



Oregon

John A. Kitzhaber, M.D., Governor

Department of Transportation

Region 4 Technical Center

Geo/Bridge/Environmental Unit

63055 N. Hwy 97, Bldg M

Bend, Oregon 97701

Voice (541) 388-6088

Fax (541) 385-0476

Email: ryan.franklin@odot.state.or.us

Date: March 25, 2014

To: Mike Darling
Project Leader
Oregon Department of Transportation
63055 N. Hwy 97, Bldg M
Bend, Oregon 97701

From: Ryan Franklin
Interim Region 4 HazMat Coordinator

Subject: Lead Based Paint Survey
Painted Curbs
US97 @ J Street Intersection (Madras South Y) Sec. Project, Key #15409

The purpose of this correspondence is to summarize the results of a survey for lead based paint (LBP) on painted curbs that will be replaced for the US97 @ J Street Intersection (Madras South Y) Sec. project. The curbs were surveyed and sampled for LBP in accordance with the *OTIA III Materials and Contamination Performance Standards Manual*.

Sampling and Testing for Lead Based Paint

ODOT Region 4 HazMat (R4 HazMat) collected paint and bulk concrete samples from the curbs to determine whether LBP is present. The results of these analyses are used to determine whether the contractor needs to meet OSHA training requirements and to determine what disposal and/or re-use options are available for painted concrete demolition materials.

Although lead is the primary metal of concern, paint may also contain chromium and cadmium. The presence of chromium and cadmium also trigger special handling requirements. Therefore, all three metals are analyzed in the collected paint samples.

Paint Sampling Methodology

Two methods are used for determining the concentration of metals in paint. These two methods are as follows:

1. analyzing paint chip samples by the Total Metals method; and
2. analyzing leachate from bulk samples (such as painted concrete fragments) for metals using the Toxicity Characteristic Leaching Procedure (TCLP).

The Total Metals analysis is used to determine the presence/absence of heavy metals in paint. The results of the total metals analyses are used to determine whether the contractor needs to meet OSHA training requirements for workers that will be exposed to lead, cadmium and/or chromium.

The TCLP analytical method is used to determine whether a waste is characteristic of a hazardous waste. If, for example, lead exceeds 5.0 mg/L in leachate generated from a bulk material, then the bulk material is characteristic of a hazardous waste and must be handled, transported, and disposed of as a hazardous waste (40 CFR Part 261 Subpart D). However, if TCLP lead concentrations are below 5.0 mg/L, then the waste is not a hazardous waste.

Sampling

On November 19, 2012 and September 5, 2013, R4 HazMat inspected the curbs and sidewalks that are to be removed for the presence of paint. Based on visual inspection, it appears that multiple coats of yellow paint are present on several curb segments and one coat of red paint is present on one curb segment as noted below:

- Sta. "H" 9+25 Lt. and Rt. (Sample ID = Paint-1, TCLP-Conc-1)
- Sta. "MA" 10+00 to 13+80 Lt. (Sample ID = Paint-2, TCLP-Conc-2¹)
- Sta. "J" 7+25 Lt. and Rt. and 9+45 Lt. and Rt. (Sample ID = Paint-3, TCLP-Conc-3)
- Sta. "SA" 12+20 Rt. (Sample ID = Paint-4²)
- Sta. "SA" 14+70, 15+10, and 15+65 (Sample ID = Paint-5)
- Sta. "NB" 58+25 (Sample ID = Paint -6)
- Sta. "NB" 59+10 and 59+65 (Sample ID = Paint-7)
- Sta. "NB" 46+60 Rt. (Sample ID = Paint -8, TCLP-Conc-2)
- Sta. "J" 8+60 Lt. and Rt. and 9+50 Lt. and Rt. (Sample ID = Paint -9, TCLP-Conc-4)
- Sta. "J" 10+00 Lt. and Rt., 10+50 Lt., 10+75 Lt., 11+00 Lt., 11+20 Lt., 11+50 Lt. and Rt., 12+00 Lt. and Rt. and 12+20 Lt. (Sample ID = Paint-10, TCLP-Conc-5)
- Sta. "NB" 48+45 Lt. and 49+55 Lt. (Sample ID = Paint-11, TCLP-Conc-6)
- Sta. "NB" 50+30 (Red Paint - Sample ID = Paint-12, TCLP-Conc-7)
- Sta "FA" 3+25 Lt. (Sample ID = Paint-13, TCLP-Conc-8)

