# APPENDIX F
# Redside Construction Weekly Reports

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# WEEKLY RECAP REPORT

Week Ending: 12/07/2013

12/02/2013; Arrive on site with Star Hunter docked on west side of pier. Crew on standby until Star Hunter ships out. Talked with Mac about time frame. Scheduled to depart tomorrow 12/03/2014 in the am.

12/03/2013; Crew on standby due to Star Hunter still docked on west side of pier. 12:00 pm Star Hunter departs. Complete set up of crane. WD40 moves into place. Train on survey equipment.

12/04/2013; Install turbidity curtain. Complete crane set up and position barges for dredging.

12/05/2013; Install turbidity buoy. Begin background monitoring at selected station. Begin dredging west side of pier inland. Excessive amounts of debris within dredge zone. Little progress due to debris using environmental bucket.

12/06/2013; Continue dredging west side of pier inland areas. Progress slow due to large debris. Separating metal and tires from dredge sediment. Processing metal debris in order to dispose of.

First week progress slow due to delays and large amounts of debris within dredge zone. Environmental bucket not effective.

# WEEKLY RECAP REPORT

Week Ending: 12/14/2013

12/09/2013; Reposition barge and continue dredging west side of pier. Crew continues to separate large amounts of metal debris, tires and wood piles. Crew continues to process debris. Dredge production slow due to debris. Discuss switching from environmental bucket to large clam digging bucket.

12/10/2013; Prep clam bucket to replace environmental bucket. Move turbidity curtain because of Yacht Masters and dive school. Dive boat gets caught in curtain. Delay of 2 hours. Load out dredge spoils with Walrath.

12/11/2013; Dredge west side of pier with clam bucket. Production improves. Still large amount of debris. Crew continues to separate and process debris. Load out trucks with dredge spoils.

12/12/2013; Dredging west side of pier. Crew continues to separate and process debris. Crane goes down at 10:00 am. Crane crew works on crane remainder of the day. Delayed due to moving turbidity curtain for dive school.

12/13/2013; Crane down all day. Haul off dredge spoils with Walrath and Grady Tucking. Work on leaks in barge and crane repair.

Constant delays moving turbidity curtain daily. Dredging production improves using clam digging bucket. But production still down. Crane goes down.

# WEEKLY RECAP REPORT

Week Ending: 12/21/2013

12/16/2013; Off load barge using solo's from Walrath. Crane crew works on crane repair. Separate and process metal and wood debris from dredge spoils. Work on repairing leaks on WD40. Dustin works on Resolute.

12/17/2013; Dredge west side of pier. Use 345 excavator to stockpile dredge spoils to balance barge and assist with dewatering. Pump compartments in WD40. Work on patch in WD40.

12/18/2013; Dredge north west quadrant of pier. Use 345 excavator to separate metal and wood debris from dredge spoils. Process metal and wood debris. Pile dredge spoils to help dewatering.

12/19/2013; Dredge on west side of pier. Use 345 to stockpile and separate debris from dredge spoils. Continue pumping barge compartments. Work on leak repairs.

12/20/2013; Dredge west side of pier. Off load barge using Walrath trucking. Air can goes out on crane work on repair.

Dredging continues to be slow because of large amounts of debris. Work on leaks in WD40. Off dredge spoils into trucks. Continued delays to move turbidity curtain to accommodate neighbors.

# WEEKLY RECAP REPORT

Week Ending: 12/28/2013

12/23/2013; Crew works on leaks in barge. Crane crew works on crane and crane bucket.

12/24/2013; Crew works on leaks in barge. Crane crew works on crane and crane bucket.

12/25/2013; Shut down for holiday.

12/26/2013, Shift barges and continue dredging on west side of pier. Use 345 excavator to balance and stockpile dredge spoils to assist in dewatering.

12/27/2013; Dredging on west side pier. Use 345 excavator to stockpile and balance load. Production still down due to large amounts of debris in dredge sediment.

Work slowed due to holiday and repairs on the crane and barge. Delays also caused by moving of turbidity curtain to accommodate the dive school and yacht masters. Production down because of large amounts of debris.

# WEEKLY RECAP REPORT

Week Ending: 1/5/2014

12/30/2013; Dredge along pier sections 21 thru 19. Larger than normal amounts of debris. 2” wire cable, logs, tires and other metal objects. Excavator separates wood and metal debris. Crew processes metal and wood.

12/31/2013; Off load barge with Walrath trucking. Long waiting times at Waste Management. Attempt to switch trucks to Republic. Need to make arrangements in advance. Continue with Waste Management.

1/2/2014; Off load barge with Walrath trucking. Complete off load and shift barges to continue dredging.

1/3/2014; Continue dredging west side of pier. Crew also processing metal and wood debris. Issues dredging D15 against pier. Large object attached and unable to lift. Let Kerry know and mark on sheet.

Dredging continues to go slow due to debris. Off loading also going slow because of delays at disposal site. Crew continues to process metal and wood debris. Tracking all debris processing on extra work orders.

# WEEKLY RECAP REPORT

Week Ending: 1/11/2014

1/6/2014; Shift barges to off load. Off load barge with Walrath trucking. Talk with Mac about scheduling move of dry dock. Meet with Libby and Kerry to discuss loss of production due to large amounts of debris. Libby would like to see an estimated cost weekly if possible. Continued delays having to move turbidity curtain.

1/7/2014; Continue dredging on west side of pier. Shift barges two times. Crew works on separating and processing debris. Schedule trucks for off loading. Report release of sheen on west side of barge. Contain and clean up.

1/8/2014; Dredge end of pier on the west of pier. Process debris with using torches and excavator. Hit large object in grid C 11. Object to large to pick so leave in pace and mark on plan. Pick up sample bottles from Freemont Analytical for water samples.

1/9/2014; Off load barge with Walrath trucking. Send trucks to Rabanco. Schedule trucks with Scarsella for tomorrow. Take water samples to Freemont Analytical.

1/10/2014; Off load barge using Scarsella trucks. Process material for scrap. Schedule trucks for 1/15/14.

Dredging still slow due to large amounts of debris. Disposal going slow due to delays at Rabanco and Waste Management. Continue tracking extra work processing debris. Continued delays moving turbidity curtain in and out for yacht masters and the dive boat.

# WEEKLY RECAP REPORT

Week Ending: 1/18/2014

1/13/2014; Shift barges and dredge south west side of pier and along dry dock. Dredge sections 11 A,B and C. Shift barges and dredge sections A & B 10 thru 9. Shift curtain for yacht masters and dive boat.

1/14/2014; Dredge south west corner of grids. Move turbidity curtain in and out on two occasions for yacht master. Shift barges in at end of shift to allow the dive boat access.

