

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 Fast Authority, 1980

O7539

Gibert General 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
SENIOR QUALITY ASSURANCE SCIENTIST

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.

Mark Stader
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

Sita Nama	Peerless Photo Products
OIG HAITIE	Lecuess i noto Lindacts

Soil (mg/kg)

H2M - Melville, New York

Project Number

68,28817,0001

Laboratory

Case/Order #

ATC001

Sampling Date(s) 3/30/2006

3/30/2006

Fraction/Method

Metals / 3050B / 6010B

	Sample Location or Description	APC11-BS-001	APC11-BS-002	APC11-BS-003	APC11-B\$-004	APC11-BS-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	PF	Q DF	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	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	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							L
	Sampling Date	3/30/2006	3/30/2006	3/30/2006							l
	Preparation Date	3/30/2006	3/30/2006	3/30/2006							
	Analysis Date	3/31/2006	3/31/2006	3/31/2006							<u> </u>
	Percent Solids	93.5	82.2	87.1							
			0.00	0 05	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
*MINRUMEN	PF	Q DF	Q DF	Q DF	ע טר	Q DI	Q DI	Q D1	Q Di	Q DI	- Q - 51
0.50 1.00	Cadmium X Silver X	0.25 B J 1 100 E J 1	0.20 B J 1 53.8 E J 1	0.40 B J 1 69.2 E J 1	Q DF	Q DI	Q BI	Q <i>D</i> ,	Q <i>D</i> ,	Q 51	

P-ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist Maple DATE 5/17/06

APPENDIX A

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

SDG: ATC001		
Customer	Laboratory	MC
Sample	Sample	ME
Code	Code	
APC11-BS-001	0604020-001	X
APC11-BS-002	0604020-002	Х
APC11-BS-003	0604020-003	Х
APC11-BS-004	0604020-004	Х
APC11-BS-005	0604020-005	Х
APC11-SW-001	0604020-006	Χ.
APC11-SW-002	0604020-007	X
APC11-SW-003	0604020-008	Х
APC11-SW-004	0604020-009	X
APC11-SW-005	0604020-010	X
APC11-SW-901	0604020-011	X

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.

			1	EPA SAMPLE NO
		INORGAN	IC ANALYSIS DATA SHEET	APC11-BS-001
Lab Name:	H2M LABS,	INC.	Contract:	
Lab Code:	10478	Case No.	SAS No.:	SDG No.: ATCOOL
Matrix (so	oil/water):	SOIL	Lab Sample ID:	0604020-001

Level (low/med): LOW

Date Received: 3/30/2006

% Solids:

96.3

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	Ū		P
7440-22-4	Silver	4.4		E	P

Color	Before: BROWN	Clarity Before:	~	Texture:	FINE
Color	After: YELLOW	Clarity After:	CLEAR	Artifacts:	

Comn	ments:
	Date Reported: 3/31/06

•				1 PORGANIC ANALYSIS DATA SHEET			EPA	. SA	MPLE NO			
•	Lab Name:	H2M_LABS,				ntract:	SET		AF	C11	-BS-002	
	Lab Code:	10478	Case No.	SAS	s N	lo.:			SDG N	o.:	ATC001	
•	Matrix (so	il/water):	SOIL			Lab Sai	mple	ID:	0604020-	-002		
	Level (low	/med):	LOW			Date R	ecei	ved:	3/30/200) 6		
•	% Solids:		91.7									
		Concentrat	tion Units	(ug/L or mg/kg	dr.	y weigh	t):	MG/K	<u>G</u>			
•		CAS No.	Analyte	Concentration	С	Q	М					

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

7440-43-9 Cadmium 7440-22-4 Silver 0.013 U

8.0

Comments:
Date Reported: 3/31/06

	,	1	EPA SAMPLE NO
Lab Name: H2M	M LABS, INC.	NORGANIC ANALYSIS DATA SHEET Contract:	APC11-BS-003
Lab Code: 104	Case No	. SAS No.:	SDG No.: ATC001
Matrix (soil/w	water): <u>SOIL</u>	Lab Sample ID:	0604020-003
Level (low/med	d): Low	Date Received:	3/30/2006
% Solids:	95.3		
Con	ncentration Units	s (ug/L or mg/kg dry weight): $\underline{MG/F}$	<u>KG</u>
CA	Analyte	Concentration C O M	

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:_	YELLOW	Clarity	After:	CLEAR	Artifacts:	

7440-43-9 Cadmium 7440-22-4 Silver 0.013 U 10.5

Comments:
Date Reported: 3/31/06

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-004

Lab Name: H2M LABS, INC.

SAS No.:

Contract:

SDG No.: ATCOO1

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-004

Level (low/med):

Lab Code: 10478

LOW

Case No.

Date Received: 3/30/2006

% Solids:

91.5

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

CAS No.	Analyte	Concentration	C	. Ŏ	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	1.3		E	P
				<u> </u>	

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comme	CS:
	ate Reported: 3/31/06

	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.: ATCOOL

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-005

Level (low/med):

LOW -

Date Received: 3/30/2006

% Solids:

<u>96.</u>0

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	Ü		P
7440-22-4	Silver	1.3		E	P

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

CORE	ments;
	Date Reported: 3/31/06

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>104</u>78

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	С	Q	М
7440-43-9	Cadmium	0.31	В		P
7440-22-4	Silver	57.5		Ε	P

Color Before: BROWN ____ Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts:

_

	1		
NORGANIC	ANALYSTS.	DATA	SHEET

EPA SAMPLE NO

APC11-SW-002

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-007

Level (low/med):

LOW

Date Received: 3/30/2006

% Solids:

90.5

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.35	В		P
7440-22-4	Silver	191		£	P

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments: Date Reported: 3/31/06

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.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-008

Level (low/med):

LOW

Date Received: 3/30/2006

% Solids:

88.8

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

CAS No.	Analyte	Concentration	C	Q	М
7440-43-9	Cadmium	0.21	В	-	P
7440-22-4	Silver	155		E	P
				1	

Color Before: BROWN

Clarity Before:

Texture:

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

Comments: Date Reported: 3/31/06

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

Analyte	Concentration	С	Q	М
Cadmium	0.25	В		P
Silver	100		E	P
	Cadmium	Cadmium 0.25	Cadmium 0.25 B	Cadmium 0.25 B

Color Before: BROWN Clarity Before:

Texture:

Color After: YELLOW Clarity After:

Artifacts:

Comments: -Date Reported: 3/31/06

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.: ATC001

Matrix (soil/water): SOIL

Lab Sample ID: 0604020-010

Level (low/med):

LOW

Date Received: 3/30/2006

% Solids:

82.2

Analyte

Silver

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

Concentration | C

P

Color Before: BROWN

Clarity Before:

Texture:

FINE

Color After: _YELLOW

7440-43-9 Cadmium

CAS No.

7440-22-4

Clarity After:

CLEAR

0.20 B

Artifacts:

Comments: Date Reported: 3/31/06

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-901

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATCOO1

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	С	Q	М
7440-43-9	Cadmium	0.40	В		P
7440-22-4	Silver	69.2		E	Ъ
	T		_		

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After:

Comments:

CLEAR

Artifacts:

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	DateRecd 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	APCII-SW-001	SOIL	AG,CD,	30-Mar-06	03/06
0604020-006DUP	APCII-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

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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 55455 NOTES: Project Contact: SHOREHAM REMEDIATION COUN CHAMBERS # TOTAL Phone Number: Cd+A9 609-571-7519 (M) SAMPLERS: (signature)/Client 631-744-3064 (Sm ATC ASSOCIATES PIS/Quote # G G RESURTS 906 FAX DELIVERABLES: 631-744-3071 R5-700 Total No. of Containers **ANALYSIS REQUESTED** TURNARQUND TIME: 24-48 NRV ZIDAY PKG **ORGANIC** INORG. Metal PCB PCB FIELD I.D. LAB I.D. NO. REMARKS: DATE TIME MATRIX 604020-006 APC11-5W-001 4:05 MS/MSD SOIL APC11-5W-901 1408 Soil 007 14:20 APC11-5W-002 1008 APCIL-SW-003 009 14.27 SOIL 010 APC11-5W-005 1413018014 σo APCIL-BS-001 14:40 2015 110 a APCII-BS-DOZ 14:42 8016 003 APC11-BS-003 SOIL 004 APC11-BS-004 Time Received by: (Signature) Date Time LABORATORY USE ONLY 3/30/16 16:45 3/30/06 Samples were: Discrepancies Between 1. Shipped___ or Hand Delivered___ Airbill# Relinguished by: (Dignature) Received by: (Signature) Time Time Date Sample Labels and 2. Ambient or chilled, Temp_ COC Record? Y or N 3. Received in good condition: Y or N 4. Properly preserved: Y or N Explain: Received by: (Signature) Relinquished by: (Signature) Date Date Time COC Tape was: 1. Present on outer package: Yor N Date Received by: (Signature) Date Relinquished by: (Signature) Time 2. Unbroken on outer package: Y or N 3, COC record present & complete upon sample receipt:

16946

EXTERNAL CHAIN OF CUSTODY

Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE	NT:	A	T	<u> </u>							H2M SDG	NO: ATCOUL
PROJECT NAME/NUMBER									100		NOTES:		Project Contact:
SHOREHAM REMEDIATION	Sample Container Description								AMBER GLASS		Torm. Cd++	1a	Phone Number: (09-571-7519(M)
SAMPLERS (signature)/Client ATZ ASSOCIATES	or Manny								1 02 A		,	531-744	63-744-3064 (\$175) PISQUOTO # 906
DELIVERABLES: B5-70D	5 E				<u>کان د</u>				[4		70	231-744	-3071
TURNAROUND TIME: 24-48 UR. V ZI DAM PKG.	Total No. of Containers	OR	GANI		SIS	RELA	UEST	FD	INOF				
17.40 Nr. V 21 1201	d bo	1		$\overline{}$		 		 	+				<u> </u>
DATE TIME MATRIX FIELD I.D.		Š	BN	PCB PCB					Meta	S.	LAB I.I		REMARKS:
13da 14:50 SOIL APCII-BS-005	1								X		06040	10 005	
1/	!										· · · · · · · · · · · · · · · · · · ·		
Relinguished by (Signature) Date Time Received by (Sign	iature)		~		5/20		16:0					ATORY USE ON	LY
Refinquished by: (Signature) Refinquished by: (Signature) Date Time Received by: (Signature) Date Time Received by: (Signature)					Da Da	ite	Tin	ne	Sam	nple La CReca	acies Between abels and ord? Y or N	Ambient or chilled Received in good Properly preserve COC Tape was:	Leondition: YorN ad: YorN
Relinquished by: (Signature) Date Time Received by: (Sign	ature)				Da	te	Tln	ne					package: YorN ar package; YorN ent & complete upon sample recelpt;



Sample Receipt Checklist

Client Name ATC	•		Date and	Time Re	eceive	3/30/2006 4:45:00 PM
Work Order Numbe 0604020			Received	by	ИL	
Checklist completed b Signalure	3/3/Date	30/06	Reviewed		itials	3 31 00
Matrix .	Carrier name	Hand Delivered				
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not A	pplicable 🗌	
Custody seals intact on shippping container/coo	oler?	Yes 🗹	№ 🗆	Not A	pplicable 🗌	
Custody seals intact on sample bottles?		Yes 🗌	No 🗀	Not A	pplicable 🗹	
Chain of custody present?		Yes 🗹	No 🗌			
Chain of custody signed when relinquished and	received?	Yes 🗸	№ 🗆			
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 complian	nce?	Yes 🗹	No 🗆 🗸	16°C		
Water - VOA vials have zero headspace?	No VOA vials subi	mitted 🗹	Yes		No 🗀	
Water - pH acceptable upon receipt?		Yes 🔽	No 🗌			
	Adjusted?	Che	cked b	<u>.</u>		
					•	
Any No and/or NA (not applicable) response in	ust be detailed in the o	comments section	b — — — —			
Client contacted	Date contacted:		· P	erson c	ontacted	
Contacted by:	Regarding					
Comments:						
	 					
					 .	
Corrective Action						
	·					

	INTERNAL CHAIN O	F CUSTODY	011-48 110 1150 to A1
CLIENT: ATC	DELIVERABLES: <u>65.701</u>	TURN AROUND TIM	E: 21 DAY PKG
SDG#: ATCOOL	CASE #: MA	_	pH CHECK Y or N
REMARKS:	<u> </u>		
RECEIVED BY:	SIGNATURE:	DATE 3/3	CHOTIME: 16:45

	·				
	H2M LAB	DATE	BOTTLE	# OF	TESTS
CLIENT ID	#	COLLECTED	TYPE	BOTTLES	REQUESTED
· APC11-BS-001	0604020	3/30/06	A	١	GOID-S-PKG(SEL)
, 002	-002				
, 003	-003				
. 004	-004				
, 2005	-005			_W_	
· ms/ SW-001	-006			3	
, 002	-007			1	
• 003	-008	·			
• 004	-009				,
. 005	-010				
" ¥ 901"	2011	<u> </u>	- 1	₩.	
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ris					
		· · · · · · · · · · · · · · · · · · ·			
20					

ATC001 S9

H2M LABS, INC. CLIENT: ATC SDG 1: ATC 001

INTERNAL CHAIN OF CUSTODY

200							
			SAMPLE	,	1 :	PURPOSE OF	1
-	1		RELINQUISHED	SAMPLE	BOTTLE	CHANGE OF	Í
	DATE	TIHE	BY	RECEIVED BY	TYPE	CUSTODY	TINI
111			310M 1111	SICE OF	A	analysis los	
	3/30/06	17:30	5000			101 5 101	D€21,00
	3/31/00	800	2 about	STONE STONE	DIE	JIP	
201	3/21/02	1160	"10 /1/1/W	3100	DIGU	Styc	
أأتند	7-100		SION	9104			
			81 Cod	SICH			
	i		110H	aron			
			SICM	alcol			
			SICA	HOIE			
300							
3	-		8) CIM	SION			
Ī			31004	SICH			
			31014	SICH			;
			MOIE	SICH			
			SION	SICH			
			9109	SIGN			
- 34			3107	SICN			
			510H	этся			
			2108	910W			
			SION	SION			
			310A	SIGN			· ·
			2108	SIGH			
			310%	SIGH			
			AION	SION			
			HOIE	91CM			
			210A	SICN	· · · · · · · · · · · · · · · · · · ·		
			SION	SIGN			
			SION	SIGN			
				<u> </u>	L	<u> </u>	<u> </u>
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APPENDIX B

Inorganic Data Validation Summary ATC Case No./SDG: ATC001 Project Name: Peerless Photo Products 3/30/2006 Project No.: 68.28817.0001 Sampling Date(s): M. McNally Reviewed By: M. Traxler Project Manager: Laboratory: H2M Completion Date: 5/17/2006 Appendix IX **Compound List:** TAL X Other__Cd, Ag____ Method: CLP SOW 3/90 SW-846 Matrix: X 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 Less than 180 days **Holding Times** Calibration Linearity - Furnace, Hg, NR and CN Calibration Verification 2-point standard CRDL Standard Χ 50 - 150 % R Calibration Blanks < RL Preparation Blanks Χ < RL Field Blank 80 - 120 % R Χ ICP Interference Check Sample **Laboratory Control Sample** 80 - 120 % R < 35 RPD Matrix Duplicate Results Ag results >4X spike amount Matrix Spike Results Ag results > 10 RPD ICP Serial Dilution NR Post Digestion Analytical Spike Method of Standard Addition < 50 RPD Field Duplicate Results X Cadmium and Silver Sample Result Verification Other: General Comments:

NA - Not applicable

NR - Not reviewed

QA Scientist Mark Frances

Date 5 /17/06

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

Project Name:

Peerless Photo Products

Case/SDG Number: ATC001

Project Number: 68.28817.0001

	_
	Sample Location
	or Description
	Sample Number
***	Sampling Date
	Units
i	

ł	
APC11-SW-001D	APC11-SW-001S
0604020-006D	0604020-0065
3/30/2006	3/30/2006
mg/kg	mg/kg
	0604020-006D 3/30/2006

Spike	Sample Result
Amount	

MD Result

MS Result

Cadnaire	E E 7	0.04	0.27	\neg

					MD RPD	Q	MS %R	_ Q
Cadmium	5.57	0.31	0.27	5.45	12.3		92.4	\Box
Silver	5.57	57.5	47.20	50.6	19.7		-124.1	*

Q - Qualifier

M Shaples Date 5/17/06

^{* -} Denotes RPD outside criteria

Inorganic Field Duplicate Precision Worksheet

ATC

Project Name:

Peerless Photo Products

Project Number:

68.28817.0001

Case/SDG Number: ATC001

Sample Location	APC11-SW-001	APC11-SW-901
or Description 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	

QA Scientist Mark Mayder Date 5/17/06

^{* -} Denotes RPD outside criteria

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 0604020-006 APC11-SW-001 APC11-SW-001D 0604020-006DUP

 APC11-SW-001D
 0604020-006DU

 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?

Were ICP background corrections applied?

Yes/No YES

Yes/No YES

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

Yes/No NC

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:

4/4/06

Name:

Vincent Stancampiano

Date:

Title:

Vice President

COVER PAGE - IN

ILM04.1

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC001

Preparation Blank Matrix (soil/water): <u>SOIL</u>

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

	Initial Calib. Blank		C		ing Cal		on.			Prepa- ration		
Analyte	(ug/L)	С	1	C	2	С	3	1		Blank	C	M
Cadmium	_ 0.	8 B	0.	7 B).5 B		0.5	в	0.01	ט (2	P
Silver	0.	4 U	0	. 4 U	(0.4 U		0.4	U	0.04	5 U	P

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

	Initial Calib. Blank		Con		nuing Calib Blank (ug/I		tion			Prepa- ration			
Analyte	(ug/L)	С	1	С	2	С	3	С		Blank	С	1	Ŋ
Cadmium	0.8	В	0.7	В	0.5	В	0.5	В		0.012	U	P	,
Silver	0.4	U	0.4	Ū	0.4	U	0.4	U		0.045	Ü	P	,
		[_		{	1	l		ł	Н				-

5A SPIKE SAMPLE RECOVERY EPA SAMPLE NO

Lab Name: <u>H2M LABS</u>, <u>INC</u>.