R4 HazMat collected paint chip samples representing all coats of paint from each sampling location because the individual coats of paint could not be separated (See Attachment 1, Representative Photographs). Painted curb segments that appeared to have the same coats of paint were grouped together for composite sampling. All paint chip samples were shipped under

¹ TCLP Conc-2 is a composite concrete sample representing the painted curbs located at Sta. "MA" 10+00 to 13+80 Lt. and Sta. "NB" 46+60 Rt.

² Corresponding concrete samples for TCLP were not collected for samples Paint-4, Paint-5, Paint-6 and Paint-7 during the second sampling event because the Total Metals analytical results from the first sampling event indicated that TCLP analyses were not necessary for the curbs represented by these paint samples.

chain of custody protocol to Environmental Sciences Corporation (ESC) to be analyzed for lead, cadmium, and chromium using the Total Metals analytical method.

Based on the segments of curb that are proposed to be demolished, the waste stream would be characterized by a mixture of paint and concrete. Therefore, R4 HazMat collected representative bulk samples of painted and unpainted concrete fragments from the curbs and shipped the samples to ESC for TCLP analyses. Based on the Total Metals results, two of the collected bulk concrete samples were analyzed by the TCLP method. Sample TCLP-Conc-2 was analyzed by the TCLP method for lead and chromium and sample TCLP-Conc-3 was analyzed by the TCLP method for lead to determine whether the demolition materials would need to be handled and disposed of as a hazardous waste. None of the concrete samples were analyzed for cadmium because cadmium was not detected in any of the paint sample Total Metals analyses (see Analytical Results below).

Analytical Results

The results of both the Total Metals and TCLP analyses are summarized in Table 1. The chain-of-custody records and lab reports are provided in Attachment 2.

Table 1						
Analysis Summary for Paint and Concrete for Lead, Cadmium, and Chromium						
Sample ID	Total Metals mg/kg (ppm)			TCLP Metals mg/L (ppm)		
	Pb	Cr	Cd	Pb	Cr	Cd
Paint-1	62	<30	<30			
Paint-2	29,000	7,000	<33			
Paint-3	230	57	<43			
Paint-4	<45	<45	<45			
Paint-5	<28	<28	<28			
Paint-6	<37	<37	<37			
Paint-7	<30	<30	<30			
Paint-8	10,000	2,400	<39			
Paint-9	<38	<38	<38			
Paint-10	<46	<46	<46			
Paint-11	<34	<34	<34			
Paint-12	<36	<36	<36			
Paint-13	<30	<30	<30			
TCLP-Conc-1						
TCLP-Conc-2				<0.050	<0.050	
TCLP-Conc-3				<0.050		
TCLP-Conc-4						
TCLP-Conc-5						
TCLP-Conc-6						

Table 1 Continued						
Analysis Summary for Paint and Concrete for Lead, Cadmium, and Chromium						
Sample ID	Total Metals mg/kg (ppm)			TCLP Metals mg/L (ppm)		
	Pb	Cr	Cd	Pb	Cr	Cd
TCLP-Conc-7						
TCLP-Conc-8						
DEQ Hazardous Waste Action Level	n/a			5.0	1.0	5.0
OTIA III Hazmat Performance Standards Action Level	1,000	n/a				
Notes for Table 1: <x = Concentration less than x, where x is the laboratory detection limit Pb = lead, Cd = cadmium, Cr = chromium mg/kg = milligrams per kilogram mg/L = milligrams per liter Where shaded = not analyzed Where highlighted = Constituent detected at or above the laboratory detection limit.						

Paint Chip Total Metals Results

Lead was detected by the Total Metals method in four of the analyzed paint samples at concentrations ranging from 62 to 29,000 mg/kg. Chromium was detected in three of the analyzed paint samples at concentrations ranging from 57 to 7,000 mg/kg. Cadmium was not detected at or above the laboratory detection limits in any of the analyzed paint samples. Therefore, all of the painted curbs represented by the paint samples with detected lead and/or chromium should be considered to be coated with lead- and/or chromium-based paint.

