SDMS Document ID
1000580

PARKER SITE RESTORATION

Soil (Clean Fill and Topsoil)

- Status of recent soil samples
- Sampling Protocol (utilizing agreed upon specs)
  - On-site soils
  - Soil at pits
- Procedure for moving non-spec soil
- Ripping of soil

On Site Sieve
On site Compaction

Rainy Creek

- Water Consulting Inc. & CDM hydraulic/hydrologic analysis
  - Creek Bottom
  - Fish Pools
  - Gradient
  - Riparian Design
  - Rip Rap
- Bridges
- Dock

Roads

- Culverts

Mobilization Date (MARCOR)

Other

PAGE 1

MEETING WITH PAUL PERONARD ON APRIL-25/02.

QUESTIONS:

① THE TRACT OF LAND WE OWN ON THE NORTH SIDE OF HI-WAY-37#. WILL IT BE RETURNED TO US. AT THE SAME TIME WE RECEIVE A "NOTICE OF AVAILABILITY" WITHOUT DEED RESTRICTIONS FROM THE SOUTH SIDE OF HI-WAY-37#. yes, we will

② ARE YOU IN FAVOR OF PLACING VEGETATION ON THE KOOTENAI RIVER RIP-RAP? THIS COULD BE DONE WITH SOIL PLACEMENT AMONG THE ROCKS OR GROWING VEGETATION THAT WILL SPREAD DOWN AMONGST THE ROCKS FROM THE SOIL EMBANKMENT DIRECTLY ABOVE THE RIP-RAP. Defer to Riparian/Restoration expert. AT minimum will "drape" runner vegetation over transition

③ WHAT WOULD YOU SUGGEST FOR MAINTENANCE AND GERMINATION, SURVIVAL OF THE HYDRO-SEEDING, RAINY CREEK AND KOOTENAI REVEGETATION. TIME FRAME! WATERING Fall for Grass, Trees other brush ASAP.

④ DOES IT SEEM RIGHT TO YOU THAT THE FINAL COPY OF THE RESTORATION PLAN BE SENT TO US PRIOR TO THE MAY-13#/02 MEETING? THIS WOULD INCLUDE ALL THE "METHODOLOGY" AND PROTOCOL THAT DEFINES HOW THE ACTIVITIES WILL BE CARRIED OUT. EG. SOIL TEXTURE, SCREENING, RIPPING, ETC. Need to get plots/types prior to meeting. Full plan if possible

⑤ THE PARKERS WOULD REQUEST A REVIEW OF THE RIGOROUS REVEGETATION PLAN WHICH IS TO BE INITIATED BY C.D.M. WE WOULD ASK THAT OUR INPUT TO THIS PLAN BE TAKEN UNDER CONSIDERATION. yes.

MEETING WITH PAUL PERONARD ON APRIL-25/02

(6) WILL THE RIPARIAN SPECIALIST, WHO WE ASSUME IS LICENSED/CERTIFIED ~~with~~, BE ON SITE TO SUPERVISE AND CO-ORDINATE THE RE-VEGETATION OF BOTH THE RAINY CREEK AND KOOTENAI RIVER BANKS. Yes

(7) WILL THE RIP RAP THAT IS ON THE SOUTH SIDE OF RAINY CREEK ON THE KOOTENAI RIVER BE REPLACED IF IT TOO IS DETERMINED TO BE UNDER SIZED.
IT is undersized, it will be replaced.

(8) WHAT EXACTLY WILL BE DONE ON RAINY CREEK WHEN THE CONTRACTOR STARTS TO DO THIS PORTION OF THE PROJECT? EG. ENERGY DISSIPATION, CHANNEL SIZING, ETC. "Pools" ok., see plan for specifics. IT will be properly sized & keyed.

(9) AS THAT WORK PROGRESSES WILL WE HAVE A CERTIFIED HYDROLOGIST ON SITE TO SUPERVISE AND IMPLEMENT A PLAN THAT IS ACCEPTABLE TO ALL CONCERNED PARTIES? Yes LINCOLN CONSERVATION; FISH, WILDLIFE AND PARKS, WATER CONSULTANTS, INC, Plan satisfactory to owners.
WE NEED TO HAVE EXPERIENCED PEOPLE ON THE JOB TO MAKE SURE THAT THE WORK IS PROGRESSING AS IT WAS DESIGNED.

(10) HOW DO YOU PLAN ON ADDRESSING THE RAINY CREEK RESTORATION WORK. WE HAVE PROVIDED YOU WITH ALL THE PAPERWORK ENSUING FROM THE DATA COLLECTED BY WATER CONSULTANTS INC. WHAT IS YOUR THINKING? WHAT DO YOU NOT AGREE WITH? See plan

-2)

MEETING WITH PAUL PERONARD ON APRIL 25/02

(11) WILL E.P.A., IF IT DECIDES TO ENDORSE THOSE ISSUES WHICH W.C.I. HAS RESEARCHED, BE WILLING TO COVER OUR COST OF 1,476 FOR THE ANALYSIS AND ANY ADDITIONAL EXPENSE BROUGHT ABOUT THROUGH MR. WALLS' REQUEST FOR ADDITIONAL INFORMATION?

