

Department of Health and Human Services Health and Environmental Testing Laboratory

221 State Stoeet

# 12 State House Station Augusta Waine 04888-0010

Tel: 207 287-2727:Fax: 207 287-6832

TTN: 1-800-606-0013

Paul R. LaPage, Governor

Mary C. Maybew, Commissioner

DOT KELLY

98 PLEASANT COVE ROAD

PHIPPSBURG ME 04562

Гах#:

Project Name: KENNEBEC DREDGE DISPOSAL

No. of Samples in Folder:

1

G010810001 G010810002 Logged:

3/21/2011

10:17:00AM

Folder/ Invoice #

G010810

Office Use Only: Do Not Bill WALK-IN

Released:

5/6/2011

Case #:

#### CERTIFICATION

The HETL hereby certifies that all test results for this report were analyzed by the method listed and meet all NELAC requirements, unless otherwise noted.

Kenneth G. Pote, PhD., Director

Richard French, Quality Assurance Officer

If we can be of further assistance to you, Please Call us at 287-1716

Approved by:

Thomas Crosby

Inorganics Supervisor/Chemist III

Thomas Crosby

Page 1 of 3

5/6/2011

8:53:50PM

CC:

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# MAINE HEALTH AND ENVIRONMENTAL TESTING LABORATORY - Visit our Web Site at: http://www.state.me.us/dhs/etl 221 State Street, Station #12 Department of Human Services Augusta, Maine 04333 Tel. No. 207-287-1716 Fax. No. 207-287-6832

G010810 HETL Folder Number: HETL Sample Number: G010810001 Description: **MUCK-1 SOLID** Sample Point: Matrix: **SOLID** Sample Date: 3/17/2011 Sampler: DOROTHY KELLY Time: 15:00:00 Units Qualifier RLMethod Analyte Result Analyst Analysis Datetime Cadmium < 3 3/30/2011 mg/Kg 6010B 3.0 m\_bourdon 36 3/30/2011 Chromium mg/Kg 6010B m\_bourdon 3.0 Lead 18 3/30/2011 mg/Kg 6010B m\_bourdon 3.0 Comment: MUCK-1, the per cent of material finer than the 200 screen was 34.1. JOHNN Attached By Date 05/06/2011 Time 15:16 Comment: SAND-2, the per cent of material finer than the 200 screen was 35.6. Attached By JOHNN Date Time 05/06/2011 15:18 Comment: The method for sieve analysis at the HETL has not been accredited.

05/06/2011

Date

Attached By

**JOHNN** 

Time

15:20

HETL Folder Number: G010810

#### Units & Measurement

"mg/L" = Milligrams per liter; "ug/L" = Micrograms per Liter; "mg/Kg" = Milligrams per Kilogram; "mg/Kg" = Milligrams per Kilogram; "PPM" = Parts per Million; "NTU" = Nephelometric Turbidity Units;

All solid results on a "Dry Weight" basis

NC = Not confirmed NQ = Not Quantitated NA = Not Analyzed J = Approximately U = Undetected R = Rejected

RL-Reporting Limit, the lowest concentration which can be reliably reported on a routine basis

"<" = Less than ">" = Greater than

Note: Results below the advisory limit, including < and K are considered satisfactory for that parameter.

#### Disclaimer

Your report consists of the number of pages listed on the cover page. Any attachments after the last numbered page are for informational purposes only and not part of the formal report.

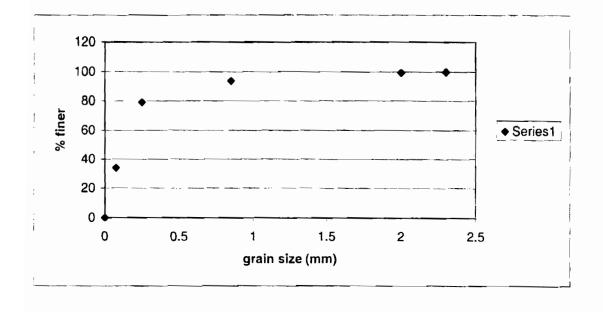
The results in this report are for the submitted sample(s) only.

