PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT FOR THE MCBETH SITE (APN 141-222-07) LOCATED AT 23 ALDER LANE, KLAMATH GLEN, CALIFORNIA

Prepared for:
Mr. Ray Martell
Yurok Tribe Environmental Program
190 Klamath Boulevard
Klamath, California 95548

October 16, 2012

Prepared by:
Stan Thiesen and Orrin Plocher

of

Freshwater Environmental Services

78 Sunny Brae Center
Arcata, California 95521
Phone (707) 839-0091

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR THE MCBETH SITE (APN 141-222-07)
LOCATED AT 23 ALDER LANE, KLAMATH GLEN, CALIFORNIA

Prepared for:
Mr. Ray Martell
Yurok Tribe Environmental Program
190 Klamath Boulevard
Klamath, California 95548

October 16, 2012

Prepared by:
Stan Thiesen and Orrin Plocher of

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, California 95521
Phone (707) 839-0091

Stan Thiesen
P.G. No. 7990

Orrin Plocher
Geologist

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

DISTRIBUTION LIST

Ray Martell, Assistant Director - Pollution Prevention
Yurok Tribe Environmental Program
190 Klamath Boulevard
Klamath, California 95548

Kathleen Sloan, Ph.D., Program Director
Yurok Tribe Environmental Program
190 Klamath Boulevard
Klamath, California 95548

Stan Thiesen, Freshwater Environmental Services
78 Sunny Brae Center
Arcata, California 95521

Glenn Kistner
Brownfields Coordinator
Brownfields & Site Assessment Section
USEPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Eugenia E. McNaughton, Ph.D.
Quality Assurance Office, US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

ACRONYMS AND ABBREVIATIONS

ASTM	American Society for Testing and Materials
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Cleanup, and Liability Act
CFR	Code of Federal Regulations
CHHSL	California Human Health Screening Levels
CLP	Contract Laboratory Program
CWA	Clean Water Act
DQA	Data quality assessment
DQI	Data quality indicators
DQO	Data quality objectives
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Levels
FEMA	Federal Emergency Management Agency
FES	Freshwater Environmental Services
FSP	Field sampling plan
GPS	Global Positioning System
GIS	Geographic Information System
GC/MS	Gas chromatography and mass spectrometry
IDW	Investigation-derived waste
IRIS	Integrated Risk Information System (USEPA)
LCS/LCSD	Laboratory control sample and laboratory control sample duplicates
MDL	Method detection limit
MPC	Measurement Performance Criteria
MQO	Measurement quality objective
MS/MSD	Matrix spike and matrix spike duplicate
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NRCS	Natural Resource Conservation Service
PARCCS	Precision, accuracy, representativeness, completeness, comparability, and sensitivity
PE	Performance evaluation
PRG	Preliminary remediation goal
PRQL	Project-required quantitation limit
QA	Quality assurance
QA/QC	Quality assurance/quality control
QAPP	Quality assurance project plan
QC	Quality control
QL	Quantitation limit
RCRA	Resource Conservation and Recovery Act
RPD	Relative percent difference
RSls	Residential Screening Levels
%R	Percent recovery
SAP	Sampling and analysis plan (an integrated FSP and QAPP)
SOP	Standard operating procedures
SOW	Statement of work
SVOC	Semi-volatile organic compound

USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
USGS	United States Geological Survey
VOC	Volatile organic compound

1.0 INTRODUCTION

Freshwater Environmental Services (FES) has prepared this report of findings for the Phase II Environmental Site Assessment (ESA) at 23 Alder Lane near Klamath Glen in Del Norte County, California (APN 141-222-07) (the Site or Subject Property). The Site location is shown on Figure 1.

This report conforms to the process and principles recommended in the *Standard Guide for Environmental Assessments: Phase II Environmental Site Assessment Process*, E-1903, (ASTM, 2002). This report documents the soil sampling performed at the Site. The location of the parcel that contains the Site is shown on Figure 1, Figure 2, and Figure 3.

The primary objectives of this Phase II ESA were to assess and evaluate the recognized environmental conditions identified in the Phase I ESA conducted by the Yurok Tribe Environmental Program (YTEP) dated August 2, 2010 (YTEP, 2010), and to provide sufficient information regarding the presence or absence of contamination at the Site (ASTM, 2002). The scope of work developed by FES for this assessment was based on the findings of the Phase I ESA and the addendum to the Phase I ESA (YTEP, 2012). The following Recognized Environmental Conditions (RECs) were identified in the Phase I ESA:

- Former use of the Subject Property as a residence revealed partially uncovered fragments of a former septic tank. This is the remnants of a septic system that was unearthed and destroyed in the 1964 flood.
- Former use of the Subject Property for illegal dumping, including tires, household paints, solid wastes, auto batteries, abandoned vehicles, engine parts, contaminated oil and household appliances.
- Former use of the Subject Property as a squatter's camp with a campfire ring.

Because there was no evidence of contamination from the septic system it was determined that this was actually a de minimus condition and was not investigated. The former use of the Subject Property as a squatter's camp was also determined to be a de minimus condition and was not investigated.

The possible presence of polychlorinated biphenyls (PCBs) and mercury were investigated even though these were not listed as RECs in the Phase I. Offsite transformers may have leaked PCBs and the PCBs could have been transported to the Site during floods. Historical upstream mining activity is known to have used mercury which may have been transported down stream to the Site during floods.

The principal study questions are whether the Site contains contaminated soils above concentrations regarded as safe for use of the Site resulting from:

- Illegal dumping;
- Contamination from mercury related to upstream mining activity; and
- PCBs from transformers.

2.0 SITE BACKGROUND

The Site is a former residential property located approximately 1,300 feet northeast of the Klamath River near Klamath Glen, Del Norte County, California. The parcel (APN 141-222-07) is approximately 50 feet wide by 100 feet long with an area of approximately 5,000 square feet. The Site is located in the former McBeth Subdivision which was created prior to the December 1964 flood event. The parcel map obtained from ParcelQuest is shown on Figure 4. The parcel is owned by the Yurok Tribe.

The Site occupies approximately 5,000 square feet on a vacant lot in the former McBeth Subdivision. The Site is vegetated with scattered trees, brush, and grass. The lots on three sides of the Site have similar vegetation. The access road (Alder Lane) is present on the northern border of the Subject Property. The Site has been cleaned up by the Yurok Tribe and is almost entirely free of debris and trash. Some pieces of concrete and iron pipe are present.

The only investigation of the Subject Property has been a Phase I ESA, (YTEP, 2010) and addendum to the Phase I ESA (YTEP, 2012) performed for the EPAs Brownfields Program. The Yurok Tribe Environmental Program is not aware of any previous sampling efforts at the Subject Property.

3.0 SITE GEOLOGY AND HYDROLOGY

The Subject Property has an elevation of approximately 40 feet above mean sea level based on the United States Geological Survey (USGS) 10-meter Digital Elevation Model. The topography in the area around the Subject Property is relatively flat with a slight slope towards the Klamath River which at its closest point is approximately 1,300 feet to the southwest. Based on data obtained from the Natural Resource Conservation Service (NRCS), the average annual precipitation at the Site is approximately 71 inches. The Site is not within the tsunami hazard zone based on the March 30, 2009 maps (1:24,000) issued by the California Emergency Management Agency. The Subject Property is within the 100-year floodplain as shown on the Flood Insurance Rate Map dated November 26, 2010 produced by the Federal Emergency Management Agency (FEMA).

The Subject Property is shown on the "Geologic Map of the Weed Quadrangle, California" (Wagner and Saucedo, 1987) as being within an area of Quaternary Alluvium. The nearest fault zoned as active (within the last 11,000 years) under the Alquist-Priolo Earthquake Fault Zoning Act, is approximately 30 miles to the south-southwest of the Subject Property. The Surpur Creek Fault is shown on the California Geological Survey Map (Geologic Data Map No. 6 by Jennings and Bryant) as being present within approximately ½ mile of the Site. The Surpur Creek Fault is shown on the map as probably active within the last 1.6 million years.

There was no easily accessible data describing the soils at the Subject Property. There are no stream channels or areas of concentrated runoff within the Subject Property. The nearest surface water is the Klamath River which at its closest point is approximately 1,300 feet to the southwest of the Site. There is an earthen berm approximately 630 feet to the northwest of the Site which was built to protect the small town of Klamath Glen from flooding. The Subject Property is located between the berm and the Klamath River. There is a small airport known as the Andy McBeth Airport located between the Subject Property and the berm. The airport is maintained by Del Norte County.

The borings at the Site encountered mostly sand and silty sand up to a depth of approximately 0.25 feet. These sands and silty sands probably represent river sediments deposited during lower velocity flows. Just below the sands and silty sands the sediments consisted of mostly gravel that appeared to be higher velocity river channel deposits.

4.0 SAMPLING METHODS AND ANALYSIS

4.1 Field Methods

The Yurok Tribe Environmental Program was responsible for determining whether subsurface utilities were present at the Site in the areas where borings were to be advanced. YTEP also completed a Cultural Resources Management Permit Application to ensure that the project would have no impact to cultural resources. Soil borings were advanced to a maximum depth of approximately 0.5 feet below ground surface (bgs). The soil borings were advanced using a shovel. Boring logs were prepared for each boring and are included in Appendix C.

4.2 Soil Sampling

Soil samples were collected in the vicinity of the Site where YTEP indicated that the worst of the dumping had occurred. Two soil samples, McBeth-1 and McBeth-5 were collected in this area from depth intervals of 0.08 to 0.25 feet bgs. McBeth-5 was co-located (field duplicate from the same boring and same depth interval) for quality control.

Soil samples were collected at three other locations (McBeth-2, McBeth-3, and McBeth-4) within the boundaries of the Subject Property to determine if PCBs or mercury were present in the soil. These samples were collected from the same depth interval of 0.08 to 0.25 feet bgs and were laboratory-homogenized and composited.

The approximate sample locations are shown on Figure 5.

4.3 Chemical Analysis Methods

The samples were analyzed by North Coast Laboratories, Ltd. (North Coast) of Arcata, California, Calscience Environmental Laboratories, Inc. (Calscience) of Garden Grove, California, and TestAmerica of West Sacramento, California. North Coast subcontracted the soil samples for VOC analysis to Calscience because they were experiencing problems with their instruments. TestAmerica conducted the PCB analyses. All of these laboratories are certified by the California Department of Public Health for the requested analyses.

4.4 Modifications to the Approved Sampling and Analysis Plan

Because of conditions in the field there were some modifications to the Sampling and Analysis Plan (SAP). These modification included:

- The sample locations proposed in the SAP were different from the actual sample locations for three of the four samples (McBeth-1 through McBeth-3). The sample location for McBeth-1 was determined in the field by YTEP based on their knowledge of where most of the dumping took place. The sample locations for McBeth-2 and McBeth-3 were located further to the southeast because there was uncertainty about the location of the parcel boundaries.

- The SAP indicated that the samples would be collected from a depth interval of approximately 0.0 to 0.5 feet. Because of the presence of significant amounts of organic material and roots from the surface to approximately 0.08 feet bgs the samples were collected from a depth interval of approximately 0.08 to 0.25 feet. Below approximately 0.25 feet bgs gravel and some cobbles were encountered which were considered to be less likely to retain contaminants that may have been present at the surface.

- The samples analyzed for VOCs and gasoline by Calscience did not include matrix spikes or matrix duplicates as requested on the chain-of-custody.

- The samples analyzed for PCBs by TestAmerica did not include matrix spikes or matrix duplicates because they were inadvertently not requested on the chain-of-custody.

5.0 CHEMICAL ANALYSIS RESULTS

5.1 Soil Analytical Results

The laboratory analytical reports are included in Appendix C. Results for soil samples with analytes detected at concentrations above the detection limits are provided in the table below. There were no detections of any other analytes in the soil samples.

SUMMARY OF CHEMICAL CONCENTRATIONS IN SOIL SAMPLES FROM THE JULY 10, 2012 SAMPLING EVENT

Sample ID	Date	TPH-Gas (mg/kg)	Toluene (mg/kg)	p-Isopropyltoluene (mg/kg)	As (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Zn (mg/kg)
	Residential Screening Level	83	5,000	NA	22	2,500	3,100	400	1,600	23,000
McBeth-1-(0.08'-0.25')	7/10/12	0.14	<0.0011	<0.0011	3.0	94	39	4.8	130	47
McBeth-2-(0.08'-0.25')	7/10/12	--	--	--	--	--	--	--	--	--
McBeth-3-(0.08'-0.25')	7/10/12	--	--	--	--	--	--	--	--	--
McBeth-4-(0.08'-0.25')	7/10/12	--	--	--	--	--	--	--	--	--
McBeth-5-(0.08'-0.25') (Duplicate of McBeth-1-(0.08'-0.25')	7/10/12	0.20	0.0017	0.0019	2.9	82	35	5.3	120	43

NOTES: There were no detections of TPH-D/MO, cadmium, mercury, PCBs, or any VOCs other then those shown above in any of the samples.