Bulk Concrete TCLP Results

Lead and/or chromium were not detected by the TCLP method at or above the laboratory detection limits in either of the two analyzed concrete samples. As shown in Table 1, all of the reported TCLP concentrations for lead and chromium are below the DEQ Hazardous Waste Action Levels. Therefore, any concrete demolition waste generated from the surveyed curbs during construction would not be considered to be characteristic of a hazardous waste.

Findings

Based on the sampling and lab results, the contractor's workers must (1) employ lead-safe work practices whenever disturbing, handling, or cutting into the painted curbs that were identified as having LBP and (2) have received lead awareness training in accordance with 29 CFR 1926.62(l). Worker training requirements also apply for chromium in accordance with 20 CFR 1926.1126.

Disposal options for the concrete curbs with LBP include:

- Use in new concrete;
- For curbs with greater than 1,000 mg/kg lead in the paint, use in ODOT road prism or embankments under a DEQ Solid Waste Letter of Authorization (SWLA);
- For curbs with less than 1,000 mg/kg lead in the paint, use in ODOT road prism or embankments provided that it is placed (1) at least four feet above the mean high groundwater table, (2) placed more than 50 feet from all surface water bodies, and (3) covered with at least one foot of clean fill material.
- Dispose of at a DEQ-permitted landfill.

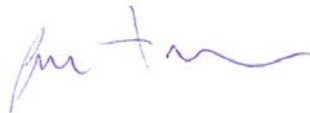
Additional investigation for the presence of LBP is not recommended unless new information indicates the potential presence of additional paint that will be disturbed by construction activities.

Limitations

No environmental site assessment can eliminate all uncertainty. Any environmental sample collected for analysis may or may not be representative of general site conditions. The observations, findings, and conclusions in this report are based solely on the site conditions at the time of this assessment and do not imply a warrantee or guarantee for the site. Nothing in this report constitutes a legal opinion or service and should not be relied on as such. ODOT is not responsible for the accuracy of information provided by third parties, which may be contained in this report.

If you have any questions, please do not hesitate to contact me.

Thank you.



Ryan Franklin

Cc: Teresa Brasfield, ODOT Region 4 Environmental Coordinator, North Half File

Attachments - 2

1. Representative Photographs
2. Laboratory Analytical Reports and Chain-of-Custody Record

This Page Intentionally Left Blank

Attachment 1

Representative Photographs

This Page Intentionally Left Blank



Photo 1. Representative photograph of the Paint-1 sampling location.



Photo 2. Representative photograph of the Paint-2 sampling location.



Photo 3. Representative photograph of the Paint-3 sampling location.



Photo 4. Representative photograph of the Paint-4 sampling location.



Photo 5. Representative photograph of the Paint-5 sampling location.



Photo 6. Representative photograph of the Paint-6 sampling location.



Photo 7. Representative photograph of the Paint-7 sampling location.



Photo 8. Representative photograph of the Paint-8 sampling location.



Photo 9. Representative photograph of the Paint-9 sampling location.



Photo 10. Representative photograph of the Paint-10 sampling location.



Photo 11. Representative photograph of the Paint-11 sampling location.



Photo 12. Representative photograph of the Paint-12 sampling location.



Photo 13. Representative photograph of the Paint-13 sampling location.



Photo 14. Representative photograph of the TCLP-Conc-1 sampling location.



Photo 15. Representative photograph of the TCLP-Conc-2 sampling location.



Photo 16. Representative photograph of the TCLP-Conc-3 sampling location.



Photo 17. Representative photograph of the TCLP-Conc-4 sampling location.



Photo 18. Representative photograph of the TCLP-Conc-5 sampling location. The sample bag was mislabeled as TCLP-Conc-4. The label on the bag was corrected prior to shipment to ESC.



Photo 19. Representative photograph of the TCLP-Conc-6 sampling location.



Photo 20. Representative photograph of the TCLP-Conc-7 sampling location.



Photo 21. Representative photograph of the TCLP-Conc-8 sampling location.