Contract:

APC11-SW-001S

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

	Control				
	Limit '	Spiked Sample	Sample	Spike	\
Analyte	%R	Result (SSR) C	Result (SR) C	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:				

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-SW-001S

Lab Name: <u>H2M LABS, INC.</u>

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC001

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.8

	Control			,				
ł	Limit	Spiked Sample	Sample		Spike]		1
Analyte	%R	Result (SSR) C	Result (SR)	С	Added (SA)	%R	Q	М
Cadmium	75-125	5.4532	0.3073	В	5.57	92.4	_	Р
Silver		50.5505	57.4590		5.57	-124.1	7	Р
	1					*	\mathcal{I}	

Comm	ents:

6 DUPLICATES EPA SAMPLE NO

APC11-SW-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

% Solids for Sample: 89.8

Case No.

SAS No.:

SDG No.: ATCOOL

Matrix (soil/water): $\underline{S}OIL$

Level (low/med): LOW

% Solids for Duplicate: 88.8

	Control						
Analyte	Limit	Sample (S)	С	Duplicate (D) C	RPD	Q	М
Cadmium	0.5568	0.3073	В	0.2717 B	12.3	Ť	P
Silver		57.4590		47.1737	19.7]	P
	1	1	1	i .	1	Į	1 1

DUPLICATES

EPA SAMPLE NO

APC11-SW-001

Lab Name: <u>H2M_LABS</u>, <u>INC</u>.

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

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

9 ICP SERIAL DILUTIONS

Lab Name: H2M LABS, INC.

Contract:

APC11-SW-001

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATCOOL

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	М
Cadmium	2.76 B	3.70 B	34.1		P
Silver	515.98	578.39	12.1	Е	Р

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

' MARK TRAXLER

SENIOR QUALITY ASSURANCE SCIENTIST

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.

Mark Traxler

Senior Quality Assurance Scientist

Mark Japle

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	Peer	rless Photo Prod	ucts					8	Soil (mg/k	3)		L	aboratory		H2M - N	lelville, N	lew York				
Pi	roject Number	6 8 .2	8817.0001										Cas	e/Order#		ATC002						
Sa	mpling Date(s)	4/3/2	2006										Fractio	n/Method		Metals /	3050B /	6010B				
	Sample Locati or Description	on	APC11-BS-006	APC11-	-BS-007	APC11-	BS-907	APC11-	SW-006	APC11-S	W-006D	APC11-S	W-006S	APC11-S	W-007	APC11-	-SW-008	APC11-S	W-009			_
	Sample Numb	er	0604115-00	1 06041	15-002	06041	15-003	06041	15-004	060411	5-004D	060411	5-004S	060411	5-005	06041	15-006	060411	5-007			_
	Sampling Date	<u> </u>	4/3/2006	4/3/2	2006	4/3/2	2006	4/3/2	006	4/3/2	006	4/3/2	006	4/3/2	006	4/3/	2006	4/3/20	006			
	Preparation Da	ate	4/4/2006		2006		2006	4/4/2		4/4/2		4/4/2		4/4/2			2006	4/4/20	006			_
	Analysis Date Percent Solids		4/6/2006 98.1		2006 7.7	4/6/2	2006	4/6/2 78		4/6/2 79		4/6/2 78.		4/6/2 88.			2006 2.4	4/6/20 88.				
RL	reicent Johns	PI			Q DF		Q DF		Q DF		Q DF		Q DF		Q DF		Q DF		Q DF		QI	DF
0.50 1.00	Cadmium Silver	X	U	1 1 0.50 B*	U 1	2.2 *	U 1	0.22 B 180 *	J 1	0.15 139	1	92.7% -570.6%	1	0.052 B 270 *	J 1	0.48 B 223 *	J 1	0.40 B 112 *	J 1			_
	Sample Locati or Description	on			-																	-
	Sample Numb	er																				_
	Sampling Date	·				}								L		<u> </u>		 		 		
	Preparation Da	te	_			L								 		└		 				_
	Analysis Date Percent Solids		 			├		<u> </u>		<u> </u>				-				-		!		
RL	Fercent Sollas	PF	= 0	OF	Q DF	 	Q DF		Q DF		Q DF	l	Q DF	 	Q DF		Q DF		Q DF	 	Q	ĴΕ
0.50	Cadmium	X					_		7					1								-

P-ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist M Hades DATE 5/19/06

APPENDIX A

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 ramges 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

Vincent Stancampiano

Vice President

NAC

o:\qc\narr2006\atc\metals\atc002.doc

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC002

Analytical Requirements

300. A10002		
Customer	Laboratory	ME
Sample	Sample	
Code	Code	
APC11-BS-006	0604115-001	Χ
APC11-BS-007	0604115-002	Χ
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

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.

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-006

Lab Name: H2M LABS, INC.

Lab Code: 10478 Case No. SAS No.:

Contract:

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	С	Q	М
7440-43-9	Cadmium	0.012	U		P
7440-22-4	Silver	0.32	В	*	P

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

Texture:

Artifacts:

Comments:

DATE REPORTED: APRIL 5, 2006

	1		
NORGANIC	ANALYSTS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-007

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATCOUZ

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	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.50	В	*	P
	T				

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts:

Comments	:					
DATE	REPORTED:	APRIL 5,	2006	 	 	
- -					 	

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

APC11-BS-906 Contract:

Case No. SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-003

Level (low/med):

Lab Code: 10478

LOW

Date Received: 4/3/2006

% Solids:

98.3

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	. 0.012	U		₽
7440-22-4	Silver	2.2		*	Р
		,	-		

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

DATE REPORTED: APRIL 5, 2006

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	С	Q	М
7440-43-9	Cadmium	0.22	В		Р
7440-22-4	Silver	180		*	P
					1

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

Comments: DATE REPORTED: APRIL 5, 2006

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-007

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Case No.

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	С	Q	М
7440-43-9	Cadmium	0.052	В		P
7440-22-4	Silver	270		*	P
	T				

Color Before: BROWN

Clarity Before:

CLEAR

Texture:

FINE

Color After: YELLOW Clarity After:

Artifacts:

Comments: DATE REPORTED: APRIL 5, 2006

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-008

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-006

Level (low/med):

LOW

Date Received: 4/3/2006

% Solids:

72.4

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.48	В		P
7440-22-4	Silver	223		*	P

Clarity Before: Color Before: BROWN Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED: APRIL 5, 2006

FORM I - IN

ILM04.1

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.: ATC002

Matrix (soil/water): SOIL

Lab Sample ID: 0604115-007

Level (low/med):

LOW

Date Received: 4/3/2006

% Solids:

88.0

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.40	Б		P
7440-22-4	Silver	112		*	P
	7	I			

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Commencs	-					
DATE	REPORTED:	APRIL 5,	2006			
					 <u></u>	
_				 	 	

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	DateRecd Date at Lab 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

16947

EXTERNAL CHAIN OF CUSTODY

סוטפיידיוו זיון אווייופאון עא אטווטח מבטום כוכ													
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE	NT:	A		<u>. A</u>	53	500	<u></u>				H2M SDG	NO: ATCOOL
PROJECT NAME/NUMBER		}				_			ध्र		NOTES:		Project Contact:
SHORENAM REMEDATION	Phor.								GLASS		* TOTA	- Cd+	COUR CHAMBERS
	Sample Container Description		}						MBEE		Ag		Phone Number: (CO9-571-7517(M)
SAMPLERS: /signeture)/¢llent													631-744-3064 (STIE)
MILL ASSOCIATES	, s]							4		ĺ		PI\$/Quote #)
ALC TASSCIATES									57				906
DELIVERABLES:		<u> </u>							1.7				
B5-70D	o. of		AN	ALY:	SIS R	EQL	JEST	ED			}		
TURNARQUND TIME: 24-48 Hr. V - 21 DK4 PKG	Total No. of Containers	OR	GANI	C					INOF	₹G.		·_··	
DATE TIME MATRIX FIELD I.D.		VOA	BNA	P.CB					Metal	CN	DO LAB	I.D. NO.	REMARKS:
4/3/06/13:26 Soin APCULT SW-00 G	3							-	X		04060	004	MS/MSD
4306 13:30 5012 APCII "SW-007	1								X			005	
4/3/01 13.35 SOIL APCIL - 5W-008	;								X	_	- पंभि	006	
4/3/06/13:55 5012 APC/1 - SW-009	1								X	_		007	
4/3/06/13.38 301- APCII-BS-006	 				-	_		_	X			COI	
4/3/06/13:45 SOIL APCIL BS-007									X			002	
4/3/06/13:40 SOIL APCII - B5-900	1				-				X			003	
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Reilinguished by (Signature) Date Time Received by (Sign	pature)	!		$\neg \dagger$	Dat	1	Tin			1	LABOR	RATORY USE ON	ILY
14/3(X) 14/3X	W			ļ	13.0	6	4,3	5	Discr	epan	icies Belween	Samoles were:	
Relinquisher (1/1) (Signature) Date Time Received by: (Sign	uature)	 1			Dat		Tin	- 1			abels and	2. Ambient or chille	
Reilinguished by: (Signature) Date Time Received by: (Sign	uatura)	<u></u>	_		:4/3/0 Dat	9	16:00 COC Rec			OTUT TOTAL	Received in good A. Property preserve	1	
1940b 10:30	N	<u> </u>	\geq		Date Time 4/4/06 10:30		[d			COC Tape was:		
Refinquished by: (Signature) Date Time Received by: (Sign	ature)		`	}	Dat		Tim	18					erpackage: YorN
									_			3. COC record pres- Y or N	ent & complete upon sample receipt:

ATC002

Sample Receipt Checklist

Client Name ATC Work Order Numbe 0604115			Date and Received	Time Receive	4/3/2006 4:00:00 PM
Checklist completed b	2+1 Date	4/06_	Reviewed	by	Tate (
Matrix	Carrier name	Hand Delivered		·	
Shipping container/cooler in good condition?		Yes 🗹	No 🗌	Not Applicable 🗌	
Custody seals intact on shippping container/coo	ler?	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 🗹	Ио □		
Sufficient sample volume for indicated test?		Yes 🗹	No 🗌		
All samples received within holding time?		Yes 🗸	No.		
Container/Temp Blank temperature in complian	ce?	Yes 🗹	No 🗌		
Water - VOA vials have zero headspace?	No VOA vials sub	mitted 🗹	Yes	□ No □	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗌		
•	Adjusted?	Che	ecked b		
Any No and/or NA (not applicable) response me	ust be detailed in the o	comments section	ı b		
			===:		
Client contacted	Date contacted:		F	Person contacted	
Contacted by:	Regarding			<u> </u>	
Comments:					·
				· · · · · · · · · · · · · · · · · · ·	
Corrective Action					

INTERNAL CHAIN OF CUSTODY

CLIENT: AT (_DELIVERAE	BLES: <u>185-70</u>	\mathcal{D} _TUR	N AROUND	TIME: 28-48 hV Ver	bal	
sdg #: ATCO)2	CASE #:		MATRIX: _	<u>S_</u>	pH CHECK Y or N	Prd	
REMARKS:					, , , , , , , , , , , , , , , , , , ,		•
RECEIVED BY:	2	SIGNATURE: 4	8	DATE X	:4/4/06TIME: 10:30 received by 1 ab	4/3/06	16:06
	H2M LAB	DATE	BOTTLE		TESTS		
CLIENT ID	#	COLLECTED	TYPE	BOTTLES	REQUESTED		
· APC11-BS-006	0604115 - LA	4-3.06	A	1	PMOIST 6010-S-PKG (SEL)		
· BS-007	-2A						
-906	-3A			V			
· M=/M3 D	-4A			3_			
1-007	-5A			<u> </u>			
- 008	-6A						
· V V-009	7A	V	<u> </u>	V	√		
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P 0205

METALS

CLIENT: ATC

SDG #: ATCO02

INTERNAL CHAIN OF CUSTODY

		SAMPLE RELINQUISHED	Sample	BOTTLE	PURPOSE OF CHANGE OF	
DATE	TIME	BY	RECRIVED BY	TYPE	CUSTODY	TINI
4/4/06	10:37	a role	STON Off	A	Analysic	
2/4/06	1030	The Color	Hadu	A	Digs_	
1414100	1200	A Buche	91 CM	AID19S	Stocase Analy	<u>s</u>
 		sicus	SICH	·		
 	-	FICE .	alon			<u> </u>
		Simi	310M			
		alcos	HOIE			
		BICOL	alow.			
		SIGN SIGN	SICH			
-		2108				•
		ROIS	SICH 115 (1)			
		SION	SICN			<u> </u>
		MOIE	SICN			
		NOIE	sign			
		210M	7910N			
ļ }		SION	SION SICH			
		SION	Sion	· · ·	·	
		21091	SION			
		SION	SION			
		SION	alch			
		510H	SICN			
		91078	SICH			
		SION	SICH			<u> </u>

METALS

APPENDIX B

Project Name: Project No.: Project Manager: Laboratory:	Peerless Photo Proc 68.28817.0001 M. McNally H2M	ducts		San Rev	e No./SDG: npling Date(s): iewed By: npletion Date:	ATC002 4/3/2006 M. Traxler 5/18/2006
Compound List: Method: Matrix:	TAL CLP SOW 3/90 X soil/solid (mg/Kg)	Append X SW-844 aqueou	6		X OtherCd, Ag_	
The following table inc	dicates the data val	idation	criteri	a exar	nined, problems i	identified,
and QA action.			. =\4		•	
Data Validation Criteria	a:	ассер	t FYI	qualit	y comments	
Holding Times Calibration Linearity - and CN	Furnace, Hg,	X			Less than 180 d	ays
Calibration Verification		X		 	2-point standard	
Calibration Blanks Preparation Blanks		×		1827 6 37	< RL < RL	
Field Blank ICP Interference Checl	«Sample	×			< RL 80 - 120 % R	
Laboratory Control Sa Matrix Duplicate Resul		X	×		80 - 120 % R Cd > 35 RPD bu	it <5X CRQL
Matrix Spike Results ICP Serial Dilution		×	X		Ag > 4X spike a < 10 RPD	mount
Post Digestion Analyti Method of Standard Ad					NR NR	
Field Duplicate Result	S		×		> 50 RPD but <	
Sample Result Verifica	ntion	x			Cadmium and S	ilver
Other:				Ш		
General Comments:						

NR - Not reviewed

QA Scientist Mark Shapler Date 5/19/06

_Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC002

Project Number: 68.28817.0001

ست	Sample Location
	or Description
	Sample Number
	Sampling Date
	Units

APC11-SW-001	APC11-SW-001D	APC11-SW-001S
0604020-006	0604020-006D	0604020-006S
3/30/2006	3/30/2006	3/30/2006
mg/kg	mg/kg	mg/kg
	1	

Spike Sample Result MD Result

MS Result

Amount

						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

M Sapler Date 5/19/06

^{* -} Denotes RPD outside criteria

Inorganic Field Duplicate Precision Worksheet

ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC002

Project Number:

68.28817.0001

Sample Location	APC11-BS-006 APC11-BS-906 0604115-001 0604115-003	
or Description		
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	*

QA Scientist Mark Staples Date 5/19/06

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC002

Preparation Blank Matrix (soil/water): <u>SOIL</u>

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

harluto	Initial Calib. Blank (ug/L)	C	Co		nuing Calik Blank (ug/1			С	Prepa- ration Blank C	М
Analyte	(ug/L)						ى 		DIdlik C	1 19
Cadmium	0.	5 B	0.:	5 B	0.6	В	0.6	В	0.012 U	P
Silver	0.	4 U	0.	U	2.4	В	0.4	U	0.045 U	P

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 O M
Cadmium	75-125	6.0963	0.2205 B	6.34	92.7 P
Silver		143.5912	179.7509	6.34	(-570.6) P

Comm	nts:	

6 DUPLICATES EPA SAMPLE NO

APC11-SW-006

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATCOO2

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)	С	Duplicate (D) C	RPD	Q	М
Cadmium	0.6337	_0.2205	В	0.1534 B	< 35.9	1	P
Silver		179.7509		138.7553	25.7	*	P
						T	

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

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.

Mark Traxler

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.

QUALIFIÈR 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

Peerless Photo Products Site Name

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Project Number 68.28817.0001

Case/Order #

ATC003

Sampling Date(s) 4/4/2006

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	PF	Q DF	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	U 1	0.073 B J 1	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	95.1 *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					
SASIRE MAIN	PF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF
0.50 1.00	Cadmium X Silver X	0.35 B J 1 139 *E J 1	0.24 B J 1 67.9 *E J 1	0.092 B J 1 107 *E J 1	0.014 B J 1 162 *E J 1	0.13 B J 1 120 *E J 1					

P - ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist M. Japle DATE 5/24/06

ATC003 Data Summary

APPENDIX A

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 ramges 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

Vincent Stancampiano

Vice President

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC003

Analytical Requirements

SDG: ATCOUS		
Customer Sample	Laboratory Sample	ME
Code	Code	
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	Х
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

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.

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INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-008

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10</u>478

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	С	Q	М
7440-43-9	Cadmium	0.039	В		P
7440-22-4	Silver	4.8		*E	P
	I				

Color Before: BROWN Clarity Before:

Texture:

COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments: Date Reported: 4/6/06

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

APC11-BS-009

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Case No.

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	С	Q	М
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	8.9		*E	P
	T			1	I

Color Before: BROWN Clarity Before: Texture: COARSE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments: Date Reported: 4/6/06

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-010

Lab Name: <u>H2M_LABS</u>, <u>INC</u>.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-003

Level (low/med):

LOW

Date Received: 4/4/2006

% Solids:

95.6

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	12.3		*E	P
	_	1			Τ

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

lents:
Date Reported: 4/6/06

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

APC11-BS-011

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>1</u>0478

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-004

Level (low/med):

LOW

Date Received: 4/4/2006

% Solids:

92.4

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

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

Color Before: BROWN

Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

Comments: Date Reported: 4/6/06

	1		
NORGANIC	ANALYSTS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-012

Lab Name: H2M LABS, INC.

Contract:

SDG No.: ATC003

Matrix (soil/water): SOIL

Lab Sample ID: 0604161-005

Level (low/med):

LOW

Lab Code: 10478 Case No. SAS No.:

Date Received: 4/4/2006

% Solids:

<u>91.0</u>

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	Ü		Р
7440-22-4	Silver	77.9		* E	Р
		T	i -		

Color Before: BROWN Clarity Before:

Texture:

FINE

Comments:

Date Reported: 4/6/06

Color After: YELLOW Clarity After: CLEAR

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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	С	Q	М
7440-43-9	Cadmium	0.073	В		P
7440-22-4	Silver	32.5		*E	₽
			$\overline{}$		

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:_	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Commer	nts:		
D	Date Reported: 4/6/06	•	•
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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	С	Q	М
7440-43-9	Cadmium	0.18	В		P
7440-22-4	Silver	123		*E	Р
	1		l		

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments: Date Reported: 4/6/06

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-012

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

SAS No.:

SDG No.: ATCOO3

Matrix (soil/water): SOIL

Case No.

