



Roc (1/29/13)
put on BRRTS 1/29/13
January 24, 2013 (43)

Wisconsin Department of Natural Resources

Attn: Mr. Phil Richard
875 South 4th Avenue
Park Falls, WI 54552



Subject:

Site Update
Phillips Plating Corporation
984 North Lake Avenue
Phillips, WI
BRRTS: 02-51-559634

Dear Phil,

The purpose of this letter is to provide you with an update for site investigation activities associated with the above referenced site. The site location is shown on Figure 1.

BACKGROUND

This site is located in the NW ¼ , SW ¼ , S07, T37N, R01E in the City of Phillips, Price County. A site vicinity map is included as an attachment. The facility is an operating plating facility which specializes in metallic plating of various plastic components.

SUMMARY OF DATES AND WORK COMPLETED

- **October 4, 2012** - REI completed Phase II Environmental Site Investigation
- **November 29, 2012** - REI reports contamination to WDNR
- **December 10, 2012** - REI prepares and submits investigation work plan
- **December 11, 2012** - REI onsite to install, develop, and sample monitoring wells 1-5
- **December 19, 2012** - REI onsite to collect soil samples around previously leaking floor drain
- **January 3, 2013** - REI on site to sample MW5 and install, develop, and sample monitoring wells 6 and 7

INITIAL GROUNDWATER ANALYTICAL RESULTS

A Phase II Environmental Site Investigation was completed on October 4, 2012 and groundwater samples collected from Geoprobe Hydraulic Push Borings, advanced by Geiss Soil and Samples, indicated that groundwater contamination was present on the site. Initial groundwater monitoring wells, MW1-MW5, were installed by Giles Engineering Associates. These wells were surveyed, developed and sampled for the first time on December 11, 2012. The extent of groundwater contamination was not defined. Therefore, On January 3, 2013, Giles Engineering Associates was subcontracted to advance two additional groundwater monitoring wells (MW6 and MW7). Figures 3a and 3b show the locations of all seven (7) groundwater monitoring wells advanced for this investigation. The horizontal extent of the ground water contamination is not yet defined.



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4080 N. 20th Avenue Wausau, WI 54401
715-675-9784 www.REIengineering.com

f:\reiproj\6100-6199\6134b\reports\update\6134bual2.docx

Groundwater analytical results from the geoprobe borings are summarized in Table 2. Groundwater elevation data was collected prior to sampling and is summarized on Table 3 and groundwater analytical results from the monitoring wells are summarized on Tables 4a-4g. Groundwater contour maps were prepared using the groundwater elevation data collected during the December 12, 2012 and the January 3, 2013 sampling events and are included as Figures 3A and 3B respectively.

SOIL SAMPLING ANALYTICAL RESULTS

Investigative work completed by Phillips Plating Corporation personnel identified what is believed to be the source of the release to the environment. Soil samples were collected below the concrete floor in the area around the previously leaking piping under the floor drain by tank six (6). These samples showed contamination exceeding the groundwater pathway Residual Contaminant Level (RCL) from the DNR RR Programs RCL Spreadsheet. Soil analytical results are provided as an attachment in Table 1.

CONCLUSIONS AND RECOMMENDATIONS

Based on the latest groundwater analytical results, the extent of groundwater contamination needs further definition. Installation of additional monitoring wells will be necessary to completely define the extent of the contamination. Soil contamination has been found in the area of the floor drain near tank six. REI believes an excavation of contaminated soil is impractical due to the structural impediments inside the building.

Upon your review please contact me to discuss what has been presented in this update. Please contact our office at (715) 675-9784 or electronically at ascheunemann@REIengineering.com to further discuss.

Sincerely,
REI Engineering, Inc.



Adam T. Scheunemann
Environmental Scientist

Attachments

- Table 1 – Summary of Soil Sample Analytical Results
- Table 2 – Geoprobe Groundwater Results Summary – Metals & VOC's
- Table 3 – Groundwater Elevation Summary
- Table 4a-4g – Groundwater Analytical Results Summaries
- Figure 1- Site Vicinity Map
- Figure 3A – Groundwater Contour Map (12/12/2012)
- Figure 3B – Groundwater Contour Map (1/3/2013)
- Attachment A –Laboratory Analytical Reports

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Phillips Plating, North Lake Avenue, Phillips, WI

				Date-->	10/4/12	10/4/12	10/4/12	10/4/12	10/4/12	10/4/12	10/4/12	10/4/12	12/19/12	12/19/12
				Boring-->	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-6D	GP-7C	HAI	HAI
				Sample Depth--(Feet)>	4-8	4-8	4-8	4-8	16-20	8-12	12-16	8-12	Surface	4.5'
Petroleum VOC's (ug/kg)	RCL	GW RCL	Table 1	Table 2										
Benzene	7410	5.1	8,500	1,100	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
Ethylbenzene	37,000	1,570	4,600	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
Toluene	818,000	1,107.2	38,000	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
Xylenes (Total)	258,000	3,940	42,000	NS	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	NA	NA
Methyl tert Butyl Ether	293,000	27	NS	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
1,2,4-Trimethylbenzene	219,000	1,379.3	83,000	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
1,3,5-Trimethylbenzene	182,000		11,000	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
Naphthalene	26,000	658.7	2,700	NS	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	NA
Metals (mg/kg)														
Total Chromium	NS	360,000	NS	NS	14.40	16.90	12.90	25.50	52.50	21.60	20.30	25.60	3,610	1,600
Hexavalent Chromium	5.57	NS	NS	NS	<2.69	<2.74	<2.77	<2.66	2.40	<2.67	<2.73	<2.64	2.77	2.84
Trivalent Chromium	100,000	NS	NS	NS	NC	NC	NC	NC	50.10	NC	NC	NC	3,607.23	1,597.16
Nickel	19,700	13.0033	NS	NS	12.20	11.80	8.90	15.60	17.20	19.00	14.70	16.40	194	461
Zinc	100,000	NS	NS	NS	18.60	19.30	18.90	21.80	16.90	28.20	27.20	24.90	NA	NA
Arsenic	1.59	0.584	NS	NS	NA	3.1	4.7							
Barium	100,000	164.8	NS	NS	NA	36.7	65.4							
Cadmium	803	0.752	NS	NS	NA	<0.035	0.19J							
Lead	800	27.0	NS	NS	NA	104	23.9							
Selenium	5,110	0.52	NS	NS	NA	<0.54	<0.51							
Silver	5,110	0.8497	NS	NS	NA	<0.25	<0.23							
Mercury	3.13	0.208	NS	NS	NA	0.062	0.054							

Notes:

RCL - Not to Exceed Direct Contact RCL from DNR RR Program RCL Spreadsheet for Industrial Sites

GW RCL - Groundwater Pathway RCL from DNR RR Program RCL Spreadsheet

Table 1 - SPS 746 Table 1 Value - Indicates Petroleum Product in Soil Pores

Table 2 - SPS 746 Direct Contact Standard

< - Concentration below listed laboratory detection limit

NS - No Standard

NC - Not Calculated

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

NA - Not Analyzed

Bold

Exceeds RCL

Exceeds GW RCL

Outline

Exceeds Table 1

Italic

Exceeds Table 2

TABLE 2
GEOPROBE GROUNDWATER SAMPLING RESULTS SUMMARY- METALS & VOCs
Phillips Plating, North Lake Avenue, Phillips, WI

PARAMETER	Sample Location		GP5	GP6D
	Date	ES	PAL	Date
Metals (ug/L)				
Total Chromium	100	10	1,300	4,040
Chromium, Hexavalent (mg/L)			1.2	<0.0039
Nickel	100	20	2,530	1,700
Zinc	5,000	2,500	41.6	1,460
Detected VOC's (ug/L)				
1,1,1,2 - Tetrachloroethane	70	7	<0.92	<0.92
1,1,1-Trichloroethane	200	40	<0.90	<0.90
1,1,2,2-Tetrachloroethane	0.2	0.02	<0.20	<0.20
1,1,2-Trichloroethane	5	0.5	<0.42	<0.42
1,1-Dichloroethane	850	85	<0.75	<0.75
1,2,3-Trichloropropane	60	12	<0.99	<0.99
1,2,4-Trichlorobenzene	70	14	<0.97	<0.97
Total Trimethylbenzenes	480	96	<0.97	<0.97
1,2-Dibromo-3-chloropropane	0.2	0.02	<1.7	<1.7
1,2-Dibromoethane	0.05	0.005	<0.56	<0.56
1,2-Dichlorobenzene	600	60	<0.83	<0.83
1,2-Dichloroethane	5	0.5	<0.36	<0.36
1,2-Dichloropropane	5	0.5	<0.49	<0.49
1,3-Dichlorobenzene	1,250	125	<0.87	<0.87
1,4-Dichlorobenzene	75	15	<0.95	<0.95
2,2-Dichloropropane			<0.62	<0.62
2-Chlorotoluene			<0.85	<0.85
4-Chlorotoluene			<0.74	<0.74
4-Isopropyltoluene			<0.67	<0.67
Benzene	5	0.5	<0.41	<0.41
Bromobenzene			<0.82	<0.82
Bromoform			<0.97	<0.97
Bromochloromethane			<0.56	<0.56
Bromodichloromethane	0.6	0.06	<0.94	<0.94
Bromoform	4.4	0.44	<0.94	<0.94
Bromomethane	10	1	<0.91	<0.91
Butylbenzene			<0.93	<0.93
Carbon Tetrachloride	5	0.5	<0.49	<0.49
Chlorobenzene			<0.41	<0.41
Chloroethane	400	80	<0.97	<0.97
Chloroform	6	0.6	<1.3	<1.3
Chloromethane	3	0.3	<0.24	0.39J
cis-1,2-Dichloroethylene	70	7	<0.83	<0.83
cis-1,3-Dichloropropylene	0.2	0.02	<0.20	<0.20
Dibromochloromethane	0.6	0.06	<0.81	<0.81
Dibromomethane		6	<0.60	<0.60
Dichlorodifluoromethane	1,000	200	<0.99	<0.99
Ethylbenzene	700	140	<0.54	<0.54
Hexachlorobutadiene			<0.67	<0.67
Isopropylbenzene			<0.59	<0.59
Total Xylenes	2,000	400	<1.8	<1.8
Methylene Chloride	5	0.5	<0.43	<0.43
Methyl-tert-Butyl Ether	60	12	<0.61	<0.61
Naphthalene	100	10	<0.89	<0.89
Propylbenzene			<0.81	<0.81
sec-Butylbenzene			<0.89	<0.89
Styrene	100	10	<0.86	<0.86
tert-Butylbenzene			<0.97	<0.97
Tetrachloroethene	5	0.5	<0.45	<0.45
Toluene	800	160	<0.67	<0.67
trans-1,2-Dichloroethylene	100	20	<0.89	<0.89
trans-1,3-Dichloropropylene	0.2	0.02	<0.19	<0.19
Trichloroethene	5	0.5	<0.48	<0.48
Trichlorofluoromethane	3,490	698	<0.79	<0.79
Vinyl Chloride	0.2	0.02	<0.18	<0.18

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD

= Exceeds Enforcement Standard

Italic

= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 3
GROUNDWATER ELEVATION SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

Well	MW1	MW2	MW3	MW4	MW5	MW6	MW7
TOC Elevation	1459.82	1457.24	1461.33	1459.19	1457.51	1458.16	1453.3
Ground Elevation	1460.22	1457.58	1461.59	1459.52	1457.99	1458.67	1454.02
Top of Screen Elevation	1445.92	1442.94	1446.85	1444.85	1443.86	1448.49	1443.76
Well Depth	23.90	24.30	24.48	24.34	23.65	19.67	19.54
Depth to Water (from TOC)							
12/12/2012	12.76	12.58	15.43	13.79	15.70	NI	NI
1/3/2013	13.06	12.83	15.74	14.02	15.77	16.76	15.04
Water Elevation							
12/12/2012	1447.06	1444.66	1445.9	1445.4	1441.81	NI	NI
1/3/2013	1446.76	1444.41	1445.59	1445.17	1441.74	1441.4	1438.26
Average Depth to Water (from Top of Casing)	12.91	12.705	15.585	13.905	15.735	16.76	15.04
Average Elevation of Water (at Groundwater Surface)	1446.91	1444.535	1445.745	1445.285	1441.775	1441.4	1438.26
Minimum Depth to Water (from Top of casing)	12.76	12.58	15.43	13.79	15.7	16.76	15.04

All well elevations referenced to an on site benchmark with an assumed elevation of 1460.00

NI = Not Installed

TABLE 4a
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-1

PARAMETER	ES	PAL	12/11/2012
Metals (ug/L)			
Arsenic	10	1	<0.50
Barium	2000	400	280
Cadmium	5	0.5	<0.10
Chromium, Hexavalent			<1.7
Total Chromium	100	10	2
Lead	15	1.5	<0.10
Mercury	2	0.2	<0.025
Nickel	100	20	5.5
Selenium	50	10	<2.0
Silver	50	10	<0.13

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

<i>Italic</i>	= Exceeds Preventative Action Limit
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NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4b
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-2

PARAMETER	ES	PAL	12/11/2012
Metals (ug/L)			
Arsenic	10	1	<0.50
Barium	2000	400	180
Cadmium	5	0.5	<0.10
Chromium, Hexavalent			<1.7
Total Chromium	100	10	1.4
Lead	15	1.5	<0.10
Mercury	2	0.2	<0.025
Nickel	100	20	9.0
Selenium	50	10	<2.0
Silver	50	10	<0.13

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4c
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-3

PARAMETER	ES	PAL	12/11/2012
Metals (ug/L)			
Arsenic	10	1	<0.50
Barium	2000	400	25
Cadmium	5	0.5	<0.10
Chromium, Hexavalent			<1.7
Total Chromium	100	10	2.2
Lead	15	1.5	<0.10
Mercury	2	0.2	<0.025
Nickel	100	20	1.4
Selenium	50	10	<2.0
Silver	50	10	<0.13

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4d
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-4

PARAMETER	ES	PAL	12/11/2012
Metals (ug/L)			
Arsenic	10	1	<0.50
Barium	2000	400	45
Cadmium	5	0.5	<0.10
Chromium, Hexavalent			<1.7
Total Chromium	100	10	3.4
Lead	15	1.5	<0.10
Mercury	2	0.2	<0.025
Nickel	100	20	6.8
Selenium	50	10	<2.0
Silver	50	10	<0.13

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4e
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-5

PARAMETER	ES	PAL	12/11/2012	1/3/2013
Metals (ug/L)				
Arsenic	10	1	<0.50	<4.7
Barium	2000	400	110	138
Cadmium	5	0.5	<0.10	<0.39
Chromium, Hexavalent			590	460
Total Chromium	100	10	430	414
Lead	15	1.5	<0.10	<1.4
Mercury	2	0.2	<0.025	<0.10
Nickel	100	20	440	787
Selenium	50	10	<2.0	<5.8
Silver	50	10	<0.13	<2.3

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4f
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-6

PARAMETER	ES	PAL	1/3/2013
Metals (ug/L)			
Arsenic	10	1	<4.7
Barium	2000	400	225
Cadmium	5	0.5	1.6J
Chromium, Hexavalent			140
Total Chromium	100	10	323
Lead	15	1.5	2.5J
Mercury	2	0.2	0.28
Nickel	100	20	14100
Selenium	50	10	<5.8
Silver	50	10	<2.3

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

TABLE 4g
GROUNDWATER ANALYTICAL RESULTS SUMMARY
Phillips Plating, North Lake Avenue, Phillips, WI

MW-7

PARAMETER	ES	PAL	1/3/2013
Metals (ug/L)			
Arsenic	10	1	<4.7
Barium	2000	400	841
Cadmium	5	0.5	<0.39
Chromium, Hexavalent			<0.0039
Total Chromium	100	10	<2.4
Lead	15	1.5	<1.4
Mercury	2	0.2	<0.10
Nickel	100	20	6.1J
Selenium	50	10	<5.8
Silver	50	10	<2.3

PAL = Preventive Action Limit

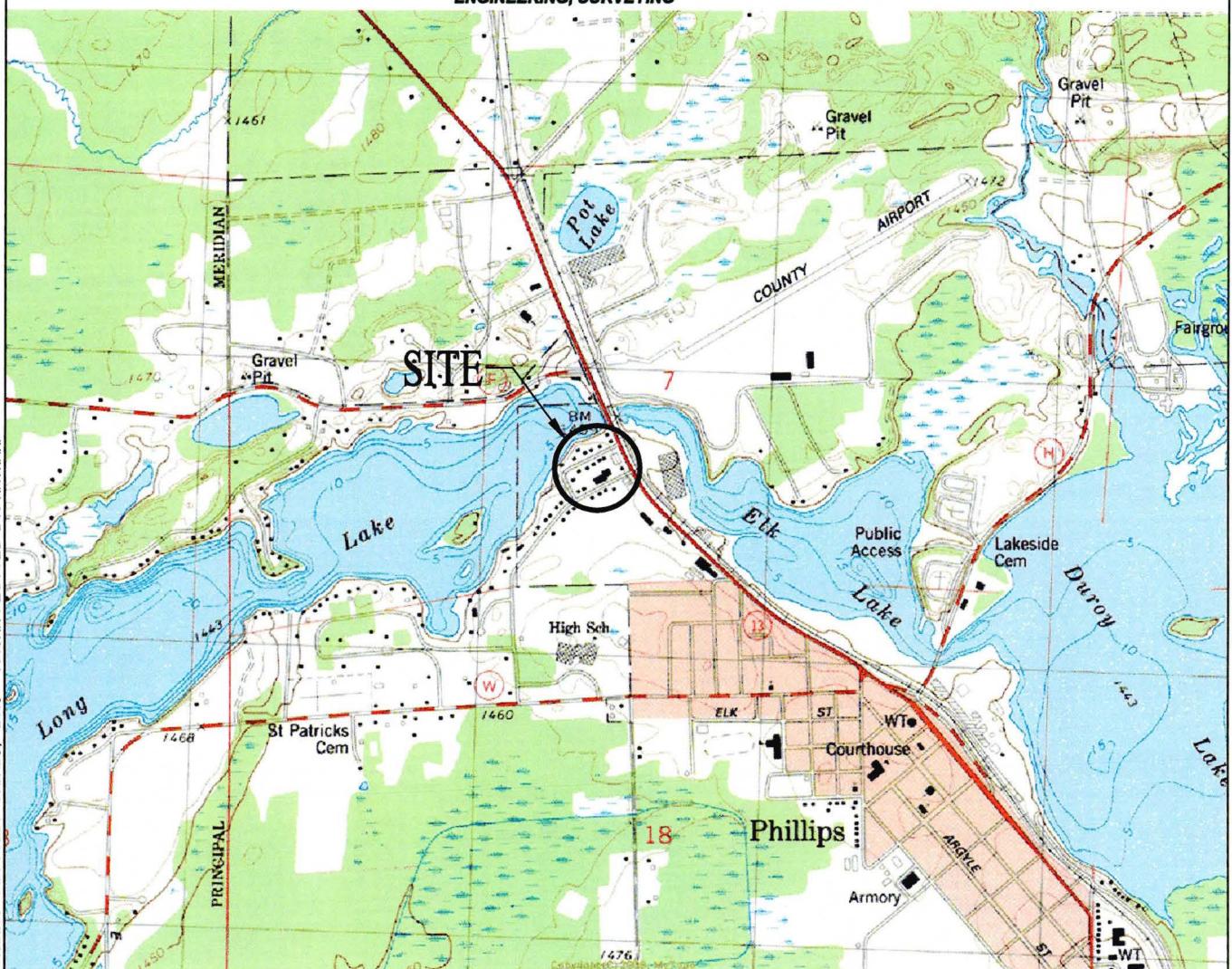
ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

DRAWING FILE: J:\DRAFTING\6134B PHILLIPS PLATING\DWG\6134B-VIGN.DWG LAYOUT: VICINITY PLOTTED: JAN 23, 2013 - 9:48AM PLOTTED BY: NATHANP

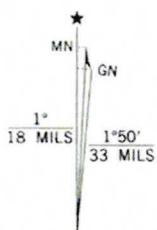


SCALE 1:24 000

1 1/2 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



PHILLIPS, WIS.
NW/4 PHILLIPS 15' QUADRANGLE
45090-F4-TF-024

1984

DMA 2975 III NW-SERIES V861



QUADRANGLE LOCATION

UTM GRID AND 1984 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

REI Engineering, INC.

PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

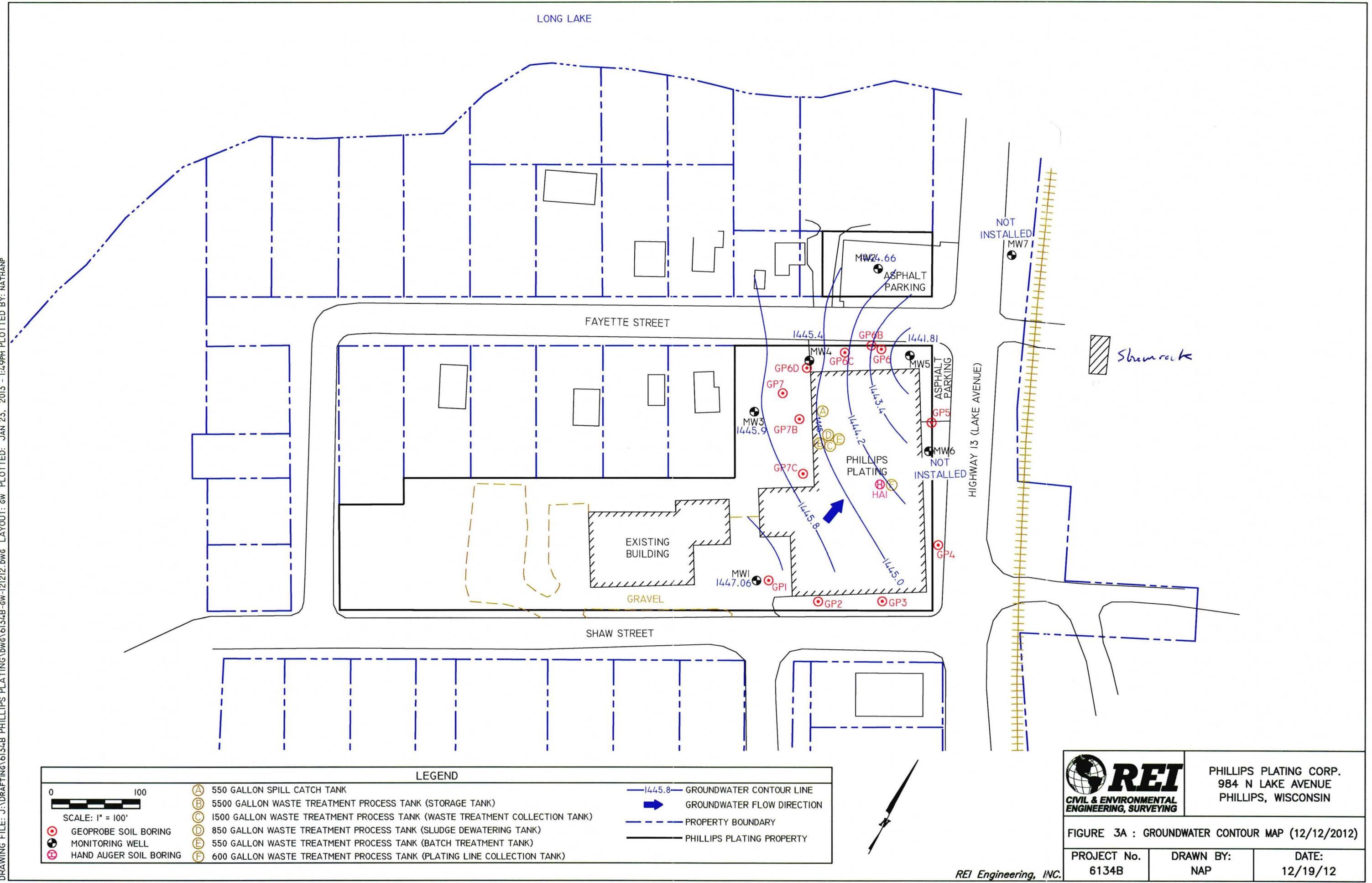
FIGURE 1 : SITE VICINITY MAP

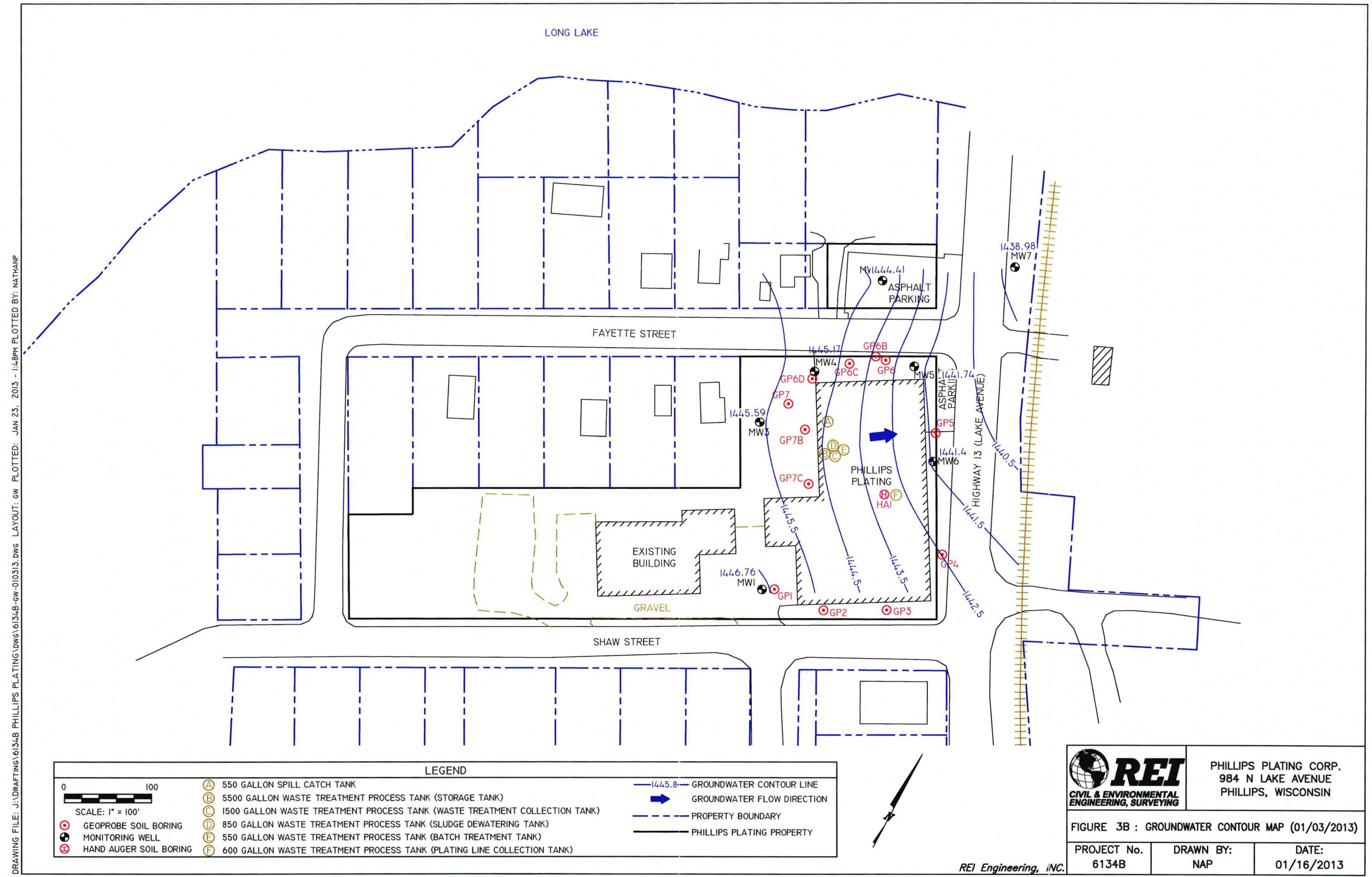
PROJECT NO.

6134B

DRAWN BY:
NAP

DATE:
12/13/12





PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3B : GROUNDWATER CONTOUR MAP (01/03/2013)

PROJECT No.	DRAWN BY:	DATE:
6134B	NAP	01/16/2013

October 22, 2012

Adam Scheunemann
REI
4680 N 20th Ave
Wausau, WI 54401

RE: Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

Dear Adam Scheunemann:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten

brian.basten@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4068437001	GP-1 4-8'	Solid	10/04/12 09:20	10/06/12 08:15
4068437002	GP-2 4-8'	Solid	10/04/12 09:35	10/06/12 08:15
4068437003	GP-3 4-8'	Solid	10/04/12 09:50	10/06/12 08:15
4068437004	GP-4 4-8'	Solid	10/04/12 10:05	10/06/12 08:15
4068437005	GP-5 16-20'	Solid	10/04/12 10:35	10/06/12 08:15
4068437006	GP-6 8-12'	Solid	10/04/12 11:10	10/06/12 08:15
4068437007	GP-6D 12-16'	Solid	10/04/12 13:15	10/06/12 08:15
4068437008	GP-7C 8-12'	Solid	10/04/12 12:45	10/06/12 08:15
4068437009	BG5	Water	10/04/12 10:40	10/06/12 08:15
4068437010	BG6D	Water	10/04/12 20:30	10/06/12 08:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6134 PHILLIPS PLATING
 Pace Project No.: 4068437

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4068437001	GP-1 4-8'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437002	GP-2 4-8'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437003	GP-3 4-8'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437004	GP-4 4-8'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437005	GP-5 16-20'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437006	GP-6 8-12'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437007	GP-6D 12-16'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437008	GP-7C 8-12'	EPA 6010	DLB	3
		EPA 8260	SMT	64
		ASTM D2974-87	SKW	1
4068437009	BG5	EPA 6010	DLB	3
		EPA 8260	SMT	64
		SM 3500-Cr B (Online)	DEY	1
4068437010	BG6D	EPA 6010	DLB	3
		EPA 8260	SMT	64
		SM 3500-Cr B (Online)	DEY	1

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-1 4-8' Lab ID: 4068437001 Collected: 10/04/12 09:20 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	14.4 mg/kg		0.53	0.11	1	10/12/12 14:40	10/15/12 12:17	7440-47-3	
Nickel	12.2 mg/kg		1.1	0.082	1	10/12/12 14:40	10/15/12 12:17	7440-02-0	
Zinc	18.6 mg/kg		4.3	1.0	1	10/12/12 14:40	10/15/12 12:17	7440-66-6	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	71-43-2	W
Bromobenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	108-86-1	W
Bromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	74-97-5	W
Bromodichloromethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-27-4	W
Bromoform	<25.9 ug/kg		60.0	25.9	1	10/11/12 12:58	10/11/12 15:40	75-25-2	W
Bromomethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	74-83-9	W
n-Butylbenzene	<40.4 ug/kg		60.0	40.4	1	10/11/12 12:58	10/11/12 15:40	104-51-8	W
sec-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	135-98-8	W
tert-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	98-06-6	W
Carbon tetrachloride	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	56-23-5	W
Chlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	108-90-7	W
Chloroethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-00-3	W
Chloroform	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	67-66-3	W
Chloromethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	74-87-3	W
2-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	95-49-8	W
4-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3 ug/kg		250	82.3	1	10/11/12 12:58	10/11/12 15:40	96-12-8	W
Dibromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	106-93-4	W
Dibromomethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	74-95-3	W
1,2-Dichlorobenzene	<44.4 ug/kg		60.0	44.4	1	10/11/12 12:58	10/11/12 15:40	95-50-1	W
1,3-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	541-73-1	W
1,4-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	106-46-7	W
Dichlorodifluoromethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-71-8	W
1,1-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-34-3	W
1,2-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	107-06-2	W
1,1-Dichloroethene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-35-4	W
cis-1,2-Dichloroethene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	156-59-2	W
trans-1,2-Dichloroethene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	156-60-5	W
1,2-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	78-87-5	W
1,3-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	142-28-9	W
2,2-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	594-20-7	W
1,1-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	563-58-6	W
cis-1,3-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	10061-01-5	W
trans-1,3-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	10061-02-6	W
Diisopropyl ether	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	108-20-3	W
Ethylbenzene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	100-41-4	W
Hexachloro-1,3-butadiene	<26.4 ug/kg		60.0	26.4	1	10/11/12 12:58	10/11/12 15:40	87-68-3	W
Isopropylbenzene (Cumene)	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	98-82-8	W
p-Isopropyltoluene	<25.0 ug/kg		60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	99-87-6	W

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-1 4-8' Lab ID: 4068437001 Collected: 10/04/12 09:20 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/11/12 12:58	10/11/12 15:40	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 15:40	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	89 %.	57-130		1	10/11/12 12:58	10/11/12 15:40	1868-53-7		
Toluene-d8 (S)	93 %.	54-133		1	10/11/12 12:58	10/11/12 15:40	2037-26-5		
4-Bromofluorobenzene (S)	85 %.	49-130		1	10/11/12 12:58	10/11/12 15:40	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	6.7 %		0.10	0.10	1				10/18/12 15:55

Sample: GP-2 4-8' Lab ID: 4068437002 Collected: 10/04/12 09:35 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	16.9 mg/kg	0.48	0.097	1	10/12/12 14:40	10/15/12 12:27	7440-47-3		
Nickel	11.8 mg/kg	0.96	0.074	1	10/12/12 14:40	10/15/12 12:27	7440-02-0		
Zinc	19.3 mg/kg	3.8	0.92	1	10/12/12 14:40	10/15/12 12:27	7440-66-6		
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	108-86-1	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	74-97-5	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-2 4-8' Lab ID: 4068437002 Collected: 10/04/12 09:35 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-27-4	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	10/11/12 12:58	10/11/12 16:03	75-25-2	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	74-83-9	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	10/11/12 12:58	10/11/12 16:03	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	108-90-7	W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	10/11/12 12:58	10/11/12 16:03	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	10/11/12 12:58	10/11/12 16:03	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/11/12 12:58	10/11/12 16:03	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	127-18-4	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-2 4-8' Lab ID: 4068437002 Collected: 10/04/12 09:35 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Toluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/11/12 12:58	10/11/12 16:03	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:03	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	97 %.	57-130		1	10/11/12 12:58	10/11/12 16:03	1868-53-7		
Toluene-d8 (S)	101 %.	54-133		1	10/11/12 12:58	10/11/12 16:03	2037-26-5		
4-Bromofluorobenzene (S)	89 %.	49-130		1	10/11/12 12:58	10/11/12 16:03	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	8.0 %		0.10	0.10	1				10/18/12 15:55

Sample: GP-3 4-8' Lab ID: 4068437003 Collected: 10/04/12 09:50 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	12.9 mg/kg	0.54	0.11	1	10/12/12 14:40	10/15/12 12:29	7440-47-3		
Nickel	8.9 mg/kg	1.1	0.084	1	10/12/12 14:40	10/15/12 12:29	7440-02-0		
Zinc	18.9 mg/kg	4.3	1.0	1	10/12/12 14:40	10/15/12 12:29	7440-66-6		
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	108-86-1	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	74-97-5	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-27-4	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	10/11/12 12:58	10/11/12 16:26	75-25-2	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	74-83-9	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	10/11/12 12:58	10/11/12 16:26	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	108-90-7	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-3 4-8' Lab ID: 4068437003 Collected: 10/04/12 09:50 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	10/11/12 12:58	10/11/12 16:26	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	10/11/12 12:58	10/11/12 16:26	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/11/12 12:58	10/11/12 16:26	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	96-18-4	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-3 4-8' Lab ID: 4068437003 Collected: 10/04/12 09:50 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/11/12 12:58	10/11/12 16:26	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/11/12 12:58	10/11/12 16:26	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	107 %.	57-130		1	10/11/12 12:58	10/11/12 16:26	1868-53-7		
Toluene-d8 (S)	109 %.	54-133		1	10/11/12 12:58	10/11/12 16:26	2037-26-5		
4-Bromofluorobenzene (S)	99 %.	49-130		1	10/11/12 12:58	10/11/12 16:26	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	8.3 %	0.10	0.10	1			10/18/12 16:42		

Sample: GP-4 4-8' Lab ID: 4068437004 Collected: 10/04/12 10:05 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	25.5 mg/kg	0.48	0.097	1	10/12/12 14:40	10/15/12 12:31	7440-47-3		
Nickel	15.6 mg/kg	0.96	0.074	1	10/12/12 14:40	10/15/12 12:31	7440-02-0		
Zinc	21.8 mg/kg	3.8	0.92	1	10/12/12 14:40	10/15/12 12:31	7440-66-6		
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	108-86-1	W	
Bromoform	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	74-97-5	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-27-4	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-25-2	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	10/15/12 16:22	10/17/12 08:21	74-83-9	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	104-51-8	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	10/15/12 16:22	10/17/12 08:21	135-98-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	98-06-6	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	56-23-5	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	108-90-7	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-00-3	L3,W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	67-66-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	74-87-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	95-49-8	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	106-43-4	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	96-12-8	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	10/15/12 16:22	10/17/12 08:21	124-48-1	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	106-93-4	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21			

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-4 4-8' Lab ID: 4068437004 Collected: 10/04/12 10:05 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	10/15/12 16:22	10/17/12 08:21	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/15/12 16:22	10/17/12 08:21	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	75-01-4	W	
m,p-Xylene	<50.0 ug/kg	120	50.0	1	10/15/12 16:22	10/17/12 08:21	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/17/12 08:21	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	82 %.	57-130		1	10/15/12 16:22	10/17/12 08:21	1868-53-7		
Toluene-d8 (S)	95 %.	54-133		1	10/15/12 16:22	10/17/12 08:21	2037-26-5		

