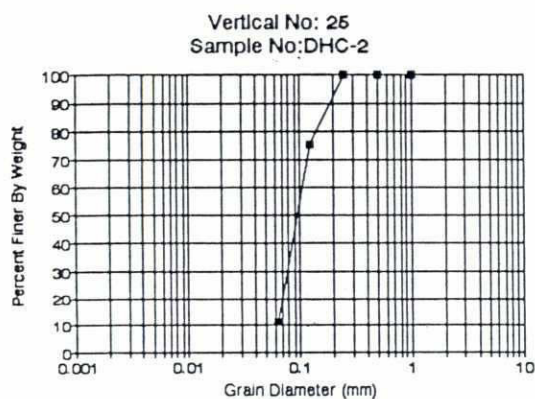


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D35 (mm)	D90 (mm)	Standard Deviation
DHA-1	20/10/93	10:24	0.135	0.158	0.179	0.249	1.325
DHA-2	20/10/93	13:03	0.101	0.135	0.159	0.229	1.470
DHA-3	20/10/93	14:55	0.127	0.150	0.170	0.239	1.337
DHA-1	21/10/93	09:39	0.087	0.133	0.155	0.229	1.588



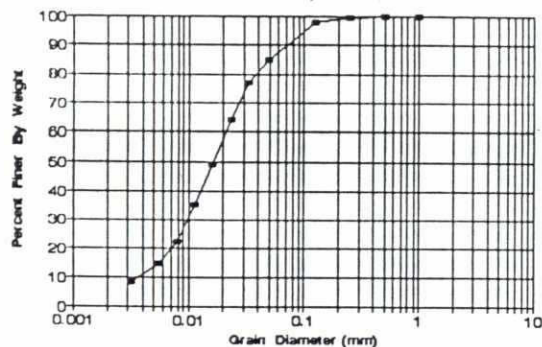
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-2	21/10/93	10:55	0.094	0.136	0.157	0.228	1.528
DHA-3	21/10/93	12:30	0.078	0.106	0.132	0.220	1.619
DHA-4	21/10/93	14:00	0.081	0.113	0.140	0.223	1.607
DHA-3	21/10/93	13:16	0.065	0.077	0.088	0.141	1.364

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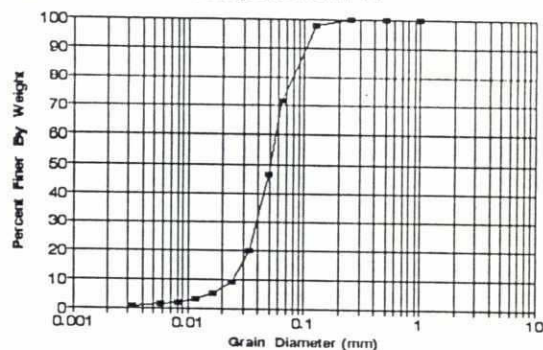


Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-2	21/10/93	12:00	0.066	0.081	0.095	0.189	1.562
DHC-1	21/10/93	09:30	0.056	0.071	0.082	0.123	1.439