(12) WILL THE E.P.A. REPLACE THOSE BALLED AND BURLAPPED TREES THAT HAVE DIED SINCE THEIR ARRIVAL IN 2000? YOU SAID, AT THE TIME THAT GRACE REFUSED ACCESS TO THE MINE, THAT YOU WOULD, BUT THIS WAS NOT DOCUMENTED! YES, & all others as need or stream/River bank per revegetation

(13) I UNDERSTAND THAT MARCOR WILL BE RESPONSIBLE FOR A LARGE PORTION OF THE CLEAN-UP IN LIBBY DURING THE 2002 SEASON.

WE HAVE IN LIBBY, SEVERAL BUSINESSES AND INDIVIDUALS WHO HAVE JUST RECENTLY OR WHO HAVE NOT RECEIVED PAYMENT FOR THE SERVICES AND MATERIALS PROVIDED TO MARCOR LAST YEAR.

MARCOR HAS A BAD REPUTATION FOR NOT PAYING ITS BILLS!! WHAT CAN YOU DO TO CORRECT THIS? WHY IS THIS OUR CONCERN? LEGALLY, THESE FOLKS CAN TIE UP OUR PROPERTY UNTIL THEY HAVE BEEN PAID.

I'll check into specific issues, have already talked with Western Building as we discussed.

These are my notes

Paul Peronard

CDM

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 11

To John McGuiggin	From Julie B.
Dept./Agency	Phone # x 2434
Fax # 406-293-5668	Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

Memorandum

To: *Peter Borowiec*

From: *Allison K. Swezey*
Michael W. Oakland

Date: *April 25, 2002*

Subject: *Libby Asbestos Project*
Libby, Montana

This memorandum presents our assessment of the geotechnical testing performed on the Clean Fill (Type 2), also referred to as agricultural fill for the Libby Asbestos Project located in Libby, Montana.

Based on the Government procurement specifications, the Clean Fill (Type 2) shall be composed of 20-40% sand, 10-25% silt and 50-70% silt and be classified as a silt-loam by the US Department of Agriculture (USDA). This results in a relatively small triangular area of acceptable material as shown on the attached figure. The USDA also uses different measurements defining the boundaries between grain sizes than ASTM. The USDA measurements are 2mm between gravel and sand, 0.05mm between sand and silt and 0.002 between silt and clay.

Seven samples of the Agricultural Fill from the existing stockpile at the Worth Nixon pit were submitted to Maxim Technologies for geotechnical testing. All of the samples conform to the project specification and are classified as silt loam. The results of the portions passing the 2mm sieve are plotted on the attached figure. All samples had less than 30 percent of larger than 2mm material, which we understand is in accordance with an agreement made between the property owner and the Government. A summary of the grain size analyses is shown on Table 1 and is attached to this memorandum.

Based on the distribution of the tests, it appears that a blend of all of the material in the stockpile would meet the project specifications provided larger rocks are removed in order to meet the 30% maximum "rock content" agreed upon between the property owner and the Government. We understand that the stockpiled material will be screened through a 3-inch screen prior to delivery to the Screening Plant site.

Please call if you require any additional information or questions.

C:\Documents and Settings\mwezeyak\My Documents\Completed Projects\Libby, Montana\LibbyEC.doc

