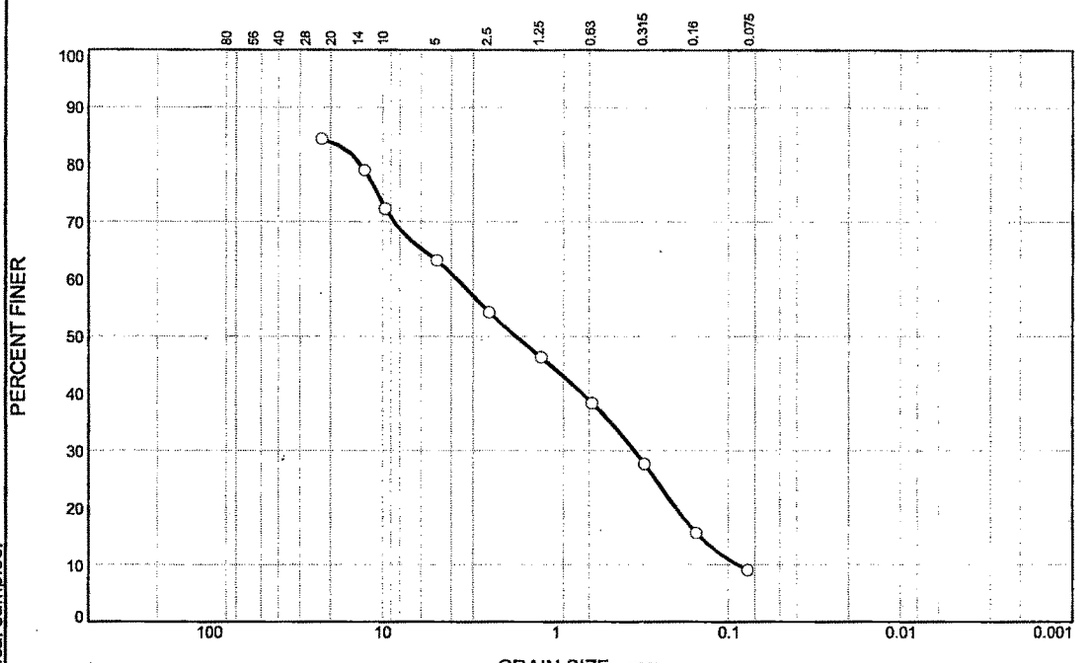
GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		21	11	19	24	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	84		
12.5	79		
9.5	72		
4.75	63		
2.36	54		
1.18	46		
0.60	38		
0.30	27		
0.15	15		
0.075	8.7		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= D_{60}= 3.7101 D_{50}= 1.6996
D_{30}= 0.3501 D_{15}= 0.1477 D_{10}= 0.0897
C_u= 41.38 C_c= 0.37

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 01
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.75m **Date:** 21.03.2004

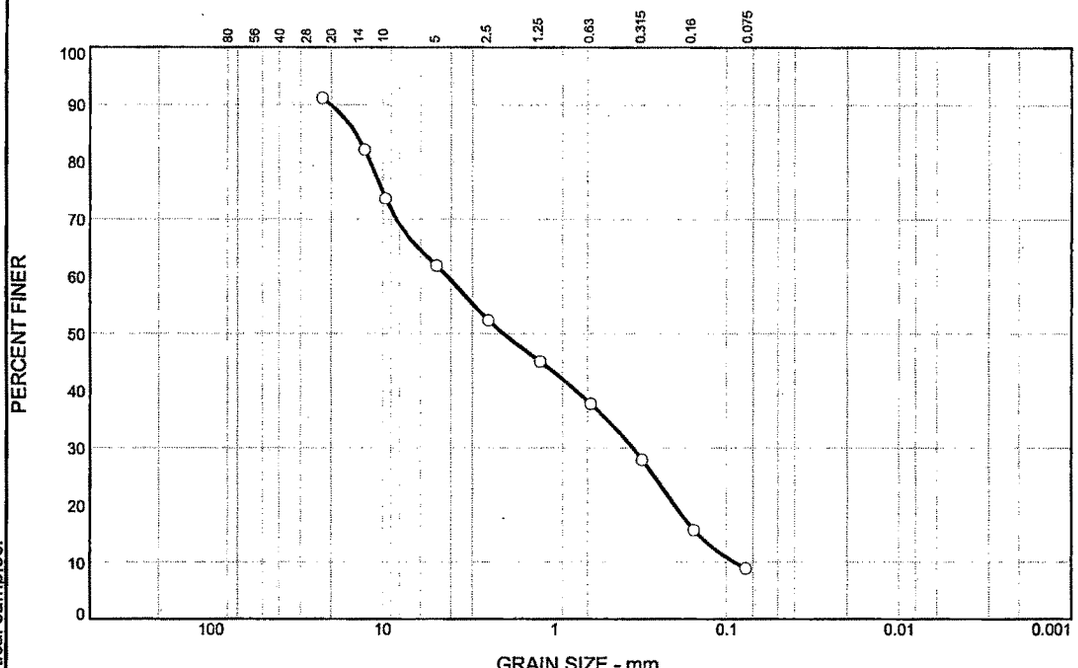
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-01/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		27	12	17	24	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	91		
12.5	82		
9.5	73		
4.75	62		
2.36	52		
1.18	45		
0.60	37		
0.30	28		
0.15	15		
0.075	8.5		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 14.2502 D_{60}= 4.1947 D_{50}= 1.9846
D_{30}= 0.3483 D_{15}= 0.1471 D_{10}= 0.0912
C_u= 45.97 C_c= 0.32

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 02
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

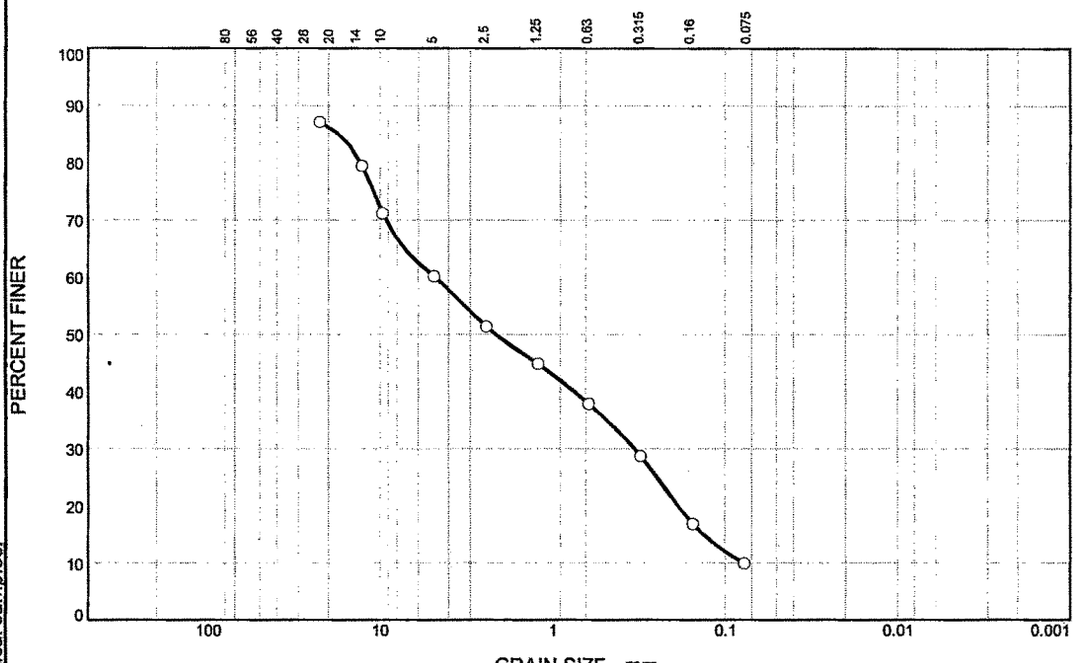
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-02/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		26	11	16	23	10	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	87		
12.5	79		
9.5	71		
4.75	60		
2.36	51		
1.18	45		
0.60	38		
0.30	28		
0.15	17		
0.075	9.6		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{85}= 17.4980 D_{60}= 4.7869 D_{50}= 2.1304
D_{30}= 0.3325 D_{15}= 0.1337 D_{10}= 0.0790
C_u= 60.56 C_c= 0.29

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 03
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date: 21.03.2004**