Lab Sample ID: 0604161-008

Level (low/med):

LOW

Date Received: 4/4/2006

% Solids:

71.6

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.47	В		P
7440-22-4	Silver	95.1		*E	P
_	T .		I		

Color Before: BROWN Clarity Before: Color After: YELLOW Clarity After:

CLEAR

Texture:

FINE

Comm	ents:
	Date Reported: 4/6/06

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-013

Lab Name: <u>H2M LABS</u>, <u>INC</u>.

Contract:

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Case No.

Lab Sample ID: 0604161-009

Level (low/med):

Lab Code: 10478

LOW

Date Received: 4/4/2006

% Solids:

87.4

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.35	В		P
7440-22-4	Silver	139		*E	P
	1	1			

Color Before: BROWN Clarity Before: Color After: YELLOW Clarity After:

CLEAR

Texture:

FINE

Comm	ents:
	Date Reported: 4/6/06

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-SW-014

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>1047</u>8

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:

<u>85.8</u>

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.24	В		P
7440-22-4	Silver	67.9		* E	P
	1	T			

Color Before: BROWN

Clarity Before:

Texture:

Color After: YELLOW Clarity After:

CLEAR

Date Reported: 4/6/06	

			TN	1	EPA SAMPLE NO							
INORGANIC ANALYSIS DATA SHEET Lab Name: <u>H2M LABS</u> , INC. Contract:										APC11-	-SW-015	
	Lab Code:	Code: 10478 Case No. SAS No.:								SDG No.:	ATC003	
Matrix (soil/water):			SOIL		06	04161-011	<u>.</u>					
Level (low/med):		TOM		4/	4/2006							
% Solids:			<u>83.7</u>									
		Concentra	tion Units	(ug/L or mg/kg	dr:	y weigh	t):	MG/K	<u>:G</u>			
		CAS No.	Analyte	Concentration	С	Q	М					
			Cadmium	0.092		`	Р					
		7440 22 4	0 / 1	107	- 1	4 12	-					

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

ents:
Date Reported: 4/6/06

	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

nalyte C	Concentration		Q	M
mium	0.014	ן ט		P
ver	162		*E	P
	lmium ver			

Color Before: BROWN Clarity Before: Color After: YELLOW Clarity After:

CLEAR

Texture:

FINE

Artifacts:

Comments: Date Reported: 4/6/06

	1		
NORGANIC	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

7440-43-9 Cadmium 0.13 B F 7440-22-4 Silver 120 *E F	CAS No.	Analyte	Concentration	С	Q	М
7440-22-4 Silver 120 *F	7440-43-9	Cadmium	0.13	В		P
7440-22-4 311Ve1 120 E F	7440-22-4	Silver	120		*E	P

Color Before: BROWN

Clarity Before:

CLEAR

Texture:

Color After: YELLOW Clarity After:

Commer				
E	Date Reported: 4/6/06			
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_			 	
_		_ 	 	

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	DateRecd at Lab	Date Analyzed
0604161-001	APCII-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	APCII-BS-010	SOIL	AG,CD,	04-Apr-06	04/06
0604161-004	APCII-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	APCII-SW-010	SOIL	AG,CD.	04-Apr-06	04/06
0604161-006DUP	APCII-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	APCII-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

16948

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd. Melville, NY 11747-5076 CLIENT: ATC Tel: (631) 694-3040 Fax: (631) 420-8436 H2M SDG NO: ATC PROJECT NAME/NUMBER NOTES: Project Contact: SYJBER. SHOREHAM REMEDIATION Phone Number: SAMPLERS1(signature)/Client PIS/Quote # ATC ASSOCIATES 6 906 DELIVERABLES: Total No. of Containers R5-70D ANALYSIS REQUESTED TURNARQUND TIME: 24-48 HR.V 71 DAY PKG ORGANIC INORG. Metal S δ ¥ } 5 LAB I.D. NO. REMARKS: **MATRIX** FIELD I.D. DATE TIME 0604161-3 X ga MS/MSD 4/4/00/11:12 APCIL-SW-010 SUIL 11:17 APCIL-SW -OIL $-\infty7$ SOLL -013 4/4/11:22 AFC11-5W-911 5014 APCIL SWI-012 80<u>0</u>_ 11:20 501 APCIL-SW-013 4 4/0013:15 5014 -CXX9 -010 4/4/06/13:21 SOIL APC11.5W-014 -011 14/4/06/13/18 SOIL APC11-5W-015 -017 4/4/03/13.25 5014 APCIL-SW-016 6613-30 Soil APCII-BS-008 $-\infty1$ APC11-B5-009 - 002 4/4/13:33 5014 Relinquished by: (Signature) Dale, Time Received by: (Signature) Date Time LABORATORY USE ONLY 4/4/06 16:03 4/4/06 Samoles were: 16:63 Discrepancies Between 1. Shipped___ or Hand Delivered___ Airbil# Received by: (Signature) Date 'Date Time Sample Labels and Relinguished by: (Signature) Time 2. Ambient or chilled. Temp 4/4/00 17:22 COC Record? Y or N 17:22 4.4.06 3. Received in good condition: Y or N 4. Property preserved: Y or N Explain: Dala Time Received by: (Signature) Date Time Relinquished by: (Signature) COC Tape was: 1. Present on outer package: Y or N Relinquished by: (Signature) Received by: (Signature) Date Date Time Time 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt: YorN

16949

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076																				
Tel: (6	<i>31)</i> 694	1-3040 l	ax: (631)	420-843	6		CLIE	NT:	Δ	TC								1	12M SDG	NO: ATO OOK
PROJE	CT NAM	E/NUME	BER												7		NOTES			Project Contact:
2	HORE	MALH	REME	DIATIO	NC		595								AMB					
							Sample Container Description								ļ	l				Phone Number:
					5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5								\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \							
SAMPLERS: (signature)/Client			Sam								C11,55					DICIO CAL A				
ATC ASSOCIATES												g ⁱ					PIS/Q406e #) 906			
DELÍVE	RABLES														4					
		_	5-70				lo. of Iners		ΑN	ALY	SIS RI	EQI	JEST	ED						
TURNA	ROUND	TIME:	4-48 11	e. V -	210	M PKG.	Total No. of Containers	OR	GANI	С					INO	RG.				
		MATRIX	4-48 He. V-21 DAM FEG.				VOA	BNA	Pest/ PCB				`.'	Metal	CN	<u> </u>	AB I.D.	NO.	REMARKS:	
4/4/06	13.40	5014	APC11-BS-010											X		9	416	1 -003		
4/4/06	13:42	SOIL	APCIL	- BS -	011		l .								X				- 004	
4/4/0 13:45 SOIL APCIL BS-012											X		. 0	/	-005					
																				_
			·																	
																	•			
Relinquistrod by: (\$lor(ature) Date Time Received by: (\$lor			iature)	1	_	<u>,</u>	Date	_	T1r 16:0	1					ORY USE ON	LY				
Relinguished by: (Signature) / Date Time Received by: (Sign		ature)	$\stackrel{\sim}{-}$			Date		Tir				cles Betwabels and	1.		and DeliveredAirbill#					
4/4/1/16 17:22				>		4.4.		1752	1	COC	Rec	ord? You	·N 3.	Ambient or chilled Received in good	condition: Y or N					
Refinquished by: (Signature) Date Time Received by: (Signature)		ature)				Date	è	Tin	ne	Expl	aln:		4.	Property preserve	od; YorN					
															OC Tabe was: Present on outer :	nackage: YorN				
Relinquished by: (Signature) Date Time Received by: (Sign			ature)				Date	•	Tin	ne				2.	Unbroken on outs	er package: Y or N ent & complete upon sample receipt:				
·														_		_		or N	overprote open earlipe to alp.	

ATC 003

Sample Receipt Checklist

Client Name ATC			Date and T	ime Receive	4/4/2006 5:22:00 PM
Work Order Numbe 0604161			Received b	y PS	
Checklist completed b	Date	4.06	_ Reviewed b	y	1 (o 00
Matrix	Carrier name	Hand Delivered	<u>i</u>		
Shipping container/cooler in good condition?		Yes 🗹	No 🗌	Not Applicable	
Custody seals intact on shippping container/coo	ler?	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	ce?	Yes 🗹	No 🗌 🤚	< 6°C	
Water - VOA vials have zero headspace?	No VOA vials sub	mitted 🗹	Yes [No 🗆	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗌		
	Adjusted?	Ch	necked b		
Any No and/or NA (not applicable) response mu	ost be detailed in the	comments sectio		erson contacted	=======
Contacted by:	Regarding				
Comments:		· .			
Corrective Action	,				
		· 			<u> </u>
*					

ATC003 S

INTERNAL CHAIN OF CUSTODY

CLIENT: ATC	DELIVERABLES: _{	<u>35-70 D</u> TURN AROUND	TIME: 24-48hr V-21Day pk	و:
SDG #: <u>ATC 003</u>	CASE #:	MATRIX: Soil	PH CHECK Y or N	
REMARKS:	· .			
RECEIVED BY:	SIGNATUR	RE: DATE	: 4,4,06TIME: 17122	

	H2M LAB DATE		BOTTLE	# OF	TESTS	
CLIENT ID	#	COLLECTED	TYPE	BOTTLES		
· APCII- BS-008	0604161 -1A	4.4.06	Α		PMOIST 6010_S, PKG (SEL)	
, 1 -009	-2A					
-010	- 3A					
-011	-4A				·	
· V-012	-5A			<u> </u>		
. SW-010	-6A			_3		
, -011	-7A			l		
-012	-8a_					
-013	_9A		•			
-014	-10A					
-015	-UA					
-016	-12A		, .			
" V V-911	V-13A	V	<u></u>	V	V	
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B						
16		ps				
17		4.4.01	,			
12						
n						
36						

METALS

CLIENT: ATC

SDG #: ATCOOS

INTERNAL CHAIN OF CUSTODY

			SAMPLE			PURPOSE OF]
2	ł	} `	RELINQUISHED	Sample	BOTTLE	CHANGE OF		
	DATE	TIME	BY	RECEIVED BY	TYPE	CUSTODY	INIT	
-	4.4.06	17:42	STON	SICH	A	Anausis		
	415/06	inm	"E are	3 Keck M	A	Das _		
M	4 5106	1345	A field na	310	Albies	Storage / Analys	77	
		20:00	E-att	nule fittered	70igs	Forage/Analys		
된	415106		Charle general	Sign Sign	0 <u>184</u>	Storage		,
	4/44	8:00	East	Site lew	42	PHUS+		* OUT
	4/15/1	8:20	Resto Bes	9) 60 d	A	Story c		* out
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			NOIE	SIGN		,		
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			HOIE	SIGH		·		0
7								310

METALS

 $\mathsf{ATC}003$ S

APPENDIX B

Project Name: Project No.: Project Manager: Laboratory:	Peerless Photo Pro 68.28817.0001 M. McNally H2M	ducts		San Rev	se No./SDG: npling Date(s): riewed By: npletion Date:	ATC003 4/4/2006 M. Traxler 5/23/2006		
Compound List: Method: Matríx:	TAL CLP SOW 3/90 X soil/solid (mg/Kg)	Append X SW-84			X OtherCd, Ag			
The following table in	ndicates the data val	idation	criteri	a exar	mined, problems	identified,		
and QA action.								
Data Validation Criter	ia: 	accep	t FYI	qualif	y comments			
Holding Times		×			Less than 180 d	ays		
Calibration Linearity and CN	- Furnace, Hg ,				NR			
Calibration Verification	on 	×	11	11	2-point standard	 		
CRDL Standard		×		2.4	50 - 150 % R			
Calibration Blanks		×		A 51	< RL	rwy - mae ro cy rwoe e a So re		
Preparation Blanks		X	2888		< RL			
Field Blank		×			< RL			
ICP Interference Chec	k Sample	×			80 - 120 % R			
Laboratory Control S	ample	X			80 - 120 % R			
Matrix Duplicate Resu	ılts			X	Ag results > 35	RPD		
Matrix Spike Results	and the second second second		X		Ag results >4X :	spike		
ICP Serial Dilution				×	Ag results >10 f	RPD; Cd <50X IDL		
Post Digestion Analyt	tical Spike		Learning 1		NR	ud – 1780 u. to 1886 kim skek m		
Method of Standard A	Addition				NR			
Field Duplicate Resul	ts	X		postiti.	< 50 RPD	SSS-1 adaptive that were supply to the second of		
Sample Result Verific	ation	×			Cadmium and 5	Silver		
Other:								
General Comments:								

QA Scientist Mark Staple Date 5/24/06

NR - Not reviewed

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC003

Project Number: 68.28817.0001

-	Sample Location
	or Description
	Sample Number
	Sampling Date
_	Units
1	

APC11-SW-010	APC11-SW-010D	APC11-SW-010S
0604161-006	0604161-006D	0604161-006S
4/4/2006	4/4/2006	4/4/2006
mg/kg	mg/kg	mg/kg

Spike

Sample Result

MD Result

MS Result

Amount

						ND RPD		M5 %K	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

QA Scientist Mark Hader Date 5/24/06

⁻ Denotes RPD outside criteria

Inorganic Field Duplicate Precision Worksheet ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC003

Project Number:

68.28817.0001

Sample Location	APC11-SW-001	APC11-SW-901
or Description		
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	$\top \top$

QA Scientist Mak Shades Date 5/24/06

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): $\underline{MG/KG}$

	Initial Calib. Blank			Continu Bl	Prepa- ration						
Analyte	(ug/L)	С	1	С	2	С	3	С	Blank	С	М
Cadmium	0.	1 U		0.1 U		0.1 0	0	. 1 U	0.01	2 U	P
Silver	0.	4 U		0.4 U		0.4 U	0	. 4 U	0.04	15 0	P
	Ţ			1							T - 1

3 BLANKS

Lab Name: <u>H2M LABS, INC.</u>

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC003

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calib. Blank		C		uing Cal lank (ug		on		Prepa~ ration			
Analyte	(ug/L)	С	1	С	2	С	3	c }	Blank	С	N	1
Cadmium	 	\top	0.	1 0						7	P	
Silver			0.	4 U							P	
						7					T	

5A SPIKE SAMPLE RECOVERY EPA SAMPLE NO

APC11-SW-010S

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 83.6

	Control Limit	Spiked Sample	Sample		Spike			
Analyte	%R	Result (SSR) C	Result (SR)	С	Added (SA)	₽R	Q	M .
Cadmium	75-125	5.7727	0.0730	В	5.98	95.3		Р
Silver		95.9372	32.4635		5.98	(1061.3	5	Р

Comments:	•

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

Analyte	Control Limit	Sample (S)	С	Duplicate (D)	C		RPD	(2	м
Cadmium	0.5981	0.0730	В	0.0897	В		20.6	T	Ì	P
Silver		32.4635		104.4548			(105.2	1)	*	P
			T			[

9 ICP SERIAL DILUTIONS

Lab Name: <u>H2M LABS</u>, INC.

Contract:

APC11-SW-010

Lab Code: 10478 Case No. SAS No.:

SDG No.: ATC003

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

	Initial Sample	Serial Dilution	% Differ-	
Analyte	Result (I) C	Result (S) C	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

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.

Mark Traxler

Senior Quality Assurance Scientist

Park Stapler

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.

Site Name	Peerless Photo Products
roject Number	68 28817 0001

Soil (mg/kg)

Laboratory

H2M - Melville, New York

Project Number 68.28817.0001
Sampling Date(s) 4/5/2006

Case/Order #
Fraction/Method

ATC004 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	PF	Q DF	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	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% 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 Locati or Description		AF	C11-S	W-01	9	APC11-	SW-02	20	APC11	-SW-0	21	APC1	1-SW-9	920													
	Sample Numb	er	06	0421	7-00	9	06042	17-01	10	06042	217-0	11_	0604	217-0	12													
	Sampling Date	•	j	4/5/2	006		4/5/2	006		4/5/	2006		4/5	/2006	;													
	Preparation Da	ate		4/5/2	006		4/5/2	2006		4/5/	2006		4/5	/2006	3							_						
	Analysis Date	_	1	4/6/2	006		4/6/2	006		4/6/	2006		4/6	/2006	;				П									
	Percent Solids	3		61.	9	Į	90	.8		7	5.0		8	39.2					Т									
₹Ľ ig≧vil	_	P	F		Q	DF		Q	DF		Q	DF		Q	DF	Q	DF	Q	DF	Q	DF	Q	DF	Q	DF		ן ב)F
50	Cadmium	X	0.2	6 B	J	1	0.11 B	J	1		U	1	0.071	ВЈ	1													
00	Silver	X	23	7 N*	J	1	118 N*	J	1	245 N	J	1	199 N	* J	1		_	\top		 					T			

P-ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist M Judy DATE 5/26/06

ATC004 Data Summary

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%. Sliver 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

Vice President

ATC004 S12

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC004

Analytical Requirements

SDG: A1C004		_
Customer	Laboratory	Na.
Sample	Sample	ME
Code	Code	
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

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.

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.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: 0604217-001

Level (low/med):

LOW

Date Received: 4/5/2006

% Solids:

<u>9</u>5.3

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.059	В	_	P
7440-22-4	Silver	7.3		N*	P

Color Before: BROWN Clarity Before:

Texture:

COARSE

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

Commen	1651				
Da	ate Reporte	d: 4/10/06	 	 	
		-			
-					
_			 	 	

			U.S. EPA	- 0	LP					
		TN	1	C 1	יש ביישר	reem			EPA SAMP	LE 1
		IN	ORGANIC ANALYSI	5 !	DATA SE	1LET			APC11-BS	 5-01:
Lab Name:	H2M LABS,	INC.		Cor	tract:			<u> </u>		
Lab Code:	10478	Case No.	SAS	5 N	o.:			S	DG No.: A	ATC0
Matrix (sc	oil/water):	SOIL			Lab Sa	ample	·ID:	060	4217-002	
Level (low	/med):	LOW			Date F	Recei	ved:	4/5	/2006	
% Solids:		<u>89.3</u>								
	Concentra	tion Units	(ug/L or mg/kg	dr	y weigh	nt):	MG/K	(G		
		T								
	CAS No.	Analyte	Concentration	С	Q	М	ı			
	CAS No.	Analyte Cadmium	Concentration 0.014		Q	M				
		<u> </u>		U	Q N*					
Color Befo	7440-43-9	Cadmium Silver	0.014	U		P	Textu	re:	COARSE	_

Comments:				
Date Repo	orted: 4/10/06			
		 		
		 · ·		

,				U.S. EFA	- C.	LP					
'			7.11	l	0 0	, m,	, 5 F M		E	PA SAI	MPLE NO
			1 N	ORGANIC ANALYSI	ט א	ATA SE	ILLT			APCI1-	BS-014
	Lab Name:	H2M LABS,	INC.		Con	tract:					
	Lab Code:	10478	Case No.	SA:	S No	.:			SDG	No.:	ATC004
	Matrix (so	il/water):	SOIL			Lab Sa	ample :	ID:	060421	7-003	
	Level (low	/med):	LOW			Date E	Receive	ed:	4/5/20	06	
	% Solids:		92.8								
		Concentra	tion Units	(ug/L or mg/kg	dry	weigh	nt):	MG/KC	<u> </u>		
		CAS No.	Analyte	Concentration	С	Q	М				
		7440-43-9	Cadmium	0.013	ان	_	P				
		7440-22-4	Silver	0.075		N *	P				
	Color Befo	re: BROWN	Clarity	Before:		_	Τe	xtur	e:	COARS	E
	Color Afte	er: YELLOW	Clarity	After: CLEA	R		Ar	tifa	cts:		

Comment		
Dat	e Reported: 4/10/06	
	·	

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

Lab Name: <u>H2M LABS</u>, INC.