Libby Asbestos Project
Libby, Montana

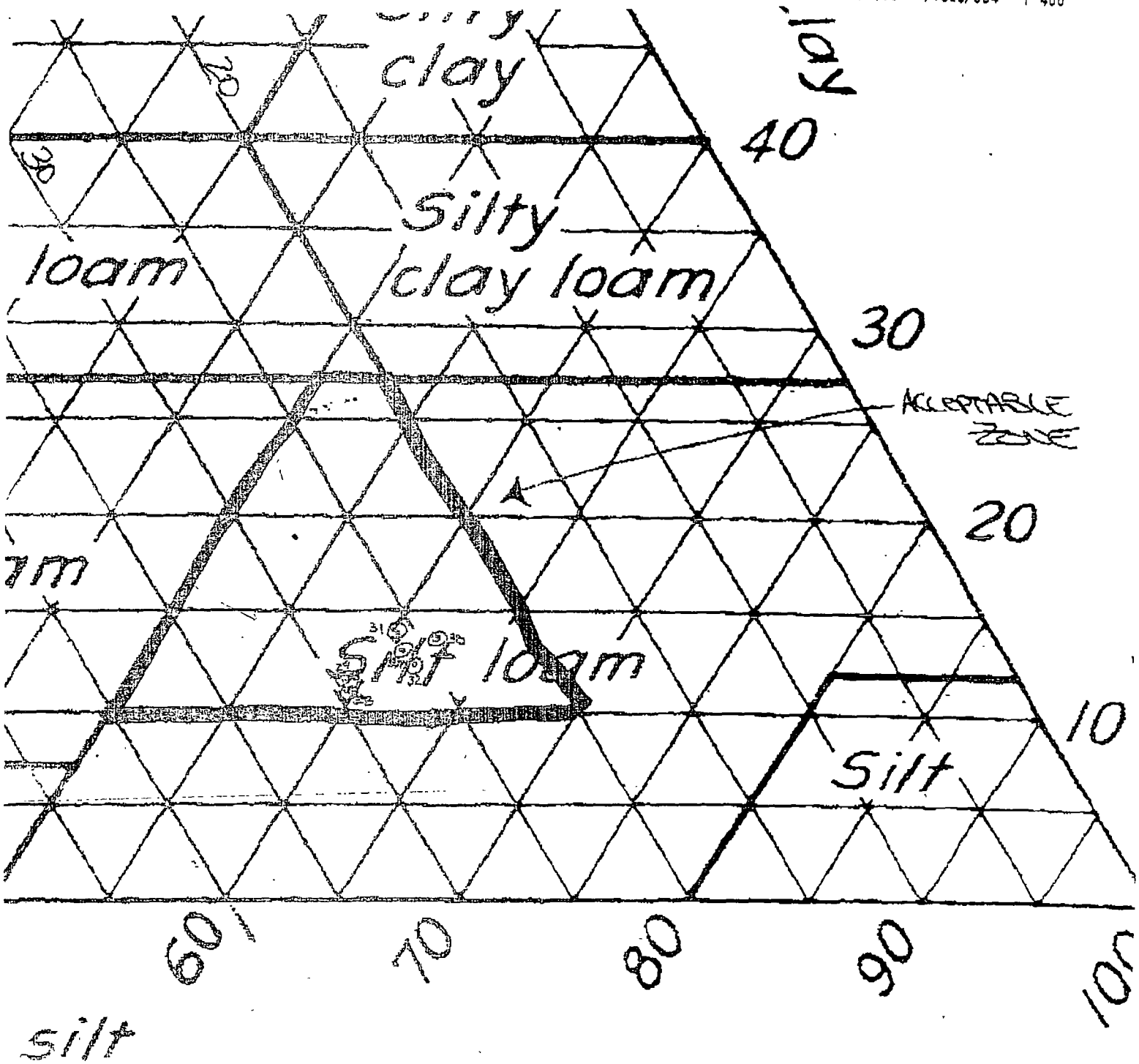
Table 1

Summary of Grain Size Analyses

Sample ID	Percent Passing (1)			Particle Percent (1)			Adjusted Particle Percent (2)		
	Sand (2mm)	Silt (0.05mm)	Clay (0.002mm)	Sand	Silt	Clay	Sand	Silt	Clay
1R-13928	90.0	64.2	10.8	25.8	53.4	10.8	28.6	59.4	12.0
1R-13929	82.0	68.9	10.7	23.1	48.2	10.7	28.2	58.8	13.0
1R-13930	94.0	70.9	12.2	23.1	58.7	12.2	24.5	62.5	13.0
1R-13931	94.0	69.0	12.2	25.0	56.8	12.2	26.6	60.4	13.0
1R-13932	91.0	67.0	10.0	24.0	57.0	10.0	26.4	62.6	11.0
1R-13933	95.0	70.6	11.4	24.4	58.2	11.4	25.7	62.3	12.0
1R-13934	95.0	70.4	11.4	24.6	59.0	11.4	25.9	62.1	12.0
				+5		+9			

Notes:

1. Based on Maxim grain size distribution curves
2. Particle percents were adjusted to reflect only particles smaller than sand. These percentages are plotted on the memorandum figure.



cation chart used by the U. S. Depart

MAXIM TECHNOLOGIES INC

Maxim Technologies
2436 Dixon Avenue PO Box 2730
Missoula, MT 59806
Telephone: (406) 543-3045
FAX: (406) 543-3088

REPORT OF GEOTECHNICAL TESTING

CLIENT: CDM - FEDERAL PROGRAMS
50 Hampshire Street
One Cambridge Place
CAMBRIDGE, MA 02139

PROJECT: Libby Asbestos Project
#2507-211-055-GA

PROJECT NO.: 1570145
REPORT NO.: 16997
DATE OF SERVICE: 4/04/2002
AUTHORIZATION:
REPORT DATE: 4/04/2002

SERVICES: Performed Geotechnical Testing as Requested by the Client

REPORT OF TESTS

On April 1, 2002, we received Chain of Custody No. 2502 from the above referenced project with instructions to perform 7 Sieve Analyses with Hydrometers and 7 Atterberg Limits.

