

Date: 09/09/2010

# Laboratory Results

Cindy Schreier PRIMA Environmental, Inc. 5070 Robert J. Mathews Parkway, Ste. 300 El Dorado Hills, CA 95762

Subject: 2 Water Samples Project Name: NGEM-TR-FL

Project Number:

Dear Ms. Schreier,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Date: 09/09/2010

**NGEM-TR-FL** Project Name:

Project Number:

Sample: RSAM-5 Matrix: Water Lab Number: 74406-01

Sample Date :09/03/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	140	10	ug/L	EPA 7199	09/03/10 17:43

Sample: RSAM-6 Matrix: Water Lab Number: 74406-02

Sample Date :09/03/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	5.7	5.0	ug/L	EPA 7199	09/03/10 17:53

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF ANALYTICAL, LLC

QC Report : Method Blank Data

Project Name: NGEM-TR-FL

Project Number:

		Method						Method	
	Measured	Reportir	Бu	Analysis	Date		Measured	Reporting	ja ja
Parameter	Value	Limit	Units	Method	Analyzed	Parameter	Value	Limit	Units
Hexavalent Chromium	< 1.0	1.0	na/L	EPA 7199 09/03/201	09/03/2010				

Date Analyzed

Analysis Method

Report Number: 74406

Date: 09/09/2010

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 74406

Date: 09/09/2010

Project Name: NGEM-TR-FL

Relative Percent Diff. Limit	10
Spiked Sample Percent Recov. Limit	90.0-110
Relative Percent Diff.	0.136
Duplicate Spiked Sample t Percent Recov.	104
Spiked Sample Percent d Recov.	104
Date Analyzed	9/3/10
Analysis Method	EPA 7199
e Units	ng/L
Duplicate Spiked Sample Value	5.76
Spiked Sample Value	5.77
Spike Dup. Level	5.00
Spike Level	5.00
Sample Value	< 1.0
Spiked Sample	omium 74363-20 < 1.0
Parameter	Hexavalent Chromium

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report: Laboratory Control Sample (LCS)

Report Number: 74406

Date: 09/09/2010

Project Name: NGEM-TR-FL

LCS Percent Recov. Limit	90.0-110
	90.0
LCS Percent Recov.	108
Date Analyzed	9/3/10
Analysis Method	<b>EPA 7199</b>
Units	ng/L
Spike Level	2.00
Parameter	Hexavalent Chromium

For Lab Use Only 0 24 hr **\*** 12 hr □2 Zhr 
 □ \frac{\pi}{2}
 ₽ Z These samples probably contain very high salt - especially perchlorate. See Mary to with questions. Thanks Chain-of-Custody Record and Analysis Request Page  $\times |\times$ W.E.T. Lead (STLC) Total Lead (EPA 200.7 / 6010) CIRCLE METHOD Mercury (EPA 245.1 / 7470 / 7471) **Analysis Request** 5 Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010) (0103 \ 7.002 A93) slateM 11 MAC (M2f08 A93) liO notoM as H9T (M2108 A93) leseiQ as H97 Volatile Organics (EPA 524.2 Drinking Water) Volatile Organics Full List (EPA 8260B) Volatile Halocarbons (EPA 8260B) -ead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B) Oxygenates (MTBE, DIPE, ETBE, TAME, TBA) (EPA 8260B) PH Gas (EPA 8260B) (80928 A93) X3T8 SRG # / Lab No. (80928 A93) dqq 2.0 @ 38TM Matrix ٦iA oN M lios Water data@primaenvironmental.com Preservative ☐ √es Received by Laboratory: EDF Deliverable To (Email Address) Mone Sampling Company Log Code: HNO3 Received by: Received by HCI California EDF Report? Sampler Print Name: Sampler Signature: Tedlar Container Glass Time Ē <u>a</u> Poly Global ID: 2795 2nd Street, Suite 300 Sleeve 0/2050 AOV Im 04 ш 530.297.4802 Davis, CA 95618 Lab: 530.297.4800 Time 5221/0//5/6 9/10/1225 Date Sampling Date 35070 Robert J. Mathews Pkwy, Ste 300 **F**ax: Project Contact (Hardcopy or PDF To): PRIMA ENVIRONMENTAL, Inc. NGEN-TR-FI P.O. #: Distribution: White - Lab; Pink - Originator Rev: 060409 El Dorado Hills, CA 95762 Sample Designation Analytical LLC Р РН: 916-939-7300 FAX: 916-939-7398 RSAM - 5 DSAM-L Project Address: Relinquished by: elinquighedby Project Name: Project #:



SAMPLE RECEIPT CHECKLIST

Date: 0903(0)

RECEIVER
RLM
Initials

SRG#: Date: Date:
Project ID: NGEM -TR - FL
Method of Receipt:
COC Inspection Is COC present?  Custody seals on shipping container? Is COC Signed by Relinquisher?  Is sampler name legibly indicated on COC? Is analysis or hold requested for all samples Is the turnaround time indicated on COC? Is COC free of whiteout and uninitialed cross-outs?  Yes  No  No  No  Yes  No  Yes  No  Yes  No  Yes  No  No  Yes  No  No  Yes  No  No  No  Yes  No  No  Yes  No  No  No  No  No  No  No  No  No  N
Sample Inspection Coolant Present: Temperature °C
Are the Sample ID's indicated: On COC On sample container(s) On Both Not indicated If Sample ID's are listed on both COC and containers, do they all match? Yes No N/A  Is the Project ID indicated: On COC On sample container(s) On Both Not indicated If project ID is listed on both COC and containers, do they all match? Yes No N/A  Are the sample collection dates indicated: On COC On sample container(s) On Both Not indicated If collection dates are listed on both COC and containers, do they all match? Yes No N/A  Are the sample collection times indicated: On COC On sample container(s) No N/A  Are the sample collection times indicated: On COC On sample container(s) No N/A  Are the sample collection times indicated: On COC On sample container(s) No N/A
COMMENTS:



Date: 09/08/2010

# Laboratory Results

Cindy Schreier PRIMA Environmental, Inc. 5070 Robert J. Mathews Parkway, Ste. 300 El Dorado Hills, CA 95762

Subject: 7 Water Samples
Project Name: NGEM-TR-FL

Project Number:

Dear Ms. Schreier,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Subject: 7 Water Samples Project Name: NGEM-TR-FL

Project Number:

Report Number: 74433

Date: 09/08/2010

# **Case Narrative**

The recommended Hold Time was exceeded for the analyte Hexavalent Chromium associated with samples NGEM-TRON-FL-RSAM-5 S6, NGEM-TRON-FL-RSAM-6 S5, NGEM-TRON-FL-SA-189 S2, RSAM-5-S7, SA-189-S3 and SA-189-S4. Samples that were past hold time were analyzed by client request.



Date: 09/08/2010

Project Name : NGEM-TR-FL

Sample: NGEM-TRON-FL-SA-189 S2	N	Matrix : Water		Lab Number : 74433-0	1
Sample Date :09/04/2010  Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	13	10	ug/L	EPA 7199	09/08/10 09:29
Sample: NGEM-TRON-FL-RSAM-5 S6	M	/latrix : Water		Lab Number : 74433-0	2
Sample Date :09/04/2010		Made			
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	130	5.0	ug/L	EPA 7199	09/08/10 10:25
Sample: NGEM-TRON-FL-RSAM-6 S5 Sample Date: 09/04/2010		Matrix : Water  Method		Lab Number : 74433-0	
·	Measured Value		Units	Lab Number : 74433-0 Analysis Method	3 Date/Time Analyzed
Sample Date :09/04/2010	Measured	Method Reporting	Units ug/L	Analysis	Date/Time
Sample Date :09/04/2010  Parameter	Measured Value	Method Reporting Limit		Analysis Method	Date/Time Analyzed
Sample Date :09/04/2010  Parameter	Measured Value 5.7	Method Reporting Limit		Analysis Method	Date/Time Analyzed 09/08/10 09:48
Sample Date :09/04/2010  Parameter  Hexavalent Chromium	Measured Value 5.7	Method Reporting Limit 5.0		Analysis Method EPA 7199	Date/Time Analyzed 09/08/10 09:48
Sample Date :09/04/2010  Parameter  Hexavalent Chromium  Sample : SA-189-S3	Measured Value 5.7	Method Reporting Limit 5.0		Analysis Method EPA 7199	Date/Time Analyzed 09/08/10 09:48



Date: 09/08/2010

Project Name: NGEM-TR-FL

Project Number:

Sample: **SA-189-S4** Matrix: Water Lab Number: 74433-05

Sample Date :09/06/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	8.8	5.0	ug/L	EPA 7199	09/08/10 10:07

Sample: **RSAM-5-S7** Matrix: Water Lab Number: 74433-06

Sample Date :09/05/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	110	5.0	ug/L	EPA 7199	09/08/10 10:16

Sample: **SA-189-S5** Matrix: Water Lab Number: 74433-07

Sample Date :09/07/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	3.9	1.0	ug/L	EPA 7199	09/08/10 09:38

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KIFF ANALYTICAL, LLC

QC Report : Method Blank Data

Project Name: NGEM-TR-FL

Project Number:

		Method						Method		
	Measured	Reporting	D	Analysis	Date		Measured	Reporting		Analysis
əter	Value	Limit	Units	Method	Analyzed	Parameter	Value	Limit	Jnits	Method
ent Chromium	< 1.0	1.0	na/L	EPA 7199 09/	09/08/2010					

Date Analyzed

Report Number: 74433

Date: 09/08/2010

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 74433

Date: 09/08/2010

Project Name: NGEM-TR-FL

Relative Percent Diff.	10
Spiked Sample Percent Recov.	90.0-110
Relative Percent	1.66
Duplicate Spiked Sample Percent	109
Spiked Sample Percent	104
Date Analyzed	9/8/10
Analysis Method	EPA 7199
о С	1 -
Duplicate Spiked Sample	16.2
Spiked Sample	15.9
Spike Dup.	5.00
Spike	5.00
Sample	11
Spiked	mium 74404-01 11
Darameter	Hexavalent Chromium 74

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number: 74433

Date: 09/08/2010

Project Name: NGEM-TR-FL

LCS Percent Recov. Limit	90.0-110
LCS Percent Recov.	110
Date Analyzed	9/8/10
Analysis Method	<b>EPA 7199</b>
Units	ng/L
Spike Level	2.00
Parameter	Hexavalent Chromium

2795 2nd Street, Suite 300 Davis, CA 95618 Lab: 530.297.4800 Fax: 530.297.4802

Chain-of-Custody Record and Analysis Request Page 58442 SRG # / Lab No. <u>≗</u> \_ ∀es California EDF Report? Project Contact (Underson on DDF To) PRIMA ENVIRONMENTAL, Inc.

