Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

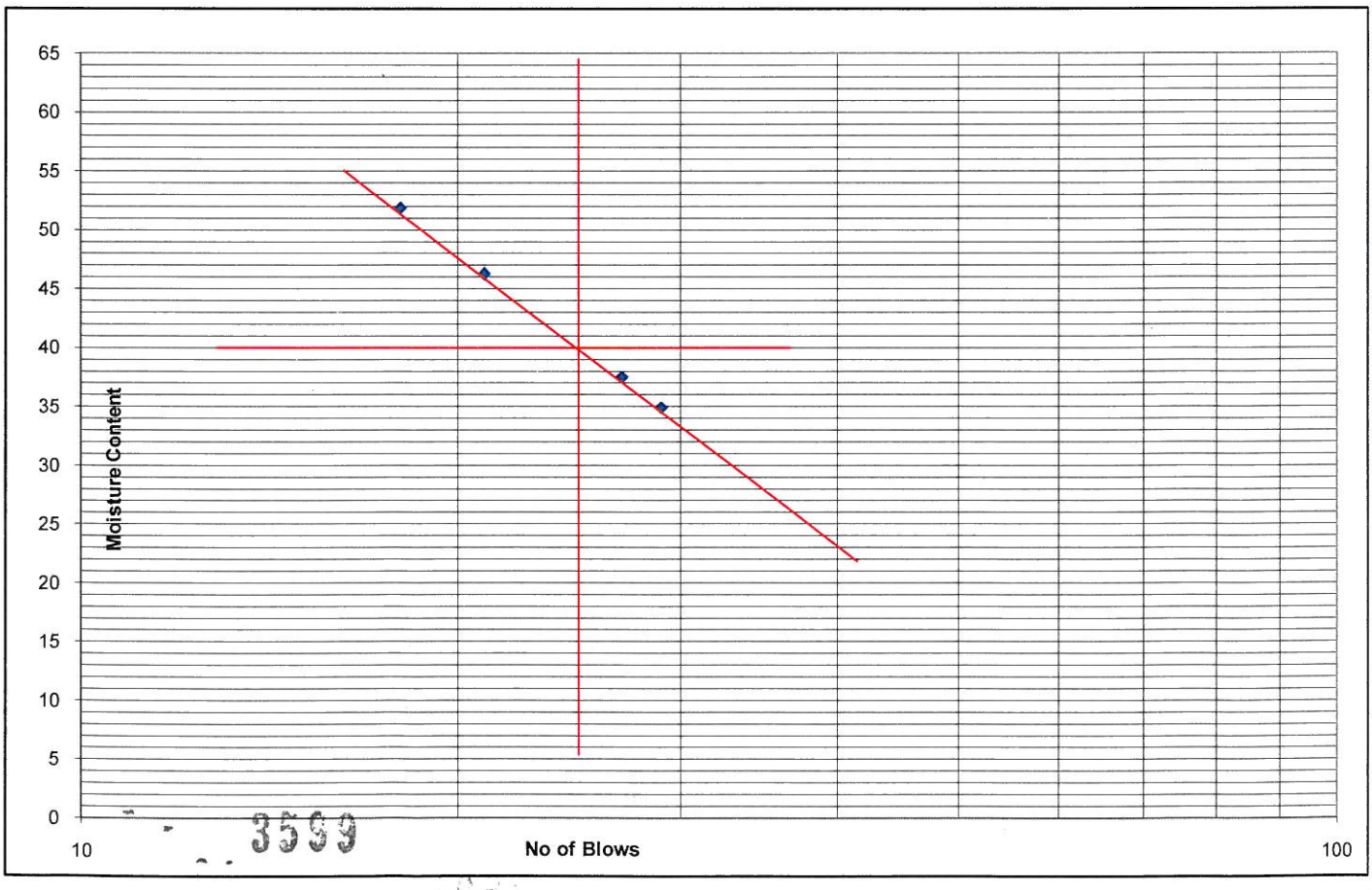
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	13.5m	Tested by	:	D.Mohanty

Number of Blows	29	27	21	18	Plastic Limit	
Container No.	D37	D38	D39	D40	D41	D42
Container Weight (gm) (W1)	36.57	32.26	31.04	30.5	34.97	35.55
Container + Wt. of wet soil (gm) (W2)	91.92	109.60	111.26	117.37	98.91	98.14
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.60	88.51	85.90	87.70	87.80	87.75
Wt. Of water (gm) (W2-W1)-(W3-W1)	14.32	21.09	25.36	29.67	11.12	10.39
Wt. of oven dry soil (gm) (W3-W1)	41.03	56.25	54.86	57.20	52.83	52.20
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**34.91**	**37.49**	**46.23**	**51.88**	**21.04**	**19.91**

Result Summary

Liquid Limit (WL)	40	%
Plastic Limit (Wp)	20	%
Plasticity Index (Ip)	20	%



3599

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

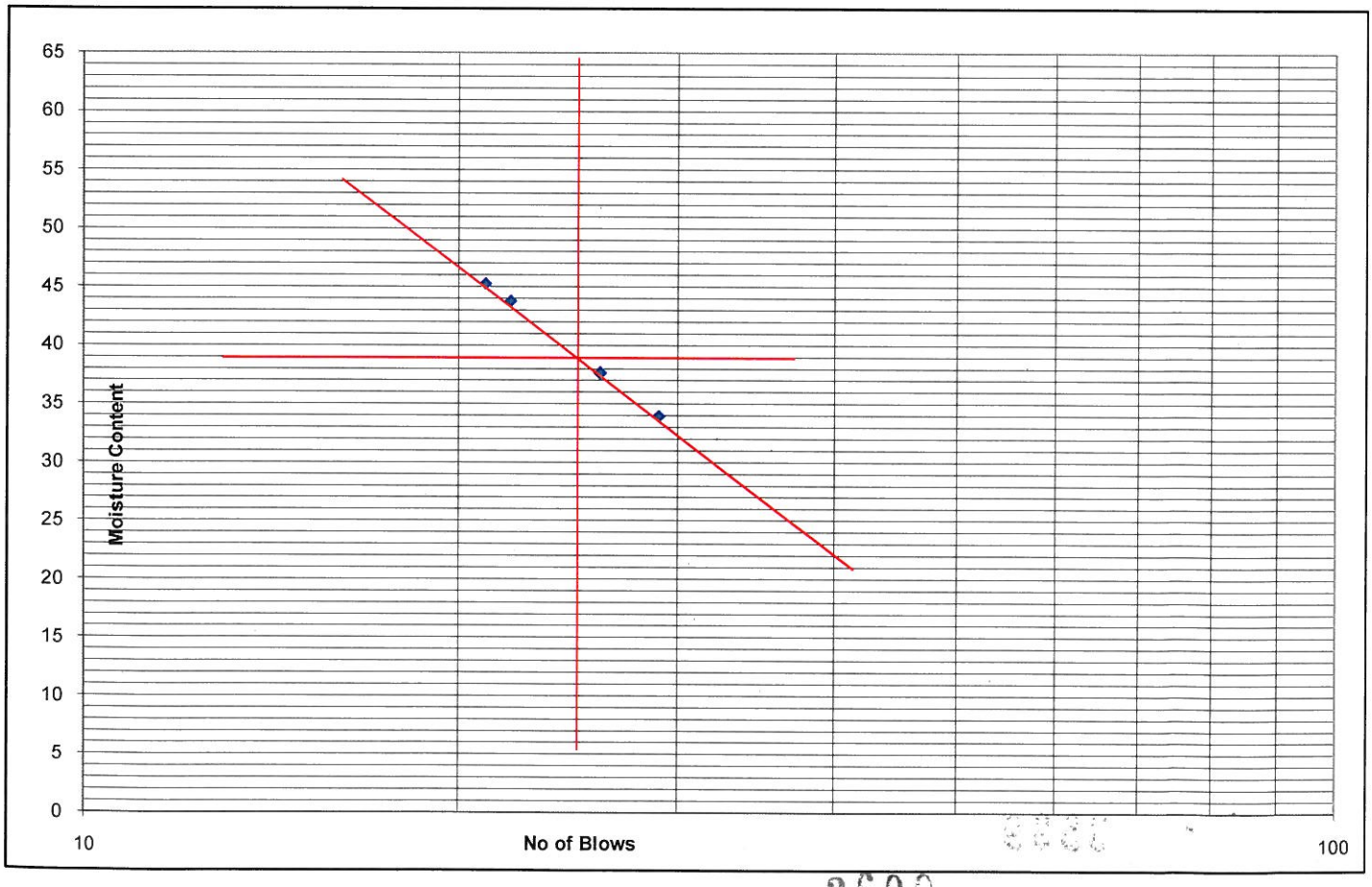
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	15.0m	Tested by	:	D.Mohanty

Number of Blows	29	26	22	21	Plastic Limit	
Container No.	D7	D8	D9	D10	D11	D12
Container Weight (gm) (W1)	35.82	31.27	34.13	32.45	36.48	37.96
Container + Wt. of wet soil (gm) (W2)	91.81	109.64	109.18	113.48	97.74	97.62
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.62	88.21	86.32	88.23	87.59	88.04
Wt. Of water (gm) (W2-W1)-(W3-W1)	14.19	21.43	22.86	25.25	10.15	9.58
Wt. of oven dry soil (gm) (W3-W1)	41.80	56.94	52.19	55.78	51.11	50.08
Moisture Content (%)= (W2-W1)-(W3-W1)]/(W3-W1) X 100	**33.95**	**37.64**	**43.79**	**45.27**	**19.86**	**19.13**

Result Summary

Liquid Limit (WL)	39	%
Plastic Limit (Wp)	19	%
Plasticity Index (Ip)	20	%



3600

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	16.5m	Tested by	:	D.Mohanty

Number of Blows	28	27	23	21	Plastic Limit	
Container No.	D25	D26	D27	D28	D29	D30
Container Weight (gm) (W1)	33.58	34.18	32.29	34.64	36.84	30.87
Container + Wt. of wet soil (gm) (W2)	92.77	107.43	108.64	112.11	96.91	97.01
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.65	88.21	86.35	88.27	87.42	87.87
Wt. Of water (gm) (W2-W1)-(W3-W1)	15.12	19.21	22.29	23.84	9.49	9.14
Wt. of oven dry soil (gm) (W3-W1)	44.07	54.03	54.06	53.63	50.58	57.00
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**34.32**	**35.56**	**41.24**	**44.46**	**18.76**	**16.04**