This report shall not be reproduced, except in full, without written permission from the Maine Health and Environmental Testing Laboratory.

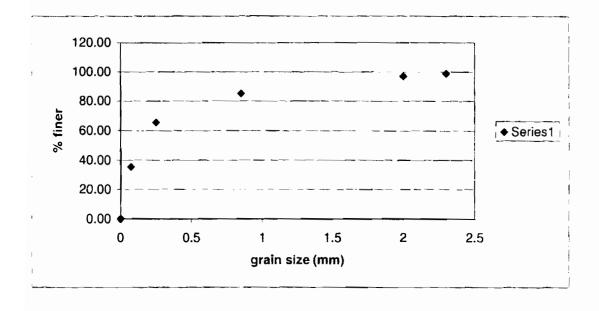
				SIEVE	SIZE	2011	
				SIEVE	SIZE	2011	
muck 1							
	_						
Sieve	SIEVE SIZE	mass sieve	mass sieve	mass	per cent	total wt	per cent
name	(MM)		+ sample	retained	retained	retained	finer
	· -			on sieve	on sieve		
7	2.3	585.52	585.64		0.09	0.09	99.90
							7
10	2	467.88	468.46	0.58	0.44	0.53	99.47
20	0.85	431.98	439.82	7.74	5.81	6.34	93.66
60	0.25	393.05	412.47	19.42	14.58	20.92	79.08
200	0.075	501.02	560.95	59.93	45.00	65.92	34.08
		-					
PAN		449.74	495.13	45.39	34.08	100.00	0.00
	wt sifted	133.18		133.18			

					SIEVE	SIZE	2011
				_			
Sand 2							
SIEVE	SIEVE SIZE	mass sieve	mass sieve	mass	TOTAL MASS		per cent finer
NAME	(MM)		+ sample	retained	RETAINED	retained	
				on sieve			
7	2.3	585.41	586.7	1.29	1.29	1.13	98.87
10	2	467.73	469.75	2.02	3.31	2.91	97.09
20	0.85	431.75	445.32	13.57	16.88	14.83	85.17
60	0.25	393.93	416.22	22.29	39.17	34.40	65.60
			55 . 65	212	70.07		
200	0.075	500.79	534.99	34.2	73.37	64.44	35.56
DAN		140 74	400 40	40.40	110.05		
PAN		449.71	490.19	40.48	113.85	100	0
				ļ			
		110.11		110.05		100	
	wt sifted	110.44		113.85		100	
							<del>                                     </del>
				<u> </u>			<del>                                     </del>
					<u> </u>		
							<del> </del>
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	-					<del></del>	<del> </del>
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						<del></del>	<del> </del>
						<del>  </del>	<del></del>
					<u> </u>	L	

sieve size	MUCK 1	
7	2.3	99.9
10	2	99.47
20	0.85	93.66
60	0.25	79.08
200	0.075	34.08
pan	0	0
	grain size (mm)	% finer



SAND 2	
2.3	98.87
2	97.09
0.85	85.17
0.25	65.60
0.075	35.56
0	0
grain size (mm)	% finer
	2.3 2 0.85 0.25





Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

Department of Health and Human Services Health and Environmental Testing Laboratory 221 State Street

LLI State Stree

# 12 State House Station Augusta, Maine 04333-0012

Tel: (207. 287-2727) Fax: (207: 287-6832

TTY: 1-300-606-0215

DOT KELLY 98 PLEASANT COVE ROAD PHIPPSBURG ME 04562

Fax#:

Logged:

3/21/2011

10:17:00AM

Folder/ Invoice #

G010810

Office Use Only: Do Not Bill WALK-IN

Released:

3/31/2011

Case #:

Project Name: KENNEBEC DREDGE DISPOSAL

No. of Samples in Folder

2

G010810001, G010810002

#### CERTIFICATION

The HETL hereby certifies that all test results for this sample were analyzed by the method listed, including preservation, preparation, and holding times, unless otherwise indicated.