1/15/2014; Process metal debris. Shift barges out to continue dredging along side dry dock. Schedule trucks for disposal 1/16/14.

1/16/2014; Load out dredge spoils with Walrath trucks. Order forklift to off load bucket to be picked up.

1/17/2014; Off load dredge spoils with Walrath trucks. Process debris. Clean up site and barge. Schedule e-trac to do pre dredge scan for 1/22/2014.

Dredging in outer quadrants. Less debris so dredging went much smoother. Crew still processing metal debris. Schedule pre dredge scan with e-trac for east side of pier.

# WEEKLY RECAP REPORT

Week Ending: 1/25/2014

1/20/2014; Crew on standby waiting for dry dock to be moved. Process metal debris while on standby. Install thumb on 345 excavator.

1/21/2014; Crew on standby waiting for dry docks to move. Process metal debris while on standby.

1/22/2014; Delayed due to dry dock not being moved. Continue to process metal debris. Schedule metal pick up.

1/23/2014; Complete load out and processing metal debris. Shift barges to east side of pier. Relocate turbidity curtain to east side of pier. Dry dock moved at 1:00pm.

1/24/2014; Complete moving of turbidity curtain and setting anchors. Begin dredging at 1:00pm. Start in sections E & F, 21 & 22. Hitting large metal object. Unable to pull any spoils. Mark area on plans. All other area large metal debris again. Production down see pictures.

Lost all week due to delay moving the dry dock. Production also slow once started because once again large amounts of debris.

# WEEKLY RECAP REPORT

Week Ending: 2/1/2014

1/27/2014; Shift barges and begin dredging. Large amounts of debris coming up. Separate debris and process for disposal. Clean up sheen which has escaped the work zone. Install debris boom on west side of the pier. Sections E and F 22 thru 21 have very little debris. Seems to be a large object which we are unable to pick or move.

1/28/2014; Continue dredging south end of the pier. Debris seems to be smaller but still using clam digging bucket. Work on closing holes in the containment boom and picking up sheen. Processing logs for disposal. Schedule trucks for disposal. Shift barges over to pier for off loading.

1/29/2014; Off load barge with Grady trucking and Scarsella trucking. Disposal wait times slowing things down. Continue to monitor sheen and deploy retrieval booms.

1/30/2014; Continue off loading barge using Grady trucking and Scarsella trucking. Waste Management cuts off two trucks. Hauling in material to fast for them to handle. Schedule trucks for Monday.

1/31/2014; Dredge east side of pier. Large amounts of tile and wood debris with very little sand blast grit. Release of sheen on east side of curtain from a log being picked. Deploy clean up efforts.

Dredging is going slow due to large amounts of debris. Disposal also going slow due to long waiting times for trucks. Using both Rabanco and Waste Management to try and speed up disposal.

# WEEKLY RECAP REPORT

Week Ending: 2/8/2014

2/3/2014; Off load barge with Grady trucking and Scarsella trucking. Crew arrives early to set up signs and keep parking lot clear. Call Spencer about getting brges loaded for sand capping. Visit Kenmore site to see if it will work.

2/4/2014; Shift barges out to eastern most dredge zone and complete dredging zones G 15 thru G 12. Shift White Horse next to pier to continue dredging. Continue clean up around perimeter of dredge zone due all the oil coming up from dredge zone.

2/5/2014; Complete dredging east side of pier zones F 15 thru F 12. Shift barges for off loading on Thursday. Clean up barge rails and process debris.

2/6/2014; Off load barge with Grady trucking and Scarsella trucking. Weather causing delays at Waste Management during off loading.

2/7/2014; Dredge zones G 4 thru G 12. Lots of sediment. Process metal and wood debris. Shift barges over to pier for off loading on Monday.

Dredging becoming easier as we move out further to the east perimeter. Debris field getting smaller much more sediment coming up. Schedule truck for both Rabanco and Waste Management. Grady trucking, Walrath trucking and Scarsella trucking.

# WEEKLY RECAP REPORT

Week Ending: 2/15/2014

2/10/2014; Off load barge with Grady trucking, Walrath trucking and Scarsella trucking. Send trucks to both Waste Management and Rabanco. Clean off pier and entry road to pier.

2/11/2014; Shift barges and dredge zones H 12 thru H 3. H 15 and 14 had large cable in the way had to process in order to finish. Crew separated and processed debris.

2/12/2014; Dredge H & G 1 thru 3. G 1 has lots of cable we are unable to pull up. Move cable around and dredge. Material coming up very clean. Only taking one bite out of each mark. Complete dredging at 1:00 pm. Clean up barge and repair breaks in turbidity curtain. Schedule trucks.

2/13/2014; Off load barge. Rabanco has no rail cars so have to go to Waste Management. Waste Management calls and have to cut 2 side dumps off and 3 solos. Schedule trucks ahead for the following day.

2/14/2014; Off load barge. Waste Management calls again to reduce the amount of trucks. They are running out of rail cars. Complete off load early. Clean up barge and pier. Take water sample to Freemont Analytical.

Dredging going much smoother with less debris on the east side of the pier. Having issues with disposal companies again. Long wait times and no room for material being delivered.

# WEEKLY RECAP REPORT

Week Ending: 2/22/2014

2/17/2014; Dredge areas F 12 thru F 8. Large amounts of sand blast grit. As many as six buckets per mark before hitting native material. Dredge section E 11 thru E 10. Large cable in the are seems to be attached to the pier. Debris is minimal.

2/18/2014; Dredge area F 7 thru F 5. At 1:00 pm the wind kicks up and we are unable to shift barges with the skiff. Spud barges down and send the guys home early.

2/19/2014; Shift barges in the morning so we can off load. Off load barge with Walrath trucking and Scarsella trucking. Schedule post dredge survey and sand deliveries for the week of the march tenth.

2/20/2014; Dredge F 5 thru F 1 and part of section E. Pulling up large amounts of wood debris from sunken ship. Weld chains to barrier and place new hay bales in openings between rails.

2/21/2014; Off load barge with Walrath trucking. Take material to Rabanco because Waste Management is closed.

Dredging is coming to a close. Scheduling sand capping materials and barge movements. Still the usual long delays with the disposal sites.

# WEEKLY RECAP REPORT

Week Ending: 3/1/2014

2/24/2014; Move turbidity curtain along pier. Shift barges to continue dredging. Set anchors to hold curtain in place. Guys work on leaks in barge.

2/25/2014; Begin dredging south end of the pier. Schedule trucks with Grady trucking and Walrath trucking. Schedule disposal with both Waste Management and Rabanco for tomorrow.