The test results for the samples labeled 1R - 13928, 13929, 13930, 13931, 13932, 13933, and 13934 are included on the attached plates. If you have any questions regarding this report or if we can be of further service, please contact us.

Technician: Deborah Schiavone
Engineering Technician

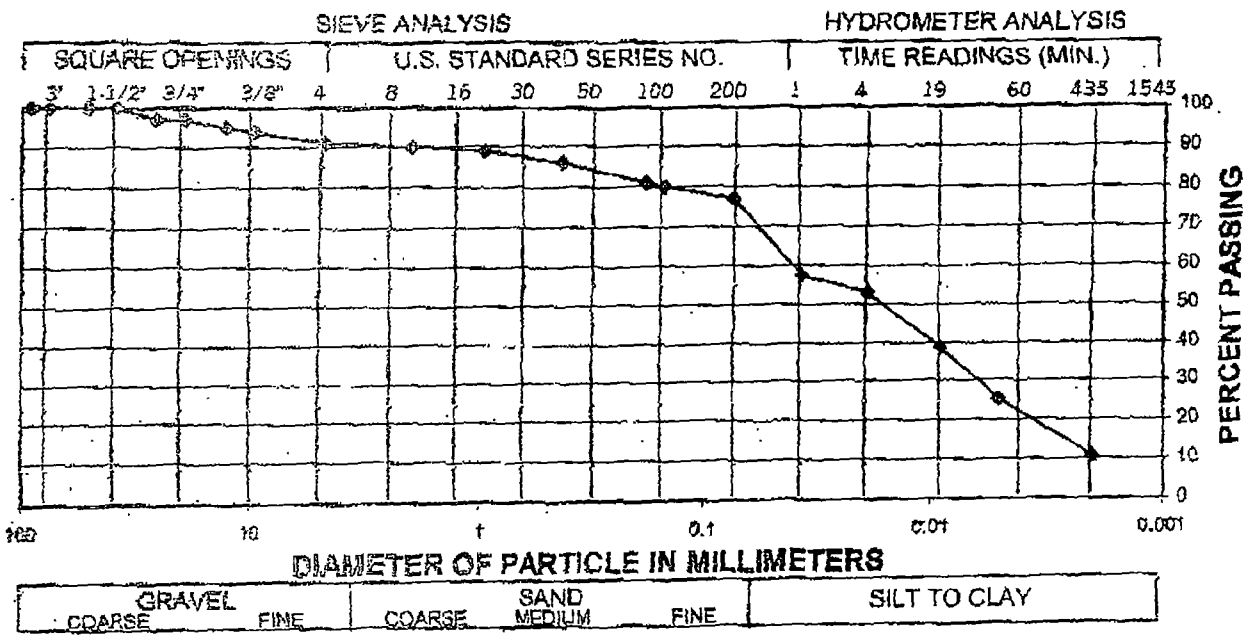
Report Distribution:
(1) CDM - FEDERAL PROGRAMS

MAXIM TECHNOLOGIES INC.

Richard P. Dombrouski, P.E.
Project Manager

Our reports and reports are for the exclusive use of the client to whom they are addressed and shall not be reproduced except in full without the approval of the testing laboratory. Trade use of our name must receive our written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not indicative of the qualities of apparently identical or similar products.

1038



SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1"	97
3/4"	97
1/2"	95
3/8"	94
#4	91
#10	90
#20	89
#40	86
#80	81
#100	80
#200 (.075)	77
0.037 mm	57.6
0.019 mm	53.1
0.009 mm	38.7
0.005 mm	25.2
0.002 mm	10.8

