

# Apex Labs

12232 S.W. Garden Place  
Tigard, OR 97223  
503-718-2323 Phone  
503-718-0333 Fax

Wednesday, June 8, 2016

Mike Gibson  
NW EnviroSearch  
P.O. Box 1290  
Oregon City, OR 97045

RE: PCC-S4-HT / 5/27/16

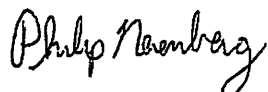
Enclosed are the results of analyses for work order A6E0779, which was received by the laboratory on 5/27/2016 at 7:55:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [pnerenberg@apex-labs.com](mailto:pnerenberg@apex-labs.com), or by phone at 503-718-2323.

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Apex Laboratories



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Philip Nerenberg, Lab Director

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Project: PCC-S4-HT  
Project Number: 5/27/16  
Project Manager: Mike Gibson

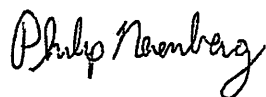
Reported:  
06/08/16 16:32

## ANALYTICAL REPORT FOR SAMPLES

### SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
H.T. M-Amalgam Cleanup-Liquid	A6E0779-02	Liquid	05/27/16 07:12	05/27/16 07:55

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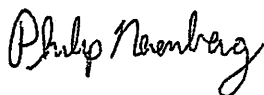
Reported:  
06/08/16 16:32

## ANALYTICAL SAMPLE RESULTS

### Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
H.T. M-Amalgam Cleanup-Liquid (A6E0779-02)			Matrix: Liquid					
Batch: 6060021								
Mercury	37.9	---	4.19	mg/L	500	06/03/16 11:23	EPA 6020A	

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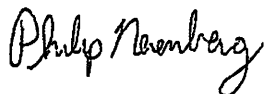
Reported:  
06/08/16 16:32

## ANALYTICAL SAMPLE RESULTS

### TCLP Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
H.T. M-Amalgam Cleanup-Liquid (A6E0779-02)			Matrix: Liquid					
Batch: 6060055								
Mercury	23.8	---	4.00	mg/L	5000	06/03/16 11:58	1311/6020A	

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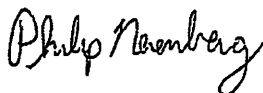
Reported:  
06/08/16 16:32

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6060021 - EPA 3051A						Liquid						
Blank (6060021-BLK2)					Prepared: 06/01/16 11:24		Analyzed: 06/03/16 11:17					
EPA 6020A												
Mercury	ND	---	0.0800	mg/L	10	---	---	---	---	---	---	Q-16
LCS (6060021-BS2)					Prepared: 06/01/16 11:24		Analyzed: 06/03/16 11:20					
EPA 6020A												
Mercury	1.07	---	0.0800	mg/L	10	1.00	---	107	80-120%	---	---	Q-16
Duplicate (6060021-DUP1)					Prepared: 06/01/16 11:24		Analyzed: 06/03/16 11:26					
QC Source Sample: H.T. M-Amalgam Cleanup-Liquid (A6E0779-02)												
EPA 6020A												
Mercury	40.1	---	4.33	mg/L	500	---	37.9	---	---	6	40%	
Matrix Spike (6060021-MS1)					Prepared: 06/01/16 11:24		Analyzed: 06/03/16 11:29					
QC Source Sample: H.T. M-Amalgam Cleanup-Liquid (A6E0779-02)												
EPA 6020A												
Mercury	40.0	---	4.29	mg/L	500	1.07	37.9	194	75-125%	---	---	Q-03

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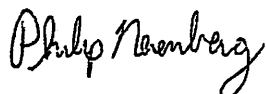
Reported:  
06/08/16 16:32

## QUALITY CONTROL (QC) SAMPLE RESULTS

### TCLP Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6060055 - EPA 1311/3015						Liquid						
Blank (6060055-BLK1)					Prepared: 06/02/16 11:43		Analyzed: 06/02/16 14:57					
1311/6020A												
Mercury	ND	---	0.00400	mg/L	5	---	---	---	---	---	---	TCLP
LCS (6060055-BS1)					Prepared: 06/02/16 11:43		Analyzed: 06/02/16 15:00					
1311/6020A												
Mercury	0.0529	---	0.00400	mg/L	5	0.0500	---	106	80-120%	---	---	Q-41, TCLP
Matrix Spike (6060055-MS1)					Prepared: 06/02/16 11:43		Analyzed: 06/03/16 12:01					
QC Source Sample: H.T. M-Amalgam Cleanup-Liquid (A6E0779-02)												
1311/6020A												
Mercury	22.9	---	4.00	mg/L	5000	0.0500	23.8	-1640	50-150%	---	---	Q-03

