



**REMEDIAL ACTION REPORT**  
*(Volume 5: Appendix G -  
APC-11)*

**FOR**

**PEERLESS PHOTO PRODUCTS SITE  
ROUTE 25A AND RANDALL RD.  
SUFFOLK COUNTY  
SHOREHAM, NEW YORK  
(SITE NO.: 1-52-031)**

**ATC PROJECT NO. 68.28817.0001**

**JUNE 20, 2007**

**Prepared for:**

**AGFA Corporation  
100 Challenger Road  
Ridgefield Park, NJ 07660-2199**

**Prepared by:**

**ATC Engineering, LLP  
104 East 28th Street  
New York, NY 10010**



**Professional Engineer No. 075399 1998**

**DATA USABILITY REPORT**

**H2M CASE NO. ATC001**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
MARCH 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**

*Mark Traxler*

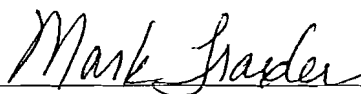
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**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 ■ Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of March 30, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in cursive script, reading "Mark Traxler", written over a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist



**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
MARCH 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the March 30, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604020 included a total of 11 soil samples, including 1 set of field duplicate samples, plus 1 Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604020 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604020 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MS percent recovery for silver exceeds the control limits of 75-125% (-124.1%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.
3. The ICP serial dilution exceeded the control limit of 10% difference (34.1%) for cadmium on sample 0604020-006. However, since the original value of cadmium was less than 50 times the Instrument Detection Limit (IDL), the ICP serial dilution for cadmium was acceptable. No qualification of data was deemed necessary due to the cadmium ICP serial dilution results.
4. The ICP serial dilution exceeded the control limit of 10% difference (10.7%) for silver on sample 0604020-006. Silver data was reported flagged "E" on forms 1 and 9 by the laboratory. All associated silver results were qualified as estimated (J).

#### 4.0 SUMMARY

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, laboratory duplicates, matrix spike recoveries, field duplicates, and laboratory control sample results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified ICP serial dilution results as an area of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 3/30/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC001

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-B5-001	APC11-B5-002	APC11-B5-003	APC11-B5-004	APC11-B5-005	APC11-SW-001	APC11-SW-001D	APC11-SW-001S	APC11-SW-002	APC11-SW-003
Sample Number	0604020-001	0604020-002	0604020-003	0604020-004	0604020-005	0604020-006	0604020-006D	0604020-006S	0604020-007	0604020-008
Sampling Date	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006
Preparation Date	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006	3/30/2006
Analysis Date	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006	3/31/2006
Percent Solids	96.3	91.7	95.3	91.5	96.0	89.8	88.8	89.8	90.5	88.8
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X	U 1	U 1	U 1	U 1	0.31 B J 1	0.27 B J 1	92.4% 1	0.35 B J 1	0.21 B J 1
1.00	Silver X	4.4 E J 1	8.0 E J 1	10.5 E J 1	1.3 E J 1	57.5 E J 1	47.2 E J 1	-124.1% 1	191 E J 1	155 E J 1

Sample Location or Description	APC11-SW-004	APC11-SW-005	APC11-SW-901							
Sample Number	0604020-009	0604020-010	0604020-011							
Sampling Date	3/30/2006	3/30/2006	3/30/2006							
Preparation Date	3/30/2006	3/30/2006	3/30/2006							
Analysis Date	3/31/2006	3/31/2006	3/31/2006							
Percent Solids	93.5	82.2	87.1							
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X	0.25 B J 1	0.20 B J 1	0.40 B J 1						
1.00	Silver X	100 E J 1	53.8 E J 1	69.2 E J 1						

P - ICP  
 F - Flame AA  
 Q - Qualifier, if any  
 DF - Dilution Factor

## APPENDIX A

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS SAMPLES RECEIVED: 3/30/06 SDG #: ATC001

For Samples:

APC11-BS-001  
APC11-BS-002  
APC11-BS-003  
APC11-BS-004  
APC11-BS-005  
APC11-SW-001 MS/MSD  
APC11-SW-002  
APC11-SW-003  
APC11-SW-004  
APC11-SW-005  
APC11-SW-901

Eleven soil samples were received by H2M Labs, Inc. on 3/30/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-SW-001 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125%. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

ICP serial dilution analysis did not reproduce within acceptance ranges for silver. Silver data was reported flagged "E" on forms 1 and 9.

No other issues were noted during the analysis of this sample group.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: April 6, 2006

\*\*\*\*\*  
\*  
\*  
\*\*\*\*\*

Vincent Stancampiano  
Vice President



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC001

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-001	0604020-001	X
APC11-BS-002	0604020-002	X
APC11-BS-003	0604020-003	X
APC11-BS-004	0604020-004	X
APC11-BS-005	0604020-005	X
APC11-SW-001	0604020-006	X
APC11-SW-002	0604020-007	X
APC11-SW-003	0604020-008	X
APC11-SW-004	0604020-009	X
APC11-SW-005	0604020-010	X
APC11-SW-901	0604020-011	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol) ASP B 10/95  
TCL/TAL, HSL, Priority Pollutant,

1985 4/6/06

ATC001 S3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-001Level (low/med): LOWDate Received: 3/30/2006% Solids: 96.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	4.4		E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 3/31/06  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-002

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-002Level (low/med): LOWDate Received: 3/30/2006% Solids: 91.7Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	8.0		E	-P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-003

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-003

Level (low/med): LOW

Date Received: 3/30/2006

% Solids: 95.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	10.5		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-004

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-004Level (low/med): LOWDate Received: 3/30/2006% Solids: 91.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	1.3		E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 3/31/06  
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U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-005

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-005

Level (low/med): LOW

Date Received: 3/30/2006

% Solids: 96.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	1.3		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-006

Level (low/med): LOW

Date Received: 3/30/2006

% Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.31	B		P
7440-22-4	Silver	57.5		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06



## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-002

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-007Level (low/med): LOWDate Received: 3/30/2006% Solids: 90.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.35	B		P
7440-22-4	Silver	191		E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 3/31/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-003

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-008Level (low/med): LOWDate Received: 3/30/2006% Solids: 88.8Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.21	B		P
7440-22-4	Silver	155		E	P

Color Before: BROWN

Clarity Before: \_\_\_\_\_

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 3/31/06  
\_\_\_\_\_  
\_\_\_\_\_  
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U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-004

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-009

Level (low/med): LOW

Date Received: 3/30/2006

% Solids: 93.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.25	B		P
7440-22-4	Silver	100		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-005

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001Matrix (soil/water): SOILLab Sample ID: 0604020-010Level (low/med): LOWDate Received: 3/30/2006% Solids: 82.2Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.20	B		P
7440-22-4	Silver	53.8		E	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 3/31/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-901

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-011

Level (low/med): LOW

Date Received: 3/30/2006

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.40	B		P
7440-22-4	Silver	69.2		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 3/31/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC001

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604020-001	APC11-BS-001	SOIL	AG,CD,	30-Mar-06	03/06
0604020-002	APC11-BS-002	SOIL	AG,CD,	30-Mar-06	03/06
0604020-003	APC11-BS-003	SOIL	AG,CD,	30-Mar-06	03/06
0604020-004	APC11-BS-004	SOIL	AG,CD,	30-Mar-06	03/06
0604020-005	APC11-BS-005	SOIL	AG,CD,	30-Mar-06	03/06
0604020-006	APC11-SW-001	SOIL	AG,CD,	30-Mar-06	03/06
0604020-006DUP	APC11-SW-001D	SOIL	AG,CD,	30-Mar-06	03/06
0604020-006MS	APC11-SW-001S	SOIL	AG,CD,	30-Mar-06	03/06
0604020-007	APC11-SW-002	SOIL	AG,CD,	30-Mar-06	03/06
0604020-008	APC11-SW-003	SOIL	AG,CD,	30-Mar-06	03/06
0604020-009	APC11-SW-004	SOIL	AG,CD,	30-Mar-06	03/06
0604020-010	APC11-SW-005	SOIL	AG,CD,	30-Mar-06	03/06
0604020-011	APC11-SW-901	SOIL	AG,CD,	30-Mar-06	03/06

# H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

16945

## EXTERNAL CHAIN OF CUSTODY

CLIENT: ATC

H2M SDG NO: ATC001

PROJECT NAME/NUMBER

SHOREHAM REMEDIATION

SAMPLERS: (signature)/Client

*[Signature]* / ATC ASSOCIATES

DELIVERABLES:

BS-700

TURNAROUND TIME:

24-48 HR V 21 DAY PKG

Sample Container Description		Total No. of Containers		ANALYSIS REQUESTED										NOTES:		Project Contact:	
Sample Container Description	Total No. of Containers	ORGANIC	INORG.	VOA	BNA	PAH/PCB	Metal	CN	LAB I.D. NO.	REMARKS:	FAX RESULTS		Phone Number:				
202 AMBER GLASS	3						X		0604020-006	MS/MSD	TO 631-744-3071		609-571-7519 (m)				
	1						X		011				631-744-3064 (smt)				
	1						X		007				PIS/Quote # 906				
	1						X		008								
	1						X		009								
	1						X		010								
	1						X		001								
	1						X		002								
	1						X		003								
	1						X		004								

Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<i>[Signature]</i>		3/30/06	16:45	<i>[Signature]</i>		3/30/06	16:45
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time

LABORATORY USE ONLY	
Discrepancies Between Sample Labels and COC Record? Y or N Explain:	Samples were: 1. Shipped ___ or Hand Delivered ___ Airbill# ___ 2. Ambient or chilled, Temp ___ 3. Received in good condition: Y or N 4. Properly preserved: Y or N  COC Tape was: 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N

ATC001006 - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY





H2M LABS, INC.

Sample Receipt Checklist

Client Name ATC

Date and Time Receive

3/30/2006 4:45:00 PM

Work Order Number 0604020

Received by

JN

Checklist completed by

Signature

Date

3/30/06

Reviewed by

Initials

Date

JSA

3/31/06

Matrix

Carrier name Hand Delivered

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Applicable ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Applicable ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Applicable ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

26°C

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Adjusted?

Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

ATC001 S8

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: B5-700 TURN AROUND TIME: 24-48 HR VERBAL  
 SDG #: ATC001 CASE #: \_\_\_\_\_ MATRIX: S pH CHECK Y or N

REMARKS: \_\_\_\_\_

RECEIVED BY: SN SIGNATURE: [Signature] DATE: 3/30/06 TIME: 16:45

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-BS-001	0604020-001	3/30/06	A	1	6010-S-PKG (SEL) PMOIST
002	-002				
003	-003				
004	-004				
005	-005				
MS/MSD SW-001	-006			3	
002	-007			1	
003	-008				
004	-009				
005	-010				
901	-011				
<div>3/30/06</div> <div>SN</div>					

METALS

P 0202

ATC001 S9

SDG #: ATC 001[illegible]

P 0203

ATC001 S10

## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC001  
 Sampling Date(s): 3/30/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/17/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other Cd, Ag  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

## Data Validation Criteria:

accept FYI qualify

comments

Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg, and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results	X			< 35 RPD
Matrix Spike Results		X		Ag results > 4X spike amount
ICP Serial Dilution			X	Ag results > 10 RPD
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results	X			< 50 RPD
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments:

NA - Not applicable  
 NR - Not reviewed

QA Scientist

Mark Traxler

Date

5/17/06

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC001

Sample Location or Description	APC11-SW-001	APC11-SW-001D	APC11-SW-001S
Sample Number	0604020-006	0604020-006D	0604020-006S
Sampling Date	3/30/2006	3/30/2006	3/30/2006
Units	mg/kg	mg/kg	mg/kg

	Spike Amount	Sample Result	MD Result	MS Result	MD RPD	Q	MS %R	Q
Cadmium	5.57	0.31	0.27	5.45	12.3		92.4	
Silver	5.57	57.5	47.20	50.6	19.7		-124.1	*

Q - Qualifier

\* - Denotes RPD outside criteria

*M. Staples*

*5/17/06*

# Inorganic Field Duplicate Precision Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC001

Sample Location or Description	APC11-SW-001	APC11-SW-901
Sample Number	0604020-006	0604020-011
Sampling Date	3/30/2006	3/30/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium	0.31	0.40	25.4	
Silver	57.5	69.2	18.5	

\* - Denotes RPD outside criteria

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

SOW No.: ILM04.1

EPA Sample No.

Lab Sample ID.

APC11-BS-001

0604020-001

APC11-BS-002

0604020-002

APC11-BS-003

0604020-003

APC11-BS-004

0604020-004

APC11-BS-005

0604020-005

APC11-SW-001

0604020-006

APC11-SW-001D

0604020-006DUP

APC11-SW-001S

0604020-006MS

APC11-SW-002

0604020-007

APC11-SW-003

0604020-008

APC11-SW-004

0604020-009

APC11-SW-005

0604020-010

APC11-SW-901

0604020-011

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YES

If yes-were raw data generated before application of background corrections?

Yes/No NO

Comments:

Date Reported: 3/31/06

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:

Name:

Vincent Stancampiano

Date:

Title:

Vice President

COVER PAGE - IN

ILM04.1

ATC001 M2



U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		
		C	1	C	2	C	3	C		C	M
Cadmium	0.8	B	0.7	B	0.5	B	0.5	B	0.012	U	P
Silver	0.4	U	0.4	U	0.4	U	0.4	U	0.045	U	P

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Prepa- ration Blank C		M
	1	C	2	C	3	C					
Cadmium	0.8	B	0.7	B	0.5	B	0.5	B	0.012	U	P
Silver	0.4	U	0.4	U	0.4	U	0.4	U	0.045	U	P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-SW-001S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.4532	0.3073 B	5.57	92.4		P
Silver		50.5505	57.4590	5.57	-124.1		P

Comments:

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U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-SW-001S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.4532	0.3073 B	5.57	92.4		P
Silver		50.5505	57.4590	5.57	-124.1		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

% Solids for Duplicate: 88.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium	0.5568	0.3073	B	0.2717	B	12.3		P
Silver		57.4590		47.1737		19.7		P

U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

% Solids for Duplicate: 88.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium	0.5568	0.3073	B	0.2717	B	12.3		P
Silver		57.4590		47.1737		19.7		P

U.S. EPA - CLP

9  
ICP SERIAL DILUTIONS

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample		Serial	Dilution	Result (S)	C	% Differ- ence	Q	M
	Result (I)	C							
Cadmium	2.76	B			3.70	B	34.1		P
Silver	515.98				578.39		12.1	E	P

**DATA USABILITY REPORT**

**H2M CASE NO. ATC002**



**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**



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**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 • Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 3, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in black ink, appearing to read "Mark Traxler", written over a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

## **1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 3, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604115 included a total of seven (7) soil samples, including one (1) set of field duplicate samples, plus one (1) Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604115 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604115 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MD relative percent difference (RPD) for cadmium exceeded the method requirements of 20% and the project Data Quality Objective (DQO) of 35% (35.9%). However, the results were less than five times (<5X) the CRQL. Therefore, no qualification of cadmium results was made due to the MD.
3. The MD RPD for silver exceeded the method requirements of 20%, but not the project DQO of 35% (25.7%). Therefore, no qualification of cadmium results was made due to the MD.
4. The MS percent recovery for silver exceeds the control limits of 75-125% (-570.6%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times (4X) the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.