2/26/2014; Off load barges. Six trucks going to Rabanco and eight trucks going to Waste Management. Long turnaround times due to delays with off loading as usual. Clean off pier and roadway.

2/27/2014; Continue dredging at the south end of the pier. Sections 8 thru 11 have large amounts of debris. Have Westar move barges into place.

2/28/2014; Complete dredging at the south end of pier. On standby for 1 hour waiting for dry dock to move so we can hit the last six marks. Large object in area, unable to pick or move. Use Westar to shift barges.

Nearing the end of dredging. Debris heavy in some areas while light in others. Same issues with disposal. Long wait times at both Rabanco and Waste Management.

# WEEKLY RECAP REPORT

Week Ending: 3/8/2014

3/3/2014; Off load barge with Grady trucking and Walrath trucking. Material very wet due to the weather over the weekend. Pull turbidity curtain at the end of the day to allow for the launching of the Blue Fin and dry dock. About four loads of material remain on the barge.

3/4/2014; Clean up barges and change out clam bucket with ecology bucket. Work on repairing leaks on WD40 and pump out compartments. Schedule trucks to complete off loading on March 5th.

3/5/2014; Off load last of the dredge spoils with Walrath trucking. Clean barges off and shift to allow for post dredge survey. Move turbidity curtain.

3/6/2014; Continue clean up of the barge and equipment. AUS shows up to patch hole in WD40. Continue cleaning barge and get thing ready for transport on March 7th.

3/7/2014;Pull turbidity curtain and ship out WD40. Clean up White Horse and schedule sand delivery for Monday March 10th.

Dredging is complete. Post dredge survey has been done and we can start doing the sand cap. Scheduled tug transport and sand barge loading for Monday the 10th. Barge to be loaded first thing in the morning and delivered by 1:00pm.

# WEEKLY RECAP REPORT

Week Ending: 3/15/2014

3/10/2014; Go to Calportland to check on barge loading. Head to NLSY to receive barge load of capping material. Barge delivered at 3:00 pm. Schedule crew for capping.

3/11/2014; Begin sand capping sections D, E and F. Complete E 1 thru 11, D 1 and 2, and F 1 thru 3. Shipyard has a tug come in and gets caught in turbidity curtain. Shut down for two hours while assisting the tug. Repair and redeploy turbidity curtain. Monitor tubidity and take water samples to Freemont Analytical.

3/12/2014; Work on completing deployment of turbidity curtain from yesterdays damage. Continue sand capping. Schedule reloading of barge with Calportland and schedule tug transport with island tug.

3/13/2014; continue capping sections F and G 14 thru 22. Shift barges and start capping section H 22 thru 19. Crane goes down at 2:00 pm. Call mechanic to schedule repair as soon as possible.

3/14/2014; Mechanic works on crane with Kyle. Clean up crane and prep for work on Monday. Shift curtain in to allow for tug to be moved into dry dock.

Capping going well. Some delay due to tug running into the turbidity curtain and the crane going down. Should be back on track and meeting our schedule.

# WEEKLY RECAP REPORT

Week Ending: 3/22/2014

3/17/2014; Finish off loading barge. Prep for tug transport tonight. Pull turbidity curtain to allow for tug to pick up barge.

3/18/2014; Arrive at 1:00 pm to receive barge. Schedule placement to start tomorrow March 19th.

3/19/2014; Shipyard has crane barge come in and we are unable to complete sand capping until barge is moved. Was supposed to take 3 or 4 hours, total time delayed 8 hours. Shift sand barge and complete final grids.

3/20/2014; Relocate turbidity curtain and stand by while NLSY moves dry dock. Shift our barges to west side of pier. Start to reset curtain.

3/21/2014; Complete set up of turbidity curtain. Begin sand capping on west side on pier grids A and B 6 thru 26. Delayed numerous times by yacht masters and dive boat and have to work on Saturday.

3/22/2014; Continue sand capping on west side of pier. Complete areas A and B. Shift barges to put White Horse against pier and WD40 outside.

Once thru delays progress went well. Should be complete by the end of the week. Tracking delays from yacht masters and dive boat.

# WEEKLY RECAP REPORT

Week Ending 3/29/2014

3/24/2014; Continue sand capping sections C 26 thru C 11 and D 26 thru D 11. Schedule fuel for barge holding tank.

3/25/2014; Complete sand capping sections C and D. Fuel barge at 3:00pm. Pull turbidity curtain and receive tugs to take out White Horse. Sand barge to remain for a couple of days. Cleared storing barge with Mac.

3/26/2014; Clean up pier and pull curtain. Have Freemont tug move anchors next to pier. Prep for demobe.

3/27/2014; Use NLSY crane to assist in removing turbidity curtain and anchors. Sort thru curtain and dispose of bad curtain. Roll up and store curtain to be reused on float tied off to pier. Get the ok from Mac to store floats and curtain until May. At which time we will pick them up and move out.

All work is done! Site is cleaned up and all debris disposed of Meet with Sam, Kerry and Libby to iron out any issues at a later date.

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# APPENDIX G
# Water Quality Monitoring Laboratory Reports

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3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1401061**

January 16, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 1/9/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *01/16/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1401061

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1401061-001 | Northlake | 01/09/2014 9:31 AM | 01/09/2014 9:42 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1401061**
Date: **1/16/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1401061**
Date Reported: **1/16/2014**

**Client:** Redside Construction
**Collection Date:** 1/9/2014 9:31:00 AM
**Project:** Northlake Dredging
**Lab ID:** 1401061-001
**Matrix:** Water
**Client Sample ID: Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6339 | | Analyst: MC |
| Arsenic | 1.68 | 1.00 | | µg/L | 1 | 1/13/2014 5:57:32 PM |
| Copper | ND | 0.500 | | µg/L | 1 | 1/13/2014 5:57:32 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *1/16/2014*

**Work Order:** 1401061
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **MB-6339** SampType: **MBLK** Units: **µg/L** Prep Date: **1/13/2014** RunNo: **12009**
Client ID: **MBLKW** Batch ID: **6339** Analysis Date: **1/13/2014** SeqNo: **240228**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

Sample ID: **LCS-6339** SampType: **LCS** Units: **µg/L** Prep Date: **1/13/2014** RunNo: **12009**
Client ID: **LCSW** Batch ID: **6339** Analysis Date: **1/13/2014** SeqNo: **240229**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 108 | 1.00 | 100.0 | 0 | 108 | 85 | 115 | | | | |
| Copper | 105 | 0.500 | 100.0 | 0 | 105 | 85 | 115 | | | | |