Screening Levels: Sources of screening levels are included in Table 1.

mg/kg: Milligrams per kilogram

TPH: Total Petroleum Hydrocarbon

--: Not analyzed

NA: Not Applicable

6.0 DATA QUALITY EVALUATION

6.1 Review of Laboratory Reports

The laboratory analytical reports are included in Appendix C. FES reviewed the laboratory analytical reports to determine if there were any data quality issues.

North Coast Laboratories (TPH-D/MO and Metals)

North Coast conducted the analyses for TPH-D/MO and metals. There were no detections in the method blanks. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate were within acceptable recovery limits and within relative percent difference limits. There was no matrix spike duplicate for TPH-D/MO. Based on the above information all of the North Coast results were considered acceptable.

Calscience (TPH-Gasoline and VOCs)

Calscience conducted the analyses for TPH-G and VOCs. There were no detections in the method blanks. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. No matrix spike or matrix spike duplicate were prepared although they were requested on the chain-of-custody. Based on the above information all of the Calscience results were considered acceptable.

TestAmerica (PCBs)

TestAmerica conducted the analyses for PCBs. There were no detections in the method blanks. The laboratory control sample was within acceptable recovery limits. TestAmerica did not prepare a laboratory control sample duplicate. No matrix spike or matrix spike duplicate were prepared as they were inadvertently not requested on the chain-of-custody. Based on the above information all of the TestAmerica results were considered acceptable.

6.2 Assessment of Field Variability of Co-Located Soil Samples

One co-located soil sample was collected for this project. The sample results are shown in the table below. There were no detections above the reporting limits for TPH-D/MO, cadmium, mercury, or PCBs so these analytes are not included in the table. The relative percent differences (RPD) were calculated for the sample from McBeth-1 and the co-located sample McBeth-5. A RPD of 35% or less is generally considered acceptable for soil samples. The RPDs are shown in the table below. The highest RPD was for TPH-Gas at 35.3%. The RPD values for arsenic, chromium (total), copper, lead, nickel, and zinc ranged from 3.4% to 13.6%.

SUMMARY OF CHEMICAL CONCENTRATIONS IN THE CO-LOCATED SOIL SAMPLE FROM THE JULY 10, 2012 SAMPLING EVENT

Sample ID	Date	TPH-Gas (mg/kg)	Toluene (mg/kg)	p-Isopropyltoluene (mg/kg)	As (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Zn (mg/kg)
	Residential Screening Level	83	5,000	NA	22	2,500	3,100	400	1,600	23,000
McBeth-1-(0.08'-0.25')	7/10/12	0.14	<0.0011	<0.0011	3.0	94	39	4.8	130	47
McBeth-5-(0.08'-0.25') (Duplicate of McBeth-1-(0.08'-0.25')	7/10/12	0.20	0.0017	0.0019	2.9	82	35	5.3	120	43
Relative Percent Difference McBeth-1 and McBeth-5		**35.3%**	**NA**	**NA**	**3.4%**	**13.6%**	**10.8%**	**9.9%**	**8.0%**	**8.9%**

NOTES: There were no detections of TPH-D/MO, cadmium, mercury, PCBs, or any VOCs other then those shown above in any of the samples.
Screening Levels Sources of screening levels are included in Table 1.
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbon

6.3 Equipment Blanks

No equipment blanks were collected because the samples were collected from the surface with no contact between the equipment and the soil collected for the sample.

6.4 Investigation Derived Wastes

All solid investigation derived wastes were placed back in the holes where they were collected. All of the samples were collected from depths of less than 0.5 feet. Water used for decontamination was poured on the ground in the area near each boring.

7.0 MEASUREMENT QUALITY OBJECTIVES (MQOs)

Data assessment criteria are used to evaluate the quality of the field sampling and laboratory performance for the sampling event, and are expressed in terms of analytical precision, accuracy, representativeness, completeness, and comparability, which are described below.

7.1 Precision

Precision is the degree of mutual agreement between or among independent measurements of a similar property usually reported as relative percent difference (RPD). This indicator relates to the analysis of duplicate laboratory samples, duplicate matrix spikes, and field duplicates. An RPD of <20% for water and <35% for soil, depending upon the chemical being analyzed is generally considered acceptable.

RDPs for the co-located soil samples ranged from 3.4% to 35.3%. Although the maximum RPD slightly exceeds the maximum target RPD, given the relatively coarse grained nature of the soils samples resulting in gross heterogeneity this is considered an acceptable level of precision.

Laboratory precision was assessed using laboratory control samples and laboratory control sample duplicates (LCS/LCSD) and matrix spikes and matrix spike duplicates (MS/MSD). Precision was expressed in terms of RPD between the values resulting from duplicate analysis. RPDs for all laboratory analysis were within acceptable ranges for the specific analytical techniques.

7.2 Accuracy/Bias

Accuracy is the degree of agreement of a measurement with a known or true value. To determine accuracy, a laboratory value was compared to a known or true concentration. Accuracy for this project was determined by laboratory control samples and laboratory control sample duplicates and matrix spikes and matrix spike duplicates. Accuracy is expressed as a bias (high or low) and is determined by calculating percent recovery (%R) from MSs/MSDs and LCSs/LCSDs.

LCS %Rs indicates accuracy relevant to an analytical batch lot and is a measure of analytical accuracy conditions independent of samples and matrices. MS/MSD and surrogate spike %Rs indicate accuracy relevant to a unique sample matrix. The %R of an analyte, and the resulting degree of accuracy expected for the analysis of spiked samples, are dependent upon the sample matrix, method of analysis, and the compound or element being measured. The concentration of the analyte relative to the detection limit of the method also is a significant factor in determining the accuracy of the measurement.

QC samples that were used in this investigation to measure accuracy/bias include the following:

- Matrix spikes - To monitor sample preparation/analysis methodology, as well as, to represent the actual sample matrix itself; and

- Standard reference materials and/or laboratory control samples to monitor sample preparation/analysis methodology and often of a similar media (such as water, soil, sediment) as the field samples.

Almost all laboratory matrix spikes and laboratory control samples have %Rs that are within the range of acceptance criteria (80 percent to 120 percent for LCSs). There were two sample matrix spikes with %Rs of less than 80%. The %R for nickel was 76.0% and the %R for chromium was 78.5%. The laboratory considers %Rs between 70% and 130% acceptable.

7.3 Representativeness

Representativeness is the expression of the degree to which data accurately and precisely represent a characteristic of an environmental condition or a population. It relates both to the area of interest and to the method of taking the individual sample. The principal study questions for this project are whether the Site contains contaminated soils above concentrations regarded as safe for reuse of the Site resulting from:

- Illegal dumping;
- Contamination from mercury related to upstream mining activity; and
- PCBs from transformers.

This project collected judgmental samples in areas that the Phase I identified as the most likely to contain contaminants and from three other locations that were not known to have been areas likely to be contaminated.

Factors that affect representativeness include:

- Use of appropriate sampling procedures, including equipment and equipment decontamination and sample holding temperatures;
- Use of appropriate analytical methods for the required parameters and project reporting limits; and
- Analysis of samples within the required holding times,

The portion of each collected sample that was chosen for analysis also affects sample representativeness. The laboratory adequately and appropriately homogenized all samples prior to taking aliquots for analysis to ensure that the reported results were representative of the sample received.

This investigation used sampling and analytical methods for ensuring the data collected reflects the environmental conditions in the areas sampled. To further ensure the representativeness of the data collected, chain-of-custody procedures, sample preservation, and maximum sample holding times were followed.

QC samples that were used in this investigation to quantitatively measure representativeness included the use of temperature blanks. The temperatures were recorded upon receipt of the samples by the laboratories to serve as a QC check for temperature-related sample preservation. All samples were received within the acceptance criteria for samples requiring preservation at 4°C +/- 2°C.

A qualitative measure of representativeness included verification that documented sample collection and analytical methods (including sample handling, chain-of-custody procedures, sample preservation, and sample holding times protocols) were followed to ensure that the data reflects the environmental conditions. Errors were made on the chain-of-custody that resulted in the omission of requests for matrix spikes and matrix spike duplicates for PCBs. No MS and MSDs were performed on the samples that were sent to Calscience by North Coast for TPH-Gas and VOC analyses even though they were requested on the chain-of-custody.

7.4 Comparability

Comparability expresses the confidence with which one dataset can be compared to another. The use of methods from EPA or "Standard Methods" or from some other recognized sources allows the data to be compared facilitating evaluation of trends or changes at a site. Comparability also refers to the reporting of data in comparable units so direct comparisons are simplified. Comparability during analysis is dependent upon analytical methods, detection limits, laboratories, units of measure, and sample preparation procedures. Comparability is determined on a qualitative rather than quantitative basis. For this project, comparability of all data collected was ensured by adherence to standard sample collection procedures, standard field measurement procedures, and standard analysis and reporting methods, including consistent units.

7.5 Completeness

Completeness is expressed as percent of valid usable data actually obtained compared to the amount that was expected.

A total of four soil samples (excluding co-located samples) were collected from the four locations. The Sampling and Analysis Plan called for the collection of four soil samples from four locations. The percent completeness is 100% based on the number of samples planned, versus the number of samples analyzed.

7.6 Sensitivity

Laboratory methods utilized in the assessment were sensitive enough to be able to quantify the parameters of concern at or below the regulatory standards.

8.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Illegal Dumping Area

Sample Location Descriptions
Two samples, McBeth-1-(0.08'-0.25') and McBeth-5-(0.08'-0.25') were collected from the area where YTEP indicated that most of the illegal dumping occurred. McBeth-5-(0.08'-0.25') was a co-located duplicate of McBeth-1-(0.08'-0.25').

Discussion
There were no detections of TPH-D/MO, cadmium, mercury and PCBs in the two samples. All of the other analytes were below the screening levels shown in the tables in Section 5.1, and in Table 1. TPH-Gasoline was detected in both of the samples at concentrations of 0.14 mg/kg and 0.20 mg/kg. The screening level for TPH-Gasoline is 83 mg/kg.

All of the metal detections except for nickel were within or below the background concentrations as shown on the maps in USGS Professional Paper 1648 (USGS, 2001). The concentrations of nickel in the two samples were 130 mg/kg and 120 mg/kg which exceed the background concentration of approximately 40 mg/kg to 47 mg/kg (USGS, 2001). The screening level for nickel for this project was 1,600 mg/kg.

Conclusion
None of the analytes for this project exceeded the screening levels. The detections of TPH-Gasoline are well below the screening level. The detections of nickel appear to be above background levels but are well below the screening level.

Recommendations
There are no recommendations for further sampling at the Site.

Human Risk
The analytes that were detected in the soil samples from the Site were well below the screening levels and are not considered to contribute to human risk from the Site.

Ecological Risk
The analytes that were detected in the soil samples from the Site were well below the screening levels and are not considered to contribute to ecological risk from the Site. There are no listings of threatened, endangered or candidate species for the Klamath Glen 7.5-minute USGS Topographic Map that includes the Site.

8.2 Principal Study Questions

The principal study questions are whether the Site contains contaminated soils above concentrations regarded as safe for reuse of the Site resulting from:

- Illegal dumping;
- Contamination from mercury related to upstream mining activity; and
- PCBs from transformers.

This assessment has concluded that the Site does not contain contaminated soils resulting from former use as an illegal dumpsite above concentrations regarded as safe for reuse of the Site. The assessment has also concluded that the Site does not contain soils contaminated by mercury or PCBs.

9.0 REFERENCES

ASTM E1903 – 97, 2002, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*.

California Environmental Protection Agency, 2005, *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*, January 2005.

California Regional Water Quality Control Board San Francisco Bay Region, 2008, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, INTERIM FINAL- November 2007 (Revised May 2008)*.

Central Valley Regional Water Quality Control Board, 2008, *A Compilation of Water Quality Goals,* July 2008.

USEPA, 2012, *Regional Screening Level (RSL) Resident Soil Table*, May.

U.S. Geological Survey, 2001, *Professional Paper 1648, Geochemical Landscapes of the Conterminous United States - New Map Presentations for 22 Elements*.

Wagner and Saucedo, 1987, *Geologic Map of the Weed Quadrangle, California*, California Division of Mines and Geology.

Yurok Tribe Environmental Program, 2010, *Phase I Environmental Site Assessment Report for the McBeth Site, (APN 141-222-07) Located on 23 Alder Lane, Klamath, California*, August 2.

