

May 29, 2008

Derek Ingram  
Philip Environmental  
210 West Sand Bank Road  
Columbia, IL 62236-0230  
TEL: (618) 281-7173  
FAX: (618) 281-5120



**RE:** A831-735002-012901-225/IP Champaign 62403053

**WorkOrder:** 08050896

Dear Derek Ingram:

TEKLAB, INC received 4 samples on 5/23/2008 11:44:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. IL ELAP and NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in black ink that reads "Heather A. White".

Heather A. White  
Project Manager  
(618)344-1004 ex.20

---

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

**Client:** Philip Environmental

## SAMPLE SUMMARY

**Project:** A831-735002-012901-225/IP Champaign 62403053

**Lab Order:** 08050896

**Report Date:** 29-May-08

---

Lab Sample ID	Client Sample ID	Fractions	Collection Date
08050896-001	B-845 2.0-4.0 ft	1	5/6/2008 2:35:00 PM
08050896-002	B-845 0.0-2.0 ft	1	5/6/2008 2:40:00 PM
08050896-003	B-851 19.0-20.0 ft	1	5/9/2008 10:20:00 AM
08050896-004	B-851 14.0-16.0 ft	1	5/9/2008 10:15:00 AM

---

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

**Client:** Philip Environmental

## CASE NARRATIVE

**Project:** A831-735002-012901-225/IP Champaign 62403053

**LabOrder:** 08050896

**Report Date:** 29-May-08

**Cooler Receipt Temp:** 23.4 °C

### State accreditations:

KS: NELAP #E-10347 | KY: UST #0073 | MO: DNR #00930 | AR: ADEQ #70-028-0

### Qualifiers

**DF** - Dilution Factor

**RL** - Reporting Limit

**ND** - Not Detected at the Reporting Limit

**Surr** - Surrogate Standard added by lab

**TNTC** - Too numerous to count (> 200 CFU)

**Q** - QC criteria failed or noncompliant CCV

**NELAP** - IL ELAP and NELAP Accredited Field of Testing

**B** - Analyte detected in the associated Method Blank

**J** - Analyte detected below reporting limits

**R** - RPD outside accepted recovery limits

**S** - Spike Recovery outside accepted recovery limits

**X** - Value exceeds Maximum Contaminant Level

**#** - Unknown hydrocarbon

**IDPH** - IL Dept. of Public Health

**C** - Client requested RL below

**D** - Diluted out of sample

**E** - Value above quantitation range

**H** - Holding time exceeded

**MI** - Matrix interference

**DNI** - Did not ignite

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## LABORATORY RESULTS

**Client:** Philip Environmental  
**WorkOrder:** 08050896  
**Lab ID:** 08050896-001  
**Report Date:** 29-May-08

**Client Project:** A831-735002-012901-225/IP Champ  
**Client Sample ID:** B-845 2.0-4.0 ft  
**Collection Date:** 5/6/2008 2:35:00 PM  
**Matrix:** SOLID

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b>ASTM D2974</b>								
FOC (0.58 conversion factor)		0.10	H	<b>0.85</b>	wt%	1	5/23/2008	HMH
Organic Matter		0.10	H	<b>1.47</b>	wt%	1	5/23/2008	HMH

### [Sample Narrative](#)

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## LABORATORY RESULTS

**Client:** Philip Environmental

**WorkOrder:** 08050896

**Lab ID:** 08050896-002

**Report Date:** 29-May-08

**Client Project:** A831-735002-012901-225/IP Champ

**Client Sample ID:** B-845 0.0-2.0 ft

**Collection Date:** 5/6/2008 2:40:00 PM

**Matrix:** SOLID

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b>ASTM D2974</b>								
FOC (0.58 conversion factor)		0.10	H	<b>1.77</b>	wt%	1	5/23/2008	HMH
Organic Matter		0.10	H	<b>3.04</b>	wt%	1	5/23/2008	HMH