Result Summary

Liquid Limit (WL)	38	%
Plastic Limit (Wp)	17	%
Plasticity Index (Ip)	21	%

3601

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

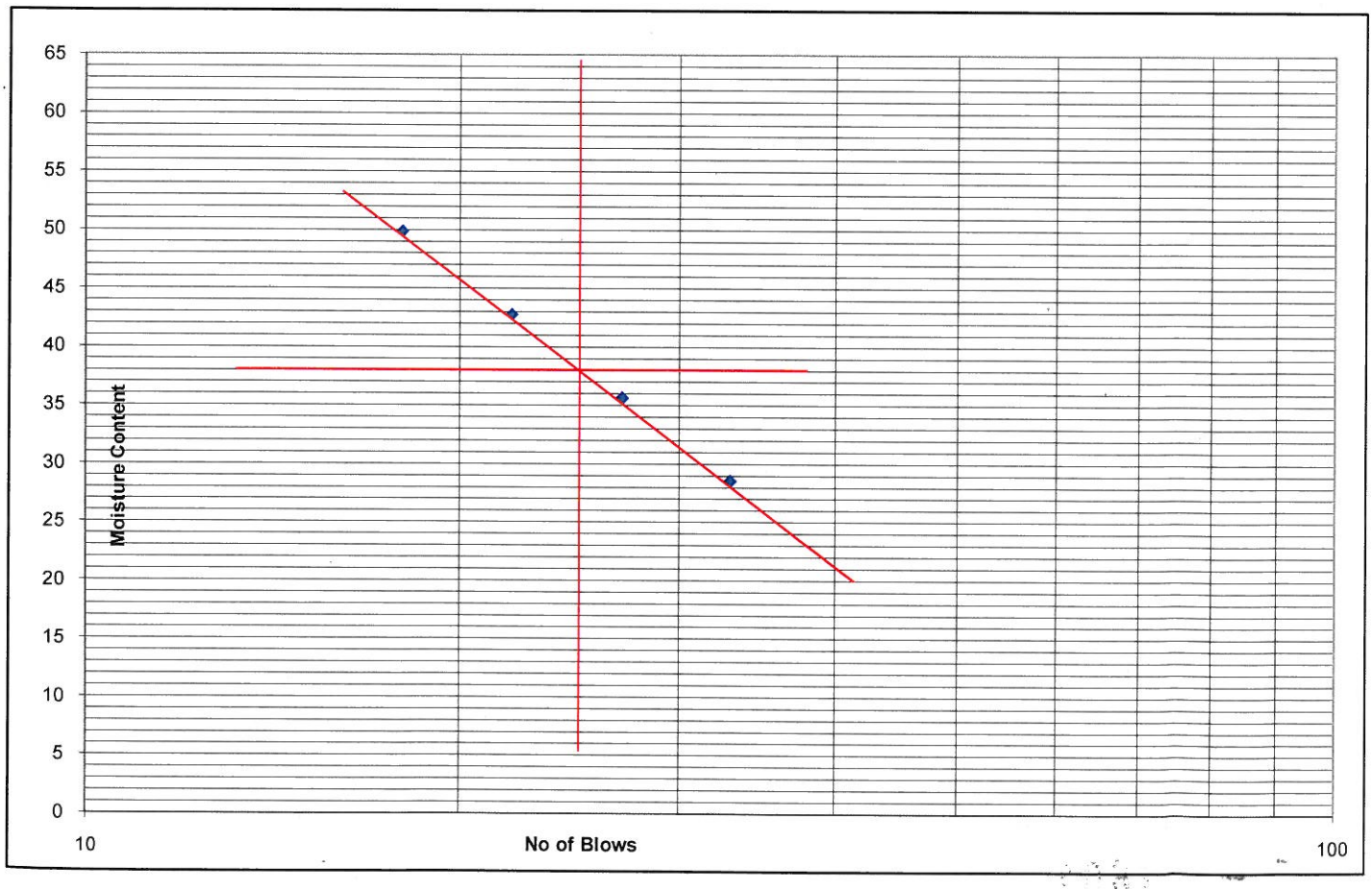
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	18.0m	Tested by	:	D.Mohanty

Number of Blows	33	27	22	18	Plastic Limit	
Container No.	D23	D24	D5	D6	D39	D40
Container Weight (gm) (W1)	33.72	34.86	34.68	35.29	31.04	30.5
Container + Wt. of wet soil (gm) (W2)	90.32	107.37	108.55	114.51	97.38	97.82
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.76	88.32	86.41	88.15	87.64	87.97
Wt. Of water (gm) (W2-W1)-(W3-W1)	12.57	19.05	22.13	26.36	9.74	9.85
Wt. of oven dry soil (gm) (W3-W1)	44.04	53.46	51.73	52.86	56.60	57.47
Moisture Content (%)= (W2-W1)-(W3-W1)]/(W3-W1) X 100	**28.54**	**35.63**	**42.78**	**49.87**	**17.21**	**17.13**

Result Summary

Liquid Limit (WL)	39	%
Plastic Limit (Wp)	17	%
Plasticity Index (Ip)	22	%



3302

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

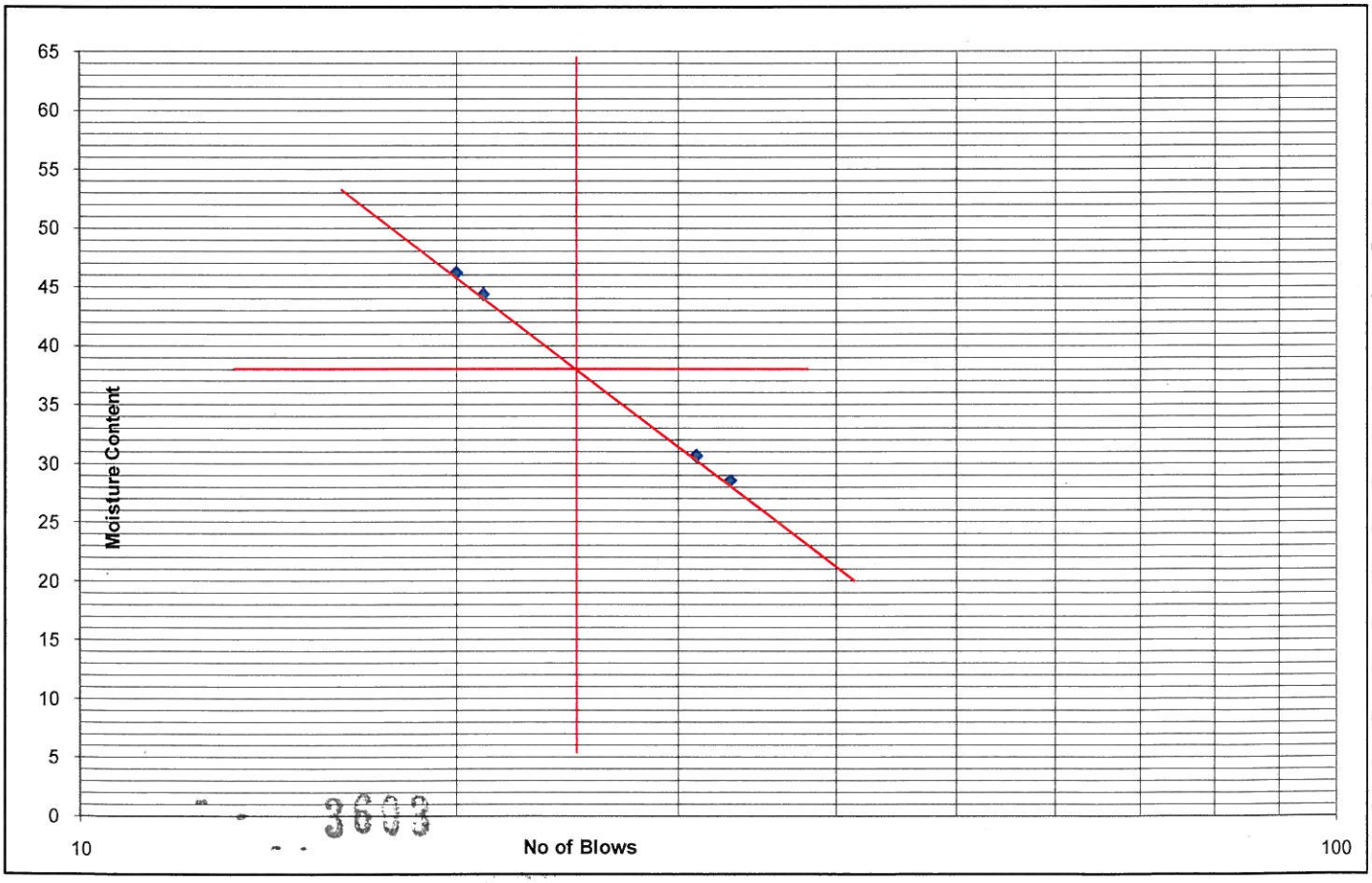
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	21.0m	Tested by	:	D.Mohanty

Number of Blows	33	31	21	20	Plastic Limit	
Container No.	B13	B14	B15	B16	B17	B18
Container Weight (gm) (W1)	34.46	33.59	32.1	31.29	30.59	32.24
Container + Wt. of wet soil (gm) (W2)	90.26	105.23	110.85	114.44	98.45	98.65
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.86	88.43	86.66	88.17	87.71	88.55
Wt. Of water (gm) (W2-W1)-(W3-W1)	12.40	16.80	24.19	26.27	10.74	10.10
Wt. of oven dry soil (gm) (W3-W1)	43.40	54.84	54.56	56.88	57.12	56.31
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**28.57**	**30.64**	**44.33**	**46.18**	**18.81**	**17.94**

Result Summary

Liquid Limit (WL)	38	%
Plastic Limit (Wp)	18	%
Plasticity Index (Ip)	20	%



3603

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

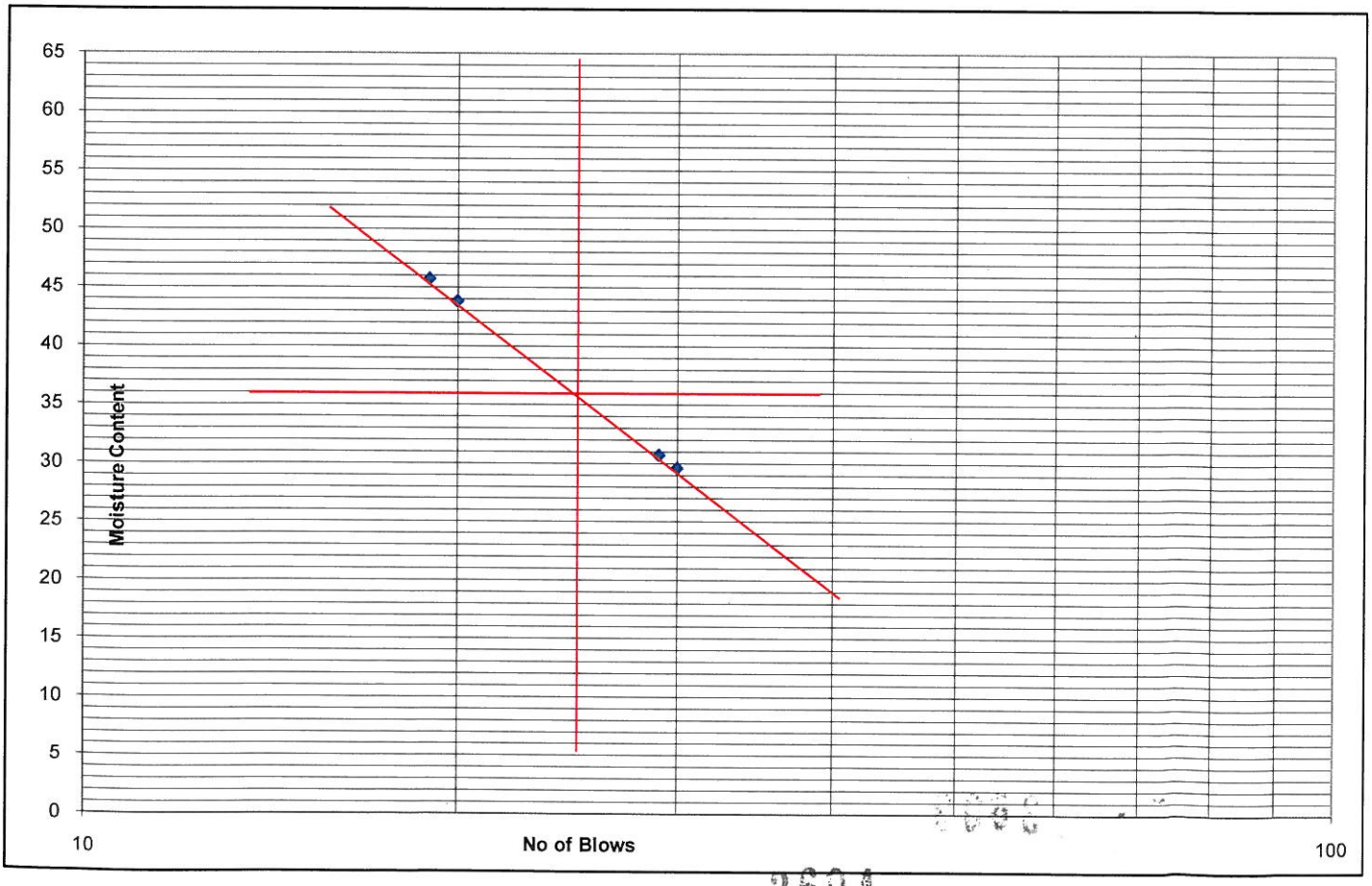
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	22.5m	Tested by	:	D.Mohanty