Contract:

APC11-BS-015

Lab Code: 10478

8 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

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

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

nents:	-			
Date Reported: 4	/10/06		 	

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-016 Contract:

Lab Name: H2M LABS, INC.

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	С	Q	М
7440-43-9	Cadmium	0.013	Ü		Р
7440-22-4	Silver	0.50	В	_N*	P

Color Before: BROWN Clarity Before: Color After: YELLOW Clarity After:

CLEAR

Texture:

FINE

Artifacts:

Comments: Date Reported: 4/10/06

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

APC11-BS-017

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	С	Q	М
7440-43-9	Cadmium	0.014	Ū		P
7440-22-4	Silver	0.079	В	N*	P

Color Before: BROWN Clarity Before: Color After: YELLOW

Clarity After: CLEAR

Texture:

FINE

Artifacts:

Date Reported: 4/10/06

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ILM04.1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-SW-017

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: <u>10478</u>

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:

<u>49.3</u>

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.26	В		P
7440-22-4	Silver	_ 13.3	_	N*	P
	T				

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:_	YELLOW	Clarity	After:	CLEAR	Artifacts:	

	Date Reported: 4/10/06
-	

	INORGANIC	ANALYSIS	DATA	SHEET	1
 					1

EPA SAMPLE NO

APC11-SW-018

Lab Name: <u>H2M LABS</u>, 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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.036	В		P
7440-22-4	Silver	65.4		N*	P
ĺ		1	l	}	! {

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Commen	ts:				•	
Da	ate Reported:	4/10/06				
-				 		
				 		

	1		
NORGANIC	ANALYSIS	DATA	SHEE

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

APC11-SW-019

Lab Code: <u>10</u>478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: <u>0604217-009</u>

Level (low/med):

LOW

Date Received: <u>4/5/2006</u>

% Solids:

61.9

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.26	В		P
7440-22-4	Silver	237		N*	P
				,	

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

rounite.	ils:					
D	Date Reported:	4/10/06	·	 	_	
_						
_						
-				 		
_				 		

	1		
NORGANIC	ANALYSTS	DATA	SHEET

EPA SAMPLE NO

APC11-SW-020

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Case No.

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	С	Q	М
7440-43-9	Cadmium	0.11	В		P
7440-22-4	Silver	118		N *	P
	T				

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts:

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\mathcal{E}
Ù

Comm	ents:
	Date Reported: 4/10/06

	1		
NORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-SW-021

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.016	U		P
7440-22-4	Silver	245		N*	₽
	 	1			

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments	3:			*	
Date	e Reported:	4/10/06			

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

Lab Name: H2M_LABS, INC.

Contract:

APC11-SW-920

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC004

Matrix (soil/water): SOIL

Lab Sample ID: <u>0604217-012</u>

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	С	Q	М
7440-43-9	Cadmium	0.071	В		P
7440-22-4	Silver	199		N*	Р
				J	

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

Comme	ents:
	Date Reported: 4/10/06
	Date Reported Type Type Type Type Type Type Type Type

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	DateRecd Date at Lab Analyz
0604217-001	APC11-BS-012-DA	SOIL	AG,CD,	U5-Apr-06 04/06
0604217-002	APC11-BS-013	SOIL	AG,CD,	05-Apr-06 04/00
0604217-002DUP	APC11-BS-013D	SOIL	AG,CD.	05-Apr-06 04/00
0604217-002MS	APC11-BS-013S	SOIL	AG,CD,	05-Apr-06 04/00
0604217-003	APC11-BS-014	SOIL	AG,CD,	05-Apr-06 04/06
0604217-004	APCIJ-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 CLIENT: ATC H2M SDG NO: AT Tel: (631) 694-3040 Fax: (631) 420-8436 PROJECT NAME/NUMBER NOTES: Project Contact: ANBER COLIN CHAMBERS SHOREHAM REMEDIATION * Toran Cd + Ag Sample Container Description Phone Number: SAMPLERS: (signature)/Client PIS(Quote #) ATC ASSOCIATES Νì 906 ΰ DELIVERABLES: Total No. of Containers R5-70D ANALYSIS REQUESTED TURNARQUND TIME: 24-48 HR.V - 21 DAY PKG **ORGANIC** INORG. Metal BNA PCB 20 FIELD I.D. LAB I.D. NO. REMARKS: TIME MATRIX X 0604217-007 45/06/12:41 1801 APCIL-SW-017 X -008 APC11-5W-018 12:44 5012 -009 APC 11-5W-019 12:47 5014 APCII-SW-020 -010 415/06/12:57/5016 APC11-5W-920 12:52 SOIL -012 415/06/12:58 5016 APC11-5W-021 -0// 3 45/06/13:00/5016 MSIMSD APCIL -BS-013 4/5/06/13:31 5012 APCIL-BS-012-DA APC11-BS-014 =(X)3 4/5/06/13.21/5016 415/06/13:23/5016 APC.11-B5-015 -(x)4Relinquished by: (Signature) Received by (Signature) Date Time Date Time LABORATORY USE ONLY 4/5/06 4.5.04 14:45 14:42 Samoles were: Discrepancies Between 1, Shipped___ or Hand Delivered __ Airbill# Date Date Time Received by: (Signature) Tlme Belinquisited by: (Signature) Sample Labels and 2. Ambient or chilled, Temp_ A 5.06 16:40 4.5.06 15:40 COC Record? Y or N 3. Received in good condition: Y or N 4. Properly preserved: Y or N Explain: Date Received by: (Signature) Date Time Relinquished by: (Signature) COC Tape was: 1, Present on outer package: Yor N Relinguished by: (Signature) Date Time Received by: (Signature) Date Time 2. Unbroken on outer package; Y or N CQC record present & complete upon sample receipt;

H2M LABS, INC.

16951

EXTERNAL CHAIN OF CUSTODY

3/3 Bload Hollow Ita, melville, NT TTT-0010														
Tel: (631) 694-3040 Fax: (631) 420-8436						H2M SDG	NO:							
PROJECT NAME/NUMBER				l	1 1		l		1	1	NOTES:		Project Contact:	
SHOREHAM REMEDIATION	Italner								AMB		X TOTA	n	COLIN CHAMBERS	
	Sample Container Description								LASS		¥ Ton	+ Ag	Phone Number: 609-571-7519	
SAMPLERS (signature)/Cilent ATC ASSOCIATES	Sam						!		02.6			•	PISQuote#)	
DELIVERABLES:				<u>L</u>			<u> </u>		7				——————————————————————————————————————	
B5-70D	0.00	MALY ANALY			YSIS REQUESTED		D							
TURNARQUND TIME: 24-48 HR. V - 21 DAY PKG.	Total No. of Containers	OR	GANI	C		_			INO	RG.			,	
DATE TIME MATRIX FIELD I.D.		. VOA	BNA	P.C.B				5	Meta	CN	LAB I.I	D. NO.	REMARKS:	
45/06/13:26/5012 APCII-BS-016								_	X		06042	7-005		
4/6/04 13:35 SOIL APCIL-BS-017									X			-000		
														
						_[
						_								
	<u> </u>										·			
Relinquished by: (Signature) Date Time Received by: (Sign	ature)			-	Date A	·]	Tir				LABORATORY USE ONLY			
Relinquished by (Signature) Date Time Received by ISign	ature)				Date	3	Tlr		Sam	ple L	repancies Between pie Labels and Record? Y or N Semples were: 1. Shipped or Hand Delivered Airbili# 2. Ambient or chilled, Temp 3. Received in good condition: Y or N		d, Temp	
Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Received by: (Signature)		nature)			Date	_	15:40		Explain:		יאטר ז (אוא	Received in good Properly preserve	good condition: Y or N served: Y or N	
					24.0							COC Tape was:		
					Date	,	Tin	ne				2. Unbroken on outs	package: YorN orpackage: YorN	
												Y or N	ent & complete upon sample receipt:	

(_

H2M LABS, INC.

ATCOOY

Sample Receipt Checklist

necklist completed b Signature Carrier na	5 - D (S	Received Reviewed		, ,
Signature		Reviewed		1 1
atrix Carrier na			l by	4/6/C
	ame <u>Courier</u>			
nipping container/cooler in good condition?	Yes 🗸	No 🗌	Not Applicable	
ustody seals intact on shippping container/cooler?	Yes 🗌	No 🗌	Not Applicable 🗹	
ustody seals intact on sample bottles?	Yes 🗌	No 🗌	Not Applicable 🗹	
nain of custody present?	Yes 🗸	No 🗌		
nain of custody signed when relinquished and received?	Yes 🗹	No 🗌		
nain of custody agrees with sample labels?	Yes 🗹	No 🗌		
amples in proper container/bottle?	Yes 🗹	No 🗌		•
ample containers intact?	Yes 🗹	No 🗌		
ufficient sample volume for indicated test?	Yes 🗹	No 🗌		
I samples received within holding time?	Yes 🔽	No 🗌		
ontainer/Temp Blank temperature in compliance?	Yes 🔽	No 🗀 .	26°C	
ater - VOA vials have zero headspace? No VOA vials	s submitted 🗹	Yes	□ No □	
ater - pH acceptable upon receipt?	Yes 🔽	No 🗌		
Adjusted?		Checked b		
ny No and/or NA (not applicable) response must be detailed in	the comments se	ction b	======	=====
lient contacted Date contacted	d:		Person contacted	
ontacted by: Regarding				
omments:				
orrective Action				

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: ATC	DELIVER	ABLES: B5-	70D TURN AROU	ND TIME: 24-48 hr V-	
SDG#: ATCOOT	CASE #:		MATRÍX: SOIL	pH CHECK Y or N	PKg-
REMARKS:			· ————————————————————————————————————		
RECEIVED BY:	PS	SIGNATURE:	DA DA	TE: 4.5.06TIME: 15: 40	

	H2M LAB	DATE	BOTTLE	# OF	TESTS
. CLIENT ID	#	COLLECTED	TYPE	BOTILES	REQUESTED
APC.11-BS-012-DA	0604217 1 -1A	4.5.06	A		DMOIST 6010-S-PKG (SEL)
APCII- BS-013	-2A			3.	
. 1-014	-3A			1	
-015	-4A				
-016	-5A				
· V-017	-6A				
SW-017	7A	 			
-018	-8A			 	
-019	9A				
- 020	-10A	-			
" -02	-IIA				
" V V-920	V-12A	V	V	V	<u> </u>
п			<u> </u>		
"					
19		PS			
14		450	0		
17					
н		<u> </u>			
19					
>>				<u> </u>	

METALS

H2M LABS, INC.

CLIENT: ATC

SDG #: ATC 004

INTERNAL CHAIN OF CUSTODY

		<u> </u>	SAMPLE RELINQUISHED	SAMPLE	BOTTLE	PURPOSE OF CHANGE OF	
l	DATE	TIME	BY	RECEIVED BY	TYPE	CUSTODY	INIT
	9.5.06	17:20	3103	SION .	A·	Analysis	
	16-6	7:10	810	SION / Kore	A	Phast	
	4-6+18	7:30	like Hone	9101	A	Stora	
	4-506	5300	FICH CO	Abah	A	Dics	
	4-606	230	Ahada	31007	ADISS	Stray Archi)
			FICE	SION C	1		
L 53	_ _		Blow	KOIE		•	
3			8104	SION			
			510M	aich	·		
	-		51001	SICH			
	. 1	-	HOIC	SICH			
		-	ROIS	51CN			
			ROIE	SICH			
			SION	SICH		-	
			MOIE	alch			
			MOIE	SICH			
			210H	9109			
			310M	HOIZ			
		-	SION	SICH			
	-		alom	SION ·			
			zion	SION			
			SION.	310N			
		· -	HOIE	SICH			
			alon	21CH			<u> </u>
			атом	SICH			
3			2108	SICH		· · · · ·	

* Out of Soquence

METALS

APPENDIX B

Project No.: Project Manager:	Peerless Photo Pro 68.28817.0001 M. McNally H2M	ducts		Sam Revi	e No./SDG: pling Date(s): lewed By: ppletion Date:	ATC004 4/5/2006 M. Traxler 5/26/2006
Compound List: Method: Matrix:	TAL CLP SOW 3/90 X soil/solid (mg/Kg)	Append X SW-84			X OtherCd, Ag	
The following table ind and QA action.	icates the data val	idation	criteri	a exan	nined, problems	identified,
Data Validation Criteria	:	accep	ot FYI	qualify	y comments	
Holding Times Calibration Linearity - F	Furnace, Hg ,	X			Less than 180 d	ays
and CN Calibration Verification		X			2-point standard	(1) 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
CRDL Standard		×		<u> </u>	50 - 150 % R	
Calibration Blanks Preparation Blanks		X X			< RL < RL	
Field Blank ICP Interference Check	Sample.	×			< RL 80 - 120 % R	
Laboratory Control San Matrix Duplicate Result		X	×	18. 1 12. 4 14. 4	80 - 120 % R Ag > 20 RPD bi	ut < 35 RPD
Matrix Spike Results ICP Serial Dilution		x		X	Ag = 136.9 %R < 10 RPD	
Post Digestion Analytic Method of Standard Ad					NR NR	
Field Duplicate Results Sample Result Verificat	ghanna - Lawaga Lawa	×		X	Ag > 50 RPD (5	an batan batan
Other: General Comments:			⊔ —-			
·			_			

NA - Not applicable NR - Not reviewed

QA Scientist__

Marke Haples

Date 5/26/06

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

Project Name:

Peerless Photo Products

Case/SDG Number: ATC004

Project 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

Sample Result

MD Result

MS Result

Amount

					אטועו ארט	Q	IM2 24K	Q
Cadmium	5.60	0.0137	0.0137	4.9138	0.0		87.8	\Box
Silver	5.60	5.519	3.9450	13.1822	33.3	*	136.9	*

Q - Qualifier

QA Scientist Mark Japles Date 5/26/06

^{* -} Denotes RPD outside criteria

Inorganic Field Duplicate Precision Worksheet ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC004 Project Number: 68.28817.0001

Sample Location	APC11-SW-020	APC11-SW-920
or Description		
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	*

QA Scientist Mark Maples Date 5/26/06

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC004

Preparation Blank Matrix (soil/water):

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

	Initial Calib. Blank						- 11						Prepa- ration			
Analyte	(ug/L)	С	1		С	2		С	3		С		Blank	С		М
Cadmium	0.	6 B		0.5	В		0.4	В		0.5	В	\top	0.021	В	Ħ	P
Silver	0.	4 U		0.4	U		0.4	υ		0.6	В		0.045	Ü		P

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC004

Preparation Blank Matrix (soil/water):

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

	Initial Calib. Blank	ì	(Continuing Calibration Blank (ug/L)							
Analyte	(ug/L)	С	1	С	. 2	С	3	С	Blank	С	M
Silver	0.	4 U).5 B		D.4 U	0	. 4 U		-	P

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.: ATCOO4

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 89.3

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

	Control Limit	Spiked Sample		Sample		Spi	ke			
Analyte	%R	Result (SSR) (2	Result (SR)	С	Added	(SA)	%R	Q	М
Cadmium	75-125	4.9138		0.0137	U		5.60	87.8		P
Silver	75-125	13.1822		5.5190			5.60	136.9	N	P

Comme	ents:	•

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-BS-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

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

Comm	ents:

6 DUPLICATES EPA SAMPLE NO

APC11-BS-013

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATCOO4

Matrix (soil/water): SOIL

% Solids for Sample: 89.3

% Solids for Duplicate: 89.7

Level (low/med): LOW

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

Analyte	Control Limit	Sample	(S)	С	Duplicat	e (D)	C	RPD	Q	M
Cadmium			0.0137	U		0.013	37 0		1	P
Silver	1.1198		5.5190		J	3.945	50	/33.3) *	P
							T		i	

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
SENIOR QUALITY ASSURANCE SCIENTIST

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.

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.

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		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 Numb	er	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 Da	ate_	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
RENO		PF	Q DF	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	1	U 1	U 1	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	355 E J 1	344 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	PF	Q DF	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

QA Scientist Mayor DATE 5/28/06

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

Vincent Stancampiano

Vice President

ATC005 S1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Analytical Requirements

SDG: ATC005		
Customer Sample	Laboratory Sample	ME
Code	Code	
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	Х
APC11-SW-022	0604265-010	Χ

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.

		* 11	1	0 5		ueem			EPA SA	MPLE NO
		1 N	ORGANIC ANALYSI	.S L	ATA S	HEET			APC11-	BS-007B
Lab Name:	H2M LABS,	INC.		Con	tract	:		Ĺ		
Lab Code:	10478	Case No.	SA	S No	o.:			SD	G No.:	ATC005
Matrix (so	oil/water):	SOIL			Lab S	ample	e ID:	0604	265-001	-
Level (low	/med):	LOW			Date	Recei	lved:	4/6/	2006	
% Solids:		<u>91.5</u>								
% Solids:	Concentra		(ug/L or mg/kg	dry	weig	ht):	MG/K	G		
% Solids:	CAS No.		(ug/L or mg/kg		weig Q	ht):	MG/K	G		
% Solids:		tion Units		С			<u>MG/K</u>	G		

Comm	nments:		
	Date Reported: 4/10/06		
			

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	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	0.12	В	E	P

Color Before:	BROWN	Clarity Bef	fore:		Texture:	FINE
Color After:	YELLOW	Clarity Aft	er: (CLEAR	Artifacts:	

Comme	ents:	
	Date Reported: 4/10/06	
		_

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-019

Lab Name: H2M LABS, INC.