TABLES

TABLE 1
SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES
MCBETH SITE
Del Norte County, California

		TPH-D/MO (EPA 8015B) (with silica gel)		TPH-Gas/VOCs (EPA 8260)			Arsenic, Cadmium, Lead (EPA 6020) Chromium, Copper, Nickel, Zinc (EPA 6010B) Mercury (EPA 7471A)								PCBs (EPA 8082)
	Date Sampled	TPH-Diesel (mg/kg)	TPH-Motor Oil (mg/kg)	TPH-Gasoline (mg/kg)	Toluene (mg/kg)	p-Isopropyltoluene (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)	PCBs (mg/kg)
Sample ID	Residential Screening Level	83 [a]	370 [a]	83 [a]	5,000 [b]	NA	22 [b]	1.7 [c]	2,500 [a]	3,100 [a]	400 [b]	10 [b]	1,600 [c]	23,000 [b]	1.1 to 3.9 [b]
McBeth-1-(0.08'-0.25')	10-Jul-12	<1.0	<10	0.14	<0.0011	<0.0011	3.0	<1.0	94	39	4.8	<0.10	130	47	<0.044
McBeth-2-3-4-Composite	10-Jul-12	--	--	--	--	--	--	--	--	--	--	<0.10	--	--	<0.048
McBeth-5-(0.08'-0.25') [1]	10-Jul-12	<1.0	<10	0.20	0.0017	0.0019	2.9	<1.0	82	35	5.3	<0.10	120	43	<0.048

Notes:

All samples analyzed for TPH-Diesel/Motor Oil were subjected to a silica gel cleanup.

Samples analyzed for TPH-Gasoline were also analyzed for an extended list of VOCs. Only those analytes with detections are included in this table.

-- Not analyzed.

mg/kg milligrams per kilogram or parts per million

[a] Table A Environmental Screening Levels (ESLs) Shallow Soils (<3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, November 2007, revised May 2008. The environmental screening level for TPH (residual fuels) was applied to motor oil.

[b] USEPA - Regional Screening Level (RSL) Resident Soil Table May 2012.

[c] California Environmental Protection Agency (CALEPA), Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, January 2005.

[1] Sample McBeth-5-(0.08'-0.25') is a duplicate of McBeth-1-(0.08'-0.25').

FIGURES

N
W E
S

Feet
0 500 1,000 2,000 3,000 4,000

LEGEND

Base Image Data Source:
1:24,000 Digital Raster Graph Mosaic of
Del Norte County, California

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

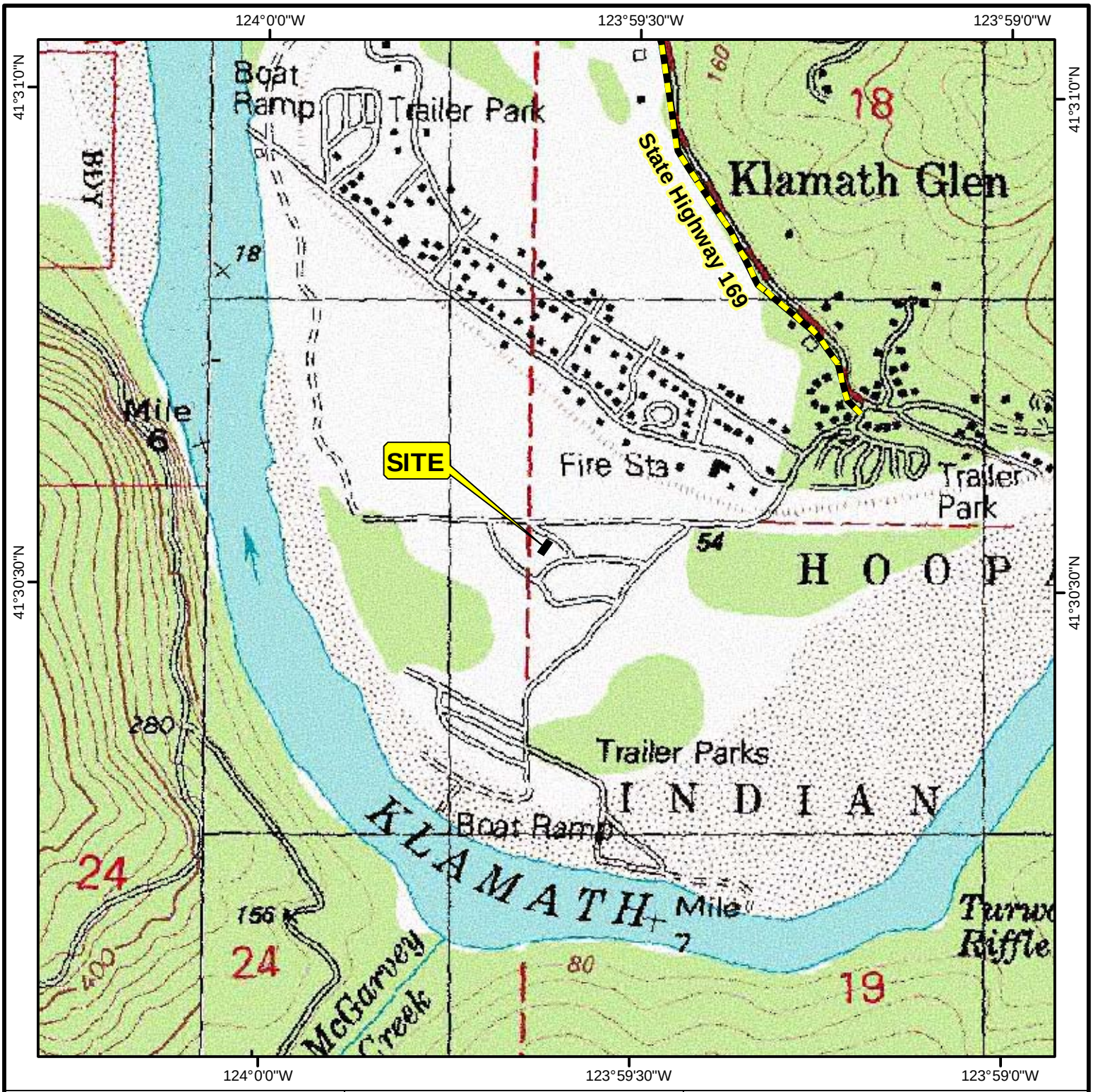
Figure 1

Site Location Map
23 Alder Lane
Klamath Glen, California

Freshwater Environmental Services

Date: 8-1-12

By: SJT



N
W E
S

Feet
0 200 400 800 1,200 1,600

LEGEND

Base Image Data Source:
1:24,000 Digital Raster Graph Mosaic of Del Norte County, California

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

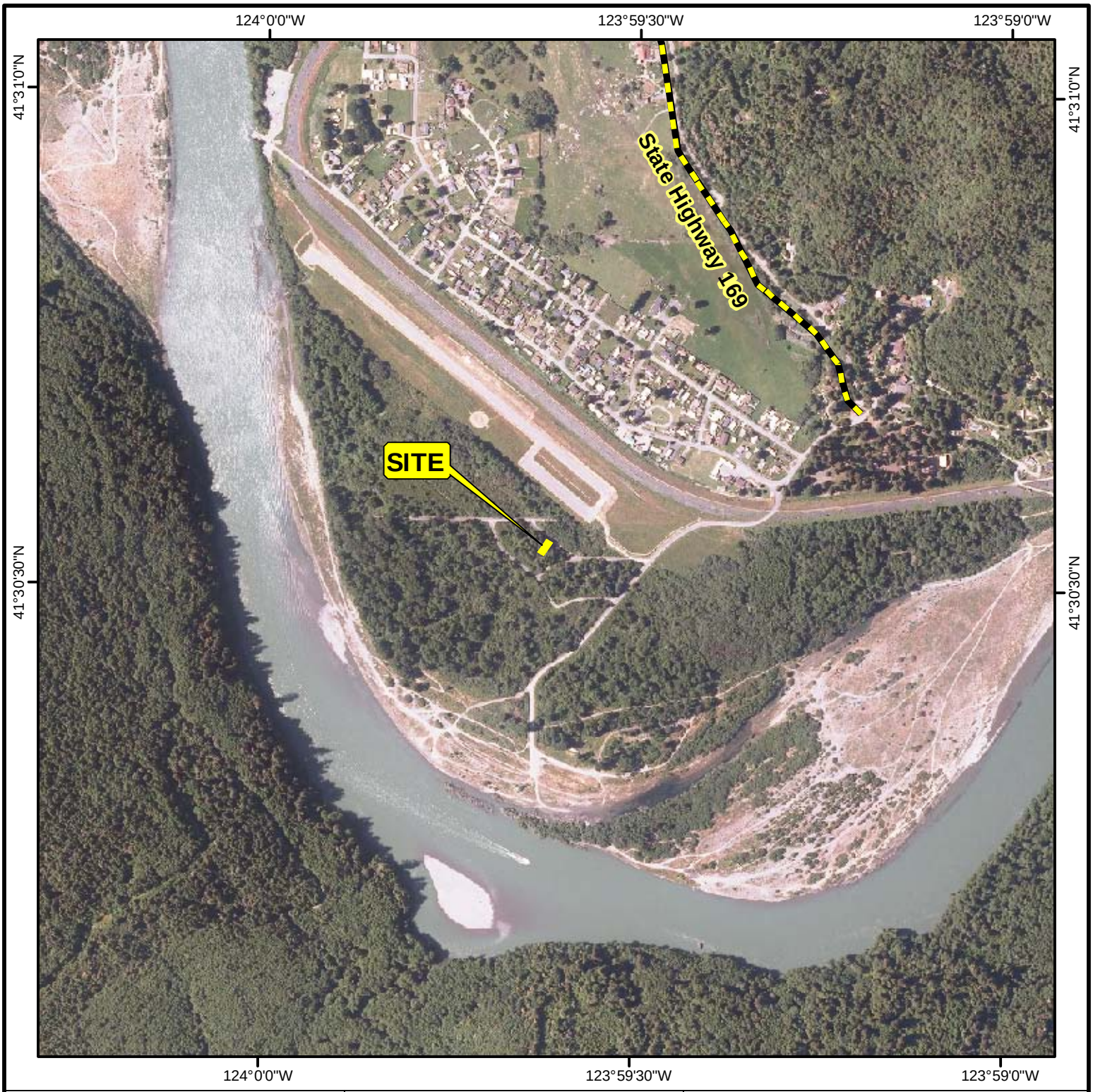
Figure 2

USGS 7.5' Topographic Map
23 Alder Lane
Klamath Glen, California

Freshwater Environmental Services

Date: 8-1-12

By: SJT



N
W E
S

Feet
0 200 400 800 1,200 1,600

LEGEND

Base Image Data Source:USDA-FSA Aerial Photography Field Office Color Digital Ortho Photo Quad, Image Date June 13, 2010.