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-4 4-8' Lab ID: 4068437004 Collected: 10/04/12 10:05 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Surrogates									
4-Bromofluorobenzene (S)	77 %.		49-130		1	10/15/12 16:22	10/17/12 08:21	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	6.6 %		0.10	0.10	1		10/18/12 16:42		

Sample: GP-5 16-20' Lab ID: 4068437005 Collected: 10/04/12 10:35 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	52.5 mg/kg		0.54	0.11	1	10/12/12 14:40	10/15/12 12:33	7440-47-3	
Nickel	17.2 mg/kg		1.1	0.083	1	10/12/12 14:40	10/15/12 12:33	7440-02-0	
Zinc	16.9 mg/kg		4.3	1.0	1	10/12/12 14:40	10/15/12 12:33	7440-66-6	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	71-43-2	W
Bromobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	108-86-1	W
Bromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	74-97-5	W
Bromodichloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-27-4	W
Bromoform	<25.9 ug/kg		60.0	25.9	1	10/15/12 16:22	10/16/12 15:55	75-25-2	W
Bromomethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	74-83-9	W
n-Butylbenzene	<40.4 ug/kg		60.0	40.4	1	10/15/12 16:22	10/16/12 15:55	104-51-8	W
sec-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	135-98-8	W
tert-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	98-06-6	W
Carbon tetrachloride	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	56-23-5	W
Chlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	108-90-7	W
Chloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-00-3	L3,W
Chloroform	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	67-66-3	W
Chloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	74-87-3	W
2-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	95-49-8	W
4-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3 ug/kg		250	82.3	1	10/15/12 16:22	10/16/12 15:55	96-12-8	W
Dibromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	106-93-4	W
Dibromomethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	74-95-3	W
1,2-Dichlorobenzene	<44.4 ug/kg		60.0	44.4	1	10/15/12 16:22	10/16/12 15:55	95-50-1	W
1,3-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	541-73-1	W
1,4-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	106-46-7	W
Dichlorodifluoromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-71-8	W
1,1-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-34-3	W
1,2-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	107-06-2	W

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

Sample: GP-5 16-20' Lab ID: 4068437005 Collected: 10/04/12 10:35 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/15/12 16:22	10/16/12 15:55	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/15/12 16:22	10/16/12 15:55	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 15:55	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	79 %.	57-130		1	10/15/12 16:22	10/16/12 15:55	1868-53-7		
Toluene-d8 (S)	94 %.	54-133		1	10/15/12 16:22	10/16/12 15:55	2037-26-5		
4-Bromofluorobenzene (S)	77 %.	49-130		1	10/15/12 16:22	10/16/12 15:55	460-00-4		
Percent Moisture		Analytical Method: ASTM D2974-87							
Percent Moisture	10.5 %		0.10	0.10	1		10/18/12 16:42		

ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-6 8-12' Lab ID: 4068437006 Collected: 10/04/12 11:10 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	21.6 mg/kg		0.50	0.10	1	10/12/12 14:40	10/15/12 12:35	7440-47-3	
Nickel	19.0 mg/kg		1.0	0.077	1	10/12/12 14:40	10/15/12 12:35	7440-02-0	
Zinc	28.2 mg/kg		4.0	0.96	1	10/12/12 14:40	10/15/12 12:35	7440-66-6	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	71-43-2	W
Bromobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	108-86-1	W
Bromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	74-97-5	W
Bromodichloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-27-4	W
Bromoform	<25.9 ug/kg		60.0	25.9	1	10/15/12 16:22	10/16/12 16:18	75-25-2	W
Bromomethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	74-83-9	W
n-Butylbenzene	<40.4 ug/kg		60.0	40.4	1	10/15/12 16:22	10/16/12 16:18	104-51-8	W
sec-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	135-98-8	W
tert-Butylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	98-06-6	W
Carbon tetrachloride	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	56-23-5	W
Chlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	108-90-7	W
Chloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-00-3	L3,W
Chloroform	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	67-66-3	W
Chloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	74-87-3	W
2-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	95-49-8	W
4-Chlorotoluene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3 ug/kg		250	82.3	1	10/15/12 16:22	10/16/12 16:18	96-12-8	W
Dibromochloromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	106-93-4	W
Dibromomethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	74-95-3	W
1,2-Dichlorobenzene	<44.4 ug/kg		60.0	44.4	1	10/15/12 16:22	10/16/12 16:18	95-50-1	W
1,3-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	541-73-1	W
1,4-Dichlorobenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	106-46-7	W
Dichlorodifluoromethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-71-8	W
1,1-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-34-3	W
1,2-Dichloroethane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	107-06-2	W
1,1-Dichloroethylene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-35-4	W
cis-1,2-Dichloroethylene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	156-59-2	W
trans-1,2-Dichloroethylene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	156-60-5	W
1,2-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	78-87-5	W
1,3-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	142-28-9	W
2,2-Dichloropropane	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	594-20-7	W
1,1-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	563-58-6	W
cis-1,3-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	10061-01-5	W
trans-1,3-Dichloropropene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	10061-02-6	W
Diisopropyl ether	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	108-20-3	W
Ethylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	100-41-4	W
Hexachloro-1,3-butadiene	<26.4 ug/kg		60.0	26.4	1	10/15/12 16:22	10/16/12 16:18	87-68-3	W
Isopropylbenzene (Cumene)	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	98-82-8	W
p-Isopropyltoluene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	99-87-6	W

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

Sample: GP-6 8-12' Lab ID: 4068437006 Collected: 10/04/12 11:10 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/15/12 16:22	10/16/12 16:18	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:18	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	81 %.	57-130		1	10/15/12 16:22	10/16/12 16:18	1868-53-7		
Toluene-d8 (S)	95 %.	54-133		1	10/15/12 16:22	10/16/12 16:18	2037-26-5		
4-Bromofluorobenzene (S)	77 %.	49-130		1	10/15/12 16:22	10/16/12 16:18	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	6.4 %		0.10	0.10	1				10/18/12 16:43

Sample: GP-6D 12-16' Lab ID: 4068437007 Collected: 10/04/12 13:15 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	20.3 mg/kg	0.53	0.11	1	10/12/12 14:40	10/15/12 12:38	7440-47-3		
Nickel	14.7 mg/kg	1.1	0.081	1	10/12/12 14:40	10/15/12 12:38	7440-02-0		
Zinc	27.2 mg/kg	4.2	1.0	1	10/12/12 14:40	10/15/12 12:38	7440-66-6		
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	108-86-1	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	74-97-5	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-6D 12-16' Lab ID: 4068437007 Collected: 10/04/12 13:15 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-27-4		W
Bromoform	<25.9 ug/kg	60.0	25.9	1	10/15/12 16:22	10/16/12 16:41	75-25-2		W
Bromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	74-83-9		W
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	10/15/12 16:22	10/16/12 16:41	104-51-8		W
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	135-98-8		W
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	98-06-6		W
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	56-23-5		W
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	108-90-7		W
Chloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-00-3	L3,W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	67-66-3		W
Chloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	74-87-3		W
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	95-49-8		W
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	106-43-4		W
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	10/15/12 16:22	10/16/12 16:41	96-12-8		W
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	124-48-1		W
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	106-93-4		W
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	74-95-3		W
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	10/15/12 16:22	10/16/12 16:41	95-50-1		W
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	541-73-1		W
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	106-46-7		W
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-71-8		W
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-34-3		W
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	107-06-2		W
1,1-Dichloroethylene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-35-4		W
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	156-59-2		W
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	156-60-5		W
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	78-87-5		W
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	142-28-9		W
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	594-20-7		W
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	563-58-6		W
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	10061-01-5		W
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	10061-02-6		W
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	108-20-3		W
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	100-41-4		W
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/15/12 16:22	10/16/12 16:41	87-68-3		W
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	98-82-8		W
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	99-87-6		W
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-09-2		W
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	1634-04-4		W
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	91-20-3		W
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	103-65-1		W
Styrene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	100-42-5		W
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	630-20-6		W
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	79-34-5		W
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	127-18-4		W

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-6D 12-16* Lab ID: 4068437007 Collected: 10/04/12 13:15 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Toluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	10/15/12 16:22	10/16/12 16:41	179601-23-1	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 16:41	95-47-6	W	
Surrogates									
Dibromofluoromethane (S)	80 %.	57-130		1	10/15/12 16:22	10/16/12 16:41	1868-53-7		
Toluene-d8 (S)	90 %.	54-133		1	10/15/12 16:22	10/16/12 16:41	2037-26-5		
4-Bromofluorobenzene (S)	75 %.	49-130		1	10/15/12 16:22	10/16/12 16:41	460-00-4		
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	9.1 %		0.10	0.10	1		10/18/12 16:43		

Sample: GP-7C 8-12* Lab ID: 4068437008 Collected: 10/04/12 12:45 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Chromium	25.6 mg/kg	0.51	0.10	1	10/12/12 14:40	10/15/12 12:40	7440-47-3		
Nickel	16.4 mg/kg	1.0	0.078	1	10/12/12 14:40	10/15/12 12:40	7440-02-0		
Zinc	24.9 mg/kg	4.0	0.97	1	10/12/12 14:40	10/15/12 12:40	7440-66-6		
8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	108-86-1	W	
Bromoform	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	74-97-5	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-27-4	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-25-2	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	10/15/12 16:22	10/16/12 17:04	74-83-9	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	104-51-8	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	10/15/12 16:22	10/16/12 17:04	135-98-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04			
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	108-90-7	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-7C 8-12' Lab ID: 4068437008 Collected: 10/04/12 12:45 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List									
Chloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-00-3	L3,W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	10/15/12 16:22	10/16/12 17:04	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	10/15/12 16:22	10/16/12 17:04	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	10/15/12 16:22	10/16/12 17:04	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	100-42-5	W	
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	96-18-4	W	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: GP-7C 8-12' Lab ID: 4068437008 Collected: 10/04/12 12:45 Received: 10/06/12 08:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,4-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	108-67-8	W
Vinyl chloride	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	75-01-4	W
m&p-Xylene	<50.0 ug/kg		120	50.0	1	10/15/12 16:22	10/16/12 17:04	179601-23-1	W
o-Xylene	<25.0 ug/kg		60.0	25.0	1	10/15/12 16:22	10/16/12 17:04	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	83 %.		57-130		1	10/15/12 16:22	10/16/12 17:04	1868-53-7	
Toluene-d8 (S)	94 %.		54-133		1	10/15/12 16:22	10/16/12 17:04	2037-26-5	
4-Bromofluorobenzene (S)	77 %.		49-130		1	10/15/12 16:22	10/16/12 17:04	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	6.1 %		0.10	0.10	1			10/18/12 16:43	

Sample: BG5 Lab ID: 4068437009 Collected: 10/04/12 10:40 Received: 10/06/12 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Chromium	1300 ug/L		5.0	2.4	1	10/08/12 10:25	10/09/12 18:03	7440-47-3	
Nickel	2530 ug/L		10.0	0.77	1	10/08/12 10:25	10/09/12 18:03	7440-02-0	
Zinc	41.6 ug/L		40.0	5.3	1	10/08/12 10:25	10/09/12 18:03	7440-66-6	
8260 MSV	Analytical Method: EPA 8260								
Benzene	<0.41 ug/L		1.0	0.41	1		10/13/12 14:51	71-43-2	
Bromobenzene	<0.82 ug/L		1.0	0.82	1		10/13/12 14:51	108-86-1	
Bromochloromethane	<0.97 ug/L		1.0	0.97	1		10/13/12 14:51	74-97-5	
Bromodichloromethane	<0.56 ug/L		1.0	0.56	1		10/13/12 14:51	75-27-4	
Bromoform	<0.94 ug/L		1.0	0.94	1		10/13/12 14:51	75-25-2	
Bromomethane	<0.91 ug/L		1.0	0.91	1		10/13/12 14:51	74-83-9	
n-Butylbenzene	<0.93 ug/L		1.0	0.93	1		10/13/12 14:51	104-51-8	
sec-Butylbenzene	<0.89 ug/L		5.0	0.89	1		10/13/12 14:51	135-98-8	
tert-Butylbenzene	<0.97 ug/L		1.0	0.97	1		10/13/12 14:51	98-06-6	
Carbon tetrachloride	<0.49 ug/L		1.0	0.49	1		10/13/12 14:51	56-23-5	
Chlorobenzene	<0.41 ug/L		1.0	0.41	1		10/13/12 14:51	108-90-7	
Chloroethane	<0.97 ug/L		1.0	0.97	1		10/13/12 14:51	75-00-3	
Chloroform	<1.3 ug/L		5.0	1.3	1		10/13/12 14:51	67-66-3	
Chloromethane	<0.24 ug/L		1.0	0.24	1		10/13/12 14:51	74-87-3	
2-Chlorotoluene	<0.85 ug/L		1.0	0.85	1		10/13/12 14:51	95-49-8	
4-Chlorotoluene	<0.74 ug/L		1.0	0.74	1		10/13/12 14:51	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7 ug/L		5.0	1.7	1		10/13/12 14:51	96-12-8	
Dibromochloromethane	<0.81 ug/L		1.0	0.81	1		10/13/12 14:51	124-48-1	
1,2-Dibromoethane (EDB)	<0.56 ug/L		1.0	0.56	1		10/13/12 14:51	106-93-4	
Dibromomethane	<0.60 ug/L		1.0	0.60	1		10/13/12 14:51	74-95-3	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: BG5 Lab ID: 4068437009 Collected: 10/04/12 10:40 Received: 10/06/12 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichlorobenzene	<0.83 ug/L		1.0	0.83	1		10/13/12 14:51	95-50-1	
1,3-Dichlorobenzene	<0.87 ug/L		1.0	0.87	1		10/13/12 14:51	541-73-1	
1,4-Dichlorobenzene	<0.95 ug/L		1.0	0.95	1		10/13/12 14:51	106-46-7	
Dichlorodifluoromethane	<0.99 ug/L		1.0	0.99	1		10/13/12 14:51	75-71-8	
1,1-Dichloroethane	<0.75 ug/L		1.0	0.75	1		10/13/12 14:51	75-34-3	
1,2-Dichloroethane	<0.36 ug/L		1.0	0.36	1		10/13/12 14:51	107-06-2	
1,1-Dichloroethene	<0.57 ug/L		1.0	0.57	1		10/13/12 14:51	75-35-4	
cis-1,2-Dichloroethene	<0.83 ug/L		1.0	0.83	1		10/13/12 14:51	156-59-2	
trans-1,2-Dichloroethene	<0.89 ug/L		1.0	0.89	1		10/13/12 14:51	156-60-5	
1,2-Dichloropropane	<0.49 ug/L		1.0	0.49	1		10/13/12 14:51	78-87-5	
1,3-Dichloropropane	<0.61 ug/L		1.0	0.61	1		10/13/12 14:51	142-28-9	
2,2-Dichloropropane	<0.62 ug/L		1.0	0.62	1		10/13/12 14:51	594-20-7	
1,1-Dichloropropene	<0.75 ug/L		1.0	0.75	1		10/13/12 14:51	563-58-6	
cis-1,3-Dichloropropene	<0.20 ug/L		1.0	0.20	1		10/13/12 14:51	10061-01-5	
trans-1,3-Dichloropropene	<0.19 ug/L		1.0	0.19	1		10/13/12 14:51	10061-02-6	
Diisopropyl ether	<0.76 ug/L		1.0	0.76	1		10/13/12 14:51	108-20-3	
Ethylbenzene	<0.54 ug/L		1.0	0.54	1		10/13/12 14:51	100-41-4	
Hexachloro-1,3-butadiene	<0.67 ug/L		5.0	0.67	1		10/13/12 14:51	87-68-3	
Isopropylbenzene (Cumene)	<0.59 ug/L		1.0	0.59	1		10/13/12 14:51	98-82-8	
p-Isopropyltoluene	<0.67 ug/L		1.0	0.67	1		10/13/12 14:51	99-87-6	
Methylene Chloride	<0.43 ug/L		1.0	0.43	1		10/13/12 14:51	75-09-2	
Methyl-tert-butyl ether	<0.61 ug/L		1.0	0.61	1		10/13/12 14:51	1634-04-4	
Naphthalene	<0.89 ug/L		5.0	0.89	1		10/13/12 14:51	91-20-3	
n-Propylbenzene	<0.81 ug/L		1.0	0.81	1		10/13/12 14:51	103-65-1	
Styrene	<0.86 ug/L		1.0	0.86	1		10/13/12 14:51	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92 ug/L		1.0	0.92	1		10/13/12 14:51	630-20-6	
1,1,2,2-Tetrachloroethane	<0.20 ug/L		1.0	0.20	1		10/13/12 14:51	79-34-5	
Tetrachloroethene	<0.45 ug/L		1.0	0.45	1		10/13/12 14:51	127-18-4	
Toluene	<0.67 ug/L		1.0	0.67	1		10/13/12 14:51	108-88-3	
1,2,3-Trichlorobenzene	<0.74 ug/L		1.0	0.74	1		10/13/12 14:51	87-61-6	
1,2,4-Trichlorobenzene	<0.97 ug/L		5.0	0.97	1		10/13/12 14:51	120-82-1	
1,1,1-Trichloroethane	<0.90 ug/L		1.0	0.90	1		10/13/12 14:51	71-55-6	
1,1,2-Trichloroethane	<0.42 ug/L		1.0	0.42	1		10/13/12 14:51	79-00-5	
Trichloroethene	<0.48 ug/L		1.0	0.48	1		10/13/12 14:51	79-01-6	
Trichlorofluoromethane	<0.79 ug/L		1.0	0.79	1		10/13/12 14:51	75-69-4	
1,2,3-Trichloropropane	<0.99 ug/L		1.0	0.99	1		10/13/12 14:51	96-18-4	
1,2,4-Trimethylbenzene	<0.97 ug/L		1.0	0.97	1		10/13/12 14:51	95-63-6	
1,3,5-Trimethylbenzene	<0.83 ug/L		1.0	0.83	1		10/13/12 14:51	108-67-8	
Vinyl chloride	<0.18 ug/L		1.0	0.18	1		10/13/12 14:51	75-01-4	
m&p-Xylene	<1.8 ug/L		2.0	1.8	1		10/13/12 14:51	179601-23-1	
o-Xylene	<0.83 ug/L		1.0	0.83	1		10/13/12 14:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	92 %.		43-137		1		10/13/12 14:51	460-00-4	
Dibromofluoromethane (S)	104 %.		70-130		1		10/13/12 14:51	1868-53-7	
Toluene-d8 (S)	104 %.		55-137		1		10/13/12 14:51	2037-26-5	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: BG5	Lab ID: 4068437009	Collected: 10/04/12 10:40	Received: 10/06/12 08:15	Matrix: Water
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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	1.2 mg/L		0.20	0.039	10		10/08/12 09:00	18540-29-9	H3