Contract:

Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-003

Level (low/med):

Lab Code: <u>104</u>78

LOW

Date Received: 4/6/2006

% Solids:

91.7

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	U		Р
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	

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.: ATC005

Matrix (soil/water): SOIL

Lab Sample ID: 0604265-004

Level (low/med):

LOW

Date Received: 4/6/2006

% Solids:

96.5

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.046	В		P
7440-22-4	Silver	51.8		E	P

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

FORM I - IN

Texture: Artifacts: FINE

Comments:

Date	Reported:	4/10/	Uŧ

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	С	Q	М
7440-43-9	Cadmium	0.013	υ		P
7440-22-4	Silver	295		E	P

Color Before: BROWN Clarity Before:

CLEAR

Texture:

FINE

Color After: YELLOW Clarity After:

Artifacts:

ents:	
Date Reported: 4/10/06	
	•

		TN	ORGANIC ANAL	1	רא מיז א	והבית		E	PA SAI	MPLE NO
Lab Name: H2	M LABS,		ORGANIC ANAL		ntract:				APC11-	-BS-022
Lab Code: 10)478	Case No.		SAS N	lo.:			SDG	No.:	ATC005
Matrix (soil/	/water):	SOIL			Lab Sa	ample	ID:	060426	5-006	
Level (low/me	ed):	LOW			Date F	Recei	ved:	4/6/20	06	
% Solids:		93.3								
Со	ncentra	ion Units	(ug/L or mg/	'kg dr	y weigh	nt):	MG/K	<u> </u>		
C	AS No.	Analyte	Concentrati	on C	Q	М				
74	40-43-9	Cadmium	0.	013 U		P				
74	40-22-4	Silver	1	0.8	E	P				

___ Clarity Before: Color Before: BROWN Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comm	ents:				
	Date Reported:	4/10/06			

		IN	ORGANIC ANALYSI	S D	ATA SE	KEET		EPA SAI	MPLE NO
Lab Name:	H2M LABS,	INC.		Con	tract:			APC11-	-BS-023
Lab Code:	10478	Case No.	SAS	S No	o.:			SDG No.:	<u>ATC005</u>
Matrix (s	oil/water):	SOIL			Lab Sa	ample ID	: 06	504265-007	
Level (lo	w/med):	TOM			Date F	Received	: 4/	/6/2006	
% Solids:		<u>91.5</u>							
	Concentra	tion Units	(ug/L or mg/kg	dry	weigh	nt): <u>MG</u>	/KG		
	CAS No.	Analyte	Concentration	С	Q	М			
	7440-43-9	Cadmium	0.49	В		P		,	
	7440 22 4	loca	יי כו		_	l n l			

Color Before: BROWN	_Clarity Before:		Texture:	FINE
Color After: YELLOW	_ Clarity After:	CLEAR	Artifacts:	

Comments:					
Date	Reported:	4/10/06			
-			 	 	

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.: ATC005

Matrix (soil/water): <u>SOIL</u>

Lab Sample ID: 0604265-008

Level (low/med):

LOW

Date Received: 4/6/2006

% Solids:

92.7

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	42.0		E	P
				1	

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

Comme	ents:
	Date Reported: 4/10/06

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract:

APC11-BY-001

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

ቼ Solids:

91.9

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	υ		P
7440-22-4	Silver	355		E	P

Color Before: BROWN Clarity Before:

Texture:

FINE

Color After: YELLOW Clarity After: CLEAR

Artifacts:

Comment	5:					
Dat	e Reported:	4/10/06				
-			 		 	
			 		 	
					-	

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.: ATC005

Matrix (soil/water): \underline{SOIL}

Lab Sample ID: 0604265-010

Level (low/med):

LOW

Date Received: 4/6/2006

% Solids:

92.3

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

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

Color Before: BROWN Clarity Before: Color After: YELLOW Clarity After:

Texture:

FINE

CLEAR Artifacts:

Comm	ents:					
	Date Rep	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	DateRecd at Lab	Date Analyzed
0604265-001	APC11-BS-007B	SOIL	AG,CD,	06-Apr-06	04/06
0604265-002	APCII-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	APCII-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	APCH-BY-001	SOIL	AG,CD,	06-Apr-06	04/06
0604265-009DUP	APCII-BY-001D	SOIL	AG,CD,	06-Apr-06	04/06
0604265-009MS	APCII-BY-001S	SOIL	AG,CD,	06-Apr-06	04/06
0604265-010	APCII-SW-022	SOIL	AG,CD,	06-Apr-06	04/06

16952

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076 CLIENT: ATC H2M SDG NO: ATC. 005 Tel: (631) 694-3040 Fax: (631) 420-8436 Amesa PROJECT NAME/NUMBER NOTES: Project Contact: COLIN CHAMBERS SHOREHAM REMEDIATION Containe Description Phone Number: 609-571-7519 Sample (SAMPLERS: (signature)/Client PISQuote#) ATC ASSOCIATES 9 906 DELIVERABLES: Total No. of Containers B5-70D **ANALYSIS REQUESTED** TURNAROUND TIME: 24-48 Hr. V - 21 DAY PEG ORGANIC INORG. BNA P S FIELD I.D. LAB I.D. NO. **REMARKS:** DATE TIME MATRIX 0604265-002 APCIL- BS-018 16:25 5016 APC11-85-019 13:24 $-\infty3$ SOIL APC11-5W-022 -010 11:55 SOIL 3 -009 MS/MSD APCII-BY-001 501L APC11-B5-007B 8011 -001 APC11-B5-020 13:31 5016 -004 12:34 SOIL APCIL- BS-02 -W 4/6/06/13:40 SOM APC11-BS-022 300-APC11-BS-023 46/06 13:43 5014 $-\infty7$ APC11-B5-919 4/6/00 13:19 SOIL -00B Relinquished by (Signature) Time Received by: (Signature) Date Time LABORATORY USE ONLY 460814:27 4/6/66 14:27 Samples were: Discrepancies Between 1. Shipped___ or Hand Delivered___ Airbit# /Date Date Time Received by: (Signature) Time Sample Labels and Relinguished by: (Signature) 2. Ambient or chilled, Temp_ 4606 16:3 COC Record? Y or N 15:30 4.6.00 3. Received in good condition: Y or N Explain: 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 Relinquished by: (Signature) Date Time Received by: (Signature) Date Time 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt:



Sample Receipt Checklist

Client Name ATC			Date and	Time Receive	4/6/2006 3:30:00 PM
Work Order Numbe 0604265			Received	by PS	
Checklist completed b Signature	Date	.06	Reviewed —	by Solitials	4/6/56
Matrix	Carrier name	Courier			
Shipping container/cooler in good condition?		Yes 🗹	No 🗌	Not Applicable	
Custody seals intact on shippping container/co	oler?	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	d 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 🗌	1.6	
Container/Temp Blank temperature in complian	nce?	Yes 🗹	No 🗌	L6 L	
Water - VOA vials have zero headspace?	No VOA vials subr	nitted 🗹	Yes	□ No □	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗌		
	Adjusted?		Checked b		
Any No and/or NA (not applicable) response m	ust be detailed in the o	comments secti	ion b		
			=====		=======
Client contacted	Date contacted:		P	erson contacted	
Contacted by:	Regarding				
Comments:					
	~			_	
Corrective Action					

- | H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: ATC	DELIVERABLE	: <u>B5-70D</u> turn aroun	DTIME: 24-48 hr V - 21 Day pkg
SDG #: _ATCO05	CASE #:	MATRIX: SOIL	pH CHECK Y or N
REMARKS:	620 AT	<u> </u>	
RECEIVED BY:	Ssign.	ATURE: DAT	TE:4.6.06TIME: 15:30

	H2M LAB	DATE	BOTTLE	# OF	TESTS
CLIENT ID	Ħ	COLLECTED	TYPE	BOTTLES	
'APC 11- BS-007	0604265 3 -1A	4.6.06	А	1	PMOIST 6010_S_PKG(SEL)
-018	-2A	4.5.06			
, -019	-3A	4.6.06			
- 020	-4A				
, -021	-5A				
-022	-6A				
-023	-7A				
· k919	-8A			\bigvee	
, BY-001	-9A			3	
- V SW-022	-10A	\bigvee	\downarrow		<u> </u>
н	А.				
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19					
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39					
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CLIENT: ATC

spc #: ATC 005

INTERNAL CHAIN OF CUSTODY

			RELINQUISHED	SAMPLE	BOTTLE	PURPOSE OF CHANGE OF CUSTODY	ZNIT
a	TICK S	TIME	SI COL	RECRIVED BY			11
	416186	16:38		310	All	AMAYSIS.	1
	4/7/06	6000		STON		DIGESTION / AM	ALSIS
ا	4/7/06	800	DION MARKET	9101	10:65	Store	
a l			PION	SION			_
Market Company	<u> </u>		9100	3103			
أد	Ī		BI COM	PION			
			51CM	91094			
t			FICOL	310H			
			8 Y COM	91034			
3 5	-		91 (Dal	SICH	+		
			alon	SICH			
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			HOIE	SICH			-
- Carrie			3103	SIGN			
<u> </u>			HOLE	этси			
-			ноте	SICH			
<u> </u>			KOIE	SIGN	-		
			SION	510N			
	- +		3101	SICH			
			NOIE	SION			
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			5100	SION			
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Take San			2109	SICH			
Ş			310N	SICH			
			SION	SICN			<u> </u>

METALS

APPENDIX B

Inorganic Data Validation Summary Project Name: Peerless Photo Products Case No./SDG: ATC005 Project No.: 68.28817.0001 Sampling Date(s): 4/6/2006 M. McNally Reviewed By: M. Traxler Project Manager: H2M Completion Date: 5/27/2006 Laboratory: Compound List: TAL Appendix IX X Other__Cd, Ag____ Method: CLP SOW 3/90 X SW-846 Other___ Matrix: X 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 Less than 180 days NR Calibration Linearity - Furnace, Hg. and CN Calibration Verification 2-point standard **CRDL** Standard 50 - 150 % R X Calibration Blanks < RL Preparation Blanks <RL Field Blank < RL 80 - 120 % R ICP Interference Check Sample Laboratory Control Sample 80 - 120 % R Matrix Duplicate Results < 35 RPD Matrix Spike Results Χ Ag results >4X spike amount ICP Serial Dilution Ag > 10 RPD (34.7%) NR Post Digestion Analytical Spike NR Method of Standard Addition Field Duplicate Results Ag > 50 RPD (62.1%) Sample Result Verification Cadmium and Silver Other:

NA - Not applicable NR - Not reviewed

General Comments:

QA Scientist Mark Haples

Date 5/28/06

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

Project Name:

Peerless Photo Products

Case/SDG Number: ATC005

Project Number: 68.28817.0001

Sa	ample Location
Οſ	Description
Sa	imple Number
Sa	ampling Date
Ur	nits

APC11-BY-001D	APC11-BY-001S
0604265-009D	0604265-0095
4/6/2006	4/6/2006
mg/kg	mg/kg
	0604265-009D 4/6/2006

Spike

Sample Result

MD Result

MS Result

Amount

			_		MUKPU	Q	MS %K	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

QA Scientist Mark Stayler Date 5/28/06

Inorganic Field Duplicate Precision Worksheet

ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC005

Project Number:

68.28817.0001

Sample Location	APC11-BS-019	APC11-BS-919
or Description		
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				T
Silver	22.1	42.0	62.1	*

Mark Staple Date 5/28/06

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC005

Preparation Blank Matrix (soil/water): <u>SOIL</u>

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

	Initial Calib. Blank		(uing Cal lank (uc		on			Prepa- ration			
Analyte	(ug/L)	С	1	С	2	С	3	С		Blank	С		М
Cadmium	0.	3 B	C	.4 B).3 B	0).4 B	Ħ	0.01	2 U	T:	P
Silver	0.	4 U	C	.5 B	().4 U	0	1.4 U		0.04	5 U		P
									П				7

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.: ATCOOS

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 91.9

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

	Control								
	Limit	Spiked Sample	Sample		Spil	ce			
Analyte	%R	Result (SSR) C	Result (SR)	С	Added	(SA)	%R	Q	М
Cadmium	75-125	5.0229	0.0133	U		5.44	92.3		Ъ
Silver		393.7377	354.6974			5.44	(717.6	D _	P

Comm	ents:

6 DUPLICATES EPA SAMPLE NO

APC11-BY-001

Lab Name: H2M LABS, INC.

Lab Code: 10478 Case No.

Contract:

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)	С	Duplicate (D) C RPD (2	M
Cadmium		0.0133	U	0.0133 U		Б
Silver		354.6974		344.2239 3.0		Б
					1	

ICP SERIAL DILUTIONS

Lab Name: H2M LABS, INC.

Contract:

APC11-BY-001

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC005

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

		Initial Sample		Serial Dilution		% Differ-		-	
Analyte	1 1	Result (I) C	! !	Result (S)	C	ence	Ç	2	М
Cadmium		0.12 U	j- -	0.	61 U		$\frac{1}{\sqrt{1}}$		Р
Silver		3259.67		2128.	23	34.7) E		P
			1		1 1	1	7		

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

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.

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 deficiencles 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	

Soil (mg/kg)

Laboratory Case/Order# H2M - Melville, New York

ATC006

	Sample Location or Description	APC11-BS-024	APC11-BS-025	APC11-BS-025D	APC11-BS-025S	APC11-BS-026	APC11-BS-924				
	Sample Number	0604292-001	0604292-002	0604292-002D	0604292-002S	0604292-003	0604292-004				
ľ	Sampling Date	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	4/6/2006	_			
ľ	Preparation Date	4/7/2006	4/7/2006	4/7/2006	4/7/2006	4/7/2006	4/7/2006				
	Analysis Date Percent Solids	4/7/2006 93.7	4/7/2006 82.7	4/7/2006 82.5	4/7/2006 82.7	4/7/2006 91.1	4/7/2006 93.4			_	_
	PF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	Q DF	
50 00	Cadmium X Silver X	UJ 1 3.2 *E J 1	0.79 J 1 65.5 *E J 1	1.34 J 1 106.3 *E J 1	84.8% 1 177.7% 1	UJ 1 115 *E J 1	UJ 1 4.4 *E J 1				

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

P-ICP

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist M Huples DATE 5/30/06

APPENDÍX A

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

Vincent Stancampiano

lancampiand

Vice President

o:\qc\narr2006\atc\metals\atc006.doc

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC006

Analytical Requirements

SDG. A1C006			
Customer	Laboratory	ME	
Sample	Sample	1972	
Code	Code		
APC11-BS-024	0604292-001	Х	
APC11-BS-025	0604292-002	X	
APC11-BS-026	0604292-003	X	
APC11-BS-924	0604292-004	X	

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.

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	С	Q	М
7440-43-9	Cadmium	0.013	Ũ		P
7440-22-4	Silver	3.2		*E	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FIN
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments: DATE REPORTED: APRIL 12, 2006

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-025

Lab Name: <u>H2M LABS</u>, 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): $\underline{MG/KG}$

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.79			P
7440-22-4	Silver	65.5		*E	P
	T			í	!

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED: APRIL 12, 2006

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-026

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATCO06

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	С	Q	М
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:	

.omments	i :					
DATI	E REPORTED:	APRIL 12, 2	2006			
				 ·	 	

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-BS-924

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

CAS No.

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

Analyte

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

Concentration C

MG/KG

P Ρ

Color Before: BROWN

Clarity Before:

0.013 U

4.4

Texture:

FINE

Comments:

DATE REPORTED: APRIL 12, 2006

7440-43-9 Cadmium

7440-22-4 Silver

Color After: YELLOW Clarity After:

CLEAR

Artifacts:

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	DateRecd 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	APCII-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-Арг-06	04/06

16953

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076 CLIENT: H2M SDG NO: ATC DOGO Tel: (631) 694-3040 Fax: (631) 420-8436 PROJECT NAME/NUMBER NOTES: Project Contact: AMBER COLIN CHAMBERS SHOREHAM PEMEDIATION Sample Container Phone Number: LASS Ag+Cd 609-571-7519 SAMPLERS: (signature)/Client PtS/Quote # ATC ASSOCIATES 906 DELIVERABLES: Total No. of Containers R5-70D ANALYSIS REQUESTED TURNAROUND TIME: 24-48 Hz V. - 21 DAY PKG. **ORGANIC** INORG. BNA Per S FIELD I.D. LAB I.D. NO. **REMARKS:** DATE TIME MATRIX 16:32 APC11-BS-924 SOIL -001 4/6/06 16:38 APCII-BS-024 5014 3 -002 MS/MSD APCII-B5-025 16:45 501L -003 APCII-BS-026 16:50 Soic Relinquished by (Signature) Date Time Received by: (Signature) Date Time LABORATORY USE ONLY 12:52 /1/00 12.5% Samoles were: Discrepancies Between 1. Shipped___ or Hand Delivered___ Airbit# Relinquished by: (Signature) Time Sample Labels and 2. Ambient or chilled, Temp_ COC Record? Y or N 3. Received in good condition: Y or N 13:35 Explain: 4. Property preserved: Y or N Relinquished by: (Signature) Date Received by: (Signature) Time COC Tape was: 1. Present on outer package: Y or N Date Received by: (Signature) Date Time Relinquished by: (Skanature) 2. Unbroken on outer package; Y or N 3. COC record present & complete upon sample receipt:

ATC 006

Sample Receipt Checklist

Client Name ATC			Date and	Time Receive	4/7/2006
Work Order Numbe 0604292			Received	by PS	
Checklist completed b	Dale	.06	Reviewed -	by Joitials	4/7/100 Obse
Matrix	Carrier name	Hand Delivered			
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Applicable	
Custody seals intact on shippping container/coole	er?	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 re	eceived?	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	e?	Yes 🗹	No 🗌	200	
Water - VOA vials have zero headspace?	No VOA vials subr	nitted 🗹	Yes	□ No □	
Water - pH acceptable upon receipt?		Yes 🔽	No 🗌		
,	Adjusted?	Ch	ecked b		
Any No and/or NA (not applicable) response mus	t be detailed in the c	comments section	n b	======	=======
Client contacted	Date contacted:		P	erson contacted	
Contacted by:	Regarding				
Comments:					
Corrective Action					

INTERNAL CHAIN OF CUSTODY

CLIENT: ATC TOO	>_DELIVERABLE	s: <u>85-70D</u> n	IRN AROUND TI	ME: 24.48 hr V	1-21 Day pkg
SDG#: ATCCCO	CASE #:		SOIL	pH CHECK Y or N	J - J
REMARKS:	020	ATC 0	0		
RECEIVED BY:	PS sign	ATURE:	DATE:4	-7.06 me: 13:35	
			* rece	ivea at lab at	12:32