CS070 Robert J. Mathews Pkwy, Ste 300	Ste 300	Sampling Company Log Code:	npany Lo	J Code:								nalys	Analysis Request	quest					TAT	
El Dorado Hills, CA 95762	•	4											Ö	CIRCLE METHOD	ЕТНОВ					
PhpH: 916-939-7300		Global ID:						\6	(6						F	_			12 hr	
Fa AA: 319-333-1336		FDE Dalimantia	rimaenv	dota mrimaenvironmental.com	al.com	<b>!</b>	1	109C8 V		(8				(01						
Project #: P.O. #:		Б v.				•		d=) (V8		30928		(103244		·09 / Ł'0				- (1	] <del>\f</del>	e Only
Project Name:		Sampler, Print Name	Name:	1000	-			T 3MAT				S. usu u a			(12					sU ds.
NG EM-IR-FL		Sampler Signature:	E.				(80928	. 3813								,				For L
Project Address:	Sampling	Container	her	Preserva	/ative	Matrix		(80								(;	<u></u>			
								9Z8 Aq						-		OJTS) t	5/t		72hr	
Sample Designation	Date Time	40 ml VOA Sleeve Poly Glass	Tedlar	None HNO3 HCI	Water	Soil Air	.0 <b>@ 38</b> TM A93) X3T8	TPH Gas (E	5 Oxygenates 7 Oxygenat	Lead Scav. Volatile Hal	Volatile Org	Volatile Org	TPH as Mot BM 11 MAD	M liO etssW 3	Mercury (Ef	W.E.T. Lead	-(IN)-()		XI ÷	
129	0  4  0													+						
-SA-189 SZ	11159	×		×	×												×		9	- 0
-RSAM-5 SG	RAS	X		×	×												×		٥	20
1 - RSAHI-6 S5	1226	×		×	×												×		-	5
7 SA-189-53	9/5/v 11.59	×		<b>λ</b>	×												×		0	ho
SA-189- S4	9/6/10 1159	X		×	×												×		2	5
, RSAH-5-57	9/5/10 01/5/P	X		×	×												×		q	9
SA-189-55	9/7/10/11:59	mi		メ	<u>×</u>												×		0	7
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Distribution: White - Lab; Pink - Originator Rev: 060409



SAMPLE RECEIPT CHECKLIST 74433 Date:

RECEIVER Initials

Project ID: NG-	EM-T	R-F	L	
	Courier	Over-	the-counter	Shipper
COC Inspection Is COC present? Custody seals on shipping container? Is COC Signed by Relinquisher? Is sampler name legibly indicated on COC? Is analysis or hold requested for all samples Is the turnaround time indicated on COC? Is COC free of whiteout and uninitialed cross-	□ No outs?	Dated?	Yes Intact Yes Yes Yes Yes Yes Yes Yes	□ No □ Broken □ Not present N/A □ No □ No □ No □ No □ No □ No □ No, Whiteout No, Cross-outs
Temperature °C Therm. ID# Z  Are there custody seals on sample containers?  Do containers match COC? Yes Are there samples matrices other than soil, was Are any sample containers broken, leaking or Are preservatives indicated? Yes, or Are preservatives correct for analyses request Are samples within holding time for analyses Are the correct sample containers used for the Is there sufficient sample to perform testing? Does any sample contain product, have strong Receipt Details	No No, Conter, air or carb damaged? In sample contact ed? requested? It analyses requested;	ooc lists at oon?  ainers  ested?  therwise st  # of co  # of co  # of co	ntainers received_ ntainers received_ ntainers received	No, Extra sample(s) present  No No No Not indicated N/A  No No No No No No Yes  Yes
If Sample ID's are listed on both COC and co Is the Project ID indicated: On CO If project ID is listed on both COC and contain	oC [] On siners, do they siners, do they since the containers, do not	tey all mat sample cor all match? On sa o they all r	trainer(s) On Yes No mple container(s) natch? Yes mple container(s)	No N/A  Both Not indicated  N/A  On Both Not indicated  NO N/A  On Both Not indicated  No N/A  On Both Not indicated
COMMENTS:				
-		<del></del>		
	•			



Date: 09/16/2010

# Laboratory Results

Cindy Schreier PRIMA Environmental, Inc. 5070 Robert J. Mathews Parkway, Ste. 300 El Dorado Hills, CA 95762

Subject: 2 Water Samples Project Name: NGEM-TR-FL

Project Number:

Dear Ms. Schreier,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Date: 09/16/2010

Project Name: NGEM-TR-FL

Project Number:

Sample: NGEM-TR-FL-RSAM-5-58 Matrix: Water Lab Number: 74538-01

Sample Date :09/14/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	120	10	ug/L	EPA 7199	09/15/10 12:01

Sample: NGEM-TR-FL-RSAM-6-56 Matrix: Water Lab Number: 74538-02

Sample Date :09/14/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	5.2	2.0	ug/L	EPA 7199	09/15/10 13:08

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF ANALYTICAL, LLC

QC Report : Method Blank Data

Project Name: NGEM-TR-FL

Project Number:

		Method						Method		
	Measured	Reportir	ng	Analysis	Date		Measured	Reporting	0	Analysis
Parameter	Value	Limit	Units	Method	Analyzed	Parameter	Value	Limit	Units	Method
Hexavalent Chromium	< 1.0	1.0	na/L	EPA 7199 09/1	09/15/2010					

Date Analyzed

Report Number: 74538

Date: 09/16/2010

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 74538

Date: 09/16/2010

Project Name: NGEM-TR-FL

Relative Percent Diff. Limit	
Rel Di∰ Lim	10
Spiked Sample e Percent it Recov. Limit	90.0-110
Relative F Percent F Diff.	3.02
Duplicate Spiked Sample Percent Recov.	99.4
Spiked Sample Percent Recov.	96.3
S Date Analyzed F	9/15/10
Analysis Method	EPA 7199
e Units	ng/L
Duplicate Spiked Sample Value	5.20
Spiked Sample Value	5.05
Spike Dup. Level	5.00
Spike Level	5.00
Sample Value	< 1.0
Spiked Sample	omium 74537-01 < 1.0
Parameter	Hexavalent Chromium

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report: Laboratory Control Sample (LCS)

Report Number: 74538

Date: 09/16/2010

Project Name: NGEM-TR-FL

LCS Percent Recov. Limit	90.0-110
LCS Percent Recov.	110
Date Analyzed	9/15/10
Analysis Method	<b>EPA 7199</b>
Units	ng/L
Spike Level	5.00
Parameter	Hexavalent Chromium

9 For Lab Use Only ₹ □₹ 12 hr 24 hr □ ½ TAT 48hr Chain-of-Custody Record and Analysis Request Page PPIT <u> ま</u>) 2) W.E.T. Lead (STLC) Total Lead (EPA 200.7 / 6010) CIRCLE METHOD Mercury (EPA 245.1 / 7470 / 7471) **Analysis Request** Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010) (0103 / T.002 A93) slateM T1 MAC Wigh conductivity (M2108 A93) IIO 10toM 28 H97 (M2108 A93) leseid as H97 Volatile Organics (EPA 524.2 Drinking Water) Volatile Organics Full List (EPA 8260B) 74.538 Volatile Halocarbons (EPA 8260B) Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B) Oxygenates (MT8E, DIPE, ET8E, TAME, TBA) (EPA 82608) TPH Gas (EPA 8260B) BTEX (EPA 8260B) SRG # / Lab No. (80928 A93) dqq 2.0 @ 38TM ηİΑ Matrix ş D lio2 Water data@primaenvironmental.com Athy Lightor Yes Received by Laboratory: Mone Sampling Company Log Code: <sup>€</sup>ONH Received by: Received by: HCI California EDF Report? Sampler Print Name: Sampler Signature: **Tedlar** Container 157 Glass Time Time Ē Poly 2795 2nd Street, Suite 300 Davis, CA 95618 Lab: 530.297.4800 Global ID Sleeve 8170 AOV Im 04 97.4802 9 14 Time 0841 a/4/3 1420 Date Date Date Sampling Date 5070 Robert J. Mathews Pkwy, Ste 300 NGEM-TR-FL-RSAM-5-38 KEM-TR-FL-RSAM-6-S6 P.O. #: PRIMA ENVIRONMENTAL, Inc. Distribution: White - Lab; Pink - Originator Rev: 060409 NGEM-TR-FL Sample Designation El Dorado Hills, CA 95762 KIFF Analytical LLC FAX: 916-939-7398 PH: 916-939-7300 Project Address: Relinquished by: Relinquished by: **Relinquished** by Project Name: rax number: Project #:



SAMPLE RECEIPT CHECKLIST

TJB Initials

SRG#:	+4538	Date: 0	091910
Project ID:	NGEM-TR-F	L	
Method of R	eceipt: Courier	Over-the-counter	Shipper
COC Inspection Is COC present? Custody seals on shipping contain Is COC Signed by Relinquisher? Is sampler name legibly indicated Is analysis or hold requested for a Is the turnaround time indicated o Is COC free of whiteout and uning	Yes No on COC? Il samples n COC?	☐ Yes ☐ Intact Dated? ☑ Yes ☑ Yes ☑ Yes ☑ Yes ☑ Yes	☐ No ☐ Broken ☐ Not present ☑ N/A ☐ No
Are there custody seals on sample Do containers match COC?  Are there samples matrices other and the any sample containers broken are preservatives indicated?  Are preservatives correct for analy are samples within holding time. Are the correct sample containers are there sufficient sample to perform Does any sample contain product, Receipt Details  Matrix Contain Matrix Contain	m. ID# \(\frac{\pi}{\pi}\)-5 In containers?  Yes \(\sum \) No \(\sum \) No, O than soil, water, air or card, leaking or damaged?  Yes, on sample contyses requested? for analyses requested? used for the analyses requesting?  have strong odor or are oner type \(\frac{\gamma}{2}\) Ay oner type \(\sum \) ner type \(\sum \) and \(\sum \) and \(\sum \) ner type \(\sum \) ner type \(\sum \) and \(\	Date/Time Intact COC lists absent sample(s) COC lists absent sample(s) Yes Yes Yes Yes Yes Yes Yes Yes Otherwise suspected to be h  # of containers receive # of containers receive # of containers receive	☐ No ♣️ N/A ☐ No ☐ No ☐ No ☐ No Ot? ☐ Yes   【○ No  d 2 d
Quicklog Are the Sample ID's indicated: If Sample ID's are listed on both of Is the Project ID indicated: If project ID is listed on both COO Are the sample collection dates in If collection dates are listed on both Are the sample collection times in If collection times are listed on both COO Are the sample collection times in If collection times are listed on both COO Are the sample collection times in If collection times are listed on both COO Are the sample collection times in If collection times are listed on both COO Are the sample collection times are listed on both COO Are the sample collection times are listed on both COO Are the sample collection times are listed on both COO Are the sample collection times are listed on both COO Are the sample collection dates a	On COC On On Coc and containers, do they dicated: On COC oth COC and containers, do dicated: On COC	sample container(s) all match? Yes N On sample container( to they all match? On sample container	es No N/A On Both Not indicated No N/A (s) On Both Not indicated (es No N/A (s) Not indicated No N/A (s) Not indicated
COMMENTS:			
A A A A A A A A A A A A A A A A A A A			



Date: 09/13/2010

# Laboratory Results

Cindy Schreier PRIMA Environmental, Inc. 5070 Robert J. Mathews Parkway, Ste. 300 El Dorado Hills, CA 95762

Subject: 1 Water Sample

Project Name: NGEM-TRON-FL

Project Number :

Dear Ms. Schreier,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Date: 09/13/2010

**NGEM-TRON-FL** Project Name:

Project Number:

Sample : **SA-189-S6** Matrix: Water Lab Number: 74461-01

Sample Date :09/08/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	2.9	1.0	ug/L	EPA 7199	09/09/10 10:01

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF ANALYTICAL, LLC

QC Report : Method Blank Data

Project Name: NGEM-TRON-FL

Project Number:

		Method						Method
	Measured	d Reporting	ō	Analysis	Date		Measured	Reportii
Parameter	Value	Limit	Units	Method	Analyzed	Parameter	Value	Limit
Hexavalent Chromium	< 1.0	1.0	na/L	EPA 7199	EPA 7199 09/09/2010			

Date Analyzed

Analysis Method

Report Number: 74461

Date: 09/13/2010

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 74461

Date: 09/13/2010

Project Name: NGEM-TRON-FL

Relative Percent Diff. Limit	10
Spiked Sample Percent t Recov. Limit	90.0-110
Relative I	1.86
Duplicate Spiked Sample t Percent Recov.	108
Spiked Sample Percent d Recov.	104
Date Analyzed	9/9/10
Analysis Method	EPA 7199
e Units	ng/L
Duplicate Spiked Sample Value	13.3
Spiked Sample Value	13.0
Spike Dup. Level	5.00
Spike Level	5.00
Sample Value	7.9
Spiked Sample	mium 74404-05 7.9
Parameter	Hexavalent Chromium

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number: 74461 Date: 09/13/2010

Project Name: NGEM-TRON-FL

LCS Percent Recov. Limit	-110
	90.0-110
LCS Percent Recov.	109
Date Analyzed	9/9/10
Analysis Method	<b>EPA 7199</b>
Units	ng/L
Spike Level	2.00
Parameter	Hexavalent Chromium

For Lab Use Only <u>5</u> 24 hr 12 hr 72hr **⊠** <sup>₹</sup> ₽ 
 □ \rightar{\pi}{2}
 TAT Chain-of-Custody Record and Analysis Request Page (מיליוי) 661L X N.E.T. Lead (STLC) (0108 / 7.002 A93) bsel lsto1 CIRCLE METHOD high Conductivity Mercury (EPA 245.1 / 7470 / 7471) **Analysis Request** 5 Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010) CAM 17 Metals (EPA 200.7 / 6010) (M2108 A93) IiO rotoM as H9T (M2108 A93) lessiG as H91 Volatile Organics (EPA 524.2 Drinking Water) Volatile Organics Full List (EPA 8260B) Volatile Halocarbons (EPA 8260B) -ead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) 7 Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B) Remarks: 5 Oxygenates (MTBE, DIPE, ETBE, TAME, TBA) (EPA 8260B) TPH Gas (EPA 8260B) (80928 A93) X3T8 SRG # / Lab No. (80928 A93) dqq 2.0 @ 38TM Matrix ٦iA <u>≗</u> **Z** lioS Water data@primaenvironmental.com Preservative ☐ √es Received by Laboratory auoN Sampling Company Log Code: HNO3 Received by: Received by HCI California EDF Report? Sampler Print Name: Sampler Signature: Legiar Container <u>8</u> Glass Time Time Poly 2795 2nd Street, Suite 300 Davis, CA 95618 Lab: 530.297.4800 Fax: 530.297.4802 Global ID: Sleeve 040810 9/8/10 AOV Im 04 Time Cael Date Sampling Date 9/8/10 5070 Robert J. Mathews Pkwy, Ste 300 PRIMA ENVIRONMENTAL, Inc. P.O. #: NGEM-TROW-FL Sample Designation El Dorado Hills, CA 95762 Analytical LLC 4-184-56 FAX: 916-939-7398 PH: 916-939-7300 Project Address: Relinquished by: Relinquished by: elinquished by: Project Name: Project #: 5

Distribution: White - Lab; Pink - Originator Rev: 060409



SAMPLE RECEIPT CHECKLIST

Pate: 090810

RECEIVER	
TJB Initials	

SRG#: 15101 Date. 010010	
Project ID: NGEM-TRON-FL	
Method of Receipt:	
Is COC Signed by Relinquisher? Yes No Dated? Yes No Is sampler name legibly indicated on COC? Yes No Is analysis or hold requested for all samples Yes No Is the turnaround time indicated on COC? Yes No	present ⊠N/A  □ No, Cross-outs
Do containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample there samples matrices other than soil, water, air or carbon? Yes No Are any sample containers broken, leaking or damaged? Yes No Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated \( \)	Not present ole(s) present
If project ID is listed on both COC and containers, do they all match? Yes \[ \] No  Are the sample collection dates indicated: \[ \] On COC \[ \] On sample container(s)  If collection dates are listed on both COC and containers, do they all match? Yes \[ \] No	Not indicated N/A dicated Not indicated N/A Not indicated N/A Not indicated N/A
COMMENTS:	



Date: 09/20/2010

# Laboratory Results

Cindy Schreier PRIMA Environmental, Inc. 5070 Robert J. Mathews Parkway, Ste. 300 El Dorado Hills, CA 95762

Subject: 1 Water Sample

Project Name: NGEM-TRON-FL

Project Number:

Dear Ms. Schreier,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Date: 09/20/2010

Project Name: NGEM-TRON-FL

Project Number:

Sample: SA-189-S7 Matrix: Water Lab Number: 74590-01

Sample Date :09/17/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	5.3	1.0	ug/L	EPA 7199	09/17/10 13:36

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Method Blank Data

Project Name: NGEM-TRON-FL

Project Number:

		Method						Method	
	Measured	Reporting		Analysis	Date		Measured	Reporting	5
Parameter	Value	Limit	Units	Method	Analyzed	Parameter	Value	Limit	Units
Hexavalent Chromium	< 1.0	1.0	na/L	EPA 7199 09/17/2010	09/17/2010				

Date Analyzed

Analysis Method

Report Number: 74590

Date: 09/20/2010

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 74590

Date: 09/20/2010

Project Name: NGEM-TRON-FL

Relative Percent Diff.	Limit		10
Spiked Sample e Percent t Recov.	Limit		90.0-110
Relative Percent			0.531
Duplicate Spiked Sample Percent	Recov.		104
	Recov.		104
Date	Analyzec		9/17/10
Analysis	Method		EPA 7199
on .	Onits		ng/L
Duplicate Spiked Sample	Value		5.31
Spiked Sample	Value		5.28
Spike Dup.	Level		2.00
Spike	Level		2.00
Sample	Value		< 1.0
Spiked	Sample	omium	74574-01 < 1.0
	Parameter	Hexavalent Chromium	

KIFF ANALYTICAL, LLC 2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number: 74590

Date: 09/20/2010

Project Name: NGEM-TRON-FL

		Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit	
Hexavalent Chromium 5.00	ng/L	EPA /199	9/1//10	105	90.0-110	