ALL LOCATIONS APPROXIMATE

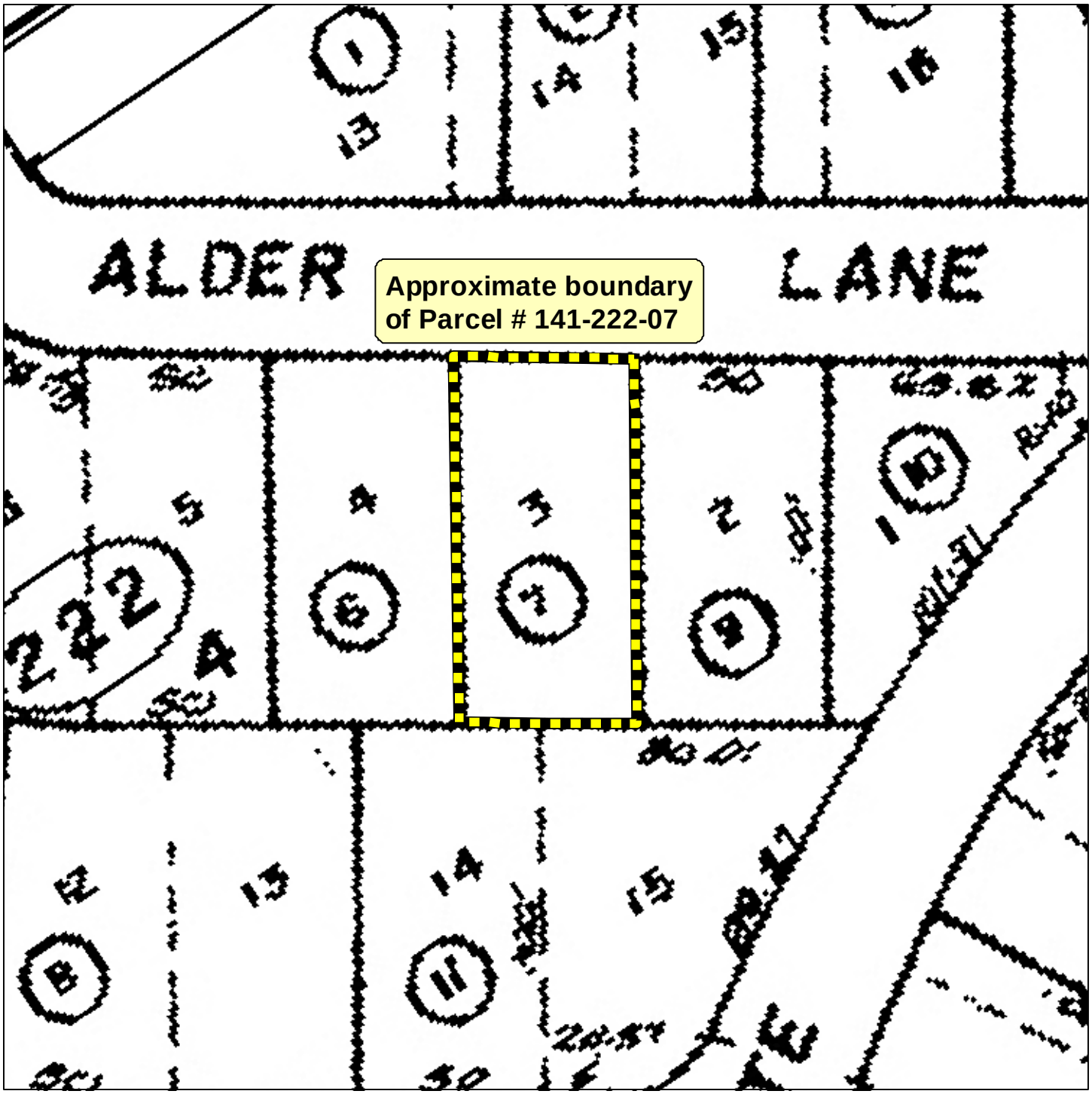
Yurok Tribe
Environmental Program

Figure 3
2010 Aerial Photograph
23 Alder Lane
Klamath Glen, California

Freshwater Environmental Services

Date: 8-16-12

By: SJT



N
E
W
S

Approximate Scale

Feet

0 10 20 40 60 80

LEGEND

Parcel map obtained from ParcelQuest.

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

Figure 4

Parcel Map APN: 141-222-07
23 Alder Lane
Klamath Glen, California

Freshwater Environmental Services

Date: 8-16-12

By: SJT

N
W E
S

Feet
0 25 50 100 150 200

LEGEND

GPS of sample locations collected by Yurok Tribe Environmental Program on July 10, 2012.
Base Image Data Source:USDA-FSA Aerial Photography Field Office Color Digital Ortho Photo Quad, Image Date June 13, 2010.
Parcel boundaries shapefile obtained from Del Norte County GIS Department
ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

Figure 5
Sample Locations
23 Alder Lane
Klamath Glen, California

Freshwater Environmental Services

Date: 8-16-12

By: SJT

APPENDIX A
Sample Location Photographs

Photo 1 (McBeth-1). Sample location for McBeth-1 looking west.
Image date: July 10, 2012.

Photo 2 (McBeth-1). Sample location for McBeth-1.
Image date: July 10, 2012.

Photo 3 (McBeth-2). Sample location for McBeth-2.
Image date: July 10, 2012.

Photo 4 (McBeth-3). Sample location for McBeth-3.
Image date: July 10, 2012.

Photo 5 (McBeth-4). Sample location for McBeth-4.
Image date: July 10, 2012.

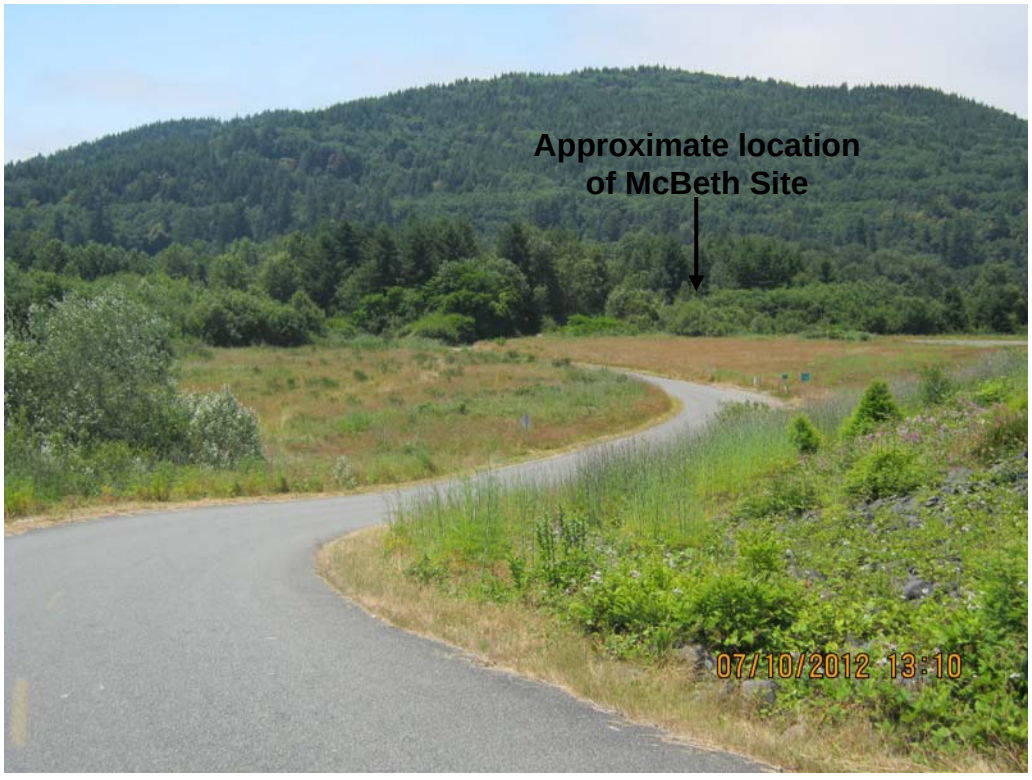


Photo 6 (McBeth Site). McBeth Site looking southwest from levee.
Image date: July 10, 2012.

APPENDIX B
Boring Logs

Log of Boring **McBeth-1**

Date Started: July 10, 2012
Date Completed: July 10, 2012

Driller: Freshwater Environmental Services
Drilling Method: Shovel

Recovery	Depth (ft)	Description	USCS	Remarks
	0			**Ground Surface**
100%	0.08	~25% roots and organic material, ~50% sand, very fine to coarse, subangular to subrounded, ~25% silt, moist, 10YR 4/1 (dark gray).	SM	
	0.17	~75% sand, very fine to coarse, subangular to subrounded, ~25% silt, moist, 10YR 4/1 (dark gray).	SM	**Soil Sample:** McBeth-1-(0.08'-0.25')
	0.25	~60% gravel, subangular to subrounded, ~40% sand, fine to medium, subangular to subrounded, moist, 10YR 4/1 (dark gray).	GP	
	0.33			
	0.42			**BOH ~ 0.42'**
	0.5			
	0.58			
	0.67			
	0.75			
	0.83			
	0.92			
	1.0			

Total Depth: ~ 0.42 feet

Freshwater Environmental Services

McBeth-1

Yurok Tribe Environmental Program
McBeth Site (APN 141-222-07)

Date: 8-5-12 | By: SJT

Log of Boring **McBeth-2**

Date Started: July 10, 2012
Date Completed: July 10, 2012

Driller: Freshwater Environmental Services
Drilling Method: Shovel

Recovery	Depth (ft)	Description	USCS	Remarks
	0			**Ground Surface**
100%	0.08	~55% sand, fine to medium, angular to subangular, ~40% roots and organic material, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	
	0.17	~95% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	**Soil Sample:** McBeth-2-(0.08'-0.25')
	0.25	~70% gravel, rounded to subrounded, ~25% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	GP	
	0.5			**BOH ~ 0.5'**
	0.58			
	0.67			
	0.75			
	0.83			
	0.92			
	1.0			

Total Depth: ~ 0.5 feet

Freshwater Environmental Services

McBeth-2

Yurok Tribe Environmental Program
McBeth Site (APN 141-222-07)

Date: 8-5-12 | By: SJT

Log of Boring **McBeth-3**

Date Started: July 10, 2012
Date Completed: July 10, 2012

Driller: Freshwater Environmental Services
Drilling Method: Shovel

Recovery	Depth (ft)	Description	USCS	Remarks
	0			**Ground Surface**
100%	0.08	~40% roots and organic material, ~55% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	
	0.17	~95% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	**Soil Sample:** McBeth-3-(0.08'-0.25')
	0.25	~75% cobbles and gravel, ~20% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	GP	
	0.5			**BOH ~ 0.5'**
	0.58			
	0.67			
	0.75			
	0.83			
	0.92			
	1.0			

Total Depth: ~ 0.5 feet

Freshwater Environmental Services

McBeth-3

Yurok Tribe Environmental Program
McBeth Site (APN 141-222-07)

Date: 8-5-12 | By: SJT

Log of Boring **McBeth-4**

Date Started: July 10, 2012
Date Completed: July 10, 2012

Driller: Freshwater Environmental Services
Drilling Method: Shovel

Recovery	Depth (ft)	Description	USCS	Remarks
	0			**Ground Surface**
100%	0.08	~40% roots and organic material, ~55% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	
	0.17	~95% sand, fine to medium, subangular to subrounded, ~5% silt, moist, 10YR 4/1 (dark gray).	SP	**Soil Sample:** McBeth-4-(0.08'-0.25')
	0.25	~60% gravel, subangular to subrounded, ~40% sand, very fine to medium, subangular to subrounded, moist, 10YR 4/1 (dark gray).	GP	
	0.33			
	0.42			
	0.5			**BOH ~ 0.5'**
	0.58			
	0.67			
	0.75			
	0.83			
	0.92			
	1.0			

Total Depth: ~ 0.5 feet

Freshwater Environmental Services

McBeth-4

Yurok Tribe Environmental Program
McBeth Site (APN 141-222-07)

Date: 8-5-12 | By: SJT

Log of Boring **McBeth-5**

Date Started: July 10, 2012
Date Completed: July 10, 2012

Driller: Freshwater Environmental Services
Drilling Method: Shovel

Recovery	Depth (ft)	Description	USCS	Remarks
	0			**Ground Surface**
100%		~25% roots and organic material, ~50% sand, very fine to coarse, subangular to subrounded, ~25% silt, moist, 10YR 4/1 (dark gray).	SM	
	0.08	~75% sand, very fine to coarse, subangular to subrounded, ~25% silt, moist, 10YR 4/1 (dark gray).	SM	**Soil Sample:** McBeth-5-(0.08'-0.25')
	0.17			
	0.25	~60% gravel, subangular to subrounded, ~40% sand, fine to medium, subangular to subrounded, moist, 10YR 4/1 (dark gray).	GP	
	0.33			
	0.42			**BOH ~ 0.42'**
	0.5			
	0.58			
	0.67			
	0.75			
	0.83			
	0.92			
	1.0			

McBeth-5 is a duplicate of McBeth-1

Total Depth: ~ 0.42 feet

McBeth-5

Yurok Tribe Environmental Program
McBeth Site (APN 141-222-07)

Date: 8-5-12 | By: SJT

Freshwater Environmental Services

APPENDIX C
Laboratory Reports and Chain-of-Custody Records

NORTH COAST LABORATORIES LTD.