Sample: BG6D	Lab ID: 4068437010	Collected: 10/04/12 20:30	Received: 10/06/12 08:15	Matrix: Water
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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Chromium	4040 ug/L		25.0	12.1	5	10/08/12 10:25	10/10/12 11:59	7440-47-3	
Nickel	1700 ug/L		50.0	3.9	5	10/08/12 10:25	10/10/12 11:59	7440-02-0	
Zinc	1460 ug/L		200	26.3	5	10/08/12 10:25	10/10/12 11:59	7440-66-6	
8260 MSV	Analytical Method: EPA 8260								
Benzene	<0.41 ug/L		1.0	0.41	1		10/13/12 15:13	71-43-2	
Bromobenzene	<0.82 ug/L		1.0	0.82	1		10/13/12 15:13	108-86-1	
Bromochloromethane	<0.97 ug/L		1.0	0.97	1		10/13/12 15:13	74-97-5	
Bromodichloromethane	<0.56 ug/L		1.0	0.56	1		10/13/12 15:13	75-27-4	
Bromoform	<0.94 ug/L		1.0	0.94	1		10/13/12 15:13	75-25-2	
Bromomethane	<0.91 ug/L		1.0	0.91	1		10/13/12 15:13	74-83-9	
n-Butylbenzene	<0.93 ug/L		1.0	0.93	1		10/13/12 15:13	104-51-8	
sec-Butylbenzene	<0.89 ug/L		5.0	0.89	1		10/13/12 15:13	135-98-8	
tert-Butylbenzene	<0.97 ug/L		1.0	0.97	1		10/13/12 15:13	98-06-6	
Carbon tetrachloride	<0.49 ug/L		1.0	0.49	1		10/13/12 15:13	56-23-5	
Chlorobenzene	<0.41 ug/L		1.0	0.41	1		10/13/12 15:13	108-90-7	
Chloroethane	<0.97 ug/L		1.0	0.97	1		10/13/12 15:13	75-00-3	
Chloroform	<1.3 ug/L		5.0	1.3	1		10/13/12 15:13	67-66-3	
Chloromethane	0.39J ug/L		1.0	0.24	1		10/13/12 15:13	74-87-3	
2-Chlorotoluene	<0.85 ug/L		1.0	0.85	1		10/13/12 15:13	95-49-8	
4-Chlorotoluene	<0.74 ug/L		1.0	0.74	1		10/13/12 15:13	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7 ug/L		5.0	1.7	1		10/13/12 15:13	96-12-8	
Dibromochloromethane	<0.81 ug/L		1.0	0.81	1		10/13/12 15:13	124-48-1	
1,2-Dibromoethane (EDB)	<0.56 ug/L		1.0	0.56	1		10/13/12 15:13	106-93-4	
Dibromomethane	<0.60 ug/L		1.0	0.60	1		10/13/12 15:13	74-95-3	
1,2-Dichlorobenzene	<0.83 ug/L		1.0	0.83	1		10/13/12 15:13	95-50-1	
1,3-Dichlorobenzene	<0.87 ug/L		1.0	0.87	1		10/13/12 15:13	541-73-1	
1,4-Dichlorobenzene	<0.95 ug/L		1.0	0.95	1		10/13/12 15:13	106-46-7	
Dichlorodifluoromethane	<0.99 ug/L		1.0	0.99	1		10/13/12 15:13	75-71-8	
1,1-Dichloroethane	<0.75 ug/L		1.0	0.75	1		10/13/12 15:13	75-34-3	
1,2-Dichloroethane	<0.36 ug/L		1.0	0.36	1		10/13/12 15:13	107-06-2	
1,1-Dichloroethene	<0.57 ug/L		1.0	0.57	1		10/13/12 15:13	75-35-4	
cis-1,2-Dichloroethene	<0.83 ug/L		1.0	0.83	1		10/13/12 15:13	156-59-2	
trans-1,2-Dichloroethene	<0.89 ug/L		1.0	0.89	1		10/13/12 15:13	156-60-5	
1,2-Dichloropropane	<0.49 ug/L		1.0	0.49	1		10/13/12 15:13	78-87-5	
1,3-Dichloropropane	<0.61 ug/L		1.0	0.61	1		10/13/12 15:13	142-28-9	
2,2-Dichloropropane	<0.62 ug/L		1.0	0.62	1		10/13/12 15:13	594-20-7	

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ANALYTICAL RESULTS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

Sample: BG6D Lab ID: 4068437010 Collected: 10/04/12 20:30 Received: 10/06/12 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1-Dichloropropene	<0.75 ug/L		1.0	0.75	1		10/13/12 15:13	563-58-6	
cis-1,3-Dichloropropene	<0.20 ug/L		1.0	0.20	1		10/13/12 15:13	10061-01-5	
trans-1,3-Dichloropropene	<0.19 ug/L		1.0	0.19	1		10/13/12 15:13	10061-02-6	
Diisopropyl ether	<0.76 ug/L		1.0	0.76	1		10/13/12 15:13	108-20-3	
Ethylbenzene	<0.54 ug/L		1.0	0.54	1		10/13/12 15:13	100-41-4	
Hexachloro-1,3-butadiene	<0.67 ug/L		5.0	0.67	1		10/13/12 15:13	87-68-3	
Isopropylbenzene (Cumene)	<0.59 ug/L		1.0	0.59	1		10/13/12 15:13	98-82-8	
p-Isopropyltoluene	<0.67 ug/L		1.0	0.67	1		10/13/12 15:13	99-87-6	
Methylene Chloride	<0.43 ug/L		1.0	0.43	1		10/13/12 15:13	75-09-2	
Methyl-tert-butyl ether	<0.61 ug/L		1.0	0.61	1		10/13/12 15:13	1634-04-4	
Naphthalene	<0.89 ug/L		5.0	0.89	1		10/13/12 15:13	91-20-3	
n-Propylbenzene	<0.81 ug/L		1.0	0.81	1		10/13/12 15:13	103-65-1	
Styrene	<0.86 ug/L		1.0	0.86	1		10/13/12 15:13	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92 ug/L		1.0	0.92	1		10/13/12 15:13	630-20-6	
1,1,2,2-Tetrachloroethane	<0.20 ug/L		1.0	0.20	1		10/13/12 15:13	79-34-5	
Tetrachloroethene	<0.45 ug/L		1.0	0.45	1		10/13/12 15:13	127-18-4	
Toluene	<0.67 ug/L		1.0	0.67	1		10/13/12 15:13	108-88-3	
1,2,3-Trichlorobenzene	<0.74 ug/L		1.0	0.74	1		10/13/12 15:13	87-61-6	
1,2,4-Trichlorobenzene	<0.97 ug/L		5.0	0.97	1		10/13/12 15:13	120-82-1	
1,1,1-Trichloroethane	<0.90 ug/L		1.0	0.90	1		10/13/12 15:13	71-55-6	
1,1,2-Trichloroethane	<0.42 ug/L		1.0	0.42	1		10/13/12 15:13	79-00-5	
Trichloroethene	<0.48 ug/L		1.0	0.48	1		10/13/12 15:13	79-01-6	
Trichlorofluoromethane	<0.79 ug/L		1.0	0.79	1		10/13/12 15:13	75-69-4	
1,2,3-Trichloropropane	<0.99 ug/L		1.0	0.99	1		10/13/12 15:13	96-18-4	
1,2,4-Trimethylbenzene	<0.97 ug/L		1.0	0.97	1		10/13/12 15:13	95-63-6	
1,3,5-Trimethylbenzene	<0.83 ug/L		1.0	0.83	1		10/13/12 15:13	108-67-8	
Vinyl chloride	<0.18 ug/L		1.0	0.18	1		10/13/12 15:13	75-01-4	
m&p-Xylene	<1.8 ug/L		2.0	1.8	1		10/13/12 15:13	179601-23-1	
o-Xylene	<0.83 ug/L		1.0	0.83	1		10/13/12 15:13	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93 %.		43-137		1		10/13/12 15:13	460-00-4	
Dibromofluoromethane (S)	107 %.		70-130		1		10/13/12 15:13	1868-53-7	HS
Toluene-d8 (S)	104 %.		55-137		1		10/13/12 15:13	2037-26-5	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	<0.0039 mg/L		0.020	0.0039	1		10/08/12 09:00	18540-29-9	H3

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

QC Batch:	MPRP/7608	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples: 4068437001, 4068437002, 4068437003, 4068437004, 4068437005, 4068437006, 4068437007, 4068437008			

METHOD BLANK: 691882 Matrix: Solid

Associated Lab Samples: 4068437001, 4068437002, 4068437003, 4068437004, 4068437005, 4068437006, 4068437007, 4068437008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	mg/kg	<0.10	0.50	10/15/12 12:12	
Nickel	mg/kg	<0.077	1.0	10/15/12 12:12	
Zinc	mg/kg	<0.96	4.0	10/15/12 12:12	

LABORATORY CONTROL SAMPLE: 691883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	mg/kg	50	50.9	102	80-120	
Nickel	mg/kg	50	51.8	104	80-120	
Zinc	mg/kg	50	52.4	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 691884 691885

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec Limits	RPD	Max RPD	Qual
		4068437001	Spike Conc.	Spike Conc.	Result	Result	% Rec					
Chromium	mg/kg	14.4	53.3	53.6	65.4	64.7	96	94	75-125	1	20	
Nickel	mg/kg	12.2	53.3	53.6	63.0	63.6	95	96	75-125	1	20	
Zinc	mg/kg	18.6	53.3	53.6	71.0	67.6	98	91	75-125	5	20	

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch: MPRP/7584 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 4068437009, 4068437010

METHOD BLANK: 688708 Matrix: Water

Associated Lab Samples: 4068437009, 4068437010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.4	5.0	10/09/12 17:12	
Nickel	ug/L	<0.77	10.0	10/09/12 17:12	
Zinc	ug/L	<5.3	40.0	10/09/12 17:12	

LABORATORY CONTROL SAMPLE: 688709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	478	96	80-120	
Nickel	ug/L	500	484	97	80-120	
Zinc	ug/L	500	488	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 688710 688711

Parameter	Units	4068329001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Chromium	ug/L	30.3	500	500	504	506	95	95	75-125	0	20	
Nickel	ug/L	16.3	500	500	487	487	94	94	75-125	0	20	
Zinc	ug/L	34.3J	500	500	513	512	96	95	75-125	0	20	

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	MSV/17184	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples: 4068437001, 4068437002, 4068437003			

METHOD BLANK: 691207	Matrix: Solid
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Associated Lab Samples: 4068437001, 4068437002, 4068437003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1,1-Trichloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1,2-Trichloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1-Dichloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1-Dichloroethene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,1-Dichloropropene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2,3-Trichlorobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2,3-Trichloropropane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2,4-Trichlorobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2-Dibromo-3-chloropropane	ug/kg	<82.3	250	10/11/12 11:03	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2-Dichlorobenzene	ug/kg	<44.4	60.0	10/11/12 11:03	
1,2-Dichloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,2-Dichloropropane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,3-Dichlorobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
1,3-Dichloropropane	ug/kg	<25.0	60.0	10/11/12 11:03	
1,4-Dichlorobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
2,2-Dichloropropane	ug/kg	<25.0	60.0	10/11/12 11:03	
2-Chlorotoluene	ug/kg	<25.0	60.0	10/11/12 11:03	
4-Chlorotoluene	ug/kg	<25.0	60.0	10/11/12 11:03	
Benzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Bromobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Bromochloromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Bromodichloromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Bromoform	ug/kg	<25.9	60.0	10/11/12 11:03	
Bromomethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Carbon tetrachloride	ug/kg	<25.0	60.0	10/11/12 11:03	
Chlorobenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Chloroethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Chloroform	ug/kg	<25.0	60.0	10/11/12 11:03	
Chloromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
cis-1,2-Dichloroethene	ug/kg	<25.0	60.0	10/11/12 11:03	
cis-1,3-Dichloropropene	ug/kg	<25.0	60.0	10/11/12 11:03	
Dibromochloromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Dibromomethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Dichlorodifluoromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Diisopropyl ether	ug/kg	<25.0	60.0	10/11/12 11:03	
Ethylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Hexachloro-1,3-butadiene	ug/kg	<26.4	60.0	10/11/12 11:03	
Isopropylbenzene (Cumene)	ug/kg	<25.0	60.0	10/11/12 11:03	

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

METHOD BLANK: 691207

Matrix: Solid

Associated Lab Samples: 4068437001, 4068437002, 4068437003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/kg	<50.0	120	10/11/12 11:03	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	10/11/12 11:03	
Methylene Chloride	ug/kg	<25.0	60.0	10/11/12 11:03	
n-Butylbenzene	ug/kg	<40.4	60.0	10/11/12 11:03	
n-Propylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Naphthalene	ug/kg	<25.0	60.0	10/11/12 11:03	
o-Xylene	ug/kg	<25.0	60.0	10/11/12 11:03	
p-Isopropyltoluene	ug/kg	<25.0	60.0	10/11/12 11:03	
sec-Butylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Styrene	ug/kg	<25.0	60.0	10/11/12 11:03	
tert-Butylbenzene	ug/kg	<25.0	60.0	10/11/12 11:03	
Tetrachloroethene	ug/kg	<25.0	60.0	10/11/12 11:03	
Toluene	ug/kg	<25.0	60.0	10/11/12 11:03	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	10/11/12 11:03	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	10/11/12 11:03	
Trichloroethene	ug/kg	<25.0	60.0	10/11/12 11:03	
Trichlorofluoromethane	ug/kg	<25.0	60.0	10/11/12 11:03	
Vinyl chloride	ug/kg	<25.0	60.0	10/11/12 11:03	
4-Bromofluorobenzene (S)	%.	118	49-130	10/11/12 11:03	
Dibromofluoromethane (S)	%.	99	57-130	10/11/12 11:03	
Toluene-d8 (S)	%.	107	54-133	10/11/12 11:03	

LABORATORY CONTROL SAMPLE & LCSD: 691208

691209

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2380	2530	95	101	70-130	6	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2250	2390	90	96	70-130	6	20	
1,1,2-Trichloroethane	ug/kg	2500	2370	2390	95	95	70-130	0	20	
1,1-Dichloroethane	ug/kg	2500	2340	2490	93	100	70-130	6	20	
1,1-Dichloroethene	ug/kg	2500	2200	2080	88	83	64-130	6	20	
1,2,4-Trichlorobenzene	ug/kg	2500	2530	2630	101	105	68-130	4	20	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2320	2150	93	86	50-150	8	20	
1,2-Dibromoethane (EDB)	ug/kg	2500	2710	2580	108	103	70-130	5	20	
1,2-Dichlorobenzene	ug/kg	2500	2440	2540	98	101	70-130	4	20	
1,2-Dichloroethane	ug/kg	2500	2680	2500	107	100	70-130	7	20	
1,2-Dichloropropane	ug/kg	2500	2480	2720	99	109	70-130	9	20	
1,3-Dichlorobenzene	ug/kg	2500	2370	2530	95	101	70-130	7	20	
1,4-Dichlorobenzene	ug/kg	2500	2310	2470	92	99	70-130	7	20	
Benzene	ug/kg	2500	2130	2600	85	104	70-130	20	20	
Bromodichloromethane	ug/kg	2500	2370	2200	95	88	70-130	7	20	
Bromoform	ug/kg	2500	2510	2140	100	85	63-130	16	20	
Bromomethane	ug/kg	2500	2420	1980	97	79	41-142	20	20	
Carbon tetrachloride	ug/kg	2500	2250	2470	90	99	70-130	9	20	
Chlorobenzene	ug/kg	2500	2470	2490	99	100	70-130	1	20	
Chloroethane	ug/kg	2500	2300	1990	92	80	57-130	15	20	

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

LABORATORY CONTROL SAMPLE & LCSD:		691208		691209		% Rec	Limits	RPD	Max RPD	Qualifiers
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	% Rec					
Chloroform	ug/kg	2500	2480	2500	99	100	70-130	1	20	
Chloromethane	ug/kg	2500	1810	1690	72	68	57-130	7	20	
cis-1,2-Dichloroethene	ug/kg	2500	2240	2700	90	108	70-130	19	20	
cis-1,3-Dichloropropene	ug/kg	2500	2240	2270	90	91	70-130	1	20	
Dibromochloromethane	ug/kg	2500	2820	2580	113	103	70-130	9	20	
Dichlorodifluoromethane	ug/kg	2500	1270	1580	51	63	31-150	21	20 D6	
Ethylbenzene	ug/kg	2500	2550	2600	102	104	65-137	2	20	
Isopropylbenzene (Cumene)	ug/kg	2500	2570	2630	103	105	70-130	2	20	
m&p-Xylene	ug/kg	5000	5250	5420	105	108	64-139	3	20	
Methyl-tert-butyl ether	ug/kg	2500	2730	2270	109	91	69-130	18	20	
Methylene Chloride	ug/kg	2500	2500	2120	100	85	70-130	16	20	
o-Xylene	ug/kg	2500	2680	2710	107	109	63-135	1	20	
Styrene	ug/kg	2500	2350	2430	94	97	69-130	3	20	
Tetrachloroethene	ug/kg	2500	2430	2460	97	98	70-130	1	20	
Toluene	ug/kg	2500	2460	2680	98	107	70-130	9	20	
trans-1,2-Dichloroethene	ug/kg	2500	2340	2230	94	89	70-130	5	20	
trans-1,3-Dichloropropene	ug/kg	2500	2580	2360	103	94	70-130	9	20	
Trichloroethene	ug/kg	2500	2540	2620	102	105	70-130	3	20	
Trichlorofluoromethane	ug/kg	2500	1880	2350	75	94	50-150	22	20 D6	
Vinyl chloride	ug/kg	2500	1880	1860	75	74	57-130	1	20	
4-Bromofluorobenzene (S)	%.				98	94	49-130			
Dibromofluoromethane (S)	%.				102	106	57-130			
Toluene-d8 (S)	%.				101	107	54-133			

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	MSV/17248	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples: 4068437004, 4068437005, 4068437006, 4068437007, 4068437008			

METHOD BLANK: 693812 Matrix: Solid

Associated Lab Samples: 4068437004, 4068437005, 4068437006, 4068437007, 4068437008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1,1-Trichloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1,2-Trichloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1-Dichloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1-Dichloroethene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,1-Dichloropropene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2,3-Trichlorobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2,3-Trichloropropane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2,4-Trichlorobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2-Dibromo-3-chloropropane	ug/kg	<82.3	250	10/16/12 14:01	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2-Dichlorobenzene	ug/kg	<44.4	60.0	10/16/12 14:01	
1,2-Dichloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,2-Dichloropropane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,3-Dichlorobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
1,3-Dichloropropane	ug/kg	<25.0	60.0	10/16/12 14:01	
1,4-Dichlorobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
2,2-Dichloropropane	ug/kg	<25.0	60.0	10/16/12 14:01	
2-Chlorotoluene	ug/kg	<25.0	60.0	10/16/12 14:01	
4-Chlorotoluene	ug/kg	<25.0	60.0	10/16/12 14:01	
Benzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Bromobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Bromochloromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Bromodichloromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Bromoform	ug/kg	<25.9	60.0	10/16/12 14:01	
Bromomethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Carbon tetrachloride	ug/kg	<25.0	60.0	10/16/12 14:01	
Chlorobenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Chloroethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Chloroform	ug/kg	<25.0	60.0	10/16/12 14:01	
Chloromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
cis-1,2-Dichloroethene	ug/kg	<25.0	60.0	10/16/12 14:01	
cis-1,3-Dichloropropene	ug/kg	<25.0	60.0	10/16/12 14:01	
Dibromochloromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Dibromomethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Dichlorodifluoromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Diisopropyl ether	ug/kg	<25.0	60.0	10/16/12 14:01	
Ethylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Hexachloro-1,3-butadiene	ug/kg	<26.4	60.0	10/16/12 14:01	
Isopropylbenzene (Cumene)	ug/kg	<25.0	60.0	10/16/12 14:01	