USDA
.05 line between silt & Sand

USDA CLASSIFICATION
Loam

USCS CLASSIFICATION
SILT with Sand

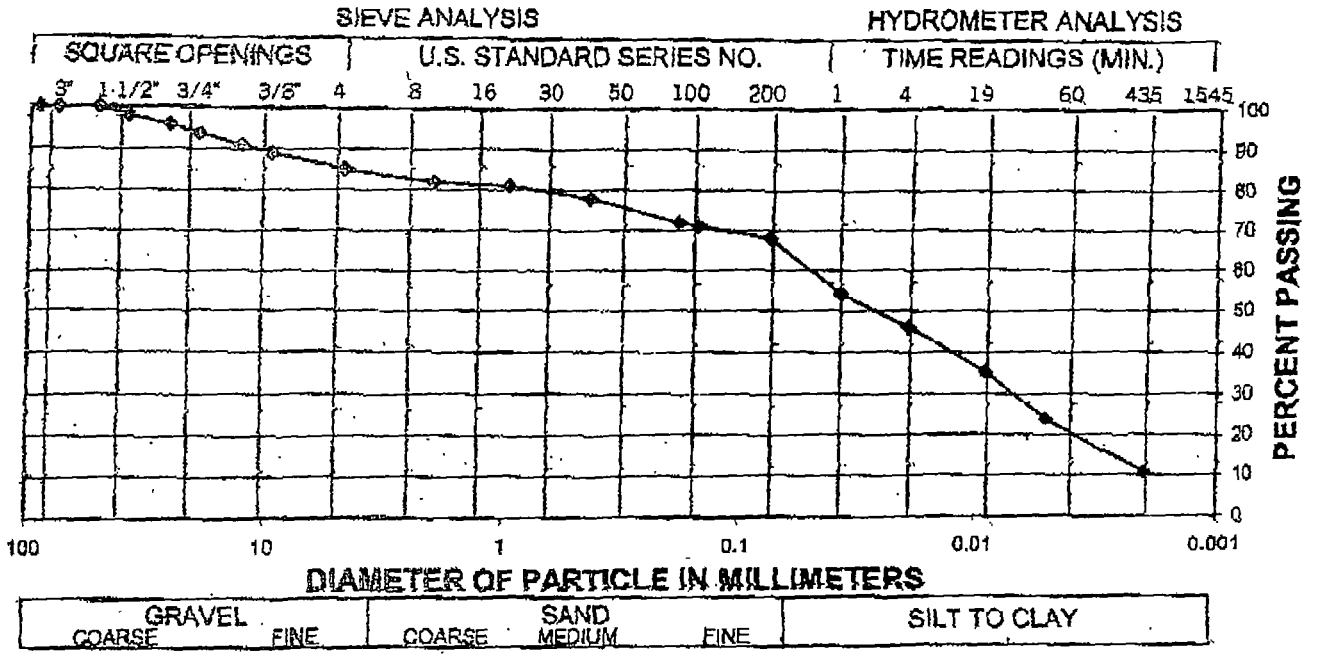
ATTERBERG LIMITS

Liquid Limit	23
Plasticity Index	2

SAMPLE IDENTIFICATION:
1R - 13928
Maxim Sample No. 16990

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
2"	100
1 1/2"	98
1"	96
3/4"	94
1/2"	91
3/8"	89
#4	85
#10	82
#20	81
#40	78
#80	72
#100	71
#200	68
0.037 mm	54.1
0.019 mm	45.9
0.009 mm	35.3
0.005 mm	23.8
0.002 mm	10.7