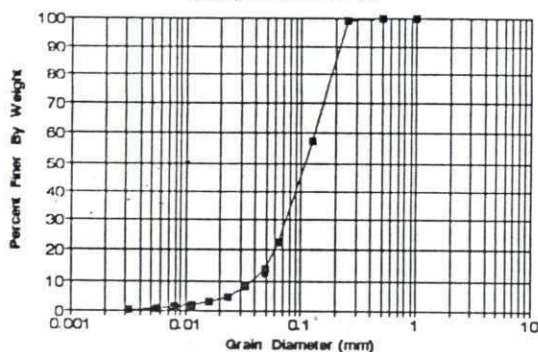
Vertical No. : 1
Sample No.: DHA-12



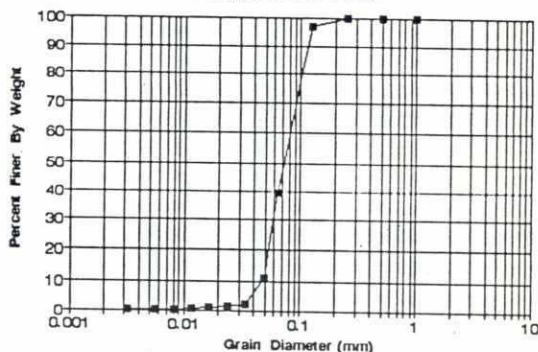
Vertical No:03
Sample No:DHA-11



Vertical No:05
Sample No:DHA-10



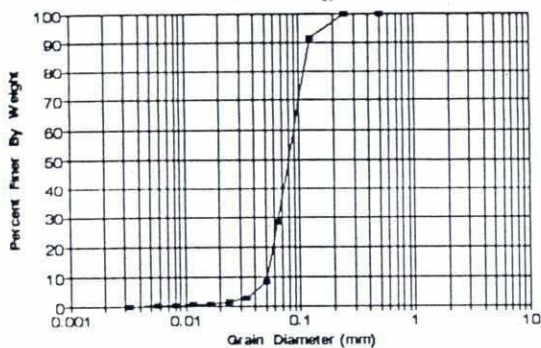
Vertical No:07
Sample No:DHA-09



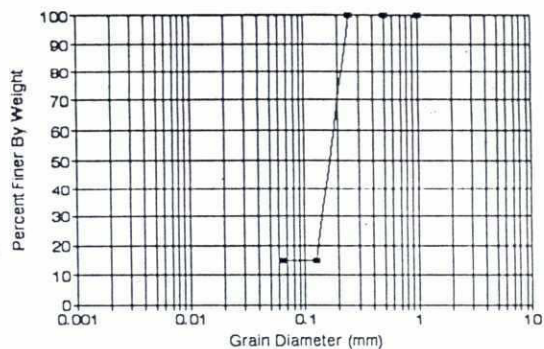
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-12	08/10/93	-	0.006	0.011	0.016	0.069	2.771
DHA-11	08/10/93	-	0.029	0.042	0.051	0.101	1.732
DHA-10	08/10/93	-	0.052	0.080	0.108	0.215	1.941
DHA-9	08/10/93	-	0.052	0.061	0.071	0.115	1.436