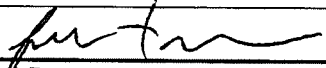
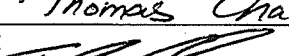
This Page Intentionally Left Blank

Attachment 2

Chain of Custody Records and Laboratory Analytical Reports

This Page Intentionally Left Blank

State of Oregon Sample Chain of Custody

Agency, Authorized Purchaser or Agent: ODOT				Contract Laboratory Name: Environmental Sciences Corporation				Lab Selection Criteria: <input type="checkbox"/> Proximity (if TAT < 48 hrs) <input checked="" type="checkbox"/> Prior work on same project <input checked="" type="checkbox"/> Cost (for anticipated analyses) <input type="checkbox"/> Other labs disqualified or unable to perform requested services <input type="checkbox"/> Emergency work				Turn Around Time: <input checked="" type="checkbox"/> 10 days (std.) <input type="checkbox"/> 5 days <input type="checkbox"/> 72 hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Other			
Send Lab Report To: Ryan Franklin Address: 63034 O.B. Riley Rd. Bend, OR 97701 Tel. #: (541) 388-6088 E-mail: ryan.franklin@odot.state.or.us				Lab Batch #: Invoice To: Same Address: Tel. #:											
Project Name: XXXXXXXXXX Project #: XXXXXX 15409 US97 at J Street Intersectn (Madras Southy) Sampler Name: Ryan Franklin				Sample Preservative None None Requested Analyses								11-0068			
Sample ID#		Collection Date/Time	Matrix	Number of Containers	Total Metals Pb, Cr, Cd	TCLP Pb, Cr, Cd									Comments
Paint-1		11/19/12 10:13am	Paint	1	X										4607293-01
Paint-2		11:02am			X										-02
Paint-3		11:27am			X										-03
Paint-4		11:32am			X										-04
Paint-5		11:47am			X										-05
Paint-6		12:09pm			X										-06
Paint-7		12:25pm			X										-07
TCLP-Conc-1		10:30am	Concrete	1											Hold
Notes:															
Relinquished By: Ryan Franklin				Agency/Agent: ODOT				Received By: Fed Ex				Agency/Agent:			
Signature: 				Time & Date: 11/19/12 3:00pm				Signature:				Time & Date:			
Relinquished By:				Agency/Agent:				Received By: Thomas Chase				Agency/Agent: ESC			
Signature:				Time & Date:				Signature: 				Time & Date: 0900 11/20/12			

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # [redacted]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S & C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S. EXPRESS OR IMPLIED.

8-bags

Am. 40

Version: 4/4/2008

This Page Intentionally Left Blank



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODOT
63034 O.B. Riley Rd
Bend, OR 97701

Report Summary

Tuesday November 27, 2012

Report Number: L607293

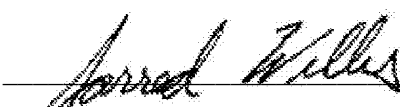
Samples Received: 11/20/12

Client Project: 15409

Description: US97 at J Street Intersection (Madras South Y)

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-1
Collected By : Ryan Franklin
Collection Date : 11/19/12 10:13

ESC Sample # : L607293-01

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	30.	mg/kg	6010B	11/24/12	1
Chromium	BDL	30.	mg/kg	6010B	11/24/12	1
Lead	62.	30.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-2
Collected By : Ryan Franklin
Collection Date : 11/19/12 11:02

ESC Sample # : L607293-02

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	33.	mg/kg	6010B	11/24/12	1
Chromium	7000	33.	mg/kg	6010B	11/24/12	1
Lead	29000	33.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-3
Collected By : Ryan Franklin
Collection Date : 11/19/12 11:27

ESC Sample # : L607293-03

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	43.	mg/kg	6010B	11/24/12	1
Chromium	57.	43.	mg/kg	6010B	11/24/12	1
Lead	230	43.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-4
Collected By : Ryan Franklin
Collection Date : 11/19/12 11:32

ESC Sample # : L607293-04

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	45.	mg/kg	6010B	11/24/12	1
Chromium	BDL	45.	mg/kg	6010B	11/24/12	1
Lead	BDL	45.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-5
Collected By : Ryan Franklin
Collection Date : 11/19/12 11:47