2795 2nd Street, Suite 300 **₹** [2

de:	Signature:  Signature:  Class  Class  From Parity Name:  Class  From Parity Name:  From Parity Name:  Class  From Parity Name:  Class  From Parity Name:  From Parity Name:  Class  From Parity Name:  Class  From Parity Name:  From Parity Name:  Class  From Parity Name:  Class  From Parity Name:  From Parity Name:  Class  From Parity Name:  From Parity Name:  Class  Nam	48800	SRG#/Lab No. 14570 Page 1 of 1	☐ Yes ☐ No Chain-of-Custody Record and Analysis Request	de: Analysis Request TAT	CIRCLE METHOD	PA 8260	8 A93) (5 (8) (9) (9) (9) (1)	9OH) (EP./ 10) (EPA 2 (71) (71)	ETBE, T.  EM, M.  EM, M.  EDB, A.  EDB,	Matrix (800) (800) (900)	TEPA 826 tes (MTBE, tes (MTBE, tes (MTBE, tes (5 ox tes (1,2 DC) tes (5 ox tes (1,2 DC) tes (1,2 DC) tes (1,2 DC) tes (1,2 DC) tes (2 ox tes (	Mone  Mater  Soil  Avit  TPH Gas  Sovygens  Yokygens  Yokygens  Yokygens  Yokygens  Yokygens  Yokygens  Yokygens  Yokygens  HFEX (Elegan Scenary)  HPH Gas  Sovygens   <u>х</u>					Remarks:		aboratory:		
Soil   Mark   Mark	SRG # / Lab No.  Company Log Code:  Ita@primaenvironmental.com  Ita@primaenvironmental.com  Olasss  Hoole  Company Log Code:  A Water  A W	Sampling Company Log Code:   Sampling Code:   Sampling Company Log Code:   Sampling Company Log Code:   Sampling Code:   Sam		Chain-of-Custody	Anal		(B)	(EPA 8	90H) (Eb)	EtOH, Ma 1,2 EDB PA 8260 st (EPA 524.2 Dr	1 + y 8 A 3) & 3) & 13   L	tes (MTBE, nv. (1,2 DC Halocarbon Organics Fi	5 Oxygena 7 Oxygen Lead Sca Volatile P Volatile C						emarks:			
	a EDF Report?  ata@primaenvironment  Signature:  Signature:  Ciass  Froservativ  Time Received by:  From Preservativ  A A A A A A A A A A A A A A A A A A A	Sampling  Date  Date  Date  Date  Date  Date	SRG#/Lab No.				tal.com			(80928)	Matrix P.	(80928 Ac	Soil Air MTBE @ BTEX (EI	<u>У</u>								•



SAMPLE RECEIPT CHECKLIST

74597)

Date: 091710

RECEIVER

Sinitfals

SRG#: 79310 Date. 011
Project ID: NGEM-TRON-PL
Method of Receipt: Over-the-counter Shipper
COC Inspection  Is COC present?  Custody seals on shipping container?  Is COC Signed by Relinquisher?  Is sampler name legibly indicated on COC?  Is analysis or hold requested for all samples  Is the turnaround time indicated on COC?  Is COC free of whiteout and uninitialed cross-outs?  Yes No  Yes No  Yes No  Yes No  No  Yes No  No  No  No, Whiteout No, Cross-outs
Sample Inspection  Coolant Present:  Temperature °C  Therm. ID#  Initial  I
Are the Sample ID's indicated:
COMMENTS:
<u> </u>
·





September 08, 2010

Additional requested analyses are reported as a stand-alone report.

Cindy Schreier Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Subject: Calscience Work Order No.: 10-07-2290

> Client Reference: NGEM-TRON-F1

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/30/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc. Robert Stearns

Project Manager

NELAP ID: 03220CA

**CSDLAC ID: 10109** 

SCAQMD ID: 93LA0830





Prima Environmental

5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Date Received: Work Order No: Preparation: Method: 07/30/10 10-07-2290 N/A EPA 9060A

Project: NGEM-TRON-F1 Page 1 of 1

Flojeci. NGLIVI-INCIN-I I							ГС	ige i oi i
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NGEM-TRON-F1-RSAM-6	10-07-2290-1-A	07/28/10 16:00	Solid	TOC 5	N/A	09/03/10 18:17	A0903TOCL1	
-Results are rep	orted on a dry weigl	nt basis.						
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Carbon, Total Organic	5000	530	1		mg/kg			
NGEM-TRON-F1-RSAM-5		10-07-2290-2-A	07/28/10 16:00	Solid	TOC 5	N/A	09/03/10 18:17	A0903TOCL1
-Results are rep	orted on a dry weigl	nt basis.						
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Carbon, Total Organic	7600	550	1		mg/kg			
NGEM-TRON-F1-SA-179		10-07-2290-3-A	07/28/10 16:00	Solid	TOC 5	N/A	09/03/10 18:17	A0903TOCL1
-Results are rep	orted on a dry weigl	nt basis.						
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Carbon, Total Organic	7800	540	1		mg/kg			
NGEM-TRON-F1-SA-189		10-07-2290-4-A	07/28/10 16:00	Solid	TOC 5	N/A	09/03/10 18:17	A0903TOCL1
-Results are rep	orted on a dry weigl	nt basis.						
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Carbon, Total Organic	5900	530	1		mg/kg			
Method Blank		099-06-013-521	N/A	Solid	TOC 5	N/A	09/03/10 18:17	A0903TOCL1
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Carbon, Total Organic	ND	500	1		mg/kg			

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers





Prima Environmental

5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Date Received: Work Order No: Preparation: Method: 07/30/10 10-07-2290 N/A

ASTM D-2216 (M)

Project: NGEM-TRON-F1

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NGEM-TRON-F1-RSAM-6		10-07-2290-1-A	07/28/10 16:00	Solid	N/A	09/04/10	09/04/10 15:00	A0904MOIB2
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Moisture	5.20	0.100	1		%			
NGEM-TRON-F1-RSAM-5		10-07-2290-2-A	07/28/10 16:00	Solid	N/A	09/04/10	09/04/10 15:00	A0904MOIB2
Parameter_	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Moisture	8.30	0.100	1		%			
NGEM-TRON-F1-SA-179		10-07-2290-3-A	07/28/10 16:00	Solid	N/A	09/04/10	09/04/10 15:00	A0904MOIB2
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Moisture	7.90	0.100	1		%			
NGEM-TRON-F1-SA-189		10-07-2290-4-A	07/28/10 16:00	Solid	N/A	09/04/10	09/04/10 15:00	A0904MOIB2
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Moisture	5.40	0.100	1		%			
Method Blank		099-05-014-2,186	N/A	Solid	N/A	09/04/10	09/04/10 15:00	A0904MOIB2
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Moisture	ND	0.100	1		%			



### **Quality Control - Spike/Spike Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 07/30/10 10-07-2290 N/A EPA 9060A

### Project NGEM-TRON-F1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyz		MS/MSD Batch Number
10-09-0004-13	Solid	TOC 5	N/A	09/03	/10	A0903TOCS1
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Carbon, Total Organic	103	100	75-125	2	0-25	

MMM\_

RPD - Relative Percent Difference , CL - Control Limit



### **Quality Control - Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 07/30/10 10-07-2290 N/A ASTM D-2216 (M)

Project: NGEM-TRON-F1

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
NGEM-TRON-F1-RSAM-5	Solid	N/A	09/04/10	09/04/10	A0904MOID2
					_
<u>Parameter</u>	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Moisture	8.30	8.50	2	0-25	



 ${\sf RPD-Relative\ Percent\ Difference\ ,}\qquad {\sf CL-Control\ Limit}$ 

# alscience nvironmental Quality Control - Laboratory Control Sample aboratories, Inc.



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method:

10-07-2290 N/A EPA 9060A

Project: NGEM-TRON-F1

Quality Control Sample ID	Matrix	Instrument Date Analyzed		Lab File ID	LCS Batch Number
099-06-013-521	Solid	TOC 5	09/03/10	NONE	A0903TOCL1
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
Carbon, Total Organic		6000	5960	99	80-120

RPD - Relative Percent Difference ,
7440 Lincoln

, CL - Control Limit



### **Glossary of Terms and Qualifiers**



Work Order Number: 10-07-2290

<u>Definition</u>
See applicable analysis comment.
Less than the indicated value.
Greater than the indicated value.
Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
Analyte was present in the associated method blank.
Concentration exceeds the calibration range.
Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
LCS Recovery Percentage is within LCS ME Control Limit range.
Parameter not detected at the indicated reporting limit.
Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
% Recovery and/or RPD out-of-range.
Analyte presence was not confirmed by second column or GC/MS analysis.
Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

7440 LINCOLN WAY GARDEN GROVE, CA 92841-1432 golence mylronmental esboratories, inc.

TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE:

1 OF 1	P.O. NO.:	QUOTE NO.:	SELECTION OF STREET, S	10 H 22 9 10	ALYSIS											32	Date: Date: B	Date: Time: C
PAGE	V GO E M - TRON-FI	PROJECT CONTACT:	SAMPLER(S): (SIGNATURE)	Man	REQUESTED ANALYSIS	p	eriupen stest ts	11 essel		火	<b>Y</b> .		*			ignature)	(Signature)	ignature)
(114) 834-7501	MENTO INC	ville Rd., #15		data@primaenvironmental.com	8HR 72 HR \$5 DAYS 10 DAYS	ARCHIVE SAMPLES UNTIL / /		LOCATION/ SAMPLING AN TO SAMPLING AND THE TIME AND TO SAMPLING AND THE TIME AND THE	1600 50	S-1 -5	\$ 50		A-1			C C X received W. (Signature)		(S) Kacawan Dy. (S)
LABORATORY CLIENT:	ADDRESS: PRIMA ENVIRONMENTAL 1310	CITY: 10265 Old Placerville Rd., #15	TEL: Sacramento, CA 95827	FH: 916-363-8798 TURNAROUND TFAX: 916-363-8829	SAME DAY 24 HR 48HR special REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)	RWQCB REPORTING AF			NGEM-TRON-FI-	T. RSAM-5	-54-179	MGEM-TRON-FI-6W			Relinquished by: (Signature)	Relinquished by. (Signature)	Relinquished by: (Signature)	