August 01, 2012

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521

Attn: Stan Thiesen

RE: Yurok Tribe-McBeth Site

Order No.: 1207120
Invoice No.: 104351
PO No.:
ELAP No.1247-Expires July 2014

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	McBeth-1-(0.08'-0.25')
01C	McBeth-1-(0.08'-0.25')
02A	McBeth-2-3-4-Composite
03A	McBeth-5-(0.08'-0.25')
03C	McBeth-5-(0.08'-0.25')

ND = Not Detected at the Reporting Limit
Limit = Reporting Limit
Flag = Explanation in Case Narrative
All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

Date: 02-Aug-2012
WorkOrder: 1207120

ANALYTICAL REPORT

Client Sample ID: McBeth-1-(0.08'-0.25')
Lab ID: 1207120-01A

Received: 7/10/2012
Collected: 7/10/2012 11:12

Test Name: TPH passed through Silica Gel Column **Reference:** EPA 3550/3630/8015B

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND		1.0	mg/kg	1.0	7/12/2012	7/19/2012
TPHC Motor Oil	ND		10	mg/kg	1.0	7/12/2012	7/19/2012

Client Sample ID: McBeth-1-(0.08'-0.25')
Lab ID: 1207120-01C

Received: 7/10/2012
Collected: 7/10/2012 11:12

Test Name: EPA 6010B **Reference:** EPA 6010B

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Chromium	94		2.0	mg/kg	1.0	7/16/2012	7/19/2012
Copper	39		2.0	mg/kg	1.0	7/16/2012	7/19/2012
Nickel	130		5.0	mg/kg	1.0	7/16/2012	7/19/2012
Zinc	47		5.0	mg/kg	1.0	7/16/2012	7/19/2012

Test Name: ICPMS **Reference:** EPA 6020

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Arsenic	3.0		1.0	mg/kg	1.0	7/16/2012	7/27/2012
Cadmium	ND		1.0	mg/kg	1.0	7/16/2012	7/27/2012
Lead	4.8		1.0	mg/kg	1.0	7/16/2012	7/27/2012

Test Name: Mercury **Reference:** EPA 7471A

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Mercury	ND		0.10	mg/kg	1.0	7/13/2012	7/17/2012

Client Sample ID: McBeth-2-3-4-Composite
Lab ID: 1207120-02A

Received: 7/10/2012
Collected: 7/10/2012 0:00

Test Name: Mercury **Reference:** EPA 7471A

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Mercury	ND		0.10	mg/kg	1.0	7/13/2012	7/17/2012

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Date: 02-Aug-2012
WorkOrder: 1207120

ANALYTICAL REPORT

Client Sample ID: McBeth-5-(0.08'-0.25')
Lab ID: 1207120-03A

Received: 7/10/2012
Collected: 7/10/2012 11:20

Test Name: TPH passed through Silica Gel Column **Reference:** EPA 3550/3630/8015B

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND		1.0	mg/kg	1.0	7/12/2012	7/19/2012
TPHC Motor Oil	ND		10	mg/kg	1.0	7/12/2012	7/19/2012

Client Sample ID: McBeth-5-(0.08'-0.25')
Lab ID: 1207120-03C

Received: 7/10/2012
Collected: 7/10/2012 11:20

Test Name: EPA 6010B **Reference:** EPA 6010B

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Chromium	82		2.0	mg/kg	1.0	7/16/2012	7/19/2012
Copper	35		2.0	mg/kg	1.0	7/16/2012	7/19/2012
Nickel	120		5.0	mg/kg	1.0	7/16/2012	7/19/2012
Zinc	43		5.0	mg/kg	1.0	7/16/2012	7/19/2012

Test Name: ICPMS **Reference:** EPA 6020

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Arsenic	2.9		1.0	mg/kg	1.0	7/16/2012	7/27/2012
Cadmium	ND		1.0	mg/kg	1.0	7/16/2012	7/27/2012
Lead	5.3		1.0	mg/kg	1.0	7/16/2012	7/27/2012

Test Name: Mercury **Reference:** EPA 7471A

Parameter	Result	Flag	Limit	Units	DF	Extracted	Analyzed
Mercury	ND		0.10	mg/kg	1.0	7/13/2012	7/17/2012

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-27751** Batch ID: **27751** Test Code: **6ICPS** Units: **mg/kg** Analysis Date **7/19/2012 10:39:00 AM** Prep Date: **7/16/2012**
Client ID: Run ID: **INICP1_120719A** SeqNo: **1035124**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	2.0									
Copper	ND	2.0									
Nickel	ND	5.0									
Zinc	ND	5.0									

Sample ID: **MB-27751** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/18/2012 1:14:50 PM** Prep Date: **7/16/2012**
Client ID: Run ID: **ICPMS_120718A** SeqNo: **1035142**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.50									
Cadmium	ND	0.50									
Lead	ND	0.50									

Sample ID: **MB-27751** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/27/2012 3:41:08 PM** Prep Date: **7/16/2012**
Client ID: Run ID: **ICPMS_120727A** SeqNo: **1036507**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.50									
Cadmium	ND	0.50									
Lead	ND	0.50									

Sample ID: **MB-27743** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: Run ID: **CVAA1_120717A** SeqNo: **1034685**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-27740** Batch ID: **27740** Test Code: **SGTPDMS** Units: **mg/kg** Analysis Date **7/19/2012 7:23:43 PM** Prep Date: **7/12/2012**
Client ID: Run ID: **ORGC14_120719A** SeqNo: **1035232**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	1.0									
TPHC Motor Oil	ND	10									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **1207120-01CMS** Batch ID: **27751** Test Code: **6ICPS** Units: **mg/kg** Analysis Date **7/19/2012 11:00:00 AM** Prep Date: **7/16/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **INICP1_120719A** SeqNo: **1035129**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	172.6	2.0	100	94.2	78.5%	70	130	0			
Copper	130.9	2.0	100	39.2	91.7%	70	130	0			
Nickel	208.8	5.0	100	133	76.0%	70	130	0			
Zinc	133.9	5.0	100	47.4	86.5%	70	130	0			

Sample ID: **1207120-01CMSD** Batch ID: **27751** Test Code: **6ICPS** Units: **mg/kg** Analysis Date **7/19/2012 11:04:00 AM** Prep Date: **7/16/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **INICP1_120719A** SeqNo: **1035130**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	180.1	2.0	100	94.2	85.9%	70	130	173	4.21%	20	
Copper	129.6	2.0	100	39.2	90.4%	70	130	131	1.03%	20	
Nickel	216.9	5.0	100	133	84.1%	70	130	209	3.79%	20	
Zinc	137.9	5.0	100	47.4	90.5%	70	130	134	2.93%	20	

Sample ID: **1207120-01CMS** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/27/2012 3:58:50 PM** Prep Date: **7/16/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **ICPMS_120727A** SeqNo: **1036511**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	93.96	4.0	100	2.96	91.0%	75	125	0			
Cadmium	88.92	4.0	100	0.180	88.7%	75	125	0			
Lead	93.68	4.0	100	4.83	88.9%	75	125	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID: **1207120-01CMSD** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/27/2012 4:03:15 PM** Prep Date: **7/16/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **ICPMS_120727A** SeqNo: **1036512**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	110.7	4.0	100	2.96	108%	75	125	94.0	16.3%	20	
Cadmium	104.7	4.0	100	0.180	105%	75	125	88.9	16.3%	20	
Lead	100.8	4.0	100	4.83	96.0%	75	125	93.7	7.36%	20	

Sample ID: **1207120-03CMS** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: **McBeth-5-(0.08'-0.25')** Run ID: **CVAA1_120717A** SeqNo: **1034691**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4700	0.10	0.400	0.0500	105%	70	130	0			

Sample ID: **1207120-03CMSD** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: **McBeth-5-(0.08'-0.25')** Run ID: **CVAA1_120717A** SeqNo: **1034692**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4700	0.10	0.400	0.0500	105%	70	130	0.470	0%	20	

Sample ID: **1207120-01CMS** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **CVAA1_120717A** SeqNo: **1034693**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4700	0.10	0.400	0.0500	105%	70	130	0			

Sample ID: **1207120-01CMSD** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **CVAA1_120717A** SeqNo: **1034694**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4800	0.10	0.400	0.0500	108%	70	130	0.470	2.11%	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **1207120-01AMS** Batch ID: **27740** Test Code: **SGTPDMS** Units: **mg/kg** Analysis Date **7/19/2012 8:54:45 PM** Prep Date: **7/12/2012**
Client ID: **McBeth-1-(0.08'-0.25')** Run ID: **ORGC14_120719A** SeqNo: **1035235**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	10.13	1.0	10.0	0.626	95.1%	70	132	0			
TPHC Motor Oil	25.12	10	20.0	0	126%	69	136	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-27751** Batch ID: **27751** Test Code: **6ICPS** Units: **mg/kg** Analysis Date **7/19/2012 10:43:00 AM** Prep Date: **7/16/2012**
Client ID: Run ID: **INICP1_120719A** SeqNo: **1035125**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	88.53	2.0	100	0	88.5%	85	115	0			
Copper	96.36	2.0	100	0	96.4%	85	115	0			
Nickel	90.72	5.0	100	0	90.7%	85	115	0			
Zinc	91.26	5.0	100	0	91.3%	85	115	0			

Sample ID: **LCSD-27751** Batch ID: **27751** Test Code: **6ICPS** Units: **mg/kg** Analysis Date **7/19/2012 10:47:00 AM** Prep Date: **7/16/2012**
Client ID: Run ID: **INICP1_120719A** SeqNo: **1035126**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	90.05	2.0	100	0	90.0%	85	115	0			
Copper	95.98	2.0	100	0	96.0%	85	115	0			
Nickel	92.15	5.0	100	0	92.2%	85	115	0			
Zinc	92.61	5.0	100	0	92.6%	85	115	0			

Sample ID: **LCS-27751** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/18/2012 1:19:15 PM** Prep Date: **7/16/2012**
Client ID: Run ID: **ICPMS_120718A** SeqNo: **1035143**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	83.86	2.0	100	0	83.9%	80	120	0			
Cadmium	90.60	2.0	100	0	90.6%	80	120	0			
Lead	86.60	2.0	100	0	86.6%	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID: **LCS-27751** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/27/2012 3:45:33 PM** Prep Date: **7/16/2012**
Client ID: Run ID: **ICPMS_120727A** SeqNo: **1036508**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	100.6	4.0	100	0	101%	80	120	0			
Cadmium	91.12	4.0	100	0	91.1%	80	120	0			
Lead	92.36	4.0	100	0	92.4%	80	120	0			

Sample ID: **LCSD-27751** Batch ID: **27751** Test Code: **ICPMSS** Units: **mg/kg** Analysis Date **7/27/2012 3:49:59 PM** Prep Date: **7/16/2012**
Client ID: Run ID: **ICPMS_120727A** SeqNo: **1036509**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	91.92	4.0	100	0	91.9%	80	120	101	9.06%	20	
Cadmium	97.84	4.0	100	0	97.8%	80	120	91.1	7.11%	20	
Lead	81.84	4.0	100	0	81.8%	80	120	92.4	12.1%	20	

Sample ID: **LCS-27743** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: Run ID: **CVAA1_120717A** SeqNo: **1034686**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4200	0.10	0.400	0	105%	85	115	0			

Sample ID: **LCSD-27743** Batch ID: **27743** Test Code: **MERCS** Units: **mg/kg** Analysis Date **7/17/2012** Prep Date: **7/13/2012**
Client ID: Run ID: **CVAA1_120717A** SeqNo: **1034687**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.4200	0.10	0.400	0	105%	85	115	0.420	0%	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Freshwater Environmental Services
Work Order: 1207120
Project: Yurok Tribe-McBeth Site

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID: **LCS-27740** Batch ID: **27740** Test Code: **SGTPDMS** Units: **mg/kg** Analysis Date **7/19/2012 7:54:04 PM** Prep Date: **7/12/2012**
Client ID: Run ID: **ORGC14_120719A** SeqNo: **1035233**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	9.504	1.0	10.0	0	95.0%	70	132	0			
TPHC Motor Oil	22.11	10	20.0	0	111%	69	136	0			

Sample ID: **LCSD-27740** Batch ID: **27740** Test Code: **SGTPDMS** Units: **mg/kg** Analysis Date **7/19/2012 8:24:18 PM** Prep Date: **7/12/2012**
Client ID: Run ID: **ORGC14_120719A** SeqNo: **1035234**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	8.786	1.0	10.0	0	87.9%	70	132	9.50	7.85%	30	
TPHC Motor Oil	20.59	10	20.0	0	103%	69	136	22.1	7.14%	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 207120

Attention: Stan Thiesen
Results & Invoice to: Stan Thiesen
Address: 78 Sunny Brae Center, Arcata, CA, 95521

Phone: 707 839-0091
Copies of Report to: Stan Thiesen
stan@freshwaterenvironmentalservices.com
Sampler (Sign & Print): Stan Thiesen

TAT: ☑ STD (2-3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH SAMPLES.

REPORTING REQUIREMENTS:
☐ State Forms
☐ Geotracker ☐ SWAMP ☐ Other EDD:
☑ Final Report PDF ☐ FAX By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—40 ml VOA; 9—60 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other
PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number:
Project Name: Yurok Tribe - McBeth Site
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	TPH-D/MO 8015	Gas/VOCs-List 7 8260	Metals 6020	Mercury 7471A
	McBeth-1-(0.08'-0.25')	07/10/12	11:12	S	11	SOBI/Mech	✓	✓	✓	✓
	McBeth-2-(0.08'-0.25')	07/10/12	11:35	S	8 (3)					✓
	McBeth-3-(0.08'-0.25')	07/10/12	11:48	S	11					✓
	McBeth-4-(0.08'-0.25')	07/10/12	11:41	S	11					✓
	McBeth-5-(0.08'-0.25')	07/10/12	11:20	S			✓	✓	✓	✓
	Temp-Blank	07/10/12								

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

Temperature: 4.4 °C
Received On Ice? (Y / N)
Samples Intact? (Y / N)
Preserved? Y / N
Preserved @ NCL ? Y / N / NA

Please composite and homogenize McBeth-2, McBeth-3, and McBeth-4 into one sample named McBeth-2-3-4-Composite. Metals: arsenic, cadmium, chromium (total), copper, nickel, lead, and zinc. Please perform MS/MSD on McBeth-1-(0.08'-0.25')

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Orrin Plocher 1616	7/10/12		7/10/12 1616

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Fed-Ex Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; WW=Waste Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

CALSCIENCE

WORK ORDER NUMBER: 12-07-0603

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: North Coast Laboratories, Ltd.