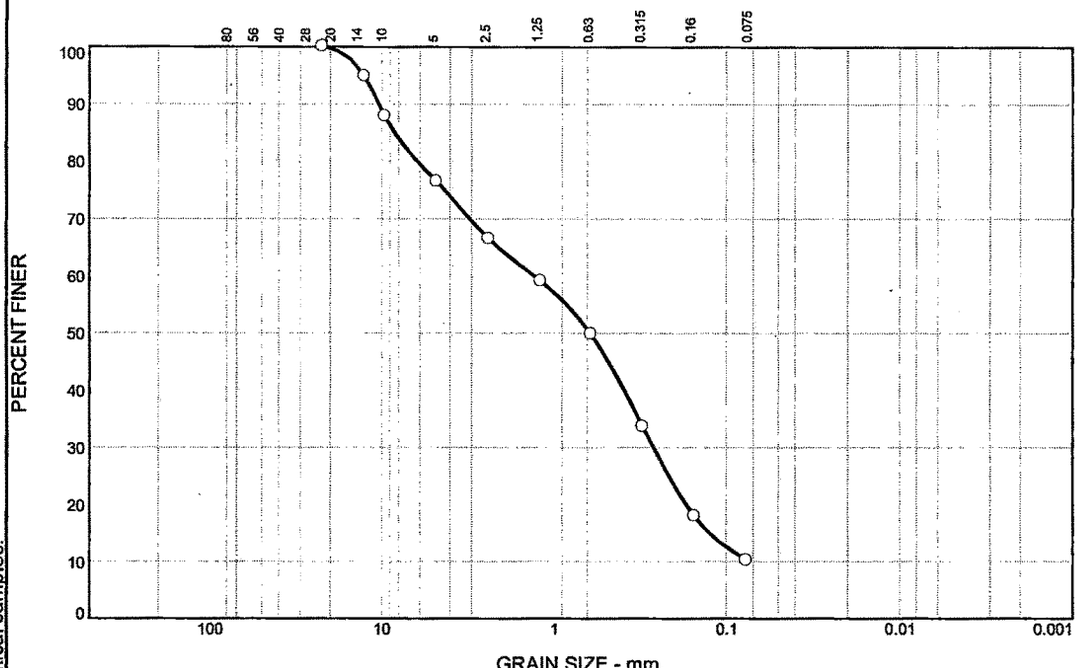
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-03/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	1	23	12	22	32	10	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22	100		
12.5	95		
9.5	88		
4.75	76		
2.36	66		
1.18	59		
0.60	50		
0.30	33		
0.15	18		
0.075	10.0		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 8.3767 D_{60}= 1.3012 D_{50}= 0.6097
D_{30}= 0.2617 D_{15}= 0.1248 D_{10}= 0.0751
C_u= 17.31 C_c= 0.70

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 04
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date: 21.03.2004**

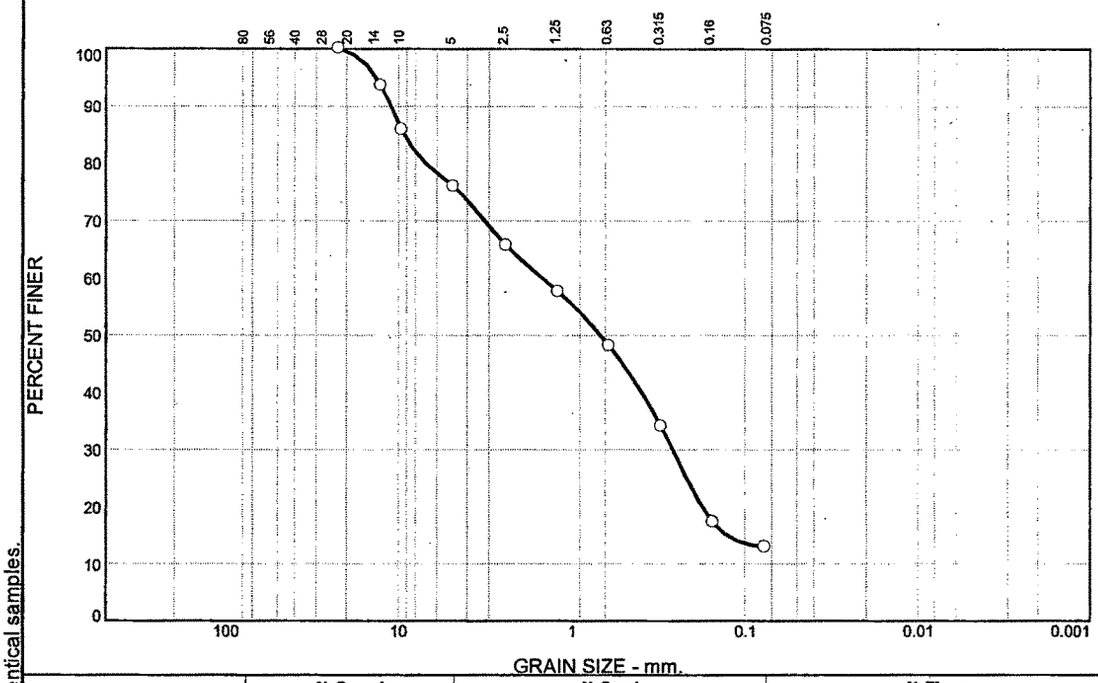
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-04/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	1	23	13	21	29	13	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	100		
12.5	94		
9.5	86		
4.75	76		
2.36	66		
1.18	58		
0.60	48		
0.30	34		
0.15	17		
0.075	13		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 9.1911 D_{60}= 1.4758 D_{50}= 0.6786
D_{30}= 0.2587 D_{15}= 0.1278 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO= A-1-b

Remarks

Sample Number: 05
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.85m **Date:** 21.03.2004

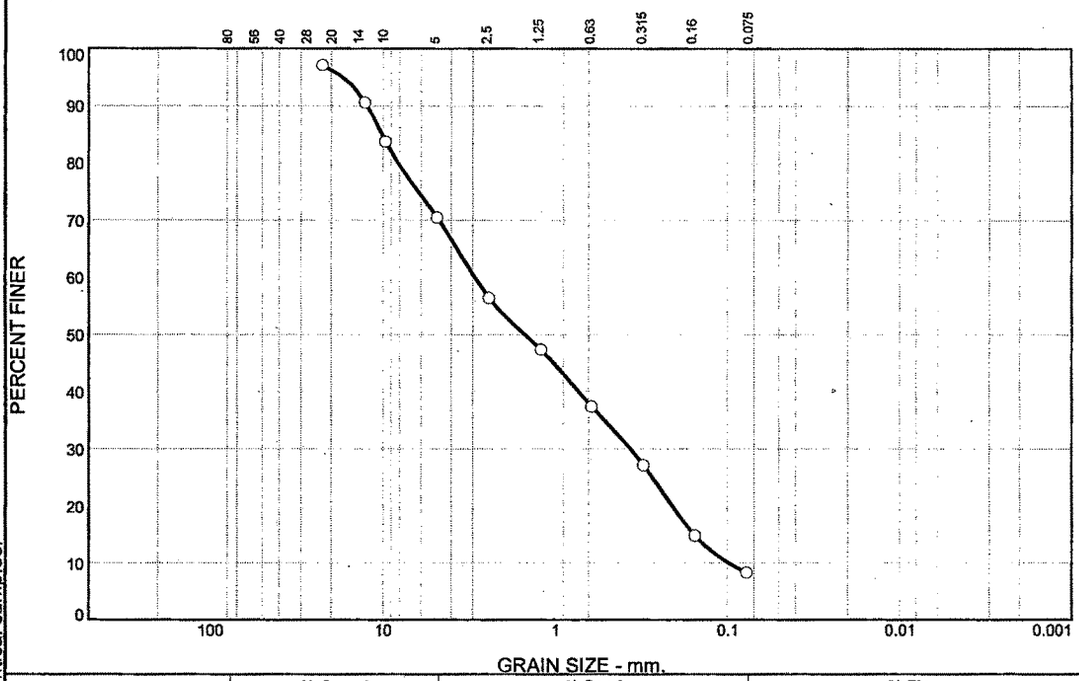
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-05/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		26	16	22	24	8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	97		
12.5	90		
9.5	83		
4.75	70		
2.36	56		
1.18	47		
0.60	37		
0.30	27		
0.15	14		
0.075	7.9		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 10.0939 D_{60}= 2.9064 D_{50}= 1.4986
D_{30}= 0.3655 D_{15}= 0.1556 D_{10}= 0.0994
C_u= 29.24 C_c= 0.46

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 06
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date: 21.03.2004**