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Resignate Bupy	Packages up to 150 lbs. FedEx First Overnight Enties nex business months	Saturday Delivery NOT evailable.	Packages over 150 lbs.	FedEx 3Day Freight Third business day.** Saturday Delivery NOT available.	FedEx Tube 🗵 Other	3Day Freight.	Indirect Signature find one is available at recipient's address, someone at a neighboring address; someone at a neighboring recipient for delivery. For		Cargo Aircraft Only	Obtain Recip.	Credit CardCash/Chack	£ 55
16	• To most locations. Fed Ex. Standard Overnight  Coverage Information Covernight  Coverage Information (Information Anti-	Sauriey Deveey NOT available. FedEx Express Saver Third business day.* Sauriday Delivery NOT available.	** To most locations.	it Booking No.	FedEx Box	Special Handling and Delivery Signature Options SATURDAY Delivery Not residate betreats Sandad Overnight Fedits Flax Overnight, Fedits Express Saves, or Fedits 2009 Finight	Indirect Signature Someona arrecipients address address address may sign for delivers, five applies residents	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Divide, st. O	Enter FedEx Acct. No. or Credit Card No. below.	Third Party Credit Card	Ibour liability is limited to \$100 unless you declare a higher value. See the current Facility Service Builde for details.
	vice		Express Freight Service To moss Freight FedEx 1Day Freight Next business day. Friday shipments will	5 <del>2</del> 1	* Declared value limit \$500.  * Fed Ex Palk** Includes PadEx Small Pak Fed Ex Large Pak and Fed Ex Surdy Pak	Special Handling and Delivery Signature Options SATURDAY Delivery Notes that the tests Sandad beneally resets. Sandad Demigrit rests first Demigrit Feets First Demigrit Feets Sandad Demigrit Rests First Demigrit Feets F	No Signature Required Direct the Peckage may be left without before a someone obtaining a signature for delivery.	Does this shipment contain dangerous goods?  One box must be checked.  One box must be checked.  No Yes Shipper Duclared	] iĝi	Bill to:	Ion Becipient Carlo February Carlo February Carlo February Carlo Weight	lbs. no store of higher value. S
	4a Express FedEx Prio	FedEx SATURDA Second business shipments will be unless SATURDA	4b Express FedEx 1Da	Delivery is selected.  PedEx 2Day Fi Second business de	5 Packaging    FedEx    Envelope*	6 Special SATURDA NOT aveilable	No Signatu Package may b obtaining a sign	Does this s	Dangerous goods (incl or placed in a FedEx Ex	7 Payment	Act No. 19 Section 1 will be lead.  Total Packages	four liability is limited to
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8704	8704078	Phone 7			N C P	Phone 71	HOLD Weekday Print Fadex location address below. NOT evailable for Fadex First Overnight.			CA ZIP		
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<b>EXPRES</b> US Airbill		Sender's The Name Name	Company FIRE THA	SS 1	City Ethin	<b>To</b> Recipient's 공출(여유 L. 돈 Name	Company CALS	Address 7445 L. L. N.C. We cannot deliver to P.D. boxes or P.D. ZIP codes.	Address Print FedEx location address hera if HOLD option is selected.	CH CARDEN		
ထ္	E	83H 13		CIPIEN		 	IIIOO:V					<b>ā</b>



WORK ORDER #: 10-07- 2 2 9 9

## SAMPLE RECEIPT FORM Cooler \_/\_ of \_\_/

CLIENT: PRIMA ENVIRONMENTAL INC	DATE:	07/30/10									
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C - 6.0 °C, not frozer Temperature 20 • 0 °C + 0.5 °C (CF) = 20 • 5 °C	n) □ Blank	<b>☑</b> Sample									
☑ Sample(s) outside temperature criteria (PM/APM contacted by:).											
☐ Sample(s) outside temperature criteria but received on ice/chilled on same d	ay of sampli	ng.									
☐ Received at ambient temperature, placed on ice for transport by Courier.											
Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs (	Only	Initial:									
CUSTODY SEALS INTACT:	□ N/A	1-141-1-1									
☐ Cooler ☐ ☐ No (Not Intact) ☐ Not Present☐ Sample ☐ ☐ No (Not Intact) ☐ Not Present☐	□ N/A	Initial:									
□ Sample □ □ No (Not Intact) □ Not Present		Initial:									
SAMPLE CONDITION:	Yes	No N/A									
Chain-Of-Custody (COC) document(s) received with samples	. <b>d</b>										
COC document(s) received complete											
$\square$ Collection date/time, matrix, and/or # of containers logged in based on sample labels.											
$\square$ No analysis requested. $\square$ Not relinquished. $\square$ No date/time relinquished.											
Sampler's name indicated on COC	<b>A</b> ,										
Sample container label(s) consistent with COC	$\leq$										
Sample container(s) intact and good condition	,										
Proper containers and sufficient volume for analyses requested	$\mathbf{Z}_{j}$										
Analyses received within holding time											
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours											
Proper preservation noted on COC or sample container											
☐ Unpreserved vials received for Volatiles analysis											
Volatile analysis container(s) free of headspace											
Tedlar bag(s) free of condensation  CONTAINER TYPE:											
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores	s <sup>®</sup> □Terra0	Cores® <u>20206</u> 5									
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp	□1AGB □	]1AGB <b>na₂</b> □1AGBs									
□500AGB □500AGJ □500AGJs □250AGB □250CGBs	□1PB □	3500PB □500PB <b>na</b>									
□250PB □250PB <b>n</b> □125PB □125PB <b>znna</b> □100PJ □100PJ <b>na₂</b> □	□	<u> </u>									
Air: ☐Tedlar® ☐Summa® Other: ☐ Trip Blank Lot#:  Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: E  Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 znna: ZnAc2+NaOH f:	Envelope <b>R</b>	eviewed by:									

 $(i_{i_1,i_2,\ldots,i_{r-1},i_r}) = \mu_{i_1,i_2,\ldots,i_{r-1},i_r} = \mu_{i_1,i_2,\ldots,i_{r-1},i_r}$ 

### **Bob Stearns**

From:

Cindy Schreier [cschreier@primaenvironmental.com]

Sent:

Friday, September 03, 2010 12:50 PM

To:

**Bob Stearns** 

Cc:

'Corinne Ackerman'; 'Chris Brooks'

Subject:

please add TOC to anlayte list

Importance:

High

Hi Bob,

We recently sent you soil samples for Cr(VI) analysis. Can you please also measure TOC in all four samples? Hopefully you still have the soils. If not, let me know and I will send more. The work order was 10-07-2290, project NGEM-Tron. These are the soils that are very high (6 to 3,100 mg/kg) perchlorate. If I could get data by Wed or Thurs, that would be great. If not, please advise. Thanks much, Cindy

### Providing site-specific information so you can make scientifically sound decisions.

Cindy G. Schreier, Ph.D.

President and Chief Scientist

PRIMA Environmental, Inc.

5070 Robert J. Mathews Pkwy, Suite 300

El Dorado Hills, CA 95762

T: 916.939.7300

F: 916.939.7398

www.primaenvironmental.com

### NOTICE OF CONFIDENTIALITY

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September 21, 2010

Cindy Schreier Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Calscience Work Order No.: 10-09-1240

Client Reference: NGEM-TR-FL

### Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/16/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc. Robert Stearns

Project Manager

NELAP ID: 03220CA

**CSDLAC ID: 10109** 

SCAQMD ID: 93LA0830





Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Project: NGEM-TR-FL

Date Received:

09/16/10 10-09-1240

Page 1 of 1

Work Order No:

Client Sample Number	Lab Sample Number	r Date Collected	Matrix
RSAM-5-Post Soil	10-09-1240-1	09/15/10	Solid

Comment(s): (3) The reporting limit is elevated resulting from matrix interference.

(9) Results are reported on a dry weight basis.

<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>	Date Prepared	Date Analyzed	Method
Moisture	15.1	0.100	1		%	09/16/10	09/16/10	ASTM D-2216 (M)
Chromium, Hexavalent (9) (3)	ND	470	10		ug/kg	09/17/10	09/17/10	EPA 7199
Carbon, Total Organic (9)	6200	590	1		mg/kg	N/A	09/17/10	EPA 9060A

ost Soil 10-09-1240-2 09/15/10 So
-----------------------------------

Comment(s): (3) The reporting limit is elevated resulting from matrix interference.

ND

500

(9) Results are reported on a dry weight basis.

<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>	Date Prepared	Date Analyzed	<u>Method</u>
Moisture	13.3	0.100	1		%	09/16/10	09/16/10	ASTM D-2216 (M)
Chromium, Hexavalent (9) (3)	ND	460	10		ug/kg	09/17/10	09/17/10	EPA 7199
Carbon, Total Organic (9)	4700	580	1		mg/kg	N/A	09/17/10	EPA 9060A

	Method Blank		N/A S				Solid			
_										
E	<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>	Date Prepared	Date Analyzed	Method	
	Moisture Chromium, Hexavalent	ND ND	0.100 40	1 1		% ug/kg	09/16/10 09/17/10	09/16/10 09/17/10	ASTM D-2216 (M) EPA 7199	



mg/kg

N/A

09/17/10

**EPA 9060A** 

Carbon, Total Organic



### **Quality Control - Spike/Spike Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No:

N/A 10-09-1240

Project: NGEM-TR-FL

### Matrix: Aqueous or Solid

<u>Parameter</u>	Method	Quality Control Sample ID	<u>Date</u> <u>Analyzed</u>	<u>Date</u> Extracted	MS% REC	MSD % REC	%REC CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Chromium, Hexavalent	EPA 7199	RSAM-6-Post Soil	09/17/10	9/17/10	101	100	75-125	1	0-25	
Carbon, Total Organic	EPA 9060A	RSAM-6-Post Soil	09/17/10	N/A	100	100	75-125	0	0-25	

RPD - Rel



### **Quality Control - Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Date Received: Work Order No:

10-09-1240

Project: NGEM-TR-FL

Matrix:	Aqueous	or Solid
---------	---------	----------

<u>Parameter</u>	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Moisture	ASTM D-2216 (M)	10-09-1014-1	09/16/10	78.1	77.8	0	0-25	



RPD - Relative Percent Difference, CL - Control Limit



### **Quality Control - LCS/LCS Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No:

N/A 10-09-1240

Project: NGEM-TR-FL

Matrix:	Aqueou	s or Solid

<u>Parameter</u>	Method	Quality Control Sample ID	<u>Date</u> Extracted	<u>Date</u> Analyzed	LCS % REC	LCSD % REC	%REC CL	<u>RPD</u>	RPD CL	Qual
Chromium, Hexavalent	EPA 7199	099-05-125-2,187	09/17/10	09/17/10	100	99	80-120	0	0-20	

Mulling.