H2M LAB DATE BOTTLE # OF TESTS
APCII-BS-024 C604292 - 1A 4-6-06 A 1 6010_S-PKG(SEC) - 025 - 2A 3 - 026 - 3A 1 - V -924 V -4A V 1 - PS - 4-7-06
-025 -2A 3 -026 -3A 1 -924 V-4A V 1 -925 -2A 3 -926 -3A 1 -926 -3A 1 -926 -3A 1 -927 -928 9 -928 -928
-025 -2A 3 -026 -3A 1 -924 V-4A V 1 -925 -2A 3 -926 -3A 1 -926 -3A 1 -926 -3A 1 -927 -928 9 -928 -928
· V -924 V -4A V I I I I I I I I I I I I I I I I I I
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15
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29
19
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METALS

SDG #: ATCOMO

INTERNAL CHAIN OF CUSTODY

ACCOUNT NAME OF THE PARTY OF TH	DATE	TIME	BY SAMPLE SAMPLE	SAMPLE RECRIVED BY	BOTTLE	PURPOSE OF CHANGE OF CUSTODY	INI
3	4.7.00	13:39	910al	9100	A	Analusis	
3	4-10-06		8100	STOWN A	A	Projet	
NAME.	4-10-06	8:35	" de leen	ston	A	sturage	
a	41006	9:00	\$100	Abrolling.	A	DIGS	
	4/10/06	11:30	"Abadah	3700	Aldias	STORAGE ANALYSIS	
	4/1406	1130	and all	5100 Helfle	Dress	74	
	e/wor	1430	81000 AL	2.00	DIGS	Storage	
			#ICM	NOIS NOIS		U	
Nazazak)			91CM	ыом			
			3100	SICH			
			NOIE	SICM			
			MOIE	SICH			
Physical Property of the Party			MOIE	2104			
1			210M	SICH			
1-			SION	SICH			
1		[310M	3101			
1			3104	KOIS			
1			910N	zica			
			310%	210%			
1_			510M	310N			
			3109	SION			
}-			KÖIE	91CH			
+			HOIE	SICH		· · · · · · · · · · · · · · · · · · ·	
-			SION	SIGN	 		
-			SION	SICH	<u> </u>		
_		1			<u> </u>		

METALS

APPENDIX B

ATC Inorganic Data Validation Summary ATC006 Project Name: Peerless Photo Products Case No./SDG: 4/6/2006 Project No.: 68.28817.0001 Sampling Date(s): Project Manager: M. McNally Reviewed By: M. Traxler 5/30/2006 Laboratory: H₂M Completion Date: **Compound List:** TAL Appendix IX X Other __Cd, Ag____ CLP SOW 3/90 X SW-846 Method: Matrix: X soil/solid (ma/Ka) agueous (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** Less than 180 days Calibration Linearity - Furnace, Hg. NR and CN Calibration Verification 2-point standard X CRDL Standard 50 - 150 % ₹ Χ < RL Calibration Blanks Х Preparation Blanks < RL Field Blank < RL ICP Interference Check Sample 80 - 120 % R 80 - 120 % R Laboratory Control Sample X Ag and Cd both > 35 RPD Matrix Duplicate Results Ag = 177.7%Matrix Spike Results X ICP Serial Dilution Ag > 10 RPD (24.5) Post Digestion Analytical Spike NR Method of Standard Addition NR Field Duplicate Results < 50 RPD Sample Result Verification Cadmium and Silver

NA - Not applicable

General Comments:

Other:

NR - Not reviewed

QA Scientist Mark Saplu Date 5/30/06

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

Project Name:

Peerless Photo Products

Case/SDG Number: ATC006

Project Number: 68.28817.0001

	Sample Location
-	or Description
	Sample Number
	Sampling Date
	Units

APC11-BS-025	APC11-BS-025D	APC11-BS-025S
0604292-002	0604292-002D	0604292-0025
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

MS %R

_	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

Mark Starder Date 5/30/06

Inorganic Field Duplicate Precision Worksheet

ATC

Project Name:

Peerless Photo Products

Case/SDG Number: ATC006

Project Number:

68.28817.0001

Sample Location	APC11-BS-024	APC11-BS-924
or Description		
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				\top
Silver	3.2	4.4	31.6	

Mark Shapler Date 5/30/06

ATC006 Field Duplicate

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATCOO6

Preparation Blank Matrix (soil/water):

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

	Initial Calib. Blank		С		nuing Ca Blank (u		ion				Prepa- ration		
Analyte	(ug/L)	С	1	С	2	С	3		С		Blank	C	M
Cadmium	0.4	В	0.	3 B		0.4 в		0.4	В		0.012	ט ו	P
Silver	0.4	U	0.	4 U		4.5 B		0.4	υ	1	0.045	ט	P

5A SPIKE SAMPLE RECOVERY EPA SAMPLE NO

APC11-BS-025S

Lab Name: <u>H2M LABS, INC.</u>

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

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

Comment	s:						
_		 	 	 	 		
		 	 	 	 		
		 	 	 		_	

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 Y P

9
ICP SERIAL DILUTIONS

Lab Name: <u>H2M LABS, INC.</u>

Contract:

APC11-BS-025

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC006

Matrix (soil/water): <u>SOIL</u>

Level (low/med): LOW

Concentration Units: ug/L

		Serial	8	
	Initial Sample	Dilution	Differ-	
Analyte	Result (I) C	Result (S) C	ence	QM
Cadmium	6.54	6.35 B	2.9	Р
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

MARK TRAXLER
SENIOR QUALITY ASSURANCE SCIENTIST

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.

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 - MÉTALS

- 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

APC11-BS-034

Q DF

Site Name

Sample Location

or Description

Project Number

Peerless Photo Products

APC11-BS-027

APC11-BS-027D

Q DF

U 1

J

Q DF

U 1

J 1

143 *

122 *

APC11-BS-027\$

68.28817.0001

PF

Х

Cadmium

Silver

Q DF

ິບ | 1

J 1

0.12 B*

1.1 B

219 *

Sampling Date(s) 4/11/2006

Soil (mg/kg)

APC11-BS-029

Q DF

U

J 1

142 *

144 *

APC11-BS-028

Laboratory

H2M - Melville, New York

APC11-BS-032

Case/Order#

APC11-BS-031

Q DF

U 1

0.036 B

116 *

ATC007

Fraction/Method

APC11-BS-030

Q DF

U 1

J 1

93.9 *

Metals / 3050B / 6010B

Q DF

APC11-BS-033

Q DF

1.4 196 *

U

J.

191 *

	Sample Number	0604417-001	0604417-001D	0604417-001S	0604417-002	0604417-003	0604417-004	604417-005	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	PF	Q DF									
0.50	Cadmium X	U 1	U 1	96.6%	U 1	U 1	U 1	Ü-11	U 1	U 1	∫ U 1
1.00	Silver X	98.6 * J 1	58.2 * J 1	-837.3% : 11	2.7 J 1	182 * J 1	1.3 * J 1	6.7 J 1	66.0 * J 1	94.1 * J 1	6.4 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
		APC11-BS-035 0604417-009	APC11-BY-02 0604417-010	APC11-BY-03	APC11-BY-04 0604417-012	APC11-BY-05 0604417-013	APC11-BY-06 0604417-014	APC11-BY-07 0604417-015	APC11-FL-007 0604417-016	APC11-SW-023	APC11-SW-024
	or Description										
	or Description Sample Number	0604417-009	0604417-010	0604417-011	0604417-012	0604417-013	0604417-014	0604417-015	0604417-016	0604417-017	0604417-018
	or Description Sample Number Sampling Date	0604417-009 4/11/2006	0604417-010 4/11/2006	0604417-011 4/11/2006	0604417-012 4/11/2006	0604417-013 4/11/2006	0604417-014 4/11/2006	0604417-015 4/11/2006	0604417-016 4/11/2006	0604417-017 4/11/2006	0604417-018 4/11/2006
	or Description Sample Number Sampling Date Preparation Date	0604417-009 4/11/2006 4/12/2006	0604417-010 4/11/2006 4/12/2006	0604417-011 4/11/2006 4/12/2006	0604417-012 4/11/2006 4/12/2006	0604417-013 4/11/2006 4/12/2006	0604417-014 4/11/2006 4/12/2006	0604417-015 4/11/2006 4/12/2006	0604417-016 4/11/2006 4/12/2006	0604417-017 4/11/2006 4/12/2006	0604417-018 4/11/2006 4/12/2006

Q DF

U | 1

J 1

P-ICP

RL.

0.50

1.00

F - Flame AA

Q - Qualifier, if any

DF - Dilution Factor

QA Scientist M Haples DATE 6/4/06

DATA SUMMARY -	INORGANIC	ANALYTES
----------------	-----------	-----------------

Peerless Photo Products Site Name Soil (mg/kg) H2M - Melville, New York Laboratory Project Number 68.28817.0001 Case/Order# ATC007 Metals / 3050B / 6010B Sampling Date(s) 4/11/2006 Fraction/Method Sample Location APC11-SW-025 APC11-SW-925 or Description Sample Number 0604417-019 0604417-020 4/11/2006 4/11/2006 Sampling Date Preparation Date 4/12/2006 4/12/2006 Analysis Date 4/12/2006 4/12/2006 95.6 Percent Solids 95.9 RL PF Q DF U 1 0.50 Cadmium Χ 0.20 B 0.38 B U 1 1.00 Silver 224 * 230 * Sample Location or Description Sample Number Sampling Date Preparation Date Analysis Date Percent Solids Q DF Q DF Q DF RL PF Q DF 0.50 Cadmium Х

P-ICP

F - Flame AA

1.00

Q - Qualifier, if any

Silver

X

DF - Dilution Factor

QA Scientist M Flayler DATE 6/4/06

page 1

APPENDIX À

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

Vincent Stancampiano

Hancamp

Vice President

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

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Analytical Requirements

SDG: ATC007		
Customer	Laboratory	
Sample	Sample	ME
Code	Code	
APC11-BS-027	0604417-001	Х
APC11-BS-028	0604417-002	Х
APC11-BS-029	0604417-003	X
APC11-BS-030	0604417-004	X
APC11-BS-031	0604417-005	Х
APC11-BS-032	0604417-006	Х
APC11-BS-033	0604417-007	Х
APC11-BS-034	0604417-008	Х
APC11-BS-035	0604417-009	Х
APC11-BY-02	0604417-010	Х
APC11-BY-03	0604417-011	Х
APC11-BY-04	0604417-012	Х
APC11-BY-05	0604417-013	Х
APC11-BY-06	0604417-014	Х
APC11-BY-07	0604417-015	Х
APC11-FL-007	0604417-016	Х
APC11-SW-023	0604417-017	Х
APC11-SW-024	0604417-018	Х
APC11-SW-025	0604417-019	X
APC11-SW-925	0604417-020	X

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.

	1		
NORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-BS-027

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: 10478

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Case No.

Lab Sample ID: 0604417-001

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

90.5

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.014	U		Р
7440-22-4	Silver	98.6		*	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comm	ments:
	Date Reported: 4/19/06

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.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-002

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

93.0

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	2.7		*	P
		i			

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments: Date Reported: 4/19/06

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.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-003

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

89.3

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

CAS No.	Analyte	Concentration	С	Q.	М
7440-43-9	Cadmium	0.014	U		P
7440-22-4	Silver	182		*	P
				1	

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

Date Report	ted: 4/19/06	 	
		 	 _

EPA SAMPLE NO

U.S.	EPA -	CLP

INORGANIC ANALYSIS DATA SHEET

APC11-BS-030

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-004

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

91.9

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	υ		P
7440-22-4	Silver	1.3		*	P

Color Before: BROWN Clarity Before: Texture: FINE Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

Date Reported: 4/19/06	

	1		
NORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

Lab Name: <u>H2M LABS, INC.</u>

Contract:

APC11-BS-031

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-005

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

91.9

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	6.7		*	Р

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments: Date Reported: 4/19/06

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

APC11-BS-032

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-006

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

90.1

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

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

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comm	nts:
	Date Reported: 4/19/06

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.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-007

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

87.9

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.014	υ		P
7440-22-4	Silver	94.1		*	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments: Date Reported: 4/19/06

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

APC11-BS-034

Lab Code: <u>10478</u>

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	С	Q	М
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:

	1		
NORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

APC11-BS-035

Lab Code: 10478

Case No. SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-009

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

92.0

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.013	Ū		P
7440-22-4	Silver	0.12	В	*	Р

Color	Before:	BROWN	Clarity Before:		Texture:	FINE
Color	After:_	YELLOW	Clarity After:	CLEAR	Artifacts:	

Comments: Date Reported: 4/19/06

EPA SAMPLE NO

U.S.	EPA	-	CLP	

INORGANIC ANALYSIS DATA SHEET

APC11-BY-02

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-010

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

44.9

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	1.1	В		P
7440-22-4	Silver	219		*	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR _	Artifacts:	

Comments:

Date Reported:	4/19/06				
				 	
		<u> </u>		 	
			•		

		IN	ORGANIC ANA	l LYSIS	DATA SH	IEET			EPA SAMPLE
Lab Name:	H2M LABS,	INC.		Сс	ntract:				APC11-BY-0
Lab Code:	10478	Case No.		SAS	No.:			SI	OG No.: ATC
Matrix (so	il/water):	SOIL			Lab Sa	ample	e ID:	0604	417-011
Level (low	/med):	LOW			Date F	Recei	ved:	4/11	/2006
% Solids:		<u>71.5</u>							
	Concentra	tion Units	(ug/L or mg	ı/kg dı	ry weigh	nt):	MG/F	<u>KG</u>	
	CAS No.	Analyte ·	Concentrat	ion C	Q	M]		
	7440-43-9	Cadmium	0	.017 U		P	Ì		
	7440-22-4	Silver		122	*	P	1		
			<u> </u>				}		
Color Befo			Before:				Textu		FINE
Color Afte	r: YELLOW	Clarity	After:	CLEAR			Artif	acts:	

Comme	ents:
	Date Reported: 4/19/06

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		TN	l longanic analysis	בא מות בי	uppm	EPA	SAMPLE NO
		1 N	ORGANIC ANALYSIS	DATA SI	HEET	AP	C11-BY-04
Lab Name:	H2M LABS,	INC.	Со	ntract:	;		
Lab Code:	10478	Case No.	SAS I	No.:		SDG No	o.: <u>ATC00</u>
Matrix (so	oil/water):	SOIL		Lab S	ample ID	: 0604417-	012
Level (lo	v/med):	LOW		Date	Received	: 4/11/200	6
% Solids:		<u>81.3</u>					
	Concentra	tion Units	(ug/L or mg/kg dr	y weigh	ht): <u>MG</u>	/KG	
	CAS No.	Analyte	Concentration C	Q	М		
	i		1	1	1 1		
	7440-43-9	Cadmium	0.015 U	 	P		

COmm	encs.
	Date Reported: 4/19/06

		T N	ORGANIC AN	ļ MIVCTC	מידא כּע	CCT		EPA SA	MPLE N
Lab Name:	H2M LABS,		ORGANIC AL		ntract:	ii I		APC11	-BY-05
								CDC N	n mc0 (
Lab Code:	10478	Case No.		SAS N	10.:			SDG No.:	ATCU
Matrix (so	il/water):	SOIL			Lab Sa	mple :	ID: <u>0</u>	604417-013	3_
Level (low	/med):	LOW			Date R	eceiv	ed: <u>4</u>	/11/2006	
% Solids:		67.8							
	CAS No. 7440-43-9 7440-22-4	Analyte Cadmium Silver	Concentra	0.018 U 144	Q	M P P			
Color Befo	re: BROWN	Clarity	Before:	_	_	Τe	exture:	FINE	
Color Afte	r: YELLOW	Clarity	After:	CLEAR		Aı	tifact		

Comments:		
Date Reported	d: 4/19/06	
	.,	

EPA SAMPLE NO

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

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	С	Q	М
7440-43-9	Cadmium	0.013	U		P
7440-22-4	Silver	142		*	Р

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Onan	nes:	
	Date Reported: 4/19/06	

			1				1	EPA SAMP	LE
		IN	ORGANIC ANALYSIS DATA SHEET					APC11-BY-07	
Lab Name:	H2M LABS,	INC.	Co	ntract	:				
Lab Code:	10478	Case No.	SAS	No.:			SDO	G No.: <u>F</u>	ATC
Matrix (sc	oil/water):	SOIL		Lab S	ample	e ID:	06044	17-015	
Level (low	v/med):	LOW		Date	Recei	.ved:	4/11/	2006	
% Solids:		06 1							
5 3011us.		<u>95.1</u>							
6 3011us.	Concentra		(ug/L or mg/kg d	ry weig	ht):	MG/KG	<u>.</u>		
a sorrus.	CAS No.		(ug/L or mg/kg d	1	ht):	MG/KG	3		
a Solius.	[tion Units		Q		MG/KG	3		
a Solius.	CAS No.	tion Units	Concentration C	Q	М	MG/KG	3		
Color Befo	CAS No. 7440-43-9 7440-22-4	Analyte Cadmium Silver	Concentration C	Q	M P P	MG/KG	-	FINE	

ments:			
Date Reported: 4/19/06			

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

APC11-FL-007

Lab Name: H2M LABS, INC.

Lab Code: 10478 Case No.