Client Project Name: 1207120

Attention: Trudie Blasi
5680 West End Road
Arcata, CA 95521-9202

Approved for release on 08/9/2012 by:
Don Burley
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 1207120
Work Order Number: 12-07-0603

Calscience Environmental Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Client:	North Coast Laboratories, Ltd. 5680 West End Road Arcata, CA 95521-9202	Work Order:	12-07-0603
		Project name:	1207120
		Received:	07/12/12 08:00
Attn:	Trudie Blasi		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
1207120-01B / McBeth-1-(0.08'-0.25') (12-07-0603-1)						
Gasoline Range Organics (C4-C12)	**0.14**		0.056	mg/kg	GC/MS / EPA 8260B	EPA 5035
1207120-03B / McBeth-5-(0.08'-0.25') (12-07-0603-2)						
p-Isopropyltoluene	**0.0019**		0.0011	mg/kg	GC/MS / EPA 8260B	EPA 5035
Gasoline Range Organics (C4-C12)	**0.20**		0.054	mg/kg	GC/MS / EPA 8260B	EPA 5035
Toluene	**0.0017**		0.0011	mg/kg	GC/MS / EPA 8260B	EPA 5035

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 07/12/12
Work Order No: 12-07-0603
Preparation: EPA 5035
Method: GC/MS / EPA 8260B
Units: mg/kg

Project: 1207120

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1207120-01B / McBeth-1-(0.08'-0.25')	**12-07-0603-1-C**	**07/10/12 11:12**	**Solid**	**GC/MS UU**	**07/10/12**	**07/14/12 15:29**	**120714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0011	1.12		1,1-Dichloropropene	ND	0.0022	1.12	
Bromobenzene	ND	0.0011	1.12		c-1,3-Dichloropropene	ND	0.0011	1.12	
Bromochloromethane	ND	0.0022	1.12		t-1,3-Dichloropropene	ND	0.0022	1.12	
Bromodichloromethane	ND	0.0011	1.12		Ethylbenzene	ND	0.0011	1.12	
Bromoform	ND	0.0056	1.12		Isopropylbenzene	ND	0.0011	1.12	
Bromomethane	ND	0.022	1.12		p-Isopropyltoluene	ND	0.0011	1.12	
n-Butylbenzene	ND	0.0011	1.12		Methylene Chloride	ND	0.011	1.12	
sec-Butylbenzene	ND	0.0011	1.12		Naphthalene	ND	0.011	1.12	
tert-Butylbenzene	ND	0.0011	1.12		n-Propylbenzene	ND	0.0022	1.12	
Carbon Tetrachloride	ND	0.0011	1.12		Styrene	ND	0.0011	1.12	
Chlorobenzene	ND	0.0011	1.12		1,1,1,2-Tetrachloroethane	ND	0.0011	1.12	
Chloroethane	ND	0.0022	1.12		1,1,2,2-Tetrachloroethane	ND	0.0022	1.12	
Chloroform	ND	0.0011	1.12		Tetrachloroethene	ND	0.0011	1.12	
Chloromethane	ND	0.022	1.12		Toluene	ND	0.0011	1.12	
2-Chlorotoluene	ND	0.0011	1.12		1,2,3-Trichlorobenzene	ND	0.0022	1.12	
4-Chlorotoluene	ND	0.0011	1.12		1,2,4-Trichlorobenzene	ND	0.0022	1.12	
Dibromochloromethane	ND	0.0022	1.12		1,1,1-Trichloroethane	ND	0.0011	1.12	
1,2-Dibromo-3-Chloropropane	ND	0.0056	1.12		1,1,2-Trichloroethane	ND	0.0011	1.12	
1,2-Dibromoethane	ND	0.0011	1.12		Trichloroethene	ND	0.0022	1.12	
Dibromomethane	ND	0.0011	1.12		Trichlorofluoromethane	ND	0.011	1.12	
1,2-Dichlorobenzene	ND	0.0011	1.12		1,2,3-Trichloropropane	ND	0.0022	1.12	
1,3-Dichlorobenzene	ND	0.0011	1.12		1,2,4-Trimethylbenzene	ND	0.0022	1.12	
1,4-Dichlorobenzene	ND	0.0011	1.12		1,3,5-Trimethylbenzene	ND	0.0022	1.12	
Dichlorodifluoromethane	ND	0.0022	1.12		Vinyl Chloride	ND	0.0011	1.12	
1,1-Dichloroethane	ND	0.0011	1.12		p/m-Xylene	ND	0.0022	1.12	
1,2-Dichloroethane	ND	0.0011	1.12		o-Xylene	ND	0.0011	1.12	
1,1-Dichloroethene	ND	0.0011	1.12		Methyl-t-Butyl Ether (MTBE)	ND	0.0022	1.12	
c-1,2-Dichloroethene	ND	0.0011	1.12		Tert-Butyl Alcohol (TBA)	ND	0.022	1.12	
t-1,2-Dichloroethene	ND	0.0011	1.12		Diisopropyl Ether (DIPE)	ND	0.0011	1.12	
1,2-Dichloropropane	ND	0.0011	1.12		Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.12	
1,3-Dichloropropane	ND	0.0011	1.12		Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.12	
2,2-Dichloropropane	ND	0.0056	1.12		Gasoline Range Organics (C4-C12)	0.14	0.056	1.12	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	103	79-139			1,2-Dichloroethane-d4	115	71-155		
1,4-Bromofluorobenzene	97	80-120			Toluene-d8	104	80-120		
Toluene-d8-TPPH	98	87-111							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 07/12/12
Work Order No: 12-07-0603
Preparation: EPA 5035
Method: GC/MS / EPA 8260B
Units: mg/kg

Project: 1207120

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1207120-03B / McBeth-5-(0.08'-0.25')	**12-07-0603-2-B**	**07/10/12 11:20**	**Solid**	**GC/MS UU**	**07/10/12**	**07/14/12 14:37**	**120714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0011	1.09		1,1-Dichloropropene	ND	0.0022	1.09	
Bromobenzene	ND	0.0011	1.09		c-1,3-Dichloropropene	ND	0.0011	1.09	
Bromochloromethane	ND	0.0022	1.09		t-1,3-Dichloropropene	ND	0.0022	1.09	
Bromodichloromethane	ND	0.0011	1.09		Ethylbenzene	ND	0.0011	1.09	
Bromoform	ND	0.0054	1.09		Isopropylbenzene	ND	0.0011	1.09	
Bromomethane	ND	0.022	1.09		p-Isopropyltoluene	0.0019	0.0011	1.09	
n-Butylbenzene	ND	0.0011	1.09		Methylene Chloride	ND	0.011	1.09	
sec-Butylbenzene	ND	0.0011	1.09		Naphthalene	ND	0.011	1.09	
tert-Butylbenzene	ND	0.0011	1.09		n-Propylbenzene	ND	0.0022	1.09	
Carbon Tetrachloride	ND	0.0011	1.09		Styrene	ND	0.0011	1.09	
Chlorobenzene	ND	0.0011	1.09		1,1,1,2-Tetrachloroethane	ND	0.0011	1.09	
Chloroethane	ND	0.0022	1.09		1,1,2,2-Tetrachloroethane	ND	0.0022	1.09	
Chloroform	ND	0.0011	1.09		Tetrachloroethene	ND	0.0011	1.09	
Chloromethane	ND	0.022	1.09		Toluene	0.0017	0.0011	1.09	
2-Chlorotoluene	ND	0.0011	1.09		1,2,3-Trichlorobenzene	ND	0.0022	1.09	
4-Chlorotoluene	ND	0.0011	1.09		1,2,4-Trichlorobenzene	ND	0.0022	1.09	
Dibromochloromethane	ND	0.0022	1.09		1,1,1-Trichloroethane	ND	0.0011	1.09	
1,2-Dibromo-3-Chloropropane	ND	0.0054	1.09		1,1,2-Trichloroethane	ND	0.0011	1.09	
1,2-Dibromoethane	ND	0.0011	1.09		Trichloroethene	ND	0.0022	1.09	
Dibromomethane	ND	0.0011	1.09		Trichlorofluoromethane	ND	0.011	1.09	
1,2-Dichlorobenzene	ND	0.0011	1.09		1,2,3-Trichloropropane	ND	0.0022	1.09	
1,3-Dichlorobenzene	ND	0.0011	1.09		1,2,4-Trimethylbenzene	ND	0.0022	1.09	
1,4-Dichlorobenzene	ND	0.0011	1.09		1,3,5-Trimethylbenzene	ND	0.0022	1.09	
Dichlorodifluoromethane	ND	0.0022	1.09		Vinyl Chloride	ND	0.0011	1.09	
1,1-Dichloroethane	ND	0.0011	1.09		p/m-Xylene	ND	0.0022	1.09	
1,2-Dichloroethane	ND	0.0011	1.09		o-Xylene	ND	0.0011	1.09	
1,1-Dichloroethene	ND	0.0011	1.09		Methyl-t-Butyl Ether (MTBE)	ND	0.0022	1.09	
c-1,2-Dichloroethene	ND	0.0011	1.09		Tert-Butyl Alcohol (TBA)	ND	0.022	1.09	
t-1,2-Dichloroethene	ND	0.0011	1.09		Diisopropyl Ether (DIPE)	ND	0.0011	1.09	
1,2-Dichloropropane	ND	0.0011	1.09		Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.09	
1,3-Dichloropropane	ND	0.0011	1.09		Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.09	
2,2-Dichloropropane	ND	0.0054	1.09		Gasoline Range Organics (C4-C12)	0.20	0.054	1.09	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	105	79-139			1,2-Dichloroethane-d4	111	71-155		
1,4-Bromofluorobenzene	98	80-120			Toluene-d8	103	80-120		
Toluene-d8-TPPH	98	87-111							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: 07/12/12
Work Order No: 12-07-0603
Preparation: EPA 5035
Method: GC/MS / EPA 8260B
Units: mg/kg

Project: 1207120

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-779-910**	**N/A**	**Solid**	**GC/MS UU**	**07/14/12**	**07/14/12 13:18**	**120714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0010	1		1,1-Dichloropropene	ND	0.0020	1	
Bromobenzene	ND	0.0010	1		c-1,3-Dichloropropene	ND	0.0010	1	
Bromochloromethane	ND	0.0020	1		t-1,3-Dichloropropene	ND	0.0020	1	
Bromodichloromethane	ND	0.0010	1		Ethylbenzene	ND	0.0010	1	
Bromoform	ND	0.0050	1		Isopropylbenzene	ND	0.0010	1	
Bromomethane	ND	0.020	1		p-Isopropyltoluene	ND	0.0010	1	
n-Butylbenzene	ND	0.0010	1		Methylene Chloride	ND	0.010	1	
sec-Butylbenzene	ND	0.0010	1		Naphthalene	ND	0.010	1	
tert-Butylbenzene	ND	0.0010	1		n-Propylbenzene	ND	0.0020	1	
Carbon Tetrachloride	ND	0.0010	1		Styrene	ND	0.0010	1	
Chlorobenzene	ND	0.0010	1		1,1,1,2-Tetrachloroethane	ND	0.0010	1	
Chloroethane	ND	0.0020	1		1,1,2,2-Tetrachloroethane	ND	0.0020	1	
Chloroform	ND	0.0010	1		Tetrachloroethene	ND	0.0010	1	
Chloromethane	ND	0.020	1		Toluene	ND	0.0010	1	
2-Chlorotoluene	ND	0.0010	1		1,2,3-Trichlorobenzene	ND	0.0020	1	
4-Chlorotoluene	ND	0.0010	1		1,2,4-Trichlorobenzene	ND	0.0020	1	
Dibromochloromethane	ND	0.0020	1		1,1,1-Trichloroethane	ND	0.0010	1	
1,2-Dibromo-3-Chloropropane	ND	0.0050	1		1,1,2-Trichloroethane	ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Trichloroethene	ND	0.0020	1	
Dibromomethane	ND	0.0010	1		Trichlorofluoromethane	ND	0.010	1	
1,2-Dichlorobenzene	ND	0.0010	1		1,2,3-Trichloropropane	ND	0.0020	1	
1,3-Dichlorobenzene	ND	0.0010	1		1,2,4-Trimethylbenzene	ND	0.0020	1	
1,4-Dichlorobenzene	ND	0.0010	1		1,3,5-Trimethylbenzene	ND	0.0020	1	
Dichlorodifluoromethane	ND	0.0020	1		Vinyl Chloride	ND	0.0010	1	
1,1-Dichloroethane	ND	0.0010	1		p/m-Xylene	ND	0.0020	1	
1,2-Dichloroethane	ND	0.0010	1		o-Xylene	ND	0.0010	1	
1,1-Dichloroethene	ND	0.0010	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
c-1,2-Dichloroethene	ND	0.0010	1		Tert-Butyl Alcohol (TBA)	ND	0.020	1	
t-1,2-Dichloroethene	ND	0.0010	1		Diisopropyl Ether (DIPE)	ND	0.0010	1	
1,2-Dichloropropane	ND	0.0010	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0010	1	
1,3-Dichloropropane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0010	1	
2,2-Dichloropropane	ND	0.0050	1		Gasoline Range Organics (C4-C12)	ND	0.050	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	105	79-139			1,2-Dichloroethane-d4	106	71-155		
1,4-Bromofluorobenzene	96	80-120			Toluene-d8	103	80-120		
Toluene-d8-TPPH	97	87-111							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Quality Control - LCS/LCS Duplicate