RPD - Relative Percent Difference , CL - Control Limit





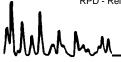
Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No:

10-09-1240

Project: NGEM-TR-FL

Matrix: Aqueo	us or Solid
---------------	-------------

<u>Parameter</u>	<u>Method</u>	Quality Control Sample ID	<u>Date</u> <u>Analyzed</u>	<u>Date</u> Extracted	<u>Conc</u> <u>Added</u>	Conc Recovered	<u>LCS</u> <u>%Rec</u>	<u>%Rec</u> <u>CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	EPA 9060A	099-06-013-522	09/17/10	N/A	6000	5800	97	80-120	



RPD - Relative Percent Difference , CL - Control Limit



### **Glossary of Terms and Qualifiers**



Work Order Number: 10-09-1240

Qualifier *	<u>Definition</u> See applicable analysis comment.
_	Less than the indicated value.
<	
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
В	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

\*aboratories, Inc. pvironmenta/ #[science

7440 LINCOLN WAY

TEL: (714) 895-5494 . FAX: (714) 894-7501 GARDEN GROVE, CA 92841-1432

CHAIN OF CUSTODY RECORD

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DATE:	PAGE:
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<u>ija</u>. S 0/·SI-6 QUOTE NO.: REQUESTED ANALYSIS Date: NGEM-TR-FL Project contact Cludy Schrejer SAMPLERISH; (SIGNATURE) Received by: (Signature) Received by: (Signature) Received by: (Signature) Please list tests required Cont data@primaenvironmental.com ☐ 10 DAYS Matrix . 8 TIME 1555 15 59 5 DAYS SAMPLING 9.15.1D 9.15.10 DATE ARCHIVE SAMPLES UNTIL PRIMA CINDY SCHREIER 72 HR LOCATION/ DESCRIPTION 48HR SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) 5070 Robert J. Mathews Pkwy, Ste 300 PRIMA ENVIRONMENTAL, Inc. ] SAME DAY [] 24 HR [] RWQCB REPORTING RSAM-5-Post Soi RSAM-6-7854 Soi El Dorado Hills, CA 95762 SAMPLE ID Relinquished by: (Signature) SPECIAL INSTRUCTIONS LABORATORY CLIENT: FAX: 916-939-7398 PH: 916-939-7300 Relineatished LAB ONE

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	FedEx 2Day Second business day,* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	. [6]	FedEx Expres Third business day. Saturday Delivery N	•		
4b	<b>Express Freight Service</b>	,	To most locations.		Packa	ges over 150 i
	FedEx 1Day Freight Next business day.** Friday shipments will be delivered on Monday unless SATURDA Delivery is selected.	y FedE	Ex 1Day Freight Booking	y No.		
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WORK ORDER #: 10-09- 1 2 4 0

# SAMPLE RECEIPT FORM Cooler \_\_\_\_ of \_\_\_\_

CLIENT: Prima	DATE: _	09/16	/ 10
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not froze	en)		
Temperature 21 • 6 °C + 0.5 °C (CF) = 22 • 1 °C	☐ Blank	Sample	
Sample(s) outside temperature criteria (PM/APM contacted by:).		-	
☐ Sample(s) outside temperature criteria but received on ice/chilled on same of	dav of sampli	na.	
☐ Received at ambient temperature, placed on ice for transport by C			
Ambient Temperature: □ Air □ Filter		Initial:	10
CUSTODY SEALS INTACT:			
□ Cooler □ □ No (Not Intact) ☑ Not Present	□ N/A	Initial:	10
□ Sample □ □ No (Not Intact) □ Not Present		Initial:	18
CAMPLE CONDITION.	V	N.L.	
SAMPLE CONDITION:  Chair Of Custody (COC) desument(s) respined with semples	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete			
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels	S.		
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.	_		
Sampler's name indicated on COC			
Sample container label(s) consistent with COC	/ .		
Sample container(s) intact and good condition	. 🗖		
Proper containers and sufficient volume for analyses requested	. 🗹		
Analyses received within holding time	. 🗹		
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	. 🗆		
Proper preservation noted on COC or sample container	. 🗆		P
$\square$ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	🗆		Ø
Tedlar bag(s) free of condensation  CONTAINER TYPE:	🗆		
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCore	es <sup>®</sup> □Terra	Cores <sup>®</sup> □	
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp			1AGBs
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGB			
□250PB □250PBn □125PB □125PB <b>znna</b> □100PJ □100PJ <b>na₂</b> □_		□	
Air: ☐Tedlar® ☐Summa® Other: ☐ Trip Blank Lot#:  Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E  Preservative: h: HCL n: HNO <sub>3</sub> na <sub>2</sub> :Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> na: NaOH p: H <sub>3</sub> PO <sub>4</sub> s: H <sub>2</sub> SO <sub>4</sub> znna: ZnAc <sub>2</sub> +NaOH	Labeled/0	Reviewed by: ${\cal U}$	10L





September 23, 2010

Cindy Schreier Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702

Subject: Calscience Work Order No.: 10-09-1448

> Client Reference: NGEM-TR-FL

### Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/18/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc.

Robert Stearns Project Manager

NELAP ID: 03220CA

**CSDLAC ID: 10109** 

SCAQMD ID: 93LA0830





Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 09/18/10 10-09-1448 EPA 3060A EPA 7199

Project: NGEM-TR-FL

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NGEM-TR-FL SA-189-Post Soil		10-09-1448-1-A	09/17/10 11:15	Solid	IC 11	09/18/10	09/18/10 13:19	100918L01
Comment(s): -The reporting limit is elevated resulting from matrix interference.								
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Chromium, Hexavalent	ND	400	10		ug/kg			
Method Blank		099-05-125-2,188	N/A	Solid	IC 11	09/18/10	09/18/10 10:18	100918L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Chromium, Hexavalent	ND	40	1		ug/kg			





Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300

5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 09/18/10 10-09-1448 N/A EPA 9060A

Project: NGEM-TR-FL

Page 1 of 1

FAX: (714) 894-7501

<u>, , , , , , , , , , , , , , , , , , , </u>								<u> </u>
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NGEM-TR-FL SA-189-Post Soil		10-09-1448-1-A	09/17/10 11:15	Solid	TOC 5	N/A	09/21/10 12:52	A0921TOCL1
-Results are reported on a dry weight basis.								
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Carbon, Total Organic	9200	580	1		mg/kg			
Method Blank		099-06-013-523	N/A	Solid	TOC 5	N/A	09/21/10 12:52	A0921TOCL1
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Carbon, Total Organic	ND	500	1		mg/kg			





Prima Environmental

5070 Robert J. Mathews Pkwy, Ste. 300

El Dorado Hills, CA 95762-5702

Date Received:

Work Order No:

Preparation: Method:

09/18/10

10-09-1448

N/A

ASTM D-2216 (M)

Project: NGEM-TR-FL

Page 1 of 1

Trojoot: TTOEM TITTE								90 1 01 1
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NGEM-TR-FL SA-189-Post Soil		10-09-1448-1-A	09/17/10 11:15	Solid	N/A	09/21/10	09/22/10 11:00	A0922MOIB1
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Moisture	14.0	0.100	1		%			
Method Blank		099-05-014-2,243	N/A	Solid	N/A	09/21/10	09/22/10 11:00	A0922MOIB1
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Moisture	ND	0.100	1		%			



### **Quality Control - Spike/Spike Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 09/18/10 10-09-1448 EPA 3060A EPA 7199

### Project NGEM-TR-FL

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
NGEM-TR-FL SA-189-Post Soil	Solid	IC 11	09/18/10	09/18/10	100918S02
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD RPD C	L Qualifiers
Chromium, Hexavalent	93	96	75-125	3 0-25	

MMM\_

RPD - Relative Percent Difference , CL - Control Limit



### **Quality Control - Spike/Spike Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 09/18/10 10-09-1448 N/A EPA 9060A

### Project NGEM-TR-FL

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
NGEM-TR-FL SA-189-Post Soil	Solid	TOC 5	N/A		09/21/10	A0921TOCS1
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	87	89	75-125	2	0-25	

MMM\_

RPD - Relative Percent Difference , CL - Control Limit



### **Quality Control - Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: 09/18/10 10-09-1448 N/A ASTM D-2216 (M)

Project: NGEM-TR-FL

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
10-09-1312-16	Solid	N/A	09/21/10	09/22/10	A0922MOID1
<u>Parameter</u>	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Moisture	9.10	9.40	3	0-25	





### **Quality Control - LCS/LCS Duplicate**



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: N/A 10-09-1448 EPA 3060A EPA 7199

Project: NGEM-TR-FL

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Dat Analy		LCS/LCSD Batc Number	h
099-05-125-2,188	Solid	IC 11	09/18/10	09/18	/10	100918L01	
<u>Parameter</u>	LCS %	6REC LCSD	%REC %	6REC CL	<u>RPD</u>	RPD CL	Qualifiers
Chromium, Hexavalent	100	101		80-120	1	0-20	

MMM\_

RPD - Relative Percent Difference , CL - Control Limit

# alscience nvironmental Quality Control - Laboratory Control Sample aboratories, Inc.



Prima Environmental 5070 Robert J. Mathews Pkwy, Ste. 300 El Dorado Hills, CA 95762-5702 Date Received: Work Order No: Preparation: Method: N/A 10-09-1448 N/A EPA 9060A

Project: NGEM-TR-FL

Quality Control Sample ID Matrix		Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
	099-06-013-523	Solid	TOC 5	09/21/10	NONE	A0921TOCL1
	<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
	Carbon, Total Organic		6000	6100	102	80-120



### **Glossary of Terms and Qualifiers**



Work Order Number: 10-09-1448

Qualifier *	Definition See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
В	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

nvironmental aboratories, inc.