USDA CLASSIFICATION
Loam

USCS CLASSIFICATION
Sandy SILT with Gravel

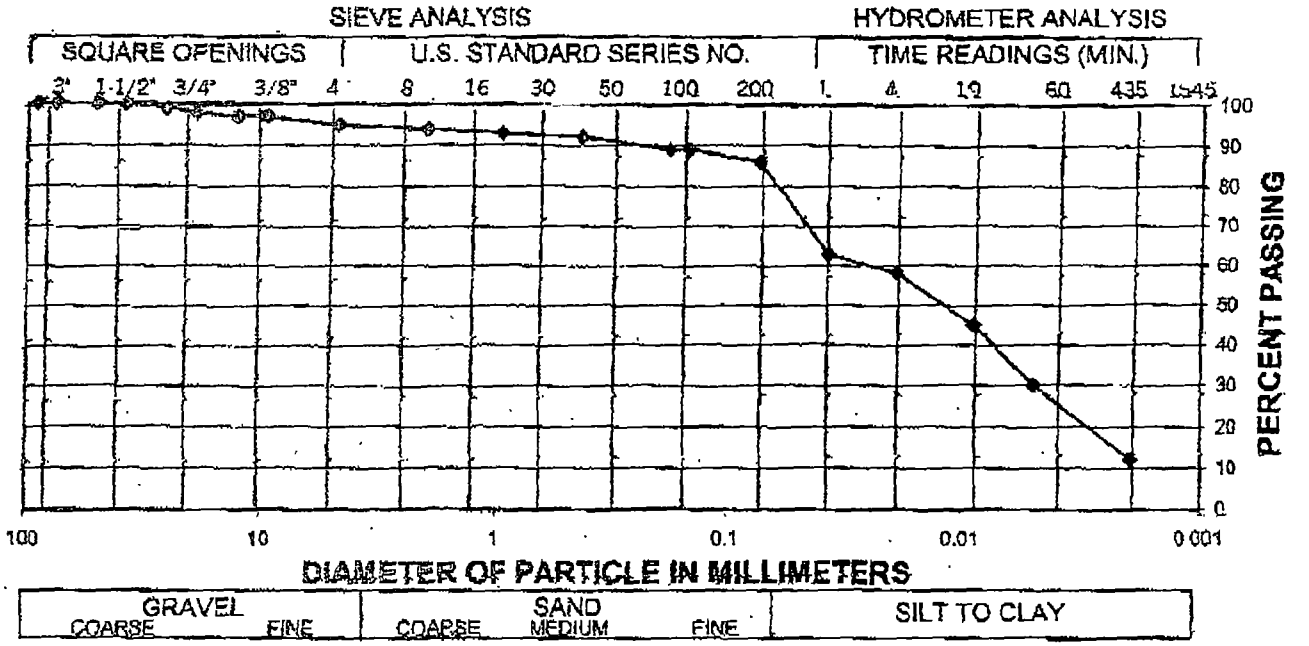
ATTERBERG LIMITS

Liquid Limit	22
Plasticity Index	2

SAMPLE IDENTIFICATION:
1R - 13929
Maxim Sample No. 16991

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1"	99
3/4"	98
1/2"	97
3/8"	97
#4	95
#10	94
#20	93
#40	92
#80	89
#100	89
#200	86
0.037 mm	63.9
0.019 mm	58.3
0.009 mm	46.1
0.005 mm	30.1
0.002 mm	12.2

USDA CLASSIFICATION
Silt Loam

USCS CLASSIFICATION
SILT

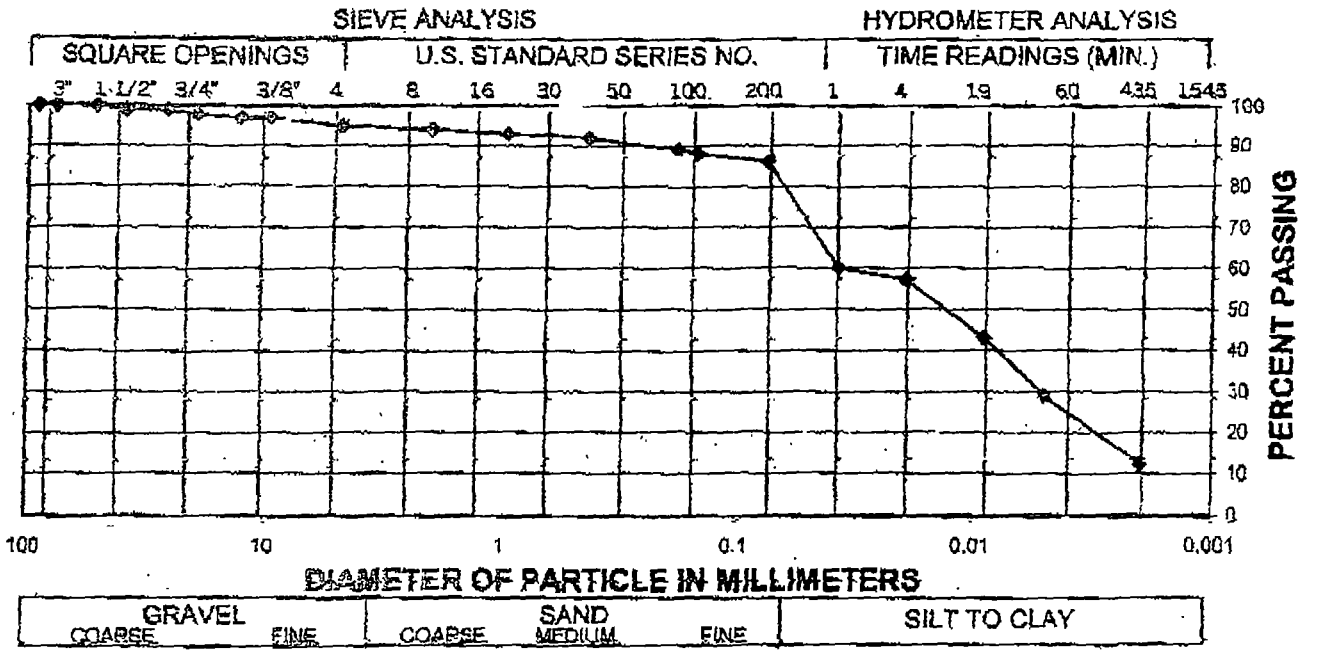
ATTERBERG LIMITS

Liquid Limit	23
Plasticity Index	2

SAMPLE IDENTIFICATION:
1R - 13930
Maxim Sample No. 16992

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
2"	100
1 1/2"	99
1"	99
3/4"	98
1/2"	97
3/8"	97
#4	95
#10	94
#20	93
#40	92
#80	89
#100	88
#200	86
0.037 mm	60.2
0.019 mm	57.3
0.009 mm	43.2
0.005 mm	29.1
0.002 mm	12.2