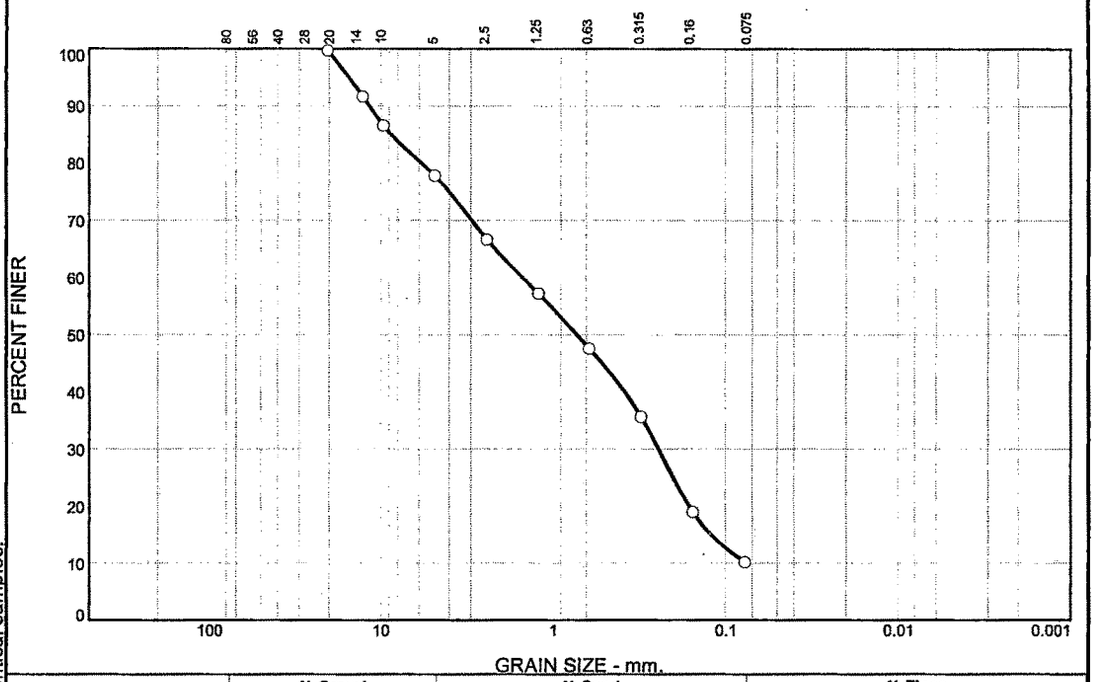
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-06/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		21	14	22	32	10	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	99		
12.5	91		
9.5	86		
4.75	78		
2.36	66		
1.18	57		
0.60	47		
0.30	35		
0.15	19		
0.075	9.8		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 8.7093 D_{60}= 1.4887 D_{50}= 0.7231
D_{30}= 0.2412 D_{15}= 0.1209 D_{10}= 0.0764
C_u= 19.48 C_c= 0.51

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 07
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

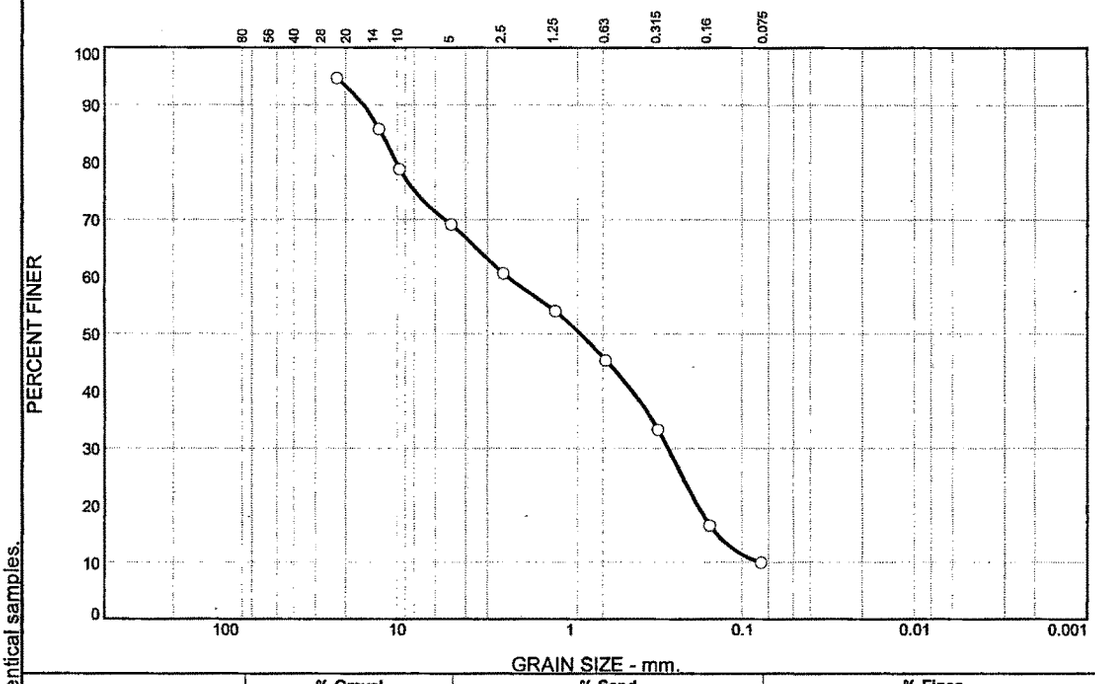
M. S. U. Baroda

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-07/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		24	10	19	30	10	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	94		
12.5	86		
9.5	79		
4.75	69		
2.36	60		
1.18	54		
0.60	45		
0.30	33		
0.15	16		
0.075	9.6		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 12.2246 D_{60}= 2.2855 D_{50}= 0.8633
D_{30}= 0.2659 D_{15}= 0.1402 D_{10}= 0.0810
C_u= 28.23 C_c= 0.38

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 08
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.80m **Date:** 21.03.2004

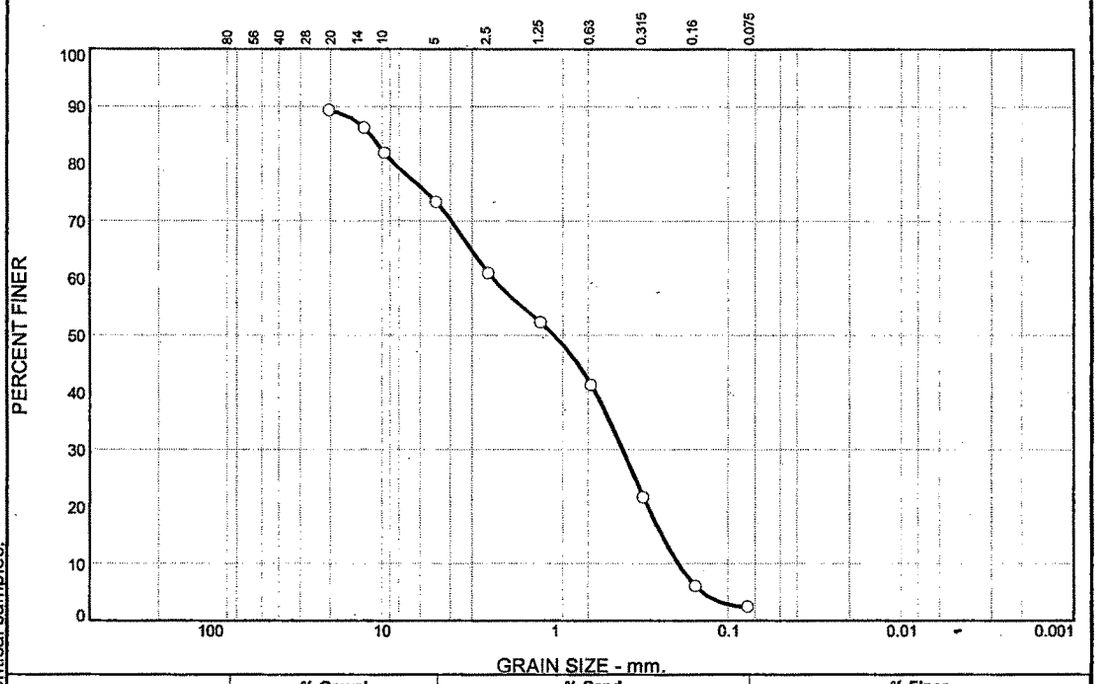
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-08/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		16	15	26	30	2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	89		
12.5	86		
9.5	82		
4.75	73		
2.36	61		
1.18	52		
0.6	41		
0.3	21		
0.15	6		
0.075	2.1		

* (no specification provided)

Material Description

Colluvial Soil.

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 11.6240 D_{60}= 2.2775 D_{50}= 1.0038
D_{30}= 0.4010 D_{15}= 0.2382 D_{10}= 0.1924
C_u= 11.84 C_c= 0.37

Classification

USCS= SP AASHTO= A-1-b

Remarks

Sample Number: 09
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1.5m **Date:** 21.03.2004