Sample ID: **1401061-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **1/13/2014** RunNo: **12009**
Client ID: **Northlake** Batch ID: **6339** Analysis Date: **1/13/2014** SeqNo: **240231**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.41 | 1.00 | | | | | | 1.680 | 17.8 | 30 | |
| Copper | ND | 0.500 | | | | | | 0 | | 30 | |

Sample ID: **1401061-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **1/13/2014** RunNo: **12009**
Client ID: **Northlake** Batch ID: **6339** Analysis Date: **1/13/2014** SeqNo: **240232**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 526 | 1.00 | 500.0 | 1.680 | 105 | 70 | 130 | | | | |
| Copper | 513 | 0.500 | 500.0 | 0.3375 | 102 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *1/16/2014*

**Work Order:** 1401061
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1401061-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **1/13/2014** RunNo: **12009**
Client ID: **Northlake** Batch ID: **6339** Analysis Date: **1/13/2014** SeqNo: **240233**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 508 | 1.00 | 500.0 | 1.680 | 101 | 70 | 130 | 526.0 | 3.51 | 30 | |
| Copper | 488 | 0.500 | 500.0 | 0.3375 | 97.6 | 70 | 130 | 512.6 | 4.89 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1401061** |
| Logged by: | **Clare Griggs** | Date Received: | **1/9/2014 9:42:00 AM** |

## *Chain of Custody*

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## *Log In*

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | | **Sample received straight from field.** | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## *Special Handling (if applicable)*

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

| | | | |
|---|---|---|---|
| Person Notified: | | Date: | |
| By Whom: | | Via: | ☐ eMail ☐ Phone ☐ Fax ☐ In Person |
| Regarding: | | | |
| Client Instructions: | | | |

19. Additional remarks:

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 140161

Date: 1/9/14

Page: 1 of: 1

Client: Redside Construction
Address: PO Box 267
City, State, Zip: Port Gamble WA 98364 Tel: 360 297 9557
Reports To (PM): Dan Roetker Fax: Email: dan@redside.biz

Project Name: Northlake Dredging
Location: 1441 Northlake Pl. Seattle WA
Collected by: Dan Roetker
Project No: R32-13

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix) | VOC (EPA 8260) | GX/BTEX by EPA 8021b | BTEX by 8260 | Gasoline Range Organics | Hydrocarbon Identification (NCID) | Diesel/Heavy Oil Range Organics | SEMI VOC (EPA 8270 - SIM) | PAH (EPA 8270) | PCBs (EPA 8082) | Cl Pesticides (EPA 8081) | Cl Herbicides (EPA 8151A) | Metals* (6020 / 200.8) | Total (T) \| Dissolved (D) | Anions (IC)** | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 1/9/14 | 9:13 AM | W | | | | | | | | | | | | X | X | | | 31' / Arsenic & Copper |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al (As) B Ba Be Ca Cd Co Cr (Cu) Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Special Remarks:

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roetker | 1/9/14 9:42 AM | x | |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | 1/9/14 942 |

TAT --> Next Day 2 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Ship Yard Dredge**
**Lab ID: 1401142**

January 24, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 1/17/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *01/24/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Ship Yard Dredge
**Lab Order:** 1401142

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1401142-001 | Northlake | 01/17/2014 9:15 AM | 01/17/2014 9:44 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1401142**
Date: **1/24/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Ship Yard Dredge

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1401142**
Date Reported: **1/24/2014**

**Client:** Redside Construction
**Collection Date:** 1/17/2014 9:15:00 AM
**Project:** Northlake Ship Yard Dredge
**Lab ID:** 1401142-001
**Matrix:** Water
**Client Sample ID:** **Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6380 | | Analyst: MC |
| Arsenic | ND | 1.00 | | µg/L | 1 | 1/17/2014 11:52:15 PM |
| Copper | 1.02 | 0.500 | | µg/L | 1 | 1/17/2014 11:52:15 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *1/24/2014*

**Work Order:** 1401142
**CLIENT:** Redside Construction
**Project:** Northlake Ship Yard Dredge

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-6380** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **1/17/2014** | RunNo: **12096** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **6380** | | Analysis Date: **1/17/2014** | SeqNo: **241892** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-6380** | SampType: **LCS** | Units: **µg/L** | Prep Date: **1/17/2014** | RunNo: **12096** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **6380** | | Analysis Date: **1/17/2014** | SeqNo: **241893** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 103 | 1.00 | 100.0 | 0 | 103 | 85 | 115 | | | | |
| Copper | 101 | 0.500 | 100.0 | 0 | 101 | 85 | 115 | | | | |

| Sample ID: **1401132-001ADUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **1/17/2014** | RunNo: **12096** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6380** | | Analysis Date: **1/17/2014** | SeqNo: **241895** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.87 | 1.00 | | | | | | 5.157 | 5.70 | 30 | |
| Copper | 7.46 | 0.500 | | | | | | 7.298 | 2.24 | 30 | |

| Sample ID: **1401132-001AMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **1/17/2014** | RunNo: **12096** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6380** | | Analysis Date: **1/17/2014** | SeqNo: **241896** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 511 | 1.00 | 500.0 | 5.157 | 101 | 70 | 130 | | | | |
| Copper | 502 | 0.500 | 500.0 | 7.298 | 98.9 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *1/24/2014*

**Work Order:** 1401142
**CLIENT:** Redside Construction
**Project:** Northlake Ship Yard Dredge

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1401132-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **1/17/2014** RunNo: **12096**
Client ID: **BATCH** Batch ID: **6380** Analysis Date: **1/17/2014** SeqNo: **241897**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 503 | 1.00 | 500.0 | 5.157 | 99.5 | 70 | 130 | 511.0 | 1.66 | 30 | |
| Copper | 501 | 0.500 | 500.0 | 7.298 | 98.7 | 70 | 130 | 501.9 | 0.274 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1401142** |
| Logged by: | **Clare Griggs** | Date Received: | **1/17/2014 9:44:34 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received straight from field** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N. Tel: 206-352-3790
Seattle, WA 98103 Fax: 206-352-7178

Laboratory Project No (internal): 1401142

Date: 1/17/14

Page: 1 of: 1

Client: Redside Construction
Address: PO BOX 267
City, State, Zip: Port Gamble WA 98364 Tel: 206 9423206
Reports To (PM): Dan Roesler Fax: Email: dan@redside.biz

Project Name: Northlake Ship yard Dredge
Location: 1441 Northlake Way
Collected by: Dan Roesler
Project No: R32-13

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix) | VOC (EPA 8260) | GX/BTEX by EPA 8021b | BTEX by 8260 | Gasoline Range Organics | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Cl Pesticides (EPA 8081) | Cl Herbicides (EPA 8151A) | Metals* (6020 / 200.8) | Total (T) | Dissolved (D) | Anions (IC)** | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 1/17/14 | 9:15 | | | | | | | | | | | | | X | D | | | Dolphin / 3' |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Special Remarks:

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 1/17/14 | x | |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | 1/17/14 921 |

TAT --> Next Day 2 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Shipyard Dredging**
**Lab ID: 1402001**

February 10, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 2/3/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *02/10/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Shipyard Dredging
**Lab Order:** 1402001

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1402001-001 | Shipyard | 02/03/2014 12:00 AM | 02/03/2014 8:30 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1402001**
Date: **2/10/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Shipyard Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1402001**
Date Reported: **2/10/2014**

**Client:** Redside Construction
**Collection Date:** 2/3/2014
**Project:** Northlake Shipyard Dredging
**Lab ID:** 1402001-001
**Matrix:** Water
**Client Sample ID:** **Shipyard**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6511 | | Analyst: MC |
| Arsenic | 1.07 | 1.00 | | µg/L | 1 | 2/4/2014 6:09:47 PM |
| Copper | 2.02 | 0.500 | | µg/L | 1 | 2/4/2014 6:09:47 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *2/10/2014*

**Work Order:** 1402001
**CLIENT:** Redside Construction
**Project:** Northlake Shipyard Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-6511** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **2/4/2014** | RunNo: **12375** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **6511** | | Analysis Date: **2/4/2014** | SeqNo: **247030** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-6511** | SampType: **LCS** | Units: **µg/L** | Prep Date: **2/4/2014** | RunNo: **12375** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **6511** | | Analysis Date: **2/4/2014** | SeqNo: **247031** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 506 | 1.00 | 500.0 | 0 | 101 | 85 | 115 | | | | |
| Copper | 511 | 0.500 | 500.0 | 0 | 102 | 85 | 115 | | | | |

| Sample ID: **1402004-003CDUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **2/4/2014** | RunNo: **12375** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6511** | | Analysis Date: **2/4/2014** | SeqNo: **247033** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | 0 | | 30 | |
| Copper | ND | 0.500 | | | | | | 0 | | 30 | |

| Sample ID: **1402004-003CMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **2/4/2014** | RunNo: **12375** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6511** | | Analysis Date: **2/4/2014** | SeqNo: **247034** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 505 | 1.00 | 500.0 | 0.7890 | 101 | 70 | 130 | | | | |
| Copper | 488 | 0.500 | 500.0 | 0 | 97.6 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *2/10/2014*

**Work Order:** 1402001
**CLIENT:** Redside Construction
**Project:** Northlake Shipyard Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1402004-003CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **2/4/2014** RunNo: **12375**
Client ID: **BATCH** Batch ID: **6511** Analysis Date: **2/4/2014** SeqNo: **247035**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 503 | 1.00 | 500.0 | 0.7890 | 101 | 70 | 130 | 504.7 | 0.283 | 30 | |
| Copper | 488 | 0.500 | 500.0 | 0 | 97.6 | 70 | 130 | 488.1 | 0.0747 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1402001** |
| Logged by: | **Clare Griggs** | Date Received: | **2/3/2014 8:30:00 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received straight from field** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☐ | No ☑ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☑ | No ☐ | NA ☐ |

| | | | |
|---|---|---|---|
| Person Notified: | Dan Roesler | Date: | 2/3/2014 |
| By Whom: | Clare Griggs | Via: | ☑ eMail ☐ Phone ☐ Fax ☐ In Person |
| Regarding: | Analysis Confirmation. | | |
| Client Instructions: | Run Dissolved Cu/As. not Total. | | |

19. Additional remarks:

Client verbalized upon sample drop-off that sample was taken within the past 20 minutes.

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1402001

Date: 2/3/14

Page: 1 of: 1

Client: Redside Construction
Address: PO BOX 267 297
City, State, Zip: Port Gamble WA Tel: 360 ~~477~~ 9557
Reports To (PM): Dan Roesler Fax: Email: dan@redside.biz

Project Name: Northlake Shipyard Dredging
Location: 1441 Northlake Way
Collected by: Dan Roesler
Project No: R32-13

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix) | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals* (6020 / 200.8) | Total (T) / Dissolved (D) | Anions (IC)** | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Shipyard | 2/3/14 | | | | | | | | | | | | X | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Cc Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Special Remarks:

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 2/3/14 8:30 AM | | 2/3/14 830 |
| x | | x | |

TAT --> SameDay NextDay 2 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1402110**

February 19, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 2/14/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *02/19/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1402110

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1402110-001 | Northlake | 02/14/2014 10:38 AM | 02/14/2014 10:45 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1402110**
Date: **2/19/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1402110**
Date Reported: **2/19/2014**

**Client:** Redside Construction
**Collection Date:** 2/14/2014 10:38:00 AM
**Project:** Northlake Dredging
**Lab ID:** 1402110-001
**Matrix:** Water
**Client Sample ID:** **Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6612 | | Analyst: MC |
| Arsenic | 1.95 | 1.00 | | µg/L | 1 | 2/18/2014 4:01:28 AM |
| Copper | 0.656 | 0.500 | | µg/L | 1 | 2/18/2014 4:01:28 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *2/19/2014*

**Work Order:** 1402110
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-6612** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **2/17/2014** | RunNo: **12573** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **6612** | | Analysis Date: **2/17/2014** | SeqNo: **251073** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-6612** | SampType: **LCS** | Units: **µg/L** | Prep Date: **2/17/2014** | RunNo: **12573** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **6612** | | Analysis Date: **2/18/2014** | SeqNo: **251076** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 102 | 1.00 | 100.0 | 0 | 102 | 85 | 115 | | | | |
| Copper | 85.6 | 0.500 | 100.0 | 0 | 85.6 | 85 | 115 | | | | |

| Sample ID: **1402088-001BDUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **2/17/2014** | RunNo: **12573** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6612** | | Analysis Date: **2/18/2014** | SeqNo: **251078** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.39 | 1.00 | | | | | | 2.974 | 13.0 | 30 | |
| Copper | ND | 0.500 | | | | | | 0 | | 30 | |

| Sample ID: **1402088-001BMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **2/17/2014** | RunNo: **12573** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6612** | | Analysis Date: **2/18/2014** | SeqNo: **251079** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 497 | 1.00 | 500.0 | 2.974 | 98.8 | 70 | 130 | | | | |
| Copper | 419 | 0.500 | 500.0 | 0 | 83.8 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *2/19/2014*

**Work Order:** 1402110
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1402088-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **2/17/2014** RunNo: **12573**
Client ID: **BATCH** Batch ID: **6612** Analysis Date: **2/18/2014** SeqNo: **251080**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 531 | 1.00 | 500.0 | 2.974 | 106 | 70 | 130 | 497.0 | 6.57 | 30 | |
| Copper | 422 | 0.500 | 500.0 | 0 | 84.5 | 70 | 130 | 418.9 | 0.830 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1402110** |
| Logged by: | **Chelsea Ward** | Date Received: | **2/14/2014 10:45:00 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received straight from field** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Same metals as previous projects.