USDA CLASSIFICATION
Silt loam

USCS CLASSIFICATION
SILT

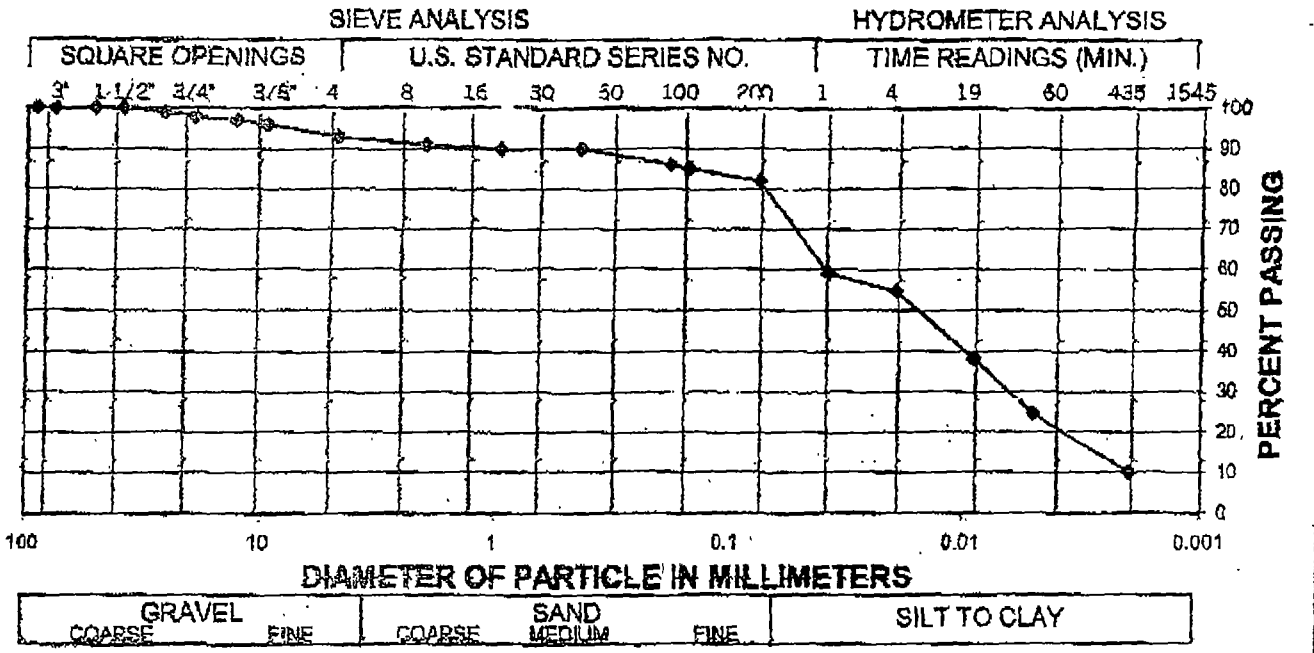
ATTERBERG LIMITS

Liquid Limit	23
Plasticity Index	1

SAMPLE IDENTIFICATION:
1R - 13931
Maxim Sample No. 16993

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
1-1/2"	100
1"	99
3/4"	98
1/2"	97
3/8"	96
#4	93
#10	91
#20	90
#40	90
#60	86
#100	85
#200	82
0.037 mm	59.2
0.019 mm	54.6
0.009 mm	38.2
0.005 mm	24.6
0.002 mm	10.0