Number of Blows	30	29	20	19	Plastic Limit	
Container No.	B25	B26	B27	B28	B29	B30
Container Weight (gm) (W1)	35.22	33.36	31.2	39.42	34.86	30.76
Container + Wt. of wet soil (gm) (W2)	90.39	105.32	110.89	110.44	97.15	98.66
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.80	88.43	86.61	88.16	87.84	88.60
Wt. Of water (gm) (W2-W1)-(W3-W1)	12.59	16.90	24.28	22.28	9.32	10.06
Wt. of oven dry soil (gm) (W3-W1)	42.58	55.07	55.41	48.74	52.98	57.84
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**29.58**	**30.69**	**43.81**	**45.72**	**17.59**	**17.40**

Result Summary

Liquid Limit (WL)	36	%
Plastic Limit (Wp)	17	%
Plasticity Index (Ip)	19	%



3604

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

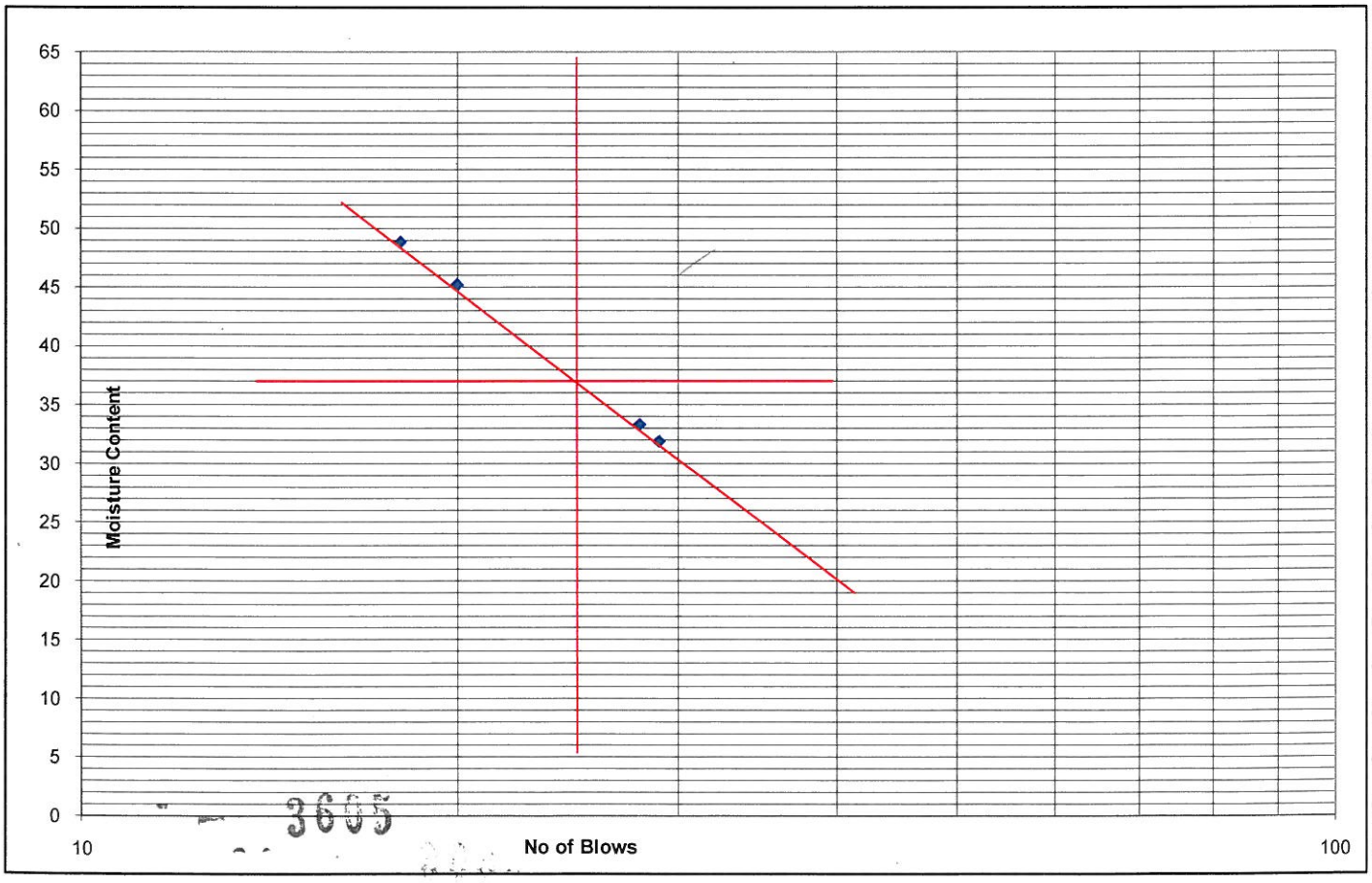
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	24.0m	Tested by	:	D.Mohanty

Number of Blows	29	28	20	18	Plastic Limit	
Container No.	B1	B2	B3	B4	B5	B6
Container Weight (gm) (W1)	34.29	33.64	36.7	32.65	31.26	30.57
Container + Wt. of wet soil (gm) (W2)	91.89	106.79	109.31	115.46	98.45	89.02
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.96	88.51	86.70	88.28	87.74	80.95
Wt. Of water (gm) (W2-W1)-(W3-W1)	13.92	18.28	22.60	27.18	10.71	8.07
Wt. of oven dry soil (gm) (W3-W1)	43.67	54.87	50.00	55.63	56.48	50.38
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**31.88**	**33.31**	**45.20**	**48.87**	**18.97**	**16.02**

Result Summary

Liquid Limit (WL)	37	%
Plastic Limit (Wp)	17	%
Plasticity Index (Ip)	20	%



Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

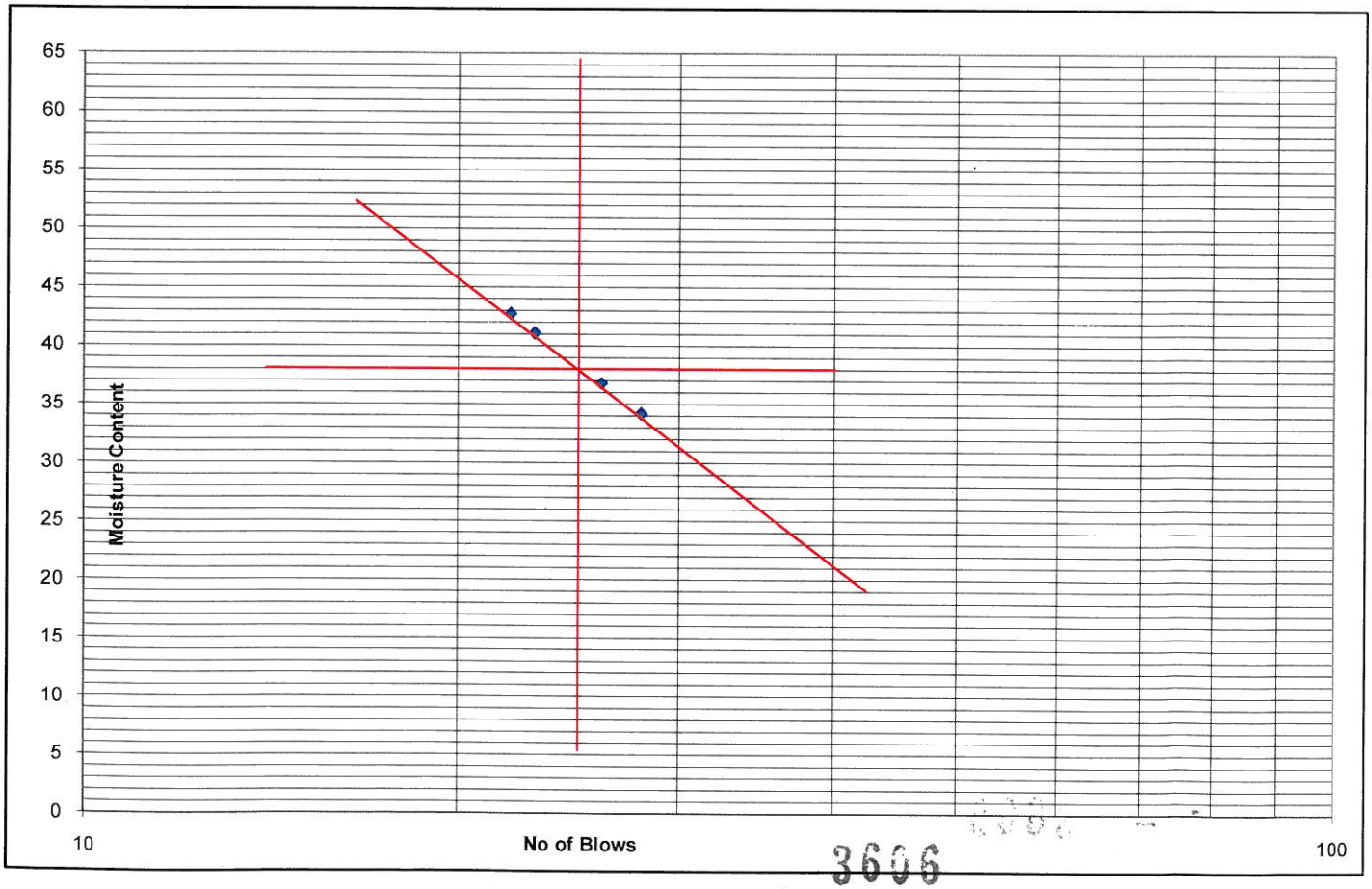
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	25.5m	Tested by	:	D.Mohanty

Number of Blows	28	26	23	22	Plastic Limit	
Container No.	B19	B20	B21	B22	B23	B24
Container Weight (gm) (W1)	31.66	35.46	33.74	34.61	36.87	32.54
Container + Wt. of wet soil (gm) (W2)	93.75	108.55	106.52	111.41	96.77	89.50
Wt of Container + Wt. of oven dry soil (gm) (W3)	77.93	88.89	85.34	88.43	87.71	81.16
Wt. Of water (gm) (W2-W1)-(W3-W1)	15.82	19.67	21.18	22.98	9.06	8.34
Wt. of oven dry soil (gm) (W3-W1)	46.27	53.43	51.60	53.82	50.84	48.62
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**34.18**	**36.81**	**41.05**	**42.71**	**17.83**	**17.15**

Result Summary

Liquid Limit (WL)	38	%
Plastic Limit (Wp)	17	%
Plasticity Index (Ip)	21	%



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Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