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

METHOD BLANK: 693812

Matrix: Solid

Associated Lab Samples: 4068437004, 4068437005, 4068437006, 4068437007, 4068437008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/kg	<50.0	120	10/16/12 14:01	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	10/16/12 14:01	
Methylene Chloride	ug/kg	<25.0	60.0	10/16/12 14:01	
n-Butylbenzene	ug/kg	<40.4	60.0	10/16/12 14:01	
n-Propylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Naphthalene	ug/kg	<25.0	60.0	10/16/12 14:01	
o-Xylene	ug/kg	<25.0	60.0	10/16/12 14:01	
p-Isopropyltoluene	ug/kg	<25.0	60.0	10/16/12 14:01	
sec-Butylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Styrene	ug/kg	<25.0	60.0	10/16/12 14:01	
tert-Butylbenzene	ug/kg	<25.0	60.0	10/16/12 14:01	
Tetrachloroethene	ug/kg	<25.0	60.0	10/16/12 14:01	
Toluene	ug/kg	<25.0	60.0	10/16/12 14:01	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	10/16/12 14:01	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	10/16/12 14:01	
Trichloroethene	ug/kg	<25.0	60.0	10/16/12 14:01	
Trichlorofluoromethane	ug/kg	<25.0	60.0	10/16/12 14:01	
Vinyl chloride	ug/kg	<25.0	60.0	10/16/12 14:01	
4-Bromofluorobenzene (S)	%.	85	49-130	10/16/12 14:01	
Dibromofluoromethane (S)	%.	89	57-130	10/16/12 14:01	
Toluene-d8 (S)	%.	103	54-133	10/16/12 14:01	

LABORATORY CONTROL SAMPLE & LCSD: 693813

693814

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2010	2070	80	83	70-130	3	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2040	2110	82	84	70-130	3	20	
1,1,2-Trichloroethane	ug/kg	2500	2310	2190	92	88	70-130	5	20	
1,1-Dichloroethane	ug/kg	2500	2150	2400	86	96	70-130	11	20	
1,1-Dichloroethene	ug/kg	2500	2330	2400	93	96	64-130	3	20	
1,2,4-Trichlorobenzene	ug/kg	2500	2000	2220	80	89	68-130	11	20	
1,2-Dibromo-3-chloropropane	ug/kg	2500	1430	1610	57	65	50-150	12	20	
1,2-Dibromoethane (EDB)	ug/kg	2500	2300	2270	92	91	70-130	1	20	
1,2-Dichlorobenzene	ug/kg	2500	2380	2400	95	96	70-130	1	20	
1,2-Dichloroethane	ug/kg	2500	2100	2210	84	88	70-130	5	20	
1,2-Dichloropropane	ug/kg	2500	2400	2280	96	91	70-130	5	20	
1,3-Dichlorobenzene	ug/kg	2500	2410	2550	97	102	70-130	5	20	
1,4-Dichlorobenzene	ug/kg	2500	2400	2500	96	100	70-130	4	20	
Benzene	ug/kg	2500	2490	2460	100	98	70-130	1	20	
Bromodichloromethane	ug/kg	2500	2080	2070	83	83	70-130	0	20	
Bromoform	ug/kg	2500	1700	1660	68	66	63-130	2	20	
Bromomethane	ug/kg	2500	3430	3440	137	138	41-142	0	20	
Carbon tetrachloride	ug/kg	2500	2010	2090	80	84	70-130	4	20	
Chlorobenzene	ug/kg	2500	2520	2500	101	100	70-130	1	20	
Chloroethane	ug/kg	2500	3450	3320	138	133	57-130	4	20 CH,L0	

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

LABORATORY CONTROL SAMPLE & LCSD:		693813		693814							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Chloroform	ug/kg	2500	2620	2680	105	107	70-130	2	20		
Chloromethane	ug/kg	2500	1770	1800	71	72	57-130	2	20		
cis-1,2-Dichloroethene	ug/kg	2500	2520	2660	101	107	70-130	6	20		
cis-1,3-Dichloropropene	ug/kg	2500	2060	1980	82	79	70-130	4	20		
Dibromochloromethane	ug/kg	2500	2070	2130	83	85	70-130	3	20		
Dichlorodifluoromethane	ug/kg	2500	1470	1500	59	60	31-150	2	20		
Ethylbenzene	ug/kg	2500	2460	2410	98	97	65-137	2	20		
Isopropylbenzene (Cumene)	ug/kg	2500	2390	2410	96	96	70-130	1	20		
m&p-Xylene	ug/kg	5000	5020	4990	100	100	64-139	0	20		
Methyl-tert-butyl ether	ug/kg	2500	2030	2130	81	85	69-130	5	20		
Methylene Chloride	ug/kg	2500	2540	2600	102	104	70-130	2	20		
o-Xylene	ug/kg	2500	2450	2460	98	98	63-135	0	20		
Styrene	ug/kg	2500	2290	2410	91	96	69-130	5	20		
Tetrachloroethene	ug/kg	2500	2420	2350	97	94	70-130	3	20		
Toluene	ug/kg	2500	2570	2520	103	101	70-130	2	20		
trans-1,2-Dichloroethene	ug/kg	2500	2440	2530	98	101	70-130	4	20		
trans-1,3-Dichloropropene	ug/kg	2500	1940	1960	78	78	70-130	1	20		
Trichloroethene	ug/kg	2500	2550	2480	102	99	70-130	3	20		
Trichlorofluoromethane	ug/kg	2500	2500	2570	100	103	50-150	3	20		
Vinyl chloride	ug/kg	2500	1970	2010	79	80	57-130	2	20		
4-Bromofluorobenzene (S)	%.				84	90	49-130				
Dibromofluoromethane (S)	%.				90	99	57-130				
Toluene-d8 (S)	%.				101	105	54-133				

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	MSV/17147	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples: 4068437009, 4068437010			

METHOD BLANK: 689074 Matrix: Water

Associated Lab Samples: 4068437009, 4068437010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	10/13/12 09:33	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	10/13/12 09:33	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	10/13/12 09:33	
1,1,2-Trichloroethane	ug/L	<0.42	1.0	10/13/12 09:33	
1,1-Dichloroethane	ug/L	<0.75	1.0	10/13/12 09:33	
1,1-Dichloroethene	ug/L	<0.57	1.0	10/13/12 09:33	
1,1-Dichloropropene	ug/L	<0.75	1.0	10/13/12 09:33	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	10/13/12 09:33	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	10/13/12 09:33	
1,2,4-Trichlorobenzene	ug/L	<0.97	5.0	10/13/12 09:33	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	10/13/12 09:33	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.0	10/13/12 09:33	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.0	10/13/12 09:33	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	10/13/12 09:33	
1,2-Dichloroethane	ug/L	<0.36	1.0	10/13/12 09:33	
1,2-Dichloropropane	ug/L	<0.49	1.0	10/13/12 09:33	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	10/13/12 09:33	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	10/13/12 09:33	
1,3-Dichloropropane	ug/L	<0.61	1.0	10/13/12 09:33	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	10/13/12 09:33	
2,2-Dichloropropane	ug/L	<0.62	1.0	10/13/12 09:33	
2-Chlorotoluene	ug/L	<0.85	1.0	10/13/12 09:33	
4-Chlorotoluene	ug/L	<0.74	1.0	10/13/12 09:33	
Benzene	ug/L	<0.41	1.0	10/13/12 09:33	
Bromobenzene	ug/L	<0.82	1.0	10/13/12 09:33	
Bromochloromethane	ug/L	<0.97	1.0	10/13/12 09:33	
Bromodichloromethane	ug/L	<0.56	1.0	10/13/12 09:33	
Bromoform	ug/L	<0.94	1.0	10/13/12 09:33	
Bromomethane	ug/L	<0.91	1.0	10/13/12 09:33	
Carbon tetrachloride	ug/L	<0.49	1.0	10/13/12 09:33	
Chlorobenzene	ug/L	<0.41	1.0	10/13/12 09:33	
Chloroethane	ug/L	<0.97	1.0	10/13/12 09:33	
Chloroform	ug/L	<1.3	5.0	10/13/12 09:33	
Chloromethane	ug/L	<0.24	1.0	10/13/12 09:33	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	10/13/12 09:33	
cis-1,3-Dichloropropene	ug/L	<0.20	1.0	10/13/12 09:33	
Dibromochloromethane	ug/L	<0.81	1.0	10/13/12 09:33	
Dibromomethane	ug/L	<0.60	1.0	10/13/12 09:33	
Dichlorodifluoromethane	ug/L	<0.99	1.0	10/13/12 09:33	
Diisopropyl ether	ug/L	<0.76	1.0	10/13/12 09:33	
Ethylbenzene	ug/L	<0.54	1.0	10/13/12 09:33	
Hexachloro-1,3-butadiene	ug/L	<0.67	5.0	10/13/12 09:33	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	10/13/12 09:33	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

METHOD BLANK: 689074

Matrix: Water

Associated Lab Samples: 4068437009, 4068437010

Parameter	Units	Blank Result	Reporting		Qualifiers
			Limit	Analyzed	
m&p-Xylene	ug/L	<1.8	2.0	10/13/12 09:33	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	10/13/12 09:33	
Methylene Chloride	ug/L	<0.43	1.0	10/13/12 09:33	
n-Butylbenzene	ug/L	<0.93	1.0	10/13/12 09:33	
n-Propylbenzene	ug/L	<0.81	1.0	10/13/12 09:33	
Naphthalene	ug/L	<0.89	5.0	10/13/12 09:33	
o-Xylene	ug/L	<0.83	1.0	10/13/12 09:33	
p-Isopropyltoluene	ug/L	<0.67	1.0	10/13/12 09:33	
sec-Butylbenzene	ug/L	<0.89	5.0	10/13/12 09:33	
Styrene	ug/L	<0.86	1.0	10/13/12 09:33	
tert-Butylbenzene	ug/L	<0.97	1.0	10/13/12 09:33	
Tetrachloroethene	ug/L	<0.45	1.0	10/13/12 09:33	
Toluene	ug/L	<0.67	1.0	10/13/12 09:33	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	10/13/12 09:33	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	10/13/12 09:33	
Trichloroethene	ug/L	<0.48	1.0	10/13/12 09:33	
Trichlorofluoromethane	ug/L	<0.79	1.0	10/13/12 09:33	
Vinyl chloride	ug/L	<0.18	1.0	10/13/12 09:33	
4-Bromofluorobenzene (S)	%.	93	43-137	10/13/12 09:33	
Dibromofluoromethane (S)	%.	102	70-130	10/13/12 09:33	
Toluene-d8 (S)	%.	105	55-137	10/13/12 09:33	

LABORATORY CONTROL SAMPLE & LCSD: 689075		689076								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	Max RPD	RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.7	50.6	103	101	70-136	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	45.7	46.3	91	93	70-130	1	20	
1,1,2-Trichloroethane	ug/L	50	47.0	45.6	94	91	70-130	3	20	
1,1-Dichloroethane	ug/L	50	53.8	52.8	108	106	70-146	2	20	
1,1-Dichloroethene	ug/L	50	46.7	45.6	93	91	70-130	2	20	
1,2,4-Trichlorobenzene	ug/L	50	49.5	50.6	99	101	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	50	40.7	43.2	81	86	46-150	6	20	
1,2-Dibromoethane (EDB)	ug/L	50	50.3	50.8	101	102	70-130	1	20	
1,2-Dichlorobenzene	ug/L	50	52.1	52.7	104	105	70-130	1	20	
1,2-Dichloroethane	ug/L	50	46.8	46.4	94	93	70-144	1	20	
1,2-Dichloropropane	ug/L	50	50.7	51.1	101	102	70-136	1	20	
1,3-Dichlorobenzene	ug/L	50	51.7	52.6	103	105	70-130	2	20	
1,4-Dichlorobenzene	ug/L	50	52.7	53.4	105	107	70-130	1	20	
Benzene	ug/L	50	48.8	48.6	98	97	70-137	0	20	
Bromodichloromethane	ug/L	50	49.1	50.3	98	101	70-133	2	20	
Bromoform	ug/L	50	41.4	41.4	83	83	59-130	0	20	
Bromomethane	ug/L	50	34.5	36.9	69	74	41-148	7	20	
Carbon tetrachloride	ug/L	50	56.1	55.1	112	110	70-154	2	20	
Chlorobenzene	ug/L	50	52.3	51.7	105	103	70-130	1	20	
Chloroethane	ug/L	50	40.7	40.5	81	81	70-139	0	20	

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QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

LABORATORY CONTROL SAMPLE & LCSD:		689075		689076				RPD	Max RPD	Qualifiers
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits			
Chloroform	ug/L	50	50.6	49.6	101	99	70-130	2	20	
Chloromethane	ug/L	50	39.9	38.6	80	77	45-154	3	20	
cis-1,2-Dichloroethene	ug/L	50	47.7	46.3	95	93	70-130	3	20	
cis-1,3-Dichloropropene	ug/L	50	42.0	42.3	84	85	70-136	1	20	
Dibromochloromethane	ug/L	50	47.5	47.2	95	94	70-130	1	20	
Dichlorodifluoromethane	ug/L	50	35.9	35.1	72	70	20-157	2	20	
Ethylbenzene	ug/L	50	54.8	54.7	110	109	70-130	0	20	
Isopropylbenzene (Cumene)	ug/L	50	57.2	56.9	114	114	70-130	1	20	
m&p-Xylene	ug/L	100	111	111	111	111	70-130	1	20	
Methyl-tert-butyl ether	ug/L	50	45.8	46.2	92	92	59-141	1	20	
Methylene Chloride	ug/L	50	43.3	42.7	87	85	70-130	1	20	
o-Xylene	ug/L	50	52.9	52.8	106	106	70-130	0	20	
Styrene	ug/L	50	48.3	48.3	97	97	70-130	0	20	
Tetrachloroethene	ug/L	50	54.2	54.0	108	108	70-130	0	20	
Toluene	ug/L	50	51.8	51.6	104	103	70-130	0	20	
trans-1,2-Dichloroethene	ug/L	50	55.2	54.6	110	109	70-130	1	20	
trans-1,3-Dichloropropene	ug/L	50	43.7	43.1	87	86	55-135	1	20	
Trichloroethene	ug/L	50	53.1	51.7	106	103	70-130	3	20	
Trichlorofluoromethane	ug/L	50	47.1	47.4	94	95	50-150	1	20	
Vinyl chloride	ug/L	50	42.6	41.4	85	83	61-143	3	20	
4-Bromofluorobenzene (S)	%.				106	105	43-137			
Dibromofluoromethane (S)	%.					96	96	70-130		
Toluene-d8 (S)	%.					108	107	55-137		

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	PMST/7746	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 4068437001, 4068437002			

SAMPLE DUPLICATE: 696260

Parameter	Units	4068435002	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.8	13.4	4	10	

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	PMST/7747	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 4068437003, 4068437004, 4068437005, 4068437006, 4068437007, 4068437008			

SAMPLE DUPLICATE: 696340

Parameter	Units	4068896001	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.0	19.4	2	10	

QUALITY CONTROL DATA

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

QC Batch:	WETA/14508	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
Associated Lab Samples:	4068437009, 4068437010		

METHOD BLANK: 689026 Matrix: Water

Associated Lab Samples: 4068437009, 4068437010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0039	0.020	10/08/12 09:00	

LABORATORY CONTROL SAMPLE: 689027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.32	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 689028 689029

Parameter	Units	4068437009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	1.2	3	3	4.3	4.4	103	107	90-110	2	20	

QUALIFIERS

Project: 6134 PHILLIPS PLATING

Pace Project No.: 4068437

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/17189

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/17249

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

- | | |
|----|---|
| CH | The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high. |
| D6 | The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits. |
| H3 | Sample was received or analysis requested beyond the recognized method holding time. |
| HS | Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter). |
| L0 | Analyte recovery in the laboratory control sample (LCS) was outside QC limits. |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| W | Non-detect results are reported on a wet weight basis. |

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134 PHILLIPS PLATING
Pace Project No.: 4068437

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4068437001	GP-1 4-8'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437002	GP-2 4-8'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437003	GP-3 4-8'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437004	GP-4 4-8'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437005	GP-5 16-20'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437006	GP-6 8-12'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437007	GP-6D 12-16'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437008	GP-7C 8-12'	EPA 3050	MPRP/7608	EPA 6010	ICP/6653
4068437009	BG5	EPA 3010	MPRP/7584	EPA 6010	ICP/6632
4068437010	BG6D	EPA 3010	MPRP/7584	EPA 6010	ICP/6632
4068437001	GP-1 4-8'	EPA 5035/5030B	MSV/17184	EPA 8260	MSV/17189
4068437002	GP-2 4-8'	EPA 5035/5030B	MSV/17184	EPA 8260	MSV/17189
4068437003	GP-3 4-8'	EPA 5035/5030B	MSV/17184	EPA 8260	MSV/17189
4068437004	GP-4 4-8'	EPA 5035/5030B	MSV/17248	EPA 8260	MSV/17249
4068437005	GP-5 16-20'	EPA 5035/5030B	MSV/17248	EPA 8260	MSV/17249
4068437006	GP-6 8-12'	EPA 5035/5030B	MSV/17248	EPA 8260	MSV/17249
4068437007	GP-6D 12-16'	EPA 5035/5030B	MSV/17248	EPA 8260	MSV/17249
4068437008	GP-7C 8-12'	EPA 5035/5030B	MSV/17248	EPA 8260	MSV/17249
4068437009	BG5	EPA 8260	MSV/17147		
4068437010	BG6D	EPA 8260	MSV/17147		
4068437001	GP-1 4-8'	ASTM D2974-87	PMST/7746		
4068437002	GP-2 4-8'	ASTM D2974-87	PMST/7746		
4068437003	GP-3 4-8'	ASTM D2974-87	PMST/7747		
4068437004	GP-4 4-8'	ASTM D2974-87	PMST/7747		
4068437005	GP-5 16-20'	ASTM D2974-87	PMST/7747		
4068437006	GP-6 8-12'	ASTM D2974-87	PMST/7747		
4068437007	GP-6D 12-16'	ASTM D2974-87	PMST/7747		
4068437008	GP-7C 8-12'	ASTM D2974-87	PMST/7747		
4068437009	BG5	SM 3500-Cr B (Online)	WETA/14508		
4068437010	BG6D	SM 3500-Cr B (Online)	WETA/14508		

(Please Print Clearly)

Company Name:	R&I Engineering	
Branch/Location:	Wausau	
Project Contact:	Adam Schaeemann	
Phone:	715-675-9784	
Project Number:	6134	
Project Name:	Phillips Platina	
Project State:	WI	
Sampled By (Print):	Adam Schaeemann	
Sampled By (Sign):		
PO #:		Regulatory Program:

Data Package Options

- EPA Level III
 EPA Level IV

MS/MSD

- On your sample (billable)
 NOT needed on your sample

Matrix Codes

- A = Air
B = Biota
C = Charcoal
O = Oil
S = Soil
St = Sludge
W = Water
DW = Drinking Water
GW = Ground Water
SW = Surface Water
WW = Waste Water
WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Analyses Requested	Y/N						Quote #:	Mail To Contact:	Mail To Company:	Mail To Address:	Invoice To Contact:	Invoice To Company:	Invoice To Address:	Invoice To Phone:	CLIENT COMMENTS (Lab Use Only)	LAB COMMENTS (Lab Use Only)	Profile #	
		DATE	TIME			N	N	N	N	M	N												
001	GP1 4-8'	10/4/12	9:30	S	VOC	X		X	X	X													
002	GP2 4-8'		9:35		VOC	X		X	X	X													
003	GP3 4-8'		9:50		Zn, Ni, Cr	X		X	X	X													
004	GP4 4-8"		10:05		Zn, Ni, Cr	X		X	X	X													
005	GP5 16-20'		10:38		Zn, Ni, Cr	X		X	X	X													
006	GP6 8-12'		11:10		Zn, Ni, Cr	X		X	X	X													
007	GP60 12-16'		1:15		Zn, Ni, Cr	X		X	X	X													
008	GP7C 8-12'		12:45		Zn, Ni, Cr	X		X	X	X													
009	GP5		10:40	GW	Zn, Ni, Cr	X		X	X														
010	GP6D		8:30pm	L	Zn, Ni, Cr	X		X	X	X													

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Samples on HOLD are subject to
special pricing and release of liability

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Received By:

Received By:

Received By:

Received By:

Received By:

Received By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

PACE Project No.