ESC Sample # : L607293-05

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	28.	mg/kg	6010B	11/24/12	1
Chromium	BDL	28.	mg/kg	6010B	11/24/12	1
Lead	BDL	28.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-6
Collected By : Ryan Franklin
Collection Date : 11/19/12 12:09

ESC Sample # : L607293-06

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	37.	mg/kg	6010B	11/24/12	1
Chromium	BDL	37.	mg/kg	6010B	11/24/12	1
Lead	BDL	37.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63034 O.B. Riley Rd
Bend, OR 97701

November 27, 2012

Date Received : November 20, 2012
Description : US97 at J Street Intersection (Madras South Y)
Sample ID : PAINT-7
Collected By : Ryan Franklin
Collection Date : 11/19/12 12:25

ESC Sample # : L607293-07

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	30.	mg/kg	6010B	11/24/12	1
Chromium	BDL	30.	mg/kg	6010B	11/24/12	1
Lead	BDL	30.	mg/kg	6010B	11/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/27/12 09:09 Printed: 11/27/12 09:10

Summary of Remarks For Samples Printed
11/27/12 at 09:10:21

TSR Signing Reports: 358
R5 - Desired TAT

Clients MUST use the State of Oregon COCs for all work. Create an NCF for any samples received on ESC COCs.

Sample: L607293-01 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample is Paint Chips ; Refer to hold label 11-0068
Sample: L607293-02 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample: L607293-03 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample: L607293-04 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample: L607293-05 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample: L607293-06 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09
Sample: L607293-07 Account: OREGONDOT Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/27/12 09:09



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63034 O.B. Riley Rd

Bend, OR 97701

Quality Assurance Report
Level II

L607293

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 27, 2012

Laboratory Blank							
Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed	
Cadmium	< 50	mg/kg			WG624704	11/24/12	14:33
Chromium	< 50	mg/kg			WG624704	11/24/12	14:33
Lead	< 47	mg/kg			WG624704	11/24/12	14:36

Duplicate							
Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Cadmium	mg/kg	0	2.47	NA	0	L607228-10	WG624704
Chromium	mg/kg	0	6.26	NA	0	L607228-10	WG624704
Lead	mg/kg	280.	260.	7.41	20	L607228-10	WG624704

Laboratory Control Sample							
Analyte	Units	Known Val	Result	% Rec	Limit	Batch	
Cadmium	mg/kg	191	199.	104.	80-120	WG624704	
Chromium	mg/kg	128	133.	104.	80-120	WG624704	
Lead	mg/kg	684.8	634.	92.6	80-120	WG624704	

Laboratory Control Sample Duplicate							
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Batch
Cadmium	mg/kg	200.	199.	105.	80-120	0.501	WG624704
Chromium	mg/kg	129.	133.	101.	80-120	3.05	WG624704
Lead	mg/kg	617.	634.	90.0	80-120	2.72	WG624704

Matrix Spike							
Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Batch
Cadmium	mg/kg	510.	2.47	490	104.	75-125	WG624704
Chromium	mg/kg	495.	6.26	490	99.7	75-125	WG624704
Lead	mg/kg	758.	260.	490	102.	80-120	WG624704

Matrix Spike Duplicate							
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Batch
Cadmium	mg/kg	456.	510.	92.6	75-125	11.2	WG624704
Chromium	mg/kg	452.	495.	91.0	75-125	9.08	WG624704
Lead	mg/kg	720.	758.	93.9	80-120	5.14	WG624704

Batch number /Run number / Sample number cross reference

WG624704: R2455518: L607293-01 02 03 04 05 06 07

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63034 O.B. Riley Rd

Bend, OR 97701

Quality Assurance Report
Level II

L607293

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 27, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

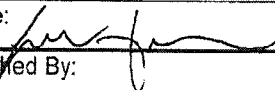
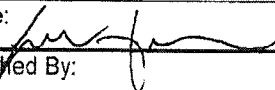
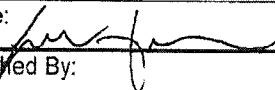
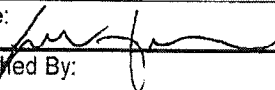
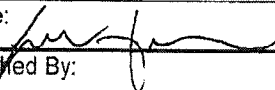
Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