Contract:

SAS No.:

SDG No.: ATC007

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-016

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

82.5

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

CAS No.	Analyte	Concentration	С	Q	М
7440-43-9	Cadmium	0.036	В		Р
7440-22-4	Silver	116		*	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments: Date Reported: 4/19/06

		TN	ODCANIC ANALYSI	۰ .	ים מיחמי	יים ביי		I	EPA SAI	MPLE N
		1 1/2	ORGANIC ANALYSI	5 L	DAIA SI	1551			APC11-	-SW-023
Lab Name:	H2M LABS,	INC.		Con	tract:	:		Ĺ		-
Lab Code:	10478	Case No.	SAS	S No	o.:			SDG	No.:	ATC0
Matrix (so	oil/water):	SOIL			Lab Sa	ample	ID:	06044	17-017	-
Level (low	/med}:	<u>LOW</u>			Date !	Rec e i	ved:	4/11/	2006	
% Solids:		89.6								
	Concentra	tion Units	(ug/L or mg/kg	dry	y weigh	ht):	MG/KG			
	CAS No.	Analyte	Concentration	С	Q	М				
	7440-43-9	Cadmium	0.014	U		P				
	7440-22-4	Silver	191		*	P				
	re: BROWN	Clarity	Before:				Texture	e:	FINE	
Color Befo			After: CLEA	R	_		Artifac			

Comments:
Date Reported: 4/19/06

Lab Name: H2M LABS, INC. Contract:			11	l ORGANIC ANALYS	IS DATA SHEET		EPA SAMPLE
Matrix (soil/water): SOIL Lab Sample ID: 0604417-01 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 M MG/KG 7440-43-9 Cadmium 1.4 P P MG/KG Color Before: BROWN Clarity Before: Texture: FINE	Lab Name:	H2M LABS,	INC.		Contract:		APC11-SW-0
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 P P P P P P P P P	Lab Code:	10478	Case No.	SA	S No.:		SDG No.: ATC
% Solids: 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	Matrix (so	il/water):	SOIL		Lab Sample	ID: <u>06</u>	04417-018
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	Level (low	/med):	LOW		Date Recei	ved: <u>4/</u>	11/2006
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	% Solids:		88.1				
7440-43-9 Cadmium 1.4 P 7440-22-4 Silver 196 * P Color Before: BROWN Clarity Before: Texture: FINE		Concentra	tion Units	(ug/L or mg/kg	dry weight):	MG/KG	
7440-22-4 Silver 196 * P Color Before: BROWN Clarity Before: Texture: FINE		CAS No.	Analyte	Concentration	C Q M		
Color Before: BROWN Clarity Before: Texture: FINE		7440-43-9	Cadmium	1.4	P		
		7440-22-4	Silver	196	* P		
			•				
			•				

Comments:

Date Reported: 4/19/06

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-SW-025

Lab Name: <u>H2M</u> LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATCOO7

Matrix (soil/water): SOIL

Lab Sample ID: 0604417-019

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

95.6

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

CAS No.	Analyte	Concentration	Ċ	Q	М
7440-43-9	Cadmium	0.20	В		P
7440-22-4	Silver	224		*	P

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR	Artifacts:	

Comments:				
Date	Reported: 4/1	.9/ <u>0</u> 6	 	
			 ·- ·-	

		T.)	1	~ .					EPA SA	MPLE
		1 N	ORGANIC ANALYSI	S	DATA SI	HEET			APC11	-SW-92
Lab Name:	H2M LABS,	INC.		Cor	tract:	:		L_		
Lab Code:	10478	Case No.	SAS	3 N	0.:			SI	DG No.:	ATCO
Matrix (so	oil/water):	SOIL			Lab S	ample	e ID:	0604	1417-02	2
Level (low	v/med):	LOW			Date	Recei	ived:	4/11	/2006	
% Solids:		95.9								
% Solids:	Concentra		(ug/L or mg/kg	dr	y weig	ht):	MG/K	<u>(G</u>		
% Solids:	Cas No.		(ug/L or mg/kg	dr	y weig ———— Q	ht):	MG/K	<u>:G</u>		
% Solids:	CAS No.	tion Units	Concentration	С			MG/K	<u>:G</u>		
% Solids:	Γ	tion Units		i			MG/K	<u>cG</u>		
% Solids:	CAS No. 7440-43-9 7440-22-4	Analyte Cadmium		С		М	MG/K		FINE	

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	DateRecd 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	APCI1-BS-027S	SOIL	AG,CD.	11-Apr-06	04/06
0604417-002	APCI1-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,	II-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	APCII-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

16954

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076 CLIENT: H2M SDG NO: ATC 007 ATC Tel: (631) 694-3040 Fax: (631) 420-8436 PROJECT NAME/NUMBER NOTES: Project Contact: COLIN CHAMBGE SHORENAM REMEDIATION Sample Container Λ Description Phone Number: 609-571-7519 SAMPLERS:/(signature)/Client PISAQuote # B ATC ASSOCIATES 906 DELIVERABLES: B5-70 D Total No. of Containers Š. ANALYSIS REQUESTED TURNARQUND TIME: 24-48 V 21 DAY PKG **ORGANIC** INORG. Meta Ea S Š P.CB DATE | TIME | MATRIX FIELD I.D. LAB I.D. NO. REMARKS: MS/MSD 3 7122000 4/11/06/10:02 SOIL APCIL- BS-027 -001 4/11/06/10:08 -002 SOIL APC 11-B5-028 χ -003 SOIL APC11-BS-029 10:11 APC11- B5-030 10:15 5016 -004 $-\infty5$ APC11-BS-031 10:20 501L 4/11/06/10/25 -006 APCIL- BS-032 SOIL APCII-BS-033 -007 10:30 8014 -00g APC11-BS-034 4/11/06/10:35 5014 -009 41110610:40 SUL APC11-BS-035 4/11/96/11:05 5012 APC11-5W-023 -017 Relinquished by: (Signature) Date Time (Received by (Signature) Date Time LABORATORY USE ONLY Kn.06! 4/11/06 4:3 14:35 Samples were: Discrepancies Between 1. Shipped___ or Hand Delivered__ Airbill# Reliberiabet (Signature) Date Time Received by: (Signature) Date Time Sample Labels and 2. Ambient or chilled, Temp 15:30 COC Record? Y or N 4.11.06 4.11.061 15:30 3. Received in good condition: Y or N Explain: 4. Property 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 Received by: (Signature) Date Relinquished by: (Signature) Date Time Time 2. Unbroken on outer package: Y or N 3. COC record present & complete upon sample receipt:

16976

EXTERNAL CHAIN OF CUSTODY

5/5 Broad mollow Ru, melville, Rt 11141-5010													
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE	NT:	A-	<u>-</u>		_						H2M SDG	NO: ATC 007
PROJECT NAME/NUMBER											NOTES:		Project Contact:
SHOREHAM REMEDIATION	sample Container Description								55		X-To-	M _	COLIN CHAMBORS
	Pott				1]		4		* Ton	- 1	Phone Number:
	P680						}		3		Aq.	+ Cd	609-571-7519
SAMPLERS: (signature)/Client	mes												PIS[Quote#)
ATC ASSOCIATES	-								20				906
DELIVERABLES:	1								7				L
/'' B5-70D	9.0		AN	IALY	SIS R	EQI	JEST	ED					
TURNAROUND TIME: 24-48 He V 210 PKG	Total No. of Containers	OR	GANI	С					INOR	≀G.			
DATE TIME MATRIX FIELD I.D.		VOA	BNA	PCB					Metal	S	LAB I.	D. NO.	REMARKS:
411/06 11:00 SOIL APCIL- SW-024	1								文			7-018	
411/166 10:55 SOIL APCIL-5W-025	1								V			-019	
411106 10:50 SOIL APC 11-SW-925	1								$\tilde{\chi}$			-020	
		_			$\neg \uparrow$			_	Ϋ́Ì	-		-010	
	 				$\neg \dashv$				ΧÌ			-011	
4/1/66 11121 SOIL APCIL-BY-03					\vdash					-			
4/11/06 11:23 SOIL APCIL BY-04	1								(-		-012	
4/11/06/11:26 SOIL APCIL-BY-05	-								$\frac{2}{\sqrt{2}}$			-013	
4/11/06/11/33 Son APCIL-BY-06	1 1								X			-014	
4/11/06 11.36 SOIL APCII-BY-07									X			-015	
4/11/06/11:40 SOIL APCII-FL-007									X			-016	
Relindustred of: (Signature) Date Time Received for (Signature)	ature)	ر			Da F.U	- 1	Tin 14A		 -			ATORY USE ON	ILY
Perhaps (Spriature) Date Time Received by (Slon	ature)				Da ¹		Tim	لــــــــــــــــــــــــــــــــــــــ		•	icles Between abels and		and DeliveredAlrbill#
41106 530	3		>	_		- 1	15:3	- 1	`	_	ord? Yor N	Amblent or chille Received in good	
Relinquished by: (Signature) Date Time Received by: (Sign	ature)			- 2	Dai	_	Tim	_	Expla	ain:		4. Properly preserve	
				Ì				}				COC Tabe was:	nadana. V N
Relinquished by: (Signature) Date Time Received by: (Sign	ature)				Dal	le	Tim	16					er package: Y or N
				ł				-				3. COC record pres	ent & complete upon sample receipt:
				j		ĺ		- 1				I	1

Sample Receipt Checklist

Client Name ATC			Date and	Time Receive	4/11/2
Work Order Numbe 0604417			Received	by PS	
Checklist completed b	Date	11.06	Reviewed	by Initials	Date
Matrix	Carrier name	Courier			
Shipping container/cooler in good condition?		Yes 🗸	No 🗌	Not Applicable	
Custody seals intact on shippping container/coo	oler?	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 complian	ce?	Yes 🗹	No 🗌	266	
Water - VOA vials have zero headspace?	No VOA vials sub	mitted 🗹	Yes	□ No □	
Water - pH acceptable upon receipt?		Yes 🔽	No 🗌		
	Adjusted?		Checked b		
Any No and/or NA (not applicable) response mu	ust be detailed in the	comments se		Person contacted	=====
Contacted by:	Regarding				
Comments:					
		-			
				_	
Corrective Action					
	· · · · · · · · · · · · · · · · · · ·		-		

INTERNAL CHAIN OF CUSTODY

CLIENT: ATC	_DELIVERABLES: <u>B5-</u> 7	<u>(O.D.</u> TURN AROUND TI	ME: <u>24-48hr V-2</u> 1day PKq
SDG #: ATC 007	CASE #:	MATRIX: SOIL	рН СНЕСК Ү ок(Ю)
REMARKS:	020 AT (206	
RECEIVED BY:	SIGNATURE:	DATE: 4	11/06 TIME: 15:30

			H2M LAB	DATE	BOTTLE	# OF	TESTS
	CLIENT		#	COLLECTED	ТҮРЕ	BOTTLES	REQUESTED
, ,	APCII-B	MS/MSD S-027	0604417 L -IA	4.11.06	A	3	PMOIST 6010-S. PKG (SEL)
2		- 028	-24				
,		-029	-3A			1	
•		-030	-4A				
,		-031	_ ^ 54				
•		-032	-6A				
,		-033	-7A				
		-034	-8A				
,		-035	-9A		·		-
10	BY-		-10A				
79		- 03	-IIA				
12	_	04	-12A				
n	-	05	-13A				
м		06	-144				
13	<u> </u>	07	~15A				
14	FL-	007	-16A				
17	SW-	023	-17A				
18		024	-18A				
מ		025	-19A				
>	VV -	925	V -20A	<u> </u>			

METALS

CLIENT: ATC

SDG #: ATC 007

INTERNAL CHAIN OF CUSTODY

(Market)	DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE	PURPOSE OF CHANGE OF CUSTODY	INI
Table 1	4.11.06	16:09	8109	SION)	A.	Anglysis	
	4-12-00	7:15	20 al	3100 Arter ha	A	PMvn-st	
No.	4-12-06	7:45	sia Plake fruit	3103	A	Storage	
4	4/206	12:30	eros	Aladh -	A	DIGS	
See See See	1/1/26	15:3D	ThudeL ?	31000	Alpics	STOCALE ANALYSIS	
	4 1200	19:30	Cath	hule fewer	<u>Digs</u>	ICP	
A MANAGEMENT	4 12 06	21:30	hule fruits	often de la constante de la co) Ozus	Storage	
			31003	310N	/ 3		
See See			3100	31CM			
9		_,	5100	SICM			
100			9100	SICN		· _	<u> </u>
			3108	SICH			
			SION	SIGN			
對			wore wore	31ÇA			
			eloie (/)	SICH			
			310H	BION			
			SION	SION			
			SION	SICN			
			э10н	SION			
	•		91031	зіон			
			SION	SION			
			MOIE	91CH			
			3109	SICH			
	-Z		ысы	SICH			
	Z T		SION	SIGN			

METALS

	APPENDIX B	

Project Name:	Peerless Photo Pro	oducts		Cas	e No./SDG:	ATC007
Project No.:	68.28817.0001				npling Date(s):	4/11/2006
Project Manager:	M. McNally				iewed By:	M. Traxler
Laboratory:	H2M			Con	npletion Date:	6/4/2006
Compound List:	TAL	Append			X OtherCd, Ag	
Method: Matrix:	CLP SOW 3/90	X SW-84	6 s (ug/L)		Other	
	X soil/solid (mg/Kg)					- 1
The following table and QA action.	indicates the data va	lidation	criteri	a exan	nined, problems	identified,
Data Validation Crite	eria:	accep	t FYI	qualif	y comments	
Holding Times		X	\Box	П	Less than 180 d	ays
Calibration Linearity	- Furnace, Hg ,				NR	
and CN						
Calibration Verificat	ion	X	11	1. [2-point standard	
CRDL Standard		×	1 1		50 - 150 % R	
Calibration Blanks	na dia manaharan dia menjada dia menja Menjada dia menjada dia me	×			< RL	
Preparation Blanks			+1		< RL	
Field Blank	en e	×	l _e	-ip-	< RL	
ICP Interference Che	ck Sample	×			80 - 120 % R	
Laboratory Control	Sample	×	11	11	80 - 120 % R	
Matrix Duplicate Res	ults		11	×	Ag > 35 RPD	
Matrix Spike Results	•	l x	×	11	75 - 125 % R; A	g >5X spik e
ICP Serial Dilution		×]]		< 10 RPD	
Post Digestion Anal	ytical Spike	1 1 1		11	NR	
Method of Standard	Addition				NR	
Field Duplicate Resu	ılts	x			< 50 RPD Ag, C	d <5x RL
Sample Result Verifi	cation	×			Cadmium and S	Silver
Other:						
General Comments:						
						

QA Scientist Mark Harbler Date 6/4/06

Inorganic Matrix Spike/ Matrix Duplicate Worksheet

ATC

Project Name:

Peerless Photo Products

Project Number: 68.28817.0001

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 Sample Result Amount

MD Result

MS Result

Case/SDG Number: ATC007

Amoui

					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

QA Scientist Mark Shaples Date 6/4/06

^{* -} Denotes RPD outside criteria

Inorganic Field Duplicate Precision Worksheet ATC

Project Name: Peerless Photo Products Case/SDG Number: ATC007

68.28817.0001 Project Number:

Sample Location	APC11-SW-025	APC11-SW-925
or Description		
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	

QA Scientist Mark Stayler Date 6/4/06

ATC007 Field Duplicate

^{* -} Denotes RPD outside criteria

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC007

Preparation Blank Matrix (soil/water): <u>SOIL</u>

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

	Initial Calib. Blank		Coi	Continuing Calibration Blank (ug/L)						Blank (ug/L) ration				Prepa- ration			
Analyte	(ug/L)	С	1	С	2	С	3	С		Blank	С		М				
Cadmium	0.3	В	0.3	В	0.3	В	0.3	В		-0.01	9 B	1	P				
Silver	0.4	U	0.4	U	0.5	В	2.2	В	1	0.04	5 U	\perp	P				

3 BLANKS

Lab Name: <u>H2M LABS, INC.</u>

Contract:

Lab Code: <u>1</u>0478

Case No.

SAS No.:

SDG No.: ATC007

Preparation Blank Matrix (soil/water): <u>SOIL</u>

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

	Initial Calib. Blank		Continuing Calibration Blank (ug/L)						Prepa- ration		
Analyte	(ug/L)	С	1	С	2	С	3	c	Blank	С	M
Cadmium				.2 B				<u> </u>			P
Silver			1	.3 В							P
	-	i			i						

5A SPIKE SAMPLE RECOVERY EPA SAMPLE NO

APC11-BS-027S

Lab Name: H2M LABS, INC.

Contract:

.0478 Case No.

SDG No.: ATC007

Lab Code: <u>10478</u>

SAS No.:

Level (low/med): LOW

Matrix (soil/water): \underline{SOIL}

% Solids for Sample: 90.5

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

	Control Limit	Spiked Sample	Sample		Spike			
Analyte	l %R	Result (SSR) C	Result (SR)	С	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	\geq	Р

MI 6/4/06

Comme	ents:						
-		 		***		 	
•		 					

6 DUPLICATES EPA SAMPLE NO

APC11-BS-027

Lab Name: <u>H2M LABS</u>, 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

	Control						
Analyte	Limit	Sample (S)	C	Duplicate (D) C RE	,D	Q	М
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

MARK TRAXLER
SENIOR QUALITY ASSURANCE SCIENTIST

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.

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 (μg/L) and should have been reported as 0.50 B. Similarly, APC11-D-09 was reported as "620 B", but was actually 0.620 μg/L and should have been reported as 0.62 B, and APC11-D-10 was reported as "708 B", but was actually 0.708 μg/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	ΔΝΔΙ YTES
DAIA SUIVINAN I *	INOVAVIAIC	MINALITO

		DATA SUMMARY - INORGANIC	CANALYTES		page 1
Site Name	Peerless Photo Products	TCLP Leachate (mg/L)	Laboratory	H2M - Melville, New York	
Project Number	68.28817.0001		Case/Order #	ATC008	
Sampling Date(s)	4/11/2006		Fraction/Method	TCLP Metals / 3010A / 6010B	

	Sample Location or Description	n	APC11	I-D-08	APC11	-D-08D	APC11-	D-08S	APC1	1-D-09	APC11-D-10						
	Sample Number	eΓ	060442	20-001	060442	20-001D	0604420	0-001S	06044:	20-002	0604420-003						
	Sampling Date	_	4/11/	2006	4/11/	/2006	4/11/2	2006	4/11/	2006	4/11/2006						
	Preparation Da	ite	4/13/	2006	4/13/	/2006	4/13/2	2006	4/13/	2006	4/13/2006						
	Analysis Date		4/13/	2006	4/13/	/2006	4/13/2	2006	4/13/	2006	4/13/2006						
	Percent Solids		n/	/a	n	/a	n/a	a	n.	a	n/a						
IDL		PHo		Q DF		Q DF		Q DF		Q DF	Q	F	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			2 1 8 F86 F	1 4 4 4 1		
1,5	Barium	X	504 B	J* 1	484 B	J* 1	103.0%	1	620 B	J* 1	708 B J*						
0.1	Cadmium	Χ	1.3 B	J 1	0.9 B	J 1	90.9%	1	1.9 B	J 1	2.1 B J						
0.3	Chromium	X	0.37 B	J 1		U 1	91.8%	1		U 1	U					:	
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						
0.1	Mercury	X		U 1		U 1	94.6%	1		U 1	U						
				1	1	1	400.00/		400	1 1 4	C 0 D	1					1
1.9	Selenium	[X]	_7.6 B] J] 1	ſ	<u>U</u> 1	102.2%	1	4.9 B	J 1	5.8 B J						

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

QA Scientist M France DATE 6/28/02

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

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

Vincent Stancampiano

Vice President

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

ATC008 S 3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: ATC008

Analytical Requirements

000.111000		
Customer Sample	Laboratory Sample	ME
Code	Code	
APC11-D-08	0604420-001	Х
APC11-D-09	0604420-002	Х
APC11-D-10	0604420-003	X

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.