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521-9202

Date Received: N/A
Work Order No: 12-07-0603
Preparation: EPA 5035
Method: GC/MS / EPA 8260B

Project: 1207120

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-779-910	**Solid**	**GC/MS UU**	**07/14/12**	**07/14/12**	**120714L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	0.05000	0.05048	101	0.05250	105	80-120	73-127	4	0-20	
Carbon Tetrachloride	0.05000	0.05385	108	0.05435	109	65-137	53-149	1	0-20	
Chlorobenzene	0.05000	0.05115	102	0.05218	104	80-120	73-127	2	0-20	
1,2-Dibromoethane	0.05000	0.05223	104	0.05271	105	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	0.05000	0.05100	102	0.05395	108	80-120	73-127	6	0-20	
1,2-Dichloroethane	0.05000	0.05118	102	0.05234	105	80-120	73-127	2	0-20	
1,1-Dichloroethene	0.05000	0.04308	86	0.04433	89	68-128	58-138	3	0-20	
Ethylbenzene	0.05000	0.05167	103	0.05290	106	80-120	73-127	2	0-20	
Toluene	0.05000	0.05149	103	0.05555	111	80-120	73-127	8	0-20	
Trichloroethene	0.05000	0.04958	99	0.05224	104	80-120	73-127	5	0-20	
Vinyl Chloride	0.05000	0.04402	88	0.04459	89	67-127	57-137	1	0-20	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04701	94	0.04805	96	70-124	61-133	2	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.2513	101	0.2516	101	73-121	65-129	0	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04149	83	0.04249	85	69-129	59-139	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.05300	106	0.04773	95	70-124	61-133	10	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.05002	100	0.05266	105	74-122	66-130	5	0-20	
Ethanol	0.5000	0.5350	107	0.5220	104	51-135	37-149	2	0-27	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 12-07-0603

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

Return to Contents

NORTH COAST LABORATORIES LTD.

Sub-Contract Chain of Custody Record

Date Shipped: 7/11/2012
Date Due: 7/24/2012
PO #: 1207120

Subcontractor: Calscience Enironmental Labs
7440 Lincoln Way
Garden Grove, CA 92841

Attn: SAMPLE RECEIVING 714 895-5494

Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
(707) 822-4649

12-07-0603

Attn: Trudie Blasi, tblasi@northcoastlabs.com

NCL Sample #	Collection Date	Matrix	State Form System	Sampler	Analysis
Sample ID	**Bottle**		**Source**	**Employer**	**Remarks**
1207120-01B	7/10/2012 11:12 am	Soil			EPA 8260 Subcontracted
McBeth-1-(0.08'-0.25')	ZipLoc Bag				
1207120-03B	7/10/2012 11:20 am	Soil			EPA 8260 Subcontracted
McBeth-5-(0.08'-0.25')	ZipLoc Bag				

		Date/Time		Date/Time
Relinquished by:		7/11/12 1230	**Received by:**	
Relinquished by:	GSO	7/12/12 0800	**Received by:**	7/12/12 0800

Special Instructions: Please include NCL Sample #, Sample ID, and QC data on all analytical work; include PO # on invoice.
Please use attached analyte list Plus TPH-G. MS/MSD needed on the first sample if possible.

Return to Contents

0603

11/2

TestGroup_SEL

Report	T	Analyte	MDL	PQL	MCL
Y	A	1,1,1,2-Tetrachloroethane		0.02	
Y	A	1,1,1-Trichloroethane		0.02	
Y	A	1,1,2,2-Tetrachloroethane		0.02	
Y	A	1,1,2-Trichloroethane		0.02	
Y	A	1,1-Dichloroethane		0.02	
Y	A	1,1-Dichloroethene		0.02	
Y	A	1,1-Dichloropropene		0.02	
Y	A	1,2,3-Trichlorobenzene		0.04	
Y	A	1,2,3-Trichloropropane		0.04	
Y	A	1,2,4-Trichlorobenzene		0.04	
Y	A	1,2,4-Trimethylbenzene		0.02	
Y	A	1,2-Dibromo-3-chloropropane (DBCP)		0.1	
Y	A	1,2-Dibromoethane (EDB)		0.04	
Y	A	1,2-Dichlorobenzene		0.02	
Y	A	1,2-Dichloroethane		0.02	
Y	A	1,2-Dichloropropane		0.02	
Y	A	1,3,5-Trimethylbenzene		0.02	
Y	A	1,3-Dichlorobenzene		0.02	
Y	A	1,3-Dichloropropane		0.02	
Y	A	1,4-Dichlorobenzene		0.02	
Y	A	2,2-Dichloropropane		0.02	
Y	A	2-Chlorotoluene		0.02	
Y	A	4-Chlorotoluene		0.02	
Y	A	4-Isopropyltoluene		0.02	
N				0.02	
Y	A	Benzene		0.005	
Y	A	Bromobenzene		0.02	
Y	A	Bromochloromethane		0.02	
Y	A	Bromodichloromethane		0.02	
Y	A	Bromoform		0.02	
Y	A	Bromomethane		0.02	
Y	A	Carbon Tetrachloride		0.02	
Y	A	Chlorobenzene		0.02	
Y	A	Chloroethane		0.02	
Y	A	Chloroform		0.02	
Y	A	Chloromethane		0.04	

Return to Contents

0603

2/2

TestGroup_SEL

Report	T	Analyte	MDL	PQL	MCL
Y	A	cis-1,2-Dichloroethene		0.02	
Y	A	cis-1,3-Dichloropropene		0.02	
Y	A	Dibromochloromethane		0.02	
Y	A	Dibromomethane		0.02	
Y	A	Dichlorodifluoromethane		0.02	
Y	A	Di-isopropyl ether (DIPE)		0.02	
Y	A	Ethyl tert-butyl ether (ETBE)		0.02	
Y	A	Ethylbenzene		0.005	
Y	A	Hexachlorobutadiene		0.04	
Y	A	Isopropylbenzene		0.02	
Y	A	m,p-Xylene		0.005	
Y	A	Methyl tert-butyl ether (MTBE)		0.005	
Y	A	Methylene chloride		0.04	
Y	A	Naphthalene		0.04	
Y	A	n-Butylbenzene		0.02	
Y	A	n-Propylbenzene		0.02	
Y	A	o-Xylene		0.005	
Y	A	sec-Butylbenzene		0.02	
Y	A	Styrene		0.02	
Y	A	Tert-amyl methyl ether (TAME)		0.02	
Y	A	Tert-butyl alcohol (TBA)		0.2	
Y	A	tert-Butylbenzene		0.02	
Y	A	Tetrachloroethene		0.02	
Y	A	Toluene		0.005	
Y	A	trans-1,2-Dichloroethene		0.02	
Y	A	trans-1,3-Dichloropropene		0.02	
Y	A	Trichloroethene		0.02	
Y	A	Trichlorofluoromethane		0.02	
Y	A	Vinyl chloride		0.005	
Y				0.002	
Y				0.002	
Y				0.002	
Y				0.002	

Return to Contents

0603

GSO
GOLDEN STATE OVERNIGHT

< WebShip > > > > >

800-322-5555 www.gso.com

Ship From:
SAMPLE CONTROL
NORTH COAST LABORATORIES
5680 WEST END RD
ARCATA, CA 95521

Ship To:
SAMPLE RECEIVING
CALSCIENCE ENVIRONMENTAL LABS
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
$0.00

Reference:

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 519518018

EPS

ORC

A

GARDEN GROVE

D92841A

2863581

Print Date : 07/11/12 12:11 PM

1 **of 1**

Send Label To Printer ☑ Print All Edit Shipment Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Return to Contents

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-07-0 6 0 3

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: NORTH COAST DATE: 07/12/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: WS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: WS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: PS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC (@ 7/12/12)	☑	☑	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑TerraCores® (3) ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** PS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** _____

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** _____

Return to Contents

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 207120

Attention: Stan Thiesen
Results & Invoice to: Stan Thiesen
Address: 78 Sunny Brae Center, Arcata, CA, 95521

Phone: 707 839-0091
Copies of Report to: Stan Thiesen
stan@freshwaterenvironmentalservices.com
Sampler (Sign & Print): Stan Thiesen

TAT: ☑ STD (2-3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH SAMPLES.

REPORTING REQUIREMENTS:
☐ State Forms
☐ Geotracker ☐ SWAMP ☐ Other EDD:
☑ Final Report PDF ☐ FAX By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—40 ml VOA; 9—60 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other
PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number:
Project Name: Yurok Tribe - McBeth Site
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	TPH-D/MO 8015	Gas/VOCs-List 7 8260	Metals 6020	Mercury 7471A
	McBeth-1-(0.08'-0.25')	07/10/12	11:12	S	11	SOBI/Mech	✓	✓	✓	✓
	McBeth-2-(0.08'-0.25')	07/10/12	11:35	S	8 (3)					✓
	McBeth-3-(0.08'-0.25')	07/10/12	11:48	S	11					✓
	McBeth-4-(0.08'-0.25')	07/10/12	11:41	S	11					✓
	McBeth-5-(0.08'-0.25')	07/10/12	11:20	S			✓	✓	✓	✓
	Temp-Blank	07/10/12								

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

Temperature: 4.4 °C
Received On Ice? (Y / N)
Samples Intact? (Y / N)
Preserved? Y / N
Preserved @ NCL ? Y / N / NA

Please composite and homogenize McBeth-2, McBeth-3, and McBeth-4 into one sample named McBeth-2-3-4-Composite. Metals: arsenic, cadmium, chromium (total), copper, nickel, lead, and zinc. Please perform MS/MSD on McBeth-1-(0.08'-0.25')

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Orrin Plocher 1616	7/10/12		7/10/12 1616

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Fed-Ex Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; WW=Waste Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: G2G130435
Client Project Description: Yurok Tribe - McBeth Site
Revision: 1

For:
Freshwater Environmental Servi
1372 Anderson Avenue
McKinleyville, CA 95519

Attn: Orrin Plocher

Authorized for release by:
8/15/2012 8:16:31 AM

David Alltucker
Project Manager
david.alltucker@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

TestAmerica West Sacramento Project Number G2G130435

SOLID, 8082, PCB Aroclors
Sample(s): 1, 2, 3
The percent difference values for analytes listed below are above the method acceptance limits in the continuing calibration standard, indicating a high bias. This standard was analyzed before and after the associated samples. As the associated samples are non-detect for this analyte and there is a potential for a high bias, there is no adverse impact on the data quality.

GC68B; 20-Jul-2012, 16:51

	%D	Limits
	====	=======
Aroclor 1221 (Peak-2)	17	(+/-15%D)

GC68B; 20-Jul-2012, 20:10

	%D	Limits
	====	=======
Aroclor 1221 (Peak-2)	16	(+/-15%D)

There were no other anomalies associated with this project.