7440 LINCOLN WAY

**CHAIN OF CUSTODY RECORD** 

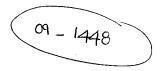
P

PAGE:

GARDEN GROVE, CA 92841-1432

TEL: (714) 895-5494 . FAX: (714) 894-7501

CABORATORY CLIENT	CINDY SCHREIER	r F		CLIENI PROJECT NAME / NUMBER:	P.O. NO.:
PRIMA ENVIRONMENTAL INC.	<u> </u>			NOEM-TR-FL	
5070 Robert J. Mathews Pkwy, Ste 300	Ste 300			chreier	QUOTE NO.:
PH: 916-939-7300 FAX: 916-939-7398		data@primaenvironmental.com	nmental.com	(SIGNATURE)	
SAME DAY 24 HR	] 48HR ⊠ 72 HR	HR	10 DAYS	REQUESTED ANALYSIS	
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)  SPECIAL INSTRUCTIONS	COSTS MAY APPLY)  ARCHIVE SAMPLES UNTIL	LES UNTIL /		(9000) (9000) (1) (1997) (1) (1994)	
SAMPLE ID ONE NOTE - FL -	LOCATION/ DESCRIPTION	SAMPLING DATE TIME	#Cont		
S4-189-Post Soi)		9/17/10/115	50 (	× ×	
*					
Relinquished by: (Signature)	( }		Received by: (Signature)	ignature)	Time:
Kelinquished by: (Signature)			Received by: (Signature)		Time:
Relinquished by: (Signature)			Received by: (Signature)	Older CEL	Date: Time:
					CC : 1



FecEx US Airbill Tracking Number 8704 015	L 2258 Recipients Con
1 From This portion can be removed for Recipient's records.  Date Property Property Brown	
Sender's CIMDY SCHREIER Phone 916 93	uniess SATURDAY Delivery is selected. Saturday Delivery NOT available
Company PRIMA ENVIRONMENTAL, INC.  Address 5070 ROBERT J MATHEWS PKY  City EL DORADO HILLS State CA ZIP 9576	4b Express Freight Service ** To most locations. Packages over 150 lb. FedEx 1Day Freight Next business day.** Friday shipments will
Address 5070 ROBERT J MATHEWS PKY	be delivered on Monday unless SATURDAY   FedEx 1Day Freight Booking No.
2 Your Internal Billing Reference NGE 11 - TR - FL	5 Packaging *Declared value limit \$500.  FedEx Envelope* FedEx Pak* FedEx FodEx FodEx Surdy Pak  FedEx Surdy Pak  FedEx Box FedEx Tube
3 To	6 Special Handling and Delivery Signature Options 5-5494 SATURDAY Delivery NOT available for FeeEx Standard Overnight, FeeEx Express Saver, or FeeEx 3Day Freight.
HOLD Weekday HOLDS  Campany CALSCIENCE ENVIRON   https://doi.org/10.1001/j.campany.cam	aburday Institute And Signature Required Institute FedEx Priority Overnight Direct Signature Someone at recipient's address, someone at a neighboring address, someone at a neighboring address may sign for delivery. Per applies.  Indirect Signature If no one is available at racipient's address, someone at a neighboring address, someone at a neighboring address may sign for delivery. Per applies.
Address 7 4 4 0 1. INCOLN WAY  We cannot deliver to P.O. boxas or P.O. ZIP codes.	Does this shipment contain dangerous goods?  One box must be checked.  Yes Shipper's Declaration.  Dry Ice Dry Ice Dry Ice, 9, UN 1845  xkg
Address Print FedEx location address here if HOLD option is selected.	Dengerous goods (including dry ice) cannot be shipped in FedEx packaging arplaced in a FedEx Express Drop Box.  Cargo Aircraft Only
City GARDEN GROVE State CA ZIP 9284	Sender Se
0409	Total Packages Total Weight Credit Card Lost/Che  Total Packages Total Weight  Total Packages Total Weight Credit Card Auth.
8704 0156 2258	TOur liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.  [553]  Rev. Data 2/08-Part #158279-©1894-2008 FedEx-PRINTED IN U.S.ASRS



WORK ORDER #: 10-09- 1 4 4 8

SAMPLE RECEIPT FO	DRM (	Cooler _	<u> </u>
CLIENT: Prima Environental	DATE.	09 /18	3 / 10
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C - 6.0 °C, not froz  Temperature 22 • 1 °C + 0.5 °C (CF) = 22 • 6 °C  ✓ Sample(s) outside temperature criteria (PM/APM contacted by: 2 ).  □ Sample(s) outside temperature criteria but received on ice/chilled on same  □ Received at ambient temperature, placed on ice for transport by C	□ Blank day of sample		100
Ambient Temperature:   Air   Filter	····	Initi	al:
CUSTODY SEALS INTACT:  □ Cooler □ □ No (Not Intact) ✓ Not Preser  □ Sample □ No (Not Intact) ✓ Not Preser			ial: <u>T</u>
SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete			
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labe	els.		
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			<u></u> 1
Sampler's name indicated on COC			
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition			
Proper containers and sufficient volume for analyses requested	,		
Analyses received within holding timepH / Residual Chlorine / Dissolved Sulfide received within 24 hours			
Proper preservation noted on COC or sample container			2
☐ Unpreserved vials received for Volatiles analysis	⊔	ш	2
l · · · · · · · · · · · · · · · · · · ·			
Volatile analysis container(s) free of headspace  Tedlar bag(s) free of condensation			
CONTAINER TYPE:	⊣	Li	<b>⊿</b> .
Solid: □4ozCGJ Ø8ozCGJ □16ozCGJ □Sleeve () □EnCo	res <sup>®</sup> □Terra	aCores <sup>®</sup> □	]
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGB	p □1AGB	□1AGBna	₂ □1AGB <b>s</b>
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGI	Bs □1PB	□500PB □	1500PB <b>na</b>

□250PB □250PBn □125PB □125PBznna □100PJ □100PJna<sub>2</sub> □ □ □ □

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope

Air: Tedlar Summa Other: Trip Blank Lot#:\_\_\_\_\_ Labeled/Checked by:

Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 znna: ZnAc2+NaOH f: Field-filtered Scanned by: 1



August 10, 2010

PRIMA Environmental Attn: Cindy Schreier 5070 Robert J Mathews #300 El Dorado Hills, CA 95762

STL Project No: 10-219

Subject:

NGEM-TR-FL

Project No:

U.

Invoice No:

7953

### LABORATORY TEST RESULTS

Dear Ms. Schreier:

As requested, Sierra Testing Laboratories, Inc. performed laboratory testing on **four samples** of material from the subject site. The samples were identified as:

- 1. RSAM-6
- 2. RSAM-5
- 3. SA-189
- 4. SA-179

Our laboratory received the samples on **July 22, 2010**. The tests performed on the submitted samples were as follows:

- 1. Moisture Content (D2216)
- 2. Hydrometer with coarse & fine sieve analysis (D422, T27, T88)
- 3. Specific Gravity (D854, T100)

The results of the above referenced testing are presented on the attached figure(s).

We appreciate the opportunity to be of service to you on this project and look forward to providing additional service, as needed, in the future.

Should you have any questions or require additional information, please contact our office at your convenience.

Respectfully submitted,

money frances

Michael Nagel

Project Manager

Enclosures/jm

## MOISTURE CONTENT & UNIT WEIGHT TEST RESULTS

Sample		Wet Unit	Dry Unit	Moisture
<b>Identification</b>	Depth, ft.	Weight, lb/ft. <sup>3</sup>	Weight, lb/ft. <sup>3</sup>	Content, %
SA-179				7.0
SA-189				4.7
RSAM-5				8.3
RSAM-6				8.2

Test Method: ASTM D2216, ASTM D2937

PROJECT NUMBER: 10-219	July 22, 2010		
		NGEM-TR-FL	
SIERRA TESTING LABORATOR GEOTECHINICAL AND MATERIALS TESTIN			
5040 Robert J. Mathews Blvd., El Dorado Hills,	CA 95762		
Phone: (916) 939-3460 FAX: (916) 939-3507			

### **SOIL SPECIFIC GRAVITY**

Sample Identification	Specific Gravity
RSAM-6	2.66
RSAM-5	2.66
SA-189	2.62
SA-179	2.63

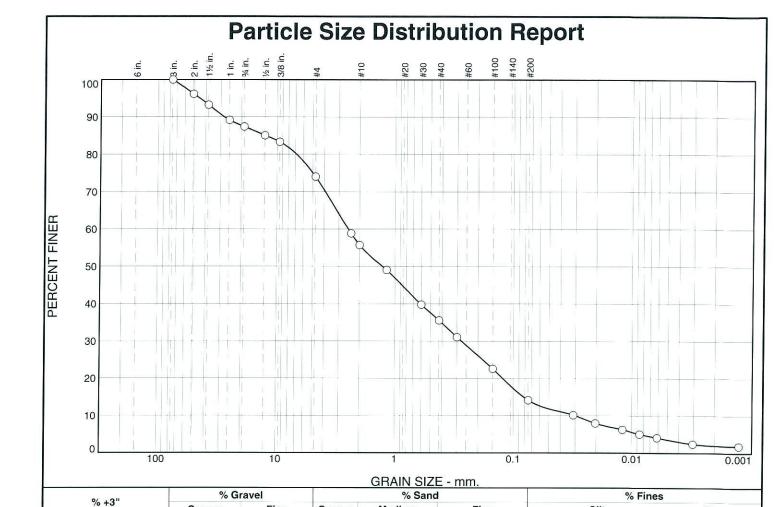
Test Method: ASTM D854

PROJECT NUMBER: 10-219

July 22, 2010

NGEM-TR-FL

5040 Robert J. Mathews Blvd., El Dorado Hills, CA 95762
Phone: (916) 939-3460 FAX: (916) 939-3507



SIEVE	PERCENT	SPEC.*	PASS?
SIZE	FINER	PERCENT	(X=NO)
3 Inch	100.0		· · · · · · · · · · · · · · · · · · ·
2 Inch	96.2		
1 1/2 Inch	93.2		
1 Inch	89.2		
3/4 Inch	87.4		
1/2 Inch	85.1		
3/8 Inch	83.4		
#4	74.0		
#8	58.8		
#10	55.7		
#16	49.0		
#30	39.8		
#40	35.6		
#50	31.1		
#100	22.6		
#200	14.2		
0.0312 mm.	10.2		
0.0203 mm.	8.0		
0.0120 mm.	6.3		
0.0086 mm.	5.1		
0.0061 mm.	4.1	4	
0.0031 mm.	2.4		
0.0013 mm.	1.9	1	

Coarse

12.6

Fine

13.4

Coarse

18.3

Medium

20.1

Fine

21.4

	Soil Description	
PL=	Atterberg Limits LL=	PI=
D <sub>90</sub> = 27.9644 D <sub>50</sub> = 1.2796 D <sub>10</sub> = 0.0300	<b>Coefficients</b> D <sub>85</sub> = 12.4925 D <sub>30</sub> = 0.2756 C <sub>U</sub> = 83.29	D <sub>60</sub> = 2.4949 D <sub>15</sub> = 0.0820 C <sub>c</sub> = 1.02
USCS=	Classification AASHTC	)=
	Remarks	