5. The field duplicate results for silver exceeded the project DQO of 50%. However, the results were <5X the CRQL. Therefore, no qualification of silver results was made due to the field duplicate.

#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, matrix spike recoveries, laboratory duplicates, field duplicates, laboratory control sample results, and ICP serial dilution results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified no areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

## DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/3/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC002

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-BS-006	APC11-BS-007	APC11-BS-907	APC11-SW-006	APC11-SW-006D	APC11-SW-006S	APC11-SW-007	APC11-SW-008	APC11-SW-009	
Sample Number	0604115-001	0604115-002	0604115-003	0604115-004	0604115-004D	0604115-004S	0604115-005	0604115-006	0604115-007	
Sampling Date	4/3/2006	4/3/2006	4/3/2006	4/3/2006	4/3/2006	4/3/2006	4/3/2006	4/3/2006	4/3/2006	
Preparation Date	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	
Analysis Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	
Percent Solids	98.1	97.7	98.3	78.9	79.1	78.9	88.3	72.4	88.0	
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X	U 1	U 1	U 1	0.22 B J 1	0.15 1	92.7% 1	0.052 B J 1	0.48 B J 1	0.40 B J 1
1.00	Silver X	0.32 B* J 1	0.50 B* J 1	2.2 * 1	180 * 1	139 1	-570.6% 1	270 * 1	223 * 1	112 * 1

Sample Location or Description										
Sample Number										
Sampling Date										
Preparation Date										
Analysis Date										
Percent Solids										
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X									
1.00	Silver X									

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor



**APPENDIX A**

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS SAMPLES RECEIVED: 4/3/06 SDG #: ATC002

For Samples:

APC11-BS-006  
APC11-BS-007  
APC11-BS-906  
APC11-SW-006 MS/MSD  
APC11-SW-007  
APC11-SW-008  
APC11-SW-009

Seven soil samples were received by H2M Labs, Inc. on 4/3/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-SW-006 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for silver. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Duplicate analysis did not reproduce within acceptance ranges for silver. Silver data was reported flagged "\*" on forms 1 and 6.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: April 21, 2006

\*\*\*\*\*

\**V. Stancampiano*\*  
\*\*\*\*\*

Vincent Stancampiano  
Vice President

NAC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC002

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-006	0604115-001	X
APC11-BS-007	0604115-002	X
APC11-BS-906	0604115-003	X
APC11-SW-006	0604115-004	X
APC11-SW-007	0604115-005	X
APC11-SW-008	0604115-006	X
APC11-SW-009	0604115-007	X

CLP, Non-CLP (Please indicate year of protocol)  
TCL/TAL, HSL, Priority Pollutant,

ASPB WKS KSS 4/21/86

ATC002 S3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-006

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-001

Level (low/med): LOW

Date Received: 4/3/2006

% Solids: 98.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.012	U		P
7440-22-4	Silver	0.32	B	*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 5, 2006

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-007

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.:

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-002

Level (low/med): LOW

Date Received: 4/3/2006

% Solids: 97.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.50	B	*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 5, 2006

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-906

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002Matrix (soil/water): SOILLab Sample ID: 0604115-003Level (low/med): LOWDate Received: 4/3/2006% Solids: 98.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.012	U		P
7440-22-4	Silver	2.2		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

DATE REPORTED: APRIL 5, 2006

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-006

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-004

Level (low/med): LOW

Date Received: 4/3/2006

% Solids: 78.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.22	B		P
7440-22-4	Silver	180		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

DATE REPORTED: APRIL 5, 2006



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-007

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-005

Level (low/med): LOW

Date Received: 4/3/2006

% Solids: 88.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.052	B		P
7440-22-4	Silver	270		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 5, 2006

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-008

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002Matrix (soil/water): SOILLab Sample ID: 0604115-006Level (low/med): LOWDate Received: 4/3/2006% Solids: 72.4Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.48	B		P
7440-22-4	Silver	223		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

## Comments:

DATE REPORTED: APRIL 5, 2006

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-009

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002Matrix (soil/water): SOILLab Sample ID: 0604115-007Level (low/med): LOWDate Received: 4/3/2006% Solids: 88.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.40	B		P
7440-22-4	Silver	112		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts:

## Comments:

DATE REPORTED: APRIL 5, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC002

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604115-001	APC11-BS-006	SOIL	AG,CD,	03-Apr-06	04/06
0604115-002	APC11-BS-007	SOIL	AG,CD,	03-Apr-06	04/06
0604115-003	APC11-BS-906	SOIL	AG,CD,	03-Apr-06	04/06
0604115-004	APC11-SW-006	SOIL	AG,CD,	03-Apr-06	04/06
0604115-004DUP	APC11-SW-006D	SOIL	AG,CD,	03-Apr-06	04/06
0604115-004MS	APC11-SW-006S	SOIL	AG,CD,	03-Apr-06	04/06
0604115-005	APC11-SW-007	SOIL	AG,CD,	03-Apr-06	04/06
0604115-006	APC11-SW-008	SOIL	AG,CD,	03-Apr-06	04/06
0604115-007	APC11-SW-009	SOIL	AG,CD,	03-Apr-06	04/06

## EXTERNAL CHAIN OF CUSTODY

**575 Broad Hollow Rd, Melville, NY 11747-5076**

**Tel: (631) 694-3040 Fax: (631) 420-8436**

Tel: (631) 694-3040 Fax: (631) 420-8436				CLIENT: ATC ASSOC.				H2M SDG NO: ATC001							
PROJECT NAME/NUMBER SHOREHAM REMEDIATION				Sample Container Description 2 OZ AMBER GLASS				NOTES: * TOTAL Cd + Ag				Project Contact: CORA CHAMBERS			
SAMPLERS: (signature)/Client ATC ASSOCIATES								Phone Number: 609-571-7519 (m) 631-744-3064 (STTE) PIS/Quote # 906							
DELIVERABLES: B5-70D				Total No. of Containers ANALYSIS REQUESTED ORGANIC INORG. VOA BNA PPA/PCB Metal CN				LAB I.D. NO.				REMARKS:			
TURNAROUND TIME: 24-48 Hr V - 21 DAY PKG								0604115 -							
DATE	TIME	MATRIX	FIELD I.D.												
4/3/06	13:26	Soil	APC11-SW-006	3							X		004	MS/MSD	
4/3/06	13:30	Soil	APC11-SW-007	1							X		005		
4/3/06	13:35	Soil	APC11-SW-008	1							X		006		
4/3/06	13:55	Soil	APC11-SW-009	1							X		007		
4/3/06	13:38	Soil	APC11-B5-006	1							X		001		
4/3/06	13:45	Soil	APC11-B5-007	1							X		002		
4/3/06	13:40	Soil	APC11-B5-906	1							X		003		
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	LABORATORY USE ONLY			
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	Discrepancies Between Sample Labels and COC Record? Y or N Explain:			
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	Samples were: 1. Shipped or Hand Delivered Airbill# 2. Ambient or chilled, Temp 3. Received in good condition: Y or N 4. Properly preserved: Y or N			
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	COC Tape was: 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N			

H2M LABS, INC.

ATC002

Sample Receipt Checklist

Client Name ATC

Date and Time Receive

4/3/2006 4:00:00 PM

Work Order Number 0604115

Received by PS

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix

Carrier name Hand Delivered

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Applicable ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Applicable ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Applicable ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Adjusted? \_\_\_\_\_

Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC002 S7

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: B5-70D TURN AROUND TIME: 28-48 hr Verbal  
 SDG #: ATC002 CASE #: \_\_\_\_\_ MATRIX: S pH CHECK Y or N 21 Day PK9

REMARKS: \_\_\_\_\_

RECEIVED BY: PS SIGNATURE: [Signature] DATE: 4/4/06 TIME: 10:30  
\*received by lab 4/3/06 16:00

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-BS-006	0604115 -1A	4-3-06	A	1	PMOIST 6010-S-PKG (SEL)
BS-007	-2A	↓	↓	↓	↓
↓-906	-3A	↓	↓	↓	↓
MS/MSD SW-006	-4A	↓	↓	3	↓
↓-007	-5A	↓	↓	1	↓
↓-008	-6A	↓	↓	↓	↓
↓-009	-7A	↓	↓	↓	↓
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;">           PS 4/4/06         </div>					

METALS

P 0205

ATC002 S8

SDG 号: ATC002[illegible]

P 0206

ATC002 S9



## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC002  
 Sampling Date(s): 4/3/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/18/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other \_\_\_ Cd, Ag \_\_\_  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg , and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results		X		Cd > 35 RPD but <5X CRQL
Matrix Spike Results		X		Ag > 4X spike amount
ICP Serial Dilution	X			< 10 RPD
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results		X		> 50 RPD but <5X CRQL
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA - Not applicable  
 NR - Not reviewed

QA Scientist Mark Traxler Date 5/19/06

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
 Project Number: 68.28817.0001

Case/SDG Number: ATC002

Sample Location or Description	APC11-SW-001	APC11-SW-001D	APC11-SW-001S
Sample Number	0604020-006	0604020-006D	0604020-006S
Sampling Date	3/30/2006	3/30/2006	3/30/2006
Units	mg/kg	mg/kg	mg/kg

	Spike Amount	Sample Result	MD Result	MS Result	MD RPD	Q	MS %R	Q
Cadmium	6.34	0.22	0.15	6.10	35.9	*	92.7	
Silver	6.34	180	139	144	25.7		-570.6	*

Q - Qualifier

\* - Denotes RPD outside criteria

# Inorganic Field Duplicate Precision Worksheet ATC

Project Name: Peerless Photo Products  
 Project Number: 68.28817.0001

Case/SDG Number: ATC002

Sample Location or Description	APC11-BS-006	APC11-BS-906
Sample Number	0604115-001	0604115-003
Sampling Date	3/30/2006	3/30/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium				
Silver	0.32	2.2	149.2	*

\* - Denotes RPD outside criteria

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Cadmium	0.5	B	0.5	B	0.6	B	0.6	B	0.012	U	P
Silver	0.4	U	0.4	U	2.4	B	0.4	U	0.045	U	P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-SW-006S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 78.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	6.0963	0.2205 B	6.34	92.7		P
Silver		143.5912	179.7509	6.34	-570.6		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-SW-006

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 78.9

% Solids for Duplicate: 79.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium	0.6337	0.2205	B	0.1534	B	35.9		P
Silver		179.7509		138.7553		25.7	*	P

**DATA USABILITY REPORT**

**H2M CASE NO. ATC003**



**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**



---

**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 • Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 4, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in cursive script, reading "Mark Traxler", written over a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 4, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604161 included a total of 13 soil samples, including 1 set of field duplicate samples, plus 1 Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604161 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604161 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MD relative percent difference (RPD) for cadmium exceeded the method requirements of 20%, but not the project Data Quality Objective (DQO) of 35% (20.6%). However, the results were less than five times (<5X) the CRQL. Therefore, no qualification of cadmium results was made due to the MD.
3. The MD RPD for silver exceeded the method requirements of 20% and the project DQO of 35% (105.2%). Silver data were reported flagged "\*" on forms 1 and 6 by the laboratory. All associated silver results were qualified as estimated (J).
4. The MS percent recovery for silver exceeds the control limits of 75-125% (1061.3%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times (>4X) the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.

5. The RPD of the field duplicate results for cadmium and silver were below the project DQO of 50%. No qualification of cadmium or silver results was made due to the field duplicate.
6. The ICP serial dilution exceeded the control limit of 10% difference (100%) for cadmium on sample 0604161-006. However, since the original value of cadmium was less than 50 times the Instrument Detection Limit (IDL), the ICP serial dilution for cadmium was acceptable. No qualification of data was deemed necessary due to the ICP serial dilution results.
7. The ICP serial dilution exceeded the control limit of 10% difference (13.4%) for silver on sample 0604161-006. Silver data was reported flagged "E" on forms 1 and 9 by the laboratory. All associated silver results were qualified as estimated (J).

#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, laboratory duplicates, field duplicates and laboratory control sample results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified matrix spike recoveries and ICP serial dilution results as areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/4/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC003

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-BS-008	APC11-BS-009	APC11-BS-010	APC11-BS-011	APC11-BS-012	APC11-SW-010	APC11-SW-010D	APC11-SW-010S	APC11-SW-011	APC11-SW-012
Sample Number	0604161-001	0604161-002	0604161-003	0604161-004	0604161-005	0604161-006	0604161-006D	0604161-006S	0604161-007	0604161-008
Sampling Date	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006
Preparation Date	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006
Analysis Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006
Percent Solids	88.7	90.2	95.6	92.4	91.0	83.6	83.0	83.6	77.5	71.6
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X	0.039 B J 1	U 1	U 1	U 1	0.073 B J 1	U 1	95.3% 1	0.18 B J 1	0.47 B J 1
1.00	Silver X	4.8 *E J 1	8.9 *E J 1	12.3 *E J 1	8.0 *E J 1	77.9 *E J 1	32.5 *E J 1	104.5 *E J 1	1061.3% 1	123 *E J 1

Sample Location or Description	APC11-SW-013	APC11-SW-014	APC11-SW-015	APC11-SW-016	APC11-SW-911					
Sample Number	0604161-009	0604161-010	0604161-011	0604161-012	0604161-013					
Sampling Date	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006					
Preparation Date	4/4/2006	4/4/2006	4/4/2006	4/4/2006	4/4/2006					
Analysis Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/6/2006					
Percent Solids	87.4	85.8	83.7	88.6	84.4					
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium X	0.35 B J 1	0.24 B J 1	0.092 B J 1	0.014 B J 1	0.13 B J 1				
1.00	Silver X	139 *E J 1	67.9 *E J 1	107 *E J 1	162 *E J 1	120 *E J 1				

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor



## APPENDIX A

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS SAMPLES RECEIVED: 4/4/06 SDG #: ATC003

For Samples:

APC11-BS-008	APC11-SW-012
APC11-BS-009	APC11-SW-013
APC11-BS-010	APC11-SW-014
APC11-BS-011	APC11-SW-015
APC11-BS-012	APC11-SW-016
APC11-SW-010 MS/MSD	APC11-SW-911
APC11-SW-011	

Thirteen soil samples were received by H2M Labs, Inc. on 4/4/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-SW-010 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for silver. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Duplicate analysis did not reproduce within acceptance ranges for silver. Silver data was reported flagged "\*" on forms 1 and 6.