Kenneth G. Pote, PhD., Director

Richard French, Quality Assurance Officer

If we can be of further assistance to you, Please Call us at 287-1716

Approved by:

James E. Curlett

Organics Supervisor/Chemist III

Jos & Bulett -

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3/31/2011

1:50:40PM

MAINE HEALTH AND ENVIRONMENTAL TESTING LABORATORY - Visit our Web Site at: http://www.state.me.us/dhs/etl 221 State Street, Station #12 Department of Human Services Augusta, Maine 04333 Tel. No. 207-287-1716 Fax. No. 207-287-6832

Continued from Previous Page

HETL Sample Number:

G010810002

HETL Sample Number:

G010810002

Description: MUCK-1 (TOC)

Matrix:

**SOLID** 

Sample Point:

Sample Date: 3/17/2011

Time: 15:00:00

Method:

Sampler: DOROTHY KELLY

Analyst Katahdin Lab

Analysis Datetime: 03/23/2011

Analyte

Result

Units

Qualifiers

Research

See note

Attached By

James Curlett

3/31/2011 12:00:00AM **Time** 

10:31

Comment:

TOC analyzed at Katahdin result 51 mg/g dry weight see attached

Page 2 of 3

3/31/2011

1:50:40PM

Continued from Previous Page

HETL Sample Number:

G010810002

#### Units & Measurement

"mg/L" = Milligrams per liter; "ug/L" = Micrograms per Liter; "mg/Kg" = Milligrams per Kilogram; "mg/Kg" = Milligrams per Kilogram; "PPM" = Parts per Million; "NTU" = Nephelometric Turbidity Units;

The MCL, Maximum Contaminant Level is listed for comparing your results with recommended levels. In the "Qualifier" column, an " \* " is placed to indicate any results that exceed this MCL.

# If there are no "\*" in the "Qualifier" column, your water is considered satisfactory for those tests.

All solid results are reported on a "Dry Weight" basis.

NC = Not confirmed NQ = Not Quantitated NA = Not Analyzed J = Approximately U = Undetected R = Rejected

RL-Reporting Limit is the lowest concentration which can be reliably reported on a routine basis.

"<" = Less than ">" = Greater than

**MCL** - Maximum Contaminant Level is the highest level allowed by EPA for public water supplies. Also used here as the maximum advisory limit set by the Maine Centers for Disease Control and Prevention.

Note: Results below the advisory limit, including < and J are considered satisfactory for that parameter.

#### Disclaimer

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The results in this report are for the submitted sample(s) only.

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3/31/2011 1:50:40PM





March 30, 2011

Mr. James Curlett
Health & Environmental Testing Lab
221 State Street, Station 12
Augusta, ME 04333

RE: Katahdin Lab Number:

SE1364

Project ID:

Muck-1:TOC

Project Manager:

Ms. Shelly Brown

Sample Receipt Date(s):

March 22, 2011

Dear Mr. Curlett:

Please find enclosed the following information:

- \* Report of Analysis (Analytical and/or Field)
- Quality Control Data Summary
- Chain of Custody (COC)
- Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to http://www.katahdinlab.com/cert.html for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES

Authorized Signature

03/30/2011

Date

# KATAHDIN ANALYTICAL SERVICES - INORGANIC DATA QUALIFIERS (Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a greater rate for false negatives, i.e. greater than 1%, than those results reported as "U" PQULOQ or "U" LOD.

- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously-called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
- I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- A-4 Please refer to cover letter or narrative for further information.
- MCL Maximum Contaminant Level
- NL No limit
- NFL No Free Liquid Present
- FLP Free Liquid Present
- NOD No Odor Detected
- TON Threshold Odor Number
- Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

DM-003 - Revision 2 - 11/02/2010





### Report of Analytical Results

Client: James Curlett

Health & Environmental Testing Lab

221 State Street, Station 12

Augusta, ME 04333

Lab Sample ID: SE1364-1

SL

Report Date: 30-MAR-11

Client PO: HETL 032111 Project: Muck-1:TOC

SDG: SE1364

Sample Description

MUCK-1

Matrix Date Sampled

17-MAR-11

Date Received

22-MAR-11

Parameter	Result	Adj PQL	Anal Method	QC.Batch	Anal. Date	Prep. Method	Prep, Date	Analyst	Footnotes
TOC In Soil	51000 ug/gdrywt	910	LLOYDKAHN	WG89439	23-MAR-11 16:26:23	N/A	N/A	BDS	
Total Solids	44. %	1	SM2540G	WG89376	25-MAR-11 10:34:00	ASTM D2216	24-MAR-11	ARE	







## Quality Control Report Blank Sample Summary Report

TOC in Soil

Tota	Samp Type MBLANK al Solids	OC Batch WG89439	<u>Anal, Method</u> Lloyd Kahn	<u>Anal. Date</u> 23-MAR-11	Prep. Date N/A	Result U 300 ug/gdrywt	POL 400 ug/gdrywt
	Samp Type	OC Batch	Anal. Method	Anal, Date	Prep. Date	Result	POL
	MBLANK	WG89376	<b>ASTM D2216</b>	25-MAR-11	24-MAR-11	U 1 %	1 %





## Quality Control Report

## Laboratory Control Sample Summary Report

#### TOC In Soil

Lab Sample Id WG89439-2	Samp Type	QC Batch WG89439	Analysis Date 23-MAR-11	Prep Date	Units ug/gdrywt	Spike Amt. 400000.000	Result 400000	Recovery 100	Acceptance Range	RPD_
Total Solids					-92,					
Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG89376-2	LCS	WG89376	25-MAR-11	24-MAR-11	%	90	90.	100	80-120	

and the same of th

Chain - of - Custody

6010810

Augusta, ME 04333-0012 Fax (207)287-1884

Health and Environmental Testing Lab

State of Maine

221 State Street Station #12

Phone (207) 287 -- 2727

Town/County: Phipps busy
Project Name: Kennetex drespedisfort

**HETL Number** MAR 21 201 HM10:14 Fax: 101/10/2 Compliance sample e-Mail address Codmin-1010 mida Copy To: Address Phone: 20 11M 221 Date/Time Date/Time Analyses Required कित्यप्र । JIDNE AMILI 80 Uhi Fax: Par Sieve 879 BINTO: CA ENTINE Matrix: Ground Water Drinking Water Solids Other Address: Check くどろいて 5231 R Ì Appropriation/PO# Received By Received By e-Mail address: erisogmo 10 b Phone: 3tab or **Ansutity** 102/21/2 Date/Time-3:04 pm 272 Container type Phirospum, ME 0456 Container vol 98 Pleason love 114 Date/Time 960 100 E Jom 3 om Sample time Phone: 207-443-4787 Fax: e-Mail address: OUTO NKRII 4.0 19 Sampled By DONOTHY KOLLY Sandy accumulation- 2 Dat tell B Sample ID P 10.CLAR MYX II MUK 1 MJCK-Relinquished By Contact: Company Address: Votes:

By signing this Chain-of-Custody you agree that the limit of The HETL's liability to be the cost of the analytical fees in question If the sample is deemed hazardous it may be returned to the client at your expense for proper disposal

rev 5/11/07

Temperature on Arrival

Date/Time

Custody seal intact (Yes or No)

Received By

Fax Results (Yes or No)

Rush (Yes or No)

Relinquished By

Date/Time