Silt

10.6

Clay

3.6

(no specification provided)

0.0

**Location:** SA-179 **Sample Number:** S23123

**SIERRA TESTING LABS, INC.** El Dorado Hills, CA

Client: PRIMA Environmental

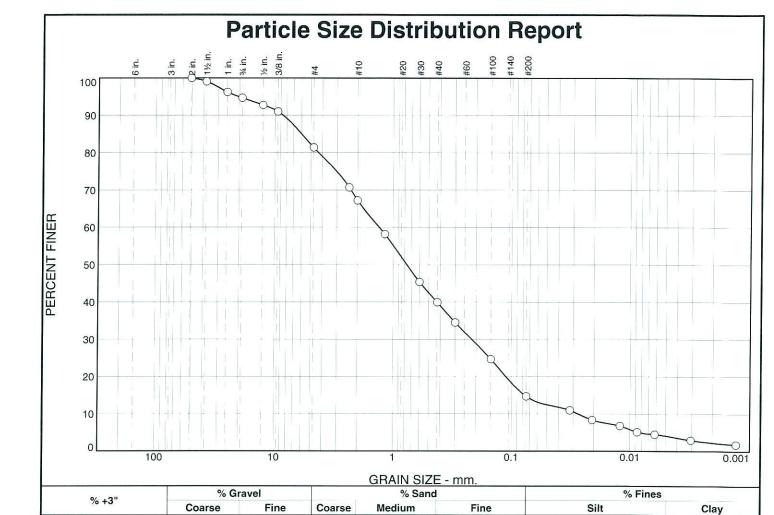
Project: NGEM-TR-FL

Project No: 10-219

**Figure** 

Date: 7/22/10

Tested By: stu/cm Checked By: mn



27.4

25.2

SIEVE	PERCENT	SPEC.*	PASS?
SIZE	FINER	PERCENT	(X=NO)
2 Inch	100,0		
1 1/2 Inch	99.1		
I Inch	96.2		
3/4 Inch	94.7		
1/2 Inch	92.8		
3/8 Inch	91.0		
#4	81.4		
#8	70.7		
#10	67.3		
#16	58.2		
#30	45.4		
#40	39.9		
#50	34.5		
#100	24.7		
#200	14.7		
0.0320 mm.	11.0		
0.0208 mm.	8.4		
0.0122 mm.	6.8		
0.0087 mm.	5.1		
0.0062 mm.	4.5		
0.0031 mm.	2.9		
0.0013 mm.	1.8		

5.3

13.3

14.1

Soil Description	
Atterberg Limits LL=	PI=
Coefficients D <sub>85</sub> = 6.0004 D <sub>30</sub> = 0.2178 C <sub>u</sub> = 48.27	D <sub>60</sub> = 1.3121 D <sub>15</sub> = 0.0772 C <sub>c</sub> = 1.33
Classification AASHT0	O=
Remarks	
	Atterberg Limits LL=  Coefficients D85= 6.0004 D30= 0.2178 Cu= 48.27  Classification AASHTO

10.6

4.1

(no specification provided)

0.0

**Location:** SA-189 **Sample Number:** S23122

**SIERRA TESTING LABS, INC.** El Dorado Hills, CA

Client: PRIMA Environmental

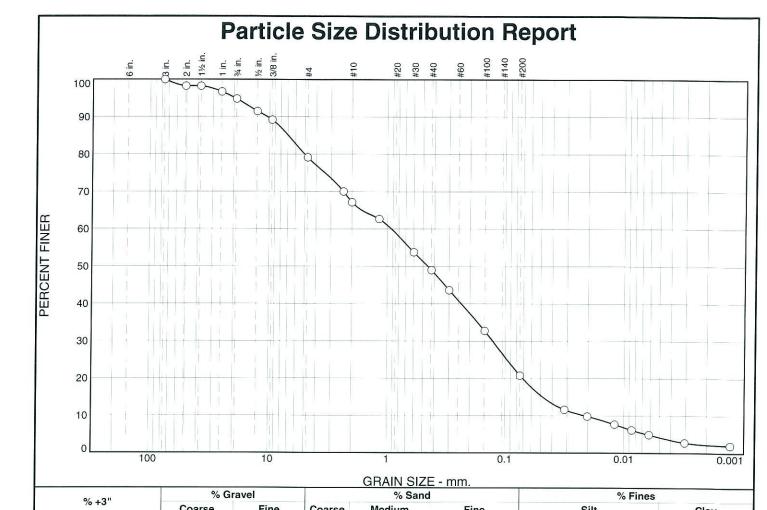
Project: NGEM-TR-FL

Project No: 10-219

**Figure** 

Date: 7/22/10

Tested By: stu Checked By: mn



	WEST 10,000	Coar	se Fine	Coarse	Medium	Fine	Silt		
	0.0	5.2	2 15.6	5 12.1	18.1	28.2	16.6		
	SIEVE	PERCENT	SPEC.*	PASS?			Soil Description		
	SIZE	FINER	PERCENT	(X=NO)					
- 1	3 Inch	100.0							
- 1	2 Inch	98.2							
- 1	1 1/2 Inch	98.2			1				
- 1	1 Inch	96.7							
- 1	3/4 Inch	94.8					Atterberg Limits		
- 1	1/2 Inch	91.5				10		<u></u>	
- 1	3/8 Inch	89.2			PL=		LL=	PI=	
- 1	#4	79.2							

1 1	2 Inch	98.2		-
	1 1/2 Inch	98.2		١
	1 Inch	96.7		١
1 1	3/4 Inch	94.8		١
	1/2 Inch	91.5		١
	3/8 Inch	89.2		١
1 1	#4	79.2		1
1	#8	70.0		1
	#10	67.1		1
	#16	62.7		1
	#30	53.8		١
1 1	#4()	49.0		١
1 1	#50	43.7		ı
1 1	#100	32.8		١
	#200	20.8		ı
	0.0316 mm.	11.6		ı
1	0.0203 mm.	9.8		ı
	0.0120 mm.	7.7		ı
	0.0086 mm.	6.2		ı
	0.0061 mm.	4.9		ı
	0.0031 mm.	2.8		ı
	0.0013 mm.	2.0		1

PL=	LL=	PI=
D <sub>90</sub> = 10.4216 D <sub>50</sub> = 0.4549 D <sub>10</sub> = 0.0213	Coefficients D <sub>85</sub> = 6.9506 D <sub>30</sub> = 0.1280 C <sub>U</sub> = 43.44	D <sub>60</sub> = 0.9234 D <sub>15</sub> = 0.0480 C <sub>c</sub> = 0.84
USCS=	Classification AASHTO=	

Remarks

Location: RSAM-5 Sample Number: S23121

**Date:** 7/22/10

SIERRA TESTING LABS, INC. El Dorado Hills, CA **Client:** PRIMA Environmental **Project:** NGEM-TR-FL

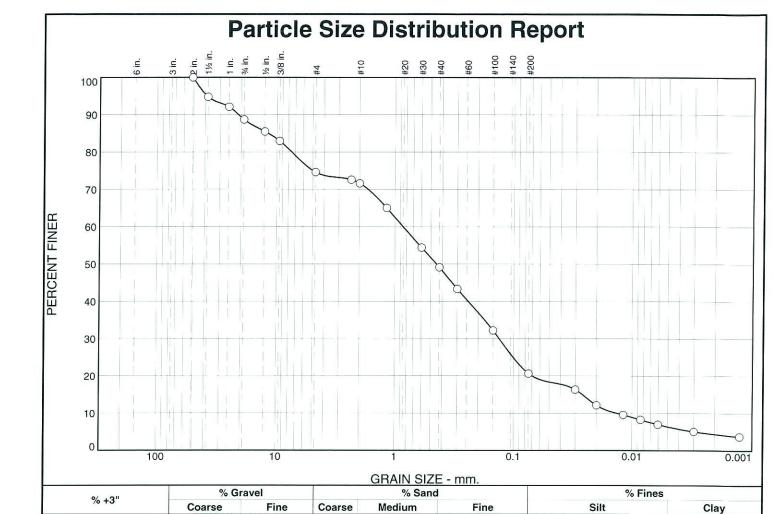
Project No: 10-219

**Figure** 

Clay 4.2

Tested By: stu Checked By: mn

<sup>(</sup>no specification provided)



SIEVE	PERCENT	SPEC.*	PASS? (X=NO)
SIZE	FINER	PERCENT	
2 Inch	100.0		
1 1/2 Inch	94.8		
1 Inch	92.1		
3/4 Inch	88.7		
1/2 Inch	85.5		
3/8 Inch	83.0		
#4	74.6		
#8	72.6		
#10	71.6		
#16	65.0		
#30	54.4		
#40	49.2		
#50	43.3		
#100	32.2		
#200	20.7		
0.0302 mm.	16.4		
0.0200 mm.	12.2		
0.0118 mm.	9.6		
0.0085 mm.	8.3		
0.0061 mm.	7.0		
0.0030 mm.	5.1		
0.0013 mm.	3.8		

11.3

14.1

3.0

22.4

28.5

	Soil Description	
DI	Atterberg Limits	DI
PL=	LL=	PI=
D <sub>90</sub> = 21.1204 D <sub>50</sub> = 0.4483 D <sub>10</sub> = 0.0134	Coefficients D <sub>85</sub> = 11.8485 D <sub>30</sub> = 0.1329 C <sub>U</sub> = 63.64	D <sub>60</sub> = 0.8556 D <sub>15</sub> = 0.0262 C <sub>c</sub> = 1.54
USCS=	Classification AASHTC	)=
	Remarks	

14.3

6.4

(no specification provided)

Location: RSAM-6 Sample Number: S23120

0.0

SIERRA TESTING LABS, INC. El Dorado Hills, CA Client: PRIMA Environmental

Project: NGEM-TR-FL

Project No: 10-219

**Figure** 

Date: 7/22/10

Tested By: cm/ky Checked By: js