ICP serial dilution analysis did not reproduce within acceptance criteria for silver. Silver data was reported flagged "E" on forms 1 and 9.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: April 21, 2006

\*\*\*\*\*

\*  
\* *V. Stancampiano* \*  
\*\*\*\*\*

Vincent Stancampiano  
Vice President

NRC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC003

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-008	0604161-001	X
APC11-BS-009	0604161-002	X
APC11-BS-010	0604161-003	X
APC11-BS-011	0604161-004	X
APC11-BS-012	0604161-005	X
APC11-SW-010	0604161-006	X
APC11-SW-011	0604161-007	X
APC11-SW-012	0604161-008	X
APC11-SW-013	0604161-009	X
APC11-SW-014	0604161-010	X
APC11-SW-015	0604161-011	X
APC11-SW-016	0604161-012	X
APC11-SW-911	0604161-013	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol) *ASP B 10/95*  
TCL/TAL, HSL, Priority Pollutant,

ATC003 S3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-008

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-001

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 88.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.039	B		P
7440-22-4	Silver	4.8		*E	P

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/6/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-009

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-002

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 90.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	8.9		*E	P

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-010

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-003Level (low/med): LOWDate Received: 4/4/2006% Solids: 95.6Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	12.3		*E	P

Color Before: BROWN Clarity Before:Texture: COARSEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/6/06  
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## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-011

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-004Level (low/med): LOWDate Received: 4/4/2006% Solids: 92.4Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	8.0		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06



## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-012

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-005Level (low/med): LOWDate Received: 4/4/2006% Solids: 91.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	77.9		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts:

## Comments:

Date Reported: 4/6/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-010

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-006

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 83.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.073	B		P
7440-22-4	Silver	32.5		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/6/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-011

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-007

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 77.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.18	B		P
7440-22-4	Silver	123		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-012

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-008Level (low/med): LOWDate Received: 4/4/2006% Solids: 71.6Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.47	B		P
7440-22-4	Silver	95.1		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-013

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-009Level (low/med): LOWDate Received: 4/4/2006% Solids: 87.4Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.35	B		P
7440-22-4	Silver	139		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-014

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-010

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.24	B		P
7440-22-4	Silver	67.9		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-015

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 1047B

Case No.

SAS No.:

SDG No.: ATC003Matrix (soil/water): SOILLab Sample ID: 0604161-011Level (low/med): LOWDate Received: 4/4/2006% Solids: 83.7Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.092	B		P
7440-22-4	Silver	107		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-016

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-012

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 88.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	162		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-911

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-013

Level (low/med): LOW

Date Received: 4/4/2006

% Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.13	B		P
7440-22-4	Silver	120		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/6/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC003

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604161-001	APC11-BS-008	SOIL	AG,CD,	04-Apr-06	04/06
0604161-002	APC11-BS-009	SOIL	AG,CD,	04-Apr-06	04/06
0604161-003	APC11-BS-010	SOIL	AG,CD,	04-Apr-06	04/06
0604161-004	APC11-BS-011	SOIL	AG,CD,	04-Apr-06	04/06
0604161-005	APC11-BS-012	SOIL	AG,CD,	04-Apr-06	04/06
0604161-006	APC11-SW-010	SOIL	AG,CD,	04-Apr-06	04/06
0604161-006DUP	APC11-SW-010D	SOIL	AG,CD,	04-Apr-06	04/06
0604161-006MS	APC11-SW-010S	SOIL	AG,CD,	04-Apr-06	04/06
0604161-007	APC11-SW-011	SOIL	AG,CD,	04-Apr-06	04/06
0604161-008	APC11-SW-012	SOIL	AG,CD,	04-Apr-06	04/06
0604161-009	APC11-SW-013	SOIL	AG,CD,	04-Apr-06	04/06
0604161-010	APC11-SW-014	SOIL	AG,CD,	04-Apr-06	04/06
0604161-011	APC11-SW-015	SOIL	AG,CD,	04-Apr-06	04/06
0604161-012	APC11-SW-016	SOIL	AG,CD,	04-Apr-06	04/06
0604161-013	APC11-SW-911	SOIL	AG,CD,	04-Apr-06	04/06

# H2M LABS, INC.

16948

## EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

<b>PROJECT NAME/NUMBER</b> SHOREHAM REMEDIATION				<b>CLIENT:</b> ATC				<b>H2M SDG NO:</b> ATC003			
<b>SAMPLERS (signature)/Client</b> ATC ASSOCIATES				<b>Sample Container Description</b> <div style="border: 1px solid black; padding: 2px; text-align: center;">2 oz. GLASS AMBER</div>				<b>NOTES:</b> * TOTAL Cd + Ag			
<b>DELIVERABLES:</b> BS-70D								<b>Project Contact:</b>			
<b>TURNAROUND TIME:</b> 24-48 Hr. V - 21 DAY PKG								<b>Phone Number:</b>			
<b>ANALYSIS REQUESTED</b>				<b>PIS/Quote #</b> 906							
<b>ORGANIC</b>				<b>INORG.</b>							
<b>LAB I.D. NO.</b>				<b>REMARKS:</b>							
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# H2M LABS, INC.

16949

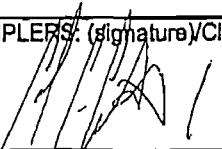
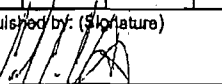
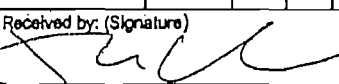
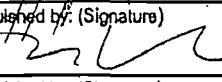
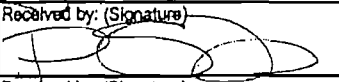
## EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: ATC

H2M SDG NO: ATC 003

PROJECT NAME/NUMBER				Sample Container Description ↓ Total No. of Containers	ANALYSIS REQUESTED								LAB I.D. NO.	REMARKS:				
SHOREHAM REMEDIATION					ORGANIC										INORG.			
					VOA	BNA	Pest/PCB											
SAMPLERS: (signature)/Client  ATC ASSOCIATES				2 OR GLASS AMBER									NOTES:  1	Project Contact:				
DELIVERABLES: B5-70D														Phone Number:				
TURNAROUND TIME: 24-48 Hr. V-21 DAY PKG.														PIS/Quote # 906				
DATE	TIME	MATRIX	FIELD I.D.															
4/4/06	13:40	SOIL	APC11-B5-010	1										X	CN	0604161 -003		
4/4/06	13:42	SOIL	APC11-B5-011	1										X			-004	
4/4/06	13:45	SOIL	APC11-B5-012	1										X			-005	
Relinquished by: (Signature) 				Date	Time	Received by: (Signature) 				Date	Time	<b>LABORATORY USE ONLY</b>  Discrepancies Between Sample Labels and COC Record? Y or N Explain:  Samples were: 1. Shipped ___ or Hand Delivered ___ Airbill# ___ 2. Ambient or chilled, Temp ___ 3. Received in good condition: Y or N 4. Properly preserved: Y or N  COC Tape was: 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N						
Relinquished by: (Signature) 				Date	Time	Received by: (Signature) 				Date	Time							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time							

WHITE COPY - ORIGINAL  
ATC003S7

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

H2M LABS, INC.

ATC 003

Sample Receipt Checklist

Client Name ATC

Date and Time Receive

4/4/2006 5:22:00 PM

Work Order Number 0604161

Received by PS

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix

Carrier name Hand Delivered

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" 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 checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	< 6°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC003 S8

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: B5-70D TURN AROUND TIME: 24-48hr V-21Day pkg

SDG #: ATC003 CASE #: \_\_\_\_\_ MATRIX: Soil pH CHECK Y or N

REMARKS: \_\_\_\_\_

RECEIVED BY: PS SIGNATURE: [Signature] DATE: 4.4.06 TIME: 17:22

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-B5-008	0604161 -1A	4.4.06	A	1	PMOIST 6010-S. PKG (SEL)
-009	-2A				
-010	-3A				
-011	-4A				
V-012	-5A			↓	
ms/msd SW-010	-6A			3	
-011	-7A			1	
-012	-8A				
-013	-9A				
-014	-10A				
-015	-11A				
-016	-12A				
↓ -911	↓ -13A	↓	↓	↓	↓
<div>PS</div> <div>4.4.06</div>					

METALS

P 0208

ATC003 S9

SDG #: ATC003

## INTERNAL CHAIN OF CUSTODY

[illegible]

\* out  
of  
\* degree

## METALS

P. 0209

ATC003 S10

## APPENDIX B



# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC003  
 Sampling Date(s): 4/4/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/23/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other \_\_\_ Cd, Ag \_\_\_  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria: accept FYI qualify comments

Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg, and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results			X	Ag results > 35 RPD
Matrix Spike Results		X		Ag results >4X spike
ICP Serial Dilution			X	Ag results >10 RPD; Cd <50X IDL
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results	X			< 50 RPD
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA - Not applicable  
 NR - Not reviewed

QA Scientist Mark Traxler Date 5/24/06

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC003

Sample Location or Description	APC11-SW-010	APC11-SW-010D	APC11-SW-010S
Sample Number	0604161-006	0604161-006D	0604161-006S
Sampling Date	4/4/2006	4/4/2006	4/4/2006
Units	mg/kg	mg/kg	mg/kg

	Spike Amount	Sample Result	MD Result	MS Result	MD RPD	Q	MS %R	Q
Cadmium	5.98	0.073	0.090	5.77	20.6	*	95.3	
Silver	5.98	32.5	104	95.9	105.2	*	1061.3	*

Q - Qualifier

\* - Denotes RPD outside criteria

# Inorganic Field Duplicate Precision Worksheet ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC003

Sample Location or Description	APC11-SW-001	APC11-SW-901
Sample Number	0604020-006	0604020-011
Sampling Date	3/30/2006	3/30/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium	0.092	0.13	34.2	
Silver	107	120	11.5	

\* - Denotes RPD outside criteria

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U	0.012	U	P
Silver	0.4	U	0.4	U	0.4	U	0.4	U	0.045	U	P

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C	C		
Cadmium			0.1	U							P
Silver			0.4	U							P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-SW-010S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 83.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.7727		0.0730	B	5.98	95.3		P
Silver		95.9372		32.4635		5.98	1061.3		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-SW-010

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 83.6

% Solids for Duplicate: 83.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium	0.5981	0.0730	B	0.0897	B	20.6		P
Silver		32.4635		104.4548		105.2	*	P

U.S. EPA - CLP

9  
ICP SERIAL DILUTIONS

APC11-SW-010

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Cadmium	0.61	B	0.61	U	100.0		P
Silver	271.39		307.69	B	13.4	E	P



**DATA USABILITY REPORT**

**H2M CASE NO. ATC004**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**



---

**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 ■ Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 5, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in cursive script, reading "Mark Traxler", is positioned above a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 5, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604217 included a total of 12 soil samples, including 1 set of field duplicate samples, plus one (1) Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604217 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604217 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MD RPD for silver exceeded the method requirements of 20%, but not the project Data Quality Objective (DQO) of 35% (33.3%). Therefore, no qualification of silver results was made due to the MD.
3. The MS percent recovery for silver exceeded the control limits of 75-125% (136.9%). The spike recovery indicates possible matrix interference or sample non-homogeneity. The sample was post spiked and reanalyzed, recovering at 186.3%. Silver data was reported flagged "N" on forms 1 and 5A by the laboratory. All associated silver results are qualified as estimated (J).
4. The field duplicate results for silver exceeded the project DQO of 50% (51.1%). All associated silver results are qualified as estimated (J).

#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, laboratory control sample results, and ICP serial dilution results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified laboratory matrix duplicates, matrix spike recoveries, and field duplicates as areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate, or imprecise
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.



# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/5/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC004

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-BS-012A	APC11-BS-013	APC11-BS-013D	APC11-BS-013S	APC11-BS-014	APC11-BS-015	APC11-BS-016	APC11-BS-017	APC11-SW-017	APC11-SW-018
Sample Number	0604217-001	0604217-002	0604217-002D	0604217-002S	0604217-003	0604217-004	0604217-005	0604217-006	0604217-007	0604217-008
Sampling Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006
Preparation Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006
Analysis Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006
Percent Solids	95.3	89.3	89.7	89.3	92.8	94.7	94.6	90.7	49.3	74.8
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	0.056 B J 1	U 1	U 1	92.4% U 1	U 1	U 1	0.26 B J 1	0.036 B J 1
1.00	Silver	X	7.3 N* J 1	5.5 N* J 1	3.9 N* J 1	-124.1% U 1	0.075 BN* J 1	2.0 N* J 1	0.050 BN* J 1	0.079 BN* J 1
			13.3 N* J 1	65.4 N* J 1						

Sample Location or Description	APC11-SW-019	APC11-SW-020	APC11-SW-021	APC11-SW-020						
Sample Number	0604217-009	0604217-010	0604217-011	0604217-012						
Sampling Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006						
Preparation Date	4/5/2006	4/5/2006	4/5/2006	4/5/2006						
Analysis Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006						
Percent Solids	61.9	90.8	75.0	89.2						
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	0.26 B J 1	0.11 B J 1	U 1	0.071 B J 1				
1.00	Silver	X	237 N* J 1	118 N* J 1	245 N* J 1	199 N* J 1				

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

**APPENDIX A**

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS

SAMPLES RECEIVED: 4/5/06

SDG #: ATC004

### For Samples:

APC11-BS-012-DA  
APC11-BS-013 MS/MSD  
APC11-BS-014  
APC11-BS-015  
APC11-BS-016  
APC11-BS-017  
APC11-SW-017  
APC11-SW-018  
APC11-SW-019  
APC11-SW-020  
APC11-SW-021  
APC11-SW-920

Twelve soil samples were received by H2M Labs, Inc. on 4/5/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E Trace ICP instrument.

Sample APC11-BS-013 was utilized for QC analysis and reporting.

Spike analysis did not recover within the acceptance range for silver. The sample was post spiked and reanalyzed, recovering at 186.3%. Silver data was reported flagged "N" on Forms 1 and 5A.