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Project Number: 5/27/16  
Project Manager: Mike Gibson

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## SAMPLE PREPARATION INFORMATION

### Total Metals by EPA 6020 (ICPMS)

#### Prep: EPA 3051A

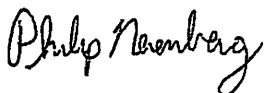
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 6060021							
A6E0779-02	Liquid	EPA 6020A	05/27/16 07:12	06/01/16 11:24	0.477g/50mL	0.5g/50mL	1.05

### TCLP Metals by EPA 6020 (ICPMS)

#### Prep: EPA 1311/3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 6060055							
A6E0779-02	Liquid	1311/6020A	05/27/16 07:12	06/02/16 11:43	5mL/50mL	5mL/50mL	1.00

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## Notes and Definitions

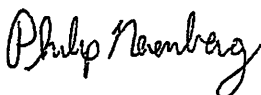
### Qualifiers:

- Q-03 Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-16 Reanalysis of an original Batch QC sample.
- Q-41 Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
- TCLP This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 6060027.

### Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.  
  
For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.  
  
Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- \*\*\* Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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06/08/16 16:32

**APEX LABS**

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

**CHAIN OF CUSTODY**

Lab # AFED779 COC 1 of 1

Company: ALORS

Address: \_\_\_\_\_

Project Mgr: Mike Gibson

Project Name: EC-SY-H7

PO# \_\_\_\_\_

Project # \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Project Name: EC-SY-H7

Project # \_\_\_\_\_

Sampled by: Mike Gibson

Site Location: OR WA

Other: \_\_\_\_\_

LAB ID # \_\_\_\_\_

DATE 5/2/02

TIME 11:00

SAMPLE ID \_\_\_\_\_

MT. McAdams

CLUMP

Matrix: \_\_\_\_\_

# OF CONTAINERS 1

NWTFH-ACID \_\_\_\_\_

NWTFH-DX \_\_\_\_\_

NWTFH-CX \_\_\_\_\_

8260 VOCs Full Lab \_\_\_\_\_

8260 RBNM VOCs \_\_\_\_\_

8260 RVOCS \_\_\_\_\_

8260 BTEX VOCs \_\_\_\_\_

8270 SVOC \_\_\_\_\_

8270 SEM PAHs \_\_\_\_\_

8082 PCBs \_\_\_\_\_

600 TTO \_\_\_\_\_

RCRA Metals (B) \_\_\_\_\_

TCLP Metals (B) \_\_\_\_\_

AL, Sb, Ar, Ba, Be, B, Bi, Br, Cd, Cr, Cu, Fe, Pb, P, Se, Si, Mn, Ni, K, Li, Na, S, Ti, V, Zn, Ag, As, Hg, Hf, Mo, Ni, Nb, Pt, Rb, Sr, Tl, U, W, Y, Zr

1200-COLS \_\_\_\_\_

1200-Z \_\_\_\_\_

TOTAL DMS/TCF \_\_\_\_\_

\_\_\_\_\_

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS: 3 Day RUSH!

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

Normal Turn Around Time (TAT) = 10 Business Days

YES NO

TAT Requested (circle)

1 Day \_\_\_\_\_ 2 Day 3 Day \_\_\_\_\_

4 DAY \_\_\_\_\_ 5 DAY \_\_\_\_\_ Other: \_\_\_\_\_

SAMPLES ARE HELD FOR 30 DAYS

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

Signature: Mike Gibson Date: 5/2/02

Printed Name: Mike Gibson

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Company: \_\_\_\_\_

Company: \_\_\_\_\_

Company: \_\_\_\_\_

## Apex Laboratories

Philip Naenberg

**Philip Nerenberg, Lab Director**

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