### Sample Narrative

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## LABORATORY RESULTS

**Client:** Philip Environmental

**Client Project:** A831-735002-012901-225/IP Champ

**WorkOrder:** 08050896

**Client Sample ID:** B-851 19.0-20.0 ft

**Lab ID:** 08050896-003

**Collection Date:** 5/9/2008 10:20:00 AM

**Report Date:** 29-May-08

**Matrix:** SOLID

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b>ASTM D2974</b>								
FOC (0.58 conversion factor)		0.10		<b>1.04</b>	wt%	1	5/23/2008	HMH
Organic Matter		0.10		<b>1.79</b>	wt%	1	5/23/2008	HMH

### Sample Narrative

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## LABORATORY RESULTS

**Client:** Philip Environmental

**Client Project:** A831-735002-012901-225/IP Champ

**WorkOrder:** 08050896

**Client Sample ID:** B-851 14.0-16.0 ft

**Lab ID:** 08050896-004

**Collection Date:** 5/9/2008 10:15:00 AM

**Report Date:** 29-May-08

**Matrix:** SOLID

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b>ASTM D2974</b>								
FOC (0.58 conversion factor)		0.10		<b>1.40</b>	wt%	1	5/23/2008	HMH
Organic Matter		0.10		<b>2.41</b>	wt%	1	5/23/2008	HMH

### Sample Narrative

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

**Client:** Philip Environmental

## DATES REPORT

**Project:** A831-735002-012901-225/IP Champaign 62403053

**Lab Order:** 08050896

**Report Date:** 29-May-08

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Prep Date	Analysis Date
08050896-001A	B-845 2.0-4.0 ft	5/6/2008	Solid	ASTM D2974		5/23/2008
08050896-002A	B-845 0.0-2.0 ft			ASTM D2974		5/23/2008
08050896-003A	B-851 19.0-20.0 ft	5/9/2008		ASTM D2974		5/23/2008
08050896-004A	B-851 14.0-16.0 ft			ASTM D2974		5/23/2008



**ANALYTICAL QC SUMMARY REPORT**

**Key QC concepts:**

- CCV** Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF** Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DUP** Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot. (NELAC)
- ICV** Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- LCS** Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. (NELAC) The acceptable recovery range is listed in this report.
- MS** Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in this report.
- MSD** Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in this report.
- MDL** Method detection limit or limit of detection (LOD) means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- MB/LCB** Method blank or lab control blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses. (NELAC)
- PQL** Practical quantitation limit or limit of quantitation (LOQ) means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in this report.
- RL** The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD** Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in this report.
- SPK** The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes. (NELAC)
- Surr** Surrogates are an organic compound which is similar to the analytes of interest in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples.

Qualifiers			
<b>DF</b> - Dilution Factor	<b>B</b> - Analyte detected in the associated Method Blank	<b>C</b> - Client requested RL below PQL	<b>MI</b> - Matrix interference
<b>RL</b> - Reporting Limit	<b>J</b> - Analyte detected below reporting limits	<b>D</b> - Diluted out of sample	<b>DNI</b> - Did not ignite
<b>ND</b> - Not Detected at the Reporting Limit	<b>R</b> - RPD outside accepted recovery limits	<b>IDPH</b> - IL Dept. of Public Health	<b>E</b> - Value above quantitation range
<b>Surr</b> - Surrogate Standard added by lab	<b>S</b> - Spike Recovery outside accepted recovery limits	<b>Q</b> - QC criteria failed	<b>H</b> - Holding time exceeded
<b>TNTC</b> - Too numerous to count ( > 200 CFU )	<b>X</b> - Value exceeds Maximum Contaminant Level	<b>#</b> - Unknown hydrocarbon	<b>NELAP</b> - IL ELAP and NELAP Accredited

Client: Philip Environmental

# ANALYTICAL QC SUMMARY REPORT

Project: A831-735002-012901-225/IP Champaign 62403053

TestCode: I\_OM\_D\_M

Lab Order: 08050896

Report Date: 29-May-08

Sample ID: <b>08050896-004ADUP</b>	SampType: <b>DUP</b>	Units: <b>wt%</b>	Prep Date:	RunNo: <b>108593</b>							
Client ID: <b>B-851 14.0-16.0 ftDU</b>	Batch ID: <b>R108593</b>		Analysis Date: <b>5/23/2008</b>	SeqNo: <b>1958606</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
FOC (0.58 conversion factor)	1.35	0.10						1.401	3.32	25	
Organic Matter	2.34	0.10						2.415	3.32	25	

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005**Client:** Philip Environmental**RECEIVING CHECK LIST****Project:** A831-735002-012901-225/IP Champaign 62403053**Lab Order:** 08050896**Report Date:** 29-May-08


Carrier: Rachael Hunson

Received By: AMH

Completed by:

On:


23-May-08

  
Amanda M. Harris

Reviewed by:

On:

23-May-08

  
Elizabeth A. HurleyPages to follow: Chain of custody Extra pages included 

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C	23.4
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>		
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>		
Type of thermal preservation?	None <input checked="" type="checkbox"/>	Ice <input type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice	<input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
All samples received within holding time?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>		
Container/Temp Blank temperature in compliance?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted	<input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

Any No responses must be detailed below or on the COC.

Samples received did not meet hold time requirements. Per Derek Ingram, continue with analysis out of hold time. EAH 5/23/08

The samples were out of temperature compliance upon receipt. Per Richard Husan, continue with analysis out of temperature compliance. AMH 5/23/08



# Chain of Custody Record

210 West Sand Bank Road  
P.O. Box 230  
Columbia, IL 62236-0230  
(618) 281-7173 Phone  
(800) 733-7173  
(618) 281-5120 Fax

08050896  
COC Serial No. **B** 08885

Project Name: ARMY Champaign Project Mgr.: Derek Ingram  
Project Number: 62403053 Cost Code: 024501

Sampler(s): R. Huson  
Laboratory Name: Texlab  
Location: Collinsville

Sample Number and (depth)	Date	Time	Matrix				Total Number of Containers
			Soil	Water	Air	Wipes	
B-845 2.0-4.0'	5/6	1435	X				1
B-845 0.0-2.0'	5/6	1440	X				1
B-851 19.0-20.0'	5/6	1020	X				1
B-851 14.0-16.0'	5/6	1015	X				1

Analyses by Method Name and Number	Comments (Field PID)	Lab ID #'s
		08050896-001
		002
		003
		004

Laboratory Temperature upon Receipt  
83.4

ok to proceed  
out of comp protocol

**Samples Iced:**  Yes  No

**Preservatives (ONLY for Water Samples)**

- Volatile Organics
- Hydrochloric acid (HCl)
- VOC Soil (5035)
- Sodium Bisulfate/Methanol
- TPH
- Hydrochloric acid and/or Sulfuric acid
- Metals
- Nitric acid (HNO<sub>3</sub>)
- Cyanide
- Sodium hydroxide (NaOH)
- Other (Specify) \_\_\_\_\_

**Lab Directives:**

Requested TAT:  Rush  5 Days  Other \_\_\_\_\_

Fax and/or Mail Results to: Derek Ingram  STD

Send Invoice to: \_\_\_\_\_

QC Deliverable Requested:  Full QC & Limits  CLP-LIKE  EDD  Other \_\_\_\_\_

Special Guidelines: \_\_\_\_\_

Reporting Limits: \_\_\_\_\_

\* Special: \_\_\_\_\_

**Shipping:**

Carrier / Airbill No. \_\_\_\_\_

**Relinquished by:**

Signature: Richard Huson Date: 5/23/06 Time: 1144

**Received by:**

Signature: G. [unclear] Date: 5/23/06 Time: 11:40