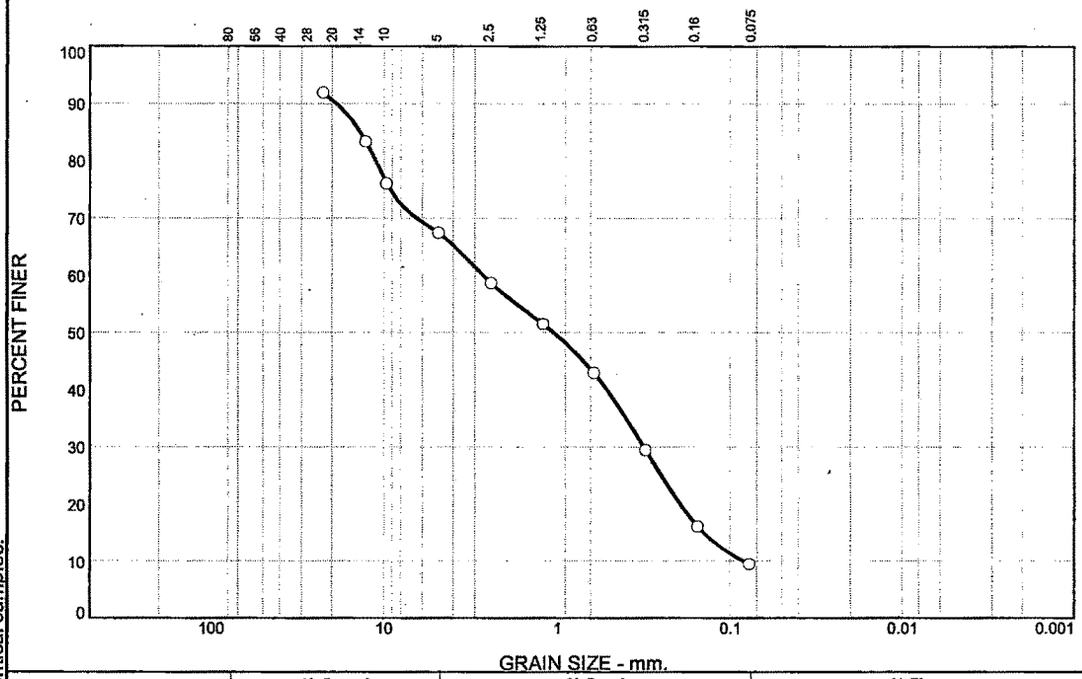
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-09/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: Anand Mehta **Checked By:** Dr. K.C.Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		23	10	21	27	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	92		
12.5	83		
9.5	76		
4.75	67		
2.36	58		
1.18	51		
0.60	43		
0.30	29		
0.15	16		
0.075	9.1		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 13.5574 D_{60}= 2.6753 D_{50}= 1.0462
D_{30}= 0.3129 D_{15}= 0.1425 D_{10}= 0.0847
C_u= 31.60 C_c= 0.43

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 10
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

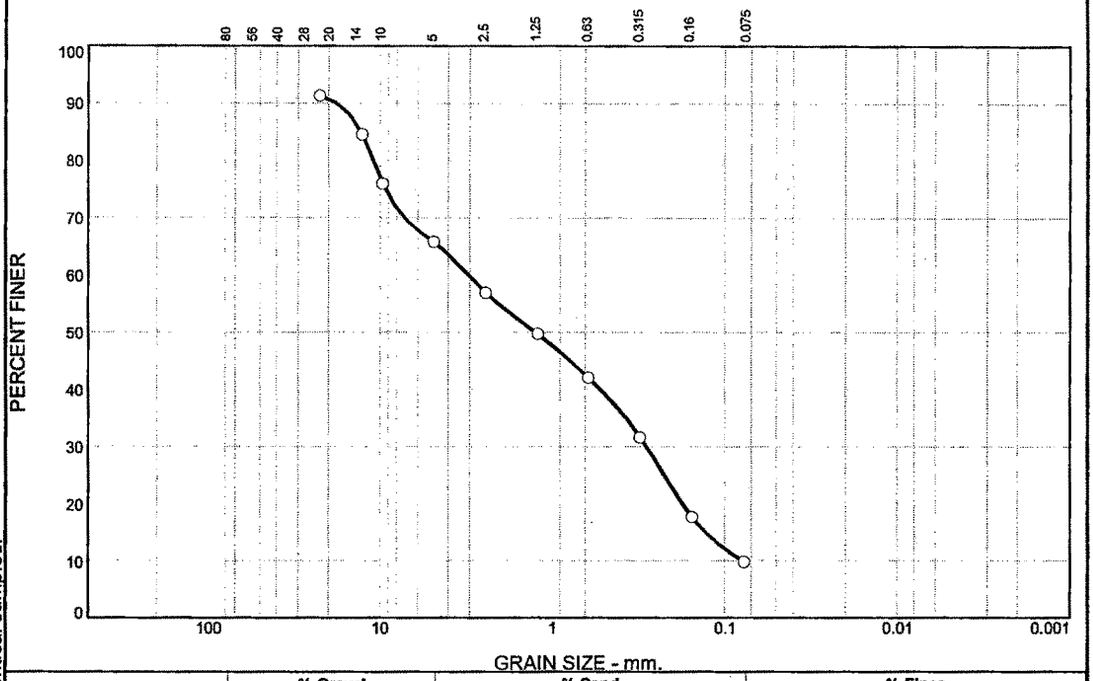
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-10/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		24	11	18	28	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	91		
12.5	84		
9.5	76		
4.75	66		
2.36	57		
1.18	49		
0.60	42		
0.30	31		
0.15	17		
0.075	9.5		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 12.8504 D_{60}= 3.0525 D_{50}= 1.2480
D_{30}= 0.2807 D_{15}= 0.1287 D_{10}= 0.0798
C_u= 38.25 C_c= 0.32

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 11
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.9m **Date: 21.03.2004**

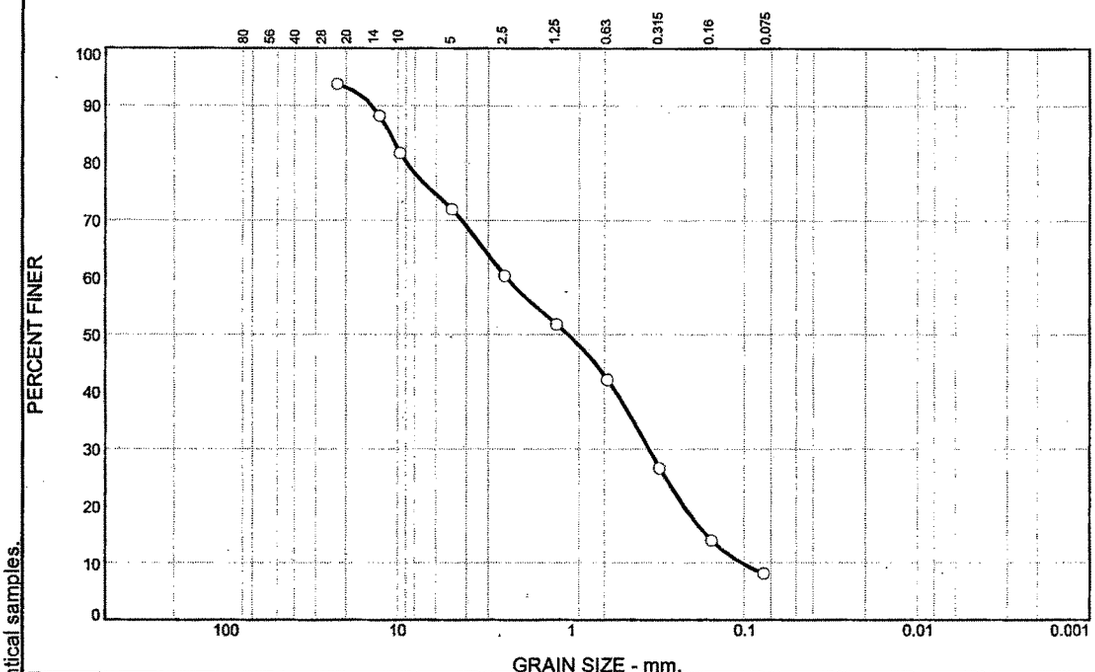
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-11/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		21	14	24	26	8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	94		
12.5	88		
9.5	81		
4.75	72		
2.36	60		
1.18	52		
0.60	42		
0.30	26		
0.15	14		
0.075	7.8		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 11.0036 D_{60}= 2.3494 D_{50}= 1.0347
D_{30}= 0.3521 D_{15}= 0.1662 D_{10}= 0.1047
C_u= 22.44 C_c= 0.50

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 12
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.90m **Date:** 21.03.2004