200

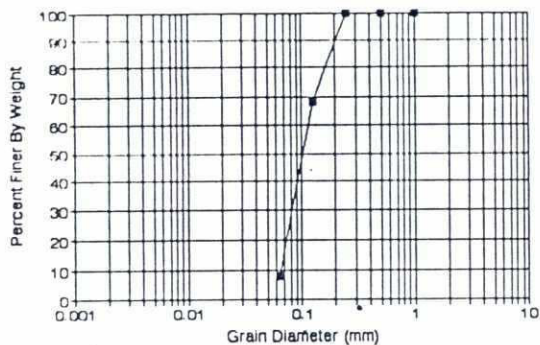
Vertical No:09
Sample No:DHA-08



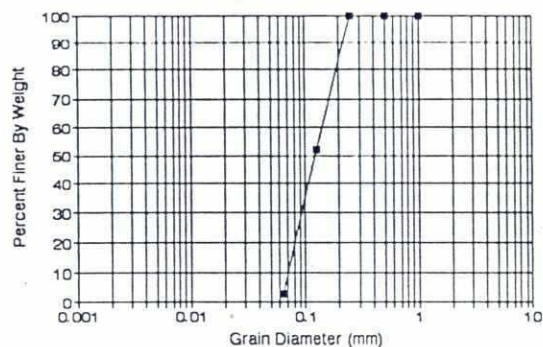
Vertical No: 11
Sample No:DHA-07



Vertical No: 13
Sample No:DHA-06

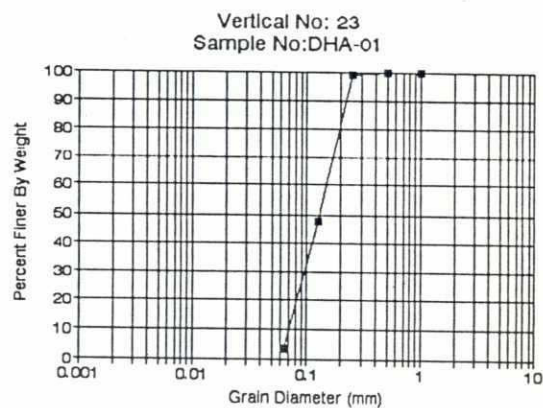
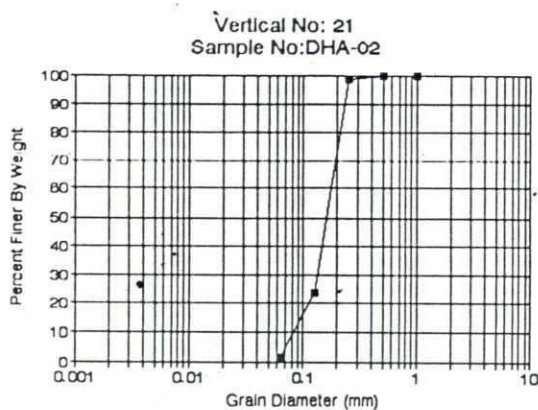
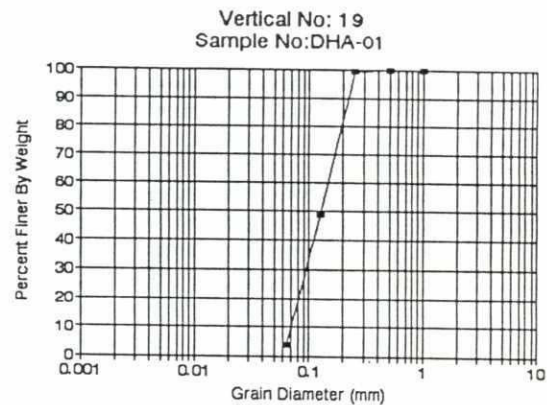
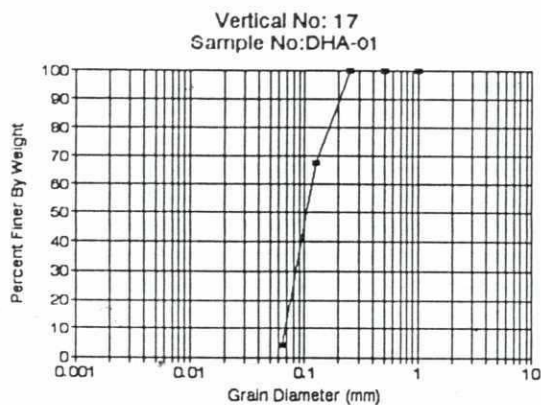


Vertical No: 15
Sample No:DHA-05



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-8	08/10/93	-	0.055	0.068	0.080	0.123	1.446
DHA-7	08/10/93	-	0.126	0.147	0.166	0.231	1.321
DHA-6	08/10/93	-	0.069	0.068	0.102	0.201	1.607
DHA-5	08/10/93	-	0.076	0.098	0.121	0.217	1.614

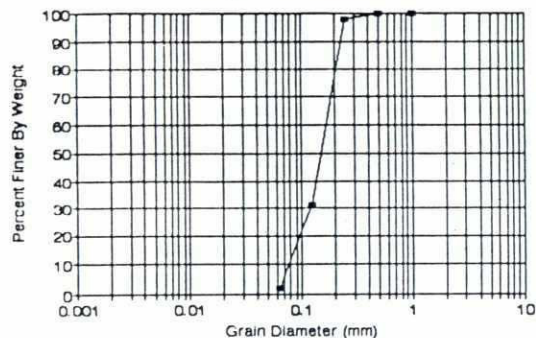
263



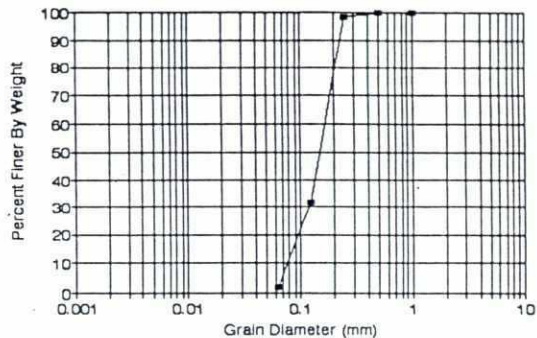
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	03/10/93	14:54	0.071	0.088	0.103	0.203	1.589
DHA-1	04/10/93	13:39	0.076	0.101	0.127	0.220	1.631
DHA-2	04/10/93	15:43	0.098	0.139	0.159	0.231	1.497
DHA-1	06/10/93	14:50	0.076	0.103	0.129	0.221	1.639