This Page Intentionally Left Blank

State of Oregon Sample

Agency, Authorized Purchaser or Agent: ODOT				Contract Laboratory Name: Environmental Sciences Corporation				Lab Selection Criteria: <input type="checkbox"/> Proximity (if TAT < 48 hrs) <input checked="" type="checkbox"/> Prior work on same project <input checked="" type="checkbox"/> Cost (for anticipated analyses) <input type="checkbox"/> Other labs disqualified or unable to perform requested services <input type="checkbox"/> Emergency work				Turn Around Time: <input checked="" type="checkbox"/> 10 days (std.) <input type="checkbox"/> 5 days <input type="checkbox"/> 72 hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Other				
Send Lab Report To: Ryan Franklin Address: 63055 N Hwy 97, Bldg M Bend, OR 97701 Tel. #: (541) 388-6088 E-mail: ryan.franklin@odot.state.or.us				Lab Batch #:				Invoice To: Same Address:				Tel. #:				
Project Name: US97: J Street Intersection (Madras South Y) Project #: 15409				Sample Preservative None None												
Sampler Name: Ryan Franklin				Requested Analyses												
Sample ID#	Collection Date/Time	Matrix	Number of Containers	Total Metals Pb, Cr, Cd	TCLP Pb, Cr, Cd	TCLP Cr									Comments	
Paint-8	9/5/13 11:01am	Paint	1	X												L656560
Paint-9	11:11am			X												Sn
Paint-10	11:26am			X												
Paint-11	11:42am			X												
Paint-12	11:49am			X												
Paint-13	11:52am	↓		X												
TCLP-Conc-2	12:18 pm	Concrete			X	X	RF	9/12/13							Hold	L657600-01
TCLP-Conc-3	12:29 pm				X		RF	9/12/13								-02
TCLP-Conc-4	12:33 pm															
TCLP-Conc-5	12:37 pm															
TCLP-Conc-6	1:01 pm															
TCLP-Conc-7	1:21 pm	↓	↓													
Notes:																
Relinquished By: Ryan Franklin Signature:  Relinquished By:  Signature: 																
Agency/Agent: ODOT				Time & Date: 3:00pm 9/9/13				Received By: Fed Ex				Agency/Agent:				
Signature: 				Time & Date: 3:00pm 9/9/13				Signature: 				Time & Date: 9-10-13/0910				

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # []. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S & C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Const. 13

Page 2 of 2

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # []. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S & C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Am

Version: 4/4/2008

Jason Romer

L657600

From: Jarred Willis
Sent: Friday, September 13, 2013 9:33 AM
To: Login
Subject: L656560 (09-0013) - OREGONDOT - log 2 hold samples
Attachments: COCL656560_Updated.pdf

Please relog 2 of the hold samples on L656560 (09-0013) from ***OREGONDOT*** as listed below. Relog to a new L# on standard TAT. Use the attached updated COC to log the samples.

Sample TCLP-Conc-2: TCLP Pb and Cr
Sample TCLP-Conc-3: TCLP Pb

Thanks,
Jarred

From: FRANKLIN Ryan [<mailto:Ryan.FRANKLIN@odot.state.or.us>]
Sent: Thursday, September 12, 2013 6:03 PM
To: Jarred Willis
Subject: Additional Analyses Requested for Project 15409

Jarred,

Please find attached a revised COC with requests to perform additional analyses for project 15409. The additional requested analyses are as follows:

Sample TCLP-Conc-2: TCLP Pb and Cr
Sample TCLP-Conc-3: TCLP Pb

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

Thanks,

Ryan Franklin
ODOT Region 4 Interim HazMat Coordinator
63055 N. Hwy 97, Bldg M
Bend, OR 97701
(541) 388-6088
(541) 419-2953 (cell)

This Page Intentionally Left Blank



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODOT
63055 N. Hwy 97, Bldg M
Bend, OR 97701