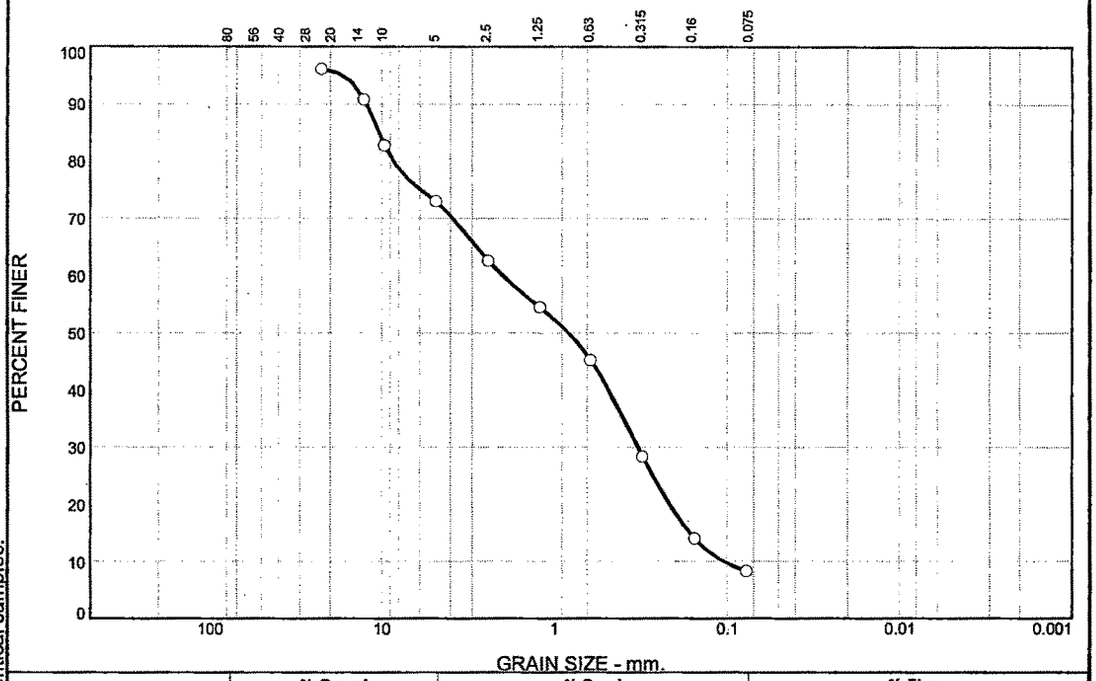
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-12/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		23	13	23	29	8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	96		
12.5	91		
9.5	83		
4.75	73		
2.36	62		
1.18	54		
0.60	45		
0.30	28		
0.15	14		
0.075	7.9		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 10.3387 D_{60}= 1.9853 D_{50}= 0.8189
D_{30}= 0.3234 D_{15}= 0.1639 D_{10}= 0.1054
C_u= 18.84 C_c= 0.50

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 13
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.97 **Date:** 21.03.2004

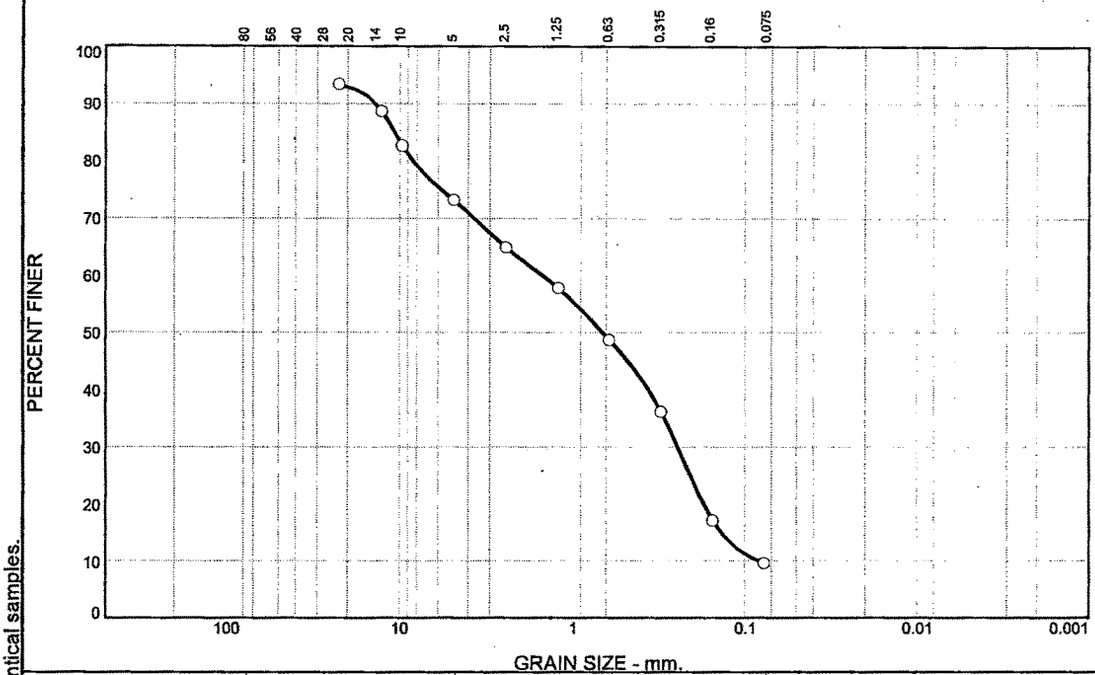
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-13/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		20	10	20	34	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	93		
12.5	88		
9.5	82		
4.75	73		
2.36	65		
1.18	58		
0.60	48		
0.30	36		
0.15	17		
0.075	9.2		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 10.6564 D_{60}= 1.4888 D_{50}= 0.6687
D_{30}= 0.2436 D_{15}= 0.1370 D_{10}= 0.0852
C_u= 17.47 C_c= 0.47

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 14
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

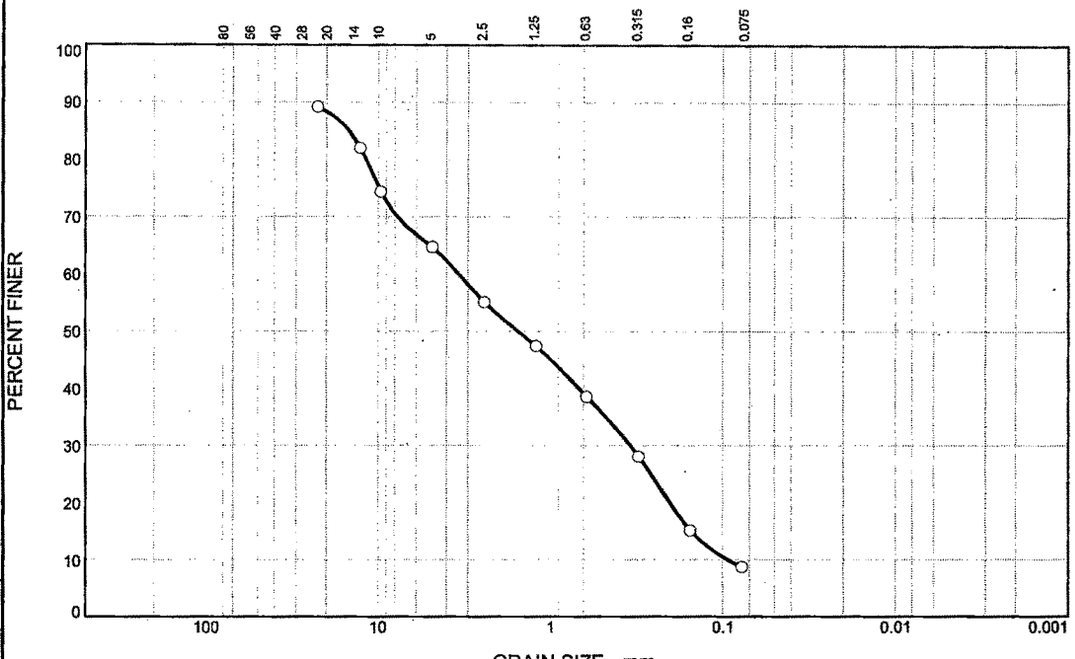
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-14/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		24	11	20	25	8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	89		
12.5	82		
9.5	74		
4.75	64		
2.36	55		
1.18	47		
0.60	38		
0.30	28		
0.15	15		
0.075	8.4		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 14.6675 D_{60}= 3.4009 D_{50}= 1.5362
D_{30}= 0.3414 D_{15}= 0.1518 D_{10}= 0.0951
C_u= 35.75 C_c= 0.36

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Sample Number: 15
Source of Sample: Mangti Landslide Soil Samples **Depth:** 0.80m **Date:** 21.03.2004

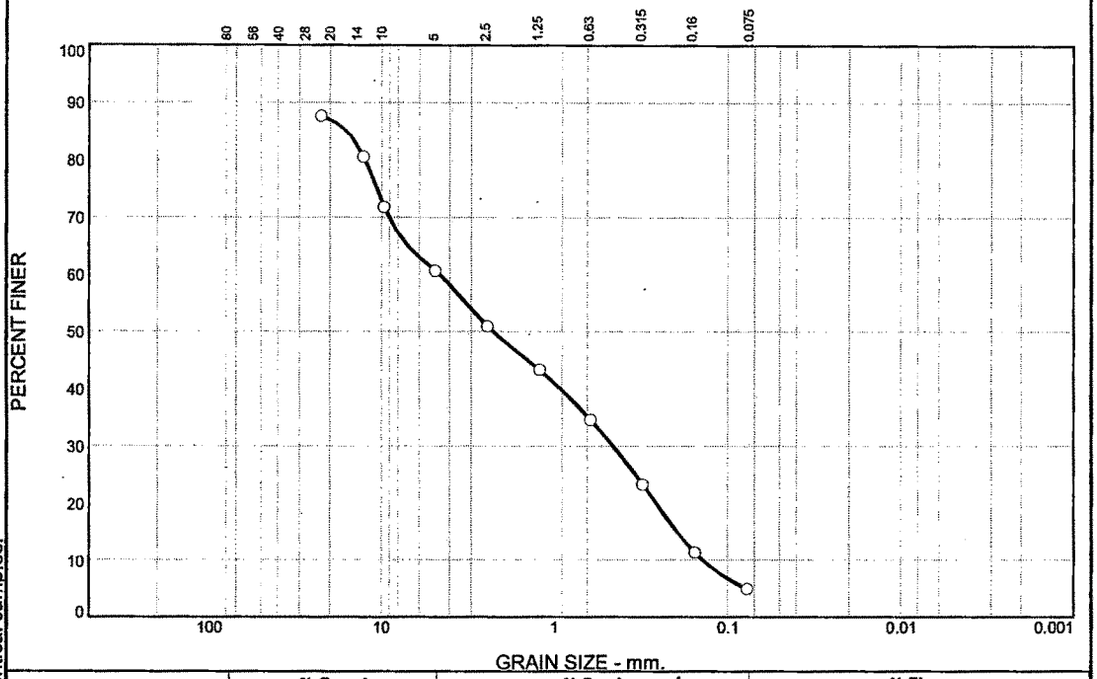
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-15/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the s -nd are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		27	11	20	24	5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	87		
12.5	80		
9.5	72		
4.75	60		
2.36	51		
1.18	43		
0.60	34		
0.30	23		
0.15	11		
0.075	4.6		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 15.9066 D_{60}= 4.5914 D_{50}= 2.2387
D_{30}= 0.4542 D_{15}= 0.1943 D_{10}= 0.1392
C_u= 32.98 C_c= 0.32