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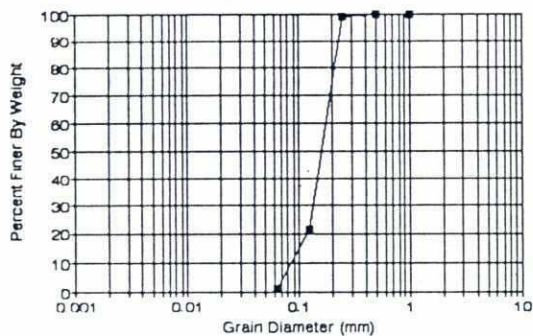
Vertical No: 25
Sample No:DHA-01



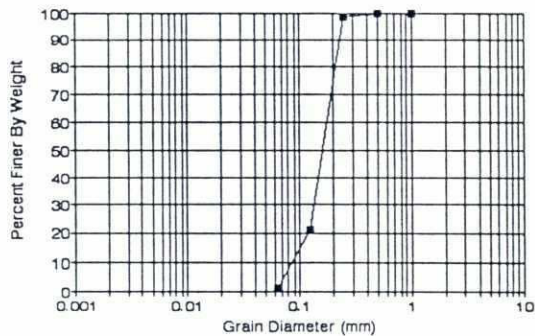
Vertical No: 27
Sample No:DHA-01



Vertical No: 29
Sample No:DHA-01



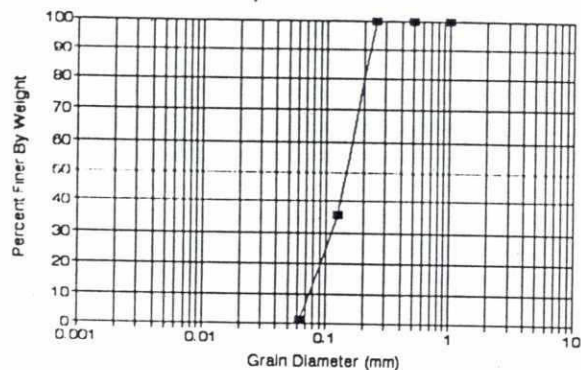
Vertical No: 31
Sample No:DHA-04



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	07/10/93	11:33	0.087	0.130	0.152	0.230	1.584
DHA-1	05/10/93	14:48	0.087	0.129	0.151	0.229	1.580
DHA-1	07/10/93	16:35	0.104	0.141	0.161	0.231	1.454
DHA-4	08/10/93	-	0.106	0.142	0.162	0.232	1.443

266

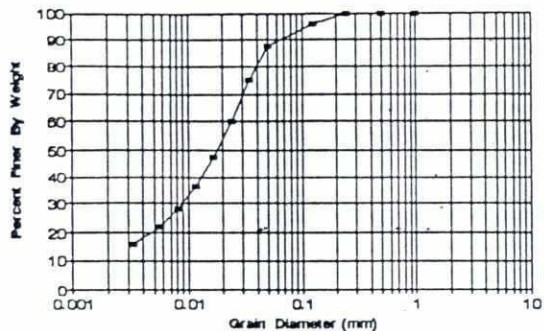
Vertical No: 33
Sample No:DHA-03



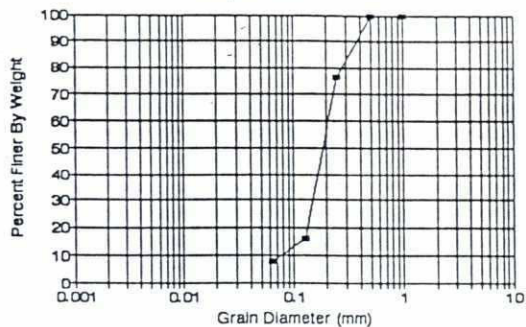
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-3	08/10/93	-	0.084	0.124	0.146	0.225	1.592