Report Summary

Thursday September 12, 2013

Report Number: L656560


Samples Received: 09/10/13

Client Project: 15409

Description: US97: J Street Intersection Madras South Y

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jared Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-8
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:01

ESC Sample # : L656560-01

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	39.	mg/kg	6010B	09/12/13	1
Chromium	2400	39.	mg/kg	6010B	09/12/13	1
Lead	10000	39.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-9
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:11

ESC Sample # : L656560-02

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	38.	mg/kg	6010B	09/12/13	1
Chromium	BDL	38.	mg/kg	6010B	09/12/13	1
Lead	BDL	38.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-10
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:26

ESC Sample # : L656560-03

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	46.	mg/kg	6010B	09/12/13	1
Chromium	BDL	46.	mg/kg	6010B	09/12/13	1
Lead	BDL	46.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-11
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:42

ESC Sample # : L656560-04

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	34.	mg/kg	6010B	09/12/13	1
Chromium	BDL	34.	mg/kg	6010B	09/12/13	1
Lead	BDL	34.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-12
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:49

ESC Sample # : L656560-05

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	36.	mg/kg	6010B	09/12/13	1
Chromium	BDL	36.	mg/kg	6010B	09/12/13	1
Lead	BDL	36.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 12, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : PAINT-13
Collected By : Ryan Franklin
Collection Date : 09/05/13 11:52

ESC Sample # : L656560-06

Site ID :

Project # : 15409

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cadmium	BDL	30.	mg/kg	6010B	09/12/13	1
Chromium	BDL	30.	mg/kg	6010B	09/12/13	1
Lead	BDL	30.	mg/kg	6010B	09/12/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/12/13 12:09 Printed: 09/12/13 12:09

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L656560-04	WG681278	SAMP	Cadmium	R2813900	J3
	WG681278	SAMP	Chromium	R2813900	J3
	WG681278	SAMP	Lead	R2813900	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
09/12/13 at 12:10:00

TSR Signing Reports: 358
R5 - Desired TAT

Clients MUST use the State of Oregon COCs for all work. Create an NCF for any samples received on ESC COCs.

Sample: L656560-01 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09
Refer to 09-0013 for HOLD samples.

Sample: L656560-02 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09

Sample: L656560-03 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09

Sample: L656560-04 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09

Sample: L656560-05 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09

Sample: L656560-06 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/17/13 00:00 RPT Date: 09/12/13 12:09



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63055 N. Hwy 97, Bldg M

Bend, OR 97701

Quality Assurance Report
Level II

L656560

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

September 12, 2013

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Cadmium	< 50	mg/kg			WG681278	09/12/13 01:29
Chromium	< 50	mg/kg			WG681278	09/12/13 01:29
Lead	< 50	mg/kg			WG681278	09/12/13 01:33

Analyte	Units	Result	Duplicate		Limit	Ref Samp	Batch
			Duplicate	RPD			
Cadmium	mg/kg	0.0	0.905	245.*	20	L656560-04	WG681278
Chromium	mg/kg	0.0	2.62	35.7*	20	L656560-04	WG681278
Lead	mg/kg	0.0	-0.436	89.6*	20	L656560-04	WG681278

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Lead	mg/kg	684.8	635.	92.8	80-120	WG681278
Cadmium	mg/kg	191	187.	97.8	80-120	WG681278
Chromium	mg/kg	128	129.	101.	80-120	WG681278

Analyte	Units	Result	Laboratory Control Sample Duplicate		Limit	RPD	Limit	Batch
			Ref	%Rec				
Lead	mg/kg	623.	635.	91.0	80-120	1.98	20	WG681278
Cadmium	mg/kg	178.	187.	93.0	80-120	4.56	20	WG681278
Chromium	mg/kg	123.	129.	96.0	80-120	4.72	20	WG681278

Laboratory Control Sample - Low Level

Analyte	Units	MS Res	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
			Ref Res						
Cadmium	mg/kg	291.	0.905	321	90.0	75-125	L656560-04	WG681278	
Chromium	mg/kg	297.	2.62	321	92.0	75-125	L656560-04	WG681278	
Lead	mg/kg	293.	-0.436	321	91.0	75-125	L656560-04	WG681278	