	1		
NORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-D-08

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.: SDG No.: ATCOOR

Matrix (soil/water): WATER

Lab Sample ID: <u>0604420-001</u>

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

0.0

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

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	8.0	В		P
7440-39-3	Barium	504	В		P
7440-43-9	Cadmium	1.3	В		P
7440-47-3	Chromium	0.37	В		P
7439-92-1	Lead	6.5	В		P
7439-97-6	Mercury	0.10	U		CV
7782-49-2	Selenium	7.6	В		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	1: 4/19/06			
		 	 	

	1		
INORGANIC	ANALYSIS	DATA	SHEET

EPA SAMPLE NO

APC11-D-09

Lab Name: H2M LABS, INC.

Contract:

SDG No.: ATC008

Lab Code: 10478

Case No.

SAS No.:

Matrix (soil/water): WATER

Lab Sample ID: 0604420-002

Level (low/med):

LOW

Date Received: 4/11/2006

% Solids:

0.0

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

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

Color	Before:	COLORLESS	Clarity Before:	CLEAR	Texture:
Color	After:	COLORLESS	Clarity After:	CLEAR	Artifacts:

Comm	ents:				
	Date Reported: 4/19/06		 		
				<u>-</u>	
		<u>-</u>			
			 	·	

APC11-D-10

EPA SAMPLE NO

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478 Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Lab Sample ID: 0604420-003

Level (low/med): LOW

Date Received: 4/11/2006

% Solids:

0.0

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

CAS No.	Analyte	Concentration	С	Q	М
7440-38-2	Arsenic	5.0	В		P
7440-39-3	Barium	708	В	-	P
7440-43-9	Cadmium	2.1	В		P
7440-47-3	Chromium	0.30	U		P
7439-92-1	Lead	5.1	В		P
7439-97-6	Mercury	0.10	U		CV
7782-49-2	Selenium	5.8	В		·P
7440-22-4	Silver	19.3	Ü		Α
_					

	Color Before: COLORLESS	Clarity Before:	CLEAR	Te
--	-------------------------	-----------------	-------	----

exture:

Color After: COLORLESS Clarity After: CLEAR

Artifacts:

Comme	ents:		
	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	DateRecd Date at Lab 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

575 Broad Hollow Rd, Melville, NY 11747-5076

16977

EXTERNAL CHAIN OF CUSTODY

Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE	NT:	A.	7							H2M SDG	NO: ATC 008/00
PROJECT NAME/NUMBER										NOTES:	**	Project Contact:
SHOREHAM REMEDIATION	Sample Container Description	GLASS	55977	CLASS				GLASS	GLASS	ARE FUL	_	COLIN CHAMBERS Phone Number: 609-571-7519
SAMPLERS: (signature)/Client ATC ASSOCIATES DELIVERABLES:	Samp	7 04.	25	١,				2 02,	2-02.		impets	PIS/Quote#
B5-7DD	\o \cong \co	 	Δ.	<u>Ι</u> ΙΔΙ Υ	SIS REC	S REQUESTED				TCL+		_ METELS
TURNARQUND TIME:	Total No. of Containers	ORGANIC			J.O. N.E.G.	DESTED		INORG.				
DATE TIME MATRIX FIELD I.D.		VOA	BNA	Peat/ PCB				Metal	CN	LAB I.D	, NO.	REMARKS:
4/10/02/15:12 SOIL APCIL-D-08	4							X		060442	0-001	
4/0/20 15:25 SOIL APC 11- D-09	4							X			-002	
4 4 66 15:35 SOIL APCHD-10	4							X		_\\	- 003	
4/10/06 12:50 SOIL APCII- SR-08	4	X	X	X				X	X	060442	4-001A	$\rightarrow 0$
4/10/06/14:00 SOIL APCIL- SR-09	4	X	X	X				X	X		002A	→ 0
4/10/06 14:45 SOIL APCIL-5R-10	4	X	X	X				X	X		0031	1>0
4/6/06/15:00 SOIL APCIL- SR-11	4	X	X	X				X	X		004A	->∩
4/11/06/08:50 SOIL APCIT-5/2-12	4	X	X	X				X	X		005A	1 > 0
4/11/86 09:10 SOIL APC 11-5R-13	4	X	X	X				χ	X		U06A	_
	<u> </u>									<u> </u>		
Relinguished by: (Gignature) Date Time Received by: (Sign	iature) /				Date Lil-Oc	F	∏me	<u></u>			TORY USE ON	LY
Relinquished by: (Signature) Relinquished by: (Signature) Date Time Received by: (Signature) Received by: (Signature)			<u></u>		Date 4/11/16	15	lme	Discrepancies Between Sample Labels and COC Record? Y or N Explain: Samoles were: 1. Shipped or Hand Delivered Alrbili# 2. Amblent or chilled, Temp 3. Received in good condition: Y or N 4. Properly preserved: Y or N		d, Temp condition: Y or N		
Relinquished by: (Signature) Date Time Received by: (Signature)					Date		îme		-	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 of Y or N		r package: Y or N

C

H2M LABS, INC.

Sample Receipt Checklist

Client Name ATC			Date and	l Time F	Receive	4/11/2006 3:30:0
Work Order Numbe 0604420			Received	d by	JN	ſ
Checklist completed b Signature	/ 4/11/ Date	06_	Reviewe		Initials	Date
Matrix	Carrier name <u>(</u>	Courier				
Shipping container/cooler in good condition?	١	∕es 🗹	No 🗌	Not	Applicable \Box	
Custody seals intact on shippping container/cooler?	١	res 🗌	No 🗹	Not	Applicable 🗌	
Custody seals intact on sample bottles?	Y	res 🗌	No 🗌	Not	Applicable 🗹	
Chain of custody present?	Y	res 🗹	No 🗌			
Chain of custody signed when relinquished and receive	ed?	res 🗹	No 🗌			
Chain of custody agrees with sample labels?	١	res 🗹	No 🗌			
Samples in proper container/bottle?	`	res 🗹	No 🗌			
Sample containers intact?	`	res 🗹	No 🗌			
Sufficient sample volume for indicated test?	١	res 🗸	No 🗌			
All samples received within holding time?	- \	res 🗹	No 🗌	c	,	
Container/Temp Blank temperature in compliance?	`	res 🗸	No 🗌	46		
Water - VOA vials have zero headspace? No No	VOA vials submit	ted 🗹	Yes		No 🗌	
Water - pH acceptable upon receipt?	`	res 🔽	No 🗀			
Adjust	ed?		Checked b			
Any No and/or NA (not applicable) response must be d	letailed in the cor	nments se		 		=====
Client contacted Date of	contacted:			Person	contacted	
Contacted by: Regar	ding					
Comments:						
Corrective Action						

HZM LABS, INC.

· ·	INTERNA	AL CHAIN	OF CUS	STODY	I WEEK VERBLUS
CLIENT: ATC					TIME: 21 DAYS
SDG#ATCOOS	CASE #:		MATRIX:	Soil	pH CHECK Y or N
REMARKS:	02	OATC	de		
RECEIVED BY:	s	IGNATURE:	EUL	DATE	:4/11/06 TIME: 15:30
	H2M LAB	DATE	BOTILE	# OF	TESTS
CLIENT ID	#	COLLECTED	TYPE	BOTTLES	REQUESTED
·APC11-0-08	0604420	4/10/06	A	4	TCLP. METALS
. 09	-uua				
. 10	¥-003	A	-J.	-3L-	
,					
7					
1		4/11/06			
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12					
13					
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H2M LABS, INC.

CLIENT: ATC

SDG 1: ATCOOS

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE	PURPOSE OF CHANGE OF CUSTODY	INI7
4/11/06	16:20.	310N Ce ()	Susanne Robel	A	prep.	
 		SION	3108			
		510M	STON			
 -	<u> </u>	FICH	эІоя		·	
		BICOM	3108			
—— <u> </u>		NICH	3108			
		sicul	310A			
		BIGN	SION	-		
		8] ©	aren			
		9101	SICH			<u>.</u>
		91 OH	SICH			
		MOIE	SICN			
		•				
		HOIE	SICN			· · · · · · · · · · · · · · · · · · ·
	,	91 ON	SICH			
		HOIE	SIGN			
		3108	SICH			
		HOIE	SION			-
		HOIE	SION		7	
		SIOM	SICH			
		910H	SION			
		alom	SION	-		
		310H	SION	 		
		MOIE	31CH .			
		3108	21CH			
		aton	SICH			-
	_`	KOIS	21CH		<u> </u>	

- H2M LABS, INC.

-1

a de la companya de	INTERNAL CHAIR				
CLIENT: ATC	DELIVERABLES: 85.	700 TURN AR	OUND TIM	ME: OI OAYS	
SDG#: ATC008	CASE #:	MATRIX: S	016	pH CHECK Y or N	~
REMARKS:		*SAMPL	E IN (CUSTODY OF SP) /
DECEMBED DV.	CICLLATE.	Selv	DATE: 4/1	1/1/6 TIME: 15:37)	

	H2M LAB	DATE	BOTTLE	# OF	TESTS
CLIENT ID	#	COLLECTED	TYPE	BOTTLES	REQUESTED
·APC11.0.08	0604420	4/10/06	A	*	TCLP METALS
, 09	७०२				
. 10	4,003	للا	*		14
	·				
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			4+17	,	
,		u/n	(90)		
19					
13					
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14					
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>					

METALS

-1 H2M LABS, INC.

CLIENT: ATC OS

SDG 1: ATC OS



INTERNAL CHAIN OF CUSTODY

-3I			SAMPLR RELINQUISHED	Sample	BOTTLE	PURPOSE OF CHANGE OF	
1	DATE	TIME	BY	RECEIVED BY	TYPE	CUSTODY	TINIT
14	4/13/06	9145	Jusame Radal	STORP COL	ϵ	ras	
_	4 13/2	10:00	9109	Thinks Delew	EN	Hy Dig analysis	
_ 3 }	4/13/00	13:00	Chotre Deur	9101	EN BOD	Stroge	
- Same	-110012	200	The Contract of the Contract o	A COR	MEN	DOS MAN	K
-3	412/01	1300	11 DOIO10-	SION)	MINIO	SON WATHOU	<u> </u>
			310d	910%			
			9103	SION			
SECTION STATES			910M	910H			
, 3			310M	SICH			
, sales est			510M	SICH		<u> </u>	
Ariensus.			9108	SIGN			
3			910M	alch SICH			
The same of the sa				SICH			
			STON	310H			· ·
HAMMAN		l	9109	310H			
			SION SION	510H			
2		-	SION	310N			
			SION	SION		,	
3			MOIE	SICH			
Name of the last o			910M	SICH			
3			3108	SIGH			-
						L	L

METALS

	APPEN	IDIX B

Project Name: Project No.: Project Manager:	Peerless Photo Proc 68.28817.0001 M. McNally	oducts		Sar Rev	se No./SDG: npling Date(s): viewed By:	ATC008 4/11/2006 M. Traxler
Laboratory:	Accutest			Coi	mpletion Date:	6/28/2006
Compound List:	TAL	Append			X Other_TCLP_	
Method:	<u></u>	SW-84			X Other mg/L_	
Matrix:	soil/solid (mg/Kg)		s (ug/L)			
The following table in	ndicates the data vali	dation	criteri	a exa	mined, problems	identified,
and QA action.	_		. 534		e	
Data Validation Criter	na: 	accep	t FYI	quain	fy comments	
Holding Times		X			Less than 180 d	ays
Calibration Linearity	- Furnace, Hg ,				NR	
and CN				. * N		
Calibration Verification	on	X			2-point standard	(
CRDL Standard		×			50 - 150 % R	
Calibration Blanks		X			< RL	
Preparation Blanks		X			< RL	
Field Blank			Х		< RL No FB in	batch
ICP Interference Chec	ck Sample	X	s *:.		80 - 120 % R	
Laboratory Control S	ample	x			80 - 120 % R	
Matrix Spike Results		X			75 - 125 % R	
Laboratory Duplicate	Results	X			< 20 RPD (unle	ss <5X CRDL)
ICP Serial Dilution		X			< 10 RPD (or <	
Post Digestion Analy	tical Spike				NR	
Method of Standard A					NR	
Field Duplicate Resul			X		< 50 RPD No F	D in batch
Sample Result Verific	表示: 12 Turner - 安安女	X				
Other:						
General Comments:			ш	ш.		

NA - Not applicable NR - Not reviewed

QA Scientist Mar Slayder

Date 6/28/06

Inorganic Matrix Spike/ Matrix Spike Duplicate Worksheet

Project Name:

Peerless Photo Products

Case/SDG Number: ATC008

Project Number: 68.28817.0001

Sample	Location
or Desc	
Sample	Number
Samplin	ng 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

QA Scientist Mark Starder Date 6/28/06

⁻ Denotes %R or RPD outside criteria

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

Lab Name: H2M LABS, INC.

Contract:

PBWT TCLP BLANK

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Lab Sample ID: MB1-16667

Level (low/med):

LOW

Date Received:

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): $\underline{UG/L}$

CAS No.	Analyte	Concentration	С	Q	М
7440-38-2	Arsenic	2.2	В		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

Comme	ents:
	Date Reported: 4/19/06

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Contract:

PBWT TELP BIANK 4/25/06 @

Lab Name: H2M LABS, INC.

Case No. Lab Code: 10478

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	С	Q	М
7440-22-4	Silver	19.3	U		А
	}				

Comments: Date Reported: 4/19/06

1 INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO

PBWT

JCLP BIAMIL 4/25/060

Lab Name: <u>H2M LABS</u>, INC.

Contract:

SDG No.: ATC008

Matrix (soil/water): WATER

Lab Code: 10478 Case No.

SAS No.:

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	С	Q	М
7439-97-6	Mercury	0.10	U	L	CV

Comments: Date Reported: 4/19/06

3 BLANKS

Lab Name: <u>H2M LABS</u>, INC.

Contract:

Lab Code: <u>10478</u>

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

	Initial Calib. Blank		Con		nuing Calib Blank (ug/I		tion			Prepa- ration		
Analyte	(ug/L)	С	1	С	2	С	3	С	1	Blank	С	М
Arsenic	1.8	β¦υ	1.8	U	1.8	υ	1.8	U		1.768	υ	P
Barium	1.5	U	1.5	U	1.5	Ū	1.5	U		1.510	U	P
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U		0.100	Ü	P
Chromium	0.3	3 U	0.3	U	0.3	U	0.3	U	П	-0.740	В	P
Lead	1.1	. U	1.1	Ü	1.1	U	1.1	Ü		1.126	U	P
Selenium	1.9	U	1.9	Ü	1.9	U	1.9	U		1.910	U	P

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

	Initial Calib. Blank		Con		uuing Calik Blank (ug/1		tion		Prepa- ration		
Analyte	(ug/L)	С	1	С	2	С	3	С	Blank	С	M
Arsenic		1	1.8	ט ו	1.8	U					P
Barium			1.5	U	1.5	U		1			P
Cadmium			0.1	U	0.1	U					P
Chromium			-0.3	В	0.3	U				7 1	P
Lead			1.1	U	1.1	U				1	P
Selenium	[j	1.9	U	1.9	U					P

BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Preparation Blank Matrix (soil/water): WATER

	Initial										
	Calib. Blank		Continuing Calibration Blank (ug/L)						Prepa- ration		
Analyte			1	С	2	C	3	С	Blank	С	М
Silver	19.	3 U	19	. 3 U					19.30	0 0	А
]			1 7							

3 BLANKS

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATCOOR

Preparation Blank Matrix (soil/water): WATER

	Initial Calib. Blank	ĺ	Cor		ing Cal		on		Prepa- ration		
Analyte	(ug/L)	С	1	С	2	C 3/L)	3	С	Blank	С	M
Mercury	0.1	U	0.1	U	(0.10			0.10	00 U	CV

5A SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

APC11-D-08S

Lab Name: H2M LABS, INC.

Contract:

ALCII D 003

Lab Code: <u>1047</u>8

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): $\underline{\text{UG/L}}$

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	C	Spike	%R		М
Analyte	917	Kesuit (33K)		result (SK)		Added (SA)	7.6	Q	191
Arsenic	75-125	984.0000	В	7.990	0 В	1000.00	97.6		P
Barium	75-125	1534.5000	В	504.490	0 B	1000.00	103.0		P
Cadmium	75-125	910.3700		1.290	0 B	1000.00	90.9		P
Chromium	75-125	918.1900	В	0.370	0 B	1000.00	91.8		P
Lead	75-125	907.0000	В	6.530	0 B	1000.00	90.0		P
Mercury	75-125	0.9460	B	1/2 Jan 0.100	0 U	1.00	94.6		CV
Selenium	75-125	1030.0000		7.550	0 B	1000.00	102.2		P
Silver	75-125	990.0000		19.300	0 0	1000.00	99.0		A
						1			

Comme	ents:				

6 DUPLICATES EPA SAMPLE NO

APC11-D-08

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	С	Duplicate	(D)	С		RPD	Q	M
Arsenic	1000.0000	7.9900	В	_	2.2000	В		113.6		Р
Barium	0000.000	504.4900	В	4	83.6700	В	П	4.2		Р
Cadmium	100.0000	1.2900	В		0.9200	В	П	33.5		Р
Chromium	1000.0000	0.3700	В		0.3000	Ü	П	200.0		P
Lead	1000.0000	6.5300	В		6.7200	В		2.9		P
Mercury		0.1000	U		0.1000	U				CV
Selenium	100.0000	7.5500	В		1.9100	U		200.0		P
Silver		19.3000	U		19.3000	U				А

RPDs are due (25x x) acceptable due (25x x) to bow levels 10b MJ 6/28/06

ICP SERIAL DILUTIONS

Lab Name: H2M LABS, INC.

Contract:

APC11-D-08

Lab Code: 10478

Case No.

SAS No.:

SDG No.: ATC008

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

						÷	•	;	7		
	: :				Seri	al		90	: ;		:
		Initial S	al Sample		Dilut.	ion		Differ	- ; ;	:	
_: Analyte		Result	(I)	C	Result	(S)	C ,	ence		Q	М
Arsenic			7.99	В		12.94	В	61	8)		Ρ
Barium			504.49	В		502.60) B	0.	4		Р :
Cadmium			1.29	В		1.80) B	39.	5		P
Chromium			0.37	В		1.50) · U	100.	رو.		P
Lead			6.53	В	-	7.36	5. B	12.	7:	· :	Р
Selenium			7.55	В		12.57	В	66.	6	j	Ρ
				,							

All 7Ds are
acceptable due to
acceptable due to
low levels of sample
(450 × 10L)
(450 × 10L)
MJ 6/28/06