Detection Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

Client Sample ID: McBeth-1-(0.08'-0,25') **Lab Sample ID: G2G130435001**

No Detections

Client Sample ID: McBeth-2-3-4-Composite **Lab Sample ID: G2G130435002**

No Detections

Client Sample ID: McBeth-5-(0.08'-0.25') **Lab Sample ID: G2G130435003**

No Detections

Client Sample ID: McBeth-1-(0.08'-0,25')

Lab Sample ID: G2G130435001

Date Collected: 07/10/12 11:12

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 74

Method: 8082 - PCBs (8082)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.044	0.0045	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1221	ND		0.044	0.0070	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1232	ND		0.044	0.0086	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1242	ND		0.044	0.0099	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1248	ND		0.044	0.0076	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1254	ND		0.044	0.0036	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99
Aroclor 1260	ND		0.044	0.0039	mg/kg	☼	07/18/12 18:00	07/19/12 18:07	0.99

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*91*		*77 - 123*	*07/18/12 18:00*	*07/19/12 18:07*	*0.99*
Tetrachloro-m-xylene	*79*		*64 - 139*	*07/18/12 18:00*	*07/19/12 18:07*	*0.99*

Client Sample ID: McBeth-2-3-4-Composite

Lab Sample ID: G2G130435002

Date Collected: 07/10/12 11:35

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 69

Method: 8082 - PCBs (8082)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.048	0.0050	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1221	ND		0.048	0.0076	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1232	ND		0.048	0.0094	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1242	ND		0.048	0.011	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1248	ND		0.048	0.0084	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1254	ND		0.048	0.0040	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01
Aroclor 1260	ND		0.048	0.0042	mg/kg	☼	07/18/12 18:00	07/19/12 18:28	1.01

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*108*		*77 - 123*	*07/18/12 18:00*	*07/19/12 18:28*	*1.01*
Tetrachloro-m-xylene	*83*		*64 - 139*	*07/18/12 18:00*	*07/19/12 18:28*	*1.01*

Client Sample ID: McBeth-5-(0.08'-0.25')

Lab Sample ID: G2G130435003

Date Collected: 07/10/12 11:20

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 69

Method: 8082 - PCBs (8082)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.048	0.0049	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1221	ND		0.048	0.0076	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1232	ND		0.048	0.0093	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1242	ND		0.048	0.011	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1248	ND		0.048	0.0083	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1254	ND		0.048	0.0039	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1
Aroclor 1260	ND		0.048	0.0042	mg/kg	☼	07/18/12 18:00	07/19/12 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*93*		*77 - 123*	*07/18/12 18:00*	*07/19/12 18:48*	*1*
Tetrachloro-m-xylene	*83*		*64 - 139*	*07/18/12 18:00*	*07/19/12 18:48*	*1*

Surrogate Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

Method: 8082 - PCBs (8082)

Matrix: Solid

Prep Type: Total

		Percent Surrogate Recovery (Acceptance Limits)									
		ıchlorobiph	TCX								
Lab Sample ID	Client Sample ID	(77-123)	(64-139)								
G2G130435001	McBeth-1-(0.08'-0,25')	91	79								
G2G130435002	McBeth-2-3-4-Composite	108	83								
G2G130435003	McBeth-5-(0.08'-0.25')	93	83								
G2G180000119B	Method Blank	101	94								
G2G180000119C	Lab Control Sample	100	90								

Surrogate Legend

Decachlorobiphenyl = Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - PCBs (8082)

Lab Sample ID: G2G180000119B
Matrix: Solid
Analysis Batch: 2200119

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 2200119_P

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.033	0.0034	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1221	ND		0.033	0.0052	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1232	ND		0.033	0.0064	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1242	ND		0.033	0.0074	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1248	ND		0.033	0.0057	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1254	ND		0.033	0.0027	mg/kg		07/18/12 18:00	07/19/12 17:27	1
Aroclor 1260	ND		0.033	0.0029	mg/kg		07/18/12 18:00	07/19/12 17:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*101*		*77 - 123*	*07/18/12 18:00*	*07/19/12 17:27*	*1*
Tetrachloro-m-xylene	*94*		*64 - 139*	*07/18/12 18:00*	*07/19/12 17:27*	*1*

Lab Sample ID: G2G180000119C
Matrix: Solid
Analysis Batch: 2200119

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 2200119_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			0.0667	0.0730		mg/kg		109	81 - 114		
Aroclor 1260			0.0667	0.0739		mg/kg		111	85 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Decachlorobiphenyl	*100*		*77 - 123*
Tetrachloro-m-xylene	*90*		*64 - 139*

QC Association Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

GC/MS Semi VOA

Analysis Batch: 2200119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G2G130435001	McBeth-1-(0.08'-0,25')	Total	Solid	8082	
G2G130435002	McBeth-2-3-4-Composite	Total	Solid	8082	
G2G130435003	McBeth-5-(0.08'-0.25')	Total	Solid	8082	
G2G180000119B	Method Blank	Total	Solid	8082	
G2G180000119C	Lab Control Sample	Total	Solid	8082	

Prep Batch: 2200119_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G2G130435001	McBeth-1-(0.08'-0,25')	Total	Solid	3550B/3665A	
G2G130435002	McBeth-2-3-4-Composite	Total	Solid	3550B/3665A	
G2G130435003	McBeth-5-(0.08'-0.25')	Total	Solid	3550B/3665A	
G2G180000119B	Method Blank	Total	Solid	3550B/3665A	
G2G180000119C	Lab Control Sample	Total	Solid	3550B/3665A	

General Chemistry

Analysis Batch: 2201077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G2G130422001X	Duplicate	Total	Solid	D 2216-90	
G2G130435001	McBeth-1-(0.08'-0,25')	Total	Solid	D 2216-90	
G2G130435002	McBeth-2-3-4-Composite	Total	Solid	D 2216-90	
G2G130435003	McBeth-5-(0.08'-0.25')	Total	Solid	D 2216-90	

Lab Chronicle

Client Sample ID: McBeth-1-(0.08'-0,25')

Lab Sample ID: G2G130435001

Date Collected: 07/10/12 11:12

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 74

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	3550B/3665A			2200119_P	07/18/12 18:00	AM	TAL WSC
Total	Analysis	8082		0.99	2200119	07/19/12 18:07	KG	TAL WSC
Total	Analysis	D 2216-90		1	2201077	07/21/12 03:19	SV	TAL WSC

Client Sample ID: McBeth-2-3-4-Composite

Lab Sample ID: G2G130435002

Date Collected: 07/10/12 11:35

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 69

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	3550B/3665A			2200119_P	07/18/12 18:00	AM	TAL WSC
Total	Analysis	8082		1.01	2200119	07/19/12 18:28	KG	TAL WSC
Total	Analysis	D 2216-90		1	2201077	07/21/12 03:19	SV	TAL WSC

Client Sample ID: McBeth-5-(0.08'-0.25')

Lab Sample ID: G2G130435003

Date Collected: 07/10/12 11:20

Matrix: Solid

Date Received: 07/12/12 09:45

Percent Solids: 69

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	3550B/3665A			2200119_P	07/18/12 18:00	AM	TAL WSC
Total	Analysis	8082		1	2200119	07/19/12 18:48	KG	TAL WSC
Total	Analysis	D 2216-90		1	2201077	07/21/12 03:19	SV	TAL WSC

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

Laboratory: TestAmerica West Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-12
Arizona	State Program	9	AZ0708	08-11-13
Arkansas DEQ	State Program	6	88-0691	06-17-13
California	NELAC	9	1119CA	01-31-13
Colorado	State Program	8	N/A	08-31-13
Connecticut	State Program	1	PH-0691	06-30-13
Florida	NELAC	4	E87570	06-30-13
Georgia	State Program	4	960	06-30-12
Guam	State Program	9	N/A	08-31-12
Hawaii	State Program	9	N/A	01-31-13
Illinois	NELAC	5	200060	03-17-13
Kansas	NELAC	7	E-10375	10-31-12
Louisiana	NELAC	6	30612	06-30-13
Michigan	State Program	5	9947	01-31-13
Nevada	State Program	9	CA44	09-30-12
New Jersey	NELAC	2	CA005	06-30-13
New Mexico	State Program	6	N/A	06-30-12
New York	NELAC	2	11666	04-01-13
Northern Mariana Islands	State Program	9	MP0007	01-31-13
Oregon	NELAC	10	CA200005	03-28-13
Pennsylvania	NELAC	3	68-01272	03-31-13
South Carolina	State Program	4	87014	06-30-13
Texas	NELAC	6	T104704399-08-TX	05-31-13
US Fish & Wildlife	Federal		LE148388-0	02-28-13
USDA	Federal		P330-11-00436	12-30-14
Utah	NELAC	8	QUAN1	01-31-13
Washington	State Program	10	C581	05-05-13
West Virginia	State Program	3	9930C	12-31-12
West Virginia DEP	State Program	3	334	07-31-13
Wisconsin	State Program	5	998204680	08-31-12
Wyoming	State Program	8	8TMS-Q	01-31-13

Method Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

Method	Method Description	Protocol	Laboratory
8082	PCBs (8082)	SW846	TAL WSC
D 2216-90	Moisture, Percent (D2216-90) - AFCEE	ASTM	TAL WSC

Protocol References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Freshwater Environmental Servi

TestAmerica Job ID: G2G130435

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
G2G130435001	McBeth-1-(0.08'-0,25')	Solid	07/10/12 11:12	07/12/12 09:45
G2G130435002	McBeth-2-3-4-Composite	Solid	07/10/12 11:35	07/12/12 09:45
G2G130435003	McBeth-5-(0.08'-0.25')	Solid	07/10/12 11:20	07/12/12 09:45

West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Orrin Plocher	Site Contact: Stan Thiesen	Date: 7-11-12	COC No:
Freshwater Environmental Services	Tel/Fax: 707 839-0091	Lab Contact: David Alltucker/Jill K.	Carrier: FedEx	1 of 1 COCs
78 Sunny Brae Center	Analysis Turnaround Time			Job No. 6260130435
Arcata, CA 95521	Calendar (C) or Work Days (W)			
(707) 839-0091 Phone	TAT if different from Below			
Email: stan@freshwaterenvironmentalservices.com	☐ 2 weeks			
Project Name: Yurok Tribe - McBeth Site	☐ 1 week			
Site: Yurok Tribe - McBeth Site	☐ 2 days			
P O # NA	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	PCBs 8082	Sample Specific Notes:
McBeth-1-(0.08'-0.25')	7/10/12	1112		Soil	1		X	Please composite and homogenize McBeth-2, McBeth-3, and McBeth-4 into one sample with the sample ID to be: McBeth-2-3-4-Composite.
McBeth-2-(0.08'-0.25')	7/10/12	1135		Soil	1		X	
McBeth-3-(0.08'-0.25')	7/10/12	1148		Soil	1		X	
McBeth-4-(0.08'-0.25')	7/10/12	1141		Soil	1		X	
McBeth-5-(0.08'-0.25')	7/10/12	1120		Soil	1		X	Please meet the following reporting limits:
								PCB-Aroclor 1016 (3.9 mg/kg)
								PCB-Aroclor 1254 (1.1 mg/kg)
								PCB-Aroclor 1260 (1.1 mg/kg)
								Please return cooler to: Analytical Sciences 110 Liberty Street Petaluma, CA 94952 707 769-3128

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ■

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Please invoice Freshwater Environmental Services at 78 Sunny Brae Center, Arcata, CA, 95521.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	FES	7/11/12 1124	[signature]	TALW-SAC	7-12-12 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT FRESHWATER ENVIRONMENTAL SERVICES PM DA

LOT# (QUANTIMS ID) G2G130435 QUOTE# 77396 LOCATION W5B

Checked (✓)

DATE RECEIVED 7/12/12 TIME RECEIVED 9:45 ☑

DELIVERED BY ☑ FEDEX ☐ ON TRAC ☐ OTHER

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☑ TAL ☐ CLIENT ☐ N/A

MULIT-COOLER(S) (If checked see multi-cooler form) ☐

SINGLE COOLER INFORMATION N/A

CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☑ N/A ☐ ☑

CUSTODY SEAL #(S) NA

COC #(S) NA ☐ ☑

TEMPERATURE BLANK Observed: 4.1 Corrected: 1.6

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: 5.6,4.1,3.3 Average 4.3 Corrected Average 2.3

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☐ #5 ☑ ☐ OTHER _____ ☐ ☑

CH (Initials) 7/12/12 (Date)

==========

pH MEASURED ☐ YES ☐ ANOMALY ☑ N/A ☑

LABELED BY..... NB ☑

LOGGED IN BY..... CH ☑

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☑ N/A ☑

VOA-ENCORES ☑ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☑ N/A ☑

☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A ☑

☐ CLOUSEAU ☐ TEMPERATURE EXCEEDED (0 °C – 6 °C)*1 ☑ N/A

☑ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED

CH (Initials) 7/12/12 (Date)

Notes _____

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G2G130435

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
VOAmeoh																				
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
125AGJmeoh																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ	1	3	1																	
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

From: (707) 839-0091
Stan Thiesen
Freshwater Environmental
78 Sunny Brae Center

Arcata, CA 95521

Origin ID: EKAA

FedEx Express

J122012053003J5

Ship Date: 11JUL12
ActWgt: 50.0 LB
CAD: 4822189/INET3300

Dims: 20 X 15 X 12 IN

Delivery Address Bar Code

Ref # Yurok McBeth Site
Invoice #
PO #
Dept #

SHIP TO: (916) 373-5600 BILL SENDER

David Altucker
TestAmerica West Sacramento
880 RIVERSIDE PKWY

WEST SACRAMENTO, CA 95605

THU - 12 JUL A1
STANDARD OVERNIGHT

TRK# 0201 7937 7670 5983

84 BLUA

95605
CA-US
SMF

515G1/E062/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.