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Cadmium	mg/kg	432.	291.	134.*	75-125	38.9*	25	L656560-04	WG681278
Chromium	mg/kg	431.	297.	134.*	75-125	37.0*	25	L656560-04	WG681278
Lead	mg/kg	426.	293.	133.*	75-125	37.0*	25	L656560-04	WG681278

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63055 N. Hwy 97, Bldg M

Bend, OR 97701

Quality Assurance Report
Level II

L656560

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

September 12, 2013

Batch number /Run number / Sample number cross reference

WG681278: R2813900: L656560-01 02 03 04 05 06

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63055 N. Hwy 97, Bldg M

Bend, OR 97701

Quality Assurance Report
Level II

L656560

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

September 12, 2013

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

This Page Intentionally Left Blank



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODOT
63055 N. Hwy 97, Bldg M
Bend, OR 97701

Report Summary

Thursday September 19, 2013

Report Number: L657600


Samples Received: 09/10/13

Client Project: 15409

Description: US97: J Street Intersection Madras South Y

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jared Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 19, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : TCLP-CONC-2
Collected By : Ryan Franklin
Collection Date : 09/05/13 12:18

ESC Sample # : L657600-01

Site ID :

Project : 15409

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	09/16/13 0830	MVE	1
Chromium	BDL	0.050	mg/l	5.0	6010B	09/18/13 1833	ALT	1
Lead	BDL	0.050	mg/l	5.0	6010B	09/18/13 1833	ALT	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/19/13 08:55 Printed: 09/19/13 09:20



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ryan Franklin (ODOT)
Oregon Dept of Transportation - ODO
63055 N. Hwy 97, Bldg M
Bend, OR 97701

September 19, 2013

Date Received : September 10, 2013
Description : US97: J Street Intersection Madras South Y
Sample ID : TCLP-CONC-3
Collected By : Ryan Franklin
Collection Date : 09/05/13 12:29

ESC Sample # : L657600-02

Site ID :

Project : 15409

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	09/16/13 0830	MVE	1
Lead	BDL	0.050	mg/l	5.0	6010B	09/18/13 1657	ALT	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/19/13 08:55 Printed: 09/19/13 09:20

Summary of Remarks For Samples Printed
09/19/13 at 09:20:49

TSR Signing Reports: 358
R5 - Desired TAT

Clients MUST use the State of Oregon COCs for all work. Create an NCF for any samples received on ESC COCs.

Sample: L657600-01 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/20/13 00:00 RPT Date: 09/19/13 08:55
logged from HOLD - refer to L656560
Sample: L657600-02 Account: OREGONDOT Received: 09/10/13 09:00 Due Date: 09/20/13 00:00 RPT Date: 09/19/13 08:55



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63055 N. Hwy 97, Bldg M

Bend, OR 97701

Quality Assurance Report
Level II

L657600

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

September 19, 2013

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chromium	< .05	mg/l			WG682158	09/18/13 16:50
Lead	< .05	mg/l			WG682158	09/18/13 16:50

Analyte	Units	Result	Duplicate		Limit	Ref Samp	Batch
			Duplicate	RPD			
Chromium	mg/l	0.0	0.00715	6.62	20	L657600-02	WG682158
Lead	mg/l	0.0	0.00774	20.4*	20	L657600-02	WG682158

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Chromium	mg/l	1	0.973	97.3	85-115	WG682158
Lead	mg/l	1	0.965	96.5	85-115	WG682158

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Chromium	mg/l	0.975	0.00715	1	97.0	75-125	L657600-02	WG682158
Lead	mg/l	0.962	0.00774	1	95.0	75-125	L657600-02	WG682158

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Chromium	mg/l	0.971	0.975	96.4	75-125	0.382	20	L657600-02	WG682158
Lead	mg/l	0.957	0.962	94.9	75-125	0.502	20	L657600-02	WG682158

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG682004: R2817755: L657600-01 02
WG682158: R2819422: L657600-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Oregon Dept of Transportation - ODOT
Ryan Franklin (ODOT)
63055 N. Hwy 97, Bldg M

Bend, OR 97701

Quality Assurance Report
Level II

L657600

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

September 19, 2013

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.