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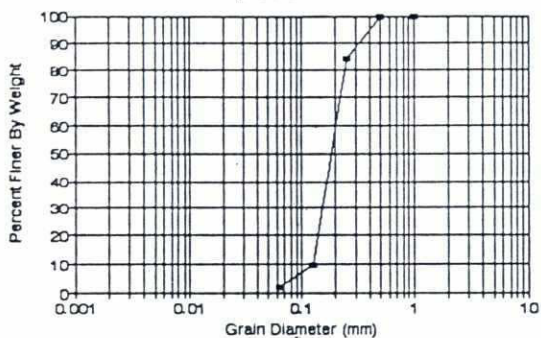
Vertical No. : 1
Sample No.: DHC-1



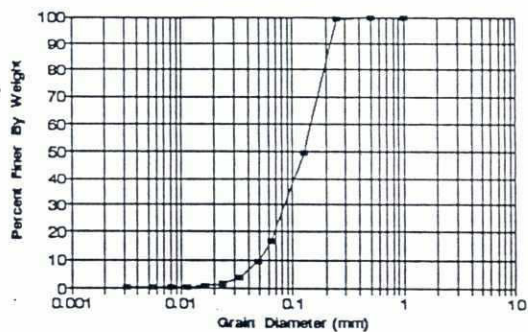
Vertical No: 2
Sample No:DHC-2



Vertical No: 3
Sample No:DHA-2



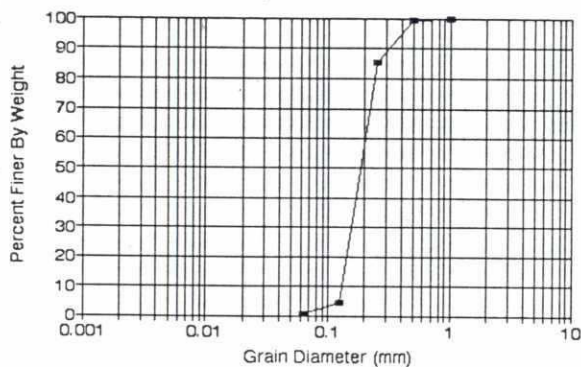
Vertical No:4
Sample No:DHA-1



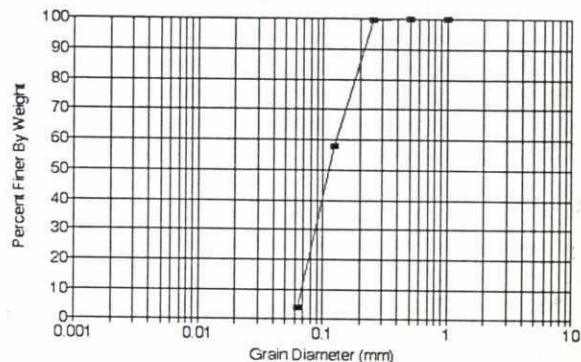
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-1	16/10/93	10:00	0.004	0.011	0.018	0.066	3.500
DHC-2	16/10/93	11:05	0.125	0.156	0.185	0.373	1.583
DHA-2	16/10/93	12:15	0.133	0.158	0.182	0.325	1.374
DHA-1	16/10/93	10:35	0.061	0.092	0.126	0.220	1.834

m20

Vertical No: 02
Sample No:DHA1



Vertical No: 04
Sample No:DHA2



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	29/09/93	14:15	0.146	0.162	0.185	0.303	1.338
DHA-2	29/09/93	16:46	0.073	0.094	0.113	0.211	1.628



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Annexure 6:
Grain size distribution of bed material samples

18 June 1994

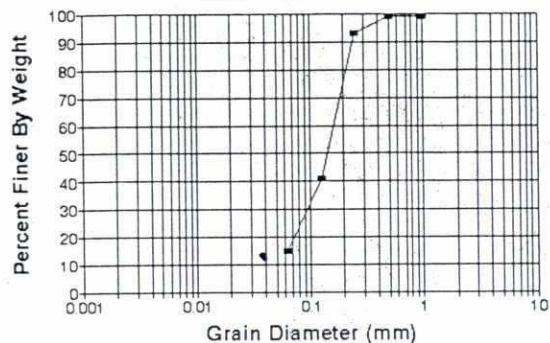
CI

Gorai
(positions on Dwg. 1.24)