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 140210

Date: 2-14-14

Page: 1 of: 1

Client: Redside Construction
Address: PO Box 267
City, State, Zip: Port Gamble WA 98364 Tel: 360 297 9558
Reports To (PM): Dan Roesler Fax: Email: dan@redside.biz

Project Name: Northlake Dredging
Location: 1441 Northlake Way
Collected by: Dan Roesler
Project No: R32-13

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix) | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals (6020 / 200.8) Total (T) \| Dissolved (D) | Anions (IC)** | | | | | | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 2/14/14 | 10:38 | | | | | | | | | | | X D | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 2/14/14 10:45 | x | 2/14/14 10:45 |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | |

Special Remarks:

TAT --> SameDay NextDay 2 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1403097**

March 19, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 3/11/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *03/19/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1403097

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1403097-001 | Northlake | 03/11/2014 12:31 PM | 03/11/2014 1:07 PM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1403097**
Date: **3/19/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1403097**
Date Reported: **3/19/2014**

**Client:** Redside Construction
**Collection Date:** 3/11/2014 12:31:00 PM
**Project:** Northlake Dredging
**Lab ID:** 1403097-001
**Matrix:** Water
**Client Sample ID:** **Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6862 | | Analyst: BR |
| Arsenic | 2.49 | 1.00 | | µg/L | 1 | 3/13/2014 6:58:08 PM |
| Copper | 2.14 | 0.500 | | µg/L | 1 | 3/13/2014 6:58:08 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *3/19/2014*

**Work Order:** 1403097
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **MB-6862** SampType: **MBLK** Units: **µg/L** Prep Date: **3/13/2014** RunNo: **13052**
Client ID: **MBLKW** Batch ID: **6862** Analysis Date: **3/13/2014** SeqNo: **261255**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

Sample ID: **LCS-6862** SampType: **LCS** Units: **µg/L** Prep Date: **3/13/2014** RunNo: **13052**
Client ID: **LCSW** Batch ID: **6862** Analysis Date: **3/13/2014** SeqNo: **261256**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 101 | 1.00 | 100.0 | 0 | 101 | 85 | 115 | | | | |
| Copper | 97.7 | 0.500 | 100.0 | 0 | 97.7 | 85 | 115 | | | | |

Sample ID: **1403137-003CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **3/13/2014** RunNo: **13052**
Client ID: **BATCH** Batch ID: **6862** Analysis Date: **3/13/2014** SeqNo: **261261**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | 0 | | 30 | |
| Copper | 1.39 | 0.500 | | | | | | 1.316 | 5.29 | 30 | |

Sample ID: **1403137-003CMS** SampType: **MS** Units: **µg/L** Prep Date: **3/13/2014** RunNo: **13052**
Client ID: **BATCH** Batch ID: **6862** Analysis Date: **3/13/2014** SeqNo: **261262**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 565 | 1.00 | 500.0 | 0.8965 | 113 | 70 | 130 | | | | |
| Copper | 493 | 0.500 | 500.0 | 1.316 | 98.4 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *3/19/2014*

**Work Order:** 1403097
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1403137-003CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/13/2014** RunNo: **13052**
Client ID: **BATCH** Batch ID: **6862** Analysis Date: **3/13/2014** SeqNo: **261263**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 599 | 1.00 | 500.0 | 0.8965 | 120 | 70 | 130 | 564.6 | 5.88 | 30 | |
| Copper | 515 | 0.500 | 500.0 | 1.316 | 103 | 70 | 130 | 493.3 | 4.28 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1403097** |
| Logged by: | **Chelsea Ward** | Date Received: | **3/11/2014 1:07:00 PM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received straight from field** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Same metals as previous samples. Sample date should be 3/11/14.

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1403097

Date: 3-10-14

Page: 1 of: 1

Client: Redside Const.
Address: PO BOX 2607
City, State, Zip: Port Gamble 98364 Tel: 2069473206
Reports To (PM): Dan Roesler Fax: Email: dan@redside.com

Project Name: Northlake Ship Yard
Location: 1441 N Lake Dr.
Collected by: Dan Roesler
Project No: Northlake

| Sample Name | Sample Date | Sample Time | Sample Type (Matrix) | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals* (6020 / 200.8) | Total (T) \| Dissolved (D) | Anions (IC)** | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Northlake | 3/11/14 | 12:31 | | | | | | | | | | | X | D | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 3/11/14 1:07 | x | |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | 3/11/14 1:07 |

Special Remarks:

TAT --> SameDay NextDay 2 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1403152**

March 21, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 3/14/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *03/21/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1403152

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1403152-001 | Northlake | 03/14/2014 9:06 AM | 03/14/2014 9:06 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1403152**
Date: **3/21/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1403152**
Date Reported: **3/21/2014**

**Client:** Redside Construction
**Collection Date:** 3/14/2014 9:06:00 AM
**Project:** Northlake Dredging
**Lab ID:** 1403152-001
**Matrix:** Water
**Client Sample ID:** **Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6882 | | Analyst: BR |
| Arsenic | 1.55 | 1.00 | | µg/L | 1 | 3/17/2014 4:03:52 PM |
| Copper | ND | 0.500 | | µg/L | 1 | 3/17/2014 4:03:52 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *3/21/2014*

**Work Order:** 1403152
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-6882** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **3/17/2014** | RunNo: **13089** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **6882** | | Analysis Date: **3/17/2014** | SeqNo: **262012** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-6882** | SampType: **LCS** | Units: **µg/L** | Prep Date: **3/17/2014** | RunNo: **13089** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **6882** | | Analysis Date: **3/17/2014** | SeqNo: **262013** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 98.4 | 1.00 | 100.0 | 0 | 98.4 | 85 | 115 | | | | |
| Copper | 99.4 | 0.500 | 100.0 | 0 | 99.4 | 85 | 115 | | | | |

| Sample ID: **1403157-003CDUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **3/17/2014** | RunNo: **13089** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6882** | | Analysis Date: **3/17/2014** | SeqNo: **262018** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | 0 | | 30 | |
| Copper | ND | 0.500 | | | | | | 0 | | 30 | |

| Sample ID: **1403157-003CMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **3/17/2014** | RunNo: **13089** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6882** | | Analysis Date: **3/17/2014** | SeqNo: **262019** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 550 | 1.00 | 500.0 | 0.5530 | 110 | 70 | 130 | | | | |
| Copper | 466 | 0.500 | 500.0 | 0 | 93.2 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *3/21/2014*