Classification

USCS= SP AASHTO= A-1-a

Remarks

Sample Number: 16
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

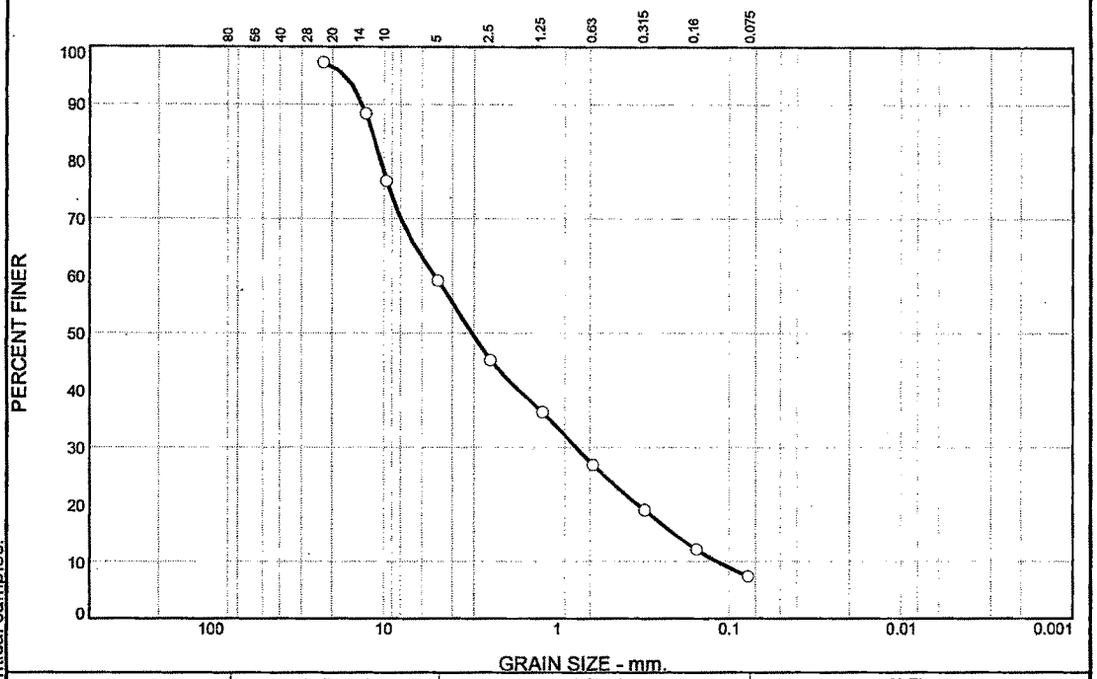
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-16/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		37	17	20	15	7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
22mm	97		
12.5	88		
9.5	76		
4.75	59		
2.36	45		
1.18	36		
0.60	27		
0.30	19		
0.15	12		
0.075	7.1		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= NV PI=

Coefficients

D_{85}= 11.5641 D_{60}= 5.0304 D_{50}= 3.0747
D_{30}= 0.7712 D_{15}= 0.2116 D_{10}= 0.1189
C_u= 42.30 C_c= 0.99

Classification

USCS= SP-SM AASHTO= A-1-a

Remarks

Sample Number: 17
Source of Sample: Mangti Landslide Soil Samples **Depth:** 1m **Date:** 21.03.2004

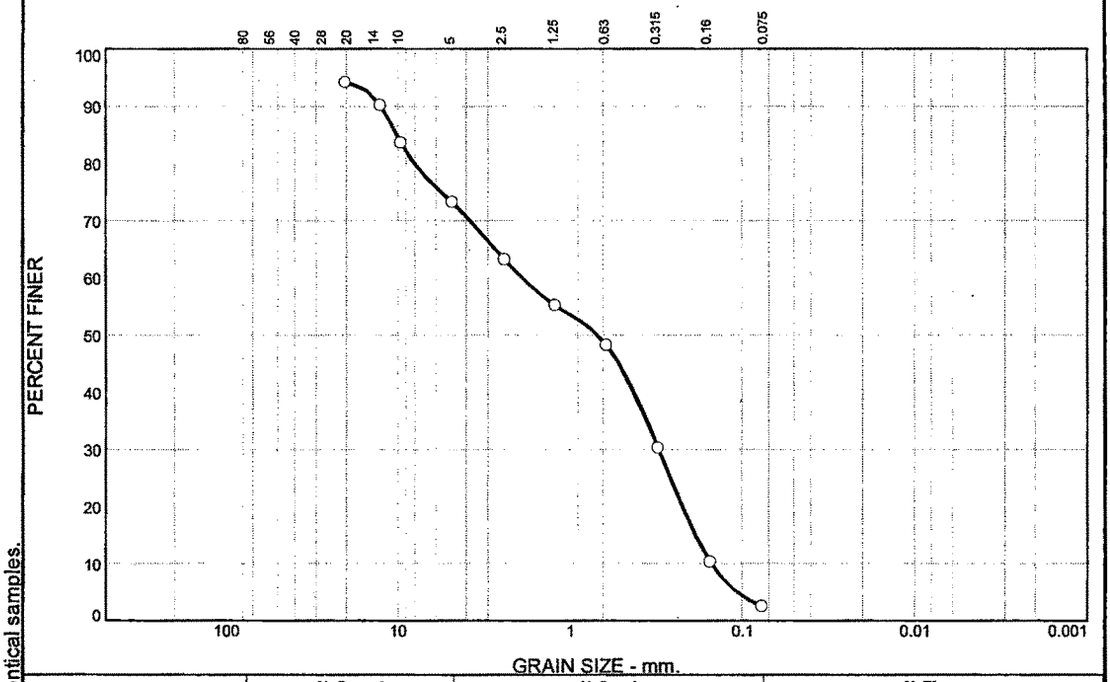
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-17/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		21	12	21	38	2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	94		
12.5	90		
9.5	83		
4.75	73		
2.36	63		
1.20	55		
0.60	48		
0.30	30		
0.15	10		
0.075	2.2		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 37.47 PI=

Coefficients

D_{85}= 10.1184 D_{60}= 1.8942 D_{50}= 0.6871
D_{30}= 0.3000 D_{15}= 0.1845 D_{10}= 0.1500
C_u= 12.63 C_c= 0.32

Classification

USCS= SP AASHTO= A-1-b

Remarks

Permeabiity = 4.1 e-6 cm/sec

Sample Number: PZ - 1
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 1.70m **Date:** 14.02.2005