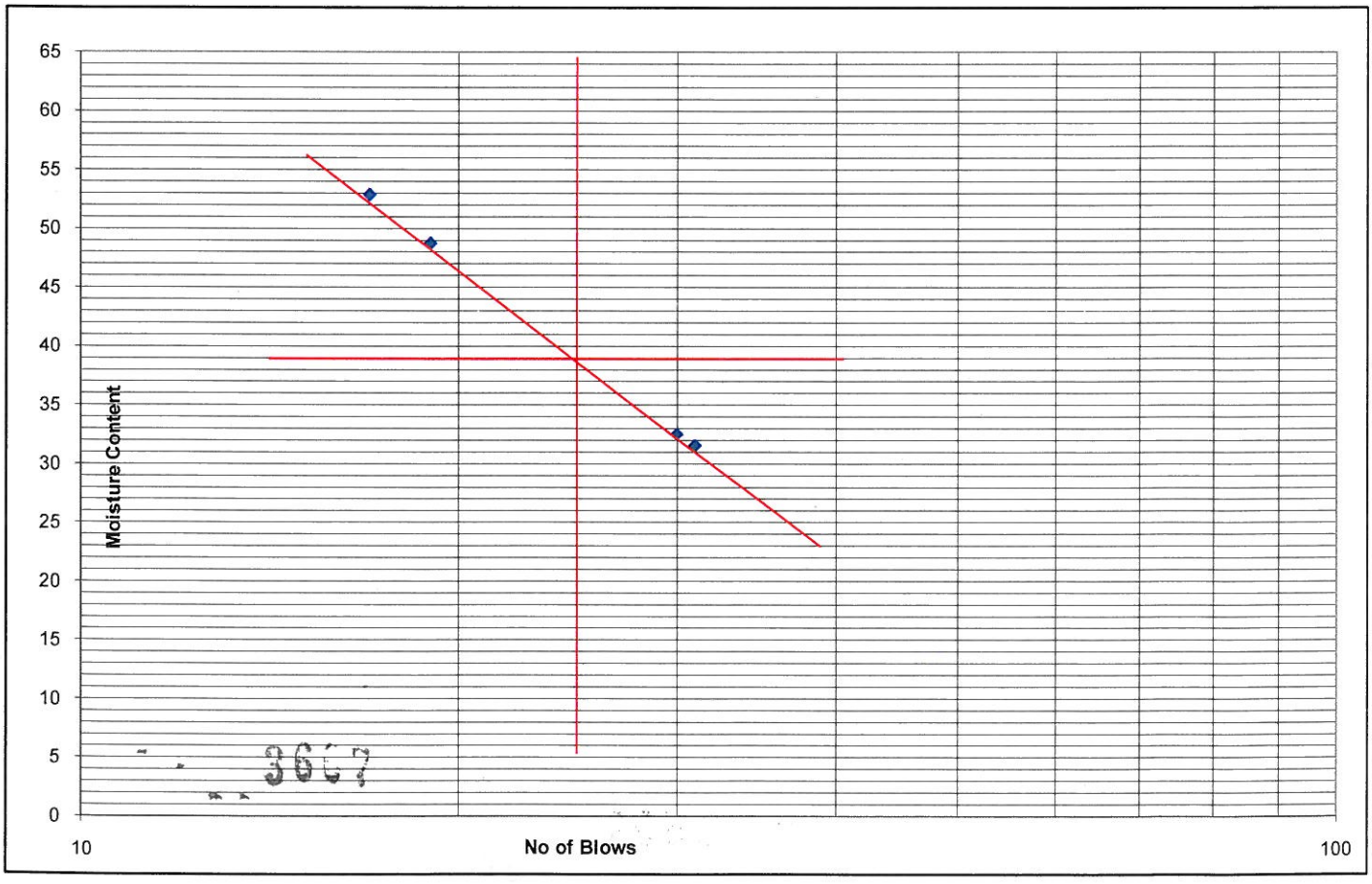
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	28.5m	Tested by	:	D.Mohanty

Number of Blows	31	30	19	17	Plastic Limit	
Container No.	B7	B8	B9	B10	B11	B12
Container Weight (gm) (W1)	36.85	32.71	31.43	34.52	35.81	33.24
Container + Wt. of wet soil (gm) (W2)	90.98	107.12	111.66	117.26	98.59	90.47
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.00	88.85	85.37	88.65	87.96	81.49
Wt. Of water (gm) (W2-W1)-(W3-W1)	12.98	18.26	26.29	28.60	10.62	8.98
Wt. of oven dry soil (gm) (W3-W1)	41.15	56.14	53.94	54.13	52.15	48.25
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**31.54**	**32.53**	**48.73**	**52.84**	**20.37**	**18.61**

Result Summary

Liquid Limit (WL)	39	%
Plastic Limit (Wp)	19	%
Plasticity Index.(Ip)	20	%



Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

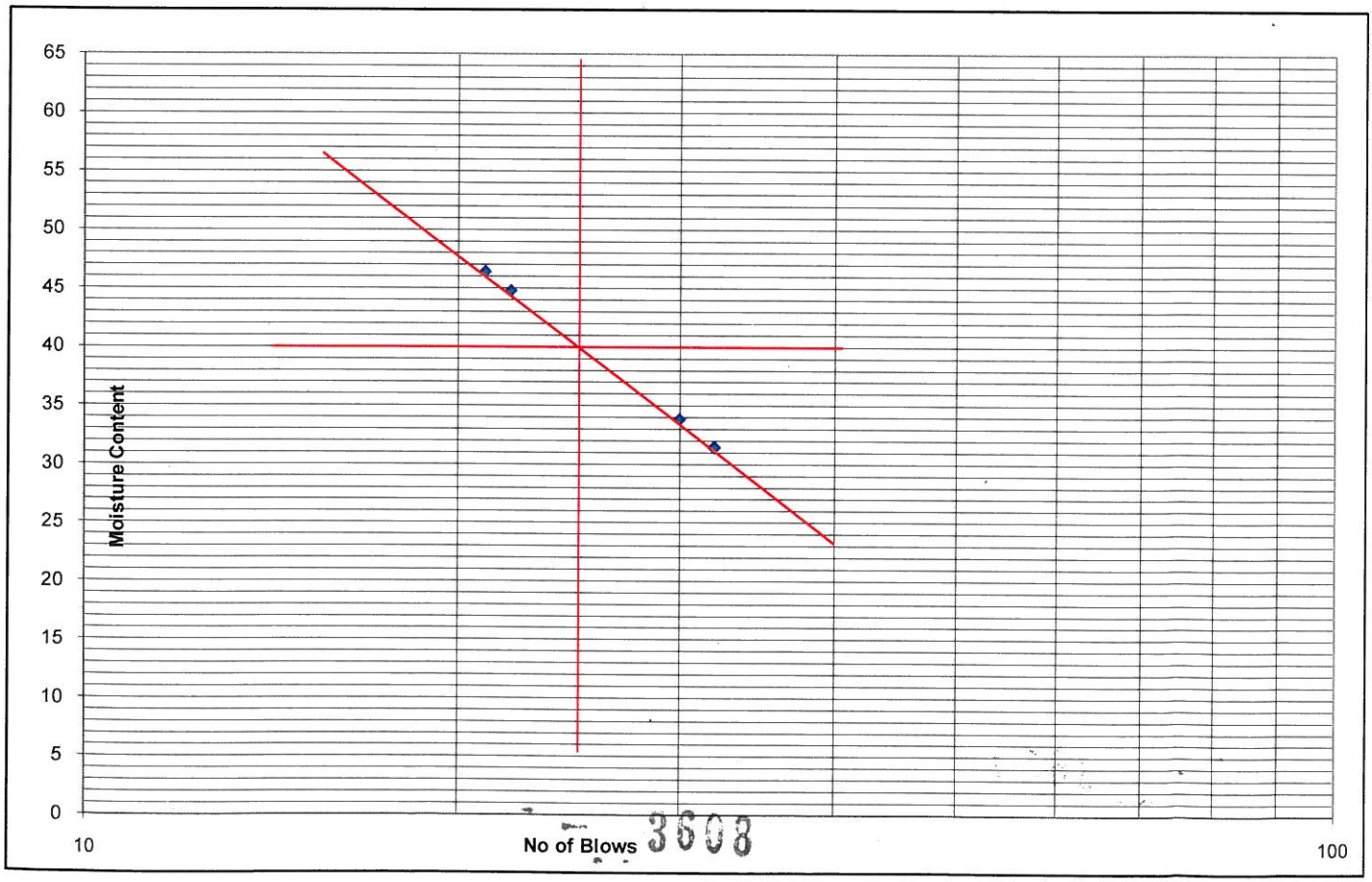
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	30.0m	Tested by	:	D.Mohanty

Number of Blows	32	30	22	21	Plastic Limit	
Container No.	B37	B38	B39	B40	B41	B42
Container Weight (gm) (W1)	33.26	32.74	31.98	30.5	34.67	35.55
Container + Wt. of wet soil (gm) (W2)	92.51	107.69	109.07	115.76	98.61	90.21
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.34	88.74	85.22	88.73	87.98	81.55
Wt. Of water (gm) (W2-W1)-(W3-W1)	14.17	18.95	23.85	27.03	10.63	8.66
Wt. of oven dry soil (gm) (W3-W1)	45.08	56.00	53.24	58.23	53.31	46.00
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**31.44**	**33.84**	**44.79**	**46.43**	**19.94**	**18.83**

Result Summary

Liquid Limit (WL)	40	%
Plastic Limit (Wp)	19	%
Plasticity Index (Ip)	21	%



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Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

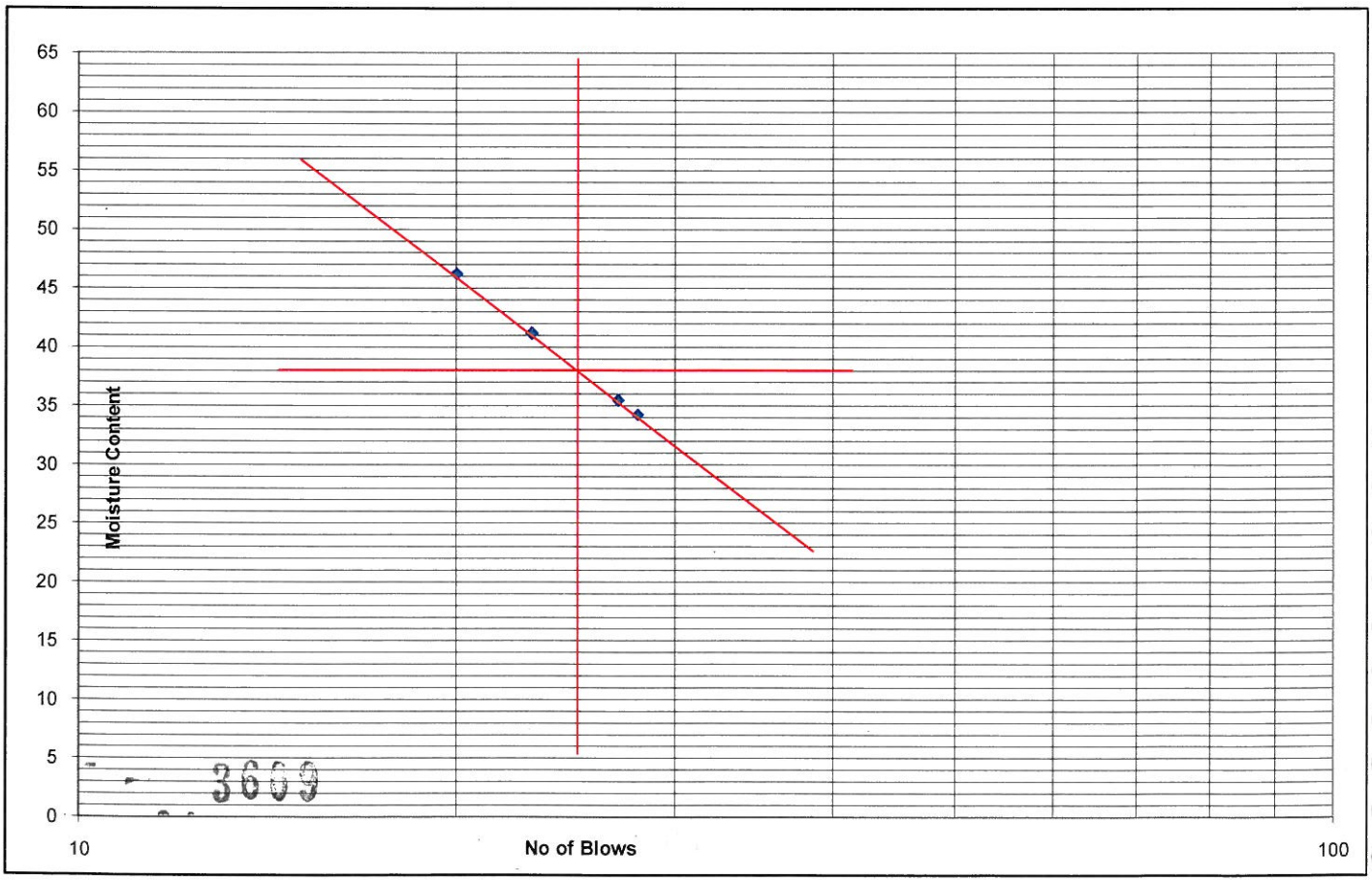
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	31.5m	Tested by	:	D.Mohanty