4068437

Receipt Temp = ROT °C

Sample Receipt pH

OK / Adjusted

Cooler Custody-Seal

Present / Not Present

Intact / Not Intact



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

4068437



Sample Condition Upon Receipt

Client Name: REI Project # 4068437
 Courier: FedEx UPS USPS Client Commercial Pace Other Walked
 Tracking #: 2443831

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no
 Custody Seal on Samples Present: yes no Seals intact: yes no
 Packing Material: Bubble Wrap Bubble Bags None Other
 Thermometer Used N/A Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun.
 Cooler Temperature ROI Biological Tissue is Frozen: yes no

Optional
Proj. Due Date
Proj. Name

Temp Blank Present: yes no no

Temp should be above freezing to 6°C for all sample except Biota.
 Biota Samples should be received ≤ 0°C.

Comments:

Person examining contents:
 Date: 10-6-12
 Initials: SKW

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<u>EMH</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<u>10/6/12</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>009+010 1-250.mL p⁴ each 1/2 full EMH 10/6/12</u>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>003 - 4ozp -ID GP 4-8 matched by same 10/6/12 SKW</u>
-Includes date/time/ID/Analysis Matrix:	<u>STW</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <u>HN03 samples pH of ≤ 2. 10/6/12 SKW</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed <u>SKW</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: BB

Date: 10-8-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

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Brian Basten
Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

October 15, 2012

RE: 6134 Phyllis Plating / 4068437

Lab Orders:
12100344

Dear Mr. Brian Basten:

Enclosed are the analytical reports for the EMT Lab Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me at 847-967-6666.

Sincerely,

Approved by,

Arminta P. Priddy

Arminta Priddy
Project Manager

Marilyn Krueding

Marilyn Krueding
Laboratory Director

This Report Contains 20 pages

The Contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety.

State of Illinois, NELAC Accredited Lab. No. 100256
State of Wisconsin, WDNR Accredited Lab No. 999888890

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CLIENT: Pace Analytical Services, Inc.

Date: 10/15/2012

Project: 6134 Phyllis Plating / 4068437

CASE NARRATIVE

Lab Order: 12100344

Unless otherwise noted, samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

Unless otherwise noted, all method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Sample results relate only to the analytes of interest tested and to the sample received at the laboratory.

All results are reported on a wet weight basis, unless otherwise noted. Dry weight adjusted results, reporting limits, method detection limits and dilution factors are indicated by the notation "dry" in the Units column. If present, a dilution factor will adjust the method detection limits and reporting limits.

The test results contained in this report meet all of the requirements of NELAC. Accreditation by the State of Illinois or Wisconsin is not an endorsement or a guarantee of the validity of data generated. For specific information regarding EMT's scope of accreditation , please contact your EMT project manager.

The Reporting Limit listed on the Report of Laboratory Analysis is EMT's reporting limit for the analyte reported. For most test methods this reporting limit is primarily based upon the lowest point in the calibration curve.

Analyst's initials of "OUT" indicate that the analyte was analyzed by a subcontracted laboratory.

Method References:

SW=USEPA, Test Methods for Evaluating Solid Waste, SW-846.

E=USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40 CFR Part 136, App A; methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water.

SM= APHA, Standard Methods for the Examination of Water and Wastewater.

D=ASTM, Annual Book of Standards

Batch numbers starting with a letter indicate an analytical batch while those that are exclusively numerals indicate a preparation batch.

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soil

air

product

waste

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CLIENT: Pace Analytical Services, Inc.
Project: 6134 Phyllis Plating / 4068437
Lab Order: 12100344

Date: 10/15/2012

CASE NARRATIVE

Analytical Comments for METHOD PMOIST, 12100344-04A-DUP: RPD recovery is outside of the laboratory control limit.

Analytical Comments for METHOD 7196_CR6_S, 12100344-07AMS: Due to the matrix effect the recovery of matrix spike is 119.7%, outside of acceptance range of 85-115%. The LCS analyzed with the batch demonstrates acceptable performance of analytical system.

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phillis Plating / 4068437
Lab ID: 12100344-01

Client Sample ID: GP-1 4-8'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.69	2.69		mg/kg-dry	1.08	10/12/12 15:03	77354	5.00	CS2
Percent Moisture Percent Moisture	7.03	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phillis Plating / 4068437
Lab ID: 12100344-02

Client Sample ID: GP-2 4-8'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.74	2.74		mg/kg-dry	1.10	10/12/12 15:04	77354	5.00	CS2
Percent Moisture Percent Moisture	8.85	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phillis Plating / 4068437
Lab ID: 12100344-03

Client Sample ID: GP-3 4-8'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.77	2.77		mg/kg-dry	1.11	10/12/12 15:09	77354	5.00	CS2
Percent Moisture Percent Moisture	9.78	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phyllis Plating / 4068437
Lab ID: 12100344-04

Client Sample ID: GP-4 4-8'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.66	2.66		mg/kg-dry	1.06	10/12/12 15:09	77354	5.00	CS2
Percent Moisture Percent Moisture	5.09	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phllis Plating / 4068437
Lab ID: 12100344-05

Client Sample ID: GP-5 16-20'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	2.4	2.77	J	mg/kg-dry	1.11	10/12/12 15:09	77354	5.00	CS2
Percent Moisture Percent Moisture	9.34	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 12100344
Project: 6134 Phillis Plating / 4068437
Lab ID: 12100344-06

Client Sample ID: GP-6 8-12'
Report Date: 10/15/2012
Collection Date: 10/4/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.67	2.67		mg/kg-dry	1.07	10/12/12 15:09	77354	5.00	CS2
Percent Moisture Percent Moisture	6.32	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc. **Client Sample ID:** GP-6D 12-16'
Lab Order: 12100344 **Report Date:** 10/15/2012
Project: 6134 Phillis Plating / 4068437 **Collection Date:** 10/4/2012
Lab ID: 12100344-07 **Matrix:** Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.73	2.73		mg/kg-dry	1.09	10/12/12 15:09	77354	5.00	CS2
Percent Moisture Percent Moisture	8.83	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits
E - Estimated R - RPD outside accepted recovery limits
H - Holding Time Exceeded J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc. **Client Sample ID:** GP-7C 8-12'
Lab Order: 12100344 **Report Date:** 10/15/2012
Project: 6134 Phyllis Plating / 4068437 **Collection Date:** 10/4/2012
Lab ID: 12100344-08 **Matrix:** Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	< 2.64	2.64		mg/kg-dry	1.06	10/12/12 15:15	77354	5.00	CS2
Percent Moisture Percent Moisture	5.39	0.03		% (Percent)	0.0150	10/10/12 15:30	R176299	1.00	SW

Qualifiers: B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits
E - Estimated R - RPD outside accepted recovery limits
H - Holding Time Exceeded J - Analyte detected below quantitation limits

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Client: Pace Analytical Services, Inc.

Project: Pace Green Bay

Lab Order: 12100344

DATES REPORT

10/15/2012

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date	Batch ID
12100344-01A	GP-1 4-8'	10/4/12	Soil	Hexavalent Chromium		10/12/12 10:55	10/12/12 15:03	77354
				Percent Moisture			10/10/12 15:30	R176299
12100344-02A	GP-2 4-8'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:04	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-03A	GP-3 4-8'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:09	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-04A	GP-4 4-8'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:09	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-05A	GP-5 16-20'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:09	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-06A	GP-6 8-12'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:09	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-07A	GP-6D 12-16'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:09	77354	
				Percent Moisture			10/10/12 15:30	R176299
12100344-08A	GP-7C 8-12'			Hexavalent Chromium	10/12/12 10:55	10/12/12 15:15	77354	
				Percent Moisture			10/10/12 15:30	R176299

environmental laboratory and testing services

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Environmental Monitoring & Technologies, Inc.

Date: 10/15/2012

CLIENT: Pace Analytical Services, Inc.

QC SUMMARY REPORT

Project: Pace Green Bay

Method Blank

Lab Order: 12100344

Sample ID:	MB-77354	Batch ID:	77354	Test Code:	SW7196A	Units:	mg/kg	Analysis Date:	10/12/12 15:03	Prep Date:	10/12/12 10:5	
Client ID:				Run ID:	KONELAB_121012C	SeqNo:	1685858					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		< 2.5	2.5									
Sample ID:	MB-R176299	Batch ID:	R176299	Test Code:	2540G	Units:	% (Percent)	Analysis Date:	10/10/12 15:30	Prep Date:		
Client ID:				Run ID:	SOLIDS_121010B	SeqNo:	1684791					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture		0.0199	0.03									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**QC SUMMARY REPORT****Project:** Pace Green Bay

Sample Duplicate

Lab Order: 12100344

Sample ID: 12100344-01A DUP Batch ID: 77354 Test Code: SW7196A Units: mg/kg-dry Analysis Date: 10/12/12 15:04 Prep Date: 10/12/12 10:5

Client ID: GP-1 4-8'

Run ID: KONELAB_121012C

SeqNo: 1685862

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
---------	--------	-----	-----------	-------------	------	-----------	------------	-------------	------	----------	------

Chromium, Hexavalent < 2.7 2.69 0 0 0 0 0 0 0 0 20

Sample ID: 12100344-04A-DUP Batch ID: R176299 Test Code: 2540G Units: % (Percent) Analysis Date: 10/10/12 15:30 Prep Date:

Client ID: GP-4 4-8'

Run ID: SOLIDS_121010B

SeqNo: 1684813

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
---------	--------	-----	-----------	-------------	------	-----------	------------	-------------	------	----------	------

Percent Moisture 5.96 0.03 0 0 0 0 0 5.09 15.7 10 R

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**QC SUMMARY REPORT****Project:** Pace Green Bay

Sample Matrix Spike

Lab Order: 12100344

Sample ID: 12100344-01A MS1 Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:04		Prep Date: 10/12/12 10:5				
Client ID:	GP-1 4-8'	Run ID: KONELAB_121012C				SeqNo: 1685863						
Analyte	Soluble Matix Spike	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		35.62	2.69	43.02	0	82.8	70	130	0			
Sample ID: 12100344-01A MSD1 Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:04		Prep Date: 10/12/12 10:5				
Client ID:	GP-1 4-8'	Run ID: KONELAB_121012C				SeqNo: 1685864						
Analyte	Insoluble Matrix Spike	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		1133	53.8	1198	0	94.5	70	130	0			
Sample ID: 12100344-01AMS Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:04		Prep Date: 10/12/12 10:5				
Client ID:	GP-1 4-8'	Run ID: KONELAB_121012C				SeqNo: 1685875						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		33.05	2.69	31.84	0	104	85	115	0			
Sample ID: 12100344-02AMS Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:09		Prep Date: 10/12/12 10:5				
Client ID:	GP-2 4-8'	Run ID: KONELAB_121012C				SeqNo: 1685876						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		31.33	2.74	32.47	0	96.5	85	115	0			
Sample ID: 12100344-03AMS Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:09		Prep Date: 10/12/12 10:5				
Client ID:	GP-3 4-8'	Run ID: KONELAB_121012C				SeqNo: 1685877						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		28.35	2.77	32.81	0	86.4	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.
Project: Pace Green Bay

QC SUMMARY REPORT
Sample Matrix Spike

Lab Order: 12100344

Sample ID: 12100344-04AMS		Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:09			Prep Date: 10/12/12 10:5			
Client ID:	GP-4 4-8'			Run ID: KONELAB_121012C				SeqNo:	1685878					
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, Hexavalent		31.11	2.66	31.48	0	98.8	85	115	0					
Sample ID: 12100344-05AMS		Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:09			Prep Date: 10/12/12 10:5			
Client ID:	GP-5 16-20'			Run ID: KONELAB_121012C				SeqNo:	1685879					
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, Hexavalent		35.13	2.77	32.65	2.387	100	85	115	0					
Sample ID: 12100344-06AMS		Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:09			Prep Date: 10/12/12 10:5			
Client ID:	GP-6 8-12'			Run ID: KONELAB_121012C				SeqNo:	1685880					
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, Hexavalent		33.65	2.67	31.6	0	107	85	115	0					
Sample ID: 12100344-07AMS		Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:15			Prep Date: 10/12/12 10:5			
Client ID:	GP-6D 12-16'			Run ID: KONELAB_121012C				SeqNo:	1685881					
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, Hexavalent		38.72	2.73	32.47	0	119	85	115	0			S		
Sample ID: 12100344-08AMS		Batch ID: 77354		Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:15			Prep Date: 10/12/12 10:5			
Client ID:	GP-7C 8-12'			Run ID: KONELAB_121012C				SeqNo:	1685882					
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, Hexavalent		29.6	2.64	31.29	0	94.6	85	115	0					

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.

Project: Pace Green Bay

QC SUMMARY REPORT

Sample Matrix Spike

Lab Order: 12100344

Sample ID: 12100344-01A DUPM Batch ID: 77354			Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:04			Prep Date: 10/12/12 10:5		
Client ID:	GP-1 4-8'		Run ID: KONELAB_121012C			SeqNo: 1685883						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		33.89	2.69	31.84	0	106	85	115	0			
Sample ID: 12100318-01AMS Batch ID: 77354			Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:15			Prep Date: 10/12/12 10:5		
Client ID:	Verification		Run ID: KONELAB_121012C			SeqNo: 1685885						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		28.93	2.66	31.49	0	91.9	85	115	0			
Sample ID: 12100319-01AMS Batch ID: 77354			Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:15			Prep Date: 10/12/12 10:5		
Client ID:	Verification		Run ID: KONELAB_121012C			SeqNo: 1685886						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		26.15	2.59	30.69	0	85.2	85	115	0			
Sample ID: 12100367-01AMS Batch ID: 77354			Test Code: SW7196A		Units: mg/kg-dry		Analysis Date: 10/12/12 15:15			Prep Date: 10/12/12 10:5		
Client ID:	Verification		Run ID: KONELAB_121012C			SeqNo: 1685887						
Analyte	Verification	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		26.22	2.85	33.83	0	77.5	85	115	0			S

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**Project:** Pace Green Bay**QC SUMMARY REPORT**

Laboratory Control Spike - Low

Lab Order: 12100344

Sample ID: LCS1-77354	Batch ID: 77354	Test Code: SW7196A	Units: mg/kg	Analysis Date: 10/12/12 15:03			Prep Date: 10/12/12 10:5
Client ID:		Run ID: KONELAB_121012C		SeqNo: 1685873			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val
Chromium, Hexavalent	34.55	2.5	40	0	86.4	80	120
Sample ID: LCS2-77354	Batch ID: 77354	Test Code: SW7196A	Units: mg/kg	Analysis Date: 10/12/12 15:03			Prep Date: 10/12/12 10:5
Client ID:		Run ID: KONELAB_121012C		SeqNo: 1685874			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val
Chromium, Hexavalent	718	50	759.9	0	94.5	80	120
Sample ID: LCS-R176299	Batch ID: R176299	Test Code: 2540G	Units: ppm	Analysis Date: 10/10/12 15:30			Prep Date:
Client ID:		Run ID: SOLIDS_121010B		SeqNo: 1684792			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val
Percent Moisture	1799	0.03	1839	0	97.8	85	115

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**Project:** Pace Green Bay**Lab Order:** 12100344**QC SUMMARY REPORT**

Post Digestion/Distillation Spike

Sample ID: 12100344-01APDS	Batch ID: 77354	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 10/12/12 15:15	Prep Date: 10/12/12 10:5						
Client ID:		Run ID: KONELAB_121012C		SeqNo: 1685884							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	217.6	26.9	215.1	0	101	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limitsS - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 4068437	Workorder Name: 6134 PHILLIPS PLATING	Results Requested	10/22/2012	121003A			
Report / Invoice To	Subcontract To	Requested Analysis					
P.O.							
Pace Analytical Brian Basten 1241 Bellevue St, STE 9 Green Bay, WI 54302							
EMT-IL							
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Hex Cr soils	LAB USE ONLY
1	GP-1 4-8'	10/4/2012 09:20	4068437001	Solid		X	KA
2	GP-2 4-8'	10/4/2012 09:35	4068437002	Solid		X	ZK
3	GP-3 4-8'	10/4/2012 09:50	4068437003	Solid		X	3K
4	GP-4 4-8'	10/4/2012 10:05	4068437004	Solid		X	AK
5	GP-5 16-20'	10/4/2012 10:35	4068437005	Solid		X	SK
6	GP-6 8-12'	10/4/2012 11:10	4068437006	Solid		X	LOW
7	GP-6D 12-16'	10/4/2012 13:15	4068437007	Solid		X	UT
8	GP-7C 8-12'	10/4/2012 12:45	4068437008	Solid		X	SK
11							
12							
13							
14							
						Comments	
Transfers	Released By	Date/Time	Received By	Date/Time	10/4/2012 MARTIN		
1	/	10/4/12 1600					
2	/						
3	/						
Cooler Temperature on Receipt		4 °C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact Y or N

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

Client: REI Engineering Inc
Attn: Adam Schunemann
4080 North 20th Avenue
Wausau, WI 54401 8846

Project: Phillips Plating

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 12/27/12 Code: NNNN-S Page 1 of 2

NLS Project: 189498

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

RECEIVED

JAN 03 2013

MW1 NLS ID: 697857

COC: 163128:1 Matrix: GW

Collected: 12/11/12 17:00 Received: 12/12/12

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Arsenic, dis. as As by ICP-MS	ND	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Barium, dis. as Ba by ICP-MS	280	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Cadmium, dis. as Cd by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	1.7*	5.0*	12/12/12	SW846 7196A	721026460
Chromium, dis. as Cr by ICP-MS	2.0	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Lead, dis. as Pb by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Mercury, dis. as Hg	ND	ug/L	1	0.025*	0.050*	12/18/12	EPA 245.7M/1631M	721026460
Nickel, dis. as Ni by ICP-MS	5.5	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Selenium, dis. as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Silver, dis. as Ag by ICP-MS	ND	ug/L	1	0.13*	0.25*	12/13/12	EPA 200.8, Rev 5.4	721026460

MW2 NLS ID: 697858

COC: 163128:2 Matrix: GW

Collected: 12/11/12 17:05 Received: 12/12/12

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Arsenic, dis. as As by ICP-MS	ND	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Barium, dis. as Ba by ICP-MS	180	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Cadmium, dis. as Cd by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	1.7*	5.0*	12/12/12	SW846 7196A	721026460
Chromium, dis. as Cr by ICP-MS	1.4	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Lead, dis. as Pb by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Mercury, dis. as Hg	ND	ug/L	1	0.025*	0.050*	12/18/12	EPA 245.7M/1631M	721026460
Nickel, dis. as Ni by ICP-MS	9.0	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Selenium, dis. as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Silver, dis. as Ag by ICP-MS	ND	ug/L	1	0.13*	0.25*	12/13/12	EPA 200.8, Rev 5.4	721026460

MW3 NLS ID: 697859

COC: 163128:3 Matrix: GW

Collected: 12/11/12 17:10 Received: 12/12/12

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Arsenic, dis. as As by ICP-MS	ND	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Barium, dis. as Ba by ICP-MS	25	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Cadmium, dis. as Cd by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	1.7*	5.0*	12/12/12	SW846 7196A	721026460
Chromium, dis. as Cr by ICP-MS	2.2	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Lead, dis. as Pb by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Mercury, dis. as Hg	ND	ug/L	1	0.025*	0.050*	12/18/12	EPA 245.7M/1631M	721026460
Nickel, dis. as Ni by ICP-MS	1.4	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Selenium, dis. as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Silver, dis. as Ag by ICP-MS	ND	ug/L	1	0.13*	0.25*	12/13/12	EPA 200.8, Rev 5.4	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 12/27/12 Code: NNNN-S Page 2 of 2

Client: REI Engineering Inc
Attn: Adam Schunemann
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 189498

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating

MW4 NLS ID: 697860

COC: 163128:4 Matrix: GW

Collected: 12/11/12 17:15 Received: 12/12/12

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Arsenic, dis. as As by ICP-MS	ND	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Barium, dis. as Ba by ICP-MS	45	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Cadmium, dis. as Cd by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	1.7*	5.0*	12/12/12	SW846 7196A	721026460
Chromium, dis. as Cr by ICP-MS	3.4	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Lead, dis. as Pb by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Mercury, dis. as Hg	ND	ug/L	1	0.025*	0.050*	12/18/12	EPA 245.7M/1631M	721026460
Nickel, dis. as Ni by ICP-MS	6.8	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Selenium, dis. as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Silver, dis. as Ag by ICP-MS	ND	ug/L	1	0.13*	0.25*	12/13/12	EPA 200.8, Rev 5.4	721026460

MW5 NLS ID: 697861

COC: 163128:5 Matrix: GW

Collected: 12/11/12 17:20 Received: 12/12/12

Notes: Results for both dissolved chromium and hexavalent chromium were confirmed by second analysis.

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Arsenic, dis. as As by ICP-MS	ND	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Barium, dis. as Ba by ICP-MS	110	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Cadmium, dis. as Cd by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Chromium, Hex. as Cr+6	590	ug/L	10	17*	50*	12/12/12	SW846 7196A	721026460
Chromium, dis. as Cr by ICP-MS	430	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Lead, dis. as Pb by ICP-MS	ND	ug/L	1	0.10*	0.20*	12/12/12	EPA 200.8, Rev 5.4	721026460
Mercury, dis. as Hg	ND	ug/L	1	0.025*	0.050*	12/18/12	EPA 245.7M/1631M	721026460
Nickel, dis. as Ni by ICP-MS	440	ug/L	1	0.50*	1.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Selenium, dis. as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	12/12/12	EPA 200.8, Rev 5.4	721026460
Silver, dis. as Ag by ICP-MS	ND	ug/L	1	0.13*	0.25*	12/13/12	EPA 200.8, Rev 5.4	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not Detected (< LOD)

1000 ug/L = 1 mg/L

Reviewed by:

Authorized by:
R. T. Krueger
President

DWB = Dry Weight Basis

NA = Not Applicable

%DWB = (mg/kg DWB) / 10000

MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

January 07, 2013

Adam Scheunemann
REI
4680 N 20th Ave
Wausau, WI 54401

RE: Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072281

Dear Adam Scheunemann:

Enclosed are the analytical results for sample(s) received by the laboratory on December 22, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten

brian.basten@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

Page 1 of 10

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CERTIFICATIONS

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072281

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

Page 2 of 10

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SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072281

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4072281001	HA1 SURFACE	Solid	12/19/12 14:00	12/22/12 09:50
4072281002	HA1 4.5'	Solid	12/19/12 14:30	12/22/12 09:50

REPORT OF LABORATORY ANALYSIS

Page 3 of 10

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SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072281

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4072281001	HA1 SURFACE	EPA 6010	MMZ	8
		EPA 7471	CMS	1
		ASTM D2974-87	SKW	1
4072281002	HA1 4.5'	EPA 6010	MMZ	8
		EPA 7471	CMS	1
		ASTM D2974-87	SKW	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 10

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072281

Sample: HA1 SURFACE Lab ID: 4072281001 Collected: 12/19/12 14:00 Received: 12/22/12 09:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	3.1 mg/kg		2.2	0.40	1	12/26/12 08:00	12/27/12 11:42	7440-38-2	
Barium	36.7 mg/kg		0.56	0.033	1	12/26/12 08:00	12/27/12 11:42	7440-39-3	
Cadmium	<0.035 mg/kg		0.56	0.035	1	12/26/12 08:00	12/27/12 11:42	7440-43-9	
Chromium	3610 mg/kg		0.56	0.11	1	12/26/12 08:00	12/27/12 11:42	7440-47-3	P6
Lead	104 mg/kg		1.1	0.28	1	12/26/12 08:00	12/27/12 11:42	7439-92-1	
Nickel	194 mg/kg		1.1	0.086	1	12/26/12 08:00	12/27/12 11:42	7440-02-0	M0
Selenium	<0.54 mg/kg		2.2	0.54	1	12/26/12 08:00	12/27/12 11:42	7782-49-2	
Silver	<0.25 mg/kg		1.1	0.25	1	12/26/12 08:00	12/27/12 11:42	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.062 mg/kg		0.0074	0.0037	1	12/26/12 13:45	12/27/12 11:20	7439-97-6	M0
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	10.6 %		0.10	0.10	1			12/24/12 09:06	

Sample: HA1 4.5' Lab ID: 4072281002 Collected: 12/19/12 14:30 Received: 12/22/12 09:50 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	4.7 mg/kg		2.1	0.38	1	12/26/12 08:00	12/27/12 11:53	7440-38-2	
Barium	65.4 mg/kg		0.53	0.032	1	12/26/12 08:00	12/27/12 11:53	7440-39-3	
Cadmium	0.19J mg/kg		0.53	0.033	1	12/26/12 08:00	12/27/12 11:53	7440-43-9	
Chromium	1600 mg/kg		0.53	0.11	1	12/26/12 08:00	12/27/12 11:53	7440-47-3	
Lead	23.9 mg/kg		1.1	0.27	1	12/26/12 08:00	12/27/12 11:53	7439-92-1	
Nickel	461 mg/kg		1.1	0.081	1	12/26/12 08:00	12/27/12 11:53	7440-02-0	
Selenium	<0.51 mg/kg		2.1	0.51	1	12/26/12 08:00	12/27/12 11:53	7782-49-2	
Silver	<0.23 mg/kg		1.1	0.23	1	12/26/12 08:00	12/27/12 11:53	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.054 mg/kg		0.0067	0.0034	1	12/26/12 13:45	12/27/12 11:54	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	12.5 %		0.10	0.10	1			12/24/12 09:06	

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072281

QC Batch:	MERP/3442	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples: 4072281001, 4072281002			

METHOD BLANK:	731865	Matrix:	Solid
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Associated Lab Samples: 4072281001, 4072281002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.0033	0.0067	12/27/12 11:16	

LABORATORY CONTROL SAMPLE: 731866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.17	0.16	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 731867 731868

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Mercury	mg/kg	0.062	.19	.19	0.20	0.23	77	93	85-115	14	20 M0

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072281

QC Batch:	MPRP/7962	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples: 4072281001, 4072281002			

METHOD BLANK: 731517 Matrix: Solid

Associated Lab Samples: 4072281001, 4072281002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.36	2.0	12/27/12 11:38	
Barium	mg/kg	<0.030	0.50	12/27/12 11:38	
Cadmium	mg/kg	<0.031	0.50	12/27/12 11:38	
Chromium	mg/kg	<0.10	0.50	12/27/12 11:38	
Lead	mg/kg	<0.25	1.0	12/27/12 11:38	
Nickel	mg/kg	<0.077	1.0	12/27/12 11:38	
Selenium	mg/kg	<0.48	2.0	12/27/12 11:38	
Silver	mg/kg	<0.22	1.0	12/27/12 11:38	

LABORATORY CONTROL SAMPLE: 731518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.9	102	80-120	
Barium	mg/kg	50	50.2	100	80-120	
Cadmium	mg/kg	50	51.5	103	80-120	
Chromium	mg/kg	50	49.9	100	80-120	
Lead	mg/kg	50	51.2	102	80-120	
Nickel	mg/kg	50	51.7	103	80-120	
Selenium	mg/kg	50	51.1	102	80-120	
Silver	mg/kg	25	25.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 731519 731520

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD Result	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		4072281001	Spike Conc.	Spike Conc.	MS Result								
Arsenic	mg/kg	3.1	55.6	55.6	55.9	56.0	95	95	95	75-125	0	20	
Barium	mg/kg	36.7	55.6	55.6	92.8	90.6	101	97	97	75-125	2	20	
Cadmium	mg/kg	<0.035	55.6	55.6	54.9	54.3	99	98	98	75-125	1	20	
Chromium	mg/kg	3610	55.6	55.6	3590	3530	-29	-143	-143	75-125	2	20	P6
Lead	mg/kg	104	55.6	55.6	157	158	94	96	96	75-125	1	20	
Nickel	mg/kg	194	55.6	55.6	215	215	39	38	38	75-125	0	20	M0
Selenium	mg/kg	<0.54	55.6	55.6	52.2	52.3	94	94	94	75-125	0	20	
Silver	mg/kg	<0.25	27.8	27.8	26.8	26.6	96	96	96	75-125	1	20	

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072281

QC Batch: PMST/8078 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 4072281001, 4072281002

SAMPLE DUPLICATE: 731480

Parameter	Units	4072211004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.6	19.7	1	10	

QUALIFIERS

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072281

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072281

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4072281001	HA1 SURFACE	EPA 3050	MPRP/7962	EPA 6010	ICP/6991
4072281002	HA1 4.5'	EPA 3050	MPRP/7962	EPA 6010	ICP/6991
4072281001	HA1 SURFACE	EPA 7471	MERP/3442	EPA 7471	MERC/4154
4072281002	HA1 4.5'	EPA 7471	MERP/3442	EPA 7471	MERC/4154
4072281001	HA1 SURFACE	ASTM D2974-87	PMST/8078		
4072281002	HA1 4.5'	ASTM D2974-87	PMST/8078		

Sample Condition Upon Receipt



Client Name: R E I Project # 4072281

Courier: FedEx UPS USPS Client Commercial Pace Other Waltro
Tracking #: 281372-1

Optional	Proj. Due Date
Proj. Name	

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no
 Custody Seal on Samples Present: yes no Seals intact: yes no
 Packing Material: Bubble Wrap Bubble Bags None Other
 Thermometer Used N/A Type of Ice Wet Blue Dry None Samples on ice, cooling process has begun.
 Cooler Temperature 20° Biological Tissue is Frozen: yes no
 Temp Blank Present: yes no

Temp should be above freezing to 6°C for all sample except Biota.
Biota Samples should be received ≤ 0°C.

Comments:

Person examining contents:
Date: 12-22-12
Initials: BS

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>S</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

Project Manager Review: [Signature]

Date: 12-24-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.



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Brian Basten
Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

January 07, 2013

RE: 6134B Phillips Plating Corp / 4072281

Lab Orders:
13010026

Dear Mr. Brian Basten:

Enclosed are the analytical reports for the EMT Lab Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me at 847-967-6666.

Sincerely,

Approved by,

Arminta P. Priddy

Arminta Priddy
Project Manager

Marilyn J. Krueding

Marilyn Krueding
Laboratory Director

This Report Contains 12 pages

The Contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety.

State of Illinois, NELAC Accredited Lab. No. 100256
State of Wisconsin, WDNR Accredited Lab No. 999888890

environmental laboratory and testing services
water soil air product waste

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CLIENT: Pace Analytical Services, Inc.

Date: 1/7/2013

Project: 6134B Phillips Plating Corp / 4072281

CASE NARRATIVE

Lab Order: 13010026

Unless otherwise noted, samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

Unless otherwise noted, all method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Sample results relate only to the analytes of interest tested and to the sample received at the laboratory.

All results are reported on a wet weight basis, unless otherwise noted. Dry weight adjusted results, reporting limits, method detection limits and dilution factors are indicated by the notation "dry" in the Units column. If present, a dilution factor will adjust the method detection limits and reporting limits.

The test results contained in this report meet all of the requirements of NELAC. Accreditation by the State of Illinois or Wisconsin is not an endorsement or a guarantee of the validity of data generated. For specific information regarding EMT's scope of accreditation , please contact your EMT project manager.

The Reporting Limit listed on the Report of Laboratory Analysis is EMT's reporting limit for the analyte reported. For most test methods this reporting limit is primarily based upon the lowest point in the calibration curve.

Analyst's initials of "OUT" indicate that the analyte was analyzed by a subcontracted laboratory.

Method References:

SW=USEPA, Test Methods for Evaluating Solid Waste, SW-846.

E=USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40 CFR Part 136, App A; methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water.

SM= APHA, Standard Methods for the Examination of Water and Wastewater.

D=ASTM, Annual Book of Standards

Batch numbers starting with a letter indicate an analytical batch while those that are exclusively numerals indicate a preparation batch.

environmental laboratory and testing services

water

soil

air

product

waste

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CLIENT: Pace Analytical Services, Inc.

Date: 1/7/2013

Project: 6134B Phillips Plating Corp / 4072281

CASE NARRATIVE

Lab Order: 13010026

Analytical Comments for METHOD PMOIST, 13010026-01A and 02A: The sample received after the holding time has expired.

environmental laboratory and testing services

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soil

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product

waste

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc. **Client Sample ID:** HA1 SURFACE
Lab Order: 13010026 **Report Date:** 1/7/2013
Project: 6134B Phillips Plating Corp / 4072281 **Collection Date:** 12/19/2012
Lab ID: 13010026-01 **Matrix:** Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	61.5	2.77		mg/kg-dry	1.11	1/7/13 10:45	79171	5.00	CS2
Percent Moisture Percent Moisture	9.73	0.03	H	% (Percent)	0.0150	1/3/13 09:55	R179971	1.00	TB2

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Report of Laboratory Analysis

CLIENT: Pace Analytical Services, Inc.
Lab Order: 13010026
Project: 6134B Phillips Plating Corp / 4072281
Lab ID: 13010026-02

Client Sample ID: HA1 4.5'
Report Date: 1/7/2013
Collection Date: 12/19/2012
Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual	Units	MDL	Date Analyzed	Batch	DF	Analyst
Hexavalent Chromium Chromium, Hexavalent	Method: EPA7196A/3060 BY AQUACHEM / SW3060A								
	34.	2.84		mg/kg-dry	1.14	1/7/13 10:45	79171	5.00	CS2
Percent Moisture Percent Moisture	Method: SM2540G								
	12.	0.03	H	% (Percent)	0.0150	1/3/13 09:55	R179971	1.00	TB2

Qualifiers: B - Analyte detected in the associated Method Blank
E - Estimated
H - Holding Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
J - Analyte detected below quantitation limits

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Client: Pace Analytical Services, Inc.

Project: Pace Green Bay

Lab Order: 13010026

DATES REPORT

1/7/2013

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date	Batch ID
13010026-01A	HA1 SURFACE	12/19/12	Soil	Hexavalent Chromium Percent Moisture	1/4/13 10:37		1/7/13 10:45	79171
13010026-02A	HA1 4.5'			Hexavalent Chromium Percent Moisture	1/4/13 10:37		1/7/13 10:45	79171

environmental laboratory and testing services

water soil air product waste

Environmental Monitoring & Technologies, Inc.

Date: 1/7/2013

CLIENT: Pace Analytical Services, Inc.

QC SUMMARY REPORT

Project: Pace Green Bay

Method Blank

Lab Order: 13010026

Sample ID: MB-79171	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg	Analysis Date: 1/7/13 10:45	Prep Date: 1/4/13 10:37
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Client ID:		Run ID: KONELAB_130107A		SeqNo: 1729306	
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Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
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Chromium, Hexavalent	< 2.5	2.5									
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Sample ID: MB-R179971	Batch ID: R179971	Test Code: 2540G	Units: % (Percent)	Analysis Date: 1/3/13 09:55	Prep Date:
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Client ID:		Run ID: SOLIDS_130103B		SeqNo: 1728816	
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Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
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Percent Moisture	0.017	0.03									J
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Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

CLIENT: Pace Analytical Services, Inc.**QC SUMMARY REPORT****Project:** Pace Green Bay

Sample Duplicate

Lab Order: 13010026

Sample ID: 13010026-01A DUP	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:45	Prep Date: 1/4/13 10:37
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Client ID: HA1 SURFACE

Run ID: KONELAB_130107A

SeqNo: 1729308

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
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Chromium, Hexavalent	50.92	2.77	0	0	0	0	0	61.5	18.8	20	
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Sample ID: 13010016-09CDUP	Batch ID: R179971	Test Code: 2540G	Units: % (Percent)	Analysis Date: 1/3/13 09:55	Prep Date:
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Client ID: SOLIDS_130103B

SeqNo: 1728832

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
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Percent Moisture	6.66	0.03	0	0	0	0	0	6.69	0.449	10	
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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.

QC SUMMARY REPORT

Project: Pace Green Bay

Sample Matrix Spike

Lab Order: 13010026

Sample ID: 13010026-01A MS1	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:45			Prep Date: 1/4/13 10:37		
Client ID: HA1 SURFACE		Run ID: KONELAB_130107A		SeqNo: 1729309					
Analyte Soluble Matrix Spike	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit Qual
Chromium, Hexavalent	95.81	2.77	44.31	61.5	77.4	70	130	0	
Sample ID: 13010026-01A MSD1	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:45			Prep Date: 1/4/13 10:37		
Client ID: HA1 SURFACE		Run ID: KONELAB_130107A		SeqNo: 1729310					
Analyte Insoluble Matrix Spike	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit Qual
Chromium, Hexavalent	898.3	55.4	1070	61.5	78.2	70	130	0	
Sample ID: 13010026-01AMS	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:45			Prep Date: 1/4/13 10:37		
Client ID: HA1 SURFACE		Run ID: KONELAB_130107A		SeqNo: 1729314					
Analyte Verification	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit Qual
Chromium, Hexavalent	93.93	2.77	32.79	61.5	98.9	85	115	0	
Sample ID: 13010026-01A DUPM	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:45			Prep Date: 1/4/13 10:37		
Client ID: HA1 SURFACE		Run ID: KONELAB_130107A		SeqNo: 1729315					
Analyte Verification	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit Qual
Chromium, Hexavalent	80.86	2.77	32.79	50.92	91.3	85	115	0	
Sample ID: 13010026-02AMS	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:49			Prep Date: 1/4/13 10:37		
Client ID: HA1 4.5'		Run ID: KONELAB_130107A		SeqNo: 1729316					
Analyte Verification	Result	PQL SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit Qual
Chromium, Hexavalent	67.35	2.77	32.79	34.05	102	85	115	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**Project:** Pace Green Bay**Lab Order:** 13010026**QC SUMMARY REPORT**

Laboratory Control Spike - Low

Sample ID: LCS1-79171	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg	Analysis Date: 1/7/13 10:45				Prep Date: 1/4/13 10:37			
Client ID:		Run ID: KONELAB_130107A						SeqNo:	1729312		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	37.37	2.5	40	0	93.4	80	120	0			
Sample ID: LCS2-79171	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg	Analysis Date: 1/7/13 10:45				Prep Date: 1/4/13 10:37			
Client ID:		Run ID: KONELAB_130107A						SeqNo:	1729313		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	824.8	50	1011	0	81.6	80	120	0			
Sample ID: LCS-R179971	Batch ID: R179971	Test Code: 2540G	Units: ppm	Analysis Date: 1/3/13 09:55				Prep Date:			
Client ID:		Run ID: SOLIDS_130103B						SeqNo:	1728817		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	1990	0.03	1882	0	106	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pace Analytical Services, Inc.**Project:** Pace Green Bay**Lab Order:** 13010026**QC SUMMARY REPORT**

Post Digestion/Distillation Spike

Sample ID: 13010026-01APDS	Batch ID: 79171	Test Code: SW7196A	Units: mg/kg-dry	Analysis Date: 1/7/13 10:49	Prep Date: 1/4/13 10:37						
Client ID:		Run ID: KONELAB_130107A		SeqNo: 1729317							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	275.7	27.7	221.6	61.5	96.7	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limitsS - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Chain of Custody

Pace Analytical®
www.pacelabs.com
13010024

Workorder: 4072281

Workorder Name: 6134B PHILLIPS PLATING CORP

Results Requested 1/9/2013

Report / Invoice To		Subcontract To		Requested Analysis												
Report / Invoice To		Subcontract To		Requested Analysis												
<i>Brian Baspen Pace Analytical Services 1241 Belltower Jr Suite 4 Oscen Bay, WI 54302 420 464-2436</i>		P.O. _____ <i>FMT</i>														
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Container	Comments	LAB USE ONLY									
1	HA1 SURFACE	12/19/2012 14:00	4072281001	Solid			<i>HA1</i>									
2	HA1 4.5'	12/19/2012 14:30	4072281002	Solid			<i>2A</i>									
3																
4																
5																
Transfers	Released By	Date/Time	Received By	Date/Time	Comments											
1	<i>Mohit Dutt / Pace 68</i>	12/13 16:00	<i>Fed EX</i>													
2																
3			<i>Margaux Ferguson</i>	12/13/13												
Cooler Temperature on Receipt		°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N								

January 09, 2013

Adam Scheunemann
REI
4680 N 20th Ave
Wausau, WI 54401

RE: Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072543

Dear Adam Scheunemann:

Enclosed are the analytical results for sample(s) received by the laboratory on January 05, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten

brian.basten@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

Page 1 of 11

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CERTIFICATIONS

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072543

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4072543001	MW5	Water	01/03/13 12:45	01/05/13 08:55
4072543002	MW6	Water	01/03/13 11:00	01/05/13 08:55
4072543003	MW7	Water	01/03/13 12:30	01/05/13 08:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING CORP
 Pace Project No.: 4072543

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4072543001	MW5	EPA 6010	DLB	8
		EPA 7470	CMS	1
		SM 3500-Cr B (Online)	DEY	1
4072543002	MW6	EPA 6010	DLB	8
		EPA 7470	CMS	1
		SM 3500-Cr B (Online)	DEY	1
4072543003	MW7	EPA 6010	DLB	8
		EPA 7470	CMS	1
		SM 3500-Cr B (Online)	DEY	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 11

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING CORP
Pace Project No.: 4072543

Sample: MW5	Lab ID: 4072543001	Collected: 01/03/13 12:45	Received: 01/05/13 08:55	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	<4.7 ug/L		20.0	4.7	1	01/07/13 10:00	01/08/13 13:32	7440-38-2	
Barium	138 ug/L		5.0	1.2	1	01/07/13 10:00	01/08/13 13:32	7440-39-3	
Cadmium	<0.39 ug/L		5.0	0.39	1	01/07/13 10:00	01/08/13 13:32	7440-43-9	
Chromium	414 ug/L		5.0	2.4	1	01/07/13 10:00	01/08/13 13:32	7440-47-3	
Lead	<1.4 ug/L		7.5	1.4	1	01/07/13 10:00	01/08/13 13:32	7439-92-1	
Nickel	787 ug/L		10.0	0.77	1	01/07/13 10:00	01/08/13 13:32	7440-02-0	
Selenium	<5.8 ug/L		20.0	5.8	1	01/07/13 10:00	01/08/13 13:32	7782-49-2	
Silver	<2.3 ug/L		10.0	2.3	1	01/07/13 10:00	01/08/13 13:32	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	<0.10 ug/L		0.20	0.10	1	01/07/13 16:15	01/08/13 10:06	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	0.46 mg/L		0.050	0.0098	2.5		01/07/13 09:30	18540-29-9	H3
Sample: MW6	Lab ID: 4072543002	Collected: 01/03/13 11:00	Received: 01/05/13 08:55	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	<4.7 ug/L		20.0	4.7	1	01/07/13 10:00	01/08/13 13:34	7440-38-2	
Barium	225 ug/L		5.0	1.2	1	01/07/13 10:00	01/08/13 13:34	7440-39-3	
Cadmium	1.6J ug/L		5.0	0.39	1	01/07/13 10:00	01/08/13 13:34	7440-43-9	
Chromium	323 ug/L		5.0	2.4	1	01/07/13 10:00	01/08/13 13:34	7440-47-3	
Lead	2.5J ug/L		7.5	1.4	1	01/07/13 10:00	01/08/13 13:34	7439-92-1	
Nickel	14100 ug/L		10.0	0.77	1	01/07/13 10:00	01/08/13 13:34	7440-02-0	
Selenium	<5.8 ug/L		20.0	5.8	1	01/07/13 10:00	01/08/13 13:34	7782-49-2	
Silver	<2.3 ug/L		10.0	2.3	1	01/07/13 10:00	01/08/13 13:34	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	0.28 ug/L		0.20	0.10	1	01/07/13 16:15	01/08/13 10:12	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	0.14 mg/L		0.020	0.0039	1		01/07/13 09:30	18540-29-9	H3
Sample: MW7	Lab ID: 4072543003	Collected: 01/03/13 12:30	Received: 01/05/13 08:55	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	<4.7 ug/L		20.0	4.7	1	01/07/13 10:00	01/08/13 13:36	7440-38-2	
Barium	841 ug/L		5.0	1.2	1	01/07/13 10:00	01/08/13 13:36	7440-39-3	

Date: 01/09/2013 07:57 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

Sample: MW7	Lab ID: 4072543003	Collected: 01/03/13 12:30	Received: 01/05/13 08:55	Matrix: Water
-------------	--------------------	---------------------------	--------------------------	---------------

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Cadmium	<0.39 ug/L		5.0	0.39	1	01/07/13 10:00	01/08/13 13:36	7440-43-9	
Chromium	<2.4 ug/L		5.0	2.4	1	01/07/13 10:00	01/08/13 13:36	7440-47-3	
Lead	<1.4 ug/L		7.5	1.4	1	01/07/13 10:00	01/08/13 13:36	7439-92-1	
Nickel	6.1J ug/L		10.0	0.77	1	01/07/13 10:00	01/08/13 13:36	7440-02-0	
Selenium	<5.8 ug/L		20.0	5.8	1	01/07/13 10:00	01/08/13 13:36	7782-49-2	
Silver	<2.3 ug/L		10.0	2.3	1	01/07/13 10:00	01/08/13 13:36	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	<0.10 ug/L		0.20	0.10	1	01/07/13 16:15	01/08/13 10:14	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	<0.0039 mg/L		0.020	0.0039	1		01/07/13 09:30	18540-29-9	H3

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

QC Batch:	MERP/3450	Analysis Method:	EPA 7470
QC Batch Method:	EPA 7470	Analysis Description:	7470 Mercury
Associated Lab Samples: 4072543001, 4072543002, 4072543003			

METHOD BLANK: 734715 Matrix: Water

Associated Lab Samples: 4072543001, 4072543002, 4072543003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.10	0.20	01/08/13 10:02	

LABORATORY CONTROL SAMPLE: 734716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.2	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 734717 734718

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Mercury	ug/L	<0.10	5	5	5.3	5.2	106	103	85-115	3	20

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

QC Batch:	MPRP/7995	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples: 4072543001, 4072543002, 4072543003			

METHOD BLANK: 734532 Matrix: Water

Associated Lab Samples: 4072543001, 4072543002, 4072543003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<4.7	20.0	01/08/13 12:58	
Barium	ug/L	<1.2	5.0	01/08/13 12:58	
Cadmium	ug/L	<0.39	5.0	01/08/13 12:58	
Chromium	ug/L	<2.4	5.0	01/08/13 12:58	
Lead	ug/L	<1.4	7.5	01/08/13 12:58	
Nickel	ug/L	<0.77	10.0	01/08/13 12:58	
Selenium	ug/L	<5.8	20.0	01/08/13 12:58	
Silver	ug/L	<2.3	10.0	01/08/13 12:58	

LABORATORY CONTROL SAMPLE: 734533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	507	101	80-120	
Barium	ug/L	500	481	96	80-120	
Cadmium	ug/L	500	512	102	80-120	
Chromium	ug/L	500	500	100	80-120	
Lead	ug/L	500	510	102	80-120	
Nickel	ug/L	500	519	104	80-120	
Selenium	ug/L	500	498	100	80-120	
Silver	ug/L	250	240	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 734534 734535

Parameter	Units	MS 4072480004		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Result								
Arsenic	ug/L	<4.7	500	500	518	520	103	104	75-125	1	20		
Barium	ug/L	49.7	500	500	527	528	95	96	75-125	0	20		
Cadmium	ug/L	<0.39	500	500	517	516	103	103	75-125	0	20		
Chromium	ug/L	<2.4	500	500	490	496	98	99	75-125	1	20		
Lead	ug/L	<1.4	500	500	502	499	100	100	75-125	1	20		
Nickel	ug/L	<0.77	500	500	507	506	101	101	75-125	0	20		
Selenium	ug/L	<5.8	500	500	501	502	100	100	75-125	0	20		
Silver	ug/L	<2.3	250	250	241	241	96	96	75-125	0	20		

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

QC Batch:	WETA/15816	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
Associated Lab Samples:	4072543001, 4072543002, 4072543003		

METHOD BLANK: 734585 Matrix: Water

Associated Lab Samples: 4072543001, 4072543002, 4072543003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0039	0.020	01/07/13 09:30	

LABORATORY CONTROL SAMPLE: 734586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.31	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 734587 734588

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.46	.75	.75	1.2	1.3	102	109	90-110	4	20

QUALIFIERS

Project: 6134B PHILLIPS PLATING CORP

Pace Project No.: 4072543

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

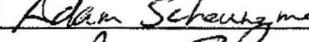
H3 Sample was received or analysis requested beyond the recognized method holding time.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING CORP
 Pace Project No.: 4072543

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4072543001	MW5	EPA 3010	MPRP/7995	EPA 6010	ICP/7025
4072543002	MW6	EPA 3010	MPRP/7995	EPA 6010	ICP/7025
4072543003	MW7	EPA 3010	MPRP/7995	EPA 6010	ICP/7025
4072543001	MW5	EPA 7470	MERP/3450	EPA 7470	MERC/4169
4072543002	MW6	EPA 7470	MERP/3450	EPA 7470	MERC/4169
4072543003	MW7	EPA 7470	MERP/3450	EPA 7470	MERC/4169
4072543001	MW5	SM 3500-Cr B (Online)	WETA/15816		
4072543002	MW6	SM 3500-Cr B (Online)	WETA/15816		
4072543003	MW7	SM 3500-Cr B (Online)	WETA/15816		

(Please Print Clearly)

Company Name:	REI Engineering
Branch/Location:	Wausau
Project Contact:	Adam Schenckmann
Phone:	715-675-9784
Project Number:	6134B
Project Name:	Phillips Platting Corp
Project State:	WI
Sampled By (Print):	Adam Schenckmann
Sampled By (Sign):	
PO #:	Regulatory Program:



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-243

Page 1 of

4072543

CHAIN OF CUSTODY

<u>*Preservation Codes</u>						
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other				

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:	Relinquished By: <i>Ad Sh</i>	Date/Time: <i>1/4/12 11:00</i>	Received By:	Date/Time:	PACE Project No. <i>2/072843</i>
Transmit Prelim Rush Results by (complete what you want):	Relinquished By: <i>Waltco</i>	Date/Time: <i>1/5/13 0855</i>	Received By: <i>Milwaukee</i>	Date/Time: <i>1/5/13 0855</i>	
Email #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Receipt Temp = <i>R01</i> °C
Email #2:					Sample Receipt pH
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	<i>OK / Adjusted</i>
Fax:					Cooler Custody Seal
Samples on HOLD are subject to special pricing and release of liability	Relinquished By:	Date/Time:	Received By:	Date/Time:	Present / Not Present Intact / Not Intact



Sample Condition Upon Receipt

Client Name: <u>REF</u>		Project # <u>4072543</u>																																																																												
Courier: <input type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Pace Other <u>Waltco</u> Tracking #: <u>286036</u>																																																																														
Custody Seal on Cooler/Box Present: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Custody Seal on Samples Present: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Packing Material: <input type="checkbox"/> Bubble Wrap <input type="checkbox"/> Bubble Bags <input checked="" type="checkbox"/> None Other		<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> Seals intact: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Type of Ice: <u>Wet</u> Blue Dry None </div> <div style="flex: 1;"> Seals intact: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Biological Tissue is Frozen: <input type="checkbox"/> yes <input type="checkbox"/> no </div> </div> <div style="margin-top: 10px;"> <input checked="" type="checkbox"/> Samples on ice, cooling process has begun. </div>																																																																												
Thermometer Used <u>NP</u> Cooler Temperature <u>ROI</u> Temp Blank Present: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> Temp should be above freezing to 6°C for all sample except Biota. Biota Samples should be received ≤ 0°C. </div> <div style="flex: 1;"> Comments: _____ </div> </div>																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Chain of Custody Present:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">1.</td> </tr> <tr> <td style="padding: 2px;">Chain of Custody Filled Out:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">2.</td> </tr> <tr> <td style="padding: 2px;">Chain of Custody Relinquished:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">3.</td> </tr> <tr> <td style="padding: 2px;">Sampler Name & Signature on COC:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">4.</td> </tr> <tr> <td style="padding: 2px;">Samples Arrived within Hold Time:</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">5. <u>Hex Chromes sampled 1/3/13</u> <u>1/5/13</u></td> </tr> <tr> <td style="padding: 2px;">Short Hold Time Analysis (<72hr):</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">6.</td> </tr> <tr> <td style="padding: 2px;">Rush Turn Around Time Requested:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">7. "Rush" <u>1/5/13 MV</u></td> </tr> <tr> <td style="padding: 2px;">Sufficient Volume:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">8. <u>Each bottle ~1/2 full</u> <u>1/5/13 MV</u></td> </tr> <tr> <td style="padding: 2px;">Correct Containers Used:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">9.</td> </tr> <tr> <td style="padding: 2px;">-Pace Containers Used:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">10.</td> </tr> <tr> <td style="padding: 2px;">Containers Intact:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">11.</td> </tr> <tr> <td style="padding: 2px;">Filtered volume received for Dissolved tests</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">12.</td> </tr> <tr> <td style="padding: 2px;">Sample Labels match COC:</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td style="padding: 2px;">13. <u>HN03 pH ≤ 2</u> <u>1/5/13 MV</u></td> </tr> <tr> <td style="padding: 2px;">-Includes date/time/ID/Analysis Matrix:</td> <td style="padding: 2px;"><u>W</u></td> <td style="padding: 2px;">Initial when completed <u>MV</u></td> <td style="padding: 2px;">Lot # of added preservative</td> </tr> <tr> <td style="padding: 2px;">All containers needing preservation have been checked.</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">All containers needing preservation are found to be in compliance with EPA recommendation.</td> <td style="padding: 2px;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td colspan="2" style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Samples checked for dechlorination:</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;">14.</td> </tr> <tr> <td style="padding: 2px;">Headspace in VOA Vials (>6mm):</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;">15.</td> </tr> <tr> <td style="padding: 2px;">Trip Blank Present:</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;">16.</td> </tr> <tr> <td style="padding: 2px;">Trip Blank Custody Seals Present</td> <td style="padding: 2px;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="2" style="padding: 2px;"></td> </tr> <tr> <td colspan="4" style="padding: 2px;">Pace Trip Blank Lot # (if purchased): _____</td> </tr> </table>				Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	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Client Notification/ Resolution:

 Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

 Comments/ Resolution: _____

 Project Manager Review: BB

 Date: 1-7-13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)