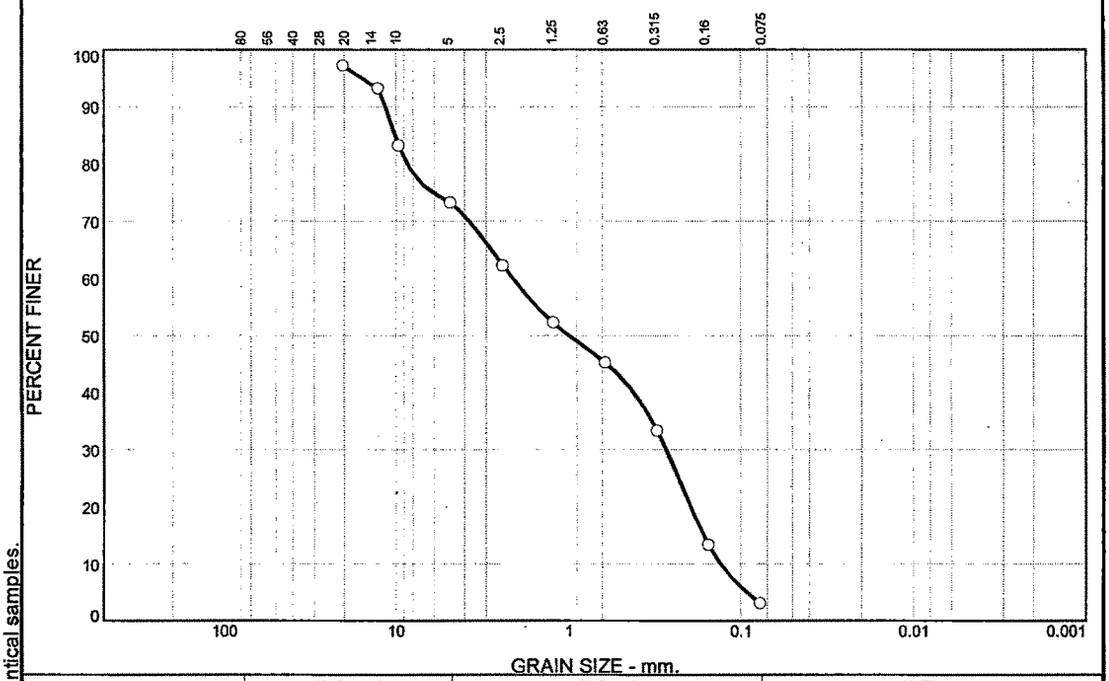
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-18/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		24	14	19	37	3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	97		
12.5	93		
9.5	83		
4.75	73		
2.36	62		
1.20	52		
0.60	45		
0.30	33		
0.15	13		
0.075	2.8		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 26.70 PI=

Coefficients

D_{85}= 10.0457 D_{60}= 2.1000 D_{50}= 0.9941
D_{30}= 0.2689 D_{15}= 0.1624 D_{10}= 0.1301
C_u= 16.14 C_c= 0.26

Classification

USCS= SP AASHTO= A-1-b

Remarks

Permeability = 1.8 e-6 cm/sec

Sample Number: PZ - 2
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 1.80m **Date:** 14.02.2005

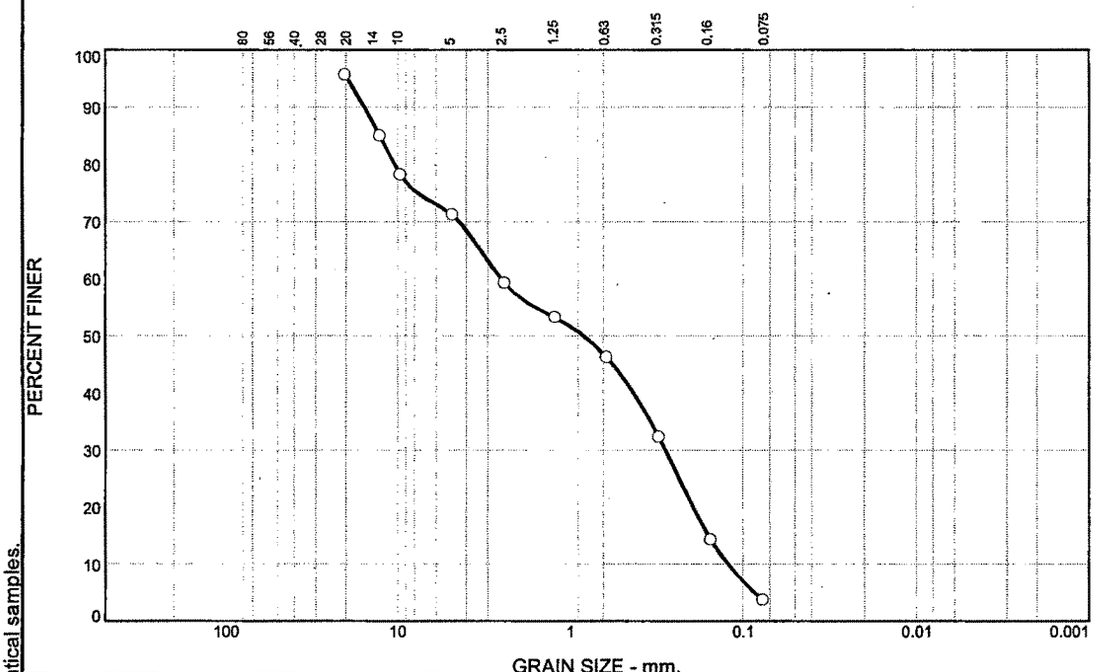
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-19/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		23	14	17	37	3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	96		
12.5	85		
9.5	78		
4.75	71		
2.36	59		
1.20	53		
0.60	46		
0.30	32		
0.15	14		
0.075	3.4		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 29.65 PI=

Coefficients

D_{85}= 12.5875 D_{60}= 2.5156 D_{50}= 0.8340
D_{30}= 0.2779 D_{15}= 0.1570 D_{10}= 0.1214
C_u= 20.72 C_c= 0.25

Classification

USCS= SP AASHTO=

Remarks

Permeability = 8.6 e-5 cm/sec

Sample Number: PZ - 3
Source of Sample: Mangti Landslide Soil Samples. Depth: 1.30m Date: 14.0.2005

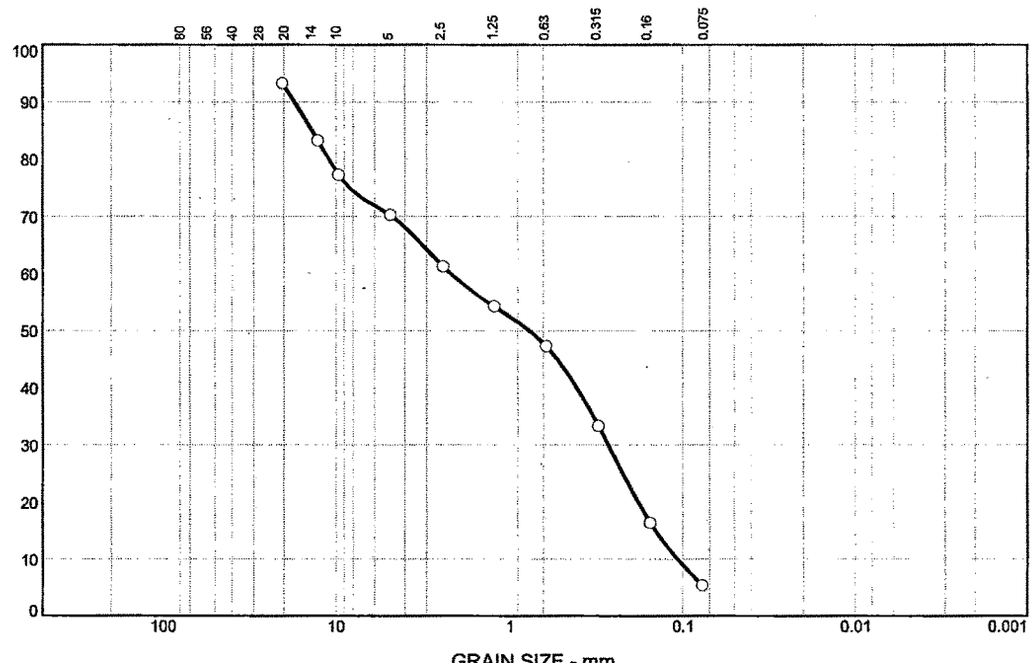
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: /S ‹bl — > š@.8 H 4 9 Figure-**20/24**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Y V V V Y öù , t² , t@ ‡→p▲☺▲◄) & ,)@p€ ?A +N ôqMí< ý< äN qöMí?<?í?í?<10]] CX@
]Y] ! 6632 #"&' ! 3265 [illegible] **Tested By:** [illegible] **Checked By:** Dr. K. C. Tiwari

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		22	11	18	36	5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	93		
12.5	83		
9.5	77		
4.75	70		
2.36	61		
1.20	54		
0.60	47		
0.30	33		
0.15	16		
0.075	5.0		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 25.70 PI=

Coefficients

D_{85}= 13.6619 D_{60}= 2.1789 D_{50}= 0.7663
D_{30}= 0.2664 D_{15}= 0.1428 D_{10}= 0.1070
C_u= 20.36 C_c= 0.30

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Permeability = 8.4 e-5 cm/sec

Sample Number: PZ - 4
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 1.4m **Date:** 14.02.2005