Number of Blows	28	27	23	20	Plastic Limit	
Container No.	B31	B32	B33	B34	B35	B36
Container Weight (gm) (W1)	30.8	34.1	32.47	31.56	35.65	30.99
Container + Wt. of wet soil (gm) (W2)	94.70	107.98	107.08	115.23	97.80	91.02
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.40	88.64	85.32	88.79	87.87	81.89
Wt. Of water (gm) (W2-W1)-(W3-W1)	16.31	19.34	21.76	26.45	9.93	9.13
Wt. of oven dry soil (gm) (W3-W1)	47.60	54.54	52.85	57.23	52.22	50.90
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**34.26**	**35.46**	**41.18**	**46.21**	**19.02**	**17.94**

Result Summary

Liquid Limit (WL)	38	%
Plastic Limit (Wp)	18	%
Plasticity Index (Ip)	20	%



Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

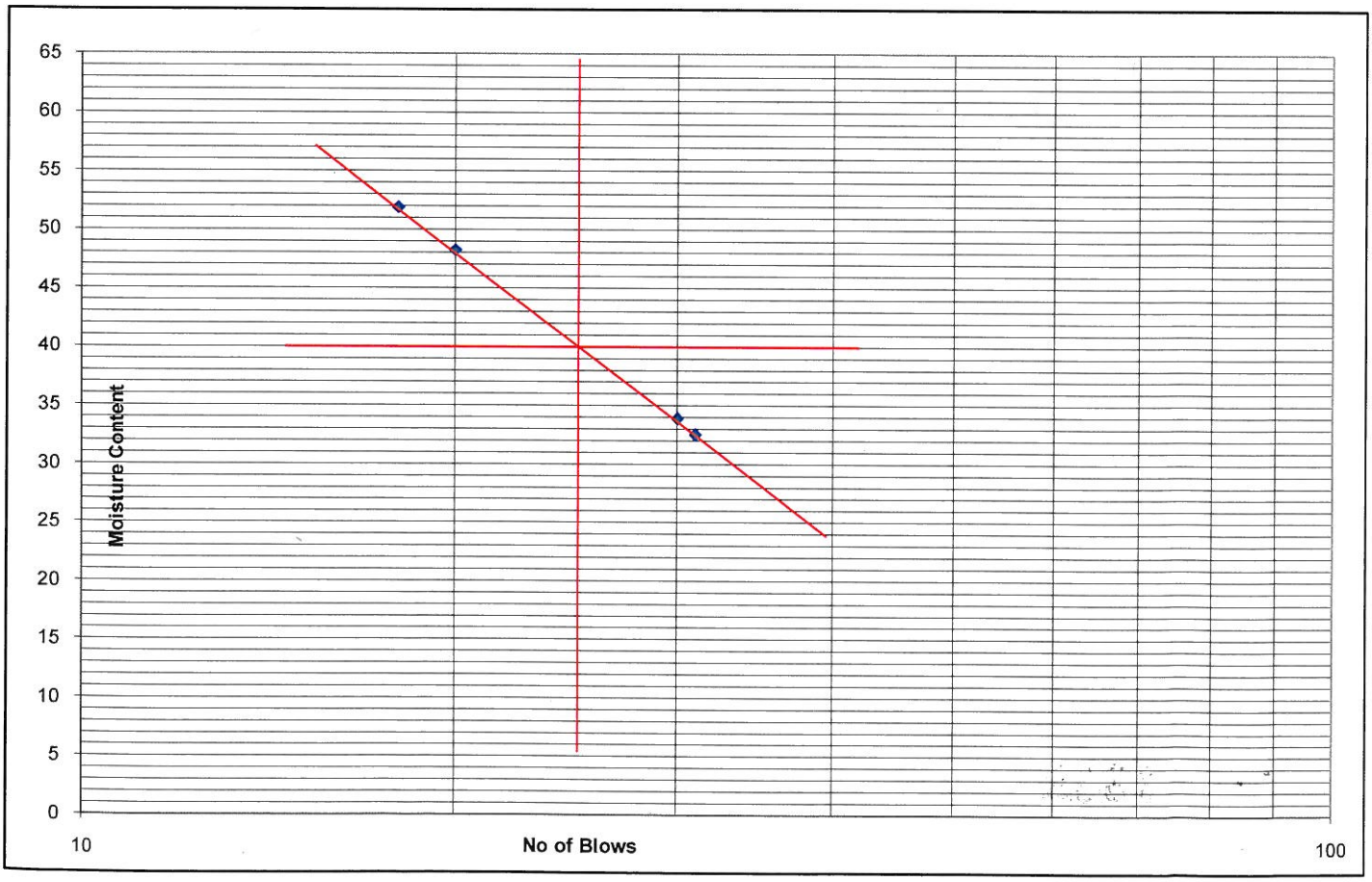
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	33.0m	Tested by	:	D.Mohanty

Number of Blows	31	30	20	18	Plastic Limit	
Container No.	E1	E2	E3	E4	E5	E6
Container Weight (gm) (W1)	30.48	35.24	37.88	34.61	35.8	32.51
Container + Wt. of wet soil (gm) (W2)	93.87	106.82	108.01	116.83	98.74	91.75
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.32	88.71	85.19	88.75	88.09	81.95
Wt. Of water (gm) (W2-W1)-(W3-W1)	15.55	18.11	22.81	28.08	10.65	9.80
Wt. of oven dry soil (gm) (W3-W1)	47.84	53.47	47.31	54.14	52.29	49.44
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**32.51**	**33.86**	**48.22**	**51.87**	**20.37**	**19.82**

Result Summary

Liquid Limit (WL)	40	%
Plastic Limit (Wp)	20	%
Plasticity Index (Ip)	20	%



3610

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

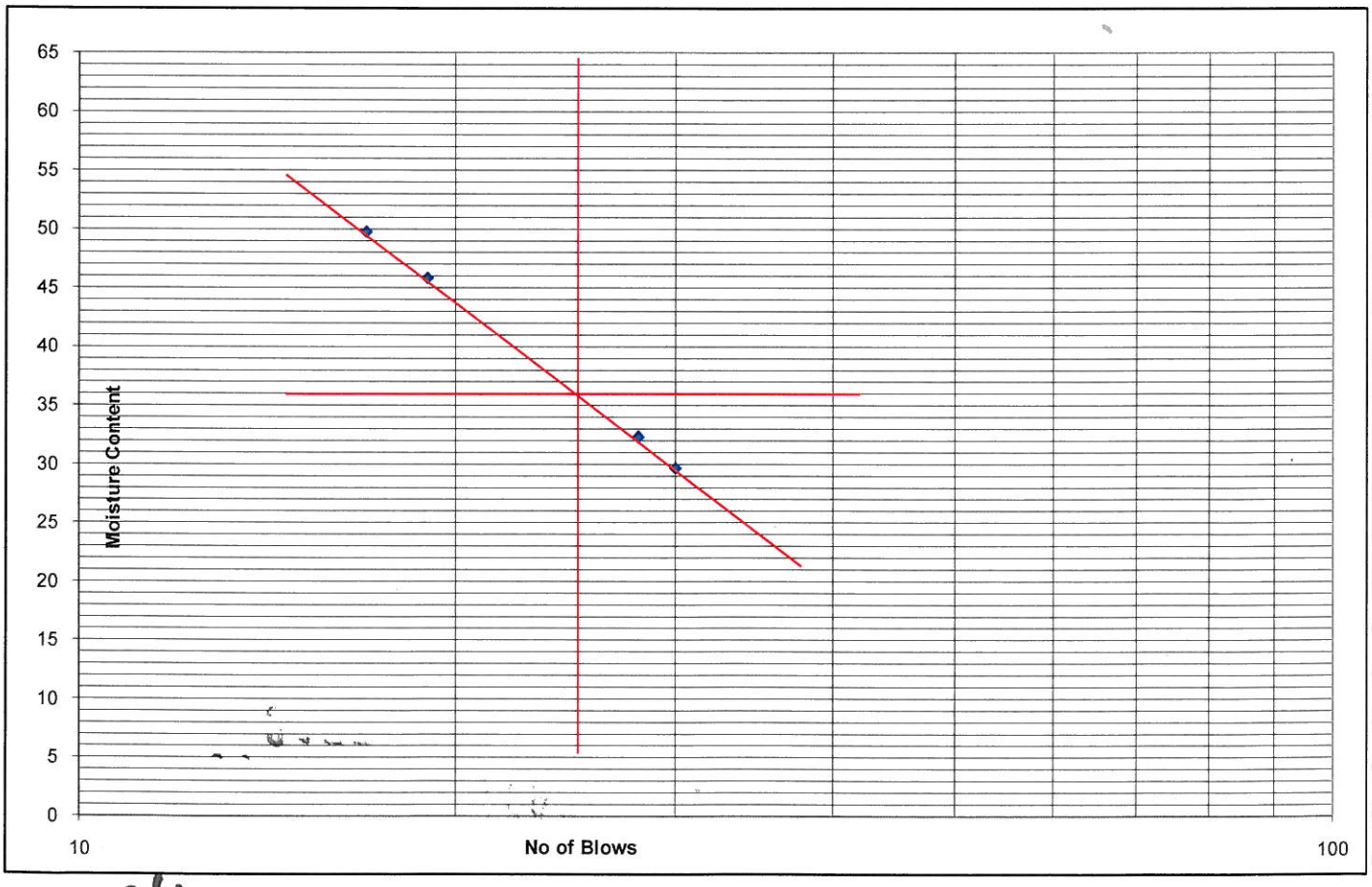
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	37.5m	Tested by	:	D.Mohanty

Number of Blows	30	28	19	17	Plastic Limit	
Container No.	E13	E14	E15	E16	E17	E18
Container Weight (gm) (W1)	32.58	37.21	33.14	35.42	31.85	36.97
Container + Wt. of wet soil (gm) (W2)	92.24	105.34	109.19	115.81	99.10	90.20
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.59	88.71	85.29	89.10	88.15	82.30
Wt. Of water (gm) (W2-W1)-(W3-W1)	13.65	16.62	23.90	26.71	10.94	7.90
Wt. of oven dry soil (gm) (W3-W1)	46.01	51.50	52.15	53.68	56.30	45.33
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**29.68**	**32.28**	**45.84**	**49.76**	**19.43**	**17.42**

Result Summary

Liquid Limit (WL)	36	%
Plastic Limit (Wp)	18	%
Plasticity Index (Ip)	18	%



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Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