USDA CLASSIFICATION
Silt Loam - Loam

USCS CLASSIFICATION
SILT with Sand

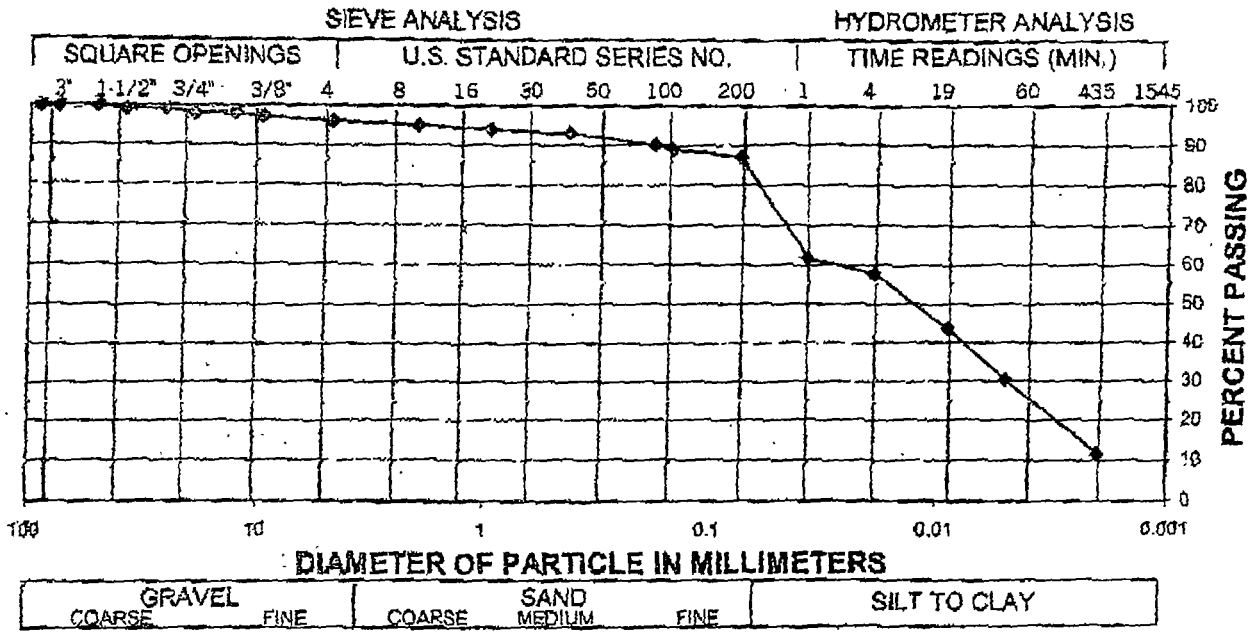
ATTERBERG LIMITS

Liquid Limit	22
Plasticity Index	1

SAMPLE IDENTIFICATION:
1R - 13932
Maxim Sample No. 16894

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
2"	100
1 1/2"	99
1"	99
3/4"	98
1/2"	98
3/8"	97
#4	96
#10	95
#20	94
#40	93
#80	90
#100	89
#200	87
0.037 mm	61.7
0.019 mm	57.9
0.009 mm	43.7
0.005 mm	30.4
0.002 mm	11.4

USDA CLASSIFICATION
Silt Loam

USCS CLASSIFICATION
SILT

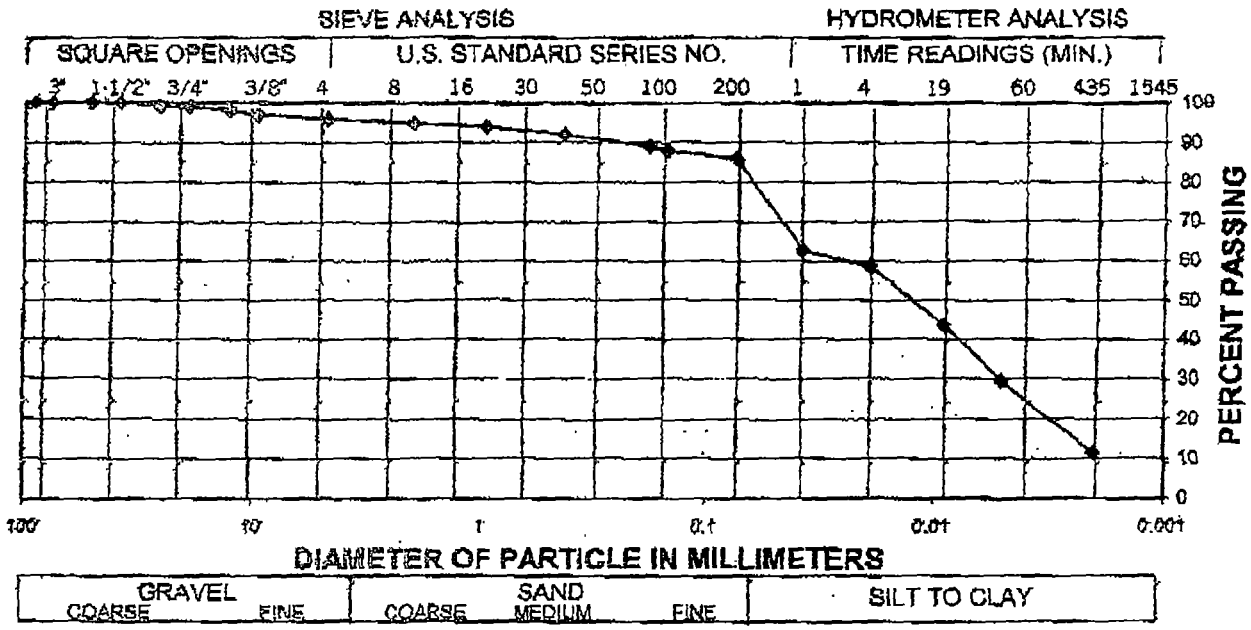
ATTERBERG LIMITS

Liquid Limit	23
Plasticity Index	2

SAMPLE IDENTIFICATION:
1R - 13934
Maxim Sample No. 16996

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002



SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1"	99
3/4"	99
1/2"	98
3/8"	97
#4	96
#10	95
#20	94
#40	92
#60	89
#100	88
#200	86
0.037 mm	62.7
0.019 mm	58.9
0.009 mm	43.7
0.005 mm	29.4
0.002 mm	11.4

USDA CLASSIFICATION
Silt Loam

USCS CLASSIFICATION
SILT

ATTERBERG LIMITS

Liquid Limit	23
Plasticity Index	2

SAMPLE IDENTIFICATION:
tR - 13933
Maxim Sample No. 16995

CDM - Federal Programs
Libby Asbestos - Libby, MT

1570145	MAXIM TECHNOLOGIES, INC®	GRADATION ANALYSIS	04/04/2002