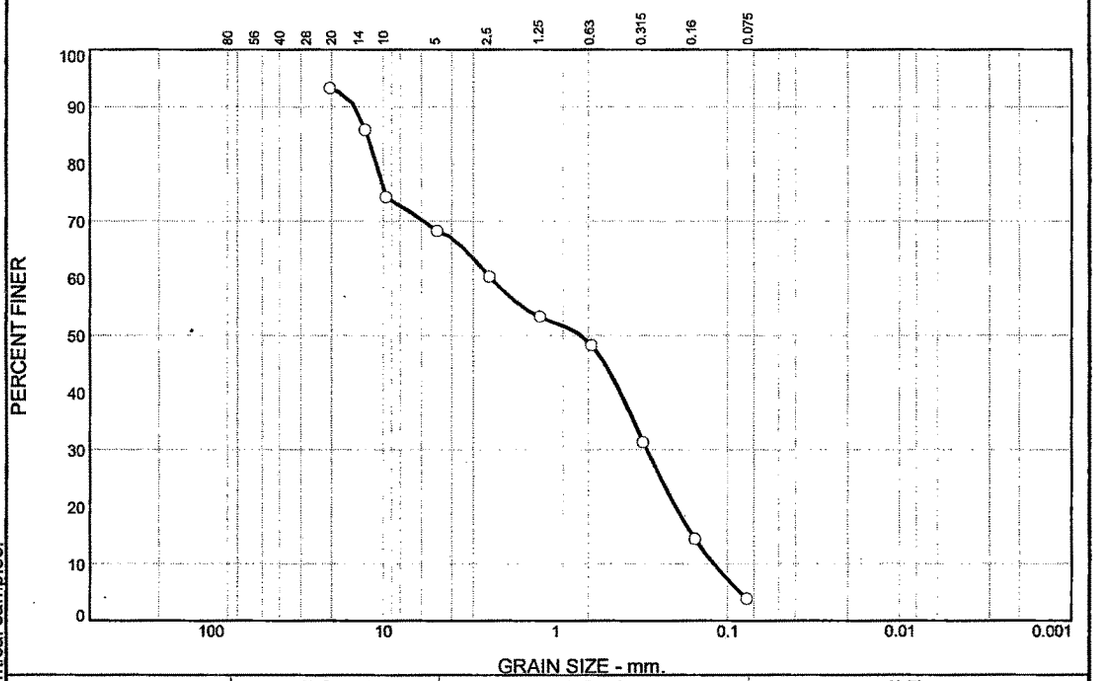
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-21/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		25	10	17	37	4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	93		
12.5	86		
9.5	74		
4.75	68		
2.36	60		
1.20	53		
0.60	48		
0.30	31		
0.15	14		
0.075	3.5		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 36.50 PI=

Coefficients

D_{85}= 12.2561 D_{60}= 2.3600 D_{50}= 0.7069
D_{30}= 0.2895 D_{15}= 0.1577 D_{10}= 0.1195
C_u= 19.75 C_c= 0.30

Classification

USCS= SP AASHTO= A-1-b

Remarks

Permeability = 4.9 e-5 cm/sec

Sample Number: PZ - 5A
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 1.20m **Date:** 14.02.2005

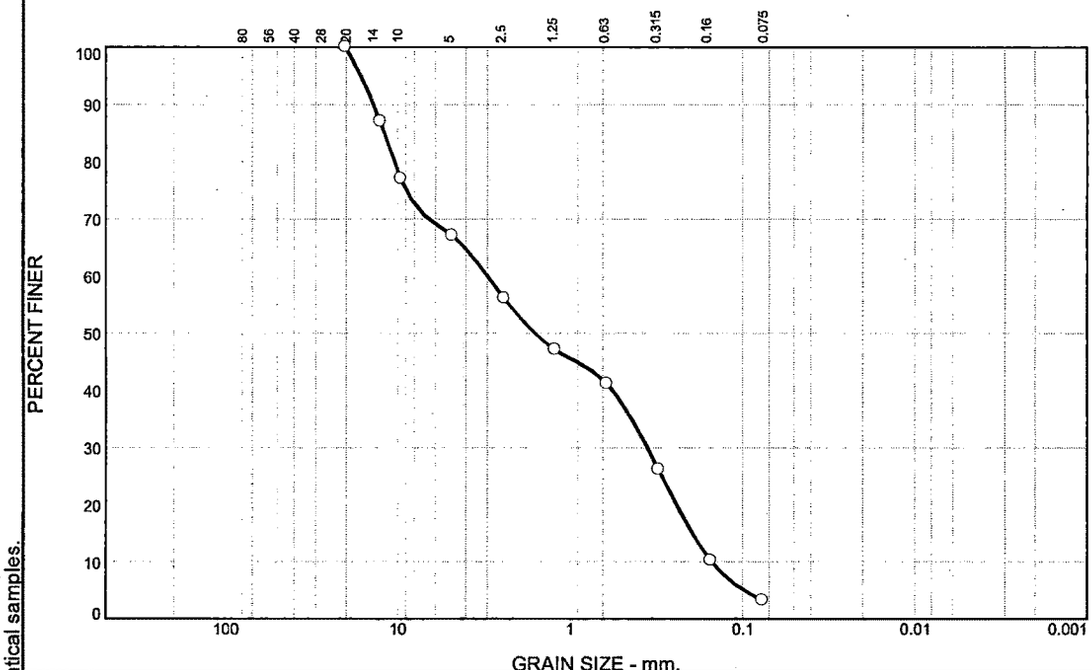
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-22/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	1	32	14	18	32	3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	100		
12.5	87		
9.5	77		
4.75	67		
2.36	56		
1.20	47		
0.60	41		
0.30	26		
0.15	10		
0.075	3.0		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 33.73 PI=

Coefficients

D_{85}= 11.8386 D_{60}= 2.9705 D_{50}= 1.5823
D_{30}= 0.3510 D_{15}= 0.1929 D_{10}= 0.1500
C_u= 19.80 C_c= 0.28

Classification

USCS= SP AASHTO=

Remarks

Permeability = 2.4 e-6 cm/sec

Sample Number: PZ - 5B
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 2.10m **Date:** 14.02.2005

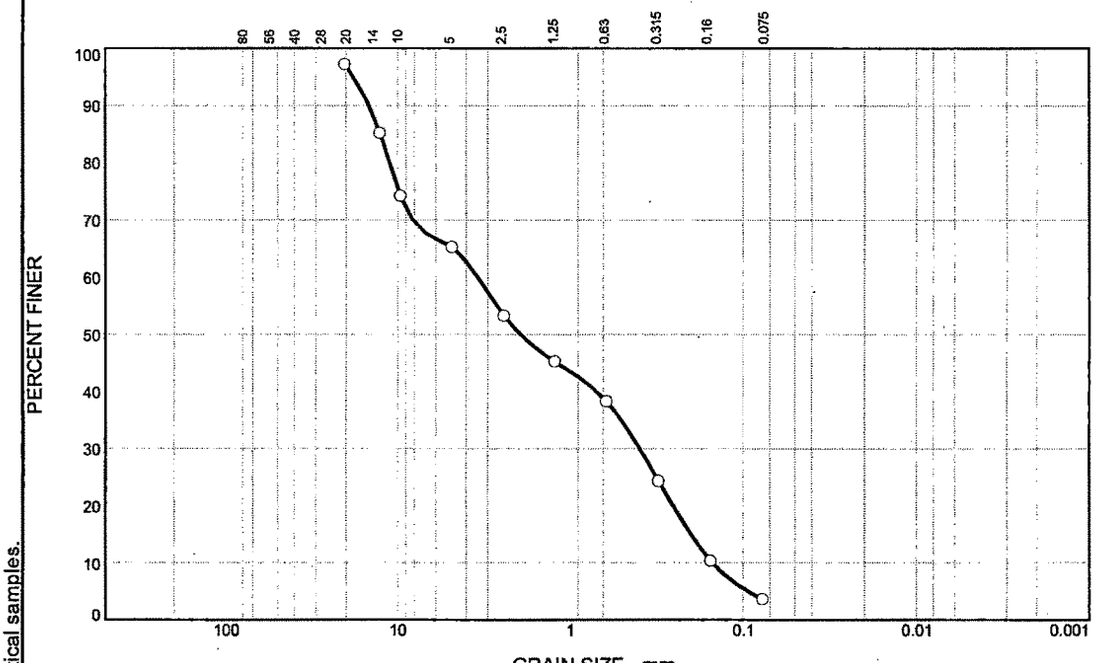
M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-23/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

GRANULOMETRIC CHARACTERISTICS



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		31	15	18	29	3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
20mm	97		
12.5	85		
9.5	74		
4.75	65		
2.36	53		
1.20	45		
0.60	38		
0.30	24		
0.15	10		
0.075	3.2		

* (no specification provided)

Material Description

Colluvial Soil

Atterberg Limits

PL= NP LL= 34.00 PI=

Coefficients

D_{85}= 12.5000 D_{60}= 3.4146 D_{50}= 1.9362
D_{30}= 0.3919 D_{15}= 0.1989 D_{10}= 0.1500
C_u= 22.76 C_c= 0.30

Classification

USCS= SP AASHTO=

Remarks

Permeability = 7.3 e-5 cm/sec

Sample Number: PZ - 6
Source of Sample: Mangti Landslide Soil Samples. **Depth:** 1.60m **Date:** 14.02.2005

M. S. U. Baroda.

Client:
Project: Engineering Geological Studies of Mangti Landslide and its Environ, Pithoragarh, Uttaranchal.
Project No: / **Figure-24/24**

Tested By: Anand Mehta **Checked By:** Dr. K. C. Tiwari

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.