**Work Order:** 1403152
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1403157-003CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/17/2014** RunNo: **13089**
Client ID: **BATCH** Batch ID: **6882** Analysis Date: **3/17/2014** SeqNo: **262020**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 556 | 1.00 | 500.0 | 0.5530 | 111 | 70 | 130 | 550.1 | 1.13 | 30 | |
| Copper | 459 | 0.500 | 500.0 | 0 | 91.9 | 70 | 130 | 465.9 | 1.43 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1403152** |
| Logged by: | **Clare Griggs** | Date Received: | **3/14/2014 9:06:00 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | | **Sample received straight from field** | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

| | | | |
|---|---|---|---|
| Person Notified: | | Date: | |
| By Whom: | | Via: | ☐ eMail ☐ Phone ☐ Fax ☐ In Person |
| Regarding: | | | |
| Client Instructions: | | | |

19. Additional remarks:

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1403152

Date: 3-14-14

Page: 1 of: 1

Client: Redside Const.
Address: PO Box 269
City, State, Zip: Port Gamble WA 98364 Tel:
Reports To (PM): Don Roesler Fax:

Project Name: Northlake Slip Yard
Location: 1441 N Lk Wash
Collected by: Don Roesler
Email: don@redside.biz Project No: R52-13

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix)* | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270 - SIM) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals** (6020 / 200.8) | Total (T) \| Dissolved (D) | Anions (IC)*** | EDB (8011) | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 3/14/14 | 9:00 | | | | | | | | | | | X | D | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x [signature] | 3/14/14 9:06 | x [signature] | 3/14/14 906 |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | |

Special Remarks:

TAT -> SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1403206**

March 26, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 3/19/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *03/26/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1403206

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1403206-001 | Northlake | 03/19/2014 10:00 AM | 03/19/2014 10:04 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1403206**
Date: **3/26/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1403206**
Date Reported: **3/26/2014**

**Client:** Redside Construction
**Collection Date:** 3/19/2014 10:00:00 AM
**Project:** Northlake Dredging
**Lab ID:** 1403206-001
**Matrix:** Water
**Client Sample ID:** **Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 6909 | | Analyst: MC |
| Arsenic | 1.24 | 1.00 | | µg/L | 1 | 3/19/2014 11:36:50 PM |
| Copper | 0.944 | 0.500 | | µg/L | 1 | 3/19/2014 11:36:50 PM |

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| D | Dilution was required |
| E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not detected at the Reporting Limit |
| RL | Reporting Limit |
| S | Spike recovery outside accepted recovery limits |

**Work Order:** 1403206
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-6909** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **3/19/2014** | RunNo: **13143** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **6909** | | Analysis Date: **3/19/2014** | SeqNo: **264187** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-6909** | SampType: **LCS** | Units: **µg/L** | Prep Date: **3/19/2014** | RunNo: **13143** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **6909** | | Analysis Date: **3/19/2014** | SeqNo: **264188** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 102 | 1.00 | 100.0 | 0 | 102 | 85 | 115 | | | | |
| Copper | 101 | 0.500 | 100.0 | 0 | 101 | 85 | 115 | | | | |

| Sample ID: **1403180-003ADUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **3/19/2014** | RunNo: **13143** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6909** | | Analysis Date: **3/19/2014** | SeqNo: **264192** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 35.5 | 1.00 | | | | | | 35.45 | 0.203 | 30 | |
| Copper | ND | 0.500 | | | | | | 0 | | 30 | |

| Sample ID: **1403180-003AMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **3/19/2014** | RunNo: **13143** |
|---|---|---|---|---|
| Client ID: **BATCH** | Batch ID: **6909** | | Analysis Date: **3/19/2014** | SeqNo: **264193** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 547 | 1.00 | 500.0 | 35.45 | 102 | 70 | 130 | | | | |
| Copper | 490 | 0.500 | 500.0 | 0 | 98.0 | 70 | 130 | | | | |

**NOTES:**
S - Outlying spike recovery observed. A duplicate analysis was performed with similar results indicating a matrix effect.

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *3/26/2014*

**Work Order:** 1403206
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1403180-003AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/19/2014** RunNo: **13143**
Client ID: **BATCH** Batch ID: **6909** Analysis Date: **3/19/2014** SeqNo: **264194**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 566 | 1.00 | 500.0 | 35.45 | 106 | 70 | 130 | 546.9 | 3.40 | 30 | |
| Copper | 499 | 0.500 | 500.0 | 0 | 99.9 | 70 | 130 | 490.0 | 1.87 | 30 | |

**NOTES:**
S - Outlying spike recovery observed. A duplicate analysis was performed with similar results indicating a matrix effect.

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1403206** |
| Logged by: | **Chelsea Ward** | Date Received: | **3/19/2014 10:04:00 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received at appropriate temperature** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

**Item Information**

| Item # | Temp ºC | Condition |
|---|---|---|
| Sample | 8.7 | Good |

# Chain of Custody Record

**Fremont Analytical**
3600 Fremont Ave N. Tel: 206-352-3790
Seattle, WA 98103 Fax: 206-352-7178

Laboratory Project No (internal): 1403207b
Date: 3-19-14
Page: 1 of: 1

Client: Redside Const.
Address: PO Box 267
City, State, Zip: Port Gamble WA 98364 Tel:
Reports To (PM): Dan Roesler Fax:

Project Name: Northlake Ship Yard
Location: 1441 N. Lake Way Seattle WA
Collected by: Dan Roesler
Email: dan@redside.biz Project No: R32-13

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix)* | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals** (6020 / 200.8) | Total (T) \| Dissolved (D) | Anions (IC)*** | EDB (8011) | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 3-19-14 | 10:02AM | | | | | | | | | | | X | D | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 3-19-14 10:04 AM | x | 3/19/14 10:04 |
| Relinquished | Date/Time | Received | Date/Time |
| x | | x | |

Special Remarks:

TAT -> SameDay^ NextDay^ 2 Day 3 Day STD
^Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

**Redside Construction**
Dan Roesler
PO Box 264
Port Gamble, WA 98364

**RE: Northlake Dredging**
**Lab ID: 1403281**

April 02, 2014

**Attention Dan Roesler:**

Fremont Analytical, Inc. received 1 sample(s) on 3/26/2014 for the analyses presented in the following report.