Duplicate analysis did not reproduce within the acceptance range for silver. Silver data was reported flagged "\*" on forms 1 and 6.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: April 21, 2006

\*\*\*\*\*

\* V. Stancampiano \*

\*\*\*\*\*

Vincent Stancampiano  
Vice President

NRC

o:\qcl\narr2006\atc\metals\atc004.doc

ATC004 S12

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC004

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-012-DA	0604217-001	X
APC11-BS-013	0604217-002	X
APC11-BS-014	0604217-003	X
APC11-BS-015	0604217-004	X
APC11-BS-016	0604217-005	X
APC11-BS-017	0604217-006	X
APC11-SW-017	0604217-007	X
APC11-SW-018	0604217-008	X
APC11-SW-019	0604217-009	X
APC11-SW-020	0604217-010	X
APC11-SW-021	0604217-011	X
APC11-SW-920	0604217-012	X

CLP ~~Non-CLP~~ (Please indicate year of protocol) ASP B 10/95  
TCL/TAL, HSL, Priority Pollutant,

JSW 4/21/06

ATC004-S3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-012-DA

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004Matrix (soil/water): SOILLab Sample ID: 0604217-001Level (low/med): LOWDate Received: 4/5/2006% Solids: 95.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.059	B		P
7440-22-4	Silver	7.3		N*	P

Color Before: BROWN

Clarity Before:

Texture: COARSEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-013

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004Matrix (soil/water): SOILLab Sample ID: 0604217-002Level (low/med): LOWDate Received: 4/5/2006% Solids: 89.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	5.5		N*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: COARSEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-014

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004Matrix (soil/water): SOILLab Sample ID: 0604217-003Level (low/med): LOWDate Received: 4/5/2006% Solids: 92.8Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.075	B	N*	P

Color Before: BROWN

Clarity Before:

Texture: COARSEColor After: YELLOWClarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-015

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-004

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 94.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	2.0		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-016

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-005

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 94.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.50	B	N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-017

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-006

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	0.079	B	N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-017

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-007

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 49.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.26	B		P
7440-22-4	Silver	13.3		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-018

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-008

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 74.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.036	B		P
7440-22-4	Silver	65.4		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-019

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-009

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 61.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.26	B		P
7440-22-4	Silver	237		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-020

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-010

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 90.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.11	B		P
7440-22-4	Silver	118		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-021

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-011

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 75.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.016	U		P
7440-22-4	Silver	245		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-920

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-012

Level (low/med): LOW

Date Received: 4/5/2006

% Solids: 89.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.071	B		P
7440-22-4	Silver	199		N*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG: ATC004

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604217-001	APC11-BS-012-DA	SOIL	AG,CD,	05-Apr-06	04/06
0604217-002	APC11-BS-013	SOIL	AG,CD,	05-Apr-06	04/06
0604217-002DUP	APC11-BS-013D	SOIL	AG,CD,	05-Apr-06	04/06
0604217-002MS	APC11-BS-013S	SOIL	AG,CD,	05-Apr-06	04/06
0604217-003	APC11-BS-014	SOIL	AG,CD,	05-Apr-06	04/06
0604217-004	APC11-BS-015	SOIL	AG,CD,	05-Apr-06	04/06
0604217-005	APC11-BS-016	SOIL	AG,CD,	05-Apr-06	04/06
0604217-006	APC11-BS-017	SOIL	AG,CD,	05-Apr-06	04/06
0604217-007	APC11-SW-017	SOIL	AG,CD,	05-Apr-06	04/06
0604217-008	APC11-SW-018	SOIL	AG,CD,	05-Apr-06	04/06
0604217-009	APC11-SW-019	SOIL	AG,CD,	05-Apr-06	04/06
0604217-010	APC11-SW-020	SOIL	AG,CD,	05-Apr-06	04/06
0604217-011	APC11-SW-021	SOIL	AG,CD,	05-Apr-06	04/06
0604217-012	APC11-SW-920	SOIL	AG,CD,	05-Apr-06	04/06

# H2M LABS, INC.

16950

## EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: ATC

H2M SDG NO: ATC 004

PROJECT NAME/NUMBER SHOREHAM REMEDIATION				Sample Container Description ↓ 2 OZ. GLASS AMBER	NOTES: * TOTAL Cd + Ag				Project Contact: COLIN CHAMBERS	
SAMPLERS: (signature)/Client [Signature] / ATC ASSOCIATES									Phone Number: 609-751-5444 (M) 571-7519	
DELIVERABLES: B5-70D									PIS/Quote # 906	
TURNAROUND TIME: 24-48 HR. V - 21 DAY PKG										
DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers ↓	ANALYSIS REQUESTED				LAB I.D. NO.	REMARKS:
					VOA	BNA	Pea/ PCB			
4/5/06	12:41	SOIL	APC11-SW-017	1					X	0604217-007
4/5/06	12:44	SOIL	APC11-SW-018	1					X	-008
4/5/06	12:47	SOIL	APC11-SW-019	1					X	-009
4/5/06	12:57	SOIL	APC11-SW-020	1					X	-010
4/5/06	12:52	SOIL	APC11-SW-920	1					X	-012
4/5/06	12:58	SOIL	APC11-SW-021	1					X	-011
4/5/06	13:00	SOIL	APC11-BS-013	3					X	↓ -002 MS/MSD
4/5/06	13:31	SOIL	APC11-BS-012-DA	1					X	0604217-001
4/5/06	13:21	SOIL	APC11-BS-014	1					X	↓ -003
4/5/06	13:23	SOIL	APC11-BS-015	1					X	↓ -004
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	LABORATORY USE ONLY		
[Signature]		4/5/06	14:42	[Signature]		4.5.06	14:42	Discrepancies Between Sample Labels and COC Record? Y or N Explain:		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples were:		
[Signature]		4.5.06	15:40	[Signature]		4.5.06	15:40	1. Shipped or Hand Delivered Airbill# 2. Ambient or chilled, Temp 3. Received in good condition: Y or N 4. Properly preserved: Y or N		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	COC Tape was:		
								1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time			

WHITE COPY - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

# H2M LABS, INC.

16951

## EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: ATC

H2M SDG NO:

PROJECT NAME/NUMBER

SHOREHAM REMEDIATION

SAMPLERS (signature)/Client

ATC ASSOCIATES

DELIVERABLES:

BS-70D

TURNAROUND TIME:

24-48 HR. V - 21 DAY PKG.

Sample Container  
DescriptionTotal No. of  
Containers

ANALYSIS REQUESTED

ORGANIC

INORG.

VOA

BNA

Pest

PCB

Metal

CN

NOTES:

\* TOTAL  
Cd + Ag

Project Contact:

COLIN CHAMBERS

Phone Number:

609-571-7519

PIS Quote #

906

DATE TIME MATRIX

FIELD I.D.

LAB I.D. NO.

REMARKS:

4/5/06 13:26 SOIL

APCII-BS-016

4/6/06 13:35 SOIL

APCII-BS-017

0604217-005

↓ -006

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

### LABORATORY USE ONLY

Discrepancies Between  
Sample Labels and  
COC Record? Y or N  
Explain:

Samples were:

1. Shipped ☐ or Hand Delivered ☐ Airbill# ☐
2. Ambient or chilled, Temp. ☐
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:

1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

H2M LABS, INC.

ATC004

Sample Receipt Checklist

Client Name ATC

Date and Time Receive

4/5/2006 3:40:00 PM

Work Order Number 0604217

Received by PS

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix

Carrier name Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" 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 checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	26°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC004 S8

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: BS-70 D TURN AROUND TIME: 24-48 hr V- 21 day

SDG #: ATC004 CASE #: \_\_\_\_\_ MATRIX: Soil pH CHECK Y or N

REMARKS: \_\_\_\_\_

RECEIVED BY: PS SIGNATURE: [Signature] DATE: 4.5.06 TIME: 15:40

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-BS-012-DA	0604217 -1A	4.5.06	A	1	DMDIST 6010-S-PKG (SEL)
APC11-BS-013	-2A			3	
-014	-3A			1	
-015	-4A				
-016	-5A				
-017	-6A				
SW-017	-7A				
-018	-8A				
-019	-9A				
-020	-10A				
-021	-11A				
V V-920	V-12A	V	V	V	V
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> PS 4.5.06 </div>					

METALS

P 0211

ATC004 S9

SDG #: ATC 004[illegible]

ATC004 S10

## APPENDIX B



# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC004  
 Sampling Date(s): 4/5/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/26/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other Cd, Ag  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria: accept FYI qualify comments

Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg, and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results	X	X		Ag > 20 RPD but < 35 RPD
Matrix Spike Results			X	Ag = 136.9 %R
ICP Serial Dilution	X			< 10 RPD
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results			X	Ag > 50 RPD (51.1)
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA - Not applicable  
 NR - Not reviewed

QA Scientist Mark Traxler Date 5/26/06

## Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo ProductsCase/SDG Number: ATC004Project Number: 68.28817.0001

Sample Location or Description
Sample Number
Sampling Date
Units

APC11-BS-013	APC11-BS-013D	APC11-BS-013S
0604217-002	0604217-002D	0604217-002S
4/5/2006	4/5/2006	4/5/2006
mg/kg	mg/kg	mg/kg

Spike  
Amount

Sample Result

MD Result

MS Result

MD RPD

Q

MS %R

Q

Cadmium	5.60	0.0137	0.0137	4.9138	0.0		87.8	
Silver	5.60	5.519	3.9450	13.1822	33.3	*	136.9	*

Q - Qualifier

\* - Denotes RPD outside criteria

ATC004 MD MS Results

QA Scientist

Mark TraylorDate 5/26/06

**Inorganic Field Duplicate Precision Worksheet****ATC**

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC004

Sample Location or Description	APC11-SW-020	APC11-SW-920
Sample Number	0604217-010	0604217-012
Sampling Date	4/5/2006	4/5/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium	0.11	0.071	43.1	
Silver	118	199	51.1	*

\* - Denotes RPD outside criteria

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Cadmium	0.6	B	0.5	B	0.4	B	0.5	B	0.021	B	P
Silver	0.4	U	0.4	U	0.4	U	0.6	B	0.045	U	P

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Prepa- ration Blank C		M
	1	C	2	C	3	C					
Silver	0.4	U	0.5	B	0.4	U	0.4	U			P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-BS-013S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	4.9138	0.0137 U	5.60	87.8		P
Silver	75-125	13.1822	5.5190	5.60	136.9		P

Comments:

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U.S. EPA - CLP

5B  
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-B5-013A

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Silver		191.84	5.52	100.0	186.3		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-BS-013

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.3

% Solids for Duplicate: 89.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium		0.0137	U	0.0137	U			P
Silver	1.1198	5.5190		3.9450		33.3	*	P



**DATA USABILITY REPORT**

**H2M CASE NO. ATC005**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**

*Mark Traxler*

---

**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 • Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 5 and 6, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in cursive script, reading "Mark Traxler". The signature is written in dark ink and is positioned above a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 5 and 6, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604265 included a total of 10 soil samples, including 1 set of field duplicate samples, plus one (1) Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604265 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day (except for one sample that was collected the previous day). All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604265 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MS percent recovery for silver exceeds the control limits of 75-125% (717.6%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times (4X) the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.
3. The field duplicate results for silver exceeded the project DQO of 50% (62.1%). All associated silver results are qualified as estimated (J).
4. The ICP serial dilution was acceptable for cadmium, but exceeded the control limit of 10% difference (34.7%) for silver on sample 0604265-009. Silver data was reported flagged "E" on forms 1 and 9 by the laboratory. All associated silver results are qualified as estimated (J).

#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, matrix spike recoveries, laboratory duplicates, and laboratory control sample results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified field duplicates and ICP serial dilution results as areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.



## DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/6/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC005

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-BS-007B	APC11-BS-018	APC11-BS-019	APC11-BS-020	APC11-BS-021	APC11-BS-022	APC11-BS-023	APC11-BS-919	APC11-BY-001	APC11-BY-001D
Sample Number	0604265-001	0604265-002	0604265-003	0604265-004	0604265-005	0604265-006	0604265-007	0604265-008	0604265-009	0604265-009D
Sampling Date	4/6/2006	4/5/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006
Preparation Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006
Analysis Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006
Percent Solids	91.5	90.8	91.7	96.5	94.1	93.3	91.5	92.7	91.9	91.8
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	U 1	U 1	U 1	U 1	U 1	U 1	U 1	U 1
1.00	Silver	X	14.9 E J 1	0.12 BE J 1	22.1 E J 1	51.8 E J 1	295 E J 1	10.8 E J 1	37.6 E J 1	42.0 E J 1

Sample Location or Description	APC11-BY-001S	APC11-SW-022								
Sample Number	06042565-009S	0604265-010								
Sampling Date	4/6/2006	4/6/2006								
Preparation Date	4/6/2006	4/6/2006								
Analysis Date	4/6/2006	4/6/2006								
Percent Solids	91.9	92.3								
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	92.3% 1	U 1						
1.00	Silver	X	717.6% 1	387 E J 1						

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

## APPENDIX A

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS

SAMPLES RECEIVED: 4/6/06

SDG #: ATC005

For Samples:

APC11-BS-007B  
APC11-BS-018  
APC11-BS-019  
APC11-BS-020  
APC11-BS-021  
APC11-BS-022  
APC11-BS-023  
APC11-BS-919  
APC11-BY-001 MS/MSD  
APC11-SW-022

Ten soil samples were received by H2M Labs, Inc. on 4/6/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-BY-001 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for silver. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

ICP serial dilution analysis did not reproduce within acceptance criteria for silver. Silver data was reported flagged "E" on forms 1 and 9.

No other problems were noted during the analysis of this sample group.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: April 21, 2006

\*\*\*\*\*

\* *V. Stancampiano* \*

\*\*\*\*\*

Vincent Stancampiano  
Vice President

*NRC*

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC005

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-007B	0604265-001	X
APC11-BS-018	0604265-002	X
APC11-BS-019	0604265-003	X
APC11-BS-020	0604265-004	X
APC11-BS-021	0604265-005	X
APC11-BS-022	0604265-006	X
APC11-BS-023	0604265-007	X
APC11-BS-919	0604265-008	X
APC11-BY-001	0604265-009	X
APC11-SW-022	0604265-010	X

CLP, Non-CLP (Please indicate year of protocol) ASP B10/95 KJS 4/21/06  
TCL/TAL, HSL, Priority Pollutant,

ATC005 S3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-007B

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-001Level (low/med): LOWDate Received: 4/6/2006% Solids: 91.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	14.9		E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-018

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-002

Level (low/med): LOW

Date Received: 4/6/2006

% Solids: 90.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.12	B	E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-019

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-003

Level (low/med): LOW

Date Received: 4/6/2006

% Solids: 91.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	22.1		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06



## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-020

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-004Level (low/med): LOWDate Received: 4/6/2006% Solids: 96.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.046	B		P
7440-22-4	Silver	51.8		E	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

## Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-021

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-005

Level (low/med): LOW

Date Received: 4/6/2006

% Solids: 94.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	295		E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-022

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-006Level (low/med): LOWDate Received: 4/6/2006% Solids: 93.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	10.8		E	P

Color Before: BROWN Clarity Before:           Texture: FINEColor After: YELLOW Clarity After: CLEARArtifacts:           

Comments:

Date Reported: 4/10/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-023

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-007Level (low/med): LOWDate Received: 4/6/2006% Solids: 91.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.49	B		P
7440-22-4	Silver	37.6		E	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-919

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-008Level (low/med): LOWDate Received: 4/6/2006% Solids: 92.7Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	42.0		E	P

Color Before: BROWN

Clarity Before: \_\_\_\_\_

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-009

Level (low/med): LOW

Date Received: 4/6/2006

% Solids: 91.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	355		E	P

Color Before: BROWN Clarity Before: \_\_\_\_\_

Texture: FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-022

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005Matrix (soil/water): SOILLab Sample ID: 0604265-010Level (low/med): LOWDate Received: 4/6/2006% Solids: 92.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	387		E	P

Color Before: BROWN

Clarity Before: \_\_\_\_\_

Texture: FINEColor After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/10/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC005

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604265-001	APC11-BS-007B	SOIL	AG,CD,	06-Apr-06	04/06
0604265-002	APC11-BS-018	SOIL	AG,CD,	06-Apr-06	04/06
0604265-003	APC11-BS-019	SOIL	AG,CD,	06-Apr-06	04/06
0604265-004	APC11-BS-020	SOIL	AG,CD,	06-Apr-06	04/06
0604265-005	APC11-BS-021	SOIL	AG,CD,	06-Apr-06	04/06
0604265-006	APC11-BS-022	SOIL	AG,CD,	06-Apr-06	04/06
0604265-007	APC11-BS-023	SOIL	AG,CD,	06-Apr-06	04/06
0604265-008	APC11-BS-919	SOIL	AG,CD,	06-Apr-06	04/06
0604265-009	APC11-BY-001	SOIL	AG,CD,	06-Apr-06	04/06
0604265-009DUP	APC11-BY-001D	SOIL	AG,CD,	06-Apr-06	04/06
0604265-009MS	APC11-BY-001S	SOIL	AG,CD,	06-Apr-06	04/06
0604265-010	APC11-SW-022	SOIL	AG,CD,	06-Apr-06	04/06



**Tel: (631) 694-3040 Fax: (631) 420-8436**

## EXTERNAL CHAIN OF CUSTODY

PINK COPY - LABORATORY

H2M LABS, INC.

Sample Receipt Checklist

ATC005

Client Name ATC

Date and Time Receive

4/6/2006 3:30:00 PM

Work Order Number 0604265

Received by

PS

Checklist completed by

  
Signature

4.6.06  
Date

Reviewed by

SA  
Initials

4/6/06  
Date

Matrix

Carrier name Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" 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 checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	26°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC005 S7

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: B5-70D TURN AROUND TIME: 24-48 hr V - 21 Day pKg

SDG #: ATC005 CASE #: \_\_\_\_\_ MATRIX: SOIL pH CHECK Y or N

REMARKS: 020 ATC 06

RECEIVED BY: PS SIGNATURE: [Signature] DATE: 4.6.06 TIME: 15:30

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC II - BS-007B	0604265 -1A	4.6.06	A	1	PMOIST 6010-S-PKG(SEL)
-018	-2A	4.5.06			
-019	-3A	4.6.06			
-020	-4A				
-021	-5A				
-022	-6A				
-023	-7A				
V 919	-8A			V	
MS/MSD BY-001	-9A			3	
V SW-022	-10A	V	V	1	V
	X				
		PS			
		4.6.06			

WET CHEMISTRY

P 0238

ATC005 S8

## INTERNAL CHAIN OF CUSTODY

[illegible]

## METALS

P 0218

ATC005 S9

## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC005  
 Sampling Date(s): 4/6/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/27/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other \_\_\_ Cd, Ag \_\_\_  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

## Data Validation Criteria:

accept FYI qualify comments

Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg , and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results	X			< 35 RPD
Matrix Spike Results		X		Ag results >4X spike amount
ICP Serial Dilution			X	Ag > 10 RPD (34.7%)
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results			X	Ag > 50 RPD (62.1%)
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments:

NA - Not applicable  
 NR - Not reviewed

QA Scientist

Mark Hapley

Date

5/28/06

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC005

Sample Location or Description	APC11-BY-001	APC11-BY-001D	APC11-BY-001S
Sample Number	0604265-009	0604265-009D	0604265-009S
Sampling Date	4/6/2006	4/6/2006	4/6/2006
Units	mg/kg	mg/kg	mg/kg

	Spike Amount	Sample Result	MD Result	MS Result	MD RPD	Q	MS %R	Q
Cadmium	5.44	0.0133	0.0133	5.0229	0.0		92.3	
Silver	5.44	354.6974	344.2239	393.7377	3.0		717.6	

Q - Qualifier

\* - Denotes RPD outside criteria

ATC005 MD MS Results

QA Scientist

Mark Hayler

Date

5/28/06

# Inorganic Field Duplicate Precision Worksheet

ATC

Project Name: Peerless Photo Products  
 Project Number: 68.28817.0001

Case/SDG Number: ATC005

Sample Location or Description	APC11-BS-019	APC11-BS-919
Sample Number	0604265-003	0604265-008
Sampling Date	4/6/2006	4/6/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium				
Silver	22.1	42.0	62.1	*

\* - Denotes RPD outside criteria



U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Prepa- ration Blank C		M
	1	C	2	C	3	C					
Cadmium	0.3	B	0.4	B	0.3	B	0.4	B	0.012	U	P
Silver	0.4	U	0.5	B	0.4	U	0.4	U	0.045	U	P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-BY-001S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 91.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.0229	0.0133	U 5.44	92.3		P
Silver		393.7377	354.6974	5.44	717.6		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-BY-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 91.9

% Solids for Duplicate: 91.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium		0.0133	U	0.0133	U			P
Silver		354.6974		344.2239		3.0		P

U.S. EPA - CLP

9  
ICP SERIAL DILUTIONS

APC11-BY-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Cadmium	0.12	U	0.61	U			P
Silver	3259.67		2128.23		34.7	E	P

**DATA USABILITY REPORT**

**H2M CASE NO. ATC006**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED MAY 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**



---

**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 ▪ Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 6, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in black ink, appearing to read "Mark Traxler", written over a horizontal line.

Mark Traxler

Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 6, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604292 included a total of FOUR (4) soil samples, including one (1) set of field duplicate samples, plus one (1) Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604292 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.



The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the next day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604292 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MD RPD for silver exceeded the method requirements of 20%, but not the project Data Quality Objective (DQO) of 35% (25.7%). Therefore, no qualification of cadmium results was made due to the MD. All associated silver results are qualified as estimated (J).
3. The MS percent recovery for silver exceeds the control limits of 75-125% (177.7%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times (4X) the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.
4. The ICP serial dilution was acceptable for cadmium, but exceeded the control limit of 10% difference (24.5%) for silver on sample 0604292-002. Silver data was reported flagged "E" on forms 1 and 9 by the laboratory. All associated silver results are qualified as estimated (J).

#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, matrix spike recoveries, field duplicates, and laboratory control sample results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified laboratory matrix duplicate and ICP serial dilution results as areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/6/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC006

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description				APC11-BS-024				APC11-BS-025				APC11-BS-025D				APC11-BS-025S				APC11-BS-026				APC11-BS-924																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Sample Number																	
Sampling Date																	
Preparation Date																	
Analysis Date																	
Percent Solids																	
RL		P	F	Q DF		Q DF		Q DF		Q DF		Q DF		Q DF		Q DF	
0.50	Cadmium	X															
1.00	Silver	X															

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

## APPENDIX A

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS SAMPLES RECEIVED: 4/7/06 SDG #: ATC006

For Samples:

APC11-BS-024  
APC11-BS-025 MS/MSD  
APC11-BS-026  
APC11-BS-924

Four soil samples were received by H2M Labs, Inc. on 4/7/06 for select metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-BS-025 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for silver. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Duplicate analysis did not reproduce within acceptance ranges for silver. Silver data was reported flagged "\*" on forms 1 and 6.

ICP serial dilution analysis did not reproduce within acceptance criteria for silver. Silver data was reported flagged "E" on forms 1 and 9.

No other problems were noted during the analysis of this sample group.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: April 21, 2006

\*\*\*\*\*

\* *V. Stancampiano* \*

\*\*\*\*\*

Vincent Stancampiano  
Vice President

*NRC*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC006

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-024	0604292-001	X
APC11-BS-025	0604292-002	X
APC11-BS-026	0604292-003	X
APC11-BS-924	0604292-004	X

CLP, Non-CLP (Please indicate year of protocol) *ASP BB 10/95* *KSS 4/21/06*  
TCL/TAL, HSL, Priority Pollutant,

ATC006 S3



# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-024

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Lab Sample ID: 0604292-001

Level (low/med): LOW

Date Received: 4/7/2006

% Solids: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	3.2		*E	P

Color Before: BROWN

Clarity Before:

Texture:

FINE

Color After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 12, 2006

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-025

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Lab Sample ID: 0604292-002

Level (low/med): LOW

Date Received: 4/7/2006

% Solids: 82.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.79			P
7440-22-4	Silver	65.5		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 12, 2006

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-026

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Lab Sample ID: 0604292-003

Level (low/med): LOW

Date Received: 4/7/2006

% Solids: 91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	115		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 12, 2006

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-924

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Lab Sample ID: 0604292-004

Level (low/med): LOW

Date Received: 4/7/2006

% Solids: 93.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	4.4		*E	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: APRIL 12, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC006

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604292-001	APC11-BS-024	SOIL	AG,CD,	07-Apr-06	04/06
0604292-002	APC11-BS-025	SOIL	AG,CD,	07-Apr-06	04/06
0604292-002DUP	APC11-BS-025D	SOIL	AG,CD,	07-Apr-06	04/06
0604292-002MS	APC11-BS-025S	SOIL	AG,CD,	07-Apr-06	04/06
0604292-003	APC11-BS-026	SOIL	AG,CD,	07-Apr-06	04/06
0604292-004	APC11-BS-924	SOIL	AG,CD,	07-Apr-06	04/06

**Tel: (631) 694-3040 Fax: (631) 420-8436**

## EXTERNAL CHAIN OF CUSTODY

PINK COPY - LABORATORY

H2M LABS, INC.

Sample Receipt Checklist

ATC006

Client Name ATC

Date and Time Receive

4/7/2006

Work Order Number 0604292

Received by PS

Checklist completed by

Signature

Date

4-7-06

Reviewed by

Initials

Date

JSA

4/7/06

Matrix

Carrier name Hand Delivered

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" 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 checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	20°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC006 S7



# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC006 DELIVERABLES: B5-70D TURN AROUND TIME: 24-48hr V-21 Day pkg

SDG #: ATC006 CASE #: \_\_\_\_\_ MATRIX: SOIL pH CHECK Y or N

REMARKS: 020 ATC 06

RECEIVED BY: PS SIGNATURE: [Signature] DATE: 4-7-06 TIME: 13:35  
\*received at lab at 12:52

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-BS-024	0604292 -1A	4-6-06	A	1	P MOIST 6010 S-PKG (SEL)
↓ -025	↓ -2A	↓	↓	3	↓
↓ -026	↓ -3A	↓	↓	1	↓
↓ -924	↓ -4A	↓	↓	1	↓
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

METALS

P 0223

ATC006 S8

SDG #: ATC006[illegible]

P 0224

ATC006 S9

## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC006  
 Sampling Date(s): 4/6/2006  
 Reviewed By: M. Traxler  
 Completion Date: 5/30/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other Cd, Ag  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg , and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results			X	Ag and Cd both > 35 RPD
Matrix Spike Results			X	Ag = 177.7%
ICP Serial Dilution			X	Ag > 10 RPD (24.5)
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results	X			< 50 RPD
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA - Not applicable  
 NR - Not reviewed

QA Scientist

*Mark Traxler*

Date

*5/30/06*

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC006

Sample Location or Description
Sample Number
Sampling Date
Units

APC11-BS-025	APC11-BS-025D	APC11-BS-025S
0604292-002	0604292-002D	0604292-002S
4/6/2006	4/6/2006	4/6/2006
mg/kg	mg/kg	mg/kg

	Spike Amount	Sample Result	MD Result	MS Result	MD RPD	Q	MS %R	Q
Cadmium	6.05	0.7908	1.3374	5.9166	51.4	*	84.8	
Silver	6.05	65.524	106.322	65.524	47.5	*	177.7	*

Q - Qualifier

\* - Denotes RPD outside criteria

ATC006 MD MS Results

QA Scientist

Mark Harper Date 5/30/06

# Inorganic Field Duplicate Precision Worksheet

ATC

Project Name: Peerless Photo Products  
 Project Number: 68.28817.0001

Case/SDG Number: ATC006

Sample Location or Description	APC11-BS-024	APC11-BS-924
Sample Number	0604292-001	0604292-004
Sampling Date	4/6/2006	4/6/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium				
Silver	3.2	4.4	31.6	

\* - Denotes RPD outside criteria

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		C	M
		C	1	C	2	C	3	C		C		
Cadmium	0.4	B	0.3	B	0.4	B	0.4	B	0.012	U		P
Silver	0.4	U	0.4	U	4.5	B	0.4	U	0.045	U		P

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-BS-025S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 82.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.9166	0.7908	6.05	84.8		P
Silver		76.2699	65.5240	6.05	177.7		P

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-BS-025

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 82.7

% Solids for Duplicate: 82.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium	0.6046	0.7908		1.3374		51.4		P
Silver		65.5240		106.3220		47.5		P

U.S. EPA - CLP

9  
ICP SERIAL DILUTIONS

APC11-BS-025

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Cadmium	6.54		6.35	B	2.9		P
Silver	541.88		674.79		24.5	E	P

**DATA USABILITY REPORT**

**H2M CASE NO. ATC007**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED JUNE 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**

A handwritten signature in black ink, reading "Mark Traxler", is positioned above a horizontal line.

**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 ■ Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 11, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in cursive script, reading "Mark Traxler", written over a horizontal line.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

**1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the two (2) metals (cadmium and silver) results from the April 11, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604417 included a total of 20 soil samples, including 1 set of field duplicate samples, plus 1 Matrix Spike/Matrix Duplicate (MS/MD) pair for limited metals (cadmium and silver) analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required quantitation limit (CRQL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 3050B and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604417 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the two (2) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, delivered under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for total cadmium and silver following SW-846 Methods 3050B for digestion and 6010B for analysis.

### 3.0 FINDINGS/QUALIFIERS

The following metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Quantitation Limit (CRQL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604417 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRQL were flagged by the laboratory with a "B". Since these values were less than the CRQL, the results were qualified as estimated (J).
2. The MD relative percent difference (RPD) for silver exceeded the method requirements of 20% and the project Data Quality Objective (DQO) of 35% (51.5%). Silver data were reported flagged "\*" on forms 1 and 6 by the laboratory. All associated silver results were qualified as estimated (J).
3. The MS percent recovery for silver exceeds the control limits of 75-125% (-837.3%). The spike recovery indicates possible matrix interference or sample non-homogeneity. However, the sample concentration exceeded four times (4X) the spike amount, rendering the spike values unusable. No post spikes were necessary and no qualification of silver results was made due to the MS recovery.
4. The field duplicate results for cadmium exceeded the project DQO of 50% (62.1%). However, the results were <5X the CRQL. Therefore, no qualification of cadmium results was made due to the field duplicate.



#### **4.0 SUMMARY**

The metals results are acceptable as qualified. Holding times, initial and continuing calibration verification results, CRQL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, matrix spike recoveries, laboratory duplicates, field duplicates, laboratory control sample results, and ICP serial dilution results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified silver matrix duplicate results as an area of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/11/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC007

Fraction/Method

Metals / 3050B / 6010B

Sample Location or Description	APC11-BS-027	APC11-BS-027D	APC11-BS-027S	APC11-BS-028	APC11-BS-029	APC11-BS-030	APC11-BS-031	APC11-BS-032	APC11-BS-033	APC11-BS-034
Sample Number	0604417-001	0604417-001D	0604417-001S	0604417-002	0604417-003	0604417-004	0604417-005	0604417-006	0604417-007	0604417-008
Sampling Date	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006
Preparation Date	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006
Analysis Date	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006
Percent Solids	90.5	91.5	90.5	93.0	89.3	91.9	91.9	90.1	87.9	91.6
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	U 1	U 1	96.6%	U 1	U 1	U 1	U 1	U 1
1.00	Silver	X	98.6 * J 1	58.2 * J 1	-837.3% J 1	2.7 * J 1	182 * J 1	1.3 * J 1	6.7 * J 1	66.0 * J 1

Sample Location or Description	APC11-BS-035	APC11-BY-02	APC11-BY-03	APC11-BY-04	APC11-BY-05	APC11-BY-06	APC11-BY-07	APC11-FL-007	APC11-SW-023	APC11-SW-024
Sample Number	0604417-009	0604417-010	0604417-011	0604417-012	0604417-013	0604417-014	0604417-015	0604417-016	0604417-017	0604417-018
Sampling Date	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006
Preparation Date	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006
Analysis Date	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006
Percent Solids	92.0	44.9	71.5	81.3	67.8	94.6	95.1	82.5	89.6	88.1
RL	P F	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50	Cadmium	X	U 1	1.1 B U 1	U 1	U 1	U 1	0.036 B J 1	U 1	1.4 J 1
1.00	Silver	X	0.12 B * J 1	219 * J 1	122 * J 1	143 * J 1	144 * J 1	142 * J 1	93.9 * J 1	116 * J 1

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/11/2006

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Case/Order #

ATC007

Fraction/Method

Metals / 3050B / 6010B

				Sample Location or Description		APC11-SW-025		APC11-SW-925																													
				Sample Number		0604417-019		0604417-020																													
				Sampling Date		4/11/2006		4/11/2006																													
				Preparation Date		4/12/2006		4/12/2006																													
				Analysis Date		4/12/2006		4/12/2006																													
				Percent Solids		95.6		95.9																													
RL				P	F	Q DF				Q DF				Q DF				Q DF				Q DF				Q DF				Q DF				Q DF			
0.50		Cadmium		X		0.20 B U 1				0.38 B U 1																											
1.00		Silver		X		224 * J 1				230 * J 1																											

	Sample Location or Description																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</
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P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

## APPENDIX A

# H2M LABS, INC.

## SDG NARRATIVE FOR METALS SAMPLES RECEIVED: 4/11/06 SDG #: ATC007

For Samples:

APC11-BS-027 MS/MSD	APC11-BY-03
APC11-BS-028	APC11-BY-04
APC11-BS-029	APC11-BY-05
APC11-BS-030	APC11-BY-06
APC11-BS-031	APC11-BY-07
APC11-BS-032	APC11-FL-007
APC11-BS-033	APC11-SW-023
APC11-BS-034	APC11-SW-024
APC11-BS-035	APC11-SW-025
APC11-BY-02	APC11-SW-925

Twenty soil samples were received by H2M Labs, Inc. on 4/11/06 for cadmium and silver analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA61E trace ICP instrument.

Sample APC11-BS-027 was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for silver. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Duplicate analysis did not reproduce within acceptance ranges for silver. Silver data was reported flagged "\*" on forms 1 and 6.

No other problems were noted during the analysis of this sample group.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: May 1, 2006

\*\*\*\*\*  
\*  
\* *V Stancampiano* \*  
\*\*\*\*\*

Vincent Stancampiano  
Vice President

o:\qc\narr2006\atc\metals\atc007.doc

ATC007 S 12

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC007

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-BS-027	0604417-001	X
APC11-BS-028	0604417-002	X
APC11-BS-029	0604417-003	X
APC11-BS-030	0604417-004	X
APC11-BS-031	0604417-005	X
APC11-BS-032	0604417-006	X
APC11-BS-033	0604417-007	X
APC11-BS-034	0604417-008	X
APC11-BS-035	0604417-009	X
APC11-BY-02	0604417-010	X
APC11-BY-03	0604417-011	X
APC11-BY-04	0604417-012	X
APC11-BY-05	0604417-013	X
APC11-BY-06	0604417-014	X
APC11-BY-07	0604417-015	X
APC11-FL-007	0604417-016	X
APC11-SW-023	0604417-017	X
APC11-SW-024	0604417-018	X
APC11-SW-025	0604417-019	X
APC11-SW-925	0604417-020	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol) *As of 10195*  
TCL/TAL, HSL, Priority Pollutant,

*35W 51106*

ATC007 S 3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA- Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.



## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-027

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-001Level (low/med): LOWDate Received: 4/11/2006% Solids: 90.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	98.6		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-028

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-002Level (low/med): LOWDate Received: 4/11/2006% Solids: 93.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	2.7		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-029

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-003Level (low/med): LOWDate Received: 4/11/2006% Solids: 89.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	182		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-030

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-004Level (low/med): LOWDate Received: 4/11/2006% Solids: 91.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	1.3		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-031

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-005Level (low/med): LOWDate Received: 4/11/2006% Solids: 91.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	6.7		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-032

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-006Level (low/med): LOWDate Received: 4/11/2006% Solids: 90.1Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	66.0		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-033

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-007Level (low/med): LOWDate Received: 4/11/2006% Solids: 87.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	94.1		*	P

Color Before: BROWN Clarity Before:           Texture: FINEColor After: YELLOW Clarity After: CLEARArtifacts:           

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-034

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-008

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 91.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	6.4		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06



## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-035

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-009Level (low/med): LOWDate Received: 4/11/2006% Solids: 92.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.12	B	*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-02

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-010Level (low/med): LOWDate Received: 4/11/2006% Solids: 44.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	1.1	B		P
7440-22-4	Silver	219		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-03

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-011Level (low/med): LOWDate Received: 4/11/2006% Solids: 71.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.017	U		P
7440-22-4	Silver	122		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-04

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-012Level (low/med): LOWDate Received: 4/11/2006% Solids: 81.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.015	U		P
7440-22-4	Silver	143		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-05

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-013

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 67.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.018	U		P
7440-22-4	Silver	144		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-06

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-014

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 94.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	142		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BY-07

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-015

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 95.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	93.9		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_

Texture: FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-FL-007

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-016Level (low/med): LOWDate Received: 4/11/2006% Solids: 82.5Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.036	B		P
7440-22-4	Silver	116		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-023

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-017

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	191		*	P

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-024

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-018

Level (low/med): LOW

Date Received: 4/11/2006

% Solids: 88.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	1.4			P
7440-22-4	Silver	196		*	P

Color Before: BROWN

Clarity Before:

Texture:

FINE

Color After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-025

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-019Level (low/med): LOWDate Received: 4/11/2006% Solids: 95.6Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.20	B		P
7440-22-4	Silver	224		*	P

Color Before: BROWN

Clarity Before:

Texture: FINEColor After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-925

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007Matrix (soil/water): SOILLab Sample ID: 0604417-020Level (low/med): LOWDate Received: 4/11/2006% Solids: 95.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.38	B		P
7440-22-4	Silver	230		*	P

Color Before: BROWN Clarity Before: \_\_\_\_\_Texture: FINEColor After: YELLOW Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC007

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604417-001	APC11-BS-027	SOIL	AG,CD,	11-Apr-06	04/06
0604417-001DUP	APC11-BS-027D	SOIL	AG,CD,	11-Apr-06	04/06
0604417-001MS	APC11-BS-027S	SOIL	AG,CD,	11-Apr-06	04/06
0604417-002	APC11-BS-028	SOIL	AG,CD,	11-Apr-06	04/06
0604417-003	APC11-BS-029	SOIL	AG,CD,	11-Apr-06	04/06
0604417-004	APC11-BS-030	SOIL	AG,CD,	11-Apr-06	04/06
0604417-005	APC11-BS-031	SOIL	AG,CD,	11-Apr-06	04/06
0604417-006	APC11-BS-032	SOIL	AG,CD,	11-Apr-06	04/06
0604417-007	APC11-BS-033	SOIL	AG,CD,	11-Apr-06	04/06
0604417-008	APC11-BS-034	SOIL	AG,CD,	11-Apr-06	04/06
0604417-009	APC11-BS-035	SOIL	AG,CD,	11-Apr-06	04/06
0604417-010	APC11-BY-02	SOIL	AG,CD,	11-Apr-06	04/06
0604417-011	APC11-BY-03	SOIL	AG,CD,	11-Apr-06	04/06
0604417-012	APC11-BY-04	SOIL	AG,CD,	11-Apr-06	04/06
0604417-013	APC11-BY-05	SOIL	AG,CD,	11-Apr-06	04/06
0604417-014	APC11-BY-06	SOIL	AG,CD,	11-Apr-06	04/06
0604417-015	APC11-BY-07	SOIL	AG,CD,	11-Apr-06	04/06
0604417-016	APC11-FL-007	SOIL	AG,CD,	11-Apr-06	04/06
0604417-017	APC11-SW-023	SOIL	AG,CD,	11-Apr-06	04/06
0604417-018	APC11-SW-024	SOIL	AG,CD,	11-Apr-06	04/06
0604417-019	APC11-SW-025	SOIL	AG,CD,	11-Apr-06	04/06
0604417-020	APC11-SW-925	SOIL	AG,CD,	11-Apr-06	04/06

## EXTERNAL CHAIN OF CUSTODY

**575 Broad Hollow Rd, Melville, NY 11747-5076**

**Tel: (631) 694-3040 Fax: (631) 420-8436**

Tel: (631) 694-3040 Fax: (631) 420-8436				CLIENT: ATC				H2M SDG NO: ATC007						
PROJECT NAME/NUMBER SLORENAM REMEDIATION				Sample Container Description 2 OZ. GLASS	NOTES: * TOTAL Ag + Cd				Project Contact: COLIN CHAMBERS					
SAMPLERS: (signature)/Client [Signature] / ATC ASSOCIATES									Phone Number: 609-571-7519					
DELIVERABLES: BS-70D									PISA Quote # 906					
TURNAROUND TIME: 24-48 V 21 DAY PKG.														
				Total No. of Containers 3	ANALYSIS REQUESTED						LAB I.D. NO.		REMARKS:	
					ORGANIC			INORG.						
DATE	TIME	MATRIX	FIELD I.D.		VOA	BNA	Pest/PCB				*Metal	CN		
4/11/06	10:02	SOIL	APC11-BS-027	3							X		0604417 -001	MS/MSD
4/11/06	10:08	SOIL	APC11-BS-028	1							X		-002	
4/11/06	10:11	SOIL	APC11-BS-029	1							X		-003	
4/11/06	10:15	SOIL	APC11-BS-030	1							X		-004	
4/11/06	10:20	SOIL	APC11-BS-031	1							X		-005	
4/11/06	10:25	SOIL	APC11-BS-032	1							X		-006	
4/11/06	10:30	SOIL	APC11-BS-033	1							X		-007	
4/11/06	10:35	SOIL	APC11-BS-034	1							X		-008	
4/11/06	10:40	SOIL	APC11-BS-035	1							X		-009	
4/11/06	11:05	SOIL	APC11-SW-023	1							X		-017	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	LABORATORY USE ONLY Discrepancies Between Sample Labels and COC Record? Y or N Explain: _____ _____ _____ COC Tape was: 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N						
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time							

# H2M LABS, INC.

16976

## EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: ATC

H2M SDG NO: ATC007

PROJECT NAME/NUMBER

SHOREHAM REMEDIATION

SAMPLERS: (signature)/Client

ATC ASSOCIATES

DELIVERABLES:

B5-70 D

TURNAROUND TIME:

24-48 Hr V 21 D PKG

PROJECT NAME/NUMBER				Sample Container Description	ANALYSIS REQUESTED										Total No. of Containers	NOTES:	H2M SDG NO: ATC007			
SAMPLERS: (signature)/Client					ORGANIC												INORG.		Project Contact:	
DELIVERABLES:																			Phone Number:	
TURNAROUND TIME:																Project Contact:				
																Phone Number:				
																PIS/Quote #				
																906				
DATE	TIME	MATRIX	FIELD I.D.		VOA	BNA	Pb	PCB								LAB I.D. NO.	REMARKS:			
4/11/06	11:00	SOIL	APC11-SW-024	1										X		0604417-018				
4/11/06	10:55	SOIL	APC11-SW-025	1										X		-019				
4/11/06	10:50	SOIL	APC11-SW-925	1										X		-020				
4/11/06	11:18	SOIL	APC11-BY-02	1										X		-010				
4/11/06	11:21	SOIL	APC11-BY-03	1										X		-011				
4/11/06	11:23	SOIL	APC11-BY-04	1										X		-012				
4/11/06	11:26	SOIL	APC11-BY-05	1										X		-013				
4/11/06	11:33	SOIL	APC11-BY-06	1										X		-014				
4/11/06	11:36	SOIL	APC11-BY-07	1										X		-015				
4/11/06	11:40	SOIL	APC11-FL-007	1										X		-016				
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	LABORATORY USE ONLY								
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	Discrepancies Between Sample Labels and COC Record? Y or N Explain:								
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	Samples were:								
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	1. Shipped ___ or Hand Delivered ___ Airbill# ___								
												2. Ambient or chilled, Temp. ___								
												3. Received in good condition: Y or N								
												4. Properly preserved: Y or N								
												COC Tape was:								
												1. Present on outer package: Y or N								
												2. Unbroken on outer package: Y or N								
												3. COC record present & complete upon sample receipt: Y or N								

ATC007 S 7, - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

C

ATC 007

H2M LABS, INC.

Sample Receipt Checklist

Client Name ATC

Date and Time Receive

4/11/2006

Work Order Number 0604417

Received by PS

Checklist completed by

Signature

Date

4.11.06

Reviewed by

Initials

Date

JSA

4/12/06

Matrix

Carrier name Courier

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Applicable ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Applicable ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Applicable ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

LG<sup>c</sup>

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Adjusted? \_\_\_\_\_

Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC007 S 8



# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: BS-70D TURN AROUND TIME: 24-48hr V-21day PKg

SDG #: ATC007 CASE #: \_\_\_\_\_ MATRIX: SOIL pH CHECK Y or N

REMARKS: \_\_\_\_\_

020 ATC06

RECEIVED BY: \_\_\_\_\_

PS

SIGNATURE: \_\_\_\_\_

DATE: 4/11/06 TIME: 15:30

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
APC11-BS-027	0604917-1A	4-11-06	A	3	PMOIST 6010-S.PKG (SEL)
-028	-2A			1	
-029	-3A			1	
-030	-4A			1	
-031	-5A			1	
-032	-6A			1	
-033	-7A			1	
-034	-8A			1	
✓-035	-9A			1	
BY-02	-10A			1	
-03	-11A			1	
-04	-12A			1	
-05	-13A			1	
-06	-14A			1	
✓-07	-15A			1	
FL-007	-16A			1	
SW-023	-17A			1	
-024	-18A			1	
-025	-19A			1	
✓✓-925	✓-20A	✓	✓	✓	✓

METALS

P 0229

ATC007 S 9

SDG #: ATC 007

## INTERNAL CHAIN OF CUSTODY

[illegible]

## METALS

P 0230

ATC007 S 10

## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: H2M

Case No./SDG: ATC007  
 Sampling Date(s): 4/11/2006  
 Reviewed By: M. Traxler  
 Completion Date: 6/4/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other Cd, Ag  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☐ Other \_\_\_\_\_  
 Matrix: ☒ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

## Data Validation Criteria:

accept FYI qualify comments

Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg , and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank	X			< RL
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Duplicate Results			X	Ag > 35 RPD
Matrix Spike Results	X	X		75 - 125 % R; Ag >5X spike
ICP Serial Dilution	X			< 10 RPD
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results	X			< 50 RPD Ag, Cd <5x RL
Sample Result Verification	X			Cadmium and Silver
Other:				

General Comments:

NA - Not applicable  
 NR - Not reviewed

QA Scientist

*Mark Traxler*

Date

*6/4/06*

# Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC007

Sample Location or Description
Sample Number
Sampling Date
Units

APC11-BS-027	APC11-BS-027D	APC11-BS-027S
0604417-001	0604417-001D	0604417-001S
4/11/2006	4/11/2006	4/11/2006
mg/kg	mg/kg	mg/kg

Spike Amount      Sample Result      MD Result      MS Result

					MD RPD	Q	MS %R	Q
Cadmium	5.52	0.00	0.00	5.34	0.0		96.6	
Silver	5.52	98.6	58.2	52.4	51.5	*	-837.3	

Q - Qualifier

\* - Denotes RPD outside criteria

ATC007 MD MS Results

QA Scientist

Mark Snyder

Date

6/4/06

# Inorganic Field Duplicate Precision Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC007

Sample Location or Description	APC11-SW-025	APC11-SW-925
Sample Number	0604417-019	0604417-020
Sampling Date	4/11/2006	4/11/2006
Units	mg/kg	mg/kg

	Sample	Field Duplicate	RPD	Q
Cadmium	0.20	0.38	62.1	*
Silver	224	230	2.6	

\* - Denotes RPD outside criteria

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		C	M
		C	1	C	2	C	3	C		C		
Cadmium	0.3	B	0.3	B	0.3	B	0.3	B	-0.019	B		P
Silver	0.4	U	0.4	U	0.5	B	2.2	B	0.045	U		P

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Cadmium			0.2	B							P
Silver			1.3	B							P



U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-BS-027S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 90.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Cadmium	75-125	5.3359	0.0135 U	5.52	96.6		P
Silver		52.3585	98.6185	5.52	-837.3		P

MT  
6/4/06

Comments:

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U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-BS-027

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 , Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 90.5

% Solids for Duplicate: 91.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium		0.0135	U	0.0135	U			P
Silver		98.6185		58.2227		51.5	*	P

MT  
6/4/06

**DATA USABILITY REPORT**

**H2M CASE NO. ATC008**

**DATA USABILITY SUMMARY REPORT**

**FOR**

**PEERLESS PHOTO PRODUCTS  
SHORHAM, NEW YORK  
APRIL 2006**

**REPORTED JUNE 2006**

**ATC PROJECT NO. 68.28817.0001**

**PREPARED BY**



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**MARK TRAXLER  
SENIOR QUALITY ASSURANCE SCIENTIST**



920 Germantown Pike, Suite 200 ■ Plymouth Meeting, PA 19462

The following Data Usability Summary Report (DUSR) was conducted by the ATC Associates Inc. Environmental Chemistry and Quality Assurance Department. This report has concluded that the following analytical data, with the use of the stated qualifications, generated in the sampling event of April 11, 2006 for the Peerless Photo Products Site are acceptable for its intended use in the subject investigation.

A handwritten signature in black ink, reading "Mark Traxler". The signature is written in a cursive style with a horizontal line underneath it.

Mark Traxler  
Senior Quality Assurance Scientist

**DATA USABILITY SUMMARY  
TCLP METALS  
PEERLESS PHOTO PRODUCTS SITE  
APRIL 2006**

## **1.0 INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR has been developed from a full NYSDEC Analytical Services Protocol (ASP) Category B deliverables package.

This DUSR addresses the eight (8) Toxicity Characteristic Leaching Procedure (TCLP) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) results from the April 11, 2006 soil sampling event at the Peerless Photo Products site in Shorham, New York. Case 0604420 included a total of three (3) soil samples, plus one (1) Matrix Spike/Matrix Duplicate (MS/MD) pair for TCLP metals analysis.

The findings offered in this DUSR are based upon a general review of sample data, holding times, initial and continuing calibration verification results, contract required detection limit (CRDL) standard results, blank contamination results, inductively coupled plasma (ICP) interference check sample results, spike sample results, laboratory and field duplicate results, and laboratory control sample results. All samples in this report were analyzed by H2M Laboratories (H2M), Melville, New York following United States Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*, Update III, 1996 (SW-846) Methods 1311, 3010A, 7470 and 6010B. The quality assurance review of the data described was prepared according to EPA's *National Functional Guidelines for Inorganic Data Review, Final*, (EPA 540-R-04-004) dated October 2004, where applicable to SW-846 Methods. Method protocol criteria were also considered as prescribed by SW-846.

The analytical data deliverables for Case 0604420 consist of NYSDCE ASP Category B reporting forms and raw data for each analysis, which includes instrument printouts, notebook pages, and chain-of-custody (COC) documents.

The data summary tables list the eight (8) metals that were analyzed. Appendix A provides the sample results as reported by the laboratory, along with a copy of the associated COC documentation. The support documentation in Appendix B summarizes the specific issues raised in this review. Analytical problems that were encountered were outlined in the Findings/Qualifiers section.

The following components of the data package were reviewed for completeness:

- Sample chain-of-custody form;
- Case narrative;
- Summary forms and supporting documents;
- Calibration data;
- Instrument and method performance data;
- Data report forms, preparation logs and run logs; and
- Raw analytical data.

The following items of the data package were reviewed for compliance:

- The data package is complete, as defined above;
- The data has been produced and reported in a manner consistent with the requirements of the Quality Assurance Project Plan (QAPP);
- The QAPP-defined quality assurance (QA) and quality control (QC) criteria have been met;
- Instrument calibration requirements have been met for the time frame during which the analyses were completed;
- Initial and Continuing calibration data are presented and documented;
- Data reporting forms are complete; and
- Problems encountered during the analytical process have been reported in the case narrative.

## **2.0 LABORATORY DATA PACKAGE**

The data package that was received from H2M was paginated, complete and overall was of good quality. Comments on specific QA/QC issues and other requirements are discussed in detail in this report.

The samples were collected, properly preserved, shipped under a chain of custody record, and received at H2M on the same day. All samples were received intact and in good condition at H2M.

The soil samples were collected and analyzed for TCLP metals following SW-846 Method 1311 for TCLP extraction, 3010A for digestion and 6010B for analysis (except for mercury, which was 7470A, and silver, which was 7760A).

### 3.0 FINDINGS/QUALIFIERS

The following TCLP metals analysis elements were reviewed for compliance:

- Custody documentation
- Holding times
- Initial and continuing calibrations
- Contract Required Detection Limit (CRDL) check sample
- Laboratory preparation blanks and field blanks
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits

It is recommended that Case 0604420 metals results be used with the following qualifiers:

1. All results that were above the IDL but less than the CRDL were flagged by the laboratory with a "B". Since these values were less than the CRDL, the results were qualified as estimated (J).
2. All barium results were incorrectly reported, off by a factor of 1,000. APC11-D-08 was reported as "504 B", but was actually 0.504 micrograms per liter ( $\mu\text{g/L}$ ) and should have been reported as 0.50 B. Similarly, APC11-D-09 was reported as "620 B", but was actually 0.620  $\mu\text{g/L}$  and should have been reported as 0.62 B, and APC11-D-10 was reported as "708 B", but was actually 0.708  $\mu\text{g/L}$  and should have been reported as 0.71 B. Since these values were less than the CRDL, the results were qualified as estimated (J).
3. The MD relative percent difference (RPD) for arsenic and cadmium exceeded the method requirements of 20% (113.6 and 33.5%, respectively). However, the results were less than five times ( $<5X$ ) the CRDL. Also, results could not be calculated for chromium, mercury, selenium and silver because one or both results were below the IDL. Therefore, no qualifications of these results were made due to the MD.
4. The ICP serial dilution exceeded the control limit of 10% difference for arsenic, cadmium, chromium, lead and selenium (61.8, 39.5, 100, 12.7 and



66.6%, respectively) on sample APC11-D-08. However, since the original values were less than 50 times the Instrument Detection Limit (IDL), the ICP serial dilution for these metals were acceptable. No qualification of data was deemed necessary due to the ICP serial dilution results.

#### **4.0 SUMMARY**

The TCLP metals results are acceptable as qualified, with the exception of the incorrectly reported barium results, which was caused by a typographical error. The correct values that the laboratory should have reported are identified in recommendation number 2. Holding times, initial and continuing calibration verification results, CRDL check sample results, continuing calibration blank results, laboratory preparation blank results, blank sample results, ICP interference check sample results, matrix spike recoveries, laboratory duplicates, field duplicates, laboratory control sample results, and ICP serial dilution results were within acceptance limits. Sample results were properly verified and identified, along with the appropriate quantitation limits.

This review has identified no areas of concern. The data has been qualified accordingly on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

## QUALIFIER CODES - METALS

- U - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ - The result is an estimated quantity, but the result may be biased high.
- J- - The result is an estimated quantity, but the result may be biased low.
- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R - The data is unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be in the sample.

# DATA SUMMARY - INORGANIC ANALYTES

page 1

Site Name Peerless Photo Products  
 Project Number 68.28817.0001  
 Sampling Date(s) 4/11/2006

TCLP Leachate (mg/L)

Laboratory

H2M - Melville, New York

Case/Order #

ATC008

Fraction/Method

TCLP Metals / 3010A / 6010B

			Sample Location or Description			APC11-D-08			APC11-D-08D			APC11-D-08S			APC11-D-09			APC11-D-10																				
			Sample Number			0604420-001			0604420-001D			0604420-001S			0604420-002			0604420-003																				
			Sampling Date			4/11/2006			4/11/2006			4/11/2006			4/11/2006			4/11/2006																				
			Preparation Date			4/13/2006			4/13/2006			4/13/2006			4/13/2006			4/13/2006																				
			Analysis Date			4/13/2006			4/13/2006			4/13/2006			4/13/2006			4/13/2006																				
			Percent Solids			n/a			n/a			n/a			n/a			n/a																				
IDL						P Hg			Q DF			Q DF			Q DF			Q DF			Q DF			Q DF			Q DF			Q DF			Q DF			Q DF		
1.8			Arsenic			X			8.0 B J 1			2.2 B J 1			97.6% 1			5.1 B J 1			5.0 B J 1																	
1.5			Barium			X			504 B J* 1			484 B J* 1			103.0% 1			620 B J* 1			708 B J* 1																	
0.1			Cadmium			X			1.3 B J 1			0.9 B J 1			90.9% 1			1.9 B J 1			2.1 B J 1																	
0.3			Chromium			X			0.37 B J 1			U 1			91.8% 1			U 1			U 1																	
1.1			Lead			X			6.5 B J 1			6.7 B J 1			90.0% 1			3.4 B J 1			5.1 B J 1																	
0.1			Mercury			X			U 1			U 1			94.6% 1			U 1			U 1																	
1.9			Selenium			X			7.6 B J 1			U 1			102.2% 1			4.9 B J 1			5.8 B J 1																	
19.3			Silver			X			U 1			U 1			99.0% 1			U 1			U 1																	

P - ICP (Except Silver, which was by flame atomic absorption)

Hg - Mercury by Leeman Hydra mercury analyzer

Q - Qualifier, if any

DF - Dilution Factor

J\* - Note that the Barium results were reported by the laboratory off by a factor of 1000 (504 B should have been reported as 0.504 B).

**APPENDIX A**

# H2M LABS, INC.

## SDG NARRATIVE FOR TCLP METALS SAMPLES RECEIVED: 4/11/06 SDG #: ATC008

For Samples:

APC11-D-08 MS/MSD  
APC11-D-09  
APC11-D-10

Three soil samples were received by H2M Labs, Inc. on 4/11/06 for TCLP metals analysis.

Samples were prepared using EPA method 1311 and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, method 7470A with a Leeman Hydra mercury analyzer and 7760A with a Varian Spectra 400 Flame AA for silver.