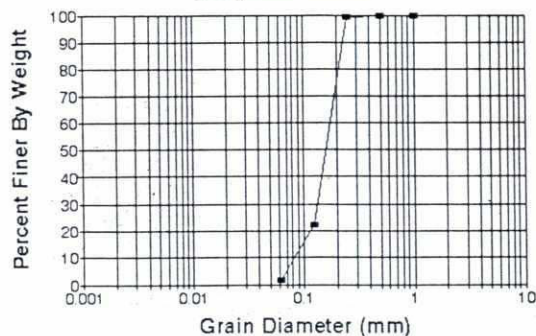
Drawing
6.45

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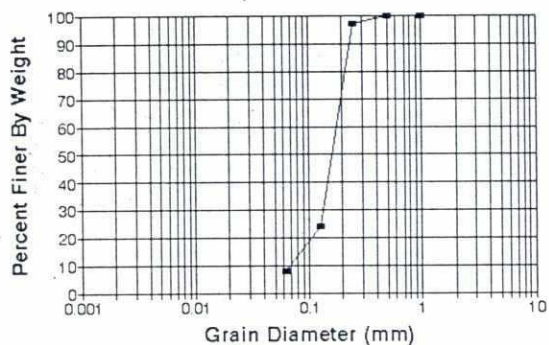
Vertical No: 1
Sample No:DHA-1



Vertical No: 3
Sample No:DHA-2



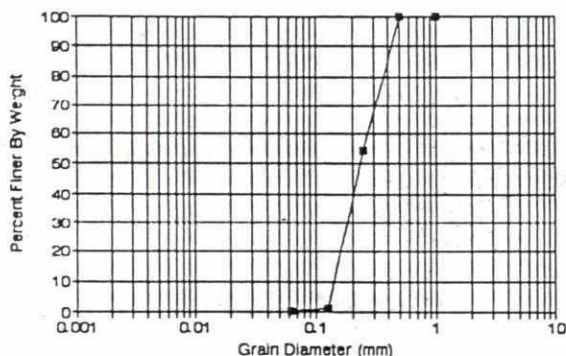
Vertical No: 5
Sample No:DHC-1



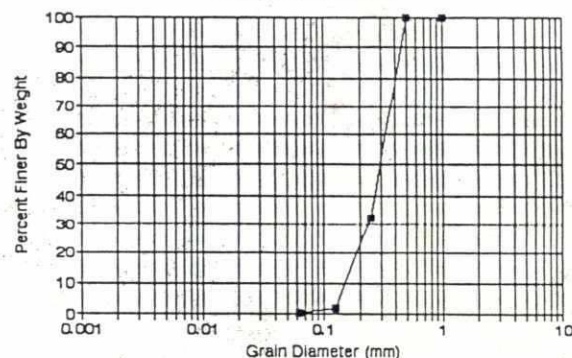
Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	08/10/93	10:58	0.065	0.106	0.140	0.240	1.866
DHA-2	08/10/93	12:44	0.101	0.140	0.160	0.230	1.473
DHC-1	08/10/93	11:06	0.088	0.138	0.160	0.233	1.597

2

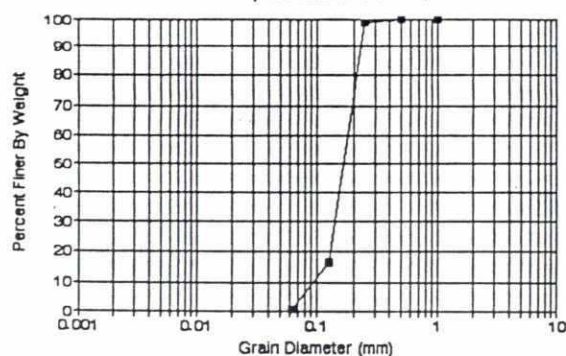
Vertical No: 2
Sample No: DHA-1



Vertical No: 4
Sample No: DHA-2



Vertical No: 6
Sample No: DHA-3



Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	12/10/93	12:45	0.151	0.194	0.236	0.430	1.612
DHA-2	12/10/93	14:55	0.172	0.256	0.299	0.452	1.580
DHA-3	12/10/93	17:04	0.121	0.146	0.166	0.232	1.352