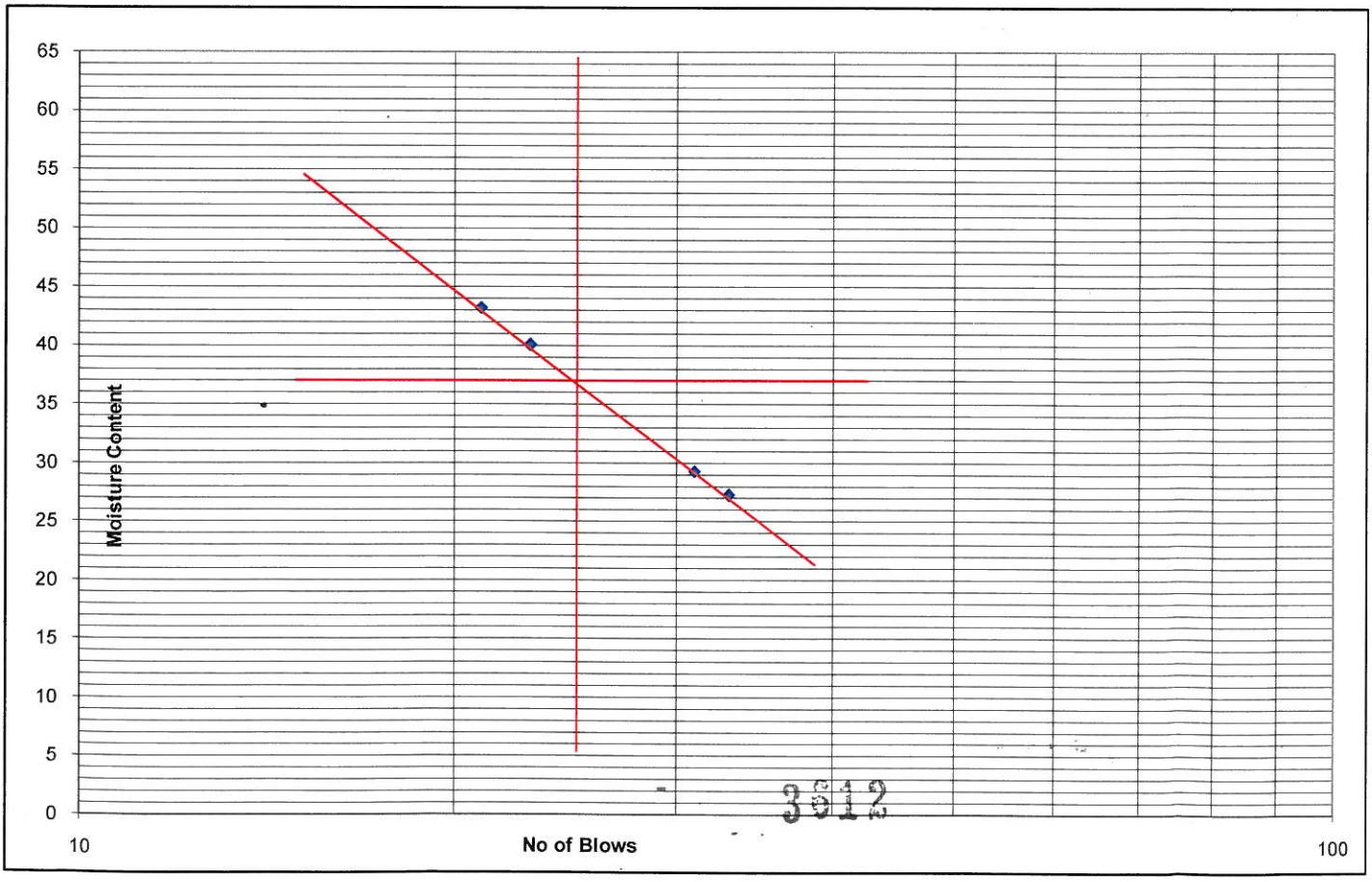
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	40.5m	Tested by	:	D.Mohanty

Number of Blows	33	31	23	21	Plastic Limit	
Container No.	E25	E26	E27	E28	E29	E30
Container Weight (gm) (W1)	33.6	34.2	36.7	32.65	31.26	30.12
Container + Wt. of wet soil (gm) (W2)	91.15	105.16	104.89	113.64	98.93	91.96
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.82	89.07	85.38	89.20	88.32	82.35
Wt. Of water (gm) (W2-W1)-(W3-W1)	12.32	16.08	19.51	24.44	10.61	9.61
Wt. of oven dry soil (gm) (W3-W1)	45.22	54.87	48.68	56.55	57.06	52.23
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**27.25**	**29.31**	**40.07**	**43.21**	**18.59**	**18.40**

Result Summary

Liquid Limit (WL)	37	%
Plastic Limit (Wp)	18	%
Plasticity Index (Ip)	19	%



Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	42.0m	Tested by	:	D.Mohanty

Number of Blows	29	27	21	19	Plastic Limit	
Container No.	E7	E8	E9	E10	E11	E12
Container Weight (gm) (W1)	30.44	36.34	37.83	32.28	30.76	32.24
Container + Wt. of wet soil (gm) (W2)	95.39	108.45	107.03	117.64	99.59	92.15
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.91	89.14	85.42	89.59	88.20	82.63
Wt. Of water (gm) (W2-W1)-(W3-W1)	16.49	19.31	21.61	28.06	11.39	9.52
Wt. of oven dry soil (gm) (W3-W1)	48.47	52.80	47.59	57.31	57.44	50.39
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**34.02**	**36.58**	**45.42**	**48.96**	**19.83**	**18.89**

Result Summary

Liquid Limit (WL)	39	%
Plastic Limit (Wp)	19	%
Plasticity Index (Ip)	20	%

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

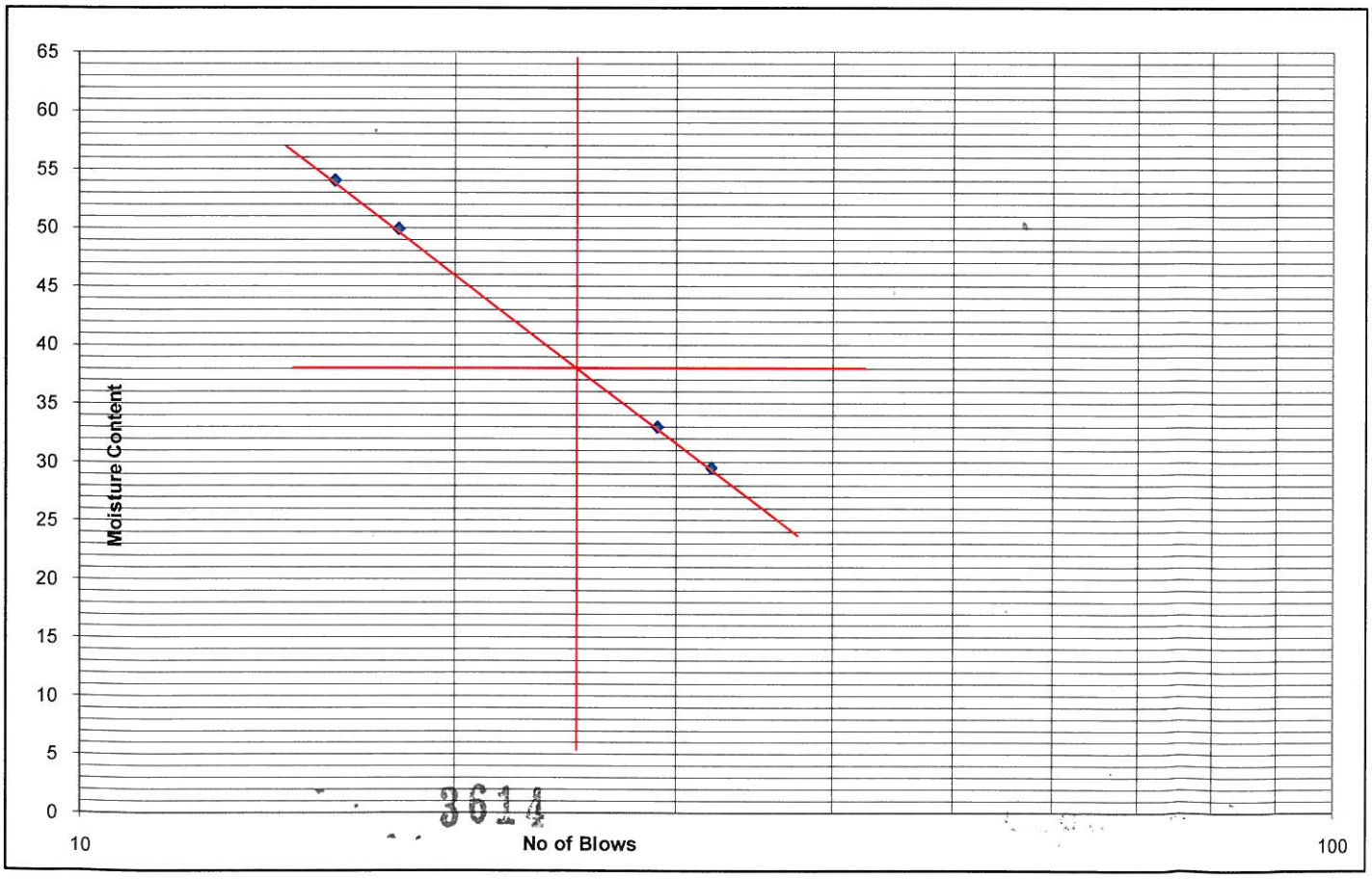
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	48.0m	Tested by	:	D.Mohanty

Number of Blows	32	29	18	16	Plastic Limit	
Container No.	E31	E32	E33	E34	E35	E36
Container Weight (gm) (W1)	30.8	35.09	32.47	31.56	36.29	30.99
Container + Wt. of wet soil (gm) (W2)	93.20	107.07	111.93	121.21	98.87	92.60
Wt of Container + Wt. of oven dry soil (gm) (W3)	78.99	89.22	85.48	89.76	88.38	82.84
Wt. Of water (gm) (W2-W1)-(W3-W1)	14.21	17.84	26.45	31.44	10.49	9.76
Wt. of oven dry soil (gm) (W3-W1)	48.19	54.13	53.01	58.20	52.09	51.85
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**29.48**	**32.96**	**49.89**	**54.02**	**20.13**	**18.82**

Result Summary

Liquid Limit (WL)	38	%
Plastic Limit (Wp)	19	%
Plasticity Index (Ip)	19	%



Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF LIQUID LIMIT AND PLASTIC LIMIT

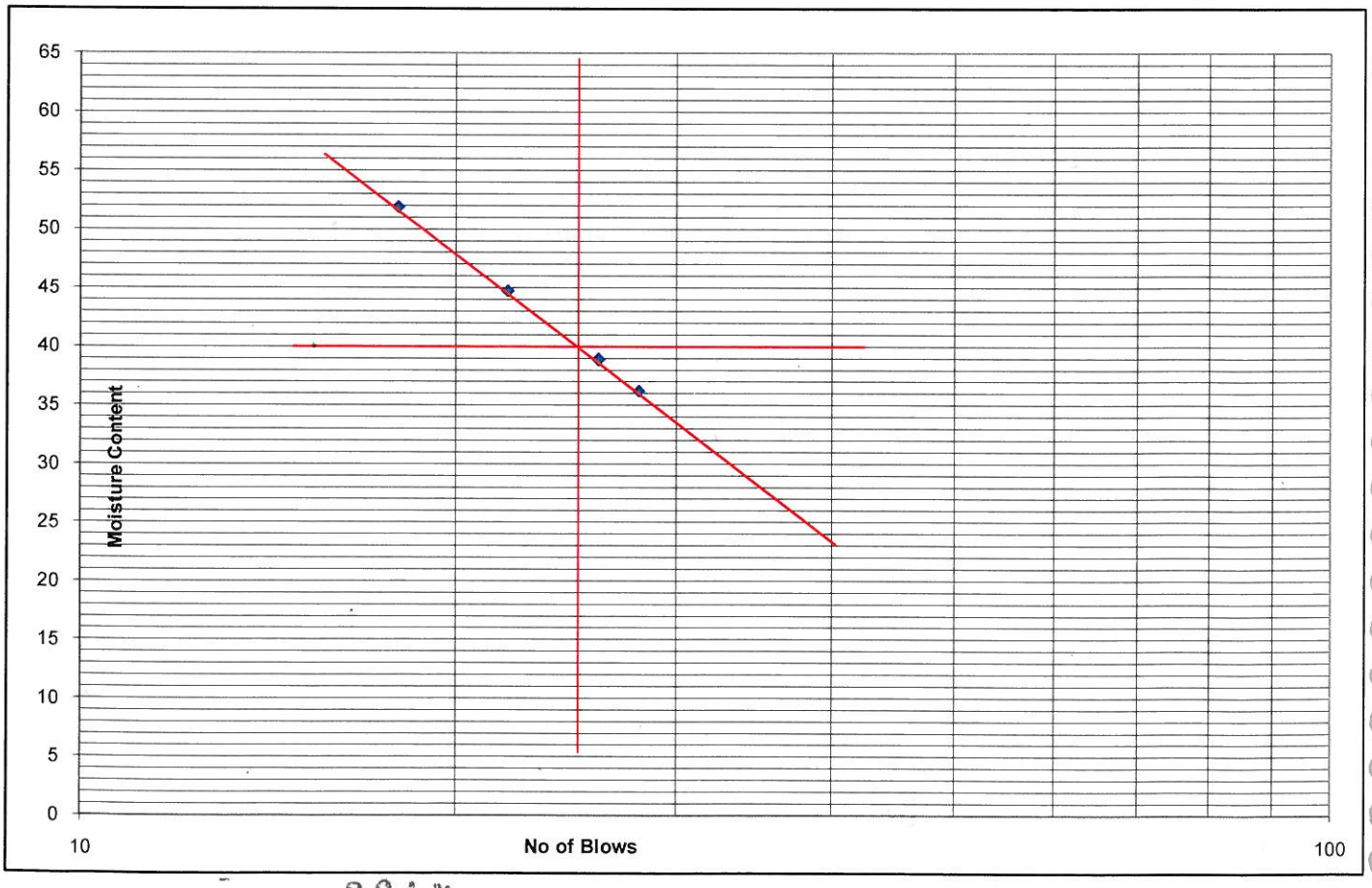
IS : 2720 (Part -5)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	25.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	50.0m	Tested by	:	D.Mohanty

Number of Blows	28	26	22	18	Plastic Limit	
Container No.	E19	E20	E21	E22	E23	E24
Container Weight (gm) (W1)	31.69	35.24	37.88	34.61	35.8	32.51
Container + Wt. of wet soil (gm) (W2)	96.32	110.42	106.69	118.51	98.83	92.77
Wt of Container + Wt. of oven dry soil (gm) (W3)	79.14	89.36	85.42	89.85	88.35	82.87
Wt. Of water (gm) (W2-W1)-(W3-W1)	17.19	21.06	21.27	28.66	10.48	9.89
Wt. of oven dry soil (gm) (W3-W1)	47.45	54.12	47.54	55.24	52.55	50.36
Moisture Content (%)= [(W2-W1)-(W3-W1)]/(W3-W1) X 100	**36.22**	**38.91**	**44.73**	**51.88**	**19.94**	**19.64**

Result Summary

Liquid Limit (WL)	40	%
Plastic Limit (Wp)	20	%
Plasticity Index (Ip)	20	%



3615

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Type of Sample : UDS

Location : BH-2(Markanda River-Ambala)

Depth : 10.5m

Date Of Testing : 24.09.12

Tested by : D.Mohanty

Sampled by : T.K.Das

Weight of Sample : 10gm

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	15	50%
2	10	11.5	1.50	15		
3	10	11.0	1.00	10		

Remarks:

Lab Manager

Checked By:

3616

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: UDS	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 13.5m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.5	2.50	25	18	50%
2	10	12.0	2.00	20		
3	10	11.0	1.00	10		

Remarks:

Lab Manager

Checked By:

3617

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12
Type of Sample	:	UDS	Tested by	:	D.Mohanty
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	16.5m	Weight of Sample	:	10gm

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	17	50%
2	10	11.5	1.50	15		
3	10	11.5	1.50	15		

Remarks:

Lab Manager

Checked By:

3618

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: UDS	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 19.5m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	16	50%
2	10	11.5	1.50	15		
3	10	11.3	1.30	13		

Remarks:

Lab Manager

Checked By:

3619

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Type of Sample : UDS

Location : BH-2(Markanda River-Ambala)

Depth : 22.5m

Date Of Testing : 24.09.12

Tested by : D.Mohanty

Sampled by : T.K.Das

Weight of Sample : 10gm

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.5	2.50	25	19	50%
2	10	12.0	2.00	20		
3	10	11.2	1.20	12		

Remarks:

Lab Manager

Checked By:

3620

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: UDS	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 25.5m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.5	2.50	25	18	50%
2	10	12.0	2.00	20		
3	10	11.0	1.00	10		

Remarks:

Lab Manager

Checked By:

3621

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Type of Sample : UDS

Location : BH-2(Markanda River-Ambala)

Depth : 28.5m

Date Of Testing : 24.09.12

Tested by : D.Mohanty

Sampled by : T.K.Das

Weight of Sample : 10gm

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.5	2.50	25	17	50%
2	10	11.5	1.50	15		
3	10	11.0	1.00	10		

Remarks:

Lab Manager

Checked By:

3622

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: UDS	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 31.5m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	15	50%
2	10	11.5	1.50	15		
3	10	11.0	1.00	10		

Remarks:

Lab Manager

Checked By:

3623

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Type of Sample : SPT

Location : BH-2(Markanda River-Ambala)

Depth : 37.5m

Date Of Testing : 24.09.12

Tested by : D.Mohanty

Sampled by : T.K.Das

Weight of Sample : 10gm

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	17	50%
2	10	11.5	1.50	15		
3	10	11.5	1.50	15		

Remarks:

Lab Manager

Checked By:

3624

Arki Techno Consultants (India) Pvt.Ltd

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: SPT	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 42.0m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.0	2.00	20	16	50%
2	10	11.5	1.50	15		
3	10	11.3	1.30	13		

Remarks:

Lab Manager

Checked By:

3625

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO

N 3/91, IRC Village, Bhubaneswar

DIFFERENTIAL FREE SWELL INDEX OF SOIL (D.F.S.)

AS PER IS: 2720 (PART - 40)

Client	: DFCC				
Project Name	: G.I For 3 Nos. Important Bridges	Date Of Testing	:	24.09.12	
Type of Sample	: SPT	Tested by	:	D.Mohanty	
Location	: BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das	
Depth	: 50.0m	Weight of Sample	:	10gm	

SAMPLE NO.	VOLUME IN KEROSIN OIL Vk	VOLUME IN WATER Vd	SWELL (Vd-Vk)	SWELL INDEX = (Vd-Vk)/ (Vk)*100 (%)	AVERAGE SWELL %	SPECIFIC LIMIT
1	10	12.5	2.50	25	18	50%
2	10	11.5	1.50	15		
3	10	11.3	1.30	13		

Remarks:

Lab Manager

Checked By:

3626

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	6.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	37.83	
3	Weight of bottle with soil and water W3 in gm	136.34	
4	Weight of bottle full of water W4 in gm	132.49	
5	Weight of dry soil (W2-W1)in gm	6.32	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	2.47	
7	Specific Gravity G = (5) / (6)	2.56	

Lab Manager

Checked By

3627

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	10.5m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	35.48	
3	Weight of bottle with soil and water W3 in gm	137.58	
4	Weight of bottle full of water W4 in gm	135.10	
5	Weight of dry soil (W2-W1)in gm	3.96	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.48	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

Checked By

3623

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	15.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	33.89	
3	Weight of bottle with soil and water W3 in gm	136.73	
4	Weight of bottle full of water W4 in gm	135.24	
5	Weight of dry soil (W2-W1)in gm	2.37	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	0.88	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

Checked By

3623

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	18.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.34	
3	Weight of bottle with soil and water W3 in gm	137.71	
4	Weight of bottle full of water W4 in gm	134.68	
5	Weight of dry soil (W2-W1)in gm	4.82	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.79	
7	Specific Gravity G = (5) / (6)	2.69	

Lab Manager

Checked By

3630

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	19.5m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	37.58	
3	Weight of bottle with soil and water W3 in gm	136.23	
4	Weight of bottle full of water W4 in gm	132.43	
5	Weight of dry soil (W2-W1)in gm	6.06	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	2.26	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

Checked By

3631

Arki Techno Consultants (India) Pvt.Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	: DFCC		
Project Name	: G.I For 3 Nos. Important Bridges		
Type of Sample	: SPT	Date Of Testing	: 24.09.12
Location	: BH-2(Markanda River-Ambala)	Sampled by	: T.K.Das
Depth	: 21.0m	Tested by	: D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.45	
3	Weight of bottle with soil and water W3 in gm	135.99	
4	Weight of bottle full of water W4 in gm	132.90	
5	Weight of dry soil (W2-W1)in gm	4.93	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.84	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

Checked By

3632

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	22.5m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	35.68	
3	Weight of bottle with soil and water W3 in gm	136.46	
4	Weight of bottle full of water W4 in gm	133.84	
5	Weight of dry soil (W2-W1)in gm	4.16	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.54	
7	Specific Gravity G = (5) / (6)	2.70	

Lab Manager

Checked By

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	24.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.78	
3	Weight of bottle with soil and water W3 in gm	137.89	
4	Weight of bottle full of water W4 in gm	134.59	
5	Weight of dry soil (W2-W1)in gm	5.26	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.96	
7	Specific Gravity G = (5) / (6)	2.69	

Lab Manager

Checked By

3634

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	28.5m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	37.13	
3	Weight of bottle with soil and water W3 in gm	135.89	
4	Weight of bottle full of water W4 in gm	132.37	
5	Weight of dry soil (W2-W1)in gm	5.61	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	2.09	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

Checked By

3635

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	30.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.73	
3	Weight of bottle with soil and water W3 in gm	137.72	
4	Weight of bottle full of water W4 in gm	134.46	
5	Weight of dry soil (W2-W1)in gm	5.21	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.94	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	31.5m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.25	
3	Weight of bottle with soil and water W3 in gm	134.58	
4	Weight of bottle full of water W4 in gm	131.61	
5	Weight of dry soil (W2-W1)in gm	4.73	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.76	
7	Specific Gravity G = (5) / (6)	2.69	

Lab Manager

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	: DFCC		
Project Name	: G.I For 3 Nos. Important Bridges		
Type of Sample	: SPT	Date Of Testing	: 24.09.12
Location	: BH-2(Markanda River-Ambala)	Sampled by	: T.K.Das
Depth	: 37.5m	Tested by	: D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	37.56	
3	Weight of bottle with soil and water W3 in gm	137.54	
4	Weight of bottle full of water W4 in gm	133.75	
5	Weight of dry soil (W2-W1)in gm	6.04	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	2.25	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	42.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	35.65	
3	Weight of bottle with soil and water W3 in gm	136.48	
4	Weight of bottle full of water W4 in gm	133.89	
5	Weight of dry soil (W2-W1)in gm	4.13	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.54	
7	Specific Gravity G = (5) / (6)	2.69	

Lab Manager

Checked By

3633

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Type of Sample : SPT — Date Of Testing : 24.09.12

Location : BH-2(Markanda River-Ambala) — Sampled by : T.K.Das

Depth : 48.0m — Tested by : D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	36.58	
3	Weight of bottle with soil and water W3 in gm	136.92	
4	Weight of bottle full of water W4 in gm	133.73	
5	Weight of dry soil (W2-W1)in gm	5.06	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	1.87	
7	Specific Gravity G = (5) / (6)	2.70	

Lab Manager

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3640

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N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF SPECIFIC GRAVITY BY DENSITY BOTTLE METHOD AS PER IS : 2386 (Part -2)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date Of Testing	:	24.09.12
Location	:	BH-2(Markanda River-Ambala)	Sampled by	:	T.K.Das
Depth	:	50.0m	Tested by	:	D.Mohanty

Sl. No.	Observations	1	Remarks
1	Weight of density bottle W1 in gm	31.52	
2	Weight of bottle with dry soil in W2 gm	37.95	
3	Weight of bottle with soil and water W3 in gm	137.34	
4	Weight of bottle full of water W4 in gm	133.31	
5	Weight of dry soil (W2-W1)in gm	6.43	
6	Weight of equal volume of water(W2 - W1) - (W3 - W4) in gm	2.40	
7	Specific Gravity G = (5) / (6)	2.68	

Lab Manager

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3641

ARKI TECHNO CONSULTANTS (I) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

DETERMINATION OF BULK DENSITY & MOISTURE CONTENT OF SOIL SAMPLE

Client : DFCC

Project Name : G.I For 3 Nos. Important Bridges

Location : BH-2(Markanda River-Ambala)

Sl No.	BH No.	Depth in m	Type of Sample	Date of Testing	Weight of Container in gm	Diameter of Sample in cm	Length of Sample in cm	Volume of Sample in cc	Weight of Container + Wet Soil in gm	Weight of Container + Dry soil in gm	Weight of Dry soil in gm	Weight of water in gm	Moisture Content in %	Bulk Density in gm/cc	Dry Density in gm/cc
1	BH-2(Markanda River-Ambala)	6.0	SPT	24.09.12	60.45	3.8	7	79.39	208.91	193.49	133.04	15.42	11.59	1.87	1.68
2		10.5	UDS	24.09.12	61.52	3.8	7	79.39	219.51	189.22	127.70	30.29	23.72	1.99	1.61
3		15.0	SPT	24.09.12	62.33	3.8	7	79.39	221.11	192.68	130.35	28.43	21.81	2.00	1.64
4		18.0	SPT	24.09.12	61.41	3.8	7	79.39	219.40	188.31	126.90	31.09	24.50	1.99	1.60
5		19.5	UDS	24.09.12	61.28	3.8	7	79.39	220.85	192.43	131.15	28.42	21.67	2.01	1.65
6		21.0	SPT	24.09.12	63.11	3.8	7	79.39	224.27	194.54	131.43	29.73	22.62	2.03	1.66
7		22.5	UDS	24.09.12	65.34	3.8	7	79.39	224.12	194.25	128.91	29.87	23.17	2.00	1.62
8		24.0	SPT	24.09.12	60.55	3.8	7	79.39	223.30	195.09	134.54	28.21	20.97	2.05	1.69
9		25.5	UDS	24.09.12	63.18	3.8	7	79.39	225.13	197.60	134.43	27.53	20.48	2.04	1.69
10		28.5	UDS	24.09.12	63.44	3.8	7	79.39	230.95	200.41	136.97	30.54	22.30	2.11	1.73
11		30.0	SPT	24.09.12	63.70	3.8	7	79.39	234.39	200.57	136.87	33.82	24.71	2.15	1.72
12		31.5	UDS	24.09.12	63.96	3.8	7	79.39	232.27	203.24	139.28	29.03	20.84	2.12	1.75
13		37.5	SPT	24.09.12	64.2	3.8	7	79.39	237.30	206.45	142.22	30.85	21.69	2.18	1.79
14		48.0	SPT	24.09.12	64.49	3.8	7	79.39	239.15	206.15	141.66	32.99	23.29	2.20	1.78
15		50.0	SPT	24.09.12	64.75	3.8	7	79.39	241.79	208.22	143.47	33.57	23.40	2.23	1.81

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	1.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 79.17

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	35.91	35.91	35.91	64.09
0.425	31.57	31.57	67.48	32.52
0.075	11.69	11.69	79.17	20.83
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 79.17 **Silt and clay %** 20.83

Remarks :-

3643

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	3.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 81.24

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	35.26	35.26	35.26	64.74
0.425	33.26	33.26	68.52	31.48
0.075	12.72	12.72	81.24	18.76
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 81.24 **Silt and clay %** 18.76

Remarks :-

3644

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

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N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	4.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 80.28

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	36.72	36.72	36.72	63.28
0.425	32.06	32.06	68.78	31.22
0.075	11.51	11.51	80.29	19.71
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 80.29 **Silt and clay %** 19.71

Remarks :-

3645

Lab Manager Checked By

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ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	6.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 77.92

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	34.81	34.81	34.81	65.19
0.425	32.48	32.48	67.29	32.71
0.075	10.63	10.63	77.92	22.08
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 77.92 **Silt and clay %** 22.08

Remarks :-

3646

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	7.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.84

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.89	0.89	0.89	99.11
0.425	0.76	0.76	1.65	98.35
0.075	0.19	0.19	1.84	98.16
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.84 **Silt and clay %** 98.16

Remarks :-

3647

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	9.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.55

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.79	0.79	0.79	99.21
0.425	0.63	0.63	1.42	98.58
0.075	0.14	0.14	1.56	98.44
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.56 **Silt and clay %** 98.44

Remarks :-

3643

Lab Manager

Checked By

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N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	10.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.09

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.59	0.59	0.59	99.41
0.425	0.39	0.39	0.98	99.02
0.075	0.11	0.11	1.09	98.91
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.09 **Silt and clay %** 98.91

Remarks :-

3649

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	13.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.65

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.91	0.91	0.91	99.09
0.425	0.54	0.54	1.45	98.55
0.075	0.20	0.20	1.65	98.35
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.65 **Silt and clay %** 98.35

Remarks :-

3650

Lab Manager Checked By

Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	15.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 0.96

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.54	0.54	0.54	99.46
0.425	0.35	0.35	0.89	99.11
0.075	0.08	0.08	0.97	99.03
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 0.97 **Silt and clay %** 99.03

Remarks :-

3651

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N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	16.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.32

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.77	0.77	0.77	99.23
0.425	0.40	0.40	1.17	98.83
0.075	0.15	0.15	1.32	98.68
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.32 **Silt and clay %** 98.68

Remarks :-

3652

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Arki Techno Consultants (India) Pvt. Ltd

ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	19.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.43

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.79	0.79	0.79	99.21
0.425	0.50	0.50	1.29	98.71
0.075	0.14	0.14	1.43	98.57
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.43 **Silt and clay %** 98.57

Remarks :-

3653

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N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	UDS	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	22.5m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.51

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.81	0.81	0.81	99.19
0.425	0.57	0.57	1.38	98.62
0.075	0.13	0.13	1.51	98.49
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.51 **Silt and clay %** 98.49

Remarks :-

3654

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ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	24.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.37

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.68	0.68	0.68	99.32
0.425	0.56	0.56	1.24	98.76
0.075	0.13	0.13	1.37	98.63
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.37 **Silt and clay %** 98.63

Remarks :-

3653

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ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.

N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	27.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.18

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
.75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.60	0.60	0.60	99.40
0.425	0.49	0.49	1.09	98.91
0.075	0.10	0.10	1.19	98.81
Total	100.00			

Gravel Content (%)= **0.00**

Sand Content (%) = 1.19 **Silt and clay %** 98.81

Remarks :-

3656

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N 3/91, IRC Village, Bhubaneswar

GRAIN SIZE ANALYSIS OF SOIL AS PER IS 2720 (P- 4)

Client	:	DFCC			
Project Name	:	G.I For 3 Nos. Important Bridges			
Type of Sample	:	SPT	Date of Testing	:	28.09.12
Location	:	BH-3(Markanda River-Ambala)	Sampled by	:	T. K. Das
Depth	:	30.0m	Tested by	:	D.Mohanty

Weight of oven dried sample before washing (gm) :- 100.00

Weight of oven dried sample after washing (gm) :- 1.52

Sieve Size mm	Individual Weight Retained in gm.	Individual Wt. Retained In %	Cummulative Wt Retained In %	Cummulative Wt Passing In %
75	0	0.00	0.00	100.00
50	0	0.00	0.00	100.00
37.5	0	0.00	0.00	100.00
19	0	0.00	0.00	100.00
4.75	0.00	0.00	0.00	100.00
2.00	0.75	0.75	0.75	99.25
0.425	0.59	0.59	1.34	98.66
0.075	0.19	0.19	1.53	98.47
Total	100.00			

Gravel Content (%)= **0.00**

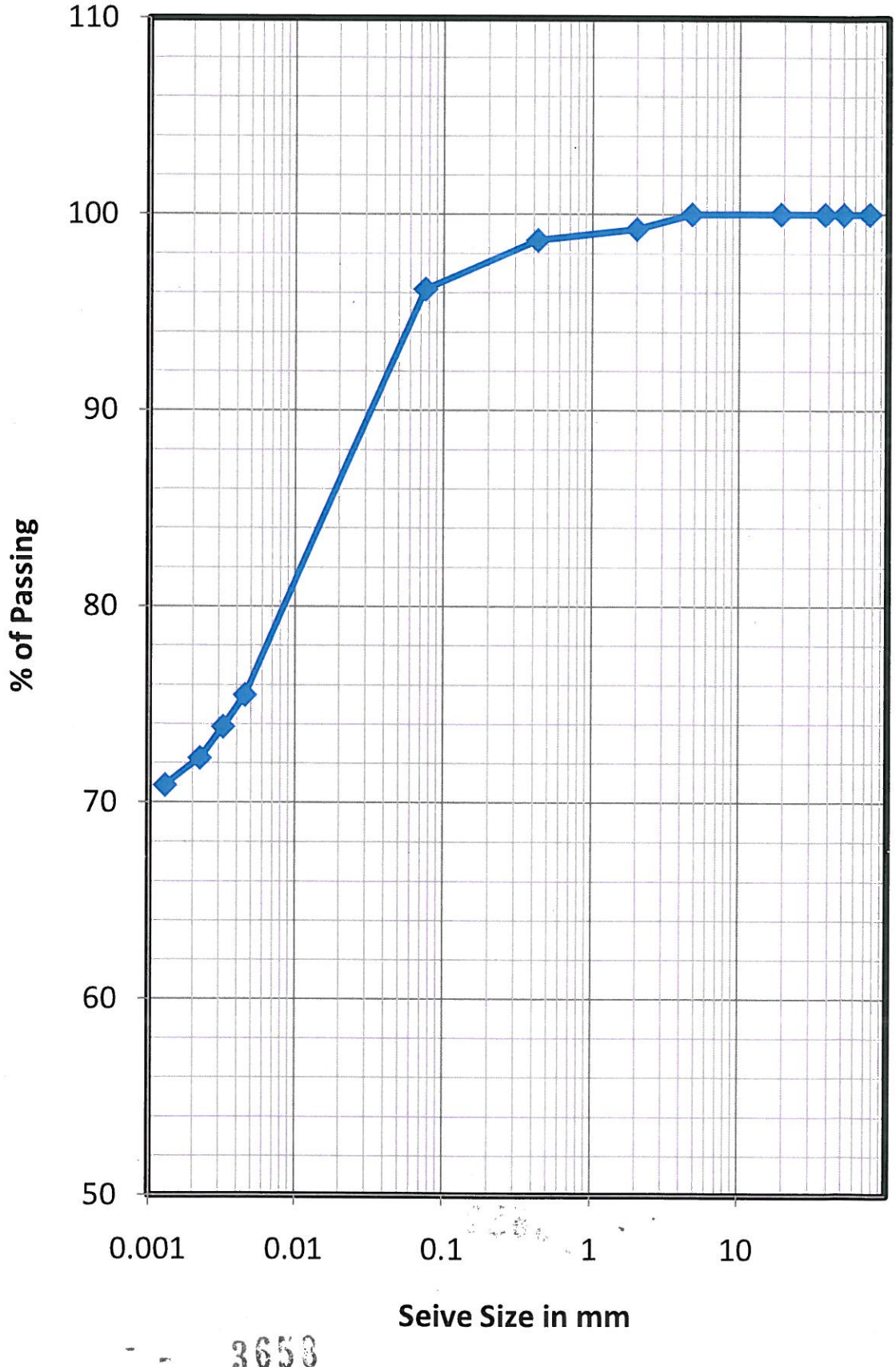
Sand Content (%) = 1.53 **Silt and clay %** 98.47

Remarks :-

3657

Lab Manager Checked By

Grain Size Distribution Curve
BH-3,D-30.0m



3653