Sample APC11-D-08 was utilized for QC analysis and reporting.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: May 1, 2006

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*V Stancampiano*

Vincent Stancampiano  
Vice President

o:\qc\narr2006\atc\metals\atc008.doc

ATC008 S 13

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC008

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
APC11-D-08	0604420-001	X
APC11-D-09	0604420-002	X
APC11-D-10	0604420-003	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol) Asp B 10/95  
TCL/TAL, HSL, Priority Pollutant,

JSW 5/11/06

ATC008 S 3

# H2M LABS, INC.

## QUALIFIERS FOR METALS ANALYSIS

### Q (Quality Control) Qualifiers

- E - The reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- M - Duplicate injection precision not met.
- N - Matrix spike sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- + - Correlation coefficient for the MSA is less than 0.995
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- \* - Duplicate analysis is not within control limits.

### C (Concentration) Qualifiers

- B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

### M (Method) Qualifiers

- P - Analyzed by ICP.
- M - Analyzed by ICP-MS
- A - Analyzed by Flame AA.
- F - Analyzed by Furnace AA.
- CV - Analyzed by Manual Cold Vapor techniques.
- AV - Analyzed by Automated Cold Vapor techniques.
- C - Analyzed by Manual Spectrophotometric Method.
- CA - Analyzed by Midi-distillation Spectrophotometric Method.
- NR - Analyte not Required.

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-D-08

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLab Sample ID: 0604420-001Level (low/med): LOWDate Received: 4/11/2006% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	8.0	B		P
7440-39-3	Barium	504	B		P
7440-43-9	Cadmium	1.3	B		P
7440-47-3	Chromium	0.37	B		P
7439-92-1	Lead	6.5	B		P
7439-97-6	Mercury	0.10	U		CV
7782-49-2	Selenium	7.6	B		P
7440-22-4	Silver	19.3	U		A

Color Before: COLORLESS Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06



## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-D-09

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLab Sample ID: 0604420-002Level (low/med): LOWDate Received: 4/11/2006% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.1	B		P
7440-39-3	Barium	620	B		P
7440-43-9	Cadmium	1.9	B		P
7440-47-3	Chromium	0.30	U		P
7439-92-1	Lead	3.4	B		P
7439-97-6	Mercury	0.10	U		CV
7782-49-2	Selenium	4.9	B		P
7440-22-4	Silver	19.3	U		A

Color Before: COLORLESS Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-D-10

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLab Sample ID: 0604420-003Level (low/med): LOWDate Received: 4/11/2006% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.0	B		P
7440-39-3	Barium	708	B		P
7440-43-9	Cadmium	2.1	B		P
7440-47-3	Chromium	0.30	U		P
7439-92-1	Lead	5.1	B		P
7439-97-6	Mercury	0.10	U		CV
7782-49-2	Selenium	5.8	B		P
7440-22-4	Silver	19.3	U		A

Color Before: COLORLESS Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 4/19/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

SDG : ATC008

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
0604420-001	APC11-D-08	WATER	AG,AS,Ba,Cd,Cr,HG,Pb,Se,	11-Apr-06	04/06
0604420-001DUP	APC11-D-08D	WATER	AG,AS,Ba,Cd,Cr,HG,Pb,Se,	11-Apr-06	04/06
0604420-001MS	APC11-D-08S	WATER	AG,AS,Ba,Cd,Cr,HG,Pb,Se,	11-Apr-06	04/06
0604420-002	APC11-D-09	WATER	AG,AS,Ba,Cd,Cr,HG,Pb,Se,	11-Apr-06	04/06
0604420-003	APC11-D-10	WATER	AG,AS,Ba,Cd,Cr,HG,Pb,Se,	11-Apr-06	04/06

# H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

16977

## EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER SHOREHAM REMEDIATION				CLIENT: <u>ATC</u>				H2M SDG NO: <u>ATC008/006</u>					
SAMPLERS: (signature)/Client / ATC ASSOCIATES				Sample Container Description ↓	Total No. of Containers ↓	ANALYSIS REQUESTED  ORGANIC: <input type="checkbox"/> VOA <input type="checkbox"/> BNA <input type="checkbox"/> PAH/PCB <input type="checkbox"/> INORG: <input type="checkbox"/> Metal <input type="checkbox"/> CN				NOTES: "D" SAMPLES ARE FULL TCLP METALS  "SR" SAMPLES ARE FULL TCL+30 / TAL METALS		Project Contact: COLIN CHAMBERS	
DELIVERABLES: B5-7 D D												Phone Number: 609-571-7519	
												PIS/Quote # 906	
TURNAROUND TIME:													
DATE	TIME	MATRIX	FIELD I.D.									LAB I.D. NO.	REMARKS:
4/10/06	15:12	SOIL	APC11-D-08	4						X		0604420-001	
4/10/06	15:25	SOIL	APC11-D-09	4						X		-002	
4/10/06	15:35	SOIL	APC11-D-10	4						X		-003	
4/10/06	12:50	SOIL	APC11-SR-08	4	X	X	X			X	X	0604424-001A	→ D
4/10/06	14:00	SOIL	APC11-SR-09	4	X	X	X			X	X	002A	→ D
4/10/06	14:45	SOIL	APC11-SR-10	4	X	X	X			X	X	003A	→ D
4/10/06	15:00	SOIL	APC11-SR-11	4	X	X	X			X	X	004A	→ D
4/11/06	08:50	SOIL	APC11-SR-12	4	X	X	X			X	X	005A	→ D
4/11/06	09:10	SOIL	APC11-SR-13	4	X	X	X			X	X	006A	→ D
Relinquished by: (Signature) 				Date	Time	Received by: (Signature) 				Date	Time	<b>LABORATORY USE ONLY</b>  Discrepancies Between Sample Labels and COC Record? Y or N Explain:  <b>Samples were:</b> 1. Shipped <input type="checkbox"/> or Hand Delivered <input type="checkbox"/> Airbill# _____ 2. Ambient or chilled, Temp _____ 3. Received in good condition: Y or N 4. Properly preserved: Y or N  <b>COC Tape was:</b> 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: Y or N	
Relinquished by: (Signature) 				Date	Time	Received by: (Signature) 				Date	Time		
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time		
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time		

ATC008 S 6.

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

ATC008

C

H2M LABS, INC.

## Sample Receipt Checklist

Client Name ATC

Date and Time Receive

4/11/2006 3:30:00 PM

Work Order Number 0604420

Received by

JN

Checklist completed by

Signature

4/11/06

Date

Reviewed by

Initials

Date

Matrix

Carrier name Courier

Shipping container/cooler in good condition?

Yes ☒No ☐Not Applicable ☐

Custody seals intact on shipping container/cooler?

Yes ☐No ☒Not Applicable ☐

Custody seals intact on sample bottles?

Yes ☐No ☐Not Applicable ☒

Chain of custody present?

Yes ☒No ☐

Chain of custody signed when relinquished and received?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒Yes ☐No ☐

Water - pH acceptable upon receipt?

Yes ☒No ☐

Adjusted? \_\_\_\_\_

Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

ATC008 S 7

# H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

# 1 WEEK VERBALS

CLIENT: ATC DELIVERABLES: BS-700 TURN AROUND TIME: 21 DAYS

SDG #: ATC008 CASE #: \_\_\_\_\_ MATRIX: SOIL pH CHECK Y or N \_\_\_\_\_

REMARKS: 020 ATC 06

RECEIVED BY: SN SIGNATURE: [Signature] DATE: 4/11/06 TIME: 15:30

[illegible]

## SPECIAL PROCESS

P 0241

ATC008S 8

SDG #: ATC008

## ATC008 S 9

## H2M LABS, INC.

## INTERNAL CHAIN OF CUSTODY

CLIENT: ATC DELIVERABLES: BS. 700 TURN AROUND TIME: 21 DAYS

SDG #: ATC008 CASE #: \_\_\_\_\_ MATRIX: Soil pH CHECK Y or N \_\_\_\_\_

REMARKS:

\* SAMPLES IN CUSTODY OF (SP

RECEIVED BY:

**SIGNATURE:**

DATE: 7/1/04

TIME: 15:30

[illegible]

## METALS

P 0232

ATC008 S 10



INSP

ATC

ATC008

[illegible]

# METALS

P 0233

ATC008 S 11

## APPENDIX B

# Inorganic Data Validation Summary

ATC

Project Name: Peerless Photo Products  
 Project No.: 68.28817.0001  
 Project Manager: M. McNally  
 Laboratory: Accutest

Case No./SDG: ATC008  
 Sampling Date(s): 4/11/2006  
 Reviewed By: M. Traxler  
 Completion Date: 6/28/2006

Compound List: ☐ TAL ☐ Appendix IX ☒ Other TCLP  
 Method: ☐ CLP SOW 3/90 ☒ SW-846 ☒ Other mg/L  
 Matrix: ☐ soil/solid (mg/Kg) ☐ aqueous (ug/L)

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times	X			Less than 180 days
Calibration Linearity - Furnace, Hg , and CN				NR
Calibration Verification	X			2-point standard
CRDL Standard	X			50 - 150 % R
Calibration Blanks	X			< RL
Preparation Blanks	X			< RL
Field Blank		X		< RL No FB in batch
ICP Interference Check Sample	X			80 - 120 % R
Laboratory Control Sample	X			80 - 120 % R
Matrix Spike Results	X			75 - 125 % R
Laboratory Duplicate Results	X			< 20 RPD (unless <5X CRDL)
ICP Serial Dilution	X			< 10 RPD (or < 50x IDL)
Post Digestion Analytical Spike				NR
Method of Standard Addition				NR
Field Duplicate Results		X		< 50 RPD No FD in batch
Sample Result Verification	X			
Other:				

General Comments:

NA - Not applicable  
 NR - Not reviewed

QA Scientist

Mark Traxler

Date

6/28/06

# Inorganic Matrix Spike/ Matrix Spike Duplicate Worksheet

ATC

Project Name: Peerless Photo Products  
Project Number: 68.28817.0001

Case/SDG Number: ATC008

Sample Location or Description
Sample Number
Sampling Date
Units

APC11-D-08	APC11-D-08D	APC11-D-08S
0604420-001	0604420-001D	0604420-001S
4/11/2006	4/11/2006	4/11/2006
ug/L	ug/L	ug/L

Spike Amount      Sample Result      MD Result      MS Result

					MD RPD	Q	MS %R	Q
Arsenic	1000	7.99	2.20	984	113.6	*	97.6	
Barium	1000	504	484	1534	4.2		103.0	
Cadmium	1000	1.29	0.92	910	33.5	*	90.9	
Chromium	1000	0.37		918	200.0	*	91.8	
Lead	1000	6.53	6.72	907	2.9		90.0	
Mercury	1.00			0.946			94.6	
Selenium	1000	7.55		1030	200.0	*	102.2	
Silver	1000			990			99.0	

Q - Qualifier

\* - Denotes %R or RPD outside criteria

ATC008 TCLP MD MS Results

QA Scientist

*Mark J. Snyder*

Date

*6/28/06*

## U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

PBWT

TCLP BLANK *4/19/06*Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLab Sample ID: MB1-16667Level (low/med): LOW

Date Received:

% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	1.5	U		P
7440-43-9	Cadmium	0.10	U		P
7440-47-3	Chromium	0.30	U		P
7439-92-1	Lead	1.1	U		P
7782-49-2	Selenium	1.9	U		P

Comments:

Date Reported: 4/19/06

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

PBWT  
TCLP BLANK 4/15/06 (L)

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Lab Sample ID: MB1-16669

Level (low/med): LOW

Date Received:

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-22-4	Silver	19.3	U		A

Comments:

Date Reported: 4/19/06

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\_\_\_\_\_  
\_\_\_\_\_

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

PBWT  
7CLP B1A41L 4/25/06

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Lab Sample ID: MB1-16658

Level (low/med): LOW

Date Received:

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	0.10	U		CV

Comments:

Date Reported: 4/19/06

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\_\_\_\_\_  
\_\_\_\_\_

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Arsenic	1.8	U	1.8	U	1.8	U	1.8	U	1.768	U	P
Barium	1.5	U	1.5	U	1.5	U	1.5	U	1.510	U	P
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	P
Chromium	0.3	U	0.3	U	0.3	U	0.3	U	-0.740	B	P
Lead	1.1	U	1.1	U	1.1	U	1.1	U	1.126	U	P
Selenium	1.9	U	1.9	U	1.9	U	1.9	U	1.910	U	P



## U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Arsenic			1.8	U	1.8	U					P
Barium			1.5	U	1.5	U					P
Cadmium			0.1	U	0.1	U					P
Chromium			-0.3	B	0.3	U					P
Lead			1.1	U	1.1	U					P
Selenium			1.9	U	1.9	U					P

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Silver	19.3	U	19.3	U					19.300	U	A

U.S. EPA - CLP

3  
BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.1	U	0.1	U	0.1	U			0.100	U	CV

## U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-D-08S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	984.0000	B	7.9900	B	1000.00	97.6		P
Barium	75-125	1534.5000	B	504.4900	B	1000.00	103.0		P
Cadmium	75-125	910.3700		1.2900	B	1000.00	90.9		P
Chromium	75-125	918.1900	B	0.3700	B	1000.00	91.8		P
Lead	75-125	907.0000	B	6.5300	B	1000.00	90.0		P
Mercury	75-125	0.9460	B <i>7/14/00</i>	0.1000	U	1.00	94.6		CV
Selenium	75-125	1030.0000		7.5500	B	1000.00	102.2		P
Silver	75-125	990.0000		19.3000	U	1000.00	99.0		A

Comments:

## U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO

APC11-D-08

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic	1000.0000	7.9900	B	2.2000	B	113.6		P
Barium	10000.0000	504.4900	B	483.6700	B	4.2		P
Cadmium	100.0000	1.2900	B	0.9200	B	33.5		P
Chromium	1000.0000	0.3700	B	0.3000	U	200.0		P
Lead	1000.0000	6.5300	B	6.7200	B	2.9		P
Mercury		0.1000	U	0.1000	U			CV
Selenium	100.0000	7.5500	B	1.9100	U	200.0		P
Silver		19.3000	U	19.3000	U			A

RPDs are acceptable due to low levels ( $<5\times$ )  
 MJ 6/28/06

## U.S. EPA - CLP

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## ICP SERIAL DILUTIONS

APC11-D-08

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC008Matrix (soil/water): WATERLevel (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Arsenic	7.99	B	12.94	B	61.8		P
Barium	504.49	B	502.60	B	0.4		P
Cadmium	1.29	B	1.80	B	39.5		P
Chromium	0.37	B	1.50	U	100.0		P
Lead	6.53	B	7.36	B	12.7		P
Selenium	7.55	B	12.57	B	66.6		P

All %Ds are  
acceptable due to  
low levels of sample  
( $< 50 \times 10L$ )  
JMJ 6/28/06