***Dissolved Metals by EPA Method 200.8***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

M. Clements

Michelle Clements
Sr. Chemist / Lab Manager

**Date:** *04/02/2014*

**CLIENT:** Redside Construction
**Project:** Northlake Dredging
**Lab Order:** 1403281

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
|---|---|---|---|
| 1403281-001 | Northlake | 03/26/2014 11:40 AM | 03/26/2014 11:40 AM |

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

# Case Narrative

WO#: **1403281**
Date: **4/2/2014**

**CLIENT:** Redside Construction
**Project:** Northlake Dredging

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

# Analytical Report

WO#: **1403281**
Date Reported: **4/2/2014**

**Client:** Redside Construction
**Collection Date:** 3/26/2014 11:40:00 AM
**Project:** Northlake Dredging
**Lab ID:** 1403281-001
**Matrix:** Water
**Client Sample ID: Northlake**

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **Dissolved Metals by EPA Method 200.8** | | | | Batch ID: 7035 | | Analyst: MC |
| Arsenic | 2.49 | 1.00 | | µg/L | 1 | 4/2/2014 12:18:05 AM |
| Copper | 5.58 | 0.500 | | µg/L | 1 | 4/2/2014 12:18:05 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required |
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

Fremont Analytical

**Date:** *4/2/2014*

**Work Order:** 1403281
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

| Sample ID: **MB-7035** | SampType: **MBLK** | Units: **µg/L** | Prep Date: **4/1/2014** | RunNo: **13371** |
|---|---|---|---|---|
| Client ID: **MBLKW** | Batch ID: **7035** | | Analysis Date: **4/1/2014** | SeqNo: **269501** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1.00 | | | | | | | | | |
| Copper | ND | 0.500 | | | | | | | | | |

| Sample ID: **LCS-7035** | SampType: **LCS** | Units: **µg/L** | Prep Date: **4/1/2014** | RunNo: **13371** |
|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **7035** | | Analysis Date: **4/1/2014** | SeqNo: **269502** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 89.8 | 1.00 | 100.0 | 0 | 89.8 | 85 | 115 | | | | |
| Copper | 91.1 | 0.500 | 100.0 | 0 | 91.1 | 85 | 115 | | | | |

| Sample ID: **1403281-001ADUP** | SampType: **DUP** | Units: **µg/L** | Prep Date: **4/1/2014** | RunNo: **13371** |
|---|---|---|---|---|
| Client ID: **Northlake** | Batch ID: **7035** | | Analysis Date: **4/2/2014** | SeqNo: **269504** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.36 | 1.00 | | | | | | 2.489 | 5.32 | 30 | |
| Copper | 6.12 | 0.500 | | | | | | 5.580 | 9.18 | 30 | |

| Sample ID: **1403281-001AMS** | SampType: **MS** | Units: **µg/L** | Prep Date: **4/1/2014** | RunNo: **13371** |
|---|---|---|---|---|
| Client ID: **Northlake** | Batch ID: **7035** | | Analysis Date: **4/2/2014** | SeqNo: **269505** |

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 461 | 1.00 | 500.0 | 2.489 | 91.6 | 70 | 130 | | | | |
| Copper | 455 | 0.500 | 500.0 | 5.580 | 89.9 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

**Date:** *4/2/2014*

**Work Order:** 1403281
**CLIENT:** Redside Construction
**Project:** Northlake Dredging

# QC SUMMARY REPORT

## Dissolved Metals by EPA Method 200.8

Sample ID: **1403281-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **4/1/2014** RunNo: **13371**
Client ID: **Northlake** Batch ID: **7035** Analysis Date: **4/2/2014** SeqNo: **269506**

| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 471 | 1.00 | 500.0 | 2.489 | 93.7 | 70 | 130 | 460.6 | 2.28 | 30 | |
| Copper | 459 | 0.500 | 500.0 | 5.580 | 90.6 | 70 | 130 | 455.1 | 0.776 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | D | Dilution was required | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | ND | Not detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | RL | Reporting Limit | S | Spike recovery outside accepted recovery limits |

# Sample Log-In Check List

| | | | |
|---|---|---|---|
| Client Name: | **REDSID** | Work Order Number: | **1403281** |
| Logged by: | **Chelsea Ward** | Date Received: | **3/26/2014 11:40:00 AM** |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | How was the sample delivered? | Client | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 3. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| | **Sample received straight from field.** | | | |
| 4. | Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| 5. | Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Required ☑ |
| 6. | Was an attempt made to cool the samples? | Yes ☐ | No ☐ | NA ☑ |
| 7. | Were all coolers received at a temperature of >0°C to 10.0°C | Yes ☐ | No ☐ | NA ☑ |
| 8. | Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 9. | Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 10. | Are samples properly preserved? | Yes ☑ | No ☐ | |
| 11. | Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 12. | Is the headspace in the VOA vials? | Yes ☐ | No ☐ | NA ☑ |
| 13. | Did all samples containers arrive in good condition(unbroken)? | Yes ☑ | No ☐ | |
| 14. | Does paperwork match bottle labels? | Yes ☑ | No ☐ | |
| 15. | Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 16. | Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 17. | Were all holding times able to be met? | Yes ☑ | No ☐ | |

## Special Handling (if applicable)

| | | | | |
|---|---|---|---|---|
| 18. | Was client notified of all discrepancies with this order? | Yes ☐ | No ☐ | NA ☑ |

| | | | |
|---|---|---|---|
| Person Notified: | | Date: | |
| By Whom: | | Via: | ☐ eMail ☐ Phone ☐ Fax ☐ In Person |
| Regarding: | | | |
| Client Instructions: | | | |

19. Additional remarks:

**Item Information**

# Fremont Analytical

## Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1403281

Date: 3-26-14

Page: 1 of: 1

Client: Redside Construction
Address: PO Box 267
City, State, Zip: Port Gamble WA Tel: 9033H
Reports To (PM): Dan Roesler Fax:

Project Name: Northlake Dredging
Location: 1441 N. Lake Wy
Collected by: Dan Roesler
Email: dan@redside.biz Project No: R3213

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

| | Sample Name | Sample Date | Sample Time | Sample Type (Matrix)* | VOC (EPA 8260) | GX/BTEX | BTEX | Gasoline Range Organics (GX) | Hydrocarbon Identification (HCID) | Diesel/Heavy Oil Range Organics (DX) | SEMI VOL (EPA 8270) | PAH (EPA 8270 - SIM) | PCBs (EPA 8082) | Metals** (6020 / 200.8) | Total (T) \| Dissolved (D) | Anions (IC)*** | EDB (8011) | Comments/Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Northlake | 3/26/14 | 11:40 AM | | | | | | | | | | | M | D | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Special Remarks:

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

| Relinquished | Date/Time | Received | Date/Time |
|---|---|---|---|
| x Dan Roesler | 3/26/14 11:40 AM | x | 3/26/14 11:40 |
| x | | x | |

TAT -> SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator