PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

for the

JET BOAT PROPERTY

17635 HIGHWAY 101, KLAMATH, CALIFORNIA (APN: 140-050-25)

October 1, 2014

Prepared for: Yurok Tribe Environmental Program 190 Klamath Boulevard Klamath, California 95548

Prepared by: Stan Thiesen and Orrin Plocher

of



Freshwater Environmental Services

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

EXECUTIVE SUMMARY

The Yurok Tribe Environmental Program, acting as agent of the Yurok Tribe and user of this report, stipulated that the primary objectives of this Phase II Environmental Site Assessment Report for the Jet Boat Property were to assess and evaluate the recognized environmental conditions and to provide confirmation regarding the presence or absence of contamination at the Jet Boat Property. The reason for performing assessments on the property was to ensure that contamination does not threaten public health and the environment during and after redevelopment.

This assessment has revealed the following conditions in connection with the Subject Property:

- concentration of nickel in the soil in both compartments of the Smoke House is considered a potential human risk if the contaminated soils are disturbed during commercial use
- concentrations of TPPH-GRO and xylenes (gasoline residues) in the soil downhill of the AST area are considered a potential human and ecological risk
- concentration of TPH-Motor Oil in the soil in the southern area of the Subject Property is considered a potential human and ecological risk.

In our opinion, the above stated conditions, would be considered Recognized Environmental Conditions (RECs) principally associated with historic activities and prior management of the property, especially those procedures associated with the fueling and maintenance of the jet boats.

Appendix F of this report summarizes current Best Management Practices for small docks and vessel fueling procedures that if followed offer alternatives for the present uses of the property that should help control the environmental liability for the property and generally protect the public health.

lu ha

Suzanne Fluharty, Ph.D., Yurok Tribe Environmental Program Environmental Specialist

Micah Gibson.

Yurok Tribe Environmental Program Interim Director

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT FOR THE JET BOAT PROPERTY 17635 HIGHWAY 101, KLAMATH, CALIFORNIA APN: 140-050-25

Prepared for: Suzanne Fluharty, Ph.D., Yurok Tribe Environmental Program 190 Klamath Boulevard Klamath, California 95548

October 1, 2014

Prepared by: Stan Thiesen and Orrin Plocher

of

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



Stan Thiesen PG No. 7990

Orrin Plocher

Geologist

DISTRIBUTION LIST

Suzanne Fluharty, Ph.D., Environmental Specialist Yurok Tribe Environmental Program 190 Klamath Boulevard Klamath, California 95548

Micah Gibson, Interim Director Yurok Tribe Environmental Program 190 Klamath Boulevard Klamath, California 95548

Orrin Plocher Freshwater Environmental Services 78 Sunny Brae Center Arcata, California 95521

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

Glenn Kistner Tribal 128(a) Grant Lead 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

i

DISTRIBUTION LIST	i
LIST OF TABLES	iv
LIST OF FIGURES	iv
LIST OF PHOTOGRAPHS	iv
LIST OF APPENDICES	v
ACRONYMS AND ABBREVIATIONS	vi
1.0 INTRODUCTION	1
1.1 Subject Property Name	2
1.2 Subject Property Location	2
2.0 BACKGROUND	3
2.1 Sampling Area Description	4
2.2 Previous Investigations/Regulatory Involvement	4
3.0 SITE GEOLOGY AND HYDROLOGY	5
4.0 SAMPLING METHODS AND ANALYSIS	6
4.1 Field Methods	6
4.2 Soil Sampling – June 5, 2014	6
4.2 Chemical Analysis Methods	6
4.3 Modifications to the Approved Sampling and Analysis Plan	6
5.0 CHEMICAL ANALYSIS RESULTS	8
6.0 DATA QUALITY EVALUATION	9
6.1 Review of Reporting Limits	9
6.2 Review of Laboratory Reports	10
6.3 Assessment of Field Variability of Co-Located Soil Samples	12
6.4 Equipment Blanks	15
6.5 Investigation Derived Wastes	15
7.0 MEASUREMENT QUALITY OBJECTIVES (MQOs)	16
7.1 Precision	16
7.2 Accuracy/Bias	16
7.3 Representativeness	17
7.4 Comparability	18
7.5 Completeness	18
7.6 Sensitivity	18
8.0 DISCUSSION	19
8.1 Sample Locations	19
8.2 Aboveground Storage Tank (AST) Area	19
8.3 Smoke House	21
8.4 Southern Area	22
8.5 Human Risk	25
8.6 Ecological Risk	26
8.7 Reporting Limits Exceeding Screening Levels for VOCs	27
9.0 CONCLUSIONS AND RECOMENDATIONS	28
9.1 AST Area	29
9.2 Smoke House	29
9.3 Southern Area	30

TABLE OF CONTENTS

10.0 REFERENCES

LIST OF TABLES

- Table 1 Summary of Chemical Analyses of Soil Samples for Petroleum and VOCs
- Table 2
 Summary of Chemical Analyses of Soil Samples for Metals
- Table 3
 Geographic Coordinates Calculated using a Geographic Information System

LIST OF FIGURES

- Figure 1 Subject Property Location Map
- Figure 2 USGS 7.5 Minute Topographic Map
- Figure 3 2012 Aerial Photograph
- Figure 4 Parcel Map APN: 140-050-25
- Figure 5 Sample Locations
- Figure 6 AST Area Detail
- Figure 7 Smoke House Area Detail
- Figure 8 Southern Area Detail

LIST OF PHOTOGRAPHS

- Photo 1 Aboveground storage tank building and former dispenser hose.
- Photo 2 Detail of former dispenser hose.
- Photo 3 Rebuilt AST building and hose path.
- Photo 4 Water released at corner of AST building to determine flow path.
- Photo 5 Boring locations; Jet-Boat-1, Jet-Boat-2, and Jet-Boat-3.
- Photo 6 Boring locations; Jet-Boat-1, Jet-Boat-2, and Jet-Boat-3.
- Photo 7 New hose in place for fueling.
- Photo 8 New hose detail.
- Photo 9 Smoke House location.
- Photo 10 Two compartments of Smoke House.
- Photo 11 Western compartment of Smoke house.
- Photo 12 Eastern compartment of Smoke House.
- Photo 13 Boring Jet-Boat-4 in western compartment of Smoke House.
- Photo 14 Boring Jet-Boat-4 in western compartment of Smoke House.
- Photo 15 Boring Jet-Boat-5 in eastern compartment of Smoke House.

- Photo 16 Southern area of Subject Property.
- Photo 17 Looking southeast at area of "stressed" vegetation.
- Photo 18 Borings locations; Jet-Boat-6, Jet-Boat-7, and Jet-Boat-8.
- Photo 19 Boring location Jet-Boat-6.
- Photo 20 Boring location Jet-Boat-7.
- Photo 21 Boring location Jet-Boat-8.
- Photo 22 Boring location Jet-Boat-Metals.
- Photo 23 Boring locations around Jet-Boat-6.
- Photo 24 Boring location Jet-Boat-12.
- Photo 25 Boring location Jet-Boat-13.
- Photo 26 Boring location Jet-Boat-13.
- Photo 27 Equipment around Jet-Boat-13.
- Photo 28 Boring location Jet-Boat-14.

LIST OF APPENDICES

- Appendix A Boring Logs
- Appendix B Laboratory Report and Chain-Of-Custody Record 1
- Appendix C Laboratory Report and Chain-Of-Custody Record 2
- Appendix D Laboratory Report and Chain-Of-Custody Record 3
- Appendix E Approved Cultural Resources Management Permit Application
- Appendix F Best Management Practices for Small Docks and Vessel Fueling Operations (Provided by YTEP)

v

ACRONYMS AND ABBREVIATIONS

ASTM	ASTM International (formerly American Society for Testing and Materials)
bgs CERCLA CFR CHHSL CLP CWA	below ground surface Comprehensive Environmental Response, Cleanup, and Liability Act Code of Federal Regulations California Human Health Screening Levels Contract Laboratory Program Clean Water Act
DQA	Data Quality Assessment
	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
GC/MS	Geographic Information System
GRO	Gasoline Range Organics
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
	Provision Accuracy Penrocentativeness Completeness Comparability and
FARCUS	Sensitivity
PDS	Post digestion spike
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	
	Quantitation Limit Resource Concernation and Resource Act
RPD	Relative Percent Difference
RSIs	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
- TPH Total Petroleum Hydrocarbons
- TPPH Total Purgeable Petroleum Hydrocarbons
- TPPH-GRO Total Purgeable Petroleum Hydrocarbons Gasoline Range Organics
- USCS Unified Soil Classification System
- USDA United States Department of Agriculture
- USGS United States Geological Survey
- VOC Volatile Organic Compound
- YTEP Yurok Tribe Environmental Program

1.0 INTRODUCTION

Freshwater Environmental Services (FES) has prepared this report of findings for the Phase II Environmental Site Assessment (ESA) of the Jet Boat Tours Property (the Subject Property). A Phase I ESA conducted by the Yurok Tribe Environmental Program (YTEP) dated July 10, 2013 (YTEP, 2013) was completed for the Subject Property. FES developed a Sampling and Analysis Plan (SAP) for the Subject Property dated May 21, 2014. The SAP was approved by the EPA on May 27, 2014.

This report conforms to the process and principles recommended in the *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, E-1903-11, (ASTM, 2011). This report documents the soil sampling activities performed at the Subject Property. The location of the Subject Property 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, 2013), and to provide sufficient information regarding the presence or absence of contamination at the Site (ASTM, 2011). The scope of work developed by FES for this assessment was based on the conclusions of the Phase I ESA.

Section 9.0 of the Phase I ESA (YTEP, 2013) listed the following as Recognized Environmental Conditions (quoted directly from the report).

- It was discovered that the smoke house appears to be the site of dumping of used petroleum oil products that are associated with the jet boats used for the Jet Boat Tours. The smoke house has no containment in the flooring, it appears to be dirt. There were other hazardous materials observed being stored in the smoke house as well. This was verified by interviewing both a former employee of the Jet Boat Tours and the Director of Economic Development for the Yurok Tribe.
- It was discovered that the Aboveground Storage Tank and the associated piping and fittings were leaking. The surrounding areas of the fittings and the tank were discolored in a pattern that would indicate a petroleum leak has been occurring. This was verified by interviewing the current maintenance worker at the Jet Boat Tours.
- Stained and distressed vegetation is an indicator of the likely presence of contaminants in or around the vegetative matter. Stained and distressed vegetation was observed on the south end of the property.

The principal questions to be answered by the investigation are listed below (quoted directly from the SAP).

- Does soil contamination exist inside the Smoke House indicating previous releases or systematic disposal of used motor oil or volatile organic compounds?
- Does gasoline contaminated soil exist in the area of the fuel tank and associated piping over the Environmental Screening Levels (ESLs) for residential use?

- Does waste oil contaminated soil exist in the "southern portion of the Site" over ESLs for residential use?
- If waste oil is present in the "southern portion of the Site" are "wear metals" present in excess of the ESLs for residential use?

The alternative actions that could result from resolution of the principal study questions are listed below (quoted directly from the SAP).

- If contamination is not identified over allowable levels on the Subject Property the Yurok Tribe can proceed with further development of the Subject Property; and
- If contamination is identified over allowable levels, additional assessment and/or cleanup may be necessary prior to redevelopment and use of the Subject Property.

This Phase II ESA is a Tribal Response Program project being funded by a CERCLA Section 128(a), Tribal Response Program grant that includes hazardous substances and petroleum products.

1.1 Subject Property Name

The Subject Property is currently operated as Klamath River Jet Boat Tours which provides seasonal river tours on the Klamath River. The Subject Property is an active commercial property which has been used as a Jet Boat Tour operation beginning in the mid 1970s based on an interview in the Phase I ESA (YTEP, 2013). The Jet Boat Tours operation is conducted on APN: 140-050-25. The area along the river edge is public property administered by the State Lands Commission. The Subject Property is known as the Jet Boat Tours Property.

1.2 Subject Property Location

The Subject Property is located west of State Highway 101 and east of the Klamath River near the town of Klamath in Del Norte County, California. The location of the Subject Property is shown on Figures 1 through 3. The Subject Property is located in the northwest corner of Section 10, Township 13 North, Range 1 East and in the southwest corner of Section 3, Township 13 North, Range 1 East of the Humboldt Base and Meridian. The Subject Property is located within the boundaries of APN 140-050-25 and also includes the strip of land along the eastern bank of the Klamath River in Del Norte County, California.

2.0 BACKGROUND

The Subject Property is currently a commercial property located approximately 2,000 feet northwest of Klamath, California. The parcel which includes most of the Subject Property (APN 140-050-25) occupies an area of approximately 0.8 acres. Based on information in the Phase I ESA (YTEP, 2013) the Subject Property was purchased by the Yurok Tribe in April 2013.

Section 7.0 of the Phase I ESA (YTEP, 2013) listed the following as findings (quoted directly from the report).

- The Subject Property was inspected by Ray Martell of the Yurok Tribe Environmental Program on May 31st, 2013. It was discovered that the smoke house appears to be the site of dumping of used petroleum oil products that are associated with the jet boats used for the Jet Boat Tours. The smoke house has no containment in the flooring, it appears to be dirt. There were other potentially hazardous materials observed being stored in the smoke house as well.
- The Subject Property was inspected by Ray Martell of the Yurok Tribe Environmental Program on May 31st, 2013. It was discovered that there is distressed and discolored vegetation on the south end of the property.
- The Subject Property was inspected by Ray Martell of the Yurok Tribe Environmental Program on May 31st, 2013. It was discovered that the Above Ground Storage Tank and the associated piping and fittings were leaking. The surrounding areas of the fittings and the tank were discolored in a pattern that would indicate a petroleum leak has been occurring.
- An interview with a former employee has verified that there has been dumping of used petroleum products throughout the property.
- A July 3rd, 2013 interview with Brad Osborne, maintenance worker, indicated that there has been ongoing leaking occurring at the AST, the fittings and the hose. He indicated that the hose was designed for water and not petroleum.
- A July 3rd interview with Tonya Sangrey, Director of Economic Development for the Yurok Tribe, indicated she was told that there were used petroleum products being dumped in the old smoke house.

Section 9.0 of the Phase I ESA (YTEP, 2013) listed the following as Recognized Environmental Conditions (quoted directly from the report).

- It was discovered that the smoke house appears to be the site of dumping of used petroleum oil products that are associated with the jet boats used for the Jet Boat Tours. The smoke house has no containment in the flooring, it appears to be dirt. There were other hazardous materials observed being stored in the smoke house as well. This was verified by interviewing both a former employee of the Jet Boat Tours and the Director of Economic Development for the Yurok Tribe.
- It was discovered that the Aboveground Storage Tank and the associated piping and fittings were leaking. The surrounding areas of the fittings and the tank were discolored in

a pattern that would indicate a petroleum leak has been occurring. This was verified by interviewing the current maintenance worker at the Jet Boat Tours.

 Stained and distressed vegetation is an indicator of the likely presence of contaminants in or around the vegetative matter. Stained and distressed vegetation was observed on the south end of the property.

2.1 Sampling Area Description

The Subject Property occupies approximately 0.8 acre that is mostly flat and located approximately 2,000 feet northwest of the town of Klamath between State Highway 101 and the Klamath River. Most of the northern one-third of the Subject Property is used for parking and is mostly paved. The central portion of the Subject Property is occupied by the building housing the Jet Boat Tours office and a paved parking lot on the east side of the building. The rest of the central portion consists of the Smoke House and grassy areas. The southern portion of the Subject Property has been cleared of most vegetation with some trees and brush. The parcel to the north of the Subject Property is occupied by a recreational vehicle park.

The Phase I ESA, (YTEP, 2013) indicated that the oldest historic documentation is a 1947 Historical Topographic Map that shows the presence of several structures in the vicinity of the Subject Property. Based on interviews conducted for the Phase I ESA the Subject Property was used as a salmon cannery and restaurant after the 1964 flood and by the 1970s was being used for the Jet Boat Tours operations.

2.2 Previous Investigations/Regulatory Involvement

The only known investigation of the Subject Property has been a Phase I ESA, (YTEP 2013) performed for the Yurok Tribe and the United States Environmental Protection Agency (US EPA) Region 9 Brownfields Program with funding through CERCLA 128(a) Tribal Response Grant. 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 ranges in elevation from approximately mean sea level along the Klamath River to approximately 20 feet above mean sea level along Highway 101 based on the United States Geological Survey (USGS) 7.5 minute Requa Quadrangle. The topography of most of the Subject Property is relatively flat with a slight slope towards the Klamath River which is adjacent to the Subject Property. The slope directly adjacent to the Klamath River is steeper. Based on data obtained from the Natural Resource Conservation Service (NRCS), the average annual precipitation at the Subject Property is approximately 75 inches.

The Subject Property is shown on the "Geologic Map of the Weed Quadrangle, California" (Wagner and Saucedo, 1987) as being within an area of Holocene (within the last 11,000 years) alluvium. The nearest fault zoned as active (within the last 11,000 years) under the Alquist-Priolo Earthquake Fault Zoning Act, is approximately 32 miles to the south-southwest of the Subject Property. The Subject Property is within the Tsunami Inundation Zone as shown on the California Emergency Management Agency's March 30, 2009 Tsunami Inundation Map for Emergency Planning, Requa Quadrangle. The Subject Property is entirely within the California Coastal Zone.

Information on soils at the Subject Property was not available from the Natural Resource Conservation Service (NRCS). Based on the location of the Subject Property it is likely that the soils underlying the Subject Property consist of river deposits which likely include gravel, sand, and silt. Significant portions of the Subject Property are covered with asphalt and the area around the dock is covered in rock.

The nearest surface water is the Klamath River which is adjacent to the western portion of the Subject Property.

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 Subject Property in the areas where the proposed soil sampling would take place. YTEP also has an approved Cultural Resources Management Permit Application (Appendix E) to ensure that the project would have no impact to cultural resources. Soil samples were collected at a maximum depth of approximately 2.0 feet below ground surface (bgs). Most of the soil samples were collected using a shovel and electric jackhammer to loosen the soil around the sample location. Boring logs were prepared for each sample location and are included in Appendix A.

4.2 Soil Sampling – June 5, 2014

A total of 19 soil samples (excluding two co-located samples) were collected at the Subject Property on June 5, 2014. The approximate sample locations are shown on Figures 5, 6, 7, and 8. One of the samples (Jet-Boat-Metals) was collected to provide reference/comparison metals concentrations outside of the expected contamination area at the Subject Property. The samples were collected from a depth intervals ranging from of 0.0 to 2.0 feet bgs. FES documented the sample locations by measuring from buildings that were present on the aerial photographs. FES also collected GPS data for the sample locations. The GPS points were found to be less accurate than using the distances from buildings.

4.2 Chemical Analysis Methods

The soil samples were analyzed by Eurofins Calscience (Calscience) of Garden Grove, California. Calscience is certified by the California Department of Public Health for the requested analysis.

4.3 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 modifications included:

- The SAP indicted that EPA Method 8015B would be used for gasoline. The method was changed to 8260B to reduce the number of Terra Core® kits used by 50%.
- The SAP indicated that the soil samples would be collected from two depth intervals. The first interval was proposed to be 0.0 to 0.5 feet bgs and the second proposed interval was to be 0.5 to 1.0 feet bgs. The actual depths range from approximately 0.0 to 2.0 feet.
- Three additional samples were collected on August 8, 2014 in the area around Jet-Boat-6 where concentrations of TPH-Motor Oil exceeded the screening level.

- The SAP indicated that soil cuttings from the Smoke House would be containerized in 5gallon buckets. Because there were no indications of contamination these soils were placed back in the borings.
- The SAP indicated that the soil for the co-located samples for TPH-Motor Oil and metals would be homogenized in the field. The co-located sample Jet-Boat-15-(0.1'-0.25') was inadvertently not homogenized in the field.
- The SAP indicated that a MS/MSD would be conducted for Jet-Boat-1 and Jet-Boat-4. The laboratory included an MS/MSD in the laboratory report for 14 VOCs but not for TPPH-GRO because it is not required for the 8260B Method. FES was not aware that no MS/MSD would be included.

5.0 CHEMICAL ANALYSIS RESULTS

The laboratory analytical reports are included in Appendix B, Appendix C, and Appendix D. Detections of analytes that exceeded the screening levels are shown in the table below. The reporting limit exceeded the screening level limit for xylenes (Jet-Boat-1-(1.0') and arsenic.

Sample ID	Date	TPH-Motor Oil With Silica Gel (mg/kg)	TPPH Gasoline Range Organics (mg/kg)	p/m- Xylene (mg/kg)	o- Xylene (mg/kg)	Arsenic (mg/kg)	Nickel (mg/kg)
	RSL	100	100	2.3	2.3	0.39	150
Jet-Boat-1-(1.0')	6/5/14		4,600	<4.6	<2.3		
Jet-Boat-1-(2.0')	6/5/14		4,500	4.0	14		
Jet-Boat-9-(1.0') Duplicate of Jet-Boat-1-(1.0')	6/5/14		4,400	<2.0	<0.98		
Jet-Boat-2-(0.9')	6/5/14		0.32	<0.0024	<0.0012		
Jet-Boat-2-(1.5')	6/5/14		0.17	0.0030	0.0019		
Jet-Boat-3-(0.8')	6/5/14		0.46	<0.0024	<0.0012		
Jet-Boat-3-(2.0')	6/5/14		0.093	<0.0024	<0.0012		
Jet-Boat-4-(0.1')	6/5/14	<25	0.083	<0.0021	<0.0011	5.896	165
Jet-Boat-10-(0.1') Duplicate of Jet-Boat-4-(0.1')	6/5/14	<25	<0.054	<0.0021	<0.0011		170
Jet-Boat-4-(1.1')	6/5/14	<25	<0.055	<0.0022	<0.0011		24.9
Jet-Boat-5-(0.1')	6/5/14	<25	<0.055	<0.0022	<0.0011		161
Jet-Boat-5-(1.0')	6/5/14	<25	<0.056	<0.0023	<0.0011		142
Jet-Boat-6-(0.1'-0.2')	6/5/14	2,300					78.2
Jet-Boat-6-(1.0')	6/5/14	44					45.7
Jet-Boat-7-(0.1'-0.2')	6/5/14	130					89.1
Jet-Boat-7-(0.9')	6/5/14	<25					79.8
Jet-Boat-8-(0.0'-0.3')	6/5/14	<25					110
Jet-Boat-8-(0.9'-1.0')	6/5/14	29					52.3
Jet-Boat-Metals-(0.75')	6/5/14					3.64	23.7
Jet-Boat-12-(0.0'-0.25')	8/8/14	160					78.4
Jet-Boat-12-(1.0')	8/8/14	52					102
Jet-Boat-13-(0.0'-0.25')	8/8/14	170					26.1
Jet-Boat-13-(1.0')	8/8/14	35					55.1
Jet-Boat-14-(0.1'-0.25')	8/8/14	490					129
Jet-Boat-15-(0.1'-0.25') Duplicate of Jet-Boat-14- (0.1'-0.25')	8/8/14	1,400					208
Jet-Boat-14-(1.0')	8/8/14	<25					114

SUMMARY OF CHEMICAL CONCENTRATIONS EXCEEDING THE RESIDENTIAL SCREENING LEVELS IN SOIL SAMPLES

NOTES:

0.32 Analytes detected below the screening level shown in bold.

4,600 Analytes detected at or above the screening level shown in red bold.

TPPH Total Purgeable Petroleum Hydrocarbons

- mg/kg milligrams per kilogram
 - RSL Residential Screening Level

TPH-Motor Oil reported after silica gel cleanup.

-- Not analyzed

6.0 DATA QUALITY EVALUATION

6.1 Review of Reporting Limits

The sampling and analysis plan included tables listing the reporting limits provided by Calscience for all analytes. Reporting limits were raised for samples that contained significant quantities of gasoline.

TPH-Motor Oil (TPH-MO) EPA Method 8015B (M)

Calscience estimated a reporting limit of 25 mg/kg for the TPH-MO analysis. All of the samples with no detections had a reporting limit of 25 mg/kg. The reporting limits for the samples with detections ranged from 25 mg/kg to 120 mg/kg. The screening level for TPH-MO was 100 mg/kg so the reporting limits were considered acceptable.

Total Purgeable Petroleum Hydrocarbons - Gasoline Range Organics EPA Method 8260B

Calscience estimated a reporting limit of 0.50 mg/kg for the Total Purgeable Petroleum Hydrocarbons - Gasoline Range Organics (TPPH-GRO) analysis. All of the samples with no detections had a reporting limits ranging from 0.54 to 0.56 mg/kg. The screening level for gasoline was 100 mg/kg so the reporting limits were considered acceptable.

LIST OF ANALYTES WHICH WERE NOT DETECTED IN THE SOIL SAMPLES BUT FOR WHICH THE REPORTING LIMIT EQUALED OR EXCEEDED THE RESIDENTIAL SCREENING LEVEL

Analyte	Units	Screening Level	Range of Reporting Limits that Exceeded the Screening Level	Number of Samples for which the Reporting Limit Equals or Exceeds the Screening Level and for which there was no Detection of the Analyte
Acetone	mg/kg	0.5	2.7	1
Benzene	mg/kg	0.044	0.90 - 2.3	3
Chlorobenzene	mg/kg	1.5	2.3	1
1,2-Dibromo-3-Chloropropane	mg/kg	0.0045	0.0053 - 2.3	5
1,2-Dibromoethane	mg/kg	0.00033	0.0011 - 2.3	12
1,2-Dichlorobenzene	mg/kg	1.1	2.3	1
1,4-Dichlorobenzene	mg/kg	0.59	0.90 - 2.3	3
1,2-Dichloroethane	mg/kg	0.0045	0.90 - 2.3	3
Naphthalene	mg/kg	1.2	9.0 - 23	3
p/m-Xylene	mg/kg	2.3	4.6	1
o-Xylene	mg/kg	2.3	2.3	1
Methyl-t-Butyl Ether (MTBE)	mg/kg	0.023	1.8 - 4.6	3
Tert-Butyl Alcohol (TBA)	mg/kg	0.075	18 - 46	3

NOTES:

mg/kg Milligrams per kilogram.

Volatile Organic Compounds (VOCs) EPA Method 8260B

A total of 71 VOCs were analyzed for this project. Screening levels were not available for 32 of the VOCs. Six of the 71 VOCs were detected in the soil samples. Thirteen of the VOCs had reporting limits that were higher than the screening levels. The other reporting limits were less than the screening levels. The table above shows the analytes for which the reporting limits exceeded the screening levels. The VOC reporting limits for these analytes were considered acceptable because they were the lowest that the laboratory stated that they could achieve.

Metals by EPA Method 6020 (All metals except chromium VI and mercury)

A total of 20 metals (excluding chromium VI and mercury) were analyzed for the Jet-Boat-Metals-(0.75') in a location outside of the areas where soil contamination was considered more likely to have occurred. All of the other samples that were analyzed for metals were analyzed for cadmium, chromium, nickel, lead, and zinc. There was no screening level available for magnesium. The reporting limits for the 21 metals were all lower than the screening levels except for arsenic which had a reporting limit of 1.00 mg/kg which is higher than the screening level of 0.39 mg/kg. Analysis for arsenic was only done for the Jet-Boat-Metals sample which had a concentration of 3.64 mg/kg. The metals reporting limits were considered acceptable.

Mercury by EPA Method 7471A

The reporting limit for mercury was 0.0835 mg/kg which is well below the screening level of 6.7 mg/kg. There were no detections of mercury in the sample. The reporting limit for mercury was considered acceptable.

Chromium VI by EPA Method 7196A

The reporting limit for Chromium VI was 0.080 mg/kg which is well below the screening level of 8.0 mg/kg. There were no detections of Chromium VI in the sample. The reporting limit for Chromium VI was considered acceptable.

6.2 Review of Laboratory Reports

The laboratory analytical reports are included in Appendix B, Appendix C, and Appendix D. All of the analyses were conducted by Calscience. FES reviewed the laboratory analytical reports to determine if there were any data quality issues. The discussions below are based on a review of the quality control results.

TPH-Motor Oil (TPH-MO) EPA Method 8015B (M)

There were no detections of TPH-MO in the method blanks. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits for the samples collected on June 5, 2014. The laboratory did not include a LCSD for the samples collected on August 8, 2014. The matrix spike and matrix spike duplicate recoveries were within the acceptable

range. The RPDs for the MS/MSD were within the laboratory control limit of 15%. The results for the TPH-MO analyses were considered acceptable.

Total Purgeable Petroleum Hydrocarbons - Gasoline Range Organics EPA Method 8260B

There were no detections of TPPH-GRO in the method blanks. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The laboratory included an MS/MSD in the laboratory report for 14 VOCs but not for TPPH-GRO because it is not required for the 8260B Method. FES was not aware that no MS/MSD would be included. The laboratory indicated that an MS/MSD that would include TPPH-GRO and all VOCs would need to be requested prior to sample analysis and that there would be additional cost. The results for the TPPH-GRO analyses were considered acceptable based on the LCS/LCSD.

Volatile Organic Compounds (VOCs) EPA Method 8260B

There were no detections of VOCs in the method blanks. Surrogate recoveries were within the acceptable range.

The laboratory control sample and laboratory control sample duplicate were lower than the acceptable recovery limits for Ethyl-t-Butyl Ether and Tert-Amyl-Methyl-Ether. The recovery of ethanol was higher than the acceptable range for the LCS and LCSD. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits for the other VOCs analyzed. There were no detections of these three analytes in the samples.

The matrix spike and matrix spike duplicate recoveries for Jet-Boat-1-(1.0') were within the acceptable. The RPDs for the MS/MSD for Jet-Boat-1-(1.0') were within the acceptable range. The matrix spike and matrix spike duplicate recoveries for Jet-Boat-4-(0.1') were lower than the acceptable range for p/m-Xylene and o-Xylene. This may indicate a low bias in the results for this sample. There were no detections of these analytes in the sample. The RPDs for the MS/MSD for Jet-Boat-4-(0.1') higher than the acceptable range for 1,2-Dichloroethane, p/m-Xylene, and o-Xylene. There were no detections of these three analytes in the samples. The results for the VOC analyses were considered acceptable.

Metals by EPA Method 6020 (All metals except chromium VI and mercury)

There were no detections of metals 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 recoveries were within the acceptable range except for zinc in the MS/MSD prepared from Jet-Boat-12-(0.0'-0.25') which had a higher recovery than the acceptable range. No RPD was calculated for nickel in the MS/MSD for Jet-Boat-4-(0.1') because of suspected matrix interference. The post digestion spike (PDS) analyses were

within the acceptable recovery limits. No RPD was calculated for nickel in the PDS for Jet-Boat-4-(0.1') because the concentration of nickel in the sample was greater than four times the spike concentration. The results for the metals analyses were considered acceptable.

Chromium VI by EPA Method 7196A

Chromium VI was not detected in the method blank. The laboratory control sample was within acceptable recovery limits. The laboratory did not include a laboratory control sample duplicate. The matrix spike and matrix spike duplicate recoveries were within the acceptable range. The results for the Chromium VI analysis were considered acceptable.

Mercury by EPA Method 7471A

Mercury was not detected in the method blank. 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 recoveries were within the acceptable range. The results for the mercury analysis were considered acceptable.

6.3 Assessment of Field Variability of Co-Located Soil Samples

Three co-located soil samples were collected for this project. The co-located samples were created by placing soil from the same location and depth in a clean glass mixing bowl and homogenizing the sample with gloved hands. Soil from the homogenized sample was placed into the various containers and the co-located sample was submitted "blind" to the laboratory. No co-located sample was collected for VOC analysis because volatilization can occur during mixing. The laboratory homogenized the individual samples prior to extraction and analysis.

The equation for calculating the RPD is: $\begin{aligned} \text{RPD} &= |X1 - X2| \div [(X1 + X2)/2] \times 100 \\ \text{RPD} &= \text{Relative Percent Difference (as \%)} \\ \text{X1 - X2} &= \text{Absolute value (always positive) of X1 - X2} \\ \text{X1 = Original sample concentration} \\ \text{X2 = Duplicate sample concentration} \end{aligned}$

A RPD of 35% or less is generally considered acceptable for soil samples. The RPDs for the colocated samples with detections in both samples are shown in the two tables on the following page.

The only petroleum compounds that were detected in both the sample and co-located sample were TPPH-GRO and TPH-Motor Oil. The RPD for TPPH-GRO was 4.4% which is well within the acceptable range.

The RPD for TPH-Motor Oil was 96% which is well outside of the acceptable limit of 35%. The TPH-Motor Oil sample was inadvertently not homogenized in the field prior to placing in the separate containers. The laboratory homogenized the TPH-Motor Oil samples prior to analysis. The lack of field homogenization probably contributed to the high RPD for TPH-Motor Oil.

Two co-located samples were collected for metal analysis. The RPDs for the metals for the sample and co-located sample collected at Jet-Boat-4-(0.1') were all less than or equal to 3%. The RPDs for the metals for the sample and co-located sample collected at Jet-Boat-14-(0.1'-0.25') were all less than 35% except for nickel which was 46.9%. Nickel was analyzed from the same co-located sample that was inadvertently not homogenized in the field prior to placing in the separate containers. The laboratory homogenized the metals samples prior to analysis. The lack of field homogenization probably contributed to the high RPD for nickel.

SUMMARY OF RELATIVE PERCENT DIFFERENCES FOR PETROLEUM HYDROCARBONS IN THE CO-LOCATED SOIL SAMPLES

Sample ID	Date	TPPH Gasoline Range Organics (mg/kg)	TPH-Motor Oil With Silica Gel (mg/kg)
Jet-Boat-1-(1.0')	6/5/14	4,600	
Jet-Boat-9-(1.0') Duplicate of Jet-Boat-1-(1.0')	6/5/14	4,400	
Relative Percent Difference	ce (RPD)	4.4%	NA
Jet-Boat-4-(0.1')	6/5/14	<25	0.083
Jet-Boat-10-(0.1') Duplicate of Jet-Boat-4-(0.1')	6/5/14	<25	<0.054
Relative Percent Difference	ce (RPD)	NA	NA
Jet-Boat-14-(0.1'-0.25')	8/8/14	490	
Jet-Boat-15-(0.1'-0.25') Duplicate of Jet-Boat-14- (0.1'-0.25')	8/8/14	1,400	
Relative Percent Difference	ce (RPD)	96.3%	NA

NOTES:

TPPH Total Purgeable Petroleum Hydrocarbons

mg/kg milligrams per kilogram

NA Not Applicable

SUMMARY OF RELATIVE PERCENT DIFFERENCES FOR METALS IN THE CO-LOCATED SOIL SAMPLES

Sample ID	Date	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
Jet-Boat-4-(0.1')	6/5/14	<1.00	94.3	5.85	165	59.1
Jet-Boat-10-(0.1') Duplicate of Jet-Boat-4-(0.1')	6/5/14	<1.00	94.9	5.84	170	60.8
Relative Percent Diff	erence (RPD)	NA	0.6%	0.2%	3.0%	2.8%
Jet-Boat-14-(0.1'-0.25')	8/8/14	<1.00	62.4	13.0	129	104
Jet-Boat-15-(0.1'-0.25') Duplicate of Jet-Boat-14-(0.1'-0.25')	8/8/14	<1.00	83.3	16.4	208	106
Relative Percent Diff	erence (RPD)	NA	28.7%	23.1%	46.9%	1.9%

NOTES:

mg/kg milligrams per kilogram

NA Not Applicable

6.4 Equipment Blanks

One equipment blank was collected for this project after the first soil sample was collected from Jet-Boat-4-(0.1'). After completing the normal decontamination procedures, distilled water was poured on the shovel and the rinse water collected in the appropriate containers. The equipment blank was submitted "blind" to the laboratory as Jet-Boat-11 and analyzed for TPH-MO, TPPH-GRO, VOCs, cadmium, chromium, nickel, lead, and zinc which are the same analytes that were analyzed for Jet-Boat-4-(0.1'). The only analyte that was detected was zinc at a concentration of 0.0167 μ g/L. This may indicate a high bias for zinc in the soil samples collected with the shovel. None of the zinc samples contained zinc exceeding the residential screening level.

6.5 Investigation Derived Wastes

During the initial sampling on June 5, 2014 there was a strong gasoline odor at Jet-Boat-1 so all soil cuttings from this area were containerized in 5-gallon buckets. Five buckets of soils and one bucket of decontamination fluids were transferred to the custody of YTEP and were hauled off after the sampling in this area was completed. There were no field indicators of contamination at the other locations. The SAP indicated that soil cuttings from the Smoke House would be containerized in 5-gallon buckets. Because there were no indications of contamination these soils were placed back in the borings.

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 (co-located samples). An RPD of <20% for water and <35% for soil, depending upon the chemical being analyzed is generally considered acceptable.

RPDs for the co-located soil samples ranged from 0.2% to 96.3%. The only analytes that exceeded 35% were TPH-Motor Oil (96.3%) and nickel (46.9%). The TPH-Motor Oil and metals sample was inadvertently not homogenized in the field prior to placing in the separate containers.

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. The results of these analyses are described in Section 6.2.

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 %R 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.

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 question for this project was whether the Subject Property contains contaminated soils above concentrations regarded as safe for reuse of the Subject Property.

This project collected judgmental samples in areas that were suspected to have been contaminated with gasoline, motor oil, VOCs, and metals. The Jet-Boat-Metals sample was collected from an area that was not suspected of being 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 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.

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 23 soil samples (excluding the co-located samples) were collected from the Subject Property. One of the samples (Jet-Boat-Metals-(0.75') was collected from an area not expected to have been impacted by activities at the Subject Property to determine reference metals concentrations. The Sampling and Analysis Plan called for the collection of 17 soil samples. The samples collected on August 8, 2014, included three new locations, Jet-Boat-12, Jet-Boat-13, and Jet-Boat-14. The percent completeness is 100% based on the number of samples in the SAP. The additional samples collected on August 8, 2014 were not included in the SAP.

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 screening levels except for the analytes described in Section 6.1. A table listing analytes for which the reporting limits were higher than the screening levels is provided in Section 6.1.

8.0 DISCUSSION

8.1 Sample Locations

A total of 23 soil samples (excluding the co-located samples) from 12 locations were collected from the Subject Property. One of the samples, Jet-Boat-Metals-(0.75') was collected from an area not expected to have been impacted by activities at the Subject Property to assess the concentrations of metals in soil. The samples were collected from various intervals with a maximum depth of 2.0 feet bgs.

The following sample locations were from areas expected to contain some contamination:

- Jet-Boat-1, Jet-Boat-2, and Jet-Boat-3 were collected in the area downhill of the AST where gasoline was reported to have been released;
- Jet-Boat-4 and Jet-Boat-5 were collected inside the Smoke House where motor oil, gasoline, and VOCs were suspected to have been stored; and
- Jet-Boat-6, Jet-Boat-7, and Jet-Boat-8 were collected in the southern area of the Subject Property where motor oil was reported to have been disposed directly onto the ground;

The following sample locations were from the area around Jet-Boat-6 where motor oil was detected above the screening level:

• Jet-Boat-12, Jet-Boat-13 and Jet-Boat-14 were collected on three sides of Jet-Boat-6.

The following sample location was in an area not expected to have been impacted by activities at the Subject Property:

• Jet-Boat-Metals.

Three co-located samples were collected as listed below:

- Jet-Boat-9-(1.0') was co-located with Jet-Boat-1-(1.0');
- Jet-Boat-10-(0.1') was co-located with Jet-Boat-4-(0.1'); and
- Jet-Boat-15-(0.1'-0.25') was co-located with Jet-Boat-14-(0.1'-0.25').

8.2 Aboveground Storage Tank (AST) Area

Jet-Boat-1 Discussion

Jet-Boat-1 was located just downhill of the concrete apron that is present near the southwest corner of the AST building (Figures 5 and 6, Photos 4, 5, and 6). The soil at Jet-Boat-1 was approximately 90% sand and had a strong gasoline odor at approximately 1.0' bgs. A total of three samples were collected at this location from the following depths:

- Jet-Boat-1-(1.0') was collected on June 5, 2014 at a depth of approximately 1.0' bgs;
- Jet-Boat-9-(1.0') was co-located with Jet-Boat-1-(1.0') and collected at a depth of approximately 1.0'; and

• Jet-Boat-1-(2.0') was collected on June 5, 2014 at a depth of approximately 2.0' bgs.

TPPH-GRO was detected in all three samples at concentrations well above the screening level. P/m-xylene and o-xylene were detected in the deeper sample at concentrations exceeded the screening levels. The reporting limits were significantly raised for all VOCs at this location due to the high concentration of TPPH-GRO.

The concentrations of TPPH-GRO in the shallow samples (4,600 mg/kg/4,400 mg/kg) and in the deeper sample (4,500 mg/kg) exceeded the residential ESL (100 mg/kg). The concentrations of p/m-xylene and o-xylene in the deeper sample (4.0 mg/kg and 14 mg/kg respectively) exceeded the residential ESLs. Because of the presence of rocks at approximately 2.0' bgs no deeper samples could be obtained. The vertical delineation of contamination at this location has not been achieved.

Jet-Boat-2 Discussion

Jet-Boat-2 was located approximately 7' downhill of Jet-Boat-1 (Figures 5 and 6, Photos 4, 5, and 6). The soil at Jet-Boat-2 was approximately 90% sand and did not have any gasoline odor. A total of two samples were collected at this location from the following depths:

- Jet-Boat-2-(0.9') was collected on June 5, 2014 at a depth of approximately 0.9' bgs; and
- Jet-Boat-2-(1.5') was collected on June 5, 2014 at a depth of approximately 1.5' bgs.

TPPH-GRO and several VOCs were detected in both samples at concentrations well below the screening levels.

The concentrations of TPPH-GRO in the shallow sample (0.32 mg/kg) and in the deeper sample (0.17 mg/kg) were well below the residential ESL (100 mg/kg). The concentrations of benzene, p/mxylene, o-xylene, and toluene were well below the screening levels (0.44 mg/kg, 2.3 mg/kg, 2.3 mg/kg, and 2.9 mg/kg respectively) for residential land use. Because of the presence of rocks at approximately 1.5' bgs no deeper samples could be obtained. The vertical delineation will be evaluated at the time of excavation at Jet-Boat-1.

Jet-Boat-3 Discussion

Jet-Boat-3 was located approximately 5' downhill of Jet-Boat-2 (Figures 5 and 6, Photos 4, 5, and 6). The soil at Jet-Boat-3 was approximately 90% sand and did not have any gasoline odor. A total of two samples were collected at this location from the following depths:

- Jet-Boat-3-(0.8') was collected on June 5, 2014 at a depth of approximately 0.8' bgs; and
- Jet-Boat-3-(2.0') was collected on June 5, 2014 at a depth of approximately 2.0' bgs.

TPPH-GRO was detected in both samples at concentrations well below the screening levels. Toluene was detected in the shallower sample at a concentration well below the screening level.

The concentrations of TPPH-GRO in the shallow sample (0.46 mg/kg) and in the deeper sample (0.093 mg/kg) were well below the residential ESL (100 mg/kg). The concentration of toluene in the shallow sample (0.0028 mg/kg) was well below the screening level (2.9 mg/kg) for residential land use. Because of the presence of rocks at approximately 2.0' bgs no deeper samples could be obtained. The vertical delineation will be confirmed at the time of the proposed excavation at Jet-Boat-1.

8.3 Smoke House

Jet-Boat-4 Discussion

Jet-Boat-4 was located in the center of the western compartment of the Smoke House (Figures 5 and 7, Photos 13 and 14). The western compartment is approximately 7' by 7' and is enclosed with concrete walls up to approximately 3' above the ground surface. The soil at Jet-Boat-4 consisted of a surface layer of clay approximately 0.1' thick. There was a layer of mostly sand and gravel below the clay to a depth of at least 1.2' bgs (the bottom of the boring). The sand and gravel appeared to have been "burned" (see Photo 14) based on the orange color and the presence of small amounts of charcoal down to approximately 1.1' bgs. A total of three samples were collected at this location from the following depths:

- Jet-Boat-4-(0.1') was collected on June 5, 2014 at a depth of approximately 0.1' bgs;
- Jet-Boat-9-(0.1') was co-located with Jet-Boat-4-(0.1') and was collected at a depth of approximately 0.1'; and
- Jet-Boat-4-(1.1') was collected on June 5, 2014 at a depth of approximately 1.1' bgs.

TPPH-GRO was detected in one of the shallow samples at a concentration well below the screening level. P-isopropyltoluene and toluene were also detected in one of the shallow samples at concentrations well below the screening levels. Chromium, lead, nickel, and zinc were detected in both of the samples. Nickel exceeded the screening level in both of the shallow samples.

The only analyte that exceeded the screening level was nickel in the shallow samples. The concentrations of nickel in the shallow samples (165 mg/kg and 170 mg/kg) exceeded the residential ESL. The horizontal extent of contamination with nickel is considered to be the entire floor space of the western compartment. The vertical delineation of contamination at this location has been achieved.

Jet-Boat-5 Discussion

Jet-Boat-5 was located in the center of the eastern compartment of the Smoke House (Figures 5 and 7, Photo 15). The eastern compartment is approximately 7' by 7' and is enclosed with concrete

walls up to approximately 3' above the ground surface. The soil at Jet-Boat-5 consisted of a surface layer of silt approximately 0.2' thick. There was a layer of mostly sand and gravel below the silt to a depth of at least 1.3' bgs (the bottom of the boring). The sand and gravel appeared to have been "burned" based on the orange color and the presence of small amounts of charcoal down to approximately 1.2' bgs. A total of two samples were collected at this location from the following depths:

- Jet-Boat-5-(0.1') was collected on June 5, 2014 at a depth of approximately 0.1' bgs;
- Jet-Boat-5-(1.0') was collected on June 5, 2014 at a depth of approximately 1.0' bgs.

Acetone was detected in both the shallow sample at a concentration well below the screening level. Chromium, lead, nickel, and zinc were detected in both of the samples with only nickel exceeding the screening level in the shallow sample.

The only analyte that exceeded the screening level was nickel in the shallow sample. The concentration of nickel in the shallow sample (161 mg/kg) exceeded the residential ESL (150 mg/kg). The horizontal extent of contamination with nickel is considered to be the entire floor space of the western compartment. The vertical delineation of contamination at this location has been achieved.

8.4 Southern Area

Jet-Boat-6 Discussion

Jet-Boat-6 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 18 and 19. The sample location was chosen based on reports that used motor oil had been disposed onto the ground in this area. The soil at Jet-Boat-6 consisted of mostly sand and gravel to a depth of approximately 1.0' bgs (the bottom of the boring). A total of two samples were collected at this location from the following depths:

- Jet-Boat-6-(0.1'-0.2') was collected on June 5, 2014 at a depth of approximately 0.1 to 0.2' bgs; and
- Jet-Boat-6-(1.0') was collected on June 5, 2014 at a depth of approximately 1.0' bgs.

TPH-Motor Oil was detected in the shallow sample at a concentration well above the screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening levels.

The only analyte that exceeded the screening level was TPH-Motor Oil in the shallow sample. The concentration of TPH-Motor Oil in the shallow sample (2,300 mg/kg) exceeded the residential ESL (100 mg/kg). Additional samples (Jet-Boat-12, Jet-Boat-13, and Jet-Boat-14) were collected in this area on August 8, 2014. The vertical delineation of TPH-Motor Oil contamination at this location has been achieved.

Jet-Boat-7 Discussion

Jet-Boat-7 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 18 and 20. The sample location was chosen based on reports that used motor oil had been disposed onto the ground in this area. The soil at Jet-Boat-7 consisted of mostly sand and gravel to a depth of approximately 0.9' bgs (the bottom of the boring). A total of two samples were collected at this location from the following depths:

- Jet-Boat-7-(0.1'-0.2') was collected on June 5, 2014 at a depth of approximately 0.1 to 0.2' bgs; and
- Jet-Boat-7-(0.9') was collected on June 5, 2014 at a depth of approximately 0.9' bgs.

TPH-Motor Oil was detected in the shallow sample at a concentration above the residential screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening level.

The only analyte that exceeded the screening level was TPH-Motor Oil in the shallow sample. The concentration of TPH-Motor Oil in the shallow sample (130 mg/kg) exceeded the residential ESL (100 mg/kg). The vertical delineation of TPG-Motor Oil at Jet-Boat-7 has been achieved.

Jet-Boat-8 Discussion

Jet-Boat-8 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 18 and 21. The sample location was chosen based on reports that used motor oil had been disposed onto the surface in this area. The soil at Jet-Boat-8 consisted of mostly silt and sand to a depth of approximately 0.2' bgs. Below approximately 0.2' bgs the soil was a mixture of gravel, and silt to a depth of approximately 1.0' bgs (the bottom of the boring). A total of two samples were collected at this location from the following depths:

- Jet-Boat-8-(0.0'-0.3') was collected on June 5, 2014 at a depth of approximately 0.0' to 0.3' bgs; and
- Jet-Boat-8-(0.9'-1.0') was collected on June 5, 2014 at a depth of approximately 0.9' to 1.0' bgs.

TPH-Motor Oil was detected in the deeper sample at a concentration well below the residential screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening levels.

No analytes exceeded the screening levels at Jet-Boat-8.

Jet-Boat-9-(1.0') was a co-located sample with Jet-Boat-1-(1.0').

Jet-Boat-10-(0.1') was a co-located sample with Jet-Boat-4-(1.0').

Jet-Boat-11 was an equipment blank. The only analyte that was detected was zinc at a concentration of 0.0167 μ g/L. This may indicate a high bias for zinc in the soil samples collected with the shovel. None of the zinc samples contained zinc exceeding the residential screening level.

Jet-Boat-12 Discussion

Jet-Boat-12 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 23 and 24. The sample location was chosen based on the presence of TPH-Motor Oil at Jet-Boat-6. The soil at Jet-Boat-12 consisted of mostly gravel and sand to a depth of approximately 1.0' bgs (the bottom of the boring). A total of two samples were collected at this location from the following depths:

- Jet-Boat-12-(0.0'-0.25') was collected on August 8, 2014 at a depth of approximately 0.0' to 0.25' bgs; and
- Jet-Boat-12-(1.0') was collected on August 8, 2014 at a depth of approximately 1.0' bgs.

TPH-Motor Oil was detected in both of the samples. The concentration of TPH-Motor Oil in the shallow sample exceeded the residential screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening levels.

The only analyte that exceeded the screening level was TPH-Motor Oil in the shallow sample. The concentration of TPH-Motor Oil in the shallow sample (160 mg/kg) exceeded the residential ESL (100 mg/kg). The vertical delineation of TPH-Motor Oil contamination was achieved.

Jet-Boat-13 Discussion

Jet-Boat-13 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 23, 25, 26, and 27. The sample location was chosen based on the presence of TPH-Motor Oil at Jet-Boat-6. The soil at Jet-Boat-13 consisted of mostly gravel and sand to a depth of approximately 1.0' bgs (the bottom of the boring). A total of two samples were collected at this location from the following depths:

- Jet-Boat-13-(0.0'-0.25') was collected on August 8, 2014 at a depth of approximately 0.0' to 0.25' bgs; and
- Jet-Boat-13-(1.0') was collected on August 8, 2014 at a depth of approximately 1.0' bgs.

TPH-Motor Oil was detected in both of the samples. The concentration of TPH-Motor Oil in the shallow sample exceeded the residential screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening levels.

The only analyte that exceeded the screening level was TPH-Motor Oil in the shallow sample. The concentration of TPH-Motor Oil in the shallow sample (170 mg/kg) exceeded the residential ESL. The vertical delineation of TPH-Motor Oil contamination was achieved.

Jet-Boat-14 Discussion

Jet-Boat-14 was located at the southern end of the Subject Property as shown on Figures 5 and 8, Photos 23, and 28. The sample location was chosen based on the presence of TPH-Motor Oil at Jet-Boat-6. The soil at Jet-Boat-14 consisted of mostly gravel and sand to a depth of approximately 1.0' bgs (the bottom of the boring). A total of three samples were collected at this location from the following depths:

- Jet-Boat-14-(0.0'-0.25') was collected on August 8, 2014 at a depth of approximately 0.0' to 0.25' bgs;
- Jet-Boat-15-(0.0'-0.25') was co-located with Jet-Boat-14-(0.0'-0.25') and was collected at a depth of approximately 0.0' to 0.25' bgs; and
- Jet-Boat-14-(1.0') was collected on August 8, 2014 at a depth of approximately 1.0' bgs.

TPH-Motor Oil was detected in both of the shallow samples. The concentration of TPH-Motor Oil in both of the shallow samples exceeded the residential screening level. Chromium, lead, nickel, and zinc were detected in both of the samples at concentrations below the screening levels except for nickel in the shallow sample.

The only analytes that exceeded the screening level were TPH-Motor Oil and nickel in the shallow samples. The concentrations of TPH-Motor Oil in the shallow samples (490 mg/kg and 1,400 mg/kg) exceeded the residential ESL (100 mg/kg). The concentration of nickel in the co-located sample exceeded the residential ESL (150 mg/kg). The vertical delineation of TPH-Motor Oil and nickel has been achieved.

Jet-Boat-15-(0.0'-0.25') was a co-located sample with Jet-Boat-14-(0.0'-0.25').

8.5 Human Risk

<u>AST Area</u>

The concentrations of TPPH-GRO and xylenes in the soil downhill of the AST area are considered a potential human risk if impacted soils are not removed. If the Subject Property continues to be used for its current commercial use the risk is considered minimal unless the contaminated soils are disturbed. We recommend the excavation and offsite disposal of soils in this area that exceed the residential screening level of 100 mg/kg.

Smoke House

The concentration of nickel in the soil in both compartments of the Smoke House is considered a potential human risk if impacted soils are not removed. If the Subject Property continues to be used for its current commercial use the risk is considered minimal unless the contaminated soils are disturbed. Prior to reuse of the Smoke House we recommend the excavation and offsite disposal of soils to a depth of approximately 1.5' bgs or to the bottom of the "burned" layer whichever is deeper.

Southern Area

The concentration of TPH-Motor Oil in the soil in the southern area of the Subject Property is considered a potential human risk if impacted soils are not removed. If the Subject Property continues to be used for its current commercial use the risk is considered minimal unless the contaminated soils are disturbed. We recommend the excavation and offsite disposal of soils exceeding the residential screening level of 100 mg/kg.

8.6 Ecological Risk

AST Area

The concentrations of TPPH-GRO and xylenes in the soil downhill of the AST area are considered a potential ecological risk if impacted soils are not removed. The contaminants present in the soil in this area are less than 20' from the eastern edge of the Klamath River. During high flows the distance could be significantly less. The contaminated soil is mostly sand which enhances the leaching of contaminants down to the water table which is at least as high as the elevation of Klamath River. This may be a source of historic release of petroleum to the Klamath River. We recommend the excavation and offsite disposal of soils in this area that exceed the residential screening level of 100 mg/kg.

Smoke House

The concentration of nickel in the soil in both compartments of the Smoke House is not considered a potential ecological risk. Prior to reuse of the Smoke House we recommend the excavation and offsite disposal of soils to a depth of approximately 1.5' bgs or to the bottom of the "burned" layer whichever is deeper.

Southern Area

The concentration of TPH-Motor Oil in the soil in the southern area of the Subject Property is considered a potential ecological risk if impacted soils are not removed. Surface runoff from the contaminated area may reach the Klamath River during heavy rainfall. TPH-Motor Oil is likely being leached down to the water table with the groundwater gradient very likely to be towards the Klamath River. We recommend the excavation and offsite disposal of soils exceeding the residential screening level of 100 mg/kg.

The table on the following page includes species that are listed by the United States Fish and Wildlife Service and the National Marine Fisheries Service for the Requa 7.5 minute quadrangle which includes the Subject Property.

Type/Listing Agency	Common Name	Category	Critical Habitat
Invertebrates			
NMFS	black abalone	Endangered species	No
Fish			
NMFS	green sturgeon	Threatened species	Yes
US FWS	tidewater goby	Endangered species	Yes
----------	------------------------------------	---------------------	-----
NMFS	S. OR/N. CA coho salmon	Threatened species	Yes
NMFS	CA coastal chinook salmon	Threatened species	Yes
NMFS	Southern eulachon DPS	Threatened species	Yes
US FWS	Northern California steelhead	Threatened species	Yes
Reptiles			
NMFS	loggerhead turtle	Threatened species	No
NMFS	green turtle	Threatened species	No
NMFS	leatherback turtle	Endangered species	Yes
NMFS	olive (=Pacific) ridley sea turtle	Threatened species	No
Birds			
US FWS	marbled murrelet	Threatened species	Yes
US FWS	western snowy plover	Threatened species	Yes
US FWS	Western yellow-billed cuckoo	Proposed Threatened	No
US FWS	short-tailed albatross	Endangered species	No
US FWS	northern spotted owl	Threatened species	Yes
US FWS	Xantus's murrelet	Candidate species	No
Mammals			
NMFS	sei whale	Endangered species	No
NMFS	blue whale	Endangered species	No
NMFS	fin whale	Endangered species	No
NMFS	Steller (=northern) sea-lion	Threatened species	Yes
US FWS	fisher, West Coast DPS	Candidate species	No
NMFS	humpback whale	Endangered species	No
NMFS	killer whale, S. resident	Endangered species	Yes
NMFS	sperm whale	Endangered species	No
Notes:			
	US Fish and Wildlife Service		

US FWS US Fish and Wildlife Service NMFS National Marine Fisheries Service DPS Distinct Population Segment

8.7 Reporting Limits Exceeding Screening Levels for VOCs

As listed in the table in Section 6.0 there were multiple instances where the reporting limits exceeded the screening levels for VOCs. Most of these were due to the presence of TPPH-GRO in the samples near the AST. There were two compounds (1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane) which have very low screening levels which resulted in the reporting limits exceeding the screening levels in all instances. By removing the soils known to be contaminated with TPPH-GRO as recommended it seems less likely that VOCs exceeding the screening levels but below the reporting limits would remain in the AST area.

9.0 CONCLUSIONS AND RECOMENDATIONS

We have performed a Phase II Environmental Site Assessment of the property located at 17635 Highway 101 near Klamath, CA (APN: 140-050-25) in conformance with the scope and limitations of ASTM Practice E 1903-11 and for the following objectives developed pursuant to section 5.1 of ASTM Practice E 1903-11:

- Assess and evaluate the recognized environmental conditions identified in the Phase I ESA conducted by YTEP in 2013; and
- Provide sufficient information regarding the presence or absence of contamination at the Subject Property.

The principal questions to be answered by the investigation are listed below (quoted directly from the SAP).

- Does soil contamination exist inside the Smoke House indicating previous releases or systematic disposal of used motor oil or volatile organic compounds?
- Does gasoline contaminated soil exist in the area of the fuel tank and associated piping over the Environmental Screening Levels (ESLs) for residential use?
- Does waste oil contaminated soil exist in the "southern portion of the Site" over ESLs for residential use?
- If waste oil is present in the "southern portion of the Site" are "wear metals" present in excess of the ESLs for residential use?

The alternative actions that could result from resolution of the principal study questions include:

- If contamination is not identified over allowable levels on the Subject Property the Yurok Tribe can proceed with further development of the Subject Property; and
- If contamination is identified over allowable levels, additional assessment and/or cleanup may be necessary prior to redevelopment and use of the Subject Property.

This assessment has concluded that contamination is present over the residential ESLs at the following locations:

- The vicinity of the AST;
- Inside both compartments of the Smoke House; and
- The southern area of the Subject Property.

Additional assessment and/or cleanup may be necessary prior to redevelopment and use of the Subject Property. The following sections describe recommended additional assessment activities and options for remediation.

9.1 AST Area

Option 1 - Excavation and Disposal of Gasoline-Impacted Soils Exceeding the Residential Screening Level

Option 1 for the AST area is for further horizontal and vertical delineation at this location and the disposal of gasoline-impacted soils at an appropriately licensed facility. Further delineation is unlikely without the use of heavy equipment because of the large rocks. The final delineation could be completed at the time of the excavation by collecting confirmation samples from the sides and floor of the excavation. We recommend that the proposed excavation around Jet-Boat-1 extend to Jet-Boat-2 and that confirmation samples be collected at the limits of the gasoline impact based on field indications. We recommend that the proposed excavation around Jet-Boat-1 extend to include the area at Jet-Boat-3 if field indications of contamination are present at depth at Jet-Boat-2.

Option 2 - Capping of Gasoline-Impacted Soils Exceeding the Residential Screening Level

Option 2 for the AST area is for installation of a concrete cap in the area downhill of the AST and extending as close as possible to the edge of the Klamath River. The concrete cap would prevent people from direct contact with contaminated soils and would reduce gasoline vapors in the area of the boat ramp. Capping the contaminated area would not prevent contamination of the groundwater adjacent to the river and during high flows the contaminated soils would be submerged which would release some gasoline into the river.

9.2 Smoke House

Option 1 - Excavation and Disposal of Nickel-Impacted Soils Exceeding the Residential Screening Level

Option 1 for the Smoke House is for the removal of soils inside both compartments down to a depth of approximately 1.5' bgs or at least to include the "burned" layer indicated by orange color and the presence of charcoal prior to reuse.

Option 2 - Capping of Nickel-Impacted Soils Exceeding the Residential Screening Level

Option 2 for the Smoke House is for installation of a concrete cap over the nickel-impacted soils in both compartments of the Smoke House. The concrete cap would prevent people from direct contact with the contaminated soils. If a concrete cap is installed a layer of clean soil or sand could be placed over the concrete to prevent damage to the concrete from the heat generated during potential future use for smoking fish.

9.3 Southern Area

Option 1 - Excavation and Disposal of Motor Oil Impacted Soils Exceeding the Commercial Screening Level

For continued commercial use we recommend additional shallow soil sampling around Jet-Boat-14 to determine the extent of motor oil contamination to the south that exceeds the commercial ESL. We recommend the excavation and offsite disposal of soil in this area to a depth of approximately 1.0' bgs. The extent of the proposed excavation would be determined by the results of the additional sampling.

Option 2 - Excavation and Disposal of Motor Oil Impacted Soils Exceeding the residential Screening Level

For redevelopment and residential use we recommend additional soil sampling around Jet-Boat-12, Jet-Boat-13 and Jet-Boat-14 to determine the extent of motor oil contamination to the north, west, and south that exceeds the residential ESL. We recommend the excavation and offsite disposal of soil in this area to a depth of approximately 1.0' bgs. The extent of the proposed excavation would be determined by the results of the additional sampling.

10.0 REFERENCES

ASTM E1903 – 11, 2011, Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.

California Regional Water Quality Control Board San Francisco Bay Region, 2013, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, INTERIM FINAL-November 2007 (Revised May 2008).

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

Yurok Tribe Environmental Program, 2013, *Phase I Environmental Site Assessment Report for: Jet Boat Tours, Located on: 17635 Highway 101, Klamath, California, APN: 140-050-25, July 10.*

TABLES

TABLE 1 SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES FOR PETROLEUM AND VOCs JET BOAT PROPERTY

Del Norte County, California

F	Bointoit	e eeung, ee							
	Date Sampled	Total Petroleum Hydrocarbons-Motor Oil (with silica gel cleanup)	Total Purgeable Petroleum Hydrocarbons Gasoline Range Organics	Acetone	Benzene	p/m-Xylene	o-Xylene	p-Isopropyltoluene	Toluene
	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID	Residential Screening Level	100 ^a	100 ^a	0.5 ^a	0.044 ^a	2.3 ^a	2.3 ^a	NA	2.9 ^a
Jet-Boat-1-(1.0')	05-Jun-14		4,600		<2.3	<4.6	<2.3		<2.3
Jet-Boat-9-(1.0') - [Duplicate of Jet-Boat-1-(1.0')]	05-Jun-14		4,400		<0.98	<2.0	<0.98		<0.98
Jet-Boat-1-(2.0')	05-Jun-14		4,500		<0.90	4.0	14		<0.90
Jet-Boat-2-(0.9')	05-Jun-14		0.32		<0.0012	<0.0024	<0.0012		0.0028
Jet-Boat-2-(1.5')	05-Jun-14		0.17		0.0013	0.0030	0.0019		0.0063
Jet-Boat-3-(0.8')	05-Jun-14		0.46		<0.0012	<0.0024	<0.0012		0.0028
Jet-Boat-3-(2.0')	05-Jun-14		0.093		<0.0012	<0.0024	<0.0012		<0.0012
Jet-Boat-4-(0.1')	05-Jun-14	<25 ¹	0.083	<2.7	<0.0011	<0.0021	<0.0011	0.0011	0.0011
Jet-Boat-10-(0.1') - [Duplicate of Jet-Boat-4-(0.1')]	05-Jun-14	<25 ¹	<0.054	0.072	<0.0011	<0.0021	<0.0011	<0.0011	<0.0011
Jet-Boat-4-(1.1')	05-Jun-14	<25 ¹	<0.055	0.075	<0.0011	<0.0022	<0.0011	<0.0011	<0.0011
Jet-Boat-5-(0.1')	05-Jun-14	<25 ¹	<0.055	0.073	<0.0011	<0.0022	<0.0011	<0.0011	<0.0011
Jet-Boat-5-(1.0')	05-Jun-14	<25 ¹	<0.056	<0.056	<0.0011	<0.0023	<0.0011	<0.0011	<0.0011
Jet-Boat-6-(0.1'-0.2')	05-Jun-14	2,300 ¹							
Jet-Boat-6-(1.0')	05-Jun-14	44 ¹							
Jet-Boat-7-(0.1'-0.2')	05-Jun-14	130 ¹							
Jet-Boat-7-(0.9')	05-Jun-14	<25 ¹							
Jet-Boat-8-(0.0'-0.3')	05-Jun-14	<25 ¹							
Jet-Boat-8-(0.9'-1.0')	05-Jun-14	29 ¹							
Jet-Boat-12-(0.0'-0.25')	08-Aug-14	160 ¹							-
Jet-Boat-12-(1.0')	08-Aug-14	52 ¹							
Jet-Boat-13-(0.0'-0.25')	08-Aug-14	170 ¹							
Jet-Boat-13-(1.0')	08-Aug-14	35 ¹							
Jet-Boat-14-(0.1'-0.25')	08-Aug-14	490 ¹							
Jet-Boat-15-(0.1'-0.25') - [Duplicate of Jet-Boat-14-(0.1'-0.25')]	08-Aug-14	1,400 ¹							
Jet-Boat-14-(1.0')	08-Aug-14	<25 ¹							

Yurok Tribe Environmental Program Phase II ESA - Jet Boat Property

Freshwater Environmental Services

TABLE 1 SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES FOR PETROLEUM AND VOCs JET BOAT PROPERTY Del Norte County, California

Notes:

0.32 Bold indicates a result that exceeds the detection limit.

4,600 Red bold indicates a result that exceeds a screening level.

NA Not Applicable

-- Not analyzed

mg/kg milligrams per kilogram or parts per million

^a Table A Environmental Screening Levels (ESLs) (Residential Land Use) Shallow Soils (<3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, December 2013.

¹ The laboratory reported that "The chromatographic pattern was inconsistent with the profile of the reference fuel standard."

TABLE 2 SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES FOR METALS JET BOAT PROPERTY

Del Norte County, California

		-								-	-	-	-	-	-	-							
	Date Sampled	Cadmium	Chromium	Lead	Nickel	Zinc	Aluminum	Antimony	Arsenic	Barium	Beryllium	Chromium (III)	Chromium (VI)	Cobalt	Copper	Magnesium	Manganese	Mercury	Molybdenum	Selenium	Silver	Thallium	Vanadium
	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID	Residential Screening Level	12 ^a	1,000 ^a	80 ^a	150 ^a	600 ^a	77,400 ^b	20 ^a	0.39 ^a	750 ^a	4.0 ^a	750 ^a	8.0 ^a	23 ^a	230 ^a	NA	1,800 ^b	6.7 ^a	40 ^a	10 ^a	20 ^a	0.78 ^a	200 ^a
Jet-Boat-Metals-(0.75')	05-Jun-14	<1.00	16.1	7.25	23.7	59.8	17,900	<2.0	3.64	94.3	<1.00	16	<0.80	7.53	19.5	7,460	403	<0.0820	<1.00	<1.00	<1.00	<1.00	31.6
Jet-Boat-4-(0.1')	05-Jun-14	<1.00	94.3	5.85	165	59.1		ND ¹	5.896 ¹						49.99 ¹				-	ND ¹	ND ¹	ND ¹	
Jet-Boat-10-(0.1') Duplicate of Jet-Boat-4-(0.1')	05-Jun-14	<1.00	94.9	5.84	170	60.8																	
Jet-Boat-4-(1.1')	05-Jun-14	<1.00	22.5	67.0	24.9	231																	
Jet-Boat-5-(0.1')	05-Jun-14	<1.00	95.8	13.2	161	311																	
Jet-Boat-5-(1.0')	05-Jun-14	<1.00	92.4	27.4	142	101																	
Jet-Boat-6-(0.1'-0.2')	05-Jun-14	<1.00	54.9	8.47	78.2	73.6																	
Jet-Boat-6-(1.0')	05-Jun-14	<1.00	29.6	11.0	45.7	72.7																	
Jet-Boat-7-(0.1'-0.2')	05-Jun-14	<1.00	59.2	9.90	89.1	80.9																	
Jet-Boat-7-(0.9')	05-Jun-14	<1.00	33.2	10.7	79.8	78.0																	
Jet-Boat-8-(0.0'-0.3')	05-Jun-14	<1.00	64.1	15.9	110	100																	
Jet-Boat-8-(0.9'-1.0')	05-Jun-14	<1.00	37.7	22.0	52.3	84.9																	
Jet-Boat-12-(0.0'-0.25')	08-Aug-14	<1.00	70.3	10.8	78.4	73.4																	
Jet-Boat-12-(1.0')	08-Aug-14	<1.00	51.6	10.5	102	99.0																	
Jet-Boat-13-(0.0'-0.25')	08-Aug-14	<1.00	16.8	6.73	26.1	62.4																	
Jet-Boat-13-(1.0')	08-Aug-14	<1.00	37.4	35.7	55.1	82.5																	
Jet-Boat-14-(0.1'-0.25')	08-Aug-14	<1.00	62.4	13.0	129	104																	
Jet-Boat-15-(0.1'-0.25') - [Duplicate of Jet-Boat-14-(0.1'-0.25')]	08-Aug-14	<1.00	83.3	16.4	208	106																	
Jet-Boat-14-(1.0')	08-Aug-14	<1.00	64.7	6.15	114	50.3																	

Notes:

16.1 Bold indicates a result that exceeds the detection limit.

165 Red bold indicates a result that exceeds a screening level.

mg/kg milligrams per kilogram or parts per million

NA Not Applicable

ND Not detected

-- Not analyzed

^a Table A Environmental Screening Levels (ESLs) (Residential Land Use) Shallow Soils (<3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, December 2013.

^b US EPA - Online RSL Calculator - Resident Risk-Based Screening Levels (RSL) for Soil. http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

¹ The laboratory reported additional metals for Jet-Boat-4-(0.1') as part of their quality control analysis. Reporting limits were not included for these analytes so the non-detections are listed as ND.

TABLE 3 JET BOAT PROPERTY GEOGRAPHIC COORDINATES CALCULATED BY FES USING GIS

Del Norte County, California

Feature	Latitude	Longitude	Collection Method	Horizontal Datum
Jet-Boat-1	41.53865479	-124.04963582	Calculated in GIS	NAD 83
Jet-Boat-9 - (Co-Located with Jet-Boat-1)	41.53865479	-124.04963582	Calculated in GIS	NAD 83
Jet-Boat-2	41.53864674	-124.04965992	Calculated in GIS	NAD 83
Jet-Boat-3	41.53864096	-124.04967478	Calculated in GIS	NAD 83
Jet-Boat-4	41.53844100	-124.04934601	Calculated in GIS	NAD 83
Jet-Boat-10 - (Co-Located with Jet-Boat-4)	41.53844100	-124.04934601	Calculated in GIS	NAD 83
Jet-Boat-5	41.53844816	-124.04931371	Calculated in GIS	NAD 83
Jet-Boat-6	41.53794184	-124.04891688	Calculated in GIS	NAD 83
Jet-Boat-7	41.53795062	-124.04886696	Calculated in GIS	NAD 83
Jet-Boat-8	41.53795974	-124.04880647	Calculated in GIS	NAD 83
Jet-Boat-12	41.53798173	-124.04893143	Calculated in GIS	NAD 83
Jet-Boat-13	41.53793155	-124.04896467	Calculated in GIS	NAD 83
Jet-Boat-14	41.53789923	-124.04890108	Calculated in GIS	NAD 83
Jet-Boat-15 - (Co-Located with Jet-Boat-14)	41.53789923	-124.04890108	Calculated in GIS	NAD 83
Jet-Boat-Metals	41.53804631	-124.04906977	Calculated in GIS	NAD 83

Notes: Geographic coordinates in this table were based on field measurements of distances to buildings visible on the 2010 aerial image obtained from terraserver®. The measurements were transferred onscreen to the image and the geographic coordinates were calculated in GIS by FES.

FIGURES







	-
Ortho 2.	Figure 3
	2012 Aerial Photograph
	Jet Boat Property
	Klamath, California
	Date: 8-31-14

250 500

0

Feet

1,000

1,500

Freshwater Environmental Services

ALL LOCATIONS APPROXIMATE

By: SJT









N A	LEGEND Sample locations	Yurok Tribe Environmental Program				
W E S Feet 0 10 20 40 60 80	Base Image Data Source: Google Earth Pro Image Date: June 6, 2013. ALL LOCATIONS APPROXIMATE	Figure 7 Sample Locations Jet Boat Property Klamath, California				
Freshwater En	Date: 8-31-14 By: SJT					

PHOTOGRAPHS



Photo 1. Aboveground storage tank building and former dispenser hose. Image date: November 4, 2013.



Photo 2. Detail of former dispenser hose. Image date: November 4, 2013.



Photo 3. Rebuilt AST building and hose path. Image date: July 12, 2014.



Photo 4. Water released at corner of AST building to determine flow path. Image date: June 5, 2014.



Photo 5. Boring locations; Jet-Boat-1, Jet-Boat-2, and Jet-Boat-3. Image date: June 5, 2014.



Photo 6. Boring locations; Jet-Boat-1, Jet-Boat-2, and Jet-Boat-3. Image date: June 5, 2014.



Photo 7. New hose in place for fueling. Image date: July 12, 2014.



Photo 8. New hose detail. Image date: July 12, 2014.



Photo 9. Smoke House location. Image date: November 4, 2013.



Photo 10. Two compartments of Smoke House. Image date: June 5, 2014.



Photo 11. Western compartment of Smoke House. Image date: November 4, 2013.



Photo 12. Eastern compartment of Smoke House. Image date: November 4, 2013.



Photo 13. Boring Jet-Boat-4 in western compartment of Smoke House. Image date: June 5, 2014.



Photo 14. Boring Jet-Boat-4 in western compartment of Smoke House. Image date: June 5, 2014.



Photo 15. Boring Jet-Boat-5 in eastern compartment of Smoke House. Image date: June 5, 2014.



Photo 16. Southern area of Subject Property. Image date: November 4, 2013.



Photo 17. Looking southeast at area of "stressed" vegetation. Image date: November 4, 2013.



Photo 18. Borings locations; Jet-Boat-6, Jet-Boat-7, and Jet-Boat-8. Image date: June 5, 2014.



Photo 19. Boring location Jet-Boat-6. Image date: June 5, 2014.



Photo 20. Boring location Jet-Boat-7. Image date: June 5, 2014.



Photo 21. Boring location Jet-Boat-8. Image date: June 5, 2014.



Photo 22. Boring location Jet-Boat-Metals. Image date: June 5, 2014.



Photo 23. Boring locations around Jet-Boat-6. Image date: August 8, 2014.



Photo 24. Boring location Jet-Boat-12. Image date: August 8, 2014.



Photo 25. Boring location Jet-Boat-13. Image date: August 8, 2014.



Photo 26. Boring location Jet-Boat-13. Image date: August 8, 2014.



Photo 27. Equipment around Jet-Boat-13. Image date: August 8, 2014.



Photo 28. Boring location Jet-Boat-14. Image date: August 8, 2014.

APPENDIX A Boring Logs

	Log of Boring Jet-Boat-1								
Date Started: June 5, 2014Driller: Freshwater Environmental ServicesDate Completed: June 5, 2014Drilling Method: Shovel									
ecovery	epth (ft)	Description	NSCS		Rem	narks			
2				Ground	Surface				
100%	0.1— 0.2— 0.3— 0.4— 0.5— 0.6— 0.7— 0.8— 0.9— 1.0— 1.1— 1.2— 1.3— 1.4— 1.5— 1.6— 1.7— 1.8—	Grass and roots at surface, sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, dry, 10YR 4/1 (dark gray). Sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, moist, 10YR 4/1 (dark gray). Strong gasoline odor.	SP		Soil Sample: (Collected on 6 (4,600 mg/kg g	Jet-Boat-1-(1.0') 5-5-14) gas) Jet-Boat-1-(2.0')			
	1.9— 2.0 —	Defused encountered at 2.0 fact due to large real			(Collected on 6 (4,500 mg/kg g	6-5-14) gas)			
	2.1— 2.2— 2.3— 2.4— 2.5— 2.6— 2.7— 2.8— 2.9— 3.0 —				-				
	Total Depth: ~ 2.0 feet Jet-Boat-1 Completion: Boring backfilled with bags of clean sand. Jet-Boat-1								
		Freshwater Environmental Service	S	Jet B Date: 7-	oat Proper	t y – Klamath, CA By: SJT			

		Log of Boring	Jet	t-Boat-2					
Da [:] Da	te St te Co	tarted: June 5, 2014 Dri ompleted: June 5, 2014 Dri	ller: Fr lling M	reshwater Environmental Services					
ecovery	epth (ft)	Description	NSCS	Remarks					
Ř				Ground Surface					
%(0.1— 0.2— 0.3— 0.4— 0.5— 0.6— 0.7—	Grass and roots at surface, sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, dry, 10YR 4/1 (dark gray).	SP						
100	0.8— 0.9— 1.0 — 1.1— 1.2— 1.3— 1.4—	Sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, moist, 10YR 4/1 (dark gray).	SP	Soil Sample: Jet-Boat-2-(0.9') (Collected on 6-5-14) (0.32 mg/kg gas) Soil Sample: Jet-Boat-2-(1.5') (Collected on 6-5-14) (0 17 mg/kg gas)					
	1.5— 1.6— 1.7— 1.8— 1.9— 2.0— 2.1— 2.2— 2.3— 2.4— 2.5— 2.6— 2.6— 2.6— 2.8— 2.9— 3.0 —	Refusal encountered at 1.5 feet due to large rocks	5.	BOH ~ 1.5'					
	Total Depth: ~ 1.5 feetJet-Boat-2Completion: Boring backfilled with soil cuttings.								
		Freshwater Environmental Services		Jet Boat Property – Klamath, CADate: 7-15-14By: SJT					
	Log of Boring Jet-Boat-3								
----------	------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------	-------------------	------------------------------------------------------------------------------	--				
Da Da	te St te Co	tarted: June 5, 2014 Dril ompleted: June 5, 2014 Dril	ler: Fr ling M	reshwater Environmental Services Method: Shovel					
ecovery	epth (ft)	Description	nscs	Remarks					
2				Ground Surface					
	0.1— 0.2— 0.3— 0.4— 0.5— 0.6— 0.7—	Grass and roots at surface, sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, dry, 10YR 4/1 (dark gray).	SP						
%0	0.8— 0.9— 1 0 —	Sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, moist, 10YR 4/1 (dark gray).	SP	Soil Sample: Jet-Boat-3-(0.8') (Collected on 6-5-14) (0.46 mg/kg gas)					
100	1.0— 1.1— 1.2— 1.3—								
	1.3 1.4— 1.5—								
	1.0— 1.7— 1.8— 1.9—			Soil Sample: Jet-Boat-3-(2.0') (Collected on 6-5-14) (0.093 mg/kg gas)					
	2.1— 2.2— 2.3— 2.4— 2.5—	Refusal encountered at 2.0 feet due to large rocks		BOH ~ 2.0'					
	2.6— 2.7— 2.8— 2.9—								
	5.0 Total Depth: ~ 2.0 feet								
	Co			Jet Boat Property – Klamath, CA					
	Freshwater Environmental Services			Date: 7-15-14 By: SJT					

	Log of Boring Jet-Boat-4					
Da Da	te St te Co	arted: June 5, 2014 completed: June 5, 2014	Driller: Fi Drilling N	reshwate lethod:	er Environme Shovel & Ele	ental Services ectric Jackhammer
ecovery	epth (ft)	Description	nscs		Rem	arks
8				Ground	Surface	
	0.1—	Clay ~90%, silt ~10%, medium plasticity, moist, 10 4/1 (dark gray).	YR CL		Soil Sample: J (Collected on 6 (165 mg/kg nic	let-Boat-4-(0.1') ⊳-5-14) kel)
	 0.2	Sand ~60%, fine to coarse, gravel ~30%, subangul to subrounded, up to ~3" diameter, silt ~10%, mois $10XP 4/1$ (dark grav). This layer appears to have	ar st, SW			
	0.3—	burned probably from fire and coals during smoking operations.				
	0.4— — 0.5—					
100%	 0.6—					
	0.8—					
	0.9— — 1.0—					
	 1.1	Gravel ~60%, subangular to subrounded, sand ~30	^{9%,} GW		Soil Sample: J (Collected on 6 (24.9 mg/kg pig	let-Boat-4-(1.1') ⊱5-14) Skel)
	1.2—	fine to coarse, silt ~10%, moist, 10YR 4/1 (dark gra	y).	BOH ~ 1	.2'	
	1.3—					
	1.4— — 1.5—					
	Tot Co	al Depth: ~ 1.2 feet mpletion: Boring backfilled with soil cuttings.			Jet-B	oat-4
	(M	form		Jet E	Boat Propert	y – Klamath, CA
	E	Freshwater Environmental Service	ces	Date: 7	-15-14	By: SJT

		Log of Boring	Jet	t-Boa	at-5		
Da Da	ite Si ite Co	tarted: June 5, 2014 [ompleted: June 5, 2014 [Driller: Fr Drilling M	eshwate lethod:	er Environme Shovel & Ele	ental Services ectric Jackhammer	
Recovery	Depth (ft)	Description	NSCS		Rem	arks	
100%	0.1— 0.1— 0.2— 0.3— 0.4— 0.5— 0.6— 0.6—	Silt ~80%, clay ~20%, slight plasticity, moist, 10YR (dark gray). Sand ~60%, fine to medium, gravel ~30%, subangu to subrounded, up to ~3" diameter, silt ~10%, moist 10YR 4/1 (dark gray). This layer appears to have be burned probably from fire and coals during smoking operations.	4/1 ML		Soil Sample: J (Collected on 6 (161 mg/kg nic	let-Boat-5-(0.1') -5-14) kel)	
	0.8— 0.9— 1.0 — 1.1— 1.2—	Sand ~80%, fine to very fine, silt ~20%, moist, 10YF 4/1 (dark gray). Sand ~80%, fine to very fine, gravel ~20%, subangu	R SP		Soil Sample : J (Collected on 6 (142 mg/kg nic	let-Boat-5-(1.0') -5-14) kel)	
		10YR 4/1 (dark gray).	., <u>5</u> P	BOH ~ 1	.3'		
	Tot Co	tal Depth: ~ 1.3 feet mpletion: Boring backfilled with soil cuttings.			Jet-B	oat-5	
		Freshwater Environmental Servic	es	Jet E Date: 7	Boat Propert	y – Klamath, CA By: SJT	

		Log of Boring	Je	t-Boa	at-6	
Da Da	te St te Co	tarted: June 5, 2014 ompleted: June 5, 2014	Driller: F Drilling N	reshwate Iethod:	er Environme Shovel & Ele	ental Services ectric Jackhammer
ecovery	epth (ft)	Description	NSCS		Rem	narks
R				Ground	Surface	
	0.1— 0.2—	Grass and roots at surface, sand ~70%, medium, subrounded, gravel ~20%, subangular to subrounde up to ~1" diameter, silt ~10%, moist, 10YR 4/1 (dan gray).	ed, rk		Soil Sample: ((Collected on 6 (2,300 mg/kg 7	Jet-Boat-6-(0.1'-0.2') 6-5-14) ГРН-МО)
	0.3— — 0.4—	Gravel ~50%, up to ~2" diameter, medium, rounded subrounded, sand, ~40%, subangular to subrounde silt ~10%, moist, 10YR 4/1 (dark gray).	d to GP ed,			
100%	0.5—					
	0.6— — 0.7—					
	0.8—					
	0.9— — 1.0—			BOH ~ 1.	Soil Sample: J (Collected on 6 (44 mg/kg TPH 0'	Jet-Boat-6-(1.0') ⊱5-14) I-MO)
	 1.1					
	1.2— — 1.3—					
	 1.4					
	1.5—					
	Tot Co	tal Depth: ~ 1.0 feet mpletion: Boring backfilled with soil cuttings.			Jet-B	Soat-6
		Freshwater Environmental Service	ces	Jet B Date: 7-	oat Proper -15-14	ty – Klamath, CA By: SJT

		Log of Boring	Jet	t-Boa	at-7	
Da Da	te St te Co	tarted: June 5, 2014 [ompleted: June 5, 2014 [Driller: Fr Drilling M	eshwate I ethod:	er Environm Shovel & E	ental Services lectric Jackhammer
ecovery	epth (ft)	Description	USCS		Rer	narks
Å	Ď		·	Ground	Surface	
	0.1— 0.2—	Grass and roots at surface, sand ~80%, fine, subangular to subrounded, silt ~20%, moist, 10YR 4 (dark gray). Sand, ~60%, fine, subangular to subrounded, gravel	/1 SP		Soil Sample: (Collected on (130 mg/kg T	Jet-Boat-7-(0.1'-0.2') 6-5-14) PH-MO)
	0.3— — 0.4—	~30%, subangular to subrounded, medium, silt ~10% moist, 10YR 4/1 (dark gray).	//0,			
100%	 0.5					
	0.6—					
	0.7— — 0.8—				Soil Sample:	9 Jet-Boat-7-(0.9')
	0.9				(<25 mg/kg T	PH-MO)
	_			BOH ~ 0.	.9'	
	1.0— — 1.1—					
	 1.2					
	 1.3					
	1.4— 					
	1.0					
	Tot Co	al Depth: ~ 0.9 feet mpletion: Boring backfilled with soil cuttings.			Jet-E	Boat-7
	A	Freshwater Environmental Servic	es	Jet B	Boat Prope	rty – Klamath, CA
				Date: 7	-15-14	By: SJT

	Log of Boring Jet-Boat-8						
Da Da	te St te Co	tarted: June 5, 2014 ompleted: June 5, 2014	Driller Drillin	Driller: Freshwater Environmental Services Drilling Method: Shovel & Electric Jackhammer			ental Services ectric Jackhammer
Secovery	Depth (ft)	Description		USCS		Rem	arks
\vdash	0	C_{race} and racts at surface, silt c_{c00} and c_{400}	fino	N // I	Ground	Surface	
	0.1—	to very fine, subangular to subrounded, dry, 10YR 4 (dark gray).	4/1	ML		Soil Sample: J (Collected on 6 (<25 mg/kg, TE	let-Boat-8-(0.0'-0.3') i-5-14) 2H-MO)
	0.3—	Gravel, ~40%, subangular to subrounded, sand ~3 fine to very fine, silt ~30%, moist, 10YR 4/1 (dark gray).	0%, (GΡ		(20 mg/kg m	
	0.4—						
%0	 0.5						
9							
	0.6—						
	— 0.8—						
	— 0.9—					Soil Sample:	let-Boat-8-(0.9'-1.0') ⊶5-14)
	1.0—					(29 mg/kg TPH	-MO)
	— 1.1—			ļ	БОП ~ 1.	0	
	— 1.2—						
	— 1.3—						
	 1.4						
	 1.5						
	Tot Co	tal Depth: ~ 1.0 feet mpletion: Boring backfilled with soil cuttings.				Jet-B	oat-8
		Freshwater Environmental Service	ces		Jet B	oat Propert	y – Klamath, CA
	Freshwater Environmental Service				Date: 7-	15-14	By: SJT

Log of Boring Jet-Boat-9 (duplicate of Jet-Boat-1)

Da Da	te St te Co	tarted: June 5, 2014 ompleted: June 5, 2014	Driller: Fr Drilling M	eshwater Environment ethod: Shovel	tal Services
Recovery	Depth (ft)	Description	nscs	Remai	rks
	0—			Ground Surface	
	0.1— 0.2— 0.3—	Grass and roots at surface, sand ~90%, very fine to fine, subangular to subrounded, silt ~10%, dry, 10Y 4/1 (dark gray).	R SP		
	0.4—				
	0.5—				
	0.6—				
	0.7—				
	0.8—				
%	0.9—	Sand ~90%, very fine to fine, subangular to subrounded silt ~10% moist 10YR 4/1 (dark grav)	SP	Soil Sample: .let-	-Boat-9-(1 0')
100	1.0—	Strong gasoline odor.		(Collected on 6-5-	-14)
-	1.1—			(4,400 mg/kg gas)
	1.2-				
	1.5—				
	1.5—				
	1.6—				
	1.7—				
	1.8—				
	1.9—				
	2.0—	Refusal encountered at 2.0 feet due to large ro		BOH ~ 2 0'	
	2.1—	Nelusal encountered at 2.0 leet due to large to	UN3.	B011 * 2.0	
	2.2-				
	2.4—	Jet-Boat-9 is a du	plica	te of Jet-B	oat-1
	2.5—				
	2.6—				
	2.7—				
	2.8—				
	2.9—				
	3.0—				
	Tot Co	tal Depth: ~ 2.0 feet mpletion: Boring backfilled with clean sand.		Jet-Bo	oat-9
	(A)			Jet Boat Property	– Klamath, CA
	E	Freshwater Environmental Servic	es	Date: 7-15-14	, By: SJT

Log of Boring Jet-Boat-10 (duplicate of Jet-Boat-4) Date Started: June 5, 2014 **Driller:** Freshwater Environmental Services Date Completed: June 5, 2014 Drilling Method: Shovel SCS Œ Recovery Depth (Description Remarks **Ground Surface** 0-Soil Sample: Jet-Boat-10-(0.1') Clay ~90%, silt ~10%, medium plasticity, moist, 10YR CL (Collected on 6-5-14) 4/1 (dark gray). (170 mg/kg nickel) 0.1-Sand ~60%, fine to coarse, gravel ~30%, subangular 0.2-SW to subrounded, up to \sim 3" diameter, silt \sim 10%, moist, 10YR 4/1 (dark gray). This layer appears to have been 0.3burned probably from fire and coals during smoking operations. 0.4-0.5-%00 0.6-0.7-0.8-0.9-1.0-1.1 Gravel ~60%, subangular to subrounded, sand ~30%, GW fine to coarse, silt ~10%, moist, 10YR 4/1 (dark gray). 12 BOH ~ 1.2' 1.3-Jet-Boat-10 is a duplicate of Jet-Boat-4 1.4 1.5-Total Depth: ~ 1.2 feet Jet-Boat-10 **Completion:** Boring backfilled with soil cuttings. Jet Boat Property – Klamath, CA **Freshwater Environmental Services** Date: 7-15-14 By: SJT

	Log of Boring Jet-Boat-Metals					
Da Da	te St te Co	t arted: June 5, 2014 ompleted: June 5, 2014	Driller: Fr Drilling M	reshwater Environmental Services Method: Shovel & Electric Jackhammer		
ecovery	epth (ft)	Description	NSCS	Remarks		
R	0			Ground Surface		
	 0.1	Grass and roots at surface, sand ~40%, medium, gravel ~30%, up to 1" diameter, silt ~ 30%, dry, 10 4/1 (dark gray).	YR SP			
	0.2— —					
%00	0.3—					
~	0.4	Gravel, ~60%, up to 3" diameter, subrounded, sand ~30%, fine to medium, silt ~10%, moist, 10YR 4/1 (dark gray).	d GP			
	 0.6			Sail Samalar, Jot Doot Mot	ala (0.75')	
	0.7—			(Collected on 6-5-14) (3.64 mg/kg arsenic)	ais-(0.75)	
	0.8—			BOH ~ 0.73		
	0.9— — 1.0—					
	 1.1					
	— 1.2—					
	 1.3					
	1.4— —					
	1.5—					
	Tot Co	tal Depth: ~ 0.75 feet mpletion: Boring backfilled with soil cuttings.		Jet-Boat-Meta	als	
	$\overline{\mathbb{N}}$			Jet Boat Property – Klam	ath, CA	
	E	Preshwater Environmental Servi	ces	Date: 7-15-14 By: SJT		

	Log of Boring Jet-Boat-12					
Da Da	te St te Co	t arted: August 8, 2014 ompleted: August 8, 2014	Driller: Fi Drilling M	reshwater lethod: S	Environme bovel & Ele	ental Services ectric Jackhammer
Recovery	Depth (ft)	Description	NSCS		Rem	arks
	0			Ground S	Surface	
	0.1— 0.2— 0.3— 0.4—	Grass surface, gravel, ~60%, up to 4", angular to subrounded, sand ~35%, fine to very fine, silt ~5%, dry, 10YR 4/1 (dark gray).	GW		Soil Sample: J (Collected on 8 (160 mg/kg TF	let-Boat-12-(0.0'-0.25') -8-14) 'H-MO)
100%	0.5— 0.6— 0.7—					
	0.8— 0.9— 1.0—				Soil Sample: 3 (Collected on 8 (52 mg/kg TPF	let-Boat-12-(1.0') ⊦8-14) 1-MO)
	_			BOH ~ 1.0) '	
	1.1—					
	— 1.2—					
	 1 3					
	1.4— —					
	1.5—					
	Tot Co	tal Depth: ~ 1.0 feet mpletion: Boring backfilled with soil cuttings.			Jet-Bo	oat-12
		Freshwater Environmental Service	ces	Jet Bo	oat Propert	y – Klamath, CA
	Freshwater Environmental Services			Date: 9-1	-14	By: SJT

	Log of Boring Jet-Boat-13					
Da Da	te St te Co	tarted: August 8, 2014 ompleted: August 8, 2014	Driller: Fr Drilling N	eshwater E I ethod: Sh	Environme lovel & Ele	ental Services ectric Jackhammer
tecovery	Jepth (ft)	Description	NSCS		Rem	arks
<u>~</u>	0_			Ground Su	urface	
100%	0.1— 0.2— 0.3— 0.3— 0.4— 0.5— 0.6— 0.6— 0.7— 0.8— 0.9—	Roots down to 0.5', gravel, up to 4", ~60%, angular subrounded, sand ~35%, fine to very fine, silt ~5%, dry, 10YR 4/1 (dark gray).	to GW	S ((oil Sample: J Collected on 8 70 mg/kg TP	let-Boat-13-(0.0'-0.25') -8-14) 'H-MO) 'H-MO) Het-Boat-13-(1.0')
	1.0—			BOH ~ 1 0'		1-1110)
				БОП ~ 1.0		
	Total Depth: ~ 1.0 feet Jet-Boat-13 Completion: Boring backfilled with soil cuttings. Jet Boat Property – Klamath, CA Freshwater Environmental Services Jet Boat Property – Klamath, CA					
				Date. 9-1-	1-7	Dy. 501

	Log of Boring Jet-Boat-14					
Da Da	te St te Co	arted: August 8, 2014 ompleted: August 8, 2014	Driller: F Drilling N	reshwater Iethod: S	r Environme Shovel & Ele	ental Services ectric Jackhammer
Recovery	Depth (ft)	Description	NSCS		Rem	arks
Ľ	0			Ground	Surface	
100%	0.1— 0.2— 0.3— 0.3— 0.4— 0.5— 0.6— 0.6— 0.7— 0.8— 0.8— 0.9—	Roots down to 0.5', gravel, up to 6", ~60%, up to 6 subangular to subrounded, sand ~35%, fine to ver fine, silt ~5%, dry, 10YR 4/1 (dark gray).	^{у",} У GW		Soil Sample: 4 (Collected on 8 (490 mg/kg TF) Soil Sample: 4 (Collected on 8	Jet-Boat-14-(0.1'-0.25') 3-8-14) PH-MO) PH-MO) Jet-Boat-14-(1.0') 3-8-14)
	1.0—			BOH ~ 1 (<u>י בס הוקיתקי ה</u> זי	
	Total Depth: ~ 1.0 feet Jet-Boat-14 Completion: Boring backfilled with soil cuttings. Jet Boat Property – Klamath, CA					Dat-14 Ly – Klamath, CA
				Date: 9-	1-14	By: SJT

	Log of Boring Jet-Boat-15 (duplicate of Jet-Boat-14)				
Date Date	Started: August 8, 2014 Completed: August 8, 2014	Driller: Freshwater Environmental Services Drilling Method: Shovel & Electric Jackhammer			
ecovery	Description	ທິ ວິ ຊິງ Remarks			
		Ground Surface			
0. 0. 0. 0. 0. 0. 0. 0. 0. 1.	 Roots down to 0.5', gravel, ~60%, up to 6", subang to subrounded, sand ~35%, fine to very fine, silt ~5 dry, 10YR 4/1 (dark gray). 2	gular 5%, GW Soil Sample: Jet-Boat-15-(0.1'-0.25') (Collected on 8-8-14) (1,400 mg/kg TPH-MO)			
1. 1.1 1.1 1.1	Jet-Boat-15 is a duplicate of Jet-Boat-14				
	Completion: Boring backfilled with soil cuttings.	Jet Boat Property – Klamath, CA			
	Freshwater Environmental Service	Ces Date: 9-1-14 By: SJT			

APPENDIX B Laboratory Report and Chain-of-Custody Record - 1

🔅 eurofins

Calscience

Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 14-06-0704

The difference is service

ResultLink ▶

Email your PM >



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Freshwater Environmental Services Client Project Name: Jet Boat Property Attention: Stan Thiesen 78 Sunny Brae Center Arcata, CA 95521-6742

Approved for release on 06/19/2014 by: Don Burley Project Manager



Eurofins Calscience, 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.

7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830

Work Order: 14-06-0704

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/10/14. They were assigned to Work Order 14-06-0704.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.





Freshwater Environmental Services			Date Recei	ved:			06/10/14
78 Sunny Brae Center			Work Orde	r:			14-06-0704
Arcata, CA 95521-6742			Preparation	n:			EPA 3510C
			Method:			EF	PA 8015B (M)
			Units:				ug/L
Project: Jet Boat Property						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-11	14-06-0704-19-E	06/05/14 13:45	Aqueous	GC 46	06/11/14	06/12/14 07:02	140611B17
Parameter		Result	RL		DF	Qual	<u>ifiers</u>
TPH as Motor Oil		ND	25	0	1.00	SG	
Surrogate		<u>Rec. (%)</u>	Co	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		76	68	-140			
Method Blank	099-15-278-635	N/A	Aqueous	GC 46	06/11/14	06/12/14 06:09	140611B17
Parameter		Result	RL	:	DF	Qual	ifiers
TPH as Motor Oil		ND	25	0	1.00		
Surrogate		<u>Rec. (%)</u>	Co	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		76	68	-140			





Freshwater Environmental Services		C	Date Re	ceived:			06/10/14
78 Sunny Brae Center		V	Vork O	rder:			14-06-0704
Arcata, CA 95521-6742		F	repara	tion:			EPA 3550B
		Ν	/lethod:			EF	PA 8015B (M)
		ι	Jnits:				ma/ka
Project: Jet Boat Property						Pad	ae 1 of 3
							,
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-4-(0.1')	14-06-0704-7-A	06/05/14 13:00	Solid	GC 46	06/11/14	06/12/14 02:23	140611B08
Comment(s): - The sample was homoger	nized prior to prepar	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Qual</u>	ifiers
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		91		61-145			
	44.00.0704.0.4	00/05/44	0	00.40	00/44/44	00/40/44	440044700
Jet-Boat-4-(1.1')	14-06-0704-8-A	06/05/14 13:35	Solid	GC 46	06/11/14	06/12/14 02:40	140611808
Comment(s): - The sample was homoger	nized prior to prepar	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DF	<u>Qual</u>	ifiers
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
n-Octacosane		89		61-145			
Jet-Boat-5-(0.1')	14-06-0704-9-A	06/05/14	Solid	GC 46	06/11/14	06/12/14	140611B08
Comment(s): - The sample was homoger	nized prior to prepar	ation / analysis.					
Parameter		Result		RL	DF	Qual	ifiers
TPH as Motor Oil		ND		25	1.00	SG	
2 million and a				O a start l l'astra	O sell'É ser		
Surrogate		<u>Rec. (%)</u>		Control Limits	Qualifiers		
n-Octacosane		93		61-145			
Jet-Boat-5-(1.0')	14-06-0704-10-A	06/05/14 14:10	Solid	GC 46	06/11/14	06/12/14 03:14	140611B08
Comment(s): - The sample was homoger	nized prior to prepar	ation / analysis.					
Parameter_		<u>Result</u>		<u>RL</u>	DF	<u>Qual</u>	ifiers
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
n-Octacosane		90		61-145			





FIESHWALEI EHVITUITIEHLAI SELVICES		ſ	Date Re	ceived:			06/10/14
78 Sunny Brae Center		١	Work Or	rder:			14-06-0704
Arcata, CA 95521-6742		I	Prepara	tion:			EPA 3550B
		1	Method:			E	PA 8015B (M)
		ι	Units:				mg/kg
Project: Jet Boat Property						Ра	ge 2 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-6-(0.1'-0.2')	14-06-0704-11-A	06/05/14 10:40	Solid	GC 46	06/11/14	06/12/14 03:32	140611B08
Comment(s): - The sample was homogen	ized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	lifiers
TPH as Motor Oil		2300		120	5.00	HD,	SG
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		97		61-145			
Jet-Boat-6-(1.0')	14-06-0704-12-A	06/05/14 10:52	Solid	GC 46	06/11/14	06/12/14 03:49	140611B08
Comment(s): - The sample was homogen	ized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	lifiers
TPH as Motor Oil		44		25	1.00	HD,	SG
Surrogate		<u>Rec. (%)</u>		Control Limits	Qualifiers		
n-Octacosane		94		61-145			
Jet-Boat-7-(0.1'-0.2')	14-06-0704-13-A	06/05/14 11:10	Solid	GC 46	06/11/14	06/12/14 04:07	140611B08
Comment(s): - The sample was homogen							
Comment(3). • The sample was nonoger	ized prior to prepara	ation / analysis.					
Parameter	ized prior to prepara	ation / analysis. <u>Result</u>		<u>RL</u>	DE	Qua	lifiers
Parameter TPH as Motor Oil	ized prior to prepara	ation / analysis. <u>Result</u> 130		<u>RL</u> 25	<u>DF</u> 1.00	<u>Qua</u> HD,	<u>lifiers</u> SG
Parameter TPH as Motor Oil Surrogate	ized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u>		<u>RL</u> 25 <u>Control Limits</u>	<u>DF</u> 1.00 <u>Qualifiers</u>	<u>Qua</u> HD,	<u>llifiers</u> SG
Parameter TPH as Motor Oil Surrogate n-Octacosane	ized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102		<u>RL</u> 25 <u>Control Limits</u> 61-145	<u>DF</u> 1.00 <u>Qualifiers</u>	Qua HD,	<u>llifiers</u> SG
Parameter TPH as Motor Oil Surrogate n-Octacosane Jet-Boat-7-(0.9')	14-06-0704-14-A	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102 06/05/14 11:25	Solid	RL 25 <u>Control Limits</u> 61-145 GC 46	DF 1.00 Qualifiers 06/11/14	Qua HD, 06/12/14 04:24	l <u>ifiers</u> SG 140611B08
Parameter TPH as Motor Oil Surrogate n-Octacosane Jet-Boat-7-(0.9') Comment(s): - The sample was homogen	14-06-0704-14-A nized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102 06/05/14 11:25 ation / analysis.	Solid	RL 25 <u>Control Limits</u> 61-145 GC 46	DE 1.00 Qualifiers 06/11/14	Qua HD, 06/12/14 04:24	<u>lifiers</u> SG 140611B08
Parameter TPH as Motor Oil Surrogate n-Octacosane Jet-Boat-7-(0.9') Comment(s): - The sample was homogen Parameter	14-06-0704-14-A iized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102 06/05/14 11:25 ation / analysis. <u>Result</u>	Solid	RL 25 <u>Control Limits</u> 61-145 GC 46 <u>RL</u>	DF 1.00 Qualifiers 06/11/14 DF	Qua HD, 06/12/14 04:24 Qua	<u>lifiers</u> SG 140611B08 lifiers
Parameter TPH as Motor Oil Surrogate n-Octacosane Jet-Boat-7-(0.9') Comment(s): - The sample was homogen Parameter TPH as Motor Oil	14-06-0704-14-A iized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102 06/05/14 11:25 ation / analysis. <u>Result</u> ND	Solid	RL 25 Control Limits 61-145 GC 46 RL 25	DE 1.00 Qualifiers 06/11/14 DE 1.00	Qua HD, 06/12/14 04:24 Qua SG	lifiers SG 140611B08 lifiers
Parameter TPH as Motor Oil Surrogate n-Octacosane Jet-Boat-7-(0.9') Comment(s): - The sample was homogen Parameter TPH as Motor Oil Surrogate Surrogate Surrogate	ized prior to prepara 14-06-0704-14-A ized prior to prepara	ation / analysis. <u>Result</u> 130 <u>Rec. (%)</u> 102 06/05/14 11:25 ation / analysis. <u>Result</u> ND <u>Rec. (%)</u>	Solid	RL 25 Control Limits 61-145 GC 46 RL 25 Control Limits	DF 1.00 Qualifiers 06/11/14 DF 1.00 Qualifiers	Qua HD, 06/12/14 04:24 Qua SG	lifiers SG 140611B08 lifiers





Freshwater Environmental Services			Date Re	ceived:			06/10/14
78 Sunny Brae Center		,	Work O	rder:			14-06-0704
Arcata, CA 95521-6742			Prepara	tion:			EPA 3550B
			Method:			EF	PA 8015B (M)
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 3 of 3
					.		
	Number	Collected	Matrix	Instrument	Date Prepared	Analyzed	QC Batch ID
Jet-Boat-8-(0.0'-0.3')	14-06-0704-15-A	06/05/14 11:40	Solid	GC 46	06/11/14	06/12/14 04:42	140611B08
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis.					
Parameter		Result		<u>RL</u>	<u>DF</u>	Qual	<u>ifiers</u>
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		85		61-145			
Jet-Boat-8-(0.9'-1.0')	14-06-0704-16-A	06/05/14 11:50	Solid	GC 46	06/11/14	06/12/14 04:59	140611B08
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DF	Qual	<u>ifiers</u>
TPH as Motor Oil		29		25	1.00	HD,S	ŝG
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		86		61-145			
Jet-Boat-10-(0.1')	14-06-0704-18-A	06/05/14 12:30	Solid	GC 46	06/11/14	06/12/14 05:52	140611B08
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DE	Qual	<u>ifiers</u>
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
n-Octacosane		89		61-145			
Method Blank	000 45 400 047	NI/A	Calid	CC 46	06/44/44	06/40/44	440644809
	099-15-420-947	N/A	Solia	GC 46	06/11/14	06/12/14 01:11	140611808
Parameter		<u>Result</u>		<u>RL</u>	DF	Qual	<u>ifiers</u>
TPH as Motor Oil		ND		25	1.00		
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifier</u> s		
n-Octacosane		89		61-145			



Freshwater Environmental Services	5		Date Recei	ved:			06/10/14
78 Sunny Brae Center			Work Orde	r:			14-06-0704
Arcata, CA 95521-6742			Preparation	1:		EP	A 3020A Total
			Method:				EPA 6020
			Units:				mg/L
Project: Jet Boat Property						Pa	ige 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-11	14-06-0704-19-D	06/05/14 13:45	Aqueous	ICP/MS 04	06/16/14	06/16/14 20:35	140616L02
Parameter		Result	RL		DF	Qua	alifiers
Cadmium		ND	0.0	0100	1.00		
Chromium		ND	0.0	0100	1.00		
Lead		ND	0.0	0100	1.00		
Nickel		ND	0.0	0100	1.00		
Zinc		0.0167	0.0	00500	1.00		
Method Blank	096-06-003-4446	N/A	Aqueous	ICP/MS 04	06/16/14	06/16/14 20:11	140616L02
Parameter		<u>Result</u>	RL		DF	Qua	alifiers
Cadmium		ND	0.0	0100	1.00		
Chromium		ND	0.0	0100	1.00		
Lead		ND	0.0	00100	1.00		
Nickel		ND	0.0	00100	1.00		
Zinc		ND	0.0	00500	1.00		





Freshwater Environmental Services	5		Date Re	ceived:			06/10/14
78 Sunny Brae Center			Work Or	der:			14-06-0704
Arcata, CA 95521-6742			Prepara	tion:			EPA 3050B
			Method:				EPA 6020
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 1 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-4-(0.1')	14-06-0704-7-AA	06/05/14 13:00	Solid	ICP/MS 04	06/11/14	06/12/14 16:46	140611L02A
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis	5.				
Parameter		Result		<u>RL</u>	DF	Qua	<u>lifiers</u>
Cadmium		ND		1.00	1.00		
Chromium		94.3		2.00	1.00		
Lead		5.85		1.00	1.00		
Nickel		165		1.00	1.00		
Zinc		59.1		5.00	1.00		
Jet-Boat-4-(1.1')	14-06-0704-8-AA	06/05/14 13:35	Solid	ICP/MS 04	06/11/14	06/12/14 16:49	140611L02A
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis	5.				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	lifiers
Cadmium		ND		1.00	1.00		
Chromium		22.5		2.00	1.00		
Lead		67.0		1.00	1.00		
Nickel		24.9		1.00	1.00		
Zinc		231		5.00	1.00		
Jet-Boat-5-(0.1')	14-06-0704-9-AA	06/05/14 13:55	Solid	ICP/MS 04	06/11/14	06/12/14 16:53	140611L02A
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis	5.				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	lifiers
Cadmium		ND		1.00	1.00		
Chromium		95.8		2.00	1.00		
Lead		13.2		1.00	1.00		
		-					
Nickel		161		1.00	1.00		





Freshwater Environmental Services	5		Date Re	ceived:			06/10/14
78 Sunny Brae Center			Work Or	der:			14-06-0704
Arcata, CA 95521-6742			Preparat	ion:			EPA 3050B
			Method:				EPA 6020
			Units:				ma/ka
Project: Jet Boat Property						Pa	ge 2 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-5-(1.0')	14-06-0704-10-AA	06/05/14 14:10	Solid	ICP/MS 04	06/11/14	06/12/14 16:56	140611L02A
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysi	s.				
Parameter		Result		<u>RL</u>	DF	Qua	<u>lifiers</u>
Cadmium		ND		1.00	1.00		
Chromium		92.4		2.00	1.00		
Lead		27.4		1.00	1.00		
Nickel		142		1.00	1.00		
Zinc		101		5.00	1.00		
Jet-Boat-6-(0.1'-0.2')	14-06-0704-11-AA	06/05/14 10:40	Solid	ICP/MS 04	06/11/14	06/12/14 16:59	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge	14-06-0704-11-AA nized prior to prepara	06/05/14 10:40 ation / analysis	Solid	ICP/MS 04	06/11/14	06/12/14 16:59	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter	14-06-0704-11-AA	06/05/14 10:40 ation / analysis	Solid s.	ICP/MS 04	06/11/14	06/12/14 16:59 Qua	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium	14-06-0704-11-AA	06/05/14 10:40 ation / analysis <u>Result</u> ND	Solid s.	ICP/MS 04 RL 1.00	06/11/14 DF 1.00	06/12/14 16:59 Qua	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium	14-06-0704-11-AA	06/05/14 10:40 ation / analysia <u>Result</u> ND 54.9	Solid s.	ICP/MS 04 <u>RL</u> 1.00 2.00	06/11/14 DF 1.00 1.00	06/12/14 16:59 <u>Qua</u>	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead	14-06-0704-11-AA	06/05/14 10:40 tition / analysis <u>Result</u> ND 54.9 8.47	Solid s.	ICP/MS 04 RL 1.00 2.00 1.00	06/11/14 DE 1.00 1.00 1.00	06/12/14 16:59 Qua	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel	14-06-0704-11-AA	06/05/14 10:40 ation / analysis <u>Result</u> ND 54.9 8.47 78.2	Solid s.	ICP/MS 04 RL 1.00 2.00 1.00 1.00	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00	06/12/14 16:59 Qua	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc	14-06-0704-11-AA	06/05/14 10:40 tition / analysis <u>Result</u> ND 54.9 8.47 78.2 73.6	Solid s.	ICP/MS 04 RL 1.00 2.00 1.00 1.00 5.00	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00	06/12/14 16:59 Qua	140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0')	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA	06/05/14 10:40 ition / analysis <u>Result</u> ND 54.9 8.47 78.2 73.6 06/05/14 10:52	Solid S. Solid	ICP/MS 04 RL 1.00 2.00 1.00 1.00 5.00 ICP/MS 04	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 06/11/14	06/12/14 16:59 Qua 06/12/14 17:03	140611L02A Nifiers 140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 attion / analysis <u>Result</u> ND 54.9 8.47 78.2 73.6 06/05/14 10:52 attion / analysis	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 5.00 ICP/MS 04	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 06/11/14	06/12/14 16:59 Qua 06/12/14 17:03	140611L02A lifiers 140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 ation / analysis Result ND 54.9 8.47 78.2 73.6 06/05/14 10:52 ation / analysis <u>Result</u>	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 06/11/14 <u>DF</u>	06/12/14 16:59 Qua 06/12/14 17:03	140611L02A difiers 140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter Cadmium	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 ition / analysis Result ND 54.9 8.47 78.2 73.6 06/05/14 10:52 ition / analysis Result ND	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL 1.00 1.00 ICP/MS 04	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 06/11/14 <u>DF</u> 1.00	06/12/14 16:59 Qua 06/12/14 17:03 Qua	140611L02A Ilifiers 140611L02A Ilifiers
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter Cadmium Chromium	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 ttion / analysis <u>Result</u> ND 54.9 8.47 78.2 73.6 06/05/14 10:52 ttion / analysis <u>Result</u> ND 29.6	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 1.00 5.00 ICP/MS 04 RL 1.00 2.00 RL 1.00 2.00 RL 1.00 2.00 RL 1.00 2.00 RL 1.00 RL	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 06/11/14 <u>DF</u> 1.00 1.00	06/12/14 16:59 Qua 06/12/14 17:03 Qua	140611L02A difiers 140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 attion / analysis <u>Result</u> ND 54.9 8.47 78.2 73.6 06/05/14 10:52 attion / analysis <u>Result</u> ND 29.6 11.0	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL 1.00 2.00 1.00 ICP/MS 04 RL 1.00 2.00 1.00 RL 1.00 2.00 1.00 RL 1.00 2.00 1.00 RL 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 06/11/14 <u>DF</u> 1.00 1.00 1.00	06/12/14 16:59 Qua 06/12/14 17:03 Qua	140611L02A Alifiers 140611L02A
Jet-Boat-6-(0.1'-0.2') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-6-(1.0') Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel Zinc Vertex Comment(s): - The sample was homoge Parameter Cadmium Chromium Lead Nickel	14-06-0704-11-AA nized prior to prepara 14-06-0704-12-AA nized prior to prepara	06/05/14 10:40 attion / analysis Result ND 54.9 8.47 78.2 73.6 06/05/14 10:52 attion / analysis Result ND 29.6 11.0 45.7	Solid S. Solid S.	ICP/MS 04 RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL 1.00 2.00 1.00 2.00 1.00 2.00 1.00 1.00	06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 06/11/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 1.00	06/12/14 16:59 Qua 06/12/14 17:03 Qua	140611L02A difiers 140611L02A



Freshwater Environmental Service	S		Date Re	ceived:			06/10/14	
78 Sunny Brae Center			Work Or	der:			14-06-0704	
Arcata, CA 95521-6742			Preparat	tion:	n: EPA 3050B			
			Method:				EPA 6020	
			Units:				ma/ka	
Project: Jet Boat Property						Pa	ige 3 of 5	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-7-(0.1'-0.2')	14-06-0704-13-AA	06/05/14 11:10	Solid	ICP/MS 04	06/11/14	06/12/14 17:06	140611L02A	
Comment(s): - The sample was homog	enized prior to prepara	ation / analysis	3.					
Parameter		Result		<u>RL</u>	DF	Qua	alifiers	
Cadmium		ND		1.00	1.00			
Chromium		59.2		2.00	1.00			
Lead		9.90		1.00	1.00			
Nickel		89.1		1.00	1.00			
Zinc		80.9		5.00	1.00			
Jet-Boat-7-(0.9')	14-06-0704-14-AA	06/05/14	Solid	ICP/MS 04	06/11/14	06/12/14	140611L02A	
· · · ·		11:25				17:10		
Comment(s): - The sample was homog	enized prior to prepara	11:25 ation / analysis	3.			17:10		
Comment(s): - The sample was homog Parameter	enized prior to prepara	11:25 ation / analysis <u>Result</u>	<u>.</u>	RL	DE	<u></u>	alifiers	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium	enized prior to prepara	11:25 ation / analysis <u>Result</u> ND	5.	<u>RL</u> 1.00	<u>DF</u> 1.00	Qua	alifiers	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium Chromium	enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2	5.	<u>RL</u> 1.00 2.00	<u>DF</u> 1.00 1.00	<u></u>	alifiers	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium Chromium Lead	enized prior to prepara	11:25 ition / analysis <u>Result</u> ND 33.2 10.7	3.	<u>RL</u> 1.00 2.00 1.00	<u>DF</u> 1.00 1.00 1.00	<u>Qu</u> 2	alifiers	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium Chromium Lead Nickel	enized prior to prepara	11:25 attion / analysis <u>Result</u> ND 33.2 10.7 79.8	3.	<u>RL</u> 1.00 2.00 1.00 1.00	<u>DF</u> 1.00 1.00 1.00 1.00	<u>Qu</u> 2	alifiers	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc	enized prior to prepara	11:25 ition / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0	3.	<u>RL</u> 1.00 2.00 1.00 5.00	DF 1.00 1.00 1.00 1.00 1.00	<u>Qu</u> 2	alifiers	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3')	enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40	S. Solid	RL 1.00 2.00 1.00 5.00 ICP/MS 04	DF 1.00 1.00 1.00 1.00 1.00 06/11/14	06/12/14 17:23	alifiers 140611L02A	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 attion / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 attion / analysis	5. Solid	RL 1.00 2.00 1.00 1.00 5.00	DF 1.00 1.00 1.00 1.00 1.00 06/11/14	06/12/14 17:23	alifiers 140611L02A	
Comment(s): - The sample was homog <u>Parameter</u> Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog <u>Parameter</u>	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 ation / analysis <u>Result</u>	S. Solid	RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL	DF 1.00 1.00 1.00 1.00 1.00 06/11/14 DE	06/12/14 17:23	alifiers 140611L02A alifiers	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog Parameter Cadmium	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 attion / analysis <u>Result</u> ND	S. Solid	RL 1.00 2.00 1.00 5.00	DF 1.00 1.00 1.00 1.00 1.00 06/11/14 DE 1.00	06/12/14 17:23	alifiers 140611L02A alifiers	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog Parameter Cadmium Chromium	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 ation / analysis <u>Result</u> ND 64.1	S. Solid	RL 1.00 2.00 1.00 5.00	DF 1.00 1.00 1.00 1.00 06/11/14 DF 1.00 1.00	06/12/14 17:23 Qua	alifiers 140611L02A alifiers	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog Parameter Cadmium Chromium Lead	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 attion / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 attion / analysis <u>Result</u> ND 64.1 15.9	S. Solid	RL 1.00 2.00 1.00 5.00 ICP/MS 04 RL 1.00 2.00 1.00 1.00	DE 1.00 1.00 1.00 1.00 06/11/14 DE 1.00 1.00 1.00	06/12/14 17:23 Qua	alifiers 140611L02A alifiers	
Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-8-(0.0'-0.3') Comment(s): - The sample was homog Parameter Cadmium Chromium Lead Nickel	enized prior to prepara 14-06-0704-15-AA enized prior to prepara	11:25 ation / analysis <u>Result</u> ND 33.2 10.7 79.8 78.0 06/05/14 11:40 ation / analysis <u>Result</u> ND 64.1 15.9 110	S. Solid	RL 1.00 2.00 1.00 5.00	DF 1.00 1.00 1.00 1.00 06/11/14 DE 1.00 1.00 1.00 1.00 1.00	06/12/14 17:23 Qua	alifiers 140611L02A alifiers	





Freshwater Environmental Services		ļ	Date Re	ceived:			06/10/14
78 Sunny Brae Center		,	Work Or	rder:			14-06-0704
Arcata, CA 95521-6742		ļ	Prepara	tion:			EPA 3050B
			Method:				EPA 6020
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 4 of 5
					-		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-8-(0.9'-1.0')	14-06-0704-16-AA	06/05/14 11:50	Solid	ICP/MS 04	06/11/14	06/12/14 17:27	140611L02A
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis.	•				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
Cadmium		ND		1.00	1.00		
Chromium		37.7		2.00	1.00		
Lead		22.0		1.00	1.00		
Nickel		52.3		1.00	1.00		
Zinc		84.9		5.00	1.00		
Jet-Boat-10-(0.1')	14-06-0704-18-AA	06/05/14 12:30	Solid	ICP/MS 04	06/11/14	06/12/14 17:30	140611L02A
Comment(s): - The sample was homogen	nized prior to prepara	ation / analysis.	•				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
Cadmium		ND		1.00	1.00		
Chromium		94.9		2.00	1.00		
Lead		5.84		1.00	1.00		
Nickel		170		1.00	1.00		
Zinc		60.8		5.00	1.00		
Jet-Boat-Metals-(0.75')	14-06-0704-20-AA	06/05/14	Solid	ICP/MS 04	06/11/14	06/12/14	140611L02A
Comment(s): - The sample was homoge	nized prior to prepara	tion / analysis				17.54	
Parameter		Result	-	RL	DF	Qua	alifiers
Antimony		ND		2.00	1.00		
Arsenic		3.64		1.00	1.00		
Cadmium		ND		1.00	1.00		
Chromium		16.1		2.00	1.00		
Copper		19.5		1.00	1.00		
Lead		7.25		1.00	1.00		
Nickel		23.7		1.00	1.00		
Selenium		ND		1.00	1.00		
Silver		ND		1.00	1.00		
Thallium		ND		1.00	1.00		
Zinc		59.8		5.00	1.00		





Chromium

Copper

Lead

Nickel

Silver

Zinc

Selenium

Thallium

Freshwater Environmental Services			Date Rec	eived:			06/10/14
78 Sunny Brae Center			Work Ord	er:	14-06-0704		
Arcata, CA 95521-6742			Preparatio	on:	EPA 3050B		
			Method:				EPA 6020
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 5 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-621-519	N/A	Solid	ICP/MS 03	06/11/14	06/11/14 19:50	140611L02A
Parameter		Result	<u> </u>	RL	DF	Qua	lifiers
Antimony		ND	2	2.00	1.00		
Arsenic		ND		1.00	1.00		
Cadmium		ND	1	1.00	1.00		

2.00

1.00

1.00

1.00

1.00

1.00

1.00

5.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

ND

ND

ND

ND

ND

ND

ND

ND



Freshwater Environmental Service	S		Date Recei	ved:			06/10/14
78 Sunny Brae Center			Work Order		14-06-0704		
Arcata, CA 95521-6742			Preparation	1:			EPA 5030C
,			Method:			GC/MS	6 / EPA 8260B
			Units:				ua/L
Project: Jet Boat Property						Pa	age 1 of 6
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	QC Batch ID
Jet-Boat-11	Number 14-06-0704-19-B	06/05/14	Aqueous	GC/MS R	06/17/14	Analyzed 06/17/14	140617L037
		13:45	nnravimata aa	rhan range C4	C12	21:08	
Comment(s) TPPH represents total p	urgeable petroleum n	Recult		rbon range C4	-012. DE	Our	alifiers
		ND	20		1.00		
Benzene			20	50	1.00		
Bromobenzene		ND	1.0)	1.00		
Bromochloromethane		ND	1.0)	1.00		
Bromodichloromethane		ND	1.0)	1.00		
Bromoform		ND	1.0)	1.00		
Bromomethane		ND	10		1.00		
2-Butanone		ND	10		1.00		
n-Butylbenzene		ND	1.0)	1.00		
sec-Butylbenzene		ND	1.0)	1.00		
tert-Butylbenzene		ND	1.0)	1.00		
Carbon Disulfide		ND	10		1.00		
Carbon Tetrachloride		ND	0.5	50	1.00		
Chlorobenzene		ND	1.0)	1.00		
Chloroethane		ND	5.0)	1.00		
Chloroform		ND	1.0)	1.00		
Chloromethane		ND	10		1.00		
2-Chlorotoluene		ND	1.0)	1.00		
4-Chlorotoluene		ND	1.0)	1.00		
Dibromochloromethane		ND	1.0)	1.00		
1,2-Dibromo-3-Chloropropane		ND	5.0)	1.00		
1,2-Dibromoethane		ND	1.0)	1.00		
Dibromomethane		ND	1.0)	1.00		
1,2-Dichlorobenzene		ND	1.0)	1.00		
1,3-Dichlorobenzene		ND	1.0)	1.00		
1,4-Dichlorobenzene		ND	1.0)	1.00		
Dichlorodifiuoromethane		ND	1.0)	1.00		
			1.0) :0	1.00		
			0.5		1.00		
			1.0)	1.00		
t-1 2-Dichloroethene		ND	1.0	,)	1.00		
1 2-Dichloropropane		ND	1.0	,)	1.00		
1.3-Dichloropropane		ND	1.0)	1.00		
·- ·-··			1.0				





Freshwater Environmental Services	[Date Received:		06/10/14		
78 Sunny Brae Center	١	Nork Order:		14-06-0704		
Arcata CA 95521-6742	F	Preparation:		EPA 5030C		
, itolaa, 0, i 00021 01 12	Ň	Vethod:		GC/MS / EPA 8260B		
	i	Inite:				
Project: Jet Boat Property		Page 2 of 6				
Parameter	<u>Result</u>	RL	DE	Qualifiers		
2,2-Dichloropropane	ND	1.0	1.00			
1,1-Dichloropropene	ND	1.0	1.00			
c-1,3-Dichloropropene	ND	0.50	1.00			
t-1,3-Dichloropropene	ND	0.50	1.00			
Ethylbenzene	ND	1.0	1.00			
2-Hexanone	ND	10	1.00			
Isopropylbenzene	ND	1.0	1.00			
p-Isopropyltoluene	ND	1.0	1.00			
Methylene Chloride	ND	10	1.00			
4-Methyl-2-Pentanone	ND	10	1.00			
Naphthalene	ND	10	1.00			
n-Propylbenzene	ND	1.0	1.00			
Styrene	ND	1.0	1.00			
1,1,1,2-Tetrachloroethane	ND	1.0	1.00			
1,1,2,2-Tetrachloroethane	ND	1.0	1.00			
Tetrachloroethene	ND	1.0	1.00			
Toluene	ND	1.0	1.00			
1,2,3-Trichlorobenzene	ND	1.0	1.00			
1,2,4-Trichlorobenzene	ND	1.0	1.00			
1,1,1-Trichloroethane	ND	1.0	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00			
1,1,2-Trichloroethane	ND	1.0	1.00			
Trichloroethene	ND	1.0	1.00			
Trichlorofluoromethane	ND	10	1.00			
1,2,3-Trichloropropane	ND	5.0	1.00			
1,2,4-Trimethylbenzene	ND	1.0	1.00			
1,3,5-Trimethylbenzene	ND	1.0	1.00			
Vinyl Acetate	ND	10	1.00			
Vinyl Chloride	ND	0.50	1.00			
p/m-Xylene	ND	1.0	1.00			
o-Xylene	ND	1.0	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00			
Tert-Butyl Alcohol (TBA)	ND	10	1.00			
Diisopropyl Ether (DIPE)	ND	2.0	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00			
Ethanol	ND	100	1.00			
ТРРН	ND	50	1.00			





Freshwater Environmental Services	e Received:		06/10/14		
78 Sunny Brae Center	Wo	rk Order:	14-06-0704		
Arcata, CA 95521-6742	Pre	Preparation:			
	Me	thod:	GC/MS / EPA 8260B		
	Uni	Units:			
Project: Jet Boat Property				Page 3 of 6	
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>		
Dibromofluoromethane	97	78-126			
1,2-Dichloroethane-d4	100	75-135			
Toluene-d8	99	80-120			
Toluene-d8-TPPH	105	88-112			
1,4-Bromofluorobenzene	99	80-120			





Freshwater Environmental Service	vices		Date Rece	eived:			06/10/14	
78 Sunny Brae Center			Work Order:			14-06-070		
Arcata, CA 95521-6742			Preparation:			EPA 5030C		
			Method:			GC/MS / EPA 8260		
			Units:				ug/L	
Project: Jet Boat Property						Ра	ge 4 of 6	
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	QC Batch ID	

	Number	Collected			Prepared	Analyzed	
Method Blank	099-12-767-6569	N/A	Aqueous	GC/MS R	06/17/14	06/17/14 18:54	140617L037
Parameter		<u>Result</u>	<u>RL</u>		DF	Qua	lifiers
Acetone		ND	20		1.00		
Benzene		ND	0.5	0	1.00		
Bromobenzene		ND	1.0		1.00		
Bromochloromethane		ND	1.0		1.00		
Bromodichloromethane		ND	1.0		1.00		
Bromoform		ND	1.0		1.00		
Bromomethane		ND	10		1.00		
2-Butanone		ND	10		1.00		
n-Butylbenzene		ND	1.0		1.00		
sec-Butylbenzene		ND	1.0		1.00		
tert-Butylbenzene		ND	1.0		1.00		
Carbon Disulfide		ND	10		1.00		
Carbon Tetrachloride		ND	0.5	0	1.00		
Chlorobenzene		ND	1.0		1.00		
Chloroethane		ND	5.0		1.00		
Chloroform		ND	1.0		1.00		
Chloromethane		ND	10		1.00		
2-Chlorotoluene		ND	1.0		1.00		
4-Chlorotoluene		ND	1.0		1.00		
Dibromochloromethane		ND	1.0		1.00		
1,2-Dibromo-3-Chloropropane		ND	5.0		1.00		
1,2-Dibromoethane		ND	1.0		1.00		
Dibromomethane		ND	1.0		1.00		
1,2-Dichlorobenzene		ND	1.0		1.00		
1,3-Dichlorobenzene		ND	1.0		1.00		
1,4-Dichlorobenzene		ND	1.0		1.00		
Dichlorodifluoromethane		ND	1.0		1.00		
1,1-Dichloroethane		ND	1.0		1.00		
1,2-Dichloroethane		ND	0.5	0	1.00		
1,1-Dichloroethene		ND	1.0		1.00		
c-1,2-Dichloroethene		ND	1.0		1.00		
t-1,2-Dichloroethene		ND	1.0		1.00		
1,2-Dichloropropane		ND	1.0		1.00		
1,3-Dichloropropane		ND	1.0		1.00		
2,2-Dichloropropane		ND	1.0		1.00		





Freshwater Environmental Services		06/10/14				
78 Sunny Brae Center	,	Work Order:		14-06-0704		
Arcata, CA 95521-6742		Preparation:		EPA 5030C		
· · · · · · · · · · · · · · · · · · ·		GC/MS / EPA 8260B				
Project: Jet Boat Property				Page 5 of 6		
Parameter	Result	RL	DF	Qualifiers		
1,1-Dichloropropene	ND	1.0	1.00			
c-1,3-Dichloropropene	ND	0.50	1.00			
t-1,3-Dichloropropene	ND	0.50	1.00			
Ethylbenzene	ND	1.0	1.00			
2-Hexanone	ND	10	1.00			
Isopropylbenzene	ND	1.0	1.00			
p-Isopropyltoluene	ND	1.0	1.00			
Methylene Chloride	ND	10	1.00			
4-Methyl-2-Pentanone	ND	10	1.00			
Naphthalene	ND	10	1.00			
n-Propylbenzene	ND	1.0	1.00			
Styrene	ND	1.0	1.00			
1,1,1,2-Tetrachloroethane	ND	1.0	1.00			
1,1,2,2-Tetrachloroethane	ND	1.0	1.00			
Tetrachloroethene	ND	1.0	1.00			
Toluene	ND	1.0	1.00			
1,2,3-Trichlorobenzene	ND	1.0	1.00			
1,2,4-Trichlorobenzene	ND	1.0	1.00			
1,1,1-Trichloroethane	ND	1.0	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00			
1,1,2-Trichloroethane	ND	1.0	1.00			
Trichloroethene	ND	1.0	1.00			
Trichlorofluoromethane	ND	10	1.00			
1,2,3-Trichloropropane	ND	5.0	1.00			
1,2,4-Trimethylbenzene	ND	1.0	1.00			
1,3,5-Trimethylbenzene	ND	1.0	1.00			
Vinyl Acetate	ND	10	1.00			
Vinyl Chloride	ND	0.50	1.00			
p/m-Xylene	ND	1.0	1.00			
o-Xylene	ND	1.0	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00			
Tert-Butyl Alcohol (TBA)	ND	10	1.00			
Diisopropyl Ether (DIPE)	ND	2.0	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00			
Ethanol	ND	100	1.00			
ТРРН	ND	50	1.00			





Freshwater Environmental Services	Dat	e Received:	06/10/14 14-06-0704	
78 Sunny Brae Center	Wo	rk Order:		
Arcata, CA 95521-6742	Pre	Preparation:		
	Met	thod:	GC/MS / EPA 82608	
	Uni	ts:		ug/L
Project: Jet Boat Property				Page 6 of 6
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	99	78-126		
1,2-Dichloroethane-d4	101	75-135		
Toluene-d8	100	80-120		
Toluene-d8-TPPH	105	88-112		
1,4-Bromofluorobenzene	99	80-120		





Freshwater Environmental Services			Date Rec	eived:			06/10/14
78 Sunny Brae Center			Work Ord			14-06-0704	
Arcata, CA 95521-6742			Preparatio	on:			EPA 5035
			Method:			GC/MS	6 / EPA 8260B
			Units:				ma/ka
Project: Jet Boat Property						Pa	ge 1 of 24
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-4-(0.1')	14-06-0704-7-F	06/05/14 13:00	Solid	GC/MS R	06/05/14	06/13/14 14:58	140613L003
Comment(s): - TPPH represents total pur	geable petroleum h	ydrocarbons, a	pproximate	carbon range C4	-C12.		
Parameter		<u>Result</u>	<u>F</u>	<u> </u>	DF	Qua	<u>lifiers</u>
Benzene		ND	C	0.0011	1.00		
Bromobenzene		ND	C	0.0011	1.00		
Bromochloromethane		ND	C).0021	1.00		
Bromodichloromethane		ND	C	0.0011	1.00		
Bromoform		ND	C	0.0053	1.00		
Bromomethane		ND	C).021	1.00		
2-Butanone		ND	C	0.021	1.00		
n-Butylbenzene		ND	C	0.0011	1.00		
sec-Butylbenzene		ND	C	0.0011	1.00		
tert-Butylbenzene		ND	C	0.0011	1.00		
Carbon Disulfide		ND	C	0.011	1.00		
Carbon Tetrachloride		ND	C	0.0011	1.00		
Chlorobenzene		ND	C	0.0011	1.00		
Chloroethane		ND	C	0.0021	1.00		
Chloroform		ND	C	0.0011	1.00		
Chloromethane		ND	C	0.021	1.00		
2-Chlorotoluene		ND	C	0.0011	1.00		
4-Chlorotoluene		ND	C	0.0011	1.00		
Dibromochloromethane		ND	C	0.0021	1.00		
1,2-Dibromo-3-Chloropropane		ND	C	0.0053	1.00		
1,2-Dibromoethane		ND	C	0.0011	1.00		
Dibromomethane		ND	C	0.0011	1.00		
1,2-Dichlorobenzene		ND	C	0.0011	1.00		
1,3-Dichlorobenzene		ND	C	0.0011	1.00		
1,4-Dichlorobenzene		ND	C	0.0011	1.00		
Dichlorodifluoromethane		ND	C	0.0021	1.00		
1,1-Dichloroethane		ND	C	0.0011	1.00		
1,2-Dichloroethane		ND	C	0.0011	1.00		
1,1-Dichloroethene		ND	C	0.0011	1.00		
c-1,2-Dichloroethene		ND	C	0.0011	1.00		
t-1,2-Dichloroethene		ND	C	0.0011	1.00		
1,2-Dichloropropane		ND	C	0.0011	1.00		
1,3-Dichloropropane		ND	C	0.0011	1.00		
2,2-Dichloropropane		ND	C).0053	1.00		





Freshwater Environmental Services	Da	06/10/14				
78 Sunny Brae Center	W	Work Order:				
Arcata, CA 95521-6742	Pr	eparation:		EPA 5035		
	M	GC/MS / EPA 8260F				
	l Ir					
Project: Jet Boat Property	0.	Page 2 of 24				
Parameter	Result	RI	DF	Qualifiers		
1.1-Dichloropropene	ND	0.0021	1.00			
c-1,3-Dichloropropene	ND	0.0011	1.00			
t-1,3-Dichloropropene	ND	0.0021	1.00			
Ethylbenzene	ND	0.0011	1.00			
2-Hexanone	ND	0.021	1.00			
Isopropylbenzene	ND	0.0011	1.00			
p-Isopropyltoluene	0.0011	0.0011	1.00			
Methylene Chloride	ND	0.011	1.00			
4-Methyl-2-Pentanone	ND	0.021	1.00			
Naphthalene	ND	0.011	1.00			
n-Propylbenzene	ND	0.0021	1.00			
Styrene	ND	0.0011	1.00			
1,1,1,2-Tetrachloroethane	ND	0.0011	1.00			
1,1,2,2-Tetrachloroethane	ND	0.0021	1.00			
Tetrachloroethene	ND	0.0011	1.00			
Toluene	0.0011	0.0011	1.00			
1,2,3-Trichlorobenzene	ND	0.0021	1.00			
1,2,4-Trichlorobenzene	ND	0.0021	1.00			
1,1,1-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00			
Trichloroethene	ND	0.0021	1.00			
Trichlorofluoromethane	ND	0.011	1.00			
1,2,3-Trichloropropane	ND	0.0021	1.00			
1,2,4-Trimethylbenzene	ND	0.0021	1.00			
1,3,5-Trimethylbenzene	ND	0.0021	1.00			
Vinyl Acetate	ND	0.011	1.00			
Vinyl Chloride	ND	0.0011	1.00			
p/m-Xylene	ND	0.0021	1.00			
o-Xylene	ND	0.0011	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	0.0021	1.00			
Tert-Butyl Alcohol (TBA)	ND	0.021	1.00			
Diisopropyl Ether (DIPE)	ND	0.0011	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.00			
Ethanol	ND	0.53	1.00			
ТРРН	0.083	0.053	1.00			



🔅 eurofins

Freshwater Environmental Serv	rices		Date Re	eceived:			06/10/14	
78 Sunny Brae Center			Work O	rder:		14-06-0704		
Arcata, CA 95521-6742			Prepara	ition:	EPA 5035			
·			Method	:		GC/MS	6 / EPA 8260B	
			Units:				ma/ka	
Project: Jet Boat Property						Pa	ige 3 of 24	
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane		118		79-139				
1,2-Dichloroethane-d4		143		71-155				
1,4-Bromofluorobenzene		86		80-120				
Toluene-d8		98		80-120				
Toluene-d8-TPPH		100		87-111				
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-4-(0.1')	14-06-0704-7-G	06/05/14 13:00	Solid	GC/MS R	06/05/14	06/13/14 17:12	140613L026	
Comment(s): - TPPH represents tot	al purgeable petroleum h	ydrocarbons, a	approximat	e carbon range C4	-C12.			
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers	
Acetone		ND		2.7	50.0			
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane		101		79-139				
1,2-Dichloroethane-d4		122		71-155				
1,4-Bromofluorobenzene		101		80-120				
Toluene-d8		103		80-120				
Toluene-d8-TPPH		105		87-111				





Freshwater Environmental Services	5		Date Rec	eived:			06/10/14
78 Sunny Brae Center			Work Ord	er:			14-06-0704
Arcata, CA 95521-6742			Preparation	on:			EPA 5035
			Method:			GC/MS	6 / EPA 8260B
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 4 of 24
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-4-(1.1')	14-06-0704-8-D	06/05/14 13:35	Solid	GC/MS R	06/05/14	06/11/14 18:26	140611L008
Comment(s): - TPPH represents total put	Irgeable petroleum h	ydrocarbons, a	pproximate	carbon range C4	-C12.		
Parameter		<u>Result</u>	<u> </u>	<u>₹L</u>	DF	Qua	<u>alifiers</u>
Acetone		0.075	(0.055	1.00		
Benzene		ND	(0.0011	1.00		
Bromobenzene		ND	(0.0011	1.00		
Bromochloromethane		ND	(0.0022	1.00		
Bromodichloromethane		ND	(0.0011	1.00		
Bromoform		ND	(0.0055	1.00		
Bromomethane		ND	(0.022	1.00		
2-Butanone		ND	(0.022	1.00		
n-Butylbenzene		ND	(0.0011	1.00		
sec-Butylbenzene		ND	(0.0011	1.00		
tert-Butylbenzene		ND	(0.0011	1.00		
Carbon Disulfide		ND	(0.011	1.00		
Carbon Tetrachloride		ND	(0.0011	1.00		
Chlorobenzene		ND	(0.0011	1.00		
Chloroethane		ND	(0.0022	1.00		
Chloroform		ND	(0.0011	1.00		
Chloromethane		ND	().022	1.00		
2-Chlorotoluene		ND	(0.0011	1.00		
4-Chlorotoluene		ND	(0.0011	1.00		
Dibromochloromethane		ND	(0.0022	1.00		
1,2-Dibromo-3-Chloropropane		ND	(0.0055	1.00		
1,2-Dibromoethane		ND	(0.0011	1.00		
Dibromomethane		ND	(0.0011	1.00		
1,2-Dichlorobenzene		ND	(0.0011	1.00		
1,3-Dichlorobenzene		ND	(0.0011	1.00		
Dichlorodifluoromothono			(0.0011	1.00		
		ND	(0.0022	1.00		
			(0.0011	1.00		
			(0.0011	1.00		
c-1 2-Dichloroethene			(0.0011	1.00		
t-1 2-Dichloroethene		ND	(0.0011	1.00		
		ND	(0.0011	1.00		
1.3-Dichloropropane			(/	0.0011	1.00		
1,5 Dichioroproparie			(1.00		


🛟 eurofins Calscience

Ethanol

TPPH

Freshwater Environmental Services	Da	06/10/14 14-06-0704		
78 Sunny Brae Center	W			
Arcata, CA 95521-6742	Pr	EPA 5035		
	M	GC/MS / EPA 8260B		
	Ur	nits:		ma/ka
Project: Jet Boat Property		Page 5 of 24		
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qualifiers</u>
2,2-Dichloropropane	ND	0.0055	1.00	
1,1-Dichloropropene	ND	0.0022	1.00	
c-1,3-Dichloropropene	ND	0.0011	1.00	
t-1,3-Dichloropropene	ND	0.0022	1.00	
Ethylbenzene	ND	0.0011	1.00	
2-Hexanone	ND	0.022	1.00	
Isopropylbenzene	ND	0.0011	1.00	
p-Isopropyltoluene	ND	0.0011	1.00	
Methylene Chloride	ND	0.011	1.00	
4-Methyl-2-Pentanone	ND	0.022	1.00	
Naphthalene	ND	0.011	1.00	
n-Propylbenzene	ND	0.0022	1.00	
Styrene	ND	0.0011	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0011	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0022	1.00	
Tetrachloroethene	ND	0.0011	1.00	
Toluene	ND	0.0011	1.00	
1,2,3-Trichlorobenzene	ND	0.0022	1.00	
1,2,4-Trichlorobenzene	ND	0.0022	1.00	
1,1,1-Trichloroethane	ND	0.0011	1.00	
1,1,2-Trichloroethane	ND	0.0011	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00	
Trichloroethene	ND	0.0022	1.00	
Trichlorofluoromethane	ND	0.011	1.00	
1,2,3-Trichloropropane	ND	0.0022	1.00	
1,2,4-Trimethylbenzene	ND	0.0022	1.00	
1,3,5-Trimethylbenzene	ND	0.0022	1.00	
Vinvl Acetate	ND	0.011	1.00	
Vinyl Chloride	ND	0.0011	1.00	
p/m-Xylene	ND	0.0022	1.00	
o-Xvlene	ND	0.0011	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0022	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.022	1.00	
Diisopropyl Ether (DIPE)	ND	0.0011	1.00	
Ethvl-t-Butvl Ether (ETBE)	ND	0.0011	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.00	
,,				

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

0.55

0.055

1.00

1.00

ND

ND





Freshwater Environmental Services	Dat	te Received:		06/10/14		
78 Sunny Brae Center	Wo	rk Order:		14-06-0704		
Arcata, CA 95521-6742	Pre	paration:		EPA 5035		
	Method: GC/		Method: GC/MS /	GC/MS / EPA 8260B		
	Uni	ts:		mg/kg		
Project: Jet Boat Property				Page 6 of 24		
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane	112	79-139				
1,2-Dichloroethane-d4	140	71-155				
1,4-Bromofluorobenzene	97	80-120				
Toluene-d8	102	80-120				
Toluene-d8-TPPH	104	87-111				





Freshwater Environmental Services	;		Date Rec	eived:			06/10/14
78 Sunny Brae Center			Work Ord	er:			14-06-0704
Arcata, CA 95521-6742			Preparatio	on:			EPA 5035
			Method:			GC/MS	6 / EPA 8260B
			Units:				ma/ka
Project: Jet Boat Property						Pa	ge 7 of 24
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-5-(0.1')	14-06-0704-9-D	06/05/14 13:55	Solid	GC/MS UU	06/05/14	06/16/14 13:47	140616L003
Comment(s): - TPPH represents total pu	rgeable petroleum h	ydrocarbons, a	pproximate	carbon range C4-	C12.		
Parameter		<u>Result</u>	<u>F</u>	<u> </u>	DF	Qua	lifiers
Acetone		0.073	(0.055	1.00		
Benzene		ND	(0.0011	1.00		
Bromobenzene		ND	(0.0011	1.00		
Bromochloromethane		ND	(0.0022	1.00		
Bromodichloromethane		ND	().0011	1.00		
Bromoform		ND	(0.0055	1.00		
Bromomethane		ND	C	0.022	1.00		
2-Butanone		ND	().022	1.00		
n-Butylbenzene		ND	(0.0011	1.00		
sec-Butylbenzene		ND	().0011	1.00		
tert-Butylbenzene		ND	().0011	1.00		
Carbon Disulfide		ND	C	0.011	1.00		
Carbon Tetrachloride		ND	C	0.0011	1.00		
Chlorobenzene		ND	(0.0011	1.00		
Chloroethane		ND	(0.0022	1.00		
Chloroform		ND	(0.0011	1.00		
Chloromethane		ND	(0.022	1.00		
2-Chlorotoluene		ND	(0.0011	1.00		
4-Chlorotoluene		ND	(0.0011	1.00		
Dibromochloromethane		ND	(0.0022	1.00		
1,2-Dibromo-3-Chloropropane		ND	(0.0055	1.00		
1,2-Dibromoethane		ND	(0.0011	1.00		
Dibromomethane		ND	(0.0011	1.00		
1,2-Dichlorobenzene		ND	(0.0011	1.00		
1,3-Dichlorobenzene		ND	(0.0011	1.00		
1,4-Dichlorobenzene		ND	(0.0011	1.00		
Dichlorodifluoromethane		ND	(0.0022	1.00		
1,1-Dichloroethane		ND	(0.0011	1.00		
1,2-Dichloroethane		ND	(0.0011	1.00		
1,1-Dichloroethene		ND	(0.0011	1.00		
c-1,2-Dichloroethene		ND	(0.0011	1.00		
t-1,2-Dichloroethene		ND	(0.0011	1.00		
1,2-Dichloropropane		ND	(0.0011	1.00		
1,3-Dichloropropane		ND	C	0.0011	1.00		



🔅 eurofins

Calscience

Freshwater Environmental Services	Da	ate Received:		06/10/14		
78 Sunny Brae Center	W	Work Order:				
Arcata, CA 95521-6742	Pr	eparation:		EPA 5035		
	M	ethod.		GC/MS / EPA 8260B		
	l Ir	nits:		ma/ka		
Project: Jet Boat Property	0.			Page 8 of 24		
Parameter	Posult	PI	DE	Qualifiers		
2 2-Dichloropropage	ND	<u>NL</u> 0.0055	<u>DF</u> 1.00	Quaimers		
1.1-Dichloropropene	ND	0.0022	1.00			
c-1.3-Dichloropropene	ND	0.0011	1.00			
t-1.3-Dichloropropene	ND	0.0022	1.00			
Ethylbenzene	ND	0.0011	1.00			
2-Hexanone	ND	0.022	1.00			
Isopropylbenzene	ND	0.0011	1.00			
p-lsopropyltoluene	ND	0.0011	1.00			
Methylene Chloride	ND	0.011	1.00			
4-Methyl-2-Pentanone	ND	0.022	1.00			
Naphthalene	ND	0.011	1.00			
n-Propylbenzene	ND	0.0022	1.00			
Styrene	ND	0.0011	1.00			
1,1,1,2-Tetrachloroethane	ND	0.0011	1.00			
1,1,2,2-Tetrachloroethane	ND	0.0022	1.00			
Tetrachloroethene	ND	0.0011	1.00			
Toluene	ND	0.0011	1.00			
1,2,3-Trichlorobenzene	ND	0.0022	1.00			
1,2,4-Trichlorobenzene	ND	0.0022	1.00			
1,1,1-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00			
Trichloroethene	ND	0.0022	1.00			
Trichlorofluoromethane	ND	0.011	1.00			
1,2,3-Trichloropropane	ND	0.0022	1.00			
1,2,4-Trimethylbenzene	ND	0.0022	1.00			
1,3,5-Trimethylbenzene	ND	0.0022	1.00			
Vinyl Acetate	ND	0.011	1.00			
Vinyl Chloride	ND	0.0011	1.00			
p/m-Xylene	ND	0.0022	1.00			
o-Xylene	ND	0.0011	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	0.0022	1.00			
Tert-Butyl Alcohol (TBA)	ND	0.022	1.00			
Diisopropyl Ether (DIPE)	ND	0.0011	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.00			
Ethanol	ND	0.55	1.00			
ТРРН	ND	0.055	1.00			





Freshwater Environmental Services Date Received:				06/10/14
78 Sunny Brae Center	Wo	ork Order:		14-06-0704
Arcata, CA 95521-6742	Pre	eparation:		EPA 5035
	Me	ethod:		GC/MS / EPA 8260B
	Un	its:		mg/kg
Project: Jet Boat Property				Page 9 of 24
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	106	79-139		
1,2-Dichloroethane-d4	104	71-155		
1,4-Bromofluorobenzene	92	80-120		
Toluene-d8	99	80-120		
Toluene-d8-TPPH	98	87-111		





Freshwater Environmental Services	6		Date Rece	eived:			06/10/14
78 Sunny Brae Center			Work Ord	er:			14-06-0704
Arcata, CA 95521-6742			Preparatio	on:			EPA 5035
			Method:			GC/MS	6 / EPA 8260B
			Units:				ma/ka
Project: Jet Boat Property						Pag	e 10 of 24
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	OC Batch ID
	Number	Collected			Prepared	Analyzed	
Jet-Boat-5-(1.0')	14-06-0704-10-D	06/05/14 14:10	Solid	GC/MS UU	06/05/14	06/16/14 14:13	140616L003
Comment(s): - TPPH represents total put	irgeable petroleum h	ydrocarbons,	approximate of	carbon range C4	·C12.		
Parameter		Result	<u>F</u>	<u> </u>	DF	Qua	lifiers
Acetone		ND	0	.056	1.00		
Benzene		ND	0	.0011	1.00		
Bromobenzene		ND	0	.0011	1.00		
Bromochloromethane		ND	0	.0023	1.00		
Bromodichloromethane		ND	0	.0011	1.00		
Bromoform		ND	0	.0056	1.00		
Bromomethane		ND	0	.023	1.00		
2-Butanone		ND	0	.023	1.00		
n-Butylbenzene		ND	0	.0011	1.00		
sec-Butylbenzene		ND	0	.0011	1.00		
tert-Butylbenzene		ND	0	.0011	1.00		
Carbon Disulfide		ND	0	.011	1.00		
Carbon Tetrachloride		ND	0	.0011	1.00		
Chlorobenzene		ND	0	.0011	1.00		
Chloroethane		ND	0	.0023	1.00		
Chloroform		ND	0	.0011	1.00		
Chloromethane		ND	0	.023	1.00		
2-Chlorotoluene		ND	0	.0011	1.00		
4-Chlorotoluene		ND	0	.0011	1.00		
Dibromochloromethane		ND	0	.0023	1.00		
1,2-Dibromo-3-Chloropropane		ND	0	.0056	1.00		
1,2-Dibromoethane		ND	0	.0011	1.00		
Dibromomethane		ND	0	.0011	1.00		
1,2-Dichlorobenzene		ND	0	.0011	1.00		
1,3-Dichlorobenzene		ND	0	.0011	1.00		
1,4-Dichlorobenzene		ND	0	.0011	1.00		
Dichlorodifluoromethane		ND	0	.0023	1.00		
1,1-Dichloroethane		ND	0	.0011	1.00		
1,2-Dichloroethane		ND	0	.0011	1.00		
1,1-Dichloroethene		ND	0	.0011	1.00		
c-1,2-Dichloroethene		ND	0	.0011	1.00		
t-1,2-Dichloroethene		ND	0	.0011	1.00		
1,2-Dichloropropane		ND	0	.0011	1.00		
1,3-Dichloropropane		ND	0	.0011	1.00		





Freshwater Environmental Services	D	Date Received:				
78 Sunny Brae Center	W	ork Order:		14-06-0704		
Arcata CA 95521-6742	P	EPA 503				
	М	ethod:		GC/MS / FPA 8260B		
		nits:		ma/ka		
Project: Jet Boat Property	0			Page 11 of 24		
Parameter	Result	RI	DF	Qualifiers		
2.2-Dichloropropane	ND	0.0056	1.00			
1,1-Dichloropropene	ND	0.0023	1.00			
c-1,3-Dichloropropene	ND	0.0011	1.00			
t-1,3-Dichloropropene	ND	0.0023	1.00			
Ethylbenzene	ND	0.0011	1.00			
2-Hexanone	ND	0.023	1.00			
Isopropylbenzene	ND	0.0011	1.00			
p-Isopropyltoluene	ND	0.0011	1.00			
Methylene Chloride	ND	0.011	1.00			
4-Methyl-2-Pentanone	ND	0.023	1.00			
Naphthalene	ND	0.011	1.00			
n-Propylbenzene	ND	0.0023	1.00			
Styrene	ND	0.0011	1.00			
1,1,1,2-Tetrachloroethane	ND	0.0011	1.00			
1,1,2,2-Tetrachloroethane	ND	0.0023	1.00			
Tetrachloroethene	ND	0.0011	1.00			
Toluene	ND	0.0011	1.00			
1,2,3-Trichlorobenzene	ND	0.0023	1.00			
1,2,4-Trichlorobenzene	ND	0.0023	1.00			
1,1,1-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloroethane	ND	0.0011	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00			
Trichloroethene	ND	0.0023	1.00			
Trichlorofluoromethane	ND	0.011	1.00			
1,2,3-Trichloropropane	ND	0.0023	1.00			
1,2,4-Trimethylbenzene	ND	0.0023	1.00			
1,3,5-Trimethylbenzene	ND	0.0023	1.00			
Vinyl Acetate	ND	0.011	1.00			
Vinyl Chloride	ND	0.0011	1.00			
p/m-Xylene	ND	0.0023	1.00			
o-Xylene	ND	0.0011	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	0.0023	1.00			
Tert-Butyl Alcohol (TBA)	ND	0.023	1.00			
Diisopropyl Ether (DIPE)	ND	0.0011	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.00			
Ethanol	ND	0.56	1.00			
ТРРН	ND	0.056	1.00			





Freshwater Environmental Services	te Received:		06/10/14	
78 Sunny Brae Center	Wo	rk Order:		14-06-0704
Arcata, CA 95521-6742	Pre	paration:		EPA 5035
	Me	thod:		GC/MS / EPA 8260B
	Uni	ts:		mg/kg
Project: Jet Boat Property				Page 12 of 24
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	110	79-139		
1,2-Dichloroethane-d4	107	71-155		
1,4-Bromofluorobenzene	93	80-120		
Toluene-d8	99	80-120		
Toluene-d8-TPPH	99	87-111		



Freshwater Environmental Services			Date Rec	eived:			06/10/14
78 Sunny Brae Center			Work Ord	ler:			14-06-0704
Arcata, CA 95521-6742			Preparati	on:			EPA 5035
			Method:			GC/MS	6 / EPA 8260B
			Units:				mg/kg
Project: Jet Boat Property						Pag	e 13 of 24
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-10-(0.1')	14-06-0704-18-D	06/05/14 12:30	Solid	GC/MS UU	06/05/14	06/16/14 14:39	140616L003
Comment(s): - TPPH represents total pu	rgeable petroleum h	ydrocarbons,	approximate	carbon range C4	-C12.		
Parameter		<u>Result</u>	ļ	<u>RL</u>	DF	Qua	<u>lifiers</u>
Acetone		0.072	(0.054	1.00		
Benzene		ND	(0.0011	1.00		
Bromobenzene		ND	(0.0011	1.00		
Bromochloromethane		ND	(0.0021	1.00		
Bromodichloromethane		ND	(0.0011	1.00		
Bromoform		ND	(0.0054	1.00		
Bromomethane		ND	(0.021	1.00		
2-Butanone		ND	(0.021	1.00		
n-Butylbenzene		ND	(0.0011	1.00		
sec-Butylbenzene		ND	(0.0011	1.00		
tert-Butylbenzene		ND	(0.0011	1.00		
Carbon Disulfide		ND	(0.011	1.00		
Carbon Tetrachloride		ND	(0.0011	1.00		
Chlorobenzene		ND	(0.0011	1.00		
Chloroethane		ND	(0.0021	1.00		
Chloroform		ND	(0.0011	1.00		
Chloromethane		ND	(0.021	1.00		
2-Chlorotoluene		ND	(0.0011	1.00		
4-Chlorotoluene		ND	(0.0011	1.00		
Dibromochloromethane		ND	(0.0021	1.00		
1,2-Dibromo-3-Chloropropane		ND	(0.0054	1.00		
1,2-Dibromoethane		ND	(0.0011	1.00		
Dibromomethane		ND	(0.0011	1.00		
1,2-Dichlorobenzene		ND	(0.0011	1.00		
1,3-Dichlorobenzene		ND	(0.0011	1.00		
1,4-Dichlorobenzene		ND	(0.0011	1.00		
Dichlorodifluoromethane		ND	(0.0021	1.00		
1,1-Dichloroethane		ND	(0.0011	1.00		
1,2-Dichloroethane		ND	(0.0011	1.00		
1,1-Dichloroethene		ND	(0.0011	1.00		
c-1,2-Dichloroethene		ND	(0.0011	1.00		
t-1,2-Dichloroethene		ND	(0.0011	1.00		
1,2-Dichloropropane		ND	(0.0011	1.00		
1,3-Dichloropropane		ND	(0.0011	1.00		



🔅 eurofins

Calscience

Freshwater Environmental Services	Da	ate Received:		06/10/14
78 Sunny Brae Center	W	ork Order:		14-06-0704
Arcata, CA 95521-6742	Pr	eparation:		EPA 5035
	Me	ethod:		GC/MS / EPA 8260B
	Ur	nits:		ma/ka
Project: Jet Boat Property	•			Page 14 of 24
Parameter	Result	RI	DF	Qualifiers
2.2-Dichloropropane	ND	0.0054	1.00	
1,1-Dichloropropene	ND	0.0021	1.00	
c-1,3-Dichloropropene	ND	0.0011	1.00	
t-1,3-Dichloropropene	ND	0.0021	1.00	
Ethylbenzene	ND	0.0011	1.00	
2-Hexanone	ND	0.021	1.00	
Isopropylbenzene	ND	0.0011	1.00	
p-Isopropyltoluene	ND	0.0011	1.00	
Methylene Chloride	ND	0.011	1.00	
4-Methyl-2-Pentanone	ND	0.021	1.00	
Naphthalene	ND	0.011	1.00	
n-Propylbenzene	ND	0.0021	1.00	
Styrene	ND	0.0011	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0011	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0021	1.00	
Tetrachloroethene	ND	0.0011	1.00	
Toluene	ND	0.0011	1.00	
1,2,3-Trichlorobenzene	ND	0.0021	1.00	
1,2,4-Trichlorobenzene	ND	0.0021	1.00	
1,1,1-Trichloroethane	ND	0.0011	1.00	
1,1,2-Trichloroethane	ND	0.0011	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00	
Trichloroethene	ND	0.0021	1.00	
Trichlorofluoromethane	ND	0.011	1.00	
1,2,3-Trichloropropane	ND	0.0021	1.00	
1,2,4-Trimethylbenzene	ND	0.0021	1.00	
1,3,5-Trimethylbenzene	ND	0.0021	1.00	
Vinyl Acetate	ND	0.011	1.00	
Vinyl Chloride	ND	0.0011	1.00	
p/m-Xylene	ND	0.0021	1.00	
o-Xylene	ND	0.0011	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0021	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.021	1.00	
Diisopropyl Ether (DIPE)	ND	0.0011	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0011	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0011	1.00	
Ethanol	ND	0.54	1.00	
ТРРН	ND	0.054	1.00	





Freshwater Environmental Services	te Received:		06/10/14	
78 Sunny Brae Center	Wo	rk Order:		14-06-0704
Arcata, CA 95521-6742	Pre	paration:		EPA 5035
	Ме	thod:		GC/MS / EPA 8260B
	Uni	ts:		mg/kg
Project: Jet Boat Property				Page 15 of 24
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	109	79-139		
1,2-Dichloroethane-d4	108	71-155		
1,4-Bromofluorobenzene	93	80-120		
Toluene-d8	98	80-120		
Toluene-d8-TPPH	97	87-111		





Freshwater Environmental Se	rvices		Date Rece	eived:	06/		
78 Sunny Brae Center			Work Order:				14-06-0704
Arcata, CA 95521-6742			Preparatio	on:	EP		
	Method:				GC/MS / EPA 8260B		
			Units:				mg/kg
Project: Jet Boat Property						Pag	je 16 of 24
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	QC Batch ID

	Number	Collected			Перагец	Analyzeu	
Method Blank	099-12-779-1544	N/A	Solid	GC/MS R	06/11/14	06/11/14 13:14	140611L008
Parameter		Result		RL	DF	Qua	lifiers
Acetone		ND		0.050	1.00		
Benzene		ND		0.0010	1.00		
Bromobenzene		ND		0.0010	1.00		
Bromochloromethane		ND		0.0020	1.00		
Bromodichloromethane		ND		0.0010	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.020	1.00		
2-Butanone		ND		0.020	1.00		
n-Butylbenzene		ND		0.0010	1.00		
sec-Butylbenzene		ND		0.0010	1.00		
tert-Butylbenzene		ND		0.0010	1.00		
Carbon Disulfide		ND		0.010	1.00		
Carbon Tetrachloride		ND		0.0010	1.00		
Chlorobenzene		ND		0.0010	1.00		
Chloroethane		ND		0.0020	1.00		
Chloroform		ND		0.0010	1.00		
Chloromethane		ND		0.020	1.00		
2-Chlorotoluene		ND		0.0010	1.00		
4-Chlorotoluene		ND		0.0010	1.00		
Dibromochloromethane		ND		0.0020	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0050	1.00		
1,2-Dibromoethane		ND		0.0010	1.00		
Dibromomethane		ND		0.0010	1.00		
1,2-Dichlorobenzene		ND		0.0010	1.00		
1,3-Dichlorobenzene		ND		0.0010	1.00		
1,4-Dichlorobenzene		ND		0.0010	1.00		
Dichlorodifluoromethane		ND		0.0020	1.00		
1,1-Dichloroethane		ND		0.0010	1.00		
1,2-Dichloroethane		ND		0.0010	1.00		
1,1-Dichloroethene		ND		0.0010	1.00		
c-1,2-Dichloroethene		ND		0.0010	1.00		
t-1,2-Dichloroethene		ND		0.0010	1.00		
1,2-Dichloropropane		ND		0.0010	1.00		
1,3-Dichloropropane		ND		0.0010	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



🔅 eurofins

Calscience

Freshwater Environmental Services	Da	06/10/14				
78 Sunny Brae Center	W	14-06-070				
Arcata CA 95521-6742	Pi	reparation:		EPA 503		
, itolaa, 0, i 00021 01 12	M	GC/MS / EPA 8260P				
	11	nite:		ma/ka		
Project: let Boat Property	UI UI			Page 17 of 24		
				Fage 17 01 24		
Parameter	<u>Result</u>	<u>RL</u>	DF	Qualifiers		
1,1-Dichloropropene	ND	0.0020	1.00			
c-1,3-Dichloropropene	ND	0.0010	1.00			
t-1,3-Dichloropropene	ND	0.0020	1.00			
Ethylbenzene	ND	0.0010	1.00			
2-Hexanone	ND	0.020	1.00			
Isopropylbenzene	ND	0.0010	1.00			
p-Isopropyltoluene	ND	0.0010	1.00			
Methylene Chloride	ND	0.010	1.00			
4-Methyl-2-Pentanone	ND	0.020	1.00			
Naphthalene	ND	0.010	1.00			
n-Propylbenzene	ND	0.0020	1.00			
Styrene	ND	0.0010	1.00			
1,1,1,2-Tetrachloroethane	ND	0.0010	1.00			
1,1,2,2-Tetrachloroethane	ND	0.0020	1.00			
Tetrachloroethene	ND	0.0010	1.00			
Toluene	ND	0.0010	1.00			
1,2,3-Trichlorobenzene	ND	0.0020	1.00			
1,2,4-Trichlorobenzene	ND	0.0020	1.00			
1,1,1-Trichloroethane	ND	0.0010	1.00			
1,1,2-Trichloroethane	ND	0.0010	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.010	1.00			
Trichloroethene	ND	0.0020	1.00			
Trichlorofluoromethane	ND	0.010	1.00			
1,2,3-Trichloropropane	ND	0.0020	1.00			
1,2,4-Trimethylbenzene	ND	0.0020	1.00			
1,3,5-Trimethylbenzene	ND	0.0020	1.00			
Vinyl Acetate	ND	0.010	1.00			
Vinyl Chloride	ND	0.0010	1.00			
p/m-Xylene	ND	0.0020	1.00			
o-Xylene	ND	0.0010	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1.00			
Tert-Butyl Alcohol (TBA)	ND	0.020	1.00			
Diisopropyl Ether (DIPE)	ND	0.0010	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	0.0010	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	0.0010	1.00			
Ethanol	ND	0.50	1.00			
ТРРН	ND	0.050	1.00			





Freshwater Environmental Services	Dat	te Received:	06/10/14 14-06-0704	
78 Sunny Brae Center	Wo	rk Order:		
Arcata, CA 95521-6742	Pre	paration:		EPA 5035
	Ме	thod:		GC/MS / EPA 8260B
	Uni	ts:		mg/kg
Project: Jet Boat Property				Page 18 of 24
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	104	79-139		
1,2-Dichloroethane-d4	123	71-155		
1,4-Bromofluorobenzene	101	80-120		
Toluene-d8	102	80-120		
Toluene-d8-TPPH	105	87-111		





Freshwater Environmental Services	Date Rece	ived:		06/10/14				
78 Sunny Brae Center			Work Orde	er:		14-06-0704		
Arcata, CA 95521-6742 Preparation:				EPA 5035				
			Method:			GC/MS / EPA 8260B		
	Units:					mg/kg		
Project: Jet Boat Property						Page	e 19 of 24	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	

Method Blank	099-12-779-1549	N/A	Solid	GC/MS R	06/13/14	06/13/14 13:33	140613L003
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
Benzene		ND		0.0010	1.00		
Bromobenzene		ND		0.0010	1.00		
Bromochloromethane		ND		0.0020	1.00		
Bromodichloromethane		ND		0.0010	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.020	1.00		
2-Butanone		ND		0.020	1.00		
n-Butylbenzene		ND		0.0010	1.00		
sec-Butylbenzene		ND		0.0010	1.00		
tert-Butylbenzene		ND		0.0010	1.00		
Carbon Disulfide		ND		0.010	1.00		
Carbon Tetrachloride		ND		0.0010	1.00		
Chlorobenzene		ND		0.0010	1.00		
Chloroethane		ND		0.0020	1.00		
Chloroform		ND		0.0010	1.00		
Chloromethane		ND		0.020	1.00		
2-Chlorotoluene		ND		0.0010	1.00		
4-Chlorotoluene		ND		0.0010	1.00		
Dibromochloromethane		ND		0.0020	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0050	1.00		
1,2-Dibromoethane		ND		0.0010	1.00		
Dibromomethane		ND		0.0010	1.00		
1,2-Dichlorobenzene		ND		0.0010	1.00		
1,3-Dichlorobenzene		ND		0.0010	1.00		
1,4-Dichlorobenzene		ND		0.0010	1.00		
Dichlorodifluoromethane		ND		0.0020	1.00		
1,1-Dichloroethane		ND		0.0010	1.00		
1,2-Dichloroethane		ND		0.0010	1.00		
1,1-Dichloroethene		ND		0.0010	1.00		
c-1,2-Dichloroethene		ND		0.0010	1.00		
t-1,2-Dichloroethene		ND		0.0010	1.00		
1,2-Dichloropropane		ND		0.0010	1.00		
1,3-Dichloropropane		ND		0.0010	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		
1,1-Dichloropropene		ND		0.0020	1.00		



🔅 eurofins

Calscience

Freshwater Environmental Services	Date Received:		06/10/14 14-06-0704		
78 Sunny Brae Center	Work Order:				
Arcata, CA 95521-6742	Preparation:		EPA 5035		
	Method:		GC/MS / EPA 8260E		
	Units:		mg/kg		
Project: Jet Boat Property			Page 20 of 24		
Parameter Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>		
c-1,3-Dichloropropene ND	0.0010	1.00			
t-1,3-Dichloropropene ND	0.0020	1.00			
Ethylbenzene ND	0.0010	1.00			
2-Hexanone ND	0.020	1.00			
Isopropylbenzene ND	0.0010	1.00			
p-Isopropyltoluene ND	0.0010	1.00			
Methylene Chloride ND	0.010	1.00			
4-Methyl-2-Pentanone ND	0.020	1.00			
Naphthalene ND	0.010	1.00			
n-Propylbenzene ND	0.0020	1.00			
Styrene ND	0.0010	1.00			
1,1,1,2- I etrachloroethane ND	0.0010	1.00			
1,1,2,2- I etrachloroethane ND	0.0020	1.00			
Tetrachioroethene ND	0.0010	1.00			
1 2 2 Tricklershermann	0.0010	1.00			
1,2,3-Thchlorobenzene ND	0.0020	1.00			
1.1.1-Trichloroethane ND	0.0020	1.00			
1.1.2-Trichloroethane ND	0.0010	1.00			
1 1 2-Trichloro-1 2 2-Trifluoroethane ND	0.010	1.00			
Trichloroethene ND	0.0020	1.00			
Trichlorofluoromethane ND	0.010	1.00			
1.2.3-Trichloropropane ND	0.0020	1.00			
1.2.4-Trimethylbenzene ND	0.0020	1.00			
1,3,5-Trimethylbenzene ND	0.0020	1.00			
Vinyl Acetate ND	0.010	1.00			
Vinyl Chloride ND	0.0010	1.00			
p/m-Xylene ND	0.0020	1.00			
o-Xylene ND	0.0010	1.00			
Methyl-t-Butyl Ether (MTBE) ND	0.0020	1.00			
Tert-Butyl Alcohol (TBA) ND	0.020	1.00			
Diisopropyl Ether (DIPE) ND	0.0010	1.00			
Ethyl-t-Butyl Ether (ETBE) ND	0.0010	1.00			
Tert-Amyl-Methyl Ether (TAME) ND	0.0010	1.00			
Ethanol ND	0.50	1.00			
TPPH ND	0.050	1.00			
Surrogate Rec. (%	6) <u>Control Limits</u>	Qualifiers			
Dibromofluoromethane 102	79-139				





Freshwater Environmental Services		Date Re	ceived:	06/10/14			
78 Sunny Brae Center			Work Or	rder:		14-06-0704	
Arcata, CA 95521-6742			Preparation:				EPA 5035
			Method:			GC/MS	/ EPA 8260B
			Units:				mg/kg
Project: Jet Boat Property						Page	e 21 of 24
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		122		71-155			
1,4-Bromofluorobenzene		100		80-120			
Toluene-d8		102		80-120			
Toluene-d8-TPPH		105		87-111			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-779-1550	N/A	Solid	GC/MS R	06/13/14	06/13/14 14:00	140613L026
Parameter		Result		RL	DF	Qual	ifiers
Acetone		ND		5.0	50.0		
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
Dibromofluoromethane		104		79-139			
1,2-Dichloroethane-d4		123		71-155			
1,4-Bromofluorobenzene		100		80-120			
Toluene-d8		101		80-120			
Toluene-d8-TPPH		103		87-111			





Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received:	06/10/14
Work Order:	14-06-0704
Preparation:	EPA 5035
Method:	GC/MS / EPA 8260B
Units:	mg/kg
	Page 22 of 24

Project: Jet Boat Property

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-779-1553	N/A	Solid	GC/MS UU	06/16/14	06/16/14 12:55	140616L003
Parameter		Result		RL	DF	Qua	lifiers
Acetone		ND		0.050	1.00		
Benzene		ND		0.0010	1.00		
Bromobenzene		ND		0.0010	1.00		
Bromochloromethane		ND		0.0020	1.00		
Bromodichloromethane		ND		0.0010	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.020	1.00		
2-Butanone		ND		0.020	1.00		
n-Butylbenzene		ND		0.0010	1.00		
sec-Butylbenzene		ND		0.0010	1.00		
tert-Butylbenzene		ND		0.0010	1.00		
Carbon Disulfide		ND		0.010	1.00		
Carbon Tetrachloride		ND		0.0010	1.00		
Chlorobenzene		ND		0.0010	1.00		
Chloroethane		ND		0.0020	1.00		
Chloroform		ND		0.0010	1.00		
Chloromethane		ND		0.020	1.00		
2-Chlorotoluene		ND		0.0010	1.00		
4-Chlorotoluene		ND		0.0010	1.00		
Dibromochloromethane		ND		0.0020	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0050	1.00		
1,2-Dibromoethane		ND		0.0010	1.00		
Dibromomethane		ND		0.0010	1.00		
1,2-Dichlorobenzene		ND		0.0010	1.00		
1,3-Dichlorobenzene		ND		0.0010	1.00		
1,4-Dichlorobenzene		ND		0.0010	1.00		
Dichlorodifluoromethane		ND		0.0020	1.00		
1,1-Dichloroethane		ND		0.0010	1.00		
1,2-Dichloroethane		ND		0.0010	1.00		
1,1-Dichloroethene		ND		0.0010	1.00		
c-1,2-Dichloroethene		ND		0.0010	1.00		
t-1,2-Dichloroethene		ND		0.0010	1.00		
1,2-Dichloropropane		ND		0.0010	1.00		
1,3-Dichloropropane		ND		0.0010	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



🔅 eurofins

Freshwater Environmental Services	Date Red		06/10/14	
78 Sunny Brae Center	Work Ore		14-06-0704	
Arcata. CA 95521-6742	Preparat		EPA 5035	
	Method:	G	C/MS / EPA 8260B	
	Units:		_	ma/ka
Project: Jet Boat Property	••		Page 23 of 24	
Parameter R	esult	RL	DF	Qualifiers
1,1-Dichloropropene N	D	0.0020	1.00	
c-1,3-Dichloropropene N	D	0.0010	1.00	
t-1,3-Dichloropropene N	D	0.0020	1.00	
Ethylbenzene	D	0.0010	1.00	
2-Hexanone N	D	0.020	1.00	
Isopropylbenzene N	D	0.0010	1.00	
p-Isopropyltoluene N	D	0.0010	1.00	
Methylene Chloride N	D	0.010	1.00	
4-Methyl-2-Pentanone N	D	0.020	1.00	
Naphthalene	D	0.010	1.00	
n-Propylbenzene N	D	0.0020	1.00	
Styrene N	D	0.0010	1.00	
1,1,1,2-Tetrachloroethane N	D	0.0010	1.00	
1,1,2,2-Tetrachloroethane N	D	0.0020	1.00	
Tetrachloroethene N	D	0.0010	1.00	
Toluene	D	0.0010	1.00	
1,2,3-Trichlorobenzene N	D	0.0020	1.00	
1,2,4-Trichlorobenzene N	D	0.0020	1.00	
1,1,1-Trichloroethane N	D	0.0010	1.00	
1,1,2-Trichloroethane N	D	0.0010	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane N	D	0.010	1.00	
Trichloroethene N	D	0.0020	1.00	
Trichlorofluoromethane N	D	0.010	1.00	
1,2,3-Trichloropropane N	D	0.0020	1.00	
1,2,4-Trimethylbenzene N	D	0.0020	1.00	
1,3,5-Trimethylbenzene N	D	0.0020	1.00	
Vinyl Acetate N	D	0.010	1.00	
Vinyl Chloride N	D	0.0010	1.00	
p/m-Xylene N	D	0.0020	1.00	
o-Xylene N	D	0.0010	1.00	
Methyl-t-Butyl Ether (MTBE) N	D	0.0020	1.00	
Tert-Butyl Alcohol (TBA) N	D	0.020	1.00	
Diisopropyl Ether (DIPE) N	D	0.0010	1.00	
Ethyl-t-Butyl Ether (ETBE) N	D	0.0010	1.00	
Tert-Amyl-Methyl Ether (TAME) N	D	0.0010	1.00	
Ethanol N	D	0.50	1.00	
TPPH N	D	0.050	1.00	





Freshwater Environmental Services	Da	te Received:	06/10/14	
78 Sunny Brae Center	Wo	ork Order:	14-06-0704	
Arcata, CA 95521-6742	Pre	eparation:		EPA 5035
	Me	thod:		GC/MS / EPA 8260B
	Units:			
Project: Jet Boat Property				Page 24 of 24
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
Dibromofluoromethane	105	79-139		
1,2-Dichloroethane-d4	106	71-155		
1,4-Bromofluorobenzene	93	80-120		
Toluene-d8	98	80-120		
Toluene-d8-TPPH	97	87-111		





Freshwater Environmental Services	S		Date Rece	ived:		06/10/14			
78 Sunny Brae Center			Work Orde	er:			14-06-0704		
Arcata, CA 95521-6742			Preparatio	n:		EPA 5035			
			Method:			GC/MS	/ EPA 8260B		
			Units:				ma/ka		
Project: Jet Boat Property						Pa	ge 1 of 12		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
Jet-Boat-1-(1.0')	14-06-0704-1-F	06/05/14 16:05	Solid	GC/MS R	06/05/14	06/12/14 16:11	140612L025		
Comment(s): - TPPH represents total p	urgeable petroleum	nydrocarbons, a	pproximate c	arbon range C4	-C12.				
Parameter		<u>Result</u>	<u>R</u>	L	DF	<u>Qua</u>	<u>lifiers</u>		
Benzene		ND	2.	3	2500				
Chlorobenzene		ND	2.	3	2500				
1,2-Dibromoethane		ND	2.	3	2500				
1,2-Dichlorobenzene		ND	2.	3	2500				
1,3-Dichlorobenzene		ND	2.	3	2500				
1,4-Dichlorobenzene		ND	2.	3	2500				
1,2-Dichloroethane		ND	2.	3	2500				
Ethylbenzene		ND	2.	3	2500				
Naphthalene		ND	23	3	2500				
Toluene		ND	2.	3	2500				
p/m-Xylene		ND	4.	6	2500				
o-Xylene		ND	2.	3	2500				
Methyl-t-Butyl Ether (MTBE)		ND	4.	6	2500				
Tert-Butyl Alcohol (TBA)		ND	46	6	2500				
Diisopropyl Ether (DIPE)		ND	2.	3	2500				
Ethyl-t-Butyl Ether (ETBE)		ND	2.	3	2500				
Tert-Amyl-Methyl Ether (TAME)		ND	2.	3	2500				
ТРРН		4600	12	20	2500				
Surrogate		<u>Rec. (%)</u>	<u>C</u>	ontrol Limits	<u>Qualifiers</u>				
Dibromofluoromethane		100	79	9-139					
1,2-Dichloroethane-d4		117	7′	1-155					
1,4-Bromofluorobenzene		106	80	0-120					
Toluene-d8		106	80	0-120					
Toluene-d8-TPPH		108	87	7-111					





Freshwater Environmental Services			Date Re	ceived:			06/10/14
78 Sunny Brae Center			Work O	der:			14-06-0704
Arcata, CA 95521-6742			Prepara	tion:			EPA 5035
			Method:			GC/MS	/ EPA 8260B
			Units:				ma/ka
Project: Jet Boat Property						Paç	je 2 of 12
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-1-(2.0')	14-06-0704-2-D	06/05/14 16:10	Solid	GC/MS R	06/05/14	06/12/14 18:06	140612L025
Comment(s): - TPPH represents total put	rgeable petroleum h	ydrocarbons, a	approximat	e carbon range C4	-C12.		
Parameter		<u>Result</u>		<u>RL</u>	DF	Qual	fiers
Benzene		ND		0.90	1000		
Chlorobenzene		ND		0.90	1000		
1,2-Dibromoethane		ND		0.90	1000		
1,2-Dichlorobenzene		ND		0.90	1000		
1,3-Dichlorobenzene		ND		0.90	1000		
1,4-Dichlorobenzene		ND		0.90	1000		
1,2-Dichloroethane		ND		0.90	1000		
Ethylbenzene		ND		0.90	1000		
Naphthalene		ND		9.0	1000		
Toluene		ND		0.90	1000		
p/m-Xylene		4.0		1.8	1000		
o-Xylene		14		0.90	1000		
Methyl-t-Butyl Ether (MTBE)		ND		1.8	1000		
Tert-Butyl Alcohol (TBA)		ND		18	1000		
Diisopropyl Ether (DIPE)		ND		0.90	1000		
Ethyl-t-Butyl Ether (ETBE)		ND		0.90	1000		
Tert-Amyl-Methyl Ether (TAME)		ND		0.90	1000		
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
Dibromofluoromethane		94		79-139			
1,2-Dichloroethane-d4		111		71-155			
1,4-Bromofluorobenzene		111		80-120			
Toluene-d8		104		80-120			
Toluene-d8-TPPH		106		87-111			
Jet-Boat-1-(2.0')	14-06-0704-2-D	06/05/14 16:10	Solid	GC/MS UU	06/05/14	06/17/14 15:02	140617L006

	10110		10102					
Comment(s): - TP	- TPPH represents total purgeable petroleum hydrocarbons, approximate carbon range C4-C12.							
Parameter		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>			
ТРРН		4500	110	2500				
Surrogate		<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>				
Toluene-d8-TPPH		99	87-111					





Freshwater Environmental Service	es		Date Rec	eived:		06/10/14		
78 Sunny Brae Center			Work Ord	er:			14-06-0704	
Arcata, CA 95521-6742			Preparatio	on:		EPA 5035		
			Method:			GC/MS	/ EPA 8260B	
			Units:				ma/ka	
Project: Jet Boat Property						Pa	ge 3 of 12	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-2-(0.9')	14-06-0704-3-C	06/05/14 15:52	Solid	GC/MS R	06/05/14	06/12/14 20:20	140612L011	
Comment(s): - TPPH represents total	purgeable petroleum ł	nydrocarbons, a	pproximate	carbon range C4	-C12.			
Parameter		<u>Result</u>	<u>F</u>	<u> </u>	DF	<u>Qua</u>	<u>lifiers</u>	
Benzene		ND	(0.0012	1.00			
Chlorobenzene		ND	(0.0012	1.00			
1,2-Dibromoethane		ND	(0.0012	1.00			
1,2-Dichlorobenzene		ND	C	0.0012	1.00			
1,3-Dichlorobenzene		ND	(0.0012	1.00			
1,4-Dichlorobenzene		ND	(0.0012	1.00			
1,2-Dichloroethane		ND	(0.0012	1.00			
Ethylbenzene		ND	(0.0012	1.00			
Naphthalene		ND	(0.012	1.00			
Toluene		0.0028	(0.0012	1.00			
p/m-Xylene		ND	(0.0024	1.00			
o-Xylene		ND	(0.0012	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	(0.0024	1.00			
Tert-Butyl Alcohol (TBA)		ND	(0.024	1.00			
Diisopropyl Ether (DIPE)		ND	(0.0012	1.00			
Ethyl-t-Butyl Ether (ETBE)		ND	(0.0012	1.00			
Tert-Amyl-Methyl Ether (TAME)		ND	(0.0012	1.00			
ТРРН		0.32	C	0.061	1.00			
Surrogate		<u>Rec. (%)</u>	<u>(</u>	Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane		113	7	79-139				
1,2-Dichloroethane-d4		140	7	71-155				
1,4-Bromofluorobenzene		94	8	30-120				
Toluene-d8		102	8	30-120				
Toluene-d8-TPPH		104	8	37-111				





Freshwater Environmental Services			Date Rec	eived:		06/10/14			
78 Sunny Brae Center			Work Order:				14-06-0704		
Arcata, CA 95521-6742			Preparati			EPA 5035			
			Method:			GC/MS	6 / EPA 8260B		
		Linits:					ma/ka		
Project: Jet Boat Property						Pa	ge 4 of 12		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
Jet-Boat-2-(1.5')	14-06-0704-4-C	06/05/14 15:54	Solid	GC/MS R	06/05/14	06/12/14 18:59	140612L011		
Comment(s): - TPPH represents total	purgeable petroleum ł	ydrocarbons, a	pproximate	carbon range C4	-C12.				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	<u>lifiers</u>		
Benzene		0.0013		0.0012	1.00				
Chlorobenzene		ND		0.0012	1.00				
1,2-Dibromoethane		ND		0.0012	1.00				
1,2-Dichlorobenzene		ND		0.0012	1.00				
1,3-Dichlorobenzene		ND		0.0012	1.00				
1,4-Dichlorobenzene		ND		0.0012	1.00				
1,2-Dichloroethane		ND		0.0012	1.00				
Ethylbenzene		ND		0.0012	1.00				
Naphthalene		ND		0.012	1.00				
Toluene		0.0063		0.0012	1.00				
p/m-Xylene		0.0030		0.0024	1.00				
o-Xylene		0.0019		0.0012	1.00				
Methyl-t-Butyl Ether (MTBE)		ND		0.0024	1.00				
Tert-Butyl Alcohol (TBA)		ND		0.024	1.00				
Diisopropyl Ether (DIPE)		ND		0.0012	1.00				
Ethyl-t-Butyl Ether (ETBE)		ND		0.0012	1.00				
Tert-Amyl-Methyl Ether (TAME)		ND		0.0012	1.00				
ТРРН		0.17		0.061	1.00				
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>				
Dibromofluoromethane		113		79-139					
1,2-Dichloroethane-d4		143		71-155					
1,4-Bromofluorobenzene		100		80-120					
Toluene-d8		103		80-120					
Toluene-d8-TPPH		106		87-111					





Freshwater Environmental Service	S		Date Rec	eived:		06/10/14		
78 Sunny Brae Center			Work Orc	ler:			14-06-0704	
Arcata, CA 95521-6742			Preparati		EPA 5035			
			Method:			GC/MS	6 / EPA 8260B	
		Units:					ma/ka	
Project: Jet Boat Property						Pa	ge 5 of 12	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-3-(0.8')	14-06-0704-5-C	06/05/14 15:40	Solid	GC/MS R	06/05/14	06/12/14 19:26	140612L011	
Comment(s): - TPPH represents total p	urgeable petroleum ł	ydrocarbons, a	pproximate	carbon range C4	-C12.			
Parameter		<u>Result</u>	ļ	<u>RL</u>	DF	<u>Qua</u>	lifiers	
Benzene		ND		0.0012	1.00			
Chlorobenzene		ND	(0.0012	1.00			
1,2-Dibromoethane		ND	(0.0012	1.00			
1,2-Dichlorobenzene		ND	(0.0012	1.00			
1,3-Dichlorobenzene		ND	(0.0012	1.00			
1,4-Dichlorobenzene		ND	(0.0012	1.00			
1,2-Dichloroethane		ND	(0.0012	1.00			
Ethylbenzene		ND	(0.0012	1.00			
Naphthalene		ND	(0.012	1.00			
Toluene		0.0028	(0.0012	1.00			
p/m-Xylene		ND	(0.0024	1.00			
o-Xylene		ND	(0.0012	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	(0.0024	1.00			
Tert-Butyl Alcohol (TBA)		ND	(0.024	1.00			
Diisopropyl Ether (DIPE)		ND	(0.0012	1.00			
Ethyl-t-Butyl Ether (ETBE)		ND	(0.0012	1.00			
Tert-Amyl-Methyl Ether (TAME)		ND	(0.0012	1.00			
ТРРН		0.46	(0.059	1.00			
Surrogate		<u>Rec. (%)</u>	9	Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane		120	-	79-139				
1,2-Dichloroethane-d4		149		71-155				
1,4-Bromofluorobenzene		87	:	80-120				
Toluene-d8		99	;	80-120				
Toluene-d8-TPPH		101	:	87-111				





Freshwater Environmental Servic	es		Date Rec	eived:		06/10/14		
78 Sunny Brae Center			Work Ord	er:			14-06-0704	
Arcata, CA 95521-6742			Preparatio		EPA 5035			
			Method:			GC/MS	6 / EPA 8260B	
			Units:				ma/ka	
Project: Jet Boat Property						Pa	ge 6 of 12	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-3-(2.0')	14-06-0704-6-B	06/05/14 15:41	Solid	GC/MS R	06/05/14	06/13/14 16:45	140613L003	
Comment(s): - TPPH represents total	purgeable petroleum ł	nydrocarbons, a	pproximate	carbon range C4	-C12.			
Parameter		<u>Result</u>	E	<u>RL</u>	DF	<u>Qua</u>	<u>llifiers</u>	
Benzene		ND	C	0.0012	1.00			
Chlorobenzene		ND	C	0.0012	1.00			
1,2-Dibromoethane		ND	C	0.0012	1.00			
1,2-Dichlorobenzene		ND	C).0012	1.00			
1,3-Dichlorobenzene		ND	C).0012	1.00			
1,4-Dichlorobenzene		ND	C	0.0012	1.00			
1,2-Dichloroethane		ND	C	0.0012	1.00			
Ethylbenzene		ND	C	0.0012	1.00			
Naphthalene		ND	C).012	1.00			
Toluene		ND	C).0012	1.00			
p/m-Xylene		ND	C).0024	1.00			
o-Xylene		ND	C).0012	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	C).0024	1.00			
Tert-Butyl Alcohol (TBA)		ND	C	0.024	1.00			
Diisopropyl Ether (DIPE)		ND	C	0.0012	1.00			
Ethyl-t-Butyl Ether (ETBE)		ND	C	0.0012	1.00			
Tert-Amyl-Methyl Ether (TAME)		ND	C	0.0012	1.00			
ТРРН		0.093	C).060	1.00			
Surrogate		<u>Rec. (%)</u>	<u>(</u>	Control Limits	<u>Qualifiers</u>			
Dibromofluoromethane		117	7	79-139				
1,2-Dichloroethane-d4		144	7	71-155				
1,4-Bromofluorobenzene		99	8	30-120				
Toluene-d8		102	8	30-120				
Toluene-d8-TPPH		104	8	37-111				





Freshwater Environmental Services			Date Reco	eived:	06/10/14				
78 Sunny Brae Center			Work Order:				14-06-0704		
Arcata, CA 95521-6742			Preparatio	on:			EPA 5035		
			Method:			GC/MS	6 / EPA 8260B		
			Units:				mg/kg		
Project: Jet Boat Property						Pa	ge 7 of 12		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
Jet-Boat-9-(1.0')	14-06-0704-17-D	06/05/14 14:30	Solid	GC/MS R	06/05/14	06/12/14 21:40	140612L025		
Comment(s): - TPPH represents total p	ourgeable petroleum h	ydrocarbons, a	approximate	carbon range C4	-C12.				
Parameter		Result	<u> </u>	<u>RL</u>	DF	<u>Qua</u>	<u>llifiers</u>		
Benzene		ND	C).98	1000				
Chlorobenzene		ND	C).98	1000				
1,2-Dibromoethane		ND	C).98	1000				
1,2-Dichlorobenzene		ND	C).98	1000				
1,3-Dichlorobenzene		ND	C).98	1000				
1,4-Dichlorobenzene		ND	C).98	1000				
1,2-Dichloroethane		ND	C).98	1000				
Ethylbenzene		ND	C).98	1000				
Naphthalene		ND	9	9.8	1000				
Toluene		ND	C).98	1000				
p/m-Xylene		ND	2	2.0	1000				
o-Xylene		ND	C).98	1000				
Methyl-t-Butyl Ether (MTBE)		ND	2	2.0	1000				
Tert-Butyl Alcohol (TBA)		ND	2	20	1000				
Diisopropyl Ether (DIPE)		ND	C).98	1000				
Ethyl-t-Butyl Ether (ETBE)		ND	C).98	1000				
Tert-Amyl-Methyl Ether (TAME)		ND	C).98	1000				
Surrogate		<u>Rec. (%)</u>	<u>(</u>	Control Limits	<u>Qualifiers</u>				
Dibromofluoromethane		103	7	79-139					
1,2-Dichloroethane-d4		120	7	71-155					
1,4-Bromofluorobenzene		108	8	30-120					
Toluene-d8		104	8	30-120					
Toluene-d8-TPPH		106	8	37-111					





Freshwater Environmental Services	S		Date Rec	eived:		06/10/14		
78 Sunny Brae Center			Work Ord	ler:			14-06-0704	
Arcata, CA 95521-6742			Preparati	on:		EPA 5035		
			Method:			GC/MS / EPA 8260B		
			Units:				mg/kg	
Project: Jet Boat Property						Pa	ge 8 of 12	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-9-(1.0')	14-06-0704-17-D	06/05/14 14:30	Solid	GC/MS R	06/05/14	06/13/14 18:33	140613L026	
Comment(s): - TPPH represents total p	urgeable petroleum h	ydrocarbons, a	approximate	carbon range C4	-C12.			
Parameter		Result	<u>RL</u>		DE	Qua	alifiers	
ТРРН		4400		120	2500			
Surrogate		<u>Rec. (%)</u>		Control Limits	Qualifiers			
Dibromofluoromethane		101		79-139				
1,2-Dichloroethane-d4		119		71-155				
1,4-Bromofluorobenzene		105		80-120				
Toluene-d8 99		99		80-120				
Toluene-d8-TPPH		101		87-111				





Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 5035
	Method:	GC/MS / EPA 8260B
	Units:	mg/kg
Project: Jet Boat Property		Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-779-1547	N/A	Solid	GC/MS R	06/12/14	06/12/14 14:50	140612L011
Parameter		<u>Result</u>		<u>RL</u>	DF	Qualif	iers
Benzene		ND		0.0010	1.00		
Chlorobenzene		ND		0.0010	1.00		
1,2-Dibromoethane		ND		0.0010	1.00		
1,2-Dichlorobenzene		ND		0.0010	1.00		
1,3-Dichlorobenzene		ND		0.0010	1.00		
1,4-Dichlorobenzene		ND		0.0010	1.00		
1,2-Dichloroethane		ND		0.0010	1.00		
Ethylbenzene		ND		0.0010	1.00		
Naphthalene		ND		0.010	1.00		
Toluene		ND		0.0010	1.00		
p/m-Xylene		ND		0.0020	1.00		
o-Xylene		ND		0.0010	1.00		
Methyl-t-Butyl Ether (MTBE)		ND		0.0020	1.00		
Tert-Butyl Alcohol (TBA)		ND		0.020	1.00		
Diisopropyl Ether (DIPE)		ND		0.0010	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND		0.0010	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND		0.0010	1.00		
ТРРН		ND		0.050	1.00		
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
Dibromofluoromethane		104		79-139			
1,2-Dichloroethane-d4		122		71-155			
1,4-Bromofluorobenzene		99		80-120			
Toluene-d8		102		80-120			
Toluene-d8-TPPH		104		87-111			





Freshwater Environmental Ser	vices		Date Received: 06						
78 Sunny Brae Center			Work Order: 14-						
Arcata, CA 95521-6742			Preparatio	on:		EPA 503			
		Method:		GC/MS / EPA 8260B					
			Units:				mg/kg		
Project: Jet Boat Property						Pag	e 10 of 12		
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	QC Batch ID		

	Number	Collected			Prepared	Analyzed	
Method Blank	099-12-779-1548	N/A	Solid	GC/MS R	06/12/14	06/12/14 15:17	140612L025
Parameter		<u>Result</u>		RL	DF	Qua	alifiers
Benzene		ND		0.10	50.0		
Chlorobenzene		ND		0.10	50.0		
1,2-Dibromoethane		ND		0.10	50.0		
1,2-Dichlorobenzene		ND		0.10	50.0		
1,3-Dichlorobenzene		ND		0.10	50.0		
1,4-Dichlorobenzene		ND		0.10	50.0		
1,2-Dichloroethane		ND		0.10	50.0		
Ethylbenzene		ND		0.10	50.0		
Naphthalene		ND		1.0	50.0		
Toluene		ND		0.10	50.0		
p/m-Xylene		ND		0.20	50.0		
o-Xylene		ND		0.10	50.0		
Methyl-t-Butyl Ether (MTBE)		ND		0.20	50.0		
Tert-Butyl Alcohol (TBA)		ND		2.0	50.0		
Diisopropyl Ether (DIPE)		ND		0.10	50.0		
Ethyl-t-Butyl Ether (ETBE)		ND		0.10	50.0		
Tert-Amyl-Methyl Ether (TAME)		ND		0.10	50.0		
TPPH		ND		2.5	50.0		
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
Dibromofluoromethane		104		79-139			
1,2-Dichloroethane-d4		121		71-155			
1,4-Bromofluorobenzene		100		80-120			
Toluene-d8		102		80-120			
Toluene-d8-TPPH		105		87-111			





Freshwater Environmental Service	es		Date Rece	eived:		06/10/ <i>*</i>			
78 Sunny Brae Center			Work Ord	er:			14-06-0704		
Arcata, CA 95521-6742			Preparatio	on:		EPA 50			
			Method:		GC/MS / EPA				
			Units:			mg/l			
Project: Jet Boat Property						Pag	e 11 of 12		
Client Sample Number	Lab Sample	Date/Time	Matrix	Instrument	Date	Date/Time	QC Batch ID		

·	Number	Collected			Prepared	Prepared Analyzed			
Method Blank	099-12-779-1549	N/A	Solid	GC/MS R	06/13/14	06/13/14 13:33	140613L003		
Parameter		<u>Result</u>		RL	DF	Qua	alifiers		
Benzene		ND		0.0010	1.00				
Chlorobenzene		ND		0.0010	1.00				
1,2-Dibromoethane		ND		0.0010	1.00				
1,2-Dichlorobenzene		ND		0.0010	1.00				
1,3-Dichlorobenzene		ND		0.0010	1.00				
1,4-Dichlorobenzene		ND		0.0010	1.00				
1,2-Dichloroethane		ND		0.0010	1.00				
Ethylbenzene		ND		0.0010	1.00				
Naphthalene		ND		0.010	1.00				
Toluene		ND		0.0010	1.00				
p/m-Xylene		ND		0.0020	1.00				
o-Xylene		ND		0.0010	1.00				
Methyl-t-Butyl Ether (MTBE)		ND		0.0020	1.00				
Tert-Butyl Alcohol (TBA)		ND		0.020	1.00				
Diisopropyl Ether (DIPE)		ND		0.0010	1.00				
Ethyl-t-Butyl Ether (ETBE)		ND		0.0010	1.00				
Tert-Amyl-Methyl Ether (TAME)		ND		0.0010	1.00				
ТРРН		ND		0.050	1.00				
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>				
Dibromofluoromethane		102		79-139					
1,2-Dichloroethane-d4		122		71-155					
1,4-Bromofluorobenzene		100		80-120					
Toluene-d8		102		80-120					
Toluene-d8-TPPH		105		87-111					





Freshwater Environmental Services	i		Date Received: 06/10/14						
78 Sunny Brae Center			Work Or	der:		14-06-0704			
Arcata, CA 95521-6742			Preparat	tion:		EPA 5035			
,			Method:			GC/MS	/ EPA 8260B		
			Units:				ma/ka		
Project: Jet Boat Property			•			Pag	e 12 of 12		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
Method Blank	099-12-779-1550	N/A	Solid	GC/MS R	06/13/14	06/13/14 14:00	140613L026		
Parameter				RL	DF	Qualifiers			
ТРРН		ND		5.0	50.0				
					o				
Surrogate		<u>Rec. (%)</u>		Control Limits	Qualifiers				
Dibromofluoromethane		104		79-139					
1,2-Dichloroethane-d4		123		71-155					
1,4-Bromofluorobenzene		100		80-120					
Toluene-d8		101		80-120					
Toluene-d8-TPPH		103		87-111					
Method Blank	099-12-779-1554	N/A	Solid	GC/MS UU	06/17/14	06/17/14 14:36	140617L006		
Parameter		Result		RL	DF	Qua	lifiers		
ТРРН		ND		5.0	50.0				
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>				
Dibromofluoromethane		97		79-139					
1,2-Dichloroethane-d4		97		71-155					
1,4-Bromofluorobenzene		96		80-120					
Toluene-d8		98		80-120					
Toluene-d8-TPPH		97		87-111					



Freshwater Environmental Services					Date Received: 0				06/10/14		
78 Sunny Brae Center					Order:				1	4-06-0704	
Arcata, CA 95521-6742					Preparation:				EPA 3550B		
				Method: EPA 8015E				8015B (M)			
Project: Jet Boat Property									Page 1	of 5	
Quality Control Sample ID	Туре		Matrix	Instr	ument	Date Prepared	Date Anal	yzed	MS/MSD Ba	tch Number	
Jet-Boat-4-(0.1')	Sample		Solid	GC	46	06/11/14	06/12/14	02:23	140611S08		
Jet-Boat-4-(0.1')	Matrix Spike		Solid	GC	46	06/11/14	06/12/14	01:47	140611S08		
Jet-Boat-4-(0.1')	Matrix Spike	Duplicate	Solid	GC	46	06/11/14	06/12/14	02:05	140611S08		
Parameter	<u>Sample</u> Conc.	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	<u>MSD</u> Conc.	MSD %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>	
TPH as Motor Oil	ND	400.0	374.1	94	356.6	89	64-130	5	0-15		

RPD: Relative Percent Difference. CL: Control Limits

🛟 eurofins

Quality Control - Spike/Spike Duplicate

Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3020A Total
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 5

Quality Control Sample ID Matrix Date Prepared Date Analyzed MS/MSD Batch Number Туре Instrument Jet-Boat-11 06/16/14 Sample Aqueous ICP/MS 04 06/16/14 20:35 140616S02 Jet-Boat-11 Matrix Spike Aqueous ICP/MS 04 06/16/14 06/16/14 20:18 140616S02 Jet-Boat-11 Matrix Spike Duplicate Aqueous ICP/MS 04 06/16/14 06/16/14 20:22 140616S02 <u>MSD</u> <u>%Rec.</u> **Parameter** Sample Conc. <u>Spike</u> Added <u>MS</u> Conc. <u>MS</u> <u>%Rec.</u> <u>MSD</u> Conc. <u>%Rec. CL</u> RPD RPD CL **Qualifiers** Cadmium ND 0.1000 0.1008 101 0.09769 98 84-114 3 0-8 Chromium ND 0.1000 0.1041 104 0.1007 101 73-133 3 0-11 Lead ND 0.1000 0.1089 109 0.1082 108 79-121 0-10 1 Nickel ND 0.1000 0.1101 110 0.1094 109 68-122 1 0-10 Zinc 0.01669 0.1000 0.1027 0.1082 43-145 5 0-39 86 91

RPD: Relative Percent Difference. CL: Control Limits



Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 3 of 5

Quality Control Sample ID	Туре		Matrix	Instru	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
Jet-Boat-4-(0.1')	Sample		Solid	ICP/	MS 04	06/11/14	06/12/14	16:46	140611S02A	L Contraction of the second se
Jet-Boat-4-(0.1')	Matrix Spike		Solid	ICP/I	MS 04	06/11/14	06/12/14	16:18	140611S02A	
Jet-Boat-4-(0.1')	Matrix Spike I	Duplicate	Solid	ICP/	MS 04	06/11/14	06/12/14	16:22	140611S02A	۱
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec.	<u>MSD</u> Conc.	MSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Antimony	ND	25.00	7.917	32	5.586	22	1-97	35	0-39	
Arsenic	5.896	25.00	29.72	95	30.23	97	72-132	2	0-13	
Cadmium	ND	25.00	26.88	108	26.91	108	85-121	0	0-12	
Chromium	94.30	25.00	117.5	93	120.1	103	20-182	2	0-15	
Copper	49.99	25.00	73.69	95	72.83	91	25-157	1	0-22	
Lead	5.847	25.00	32.14	105	31.73	104	62-134	1	0-23	
Nickel	164.7	25.00	190.0	4X	186.9	4X	46-154	4X	0-15	Q
Selenium	ND	25.00	26.45	106	27.02	108	54-132	2	0-14	
Silver	ND	12.50	13.02	104	13.22	106	78-126	2	0-15	
Thallium	ND	25.00	24.95	100	24.67	99	79-115	1	0-11	
Zinc	59.13	25.00	86.06	108	89.77	123	23-173	4	0-18	

🛟 eurofins

Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 5030C
	Method:	GC/MS / EPA 8260B
Project: Jet Boat Property		Page 4 of 5

ጉ

Quality Control Sample ID	Туре		Matrix		Instrument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
14-06-0989-5	Sample		Aqueous	; (GC/MS R	06/17/14	06/17/14	19:21	140617S024	
14-06-0989-5	Matrix Spike		Aqueous	; (GC/MS R	06/17/14	06/17/14	19:47	140617S024	
14-06-0989-5	Matrix Spike	Duplicate	Aqueous	; (GC/MS R	06/17/14	06/17/14	20:14	140617S024	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec	<u>MSD</u> c. Conc.	<u>MSD</u> %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Benzene	ND	50.00	39.50	79	41.70	83	74-122	5	0-21	
Carbon Tetrachloride	ND	50.00	38.89	78	42.63	85	60-144	9	0-21	
Chlorobenzene	ND	50.00	42.65	85	45.02	90	73-120	5	0-22	
1,2-Dibromoethane	ND	50.00	47.58	95	49.11	98	80-122	3	0-20	
1,2-Dichlorobenzene	ND	50.00	42.38	85	40.77	82	70-120	4	0-26	
1,2-Dichloroethane	ND	50.00	42.48	85	45.24	90	64-142	6	0-20	
1,1-Dichloroethene	ND	50.00	39.46	79	41.10	82	52-136	4	0-21	
Ethylbenzene	ND	50.00	43.48	87	43.43	87	77-125	0	0-24	
Toluene	ND	50.00	40.83	82	44.94	90	72-126	10	0-23	
Trichloroethene	ND	50.00	40.17	80	42.75	86	74-128	6	0-22	
Vinyl Chloride	ND	50.00	47.10	94	51.38	103	67-133	9	0-20	
p/m-Xylene	ND	100.0	86.48	86	89.37	89	63-129	3	0-25	
o-Xylene	ND	50.00	44.72	89	46.87	94	62-128	5	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	38.60	77	45.51	91	68-134	16	0-21	
Tert-Butyl Alcohol (TBA)	18.00	250.0	233.2	86	264.8	99	65-143	13	0-30	
Diisopropyl Ether (DIPE)	ND	50.00	36.80	74	39.06	78	61-139	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	39.72	79	42.56	85	64-136	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	42.33	85	44.47	89	67-133	5	0-20	
Ethanol	ND	500.0	345.0	69	447.3	89	34-178	26	0-58	

RPD: Relative Percent Difference. CL: Control Limits
🔅 eurofins

Date Received:	06/10/14
Work Order:	14-06-0704
Preparation:	EPA 5035
Method:	GC/MS / EPA 8260B
	Page 5 of 5
	Date Received: Work Order: Preparation: Method:

Quality Control Sample ID Туре Matrix Instrument Date Prepared Date Analyzed MS/MSD Batch Number Jet-Boat-4-(0.1') Sample Solid GC/MS R 06/05/14 06/13/14 14:58 140613S012 Jet-Boat-4-(0.1') Matrix Spike Solid GC/MS R 06/05/14 06/13/14 15:25 140613S012 06/05/14 Jet-Boat-4-(0.1') Matrix Spike Duplicate Solid GC/MS R 06/13/14 15:51 140613S012 Sample Conc. <u>MS</u> Conc. <u>MS</u> <u>%Rec.</u> <u>MSD</u> %Rec. CL RPD RPD CL **Parameter** <u>Spike</u> Added <u>MSD</u> **Qualifiers** Conc. %Rec. ND 0.05000 0.04723 94 0.03645 73 31-145 0-41 Benzene 26 ND 0.05000 0.04671 93 0.03685 74 49-133 24 0-48 Carbon Tetrachloride ND 82 0.03039 54-126 0-50 Chlorobenzene 0.05000 0.04078 61 29 1,2-Dibromoethane ND 0.05000 0.05144 103 0.03882 78 57-133 28 0-39 1,2-Dichlorobenzene ND 0.05000 0.03114 62 0.02209 44 38-128 34 0-62 1.2-Dichloroethane ND 0.05000 0.05966 119 0.04616 92 80-120 26 0-20 4 55-133 1,1-Dichloroethene ND 0.05000 0.06139 123 0.04882 98 23 0-41 Ethylbenzene ND 0.05000 0.04179 84 0.03037 61 32-146 32 0-61 Toluene 0.001129 0.05000 0.04663 91 0.03532 68 39-141 28 0-52 Trichloroethene ND 0.05000 0.04240 85 0.03385 68 57-129 22 0-47 47-137 Vinyl Chloride ND 0.05000 0.05807 116 0.04737 95 20 0-58 ND 0.1000 83 70-130 31 0-30 3,4 p/m-Xylene 0.08310 0.06062 61 ND 87 0.03158 70-130 31 0-30 3,4 o-Xylene 0.05000 0.04331 63 ND 61-145 0-33 Methyl-t-Butyl Ether (MTBE) 0.05000 0.06321 126 0.04622 92 31 Tert-Butyl Alcohol (TBA) ND 0.2500 0.2271 91 0.1695 68 44-152 29 0-54 **Diisopropyl Ether (DIPE)** ND 0.05000 0.04324 86 59-137 29 0-36 0.05781 116 Ethyl-t-Butyl Ether (ETBE) ND 0.05000 0.04607 56-140 28 0-36 0.06078 122 92 Tert-Amyl-Methyl Ether (TAME) ND 0.05000 0.05629 113 0.04290 86 57-141 27 0-35 Ethanol ND 0.5000 0.5128 103 0.3173 63 8-170 47 0-77

🔅 eurofins

Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 5035
	Method:	GC/MS / EPA 8260B
Project: Jet Boat Property		Page 1 of 2

Quality Control Sample ID Date Prepared Date Analyzed MS/MSD Batch Number Туре Matrix Instrument Jet-Boat-1-(1.0') Sample Solid GC/MS R 06/05/14 06/12/14 16:11 140612S012 Jet-Boat-1-(1.0') Matrix Spike Solid GC/MS R 06/05/14 06/12/14 16:45 140612S012 06/05/14 Jet-Boat-1-(1.0') Matrix Spike Duplicate Solid GC/MS R 06/12/14 17:12 140612S012 <u>MSD</u> %Rec. Sample Conc. <u>Spike</u> Added <u>MS</u> Conc. <u>MS</u> <u>%Rec.</u> <u>MSD</u> Conc. %Rec. CL RPD RPD CL **Qualifiers Parameter** ND 125.0 106.6 85 114.6 92 31-145 7 0-41 Benzene Chlorobenzene ND 125.0 107.9 86 114.6 92 54-126 6 0-50 ND 125.0 110.0 88 115.9 93 57-133 5 0-39 1,2-Dibromoethane 1,2-Dichlorobenzene ND 125.0 108.2 87 113.9 91 38-128 5 0-62 1,2-Dichloroethane ND 125.0 120.2 96 128.0 102 80-120 6 0-20 Ethylbenzene ND 125.0 108.8 87 117.2 94 32-146 7 0-61 Toluene 110.2 39-141 0-52 ND 125.0 88 117.2 94 6 p/m-Xylene ND 250.0 221.6 89 239.4 96 70-130 8 0-30 o-Xylene ND 125.0 114.9 92 122.1 98 70-130 6 0-30 Methyl-t-Butyl Ether (MTBE) ND 125.0 117.7 94 120.0 96 61-145 2 0-33 Tert-Butyl Alcohol (TBA) ND 625.0 514.8 82 547.7 88 44-152 6 0-54 Diisopropyl Ether (DIPE) ND 125.0 117.6 121.7 97 59-137 3 0-36 94 Ethyl-t-Butyl Ether (ETBE) ND 125.0 119.2 95 101 56-140 6 0-36 126.2 Tert-Amyl-Methyl Ether (TAME) ND 125.0 111.6 120.4 96 57-141 8 0-35 89

🛟 eurofins

Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 5035
	Method:	GC/MS / EPA 8260B
Project: Jet Boat Property		Page 2 of 2

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
Jet-Boat-4-(0.1')	Sample		Solid	GC	/MS R	06/05/14	06/13/14	14:58	140613S012	!
Jet-Boat-4-(0.1')	Matrix Spike		Solid	GC	/MS R	06/05/14	06/13/14	15:25	140613S012	1
Jet-Boat-4-(0.1')	Matrix Spike I	Duplicate	Solid	GC	/MS R	06/05/14	06/13/14	15:51	140613S012	1
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> <u>%Rec.</u>	<u>MSD</u> Conc.	<u>MSD</u> %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	ND	0.05000	0.04723	94	0.03645	73	31-145	26	0-41	
Chlorobenzene	ND	0.05000	0.04078	82	0.03039	61	54-126	29	0-50	
1,2-Dibromoethane	ND	0.05000	0.05144	103	0.03882	78	57-133	28	0-39	
1,2-Dichlorobenzene	ND	0.05000	0.03114	62	0.02209	44	38-128	34	0-62	
1,2-Dichloroethane	ND	0.05000	0.05966	119	0.04616	92	80-120	26	0-20	4
Ethylbenzene	ND	0.05000	0.04179	84	0.03037	61	32-146	32	0-61	
Toluene	0.001129	0.05000	0.04663	91	0.03532	68	39-141	28	0-52	
p/m-Xylene	ND	0.1000	0.08310	83	0.06062	61	70-130	31	0-30	3,4
o-Xylene	ND	0.05000	0.04331	87	0.03158	63	70-130	31	0-30	3,4
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.06321	126	0.04622	92	61-145	31	0-33	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2271	91	0.1695	68	44-152	29	0-54	
Diisopropyl Ether (DIPE)	ND	0.05000	0.05781	116	0.04324	86	59-137	29	0-36	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.06078	122	0.04607	92	56-140	28	0-36	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.05629	113	0.04290	86	57-141	27	0-35	





	• ·					
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
Project: Jet Boat Property						Page 1 of 2
			Method:			EPA 6020
Arcata, CA 95521-6742			Preparation:			EPA 3020A Total
78 Sunny Brae Center			Work Order:			14-06-0704
Freshwater Environmental Se	ervices		Date Received	:		06/10/14

Jet-Boat-11	Sample	Ac	queous	ICP/MS 04	06/16/14 00:00	06/16/14 20:35 14	40616S02	
Jet-Boat-11	PDS	Ad	queous	ICP/MS 04	06/16/14 00:00	06/16/14 20:25 14	40616S02	
Parameter		Sample Conc.	Spike Added	PDS Conc.	PDS %Red	<u>c. %Rec. CL</u>	<u>Qualifiers</u>	
Cadmium		ND	0.1000	0.09079	91	75-125		
Chromium		ND	0.1000	0.09412	94	75-125		
Lead		ND	0.1000	0.1014	101	75-125		
Nickel		ND	0.1000	0.1013	101	75-125		
Zinc		0.01669	0.1000	0.1045	88	75-125		





Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 2

Quality Control Sample ID	Туре	M	atrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
Jet-Boat-4-(0.1')	Sample	So	olid	ICP/MS 04	06/11/14 00:00	06/12/14 16:46	140611S02A
Jet-Boat-4-(0.1')	PDS	So	olid	ICP/MS 04	06/11/14 00:00	06/12/14 16:25	140611S02A
Parameter		Sample Conc.	Spike Added	PDS Conc.	PDS %Re	<u>c. %Rec. C</u>	<u>L</u> Qualifiers
Antimony		ND	25.00	25.99	104	75-125	
Arsenic		5.896	25.00	30.91	100	75-125	
Cadmium		ND	25.00	26.44	106	75-125	
Chromium		94.30	25.00	117.6	93	75-125	
Copper		49.99	25.00	74.17	97	75-125	
Lead		5.847	25.00	30.94	100	75-125	
Nickel		164.7	25.00	188.9	4X	75-125	Q
Selenium		ND	25.00	25.90	104	75-125	
Silver		ND	12.50	12.65	101	75-125	
Thallium		ND	25.00	24.48	98	75-125	
Zinc		59.13	25.00	84.69	102	75-125	



Freshwater Environmental	Services			Date Receiv	ved:				06/10/14
78 Sunny Brae Center				Work Order:					14-06-0704
Arcata, CA 95521-6742				Preparation:					EPA 3510C
				Method:				EPA	8015B (M)
Project: Jet Boat Property								Page	1 of 9
Quality Control Sample ID	Туре	Mati	ix	Instrument	Date Prep	bared	Date Analvze	H LCS/LCSD B	atch Number
								. 200,2002 2	aton Number
099-15-278-635	LCS	Aqu	eous	GC 46	06/11/14		06/12/14 06:2	7 140611B17	
099-15-278-635 099-15-278-635	LCS LCSD	Aqu Aqu	eous eous	GC 46 GC 46	06/11/14 06/11/14		06/12/14 06:2 06/12/14 06:4	7 140611B17 4 140611B17	
099-15-278-635 099-15-278-635 Parameter	LCS LCSD Spike Added	Aqu Aqu LCS Conc.	eous eous LCS <u>%Rec.</u>	GC 46 GC 46 LCSD Conc.	06/11/14 06/11/14 LCSD %Rec.	<u>%Rec</u>	06/12/14 06:2 06/12/14 06:2 . CL RPD	7 140611B17 4 140611B17 <u>RPD CL</u>	Qualifiers



Freshwater Environmental S	ervices		Date Receive	ed:		06/10/14
78 Sunny Brae Center			Work Order:			14-06-0704
Arcata, CA 95521-6742			Preparation:			EPA 3550B
			Method:			EPA 8015B (M)
Project: Jet Boat Property						Page 2 of 9
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-420-947	LCS	Solid	GC 46	06/11/14	06/12/14 01:29	140611B08
Parameter		Spike Added	Conc. Recovere	ed LCS %Re	ec. <u>%Rec</u>	. CL Qualifiers
TPH as Motor Oil		400.0	416.4	104	75-12	3

🛟 eurofins

	Dete Developed	00/40/44
Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3020A Total
	Method:	EPA 6020
Project: Jet Boat Property		Page 3 of 9

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch N	Number
096-06-003-4446	LCS	Aqueous	ICP/MS 04	06/16/14	06/16/14 20:15	140616L02	
Parameter		Spike Added	Conc. Recover	red LCS %Re	ec. <u>%Rec</u>	<u>. CL</u>	Qualifiers
Cadmium		0.1000	0.1002	100	80-12	0	
Chromium		0.1000	0.09815	98	80-12	0	
Lead		0.1000	0.09931	99	80-12	0	
Nickel		0.1000	0.09832	98	80-12	0	
Zinc		0.1000	0.1041	104	80-12	0	



Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 4 of 9

Quality Control Sample ID	Туре		Matrix Instrument		Date Prepared Date Analyzed		LCS/LCSD Batch Number			
099-15-621-519	LCS		Solid	ICP	/MS 03	06/11/14	06/11/	14 19:57	140611L02A	
099-15-621-519	LCSD		Solid	ICP	/MS 03	06/11/14	06/11/	14 20:00	140611L02A	
Parameter	<u>Spike</u> Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	<u>LCSD</u> <u>%Rec.</u>	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Antimony	25.00	25.20	101	25.09	100	80-120	73-127	0	0-20	
Arsenic	25.00	25.22	101	24.59	98	80-120	73-127	3	0-20	
Cadmium	25.00	25.89	104	25.59	102	80-120	73-127	1	0-20	
Chromium	25.00	23.40	94	23.89	96	80-120	73-127	2	0-20	
Copper	25.00	25.99	104	25.85	103	80-120	73-127	1	0-20	
Lead	25.00	25.44	102	25.19	101	80-120	73-127	1	0-20	
Nickel	25.00	24.57	98	24.55	98	80-120	73-127	0	0-20	
Selenium	25.00	24.11	96	23.81	95	80-120	73-127	1	0-20	
Silver	12.50	12.86	103	12.70	102	80-120	73-127	1	0-20	
Thallium	25.00	24.63	99	24.30	97	80-120	73-127	1	0-20	
Zinc	25.00	25.84	103	26.01	104	80-120	73-127	1	0-20	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



Freshwater Environmental Services 78 Sunny Brae Center

Arcata, CA 95521-6742

Date Received: Work Order: Preparation: Method:

06/10/14 14-06-0704 EPA 5030C GC/MS / EPA 8260B Page 5 of 9

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	l	nstrument	Date Prepare	d Date A	nalyzed	LCS/LCSD Bat	ch Number
099-12-767-6569	LCS		Aqueous	C	GC/MS R	06/17/14	06/17/1	4 17:33	140617L037	
099-12-767-6569	LCSD		Aqueous	C	GC/MS R	06/17/14	06/17/1	4 18:00	140617L037	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> <u>%Rec.</u>	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	50.00	43.99	88	N/A	N/A	80-120	73-127	N/A	0-200	
Carbon Tetrachloride	50.00	45.70	91	N/A	N/A	67-139	55-151	N/A	0-200	
Chlorobenzene	50.00	43.92	88	N/A	N/A	78-120	71-127	N/A	0-200	
1,2-Dibromoethane	50.00	47.03	94	N/A	N/A	80-120	73-127	N/A	0-200	
1,2-Dichlorobenzene	50.00	43.64	87	N/A	N/A	63-129	52-140	N/A	0-249	
1,2-Dichloroethane	50.00	45.30	91	N/A	N/A	70-130	60-140	N/A	0-200	
1,1-Dichloroethene	50.00	46.77	94	N/A	N/A	66-126	56-136	N/A	0-200	
Ethylbenzene	50.00	44.47	89	N/A	N/A	80-123	73-130	N/A	0-200	
Toluene	50.00	43.57	87	N/A	N/A	80-120	73-127	N/A	0-200	
Trichloroethene	50.00	44.72	89	N/A	N/A	80-122	73-129	N/A	0-200	
Vinyl Chloride	50.00	49.50	99	N/A	N/A	70-130	60-140	N/A	0-200	
p/m-Xylene	100.0	88.78	89	N/A	N/A	75-123	67-131	N/A	0-200	
o-Xylene	50.00	45.49	91	N/A	N/A	74-122	66-130	N/A	0-200	
Methyl-t-Butyl Ether (MTBE)	50.00	45.47	91	N/A	N/A	69-129	59-139	N/A	0-200	
Tert-Butyl Alcohol (TBA)	250.0	234.5	94	N/A	N/A	69-129	59-139	N/A	0-200	
Diisopropyl Ether (DIPE)	50.00	44.39	89	N/A	N/A	68-128	58-138	N/A	0-200	
Ethyl-t-Butyl Ether (ETBE)	50.00	45.20	90	N/A	N/A	63-135	51-147	N/A	0-200	
Tert-Amyl-Methyl Ether (TAME)	50.00	44.70	89	N/A	N/A	67-133	56-144	N/A	0-200	
Ethanol	500.0	388.2	78	N/A	N/A	42-168	21-189	N/A	0-200	
ТРРН	1000	980.7	98	982.3	98	65-135	53-147	0	0-30	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Alcala, CA 95521-0742

Date Received: Work Order: Preparation: Method: 06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 6 of 9

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instru	ment	Date Prepare	d Date Ar	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1544	LCS		Solid	GC/M	SR	06/11/14	06/11/1	4 11:51	140611L008	
099-12-779-1544	LCSD		Solid	GC/M	SR	06/11/14	06/11/1/	4 12:18	140611L008	
Parameter	<u>Spike</u> Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	0.05000	0.04443	89	0.04392	88	80-120	73-127	1	0-20	
Carbon Tetrachloride	0.05000	0.04880	98	0.04742	95	65-137	53-149	3	0-20	
Chlorobenzene	0.05000	0.04283	86	0.04281	86	80-120	73-127	0	0-20	
1,2-Dibromoethane	0.05000	0.04662	93	0.04625	92	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	0.05000	0.04253	85	0.04341	87	80-120	73-127	2	0-20	
1,2-Dichloroethane	0.05000	0.05243	105	0.05063	101	80-120	73-127	3	0-20	
1,1-Dichloroethene	0.05000	0.05295	106	0.05149	103	68-128	58-138	3	0-20	
Ethylbenzene	0.05000	0.04363	87	0.04430	89	80-120	73-127	2	0-20	
Toluene	0.05000	0.04500	90	0.04511	90	80-120	73-127	0	0-20	
Trichloroethene	0.05000	0.04374	87	0.04282	86	80-120	73-127	2	0-20	
Vinyl Chloride	0.05000	0.05938	119	0.05447	109	67-127	57-137	9	0-20	
p/m-Xylene	0.1000	0.08812	88	0.08843	88	75-125	67-133	0	0-25	
o-Xylene	0.05000	0.04483	90	0.04521	90	75-125	67-133	1	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.05115	102	0.04669	93	70-124	61-133	9	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.2073	83	0.2243	90	73-121	65-129	8	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04928	99	0.04796	96	69-129	59-139	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.05024	100	0.04878	98	70-124	61-133	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04679	94	0.04705	94	74-122	66-130	1	0-20	
Ethanol	0.5000	0.4609	92	0.4706	94	51-135	37-149	2	0-27	
ТРРН	1.000	0.7233	72	0.9276	93	65-135	53-147	25	0-30	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



Freshwater Environmental Services 78 Sunny Brae Center

Arcata, CA 95521-6742

Date Received: Work Order: Preparation: Method: 06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 7 of 9

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instru	ment	Date Prepare	d Date An	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1549	LCS		Solid	GC/M	SR	06/13/14	06/13/14	12:12	140613L003	
099-12-779-1549	LCSD		Solid	GC/M	SR	06/13/14	06/13/14 06/13/14 12:39		140613L003	
Parameter	<u>Spike</u> Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	0.05000	0.04278	86	0.04631	93	80-120	73-127	8	0-20	
Carbon Tetrachloride	0.05000	0.04390	88	0.04997	100	65-137	53-149	13	0-20	
Chlorobenzene	0.05000	0.04305	86	0.04441	89	80-120	73-127	3	0-20	
1,2-Dibromoethane	0.05000	0.04630	93	0.04646	93	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	0.05000	0.04095	82	0.04458	89	80-120	73-127	8	0-20	
1,2-Dichloroethane	0.05000	0.04719	94	0.04953	99	80-120	73-127	5	0-20	
1,1-Dichloroethene	0.05000	0.04518	90	0.05043	101	68-128	58-138	11	0-20	
Ethylbenzene	0.05000	0.04245	85	0.04528	91	80-120	73-127	6	0-20	
Toluene	0.05000	0.04305	86	0.04235	85	80-120	73-127	2	0-20	
Trichloroethene	0.05000	0.04367	87	0.04530	91	80-120	73-127	4	0-20	
Vinyl Chloride	0.05000	0.04696	94	0.05049	101	67-127	57-137	7	0-20	
p/m-Xylene	0.1000	0.08485	85	0.07977	80	75-125	67-133	6	0-25	
o-Xylene	0.05000	0.04336	87	0.04621	92	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04719	94	0.04786	96	70-124	61-133	1	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.1929	77	0.2197	88	73-121	65-129	13	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04660	93	0.05114	102	69-129	59-139	9	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.04615	92	0.05243	105	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04364	87	0.04769	95	74-122	66-130	9	0-20	
Ethanol	0.5000	0.4086	82	0.4727	95	51-135	37-149	15	0-27	
ТРРН	1.000	0.7428	74	0.7701	77	65-135	53-147	4	0-30	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

🛟 eurofins

Freshwater Environmental Services 78 Sunny Brae Center

Arcata, CA 95521-6742

.

Date Received: Work Order: Preparation: Method:

06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 8 of 9

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instrun	nent	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1550	LCS		Solid	GC/MS R		06/13/14 06/13/14 12:12		12:12	140613L026	
099-12-779-1550	LCSD		Solid	GC/MS	S R	06/13/14	06/13/14	12:39	140613L026	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	0.05000	0.04278	86	0.04631	93	80-120	73-127	8	0-20	
Carbon Tetrachloride	0.05000	0.04390	88	0.04997	100	65-137	53-149	13	0-20	
Chlorobenzene	0.05000	0.04305	86	0.04441	89	80-120	73-127	3	0-20	
1,2-Dibromoethane	0.05000	0.04630	93	0.04646	93	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	0.05000	0.04095	82	0.04458	89	80-120	73-127	8	0-20	
1,2-Dichloroethane	0.05000	0.04719	94	0.04953	99	80-120	73-127	5	0-20	
1,1-Dichloroethene	0.05000	0.04518	90	0.05043	101	68-128	58-138	11	0-20	
Ethylbenzene	0.05000	0.04245	85	0.04528	91	80-120	73-127	6	0-20	
Toluene	0.05000	0.04305	86	0.04235	85	80-120	73-127	2	0-20	
Trichloroethene	0.05000	0.04367	87	0.04530	91	80-120	73-127	4	0-20	
Vinyl Chloride	0.05000	0.04696	94	0.05049	101	67-127	57-137	7	0-20	
p/m-Xylene	0.1000	0.08485	85	0.07977	80	75-125	67-133	6	0-25	
o-Xylene	0.05000	0.04336	87	0.04621	92	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04719	94	0.04786	96	70-124	61-133	1	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.1929	77	0.2197	88	73-121	65-129	13	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04660	93	0.05114	102	69-129	59-139	9	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.04615	92	0.05243	105	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04364	87	0.04769	95	74-122	66-130	9	0-20	
Ethanol	0.5000	0.4086	82	0.4727	95	51-135	37-149	15	0-27	
ТРРН	1.000	0.7428	74	0.7701	77	65-135	53-147	4	0-30	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Date Received:	
Work Order:	
Preparation:	
Method:	

06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 9 of 9

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instru	ment	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1553	LCS		Solid	GC/M	S UU	06/16/14	06/16/14	11:37	140616L003	
099-12-779-1553	LCSD		Solid	GC/M	S UU	06/16/14	06/16/14	12:03	140616L003	
Parameter	<u>Spike</u> Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	0.05000	0.05060	101	0.05451	109	80-120	73-127	7	0-20	
Carbon Tetrachloride	0.05000	0.04399	88	0.04630	93	65-137	53-149	5	0-20	
Chlorobenzene	0.05000	0.05366	107	0.05803	116	80-120	73-127	8	0-20	
1,2-Dibromoethane	0.05000	0.04864	97	0.05295	106	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	0.05000	0.05481	110	0.06002	120	80-120	73-127	9	0-20	
1,2-Dichloroethane	0.05000	0.05056	101	0.05451	109	80-120	73-127	8	0-20	
1,1-Dichloroethene	0.05000	0.05442	109	0.05789	116	68-128	58-138	6	0-20	
Ethylbenzene	0.05000	0.05241	105	0.05643	113	80-120	73-127	7	0-20	
Toluene	0.05000	0.05229	105	0.05659	113	80-120	73-127	8	0-20	
Trichloroethene	0.05000	0.04938	99	0.05245	105	80-120	73-127	6	0-20	
Vinyl Chloride	0.05000	0.04787	96	0.05209	104	67-127	57-137	8	0-20	
p/m-Xylene	0.1000	0.1110	111	0.1194	119	75-125	67-133	7	0-25	
o-Xylene	0.05000	0.05199	104	0.05631	113	75-125	67-133	8	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04671	93	0.05025	100	70-124	61-133	7	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.2350	94	0.2565	103	73-121	65-129	9	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.05131	103	0.05462	109	69-129	59-139	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.04506	90	0.04831	97	70-124	61-133	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04268	85	0.04620	92	74-122	66-130	8	0-20	
Ethanol	0.5000	0.7246	145	0.7592	152	51-135	37-149	5	0-27	ME,X
ТРРН	1.000	0.8340	83	0.8220	82	65-135	53-147	1	0-30	

Total number of LCS compounds: 20

Total number of ME compounds: 1

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Date Received:	
Work Order:	
Preparation:	
Method:	

06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 1 of 5

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instrur	nent	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1547	LCS		Solid	GC/M	SR	06/12/14	06/12/14	13:29	140612L011	
099-12-779-1547	LCSD		Solid	GC/M	SR	06/12/14	06/12/14	13:56	140612L011	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	0.05000	0.04845	97	0.05207	104	80-120	73-127	7	0-20	
Chlorobenzene	0.05000	0.04657	93	0.05088	102	80-120	73-127	9	0-20	
1,2-Dibromoethane	0.05000	0.04969	99	0.05370	107	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	0.05000	0.04559	91	0.05104	102	80-120	73-127	11	0-20	
1,2-Dichloroethane	0.05000	0.05578	112	0.05990	120	80-120	73-127	7	0-20	
Ethylbenzene	0.05000	0.04930	99	0.05356	107	80-120	73-127	8	0-20	
Toluene	0.05000	0.05029	101	0.05365	107	80-120	73-127	6	0-20	
p/m-Xylene	0.1000	0.09805	98	0.1067	107	75-125	67-133	8	0-25	
o-Xylene	0.05000	0.04932	99	0.05357	107	75-125	67-133	8	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.05252	105	0.05826	117	70-124	61-133	10	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.2343	94	0.2526	101	73-121	65-129	8	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.05079	102	0.05704	114	69-129	59-139	12	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.05110	102	0.05798	116	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04955	99	0.05398	108	74-122	66-130	9	0-20	
ТРРН	1.000	1.037	104	0.9720	97	65-135	53-147	6	0-30	

Total number of LCS compounds: 15 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Project:	Jet Boa	at Property	/

Date Received:	
Work Order:	
Preparation:	
Method:	

06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 2 of 5

Quality Control Sample ID	Туре		Matrix	Instrur	nent	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1548	LCS		Solid	GC/M	SR	06/12/14	06/12/14	13:29	140612L025	
099-12-779-1548	LCSD		Solid	GC/M	SR	06/12/14	06/12/14	13:56	140612L025	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	0.05000	0.04845	97	0.05207	104	80-120	73-127	7	0-20	
Chlorobenzene	0.05000	0.04657	93	0.05088	102	80-120	73-127	9	0-20	
1,2-Dibromoethane	0.05000	0.04969	99	0.05370	107	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	0.05000	0.04559	91	0.05104	102	80-120	73-127	11	0-20	
1,2-Dichloroethane	0.05000	0.05578	112	0.05990	120	80-120	73-127	7	0-20	
Ethylbenzene	0.05000	0.04930	99	0.05356	107	80-120	73-127	8	0-20	
Toluene	0.05000	0.05029	101	0.05365	107	80-120	73-127	6	0-20	
p/m-Xylene	0.1000	0.09805	98	0.1067	107	75-125	67-133	8	0-25	
o-Xylene	0.05000	0.04932	99	0.05357	107	75-125	67-133	8	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.05252	105	0.05826	117	70-124	61-133	10	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.2343	94	0.2526	101	73-121	65-129	8	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.05079	102	0.05704	114	69-129	59-139	12	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.05110	102	0.05798	116	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04955	99	0.05398	108	74-122	66-130	9	0-20	
ТРРН	1.000	1.037	104	0.9720	97	65-135	53-147	6	0-30	

Total number of LCS compounds: 15 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Date Received: Work Order: Preparation: Method: 06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 3 of 5

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instrun	nent	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bate	ch Number
099-12-779-1549	LCS		Solid	GC/MS	S R	06/13/14	06/13/14	12:12	140613L003	
099-12-779-1549	LCSD		Solid	GC/MS	S R	06/13/14	06/13/14	12:39	140613L003	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	0.05000	0.04278	86	0.04631	93	80-120	73-127	8	0-20	
Chlorobenzene	0.05000	0.04305	86	0.04441	89	80-120	73-127	3	0-20	
1,2-Dibromoethane	0.05000	0.04630	93	0.04646	93	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	0.05000	0.04095	82	0.04458	89	80-120	73-127	8	0-20	
1,2-Dichloroethane	0.05000	0.04719	94	0.04953	99	80-120	73-127	5	0-20	
Ethylbenzene	0.05000	0.04245	85	0.04528	91	80-120	73-127	6	0-20	
Toluene	0.05000	0.04305	86	0.04235	85	80-120	73-127	2	0-20	
p/m-Xylene	0.1000	0.08485	85	0.07977	80	75-125	67-133	6	0-25	
o-Xylene	0.05000	0.04336	87	0.04621	92	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04719	94	0.04786	96	70-124	61-133	1	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.1929	77	0.2197	88	73-121	65-129	13	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04660	93	0.05114	102	69-129	59-139	9	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.04615	92	0.05243	105	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04364	87	0.04769	95	74-122	66-130	9	0-20	
ТРРН	1.000	0.7428	74	0.7701	77	65-135	53-147	4	0-30	

Total number of LCS compounds: 15 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass



Freshwater Environmental Services
78 Sunny Brae Center

Date Received:	
Work Order:	
Preparation:	
Method:	

06/10/14 14-06-0704 EPA 5035 GC/MS / EPA 8260B Page 4 of 5

Project: Jet Boat Property

Quality Control Sample ID	Туре		Matrix	Instrur	nent	Date Prepare	d Date Ana	alyzed	LCS/LCSD Bat	ch Number
099-12-779-1550	LCS		Solid	GC/M	SR	06/13/14	06/13/14	12:12	140613L026	
099-12-779-1550	LCSD		Solid	GC/M	SR	06/13/14	06/13/14	12:39	140613L026	
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	0.05000	0.04278	86	0.04631	93	80-120	73-127	8	0-20	
Chlorobenzene	0.05000	0.04305	86	0.04441	89	80-120	73-127	3	0-20	
1,2-Dibromoethane	0.05000	0.04630	93	0.04646	93	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	0.05000	0.04095	82	0.04458	89	80-120	73-127	8	0-20	
1,2-Dichloroethane	0.05000	0.04719	94	0.04953	99	80-120	73-127	5	0-20	
Ethylbenzene	0.05000	0.04245	85	0.04528	91	80-120	73-127	6	0-20	
Toluene	0.05000	0.04305	86	0.04235	85	80-120	73-127	2	0-20	
p/m-Xylene	0.1000	0.08485	85	0.07977	80	75-125	67-133	6	0-25	
o-Xylene	0.05000	0.04336	87	0.04621	92	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04719	94	0.04786	96	70-124	61-133	1	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	0.1929	77	0.2197	88	73-121	65-129	13	0-20	
Diisopropyl Ether (DIPE)	0.05000	0.04660	93	0.05114	102	69-129	59-139	9	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.04615	92	0.05243	105	70-124	61-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.04364	87	0.04769	95	74-122	66-130	9	0-20	
ТРРН	1.000	0.7428	74	0.7701	77	65-135	53-147	4	0-30	

Total number of LCS compounds: 15 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass

06/10/14

14-06-0704

GC/MS / EPA 8260B

EPA 5035



Date Received:

Work Order:

Preparation:

Method:

Freshwater Environmental Services
78 Sunny Brae Center

Arcata, CA 95521-6742

Pro	ject:	Jet	Boat	Pro	perty

Project: Jet Boat Property											
Quality Control Sample ID	Туре		Matrix	Instru	ument	Date Prepare	ed Date A	nalyzed	LCS/LCSD Ba	tch Number	
099-12-779-1554	LCS		Solid	GC/I	IS UU	06/17/14	06/17/	14 13:18	140617L006		
099-12-779-1554	LCSD		Solid	GC/I	IS UU	06/17/14	06/17/	14 13:44	140617L006		
Parameter	<u>Spike</u> Added	LCS Conc.	LCS %Rec.	LCSD Conc.	<u>LCSD</u> %Rec.	<u>%Rec. CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>	
Benzene	0.05000	0.04857	97	0.04955	99	80-120	73-127	2	0-20		
Chlorobenzene	0.05000	0.05329	107	0.05323	106	80-120	73-127	0	0-20		
1,2-Dibromoethane	0.05000	0.04847	97	0.04888	98	80-120	73-127	1	0-20		
1,2-Dichlorobenzene	0.05000	0.05488	110	0.05386	108	80-120	73-127	2	0-20		
1,2-Dichloroethane	0.05000	0.04729	95	0.04861	97	80-120	73-127	3	0-20		
Ethylbenzene	0.05000	0.05213	104	0.05222	104	80-120	73-127	0	0-20		
Toluene	0.05000	0.05108	102	0.05207	104	80-120	73-127	2	0-20		
p/m-Xylene	0.1000	0.1085	109	0.1090	109	75-125	67-133	0	0-25		
o-Xylene	0.05000	0.05098	102	0.05129	103	75-125	67-133	1	0-25		
Methyl-t-Butyl Ether (MTBE)	0.05000	0.04075	82	0.04149	83	70-124	61-133	2	0-20		
Tert-Butyl Alcohol (TBA)	0.2500	0.2150	86	0.2259	90	73-121	65-129	5	0-20		
Diisopropyl Ether (DIPE)	0.05000	0.04804	96	0.04871	97	69-129	59-139	1	0-20		
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.03469	69	0.03525	71	70-124	61-133	2	0-20	ME	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.03054	61	0.03205	64	74-122	66-130	5	0-20	Х	
TPPH	1.000	0.8563	86	0.8078	81	65-135	53-147	6	0-30		

Total number of LCS compounds: 15 Total number of ME compounds: 1 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass



Glossary of Terms and Qualifiers

Work Order: 14-06-0704

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < Greater than the indicated value. > Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 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 suspected matrix interference. The associated LCS recovery was in control. Δ The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5 6 Surrogate recovery below the acceptance limit. 7 Surrogate recovery above the acceptance limit. В Analyte was present in the associated method blank. ΒU Sample analyzed after holding time expired. ΒV Sample received after holding time expired. Е Concentration exceeds the calibration range. FT 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). Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated. JA Analyte positively identified but quantitation is an estimate. LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME 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. Х % Recovery and/or RPD out-of-range. Ζ 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. Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time. A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Cal	science	7440 LINCO	LN WAY						g									CH	AIN	OF	CU	ST()DY	RE	COI	RD
E	nvironmental	GARDEN GI	ROVE, CA 92	841-1427					WO.	#/LABL	ISE ON	Y N 67	- •77 6	`		D	ATE:	Rathaninganasiaan			06	3/05/	14	xoomonennijets/toomt	12000/0504/05/02/02/	140000400000000444
2	aboratories, Inc.	TEL: (714) 8	95-5494 . FAX	X: (714) 894	1-7501					14-	U	JA	Д	明		P	AGE:	tojeannyounioni	-	1	paramatan da antesa d	OF		3	lanatipliqtititetamere	siscentroixiale
LABOR	ATORY CLIENT:						ana ana ana ang ang ang ang ang ang ang		CLIE	NT PRO	JECT N	AME / N	UMBER	anan tamah teta ani				ing the second		P.O. I	NO.:	and an and a second		attenen antenen		
10000	Freshwate	er Environmer	Ital Service	2		eggina da antifata de serio	sanaan manaa ka	a de la companya de l	Je	et Boa	t Pro	perty	/													
ADDRE	78 Sunny Brae Ce	nter							PRO	JECT CO	ONTACI		ng considerang contractor				*******	*******		SAMI	PLER(S):	: (PRIN	Г)	<u>Canada ana sina da ka</u>	60003000000000000	
CITY:	Arcata	uzentamenten jota innationalaisia kakkan	******	STATE:	CA ZIP:	9552	21		St	tan Th	niese	n								5	tai	$_{n}$ T	hi	2500	à	
TEL:	707 498-0793	É-MAIL: stai	n@freshwa	terenviro	nmentalse	ervice	es.co	m	ľ		an se i fost da mana se a				REQ	UES	STEL) AN	IALY	SES)))					
TURNA	ROUND TIME:	Loninterester			na na sing ngang ngang na sing ngang ng		an an an an a bh							ų,			menenkostonada						ſ	anananin ta	T	
□ s/	MEDAY 24 HR	コ 48 HR ロコ	72 HR 🔲	5 DAYS	🗵 10 DA	YS	OODE:	nih qenyimlətində	ۍ د	QCs	a gel)	6		s, a												
	DELT EDF	NA				LOG	NA		ates/P 8260E	ates∕V	1 silice	(602		o, Ni, 8												
SPECIA	L INSTRUCTIONS:		999944mmolynoxidianaamayteitty (30009962103000						gen; ,gen;	/gen	s with	í, Zn)	2)	u, Pt												
Pleas	se Homogenize TPH-Motor C	oil and Metals pri	or to Analysis Tert-amvl met	ι. thyl ether (Τλ	AME).				f) Oxy thate	Ś	015E	þ, N	(503:	о Б	96A)		8.6)									
Ethyl	tertiary butyl ether (ETBE), Di	-isopropyl ether (C	IPE), and Tert	-butyl alcoho	ol (TBA).	ğ		D D	ITBE Vaph	ITBE	Dit (8	С, Р	rep	0, Q	I (71	71A)	1 (21	3E)	Δ							
Scav Dichl	engers include: 1,2-Dichloroe orobenzene, 1,2-Dibromoethar	ethane, 1,3-Dichlo	robenzene, 1,2 orobenzene.	-Dicnioroper	izene, 1,4-	erve	ved	iltere	EX/N ers/h	EXE	otor (Cd,	ore F	As, (n) (6	2	(74	∧ m	(16	SN							
LAB		SAMP	LING		NO.	bres	ser	L P	s/BT veng	s/BT (80	H-Mc	tals (ra C	tals (TI, Z	romit	rcury	romit	Lcun	NS.							
USE ONLY	SAMPLE ID	DATE	TIME	MATRIX	OF CONT.	5	d d	це	Sca Sca	(826 (826	Id1	Mei	Ter	Ag,	Ч. СР	Me	Chi	Me	Z							·
·:/.	Jet-Boat-1-(1.0')	6/5/2014	16:05	Soil	9	0	9	NA	X				X						X							
2	Jet-Boat-1-(2.0')	6/5/2014	16:10	Soil	3	0	3	NA	X				x													
.3	Jet-Boat-2-(0.9')	6/5/2014	15:52	Soil	3	0	3	NA	X		-		x				Sentimentinett									
4	Jet-Boat-2-(1.5')	6/5/2014	15:54	Soil	3	0	3	NA	Х				x													
· } ·	Jet-Boat-3-(0.8')	6/5/2014	15:40	Soil	3	0	3	NA	Х				x													
6	Jet-Boat-3-(2.0')	6/5/2014	15:41	Soil	3	0	3	NA	X				x													
·7:	Jet-Boat-4-(0.1')	6/5/2014	13:00	Soil	10	1	9	NA		x	X	X	x						X							
:8:	Jet-Boat-4-(1.1')	6/5/2014	13:35	Soil	4	1	3	NA		X	X	X	x			-										
. q.	Jet-Boat-5-(0.1')	6/5/2014	13:55	Soil	4	1	3	NA		X	X	X	x									_				
10	Jet-Boat-5-(1.0')	6/5/2014	14:10	Soil	4	1	3	NA		X	X	X	X		1007533004000											
Relinq	uished by: (Signature) 🏾 🕺 -	r. 10.	<u> </u>		Rec	eived b	y: (Sigi	nature/.	Affiliatio	on)				****************				*********************	Date	: 	11.1	Automotilities a	Time:	-7 1 1	15	
Reling	uished by: (Signature)	Van Lhu	WALL .	antoireachannsonnaoinean	Rec	eived b	y: (Sigi	nature/	Affiliatio	on)		202200000000000000000000000000000000000		ananananan ana ana ana ana ana ana ana		and the second		ajantanangananan	Date	: 1	-1 T	NORGONARD COMM	Time:	<u> 511</u>		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																	abrašanto								ſ
Relinq	uished by: (Signature)	nen ya ana ana ana ana ana ana ana ana ana	anna an tarain an tar	(en	Rec	eived b	y: (Sigi	nature/.	Affiliatio	on).						1 "7	07		Date	110	110		Time:	60		S K
		ana ana amin'ny fisiana amin'ny fantana amin'ny fantana amin'ny fantana amin'ny fantana amin'ny fantana amin'ny		Teo	<u>~~~71</u>	μ	Ľ	4		า "				an a		62	S.F.				('7			10/20	1/10 Pe	wision -

and the second second

Calscience	7440 LINCO	LN WAY						L.WO	8 / 1+ A Pa (IC COM			unionen anjar ja ja		ł		CH	AIN	OF	CU	STC	DY	RE	COF	٦D
, nvironmental	GARDEN GI	ROVE, CA 92	2841-1427						Ψ/LAD						۵	ATE:	andoterra a constantina di antico di anti			90	3/05/1	14	tonnansononijnakaje	tagangadi standarakan kanangan kananga	1004050000050
aboratories, Inc.	TEL: (714) 8	95-5494 . FA	X: (714) 894	4-7501				ιż	2 6		Øİ	王白	\mathcal{Q}		P	AGE:	obina dhi ambal fa a b	6		nananajatafananana	OF	talalisyn rhenne blik	on and a second s	-	stranskinisterent
LABORATORY CLIENT:	ər Environmer	tal Sarvica	26			anna ann ann ann ann ann ann ann ann an		CLIE	NT PRO	JECT N	AME / N	UMBEF	terenterenteren }:	นและเพราะได		ienen en			P.O. I	NO.:					
	EL CHANOUNDE		73		600930000000000000000000000000000000000	анцонтанномф	and an	Je	et Boa	nt Pro	operty	/								1					
78 Sunny Brae Ce	enter							PRO	JECT CO	ONTACI	ſ:		98949999999999999999999999999999999999	and a subsection of the subsection of t	explosion de la constantion de la const	novinciodiminalediki	iahaaxii ainii kiinii kii	ininti dominini dali konine	SAM	PLÉR(S)	i: (PRIN1	Γ)	200000000000000000000000000000000000000	2000.011070444000000	
Arcata			STATE:	CA ZIP:	9552	21		St	an Th	niese	n					~~~~			5	*†a	 	Thi	` <i></i> €5€	· 1/1	
TEL: 707 498-0793	E-MAIL: star	n@freshwa	aterenviro	nmentals	ervic	es.cc	m							REC	UES	STEC) AN	ALY	'SES	\$					
TURNAROUND TIME:									S				Ğ,						[T	
	□ 48 HR □ 1	72 HR 🛛	5 DAYS	区 10 DA	YS LLOG	CODE	alisetsenaster	ი ი რ	00	a ge	0		Sb, S												
	NA					NA	an Reverts vice on Schoola	ates/i 82601	ates∧	h silic	(602		o, Ní,												
SPECIAL INSTRUCTIONS:								ygen yne (ygen	3 wit	li, Zn	5)	Ľ, Pl												
Please Homogenize TPH-Motor C Oxygenates include: Methyl tert-b Ethyl tertiary butyl ether (ETBE), Di Scavengers include: 1,2-Dichloror	Dil and Metals pri utyl ether (MTBE), i-isopropyl ether (D ethane, 1,3-Dichloi	or to Analysis Tert-amyl me NPE), and Tert robenzene, 1,2	s. hthyl ether (Tr t-butyl alcoho 2-Dichlorober	AME), ol (TBA). nzene, 1,4-	ved		red	/MTBE/Ox	/MTBE/Ox	- Oil (8015)	, Cr, Pb, N	Prep (503	, Cd, Cr, C (6020)	VI (7196A	471A)	VI (218.6)	631E)								
Dichlorobenzene, 1,2-Dibromoetha	ne (ÉDB), and Chl	orobenzene.			ser	LVe(Filte	TEX	ŤĒX	flotor	Ŭ	Core	Zn) (As	ium	ע (ז	nium	ry (1								
USE SAMPLE ID	SAMP	LING	MATRIX	NO. OF	Jnpre	rese	ield	as/B caver	as/B 260E	Ч-н _d	fetals	erra	fetals g, T1,	hron	Vercu	hron	liercu								
ONLY · // ·	6/5/2014	10:40	Soil	CONT.	1			0 Ø	0 8				<u> </u>			0						┝───┥			
	6/5/2014	10:52	Soil	1	1		NA			$\frac{1}{x}$		<u> </u>							 			┝───┤			
./2' Jet-Boat-7+(0,1'-0,2')	6/5/2014	11:10	Soil	1	1	0	NA			$\frac{\hat{x}}{x}$	$\frac{1}{x}$									-					
1)	6/5/2014	11.25	Soil	1	1	0	ΝΔ			$\frac{1}{\sqrt{2}}$	$\frac{1}{\sqrt{2}}$		\vdash									┟──┤			
	0/0/2014	44.40	0011		Ļ				<u> </u>		<u>↓</u>		hananiraa	anaya da sha kura					<u> </u>			┝──┤			
. M. Jet-Boat-8-(0.0-0.3)	6/5/2014	11:40	501	-					_	X		ļ	 	******					 			┠──┤	i		
·// Jet-Boat-8-(0.9'-1.0')	6/5/2014	11:50	Soil	1	1	0	NA	ļ	_	X	X		ļ	1900000000000000000				ļ	ļ						
17 Jet-Boat-9-(1.0')	6/5/2014	14:30	Soil	3	0	3	NA	X		L	-	X									ļ				
Jet-Boat-10-(0.1')	6/5/2014	12:30	Soil	4	1	3	NA		X	X	X	X		-											
Jet-Boat-11	6/5/2014	13:45	Water	6	2	4	NA	<u> </u>	X	X	x	ļ		, y				ļ	ļ						
20 Jet-Boat-Metals-(0.75')	6/5/2014	10:05	Soil	1	1	0	NA				L		X				a to open a star								
Relinquished by: (Signature) $\% t$	in Th	501.		Rec	eived b	ıy: (Sigi	nature//	Affiliatio	on)									Date	-9-	-14		Time:	2:	5	
Relinquished by: (Signature)				Rec	eived b	y: (Sig	nature//	Affiliatio	on)	ananijoza katolijska	agolufbingdynadie	anoin dean an an		******			ļėskanskesanstim	Date	1 		KUTURA (UMBRINDO) KOOKOO	Time:		a pine a barbaran	
Relinquished by: (Signature)			(Fed	ex) Rec	eived b Í	oy: (Sigi	nature/,	Affiliatio	on)						E	CŦ.		Date C	110	114		Time:	1101		
					Ţ		0																06/0	1/10 Re	vision ¥

<u>C</u> a	Iscience	7440 LINCO	DLN WAY						Personalisti							1		СН	AIN	OF	CU	JSTO	ODY	' RE	CO	RD
E	nvironmental	GARDEN G	ROVE, CA 9	2841-1427					WO	#/LAB	JSE ON	ιγ				C	ATE:	Sphenispotectopo	*****	Manageore Manageore	0	6/05/	14	хангенчилифооди	nontpungupticumminum	505000000000000000000000000000000000000
Å	aboratories, Inc.	TEL: (714)	895-5494 .F <i>l</i>	NX: (714) 89	4-7501][6]-	<u>0</u>]:[王	Ø		P	AGE:	notopentypentybelas;		3	na n	OF	******	ananananananananananananananananananan	3	Bantana takana kang
LABO	RATORY CLIENT:	r Environme	ntal Service	00			ano anti a constante fo		CLIE	NT PRC	JECT N	AME / N	IUMBEF	tenentensijderen ?:	townstanoontee				anterenter de la constant de la cons La constant de la cons	P.O.	NO.:	*********	01020020200000	essensennesijente		processory (
ADDR	ESS:			~~~~	na na international and a subsection of the subsection of the subsection of the subsection of the subsection of	water and a second s	annannannan air	10/1001/201000000	Je	et Boa	at Pro	operty	/													
	78 Sunny Brae Cer	nter					stationeconomicationaliza	****	PRO	JECT C	ONTAC	ſ:	2723/942007000000	anna an	, con al o joi o nama	CONCERTION OF CONCE		90962069090908	aran ya	SAM	PLER(S	;): (PRIN	T)	avatteopeope	ane fearing a first frankrig	Noncolation of the local division of the loc
CITY:	Arcata			STATE:	CA	^{P:} 955	21		St	tan Tl	hiese	n								5	Ta	ь T	[hi	15+	en	
TEL:	707 498-0793	E-MAIL: sta	n@freshwa	aterenviro	nmental	servic	es.co	m	[REC	UES	STE		IALY	'SES	\$			annonnoise germ		
				E DAVE		AVC	ontra contra br>Contra contra c	işteri çirdekt		Ś	a			Se,						Γ	T.			aanse van de seelen br>Seelen de seelen de s		
				5 DATS		LOG	CODE:		s/Pb (0B)	NOC	lica ge	020)		i, Sb,												
			ระการระการและสมุ่าวไทรที่สองจะสะ	enterne anterne	nina ana ina kaominina amin' ami				nate: (826	nate	ith si	9) (u		a a												
Plead	ease hold this contai ded. Use only if nee	ner as thei ded.	e was ex	cess so	il	/ed		red	MTBE/Oxyg /Naphthalen	MTBE/Oxyg	Oil (8015B 1	Cr, Pb, Ni,	Prep (5035)	Cd, Cr, Cu, 6020)	VI (7196A)	471A)	VI (218.6)	331E)								
						esen	erved	Filte	3TEX/ ngers	BTEX	Motor	s (Cd,	Core	s (As, Zn) (nium	rL) (Jr	nium	IIY (16	2							
USE	SAMPLE ID	SAMF DATE	LING	MATRIX	NO. OF	Unpr	Pres	Field	Gas/E Scave	Gas/E 8260f	HdT	Metal	Terra	Metal \g, T1,	Chror	Mercu	Chror	Merct	9							
21	Jet-Boat-4-(0.1')-(HOLD)	6/5/2014	13:00	Soil	1	0	1	NA	<u>~</u>	X		 							X	İ		-				
	Temp-Blank-1		***********************************				İ	Ì			 	<u>.</u>			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				1		dennin arrite					
• • • • •	Temp-Blank-2						_					[2000,000,000,000,000,000,000,000,000,00			PARATION								
			ang papanet an union of the test which the												200040003044204		*****		 			o po nominavanani		energen einen		AUDIO AUTO AUDIO
					, and the second second second second second second second second second second second second second second se		1	1	l		-						hendriadrodikini.				. Constant of the Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of Constant of	-				. Nani Katalari kalen
••••••••••••••••••••••••••••••••••••••		ม (การการการการการการการการการการการการการก	สมมาราวารสารราชสารรุงประเทศ			† ·	1	†			 	†			Quantum Constant and an				†							
•••••			สมกุลสารระหางการสารกุลส์ของราชางสาร			1	†	†	 		 	<u> </u>						<u> </u>	 			-				
			*****			1		<u> </u>			-*··	t							† – –			1				
						\square	+	<u> </u>		1	┢┉┉	†							1	1						
		ar anna airte an san san ann an ann an ann ann ann an				\mathbf{T}	+	<u> </u>		†	†	<u> </u>							 							
Relinc	uished by: (Signature)	-11) (Re	ceived b	y: (Sigr	hature//	Affiliatio	n)	Lipanan	Lonacoon	Lannessan			Laurana			Date		L		Time:		••••••••••••••••••••••••••••••••••••••	
Relinquished by: (Signature) Received by: (Signature)					nature//	Affiliatio	on)	*****			ىتەرىغا يىلىۋ ئىسىرى بىلىسىرى	ىرىرىدىنىيەتەر بېرىرە بىر				Date	ຍ :		-7	Time:	12	, ()				
						A ffiliati-	<u>, , , , , , , , , , , , , , , , , , , </u>				urana ana fata ta	ale succession de la company				Data		*****		Time	monunitie	05/10/2002/02/02/020				
Relinquished by: (Signature) Received by: (Signature)				ature//		лт) Л ~								<i>f</i> -	G/	10/	'ry		lime:	101	0					
(rogex) free						\sim		kaningan	nanýchosta a n			n per se se se se se se se se se se se se se					<u> (</u>		anaderstaan		lananan sanan	0.60	1/10 Re	wision		

Page 1 of 1 Page 82 of 84 0704 Ship Date: 09JUN14 From: (707) 839-0091 Origin ID: EKAA ActWgt: 50.0 LB Dims: 24 X 15 X 15 IN Stan Thiesen CAD: 4822189/INET3490 Freshwater Environmental 78 Sunny Brae Center Delivery Address Bar Code Arcata, CA 95521 BILL SENDER SHIP TO: (714) 895-5494 YTEP Jet-Boat Ref# Don Burley Invoice # P0# Calscience Environmental Laboratory Dept# 7440 Lincoln Way Garden Grove, CA 92841 TUE - 10 JUN 10:30A **PRIORITY OVERNIGHT** TRK# 7702 3798 6693 DSR 0201 92841 Page 1 of 1 From: (707) 839-0091 Origin ID: EKAA Ship Date: 09JUN14 EXX ActWgt: 50.0 LB Dims: 24 X 15 X 15 IN Stan Thiesen CAD: 4822189/INET3490 Freshwater Environmental 78 Sunny Brae Center Delivery Address Bar Code Arcata, CA 95521 114101402070326 SHIP TO: (714) 895-5494 BILL SENDER YTEP Jet-Boat Ref# Don Burley Invoice # P0 # Calscience Environmental Laboratory Dept# 7440 Lincoln Way Garden Grove, CA 92841 TUE - 10 JUN 10:30A **PRIORITY OVERNIGHT** TRK# 7702 3793 3222 DSR 0201 92841 **92 APVA** CA-US SNA 20005205050

P.

eurofine				Page 8	33 of 84
Calscience	e We		#: 14- (06-0	FO
SA	MPLE REC	EIPT FOR	RM c	ooler _/	_ of _2
CLIENT: Freshwater En	11. Services		DATE:	06/10	/ 14
TEMPERATURE: Thermometer ID	SC2 (Criteria: 0.0 °C	– 6.0 °C, not frozer	n except se	diment/tissu	e).
Temperature 2.7 °C - ().3°C (CF) = <u>२</u>	_• <u>⊬</u> °C _	Blank	□ Sample	e
Sample(s) outside temperature cri	teria (PM/APM contact	ed by:)			
□ Sample(s) outside temperature cri	teria but received on ic	e/chilled on same da	ay of sampli	ing.	
□ Received at ambient temperatu	re, placed on ice fo	r transport by Co	urier.		
Ambient Temperature: 🗆 Air] Filter			Checked b	y: <u>826</u>
CUSTODY SEALS INTACT:					826
		□ Not Present	⊔ N/A	Checked b	y:
		A NOL Present		Checked by	y: <u>o@</u>
SAMPLE CONDITION:		•	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with sam	ples	Z		
COC document(s) received complete	ə		P		
□ Collection date/time, matrix, and/or # o	f containers logged in bas	sed on sample labels.			
□ No analysis requested. □ Not reline	uished. No date/tin	ne relinquished.		_	
Sampler's name indicated on COC.		······			
Sample container label(s) consistent	andition	•••••••			
Proper container(s) intact and good	me for analyses requ	upsted	p R		
Analyses received within holding tim					
Aqueous samples received within	15-minute holding ti	me	<u> </u>		· · · ·
□ pH □ Residual Chlorine □ Disso	Ived Sulfides	ved Oxygen			
Proper preservation noted on COC of	or sample container				
□ Unpreserved vials received for Vol	atiles analysis	•			
Volatile analysis container(s) free of	headspace		Ø		
Tedlar bag(s) free of condensation CONTAINER TYPE:					5
Solid: □4ozCGJ □8ozCGJ □16	ozCGJ □Sleeve (_) □EnCores	® ZITerra	Cores [®] □_	
Aqueous: UVOA DVOAh UVOAn	a₂ □125AGB □125A	GBh □125AGBp	□1AGB [∃1AGB na ₂ [∃1AGB s
□500AGB 2500AGJ □500AGJs	□250AGB □2500	GB □250CGBs		□1PB na □	1500PB
□250PB 250PBn _M □125PB □12	5PB znna □100PJ	□100PJ na₂ □	□		
Air: DTedlar [®] DCanister Other: Container: C: Clear A: Amber P: Plastic G: Glas Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: N	Trip Blank ss J: Jar B: Bottle Z: Ziploc aOH p: H₃PO₄ s: H₂SO₄ u: UI	Lot#: /Resealable Bag E: Env tra-pure znna: ZnAc ₂ +NaC	_ Labeled/ velope R DH f: Filtered	Checked by: Reviewed by: Scanned by	- 562 - 55 - 55

eurofins			u. 1 / _		84 of 84
Calscience			#: 4+ = \ 	00-0	
SAMPL	E REC	EIPT FOR		≎ooler <u>-</u>	_ of _੨ੋ
CLIENT: Freshwater Env'l.,	Service	r	DATE:	06/10	/ 14
TEMPERATURE: Thermometer ID: SC2 (Cri	teria: 0.0 °C	– 6.0 °C, not frozer	n except se	diment/tiss	ue)
Temperature \sim • 7 °C - 0.3 °C (C	(F) = 2	.6°C 2	Blank	🗌 Samp	le
□ Sample(s) outside temperature criteria (PM/	APM contacte	ed by:)			
□ Sample(s) outside temperature criteria but re	eceived on ice	e/chilled on same da	ay of sampl	ling.	-
□ Received at ambient temperature, place	d on ice for	transport by Co	urier.	-	
Ambient Temperature:				Checked	by: 826
				· · · · · · · · ·	
CUSTODY SEALS INTACT:					~
□ Cooler □ □ No (N	ot Intact)	Not Present	□ N/A	Checked	by: <u>8%</u>
□ Sample □ □ No (N	ot Intact)	Not Present		Checked	by: <u>X6 4</u>
SAMPLE CONDITION:			Yes	No	N/A
Chain-Of-Custody (COC) document(s) receive	ed with sam	ples	. 🗹		
COC document(s) received complete			. 🗹		
□ Collection date/time, matrix, and/or # of containers	s logged in bas	ed on sample labels.			
No analysis requested.	□ No date/tim	e relinquished.	.,		
Sampler's name indicated on COC	· · · · · · · · · · · · · · · · · · ·		P A		
Sample container label(s) consistent with CO					
Sample container(s) intact and good condition					
Proper containers and sufficient volume for an	laryses requ	lesteu	Å		
Analyses received within holding time	te holdina ti				
	es 🗆 Dissol	ved Oxvaen			ø
Proper preservation noted on COC or sample	container		ź		
□ Unpreserved vials received for Volatiles anal	ysis				
Volatile analysis container(s) free of headspa	ce	· · · · · · · · · · · · · · · · · · ·	. 🗆		
Tedlar bag(s) free of condensation			. 🗆		Ø
CONTAINER TYPE:			3)	
Solid: Ø4ozCGJ Ø8òzĆGJ □16ozCGJ	□Sleeve (_)	s [®] ØTerra	iCores [®] 🗆	
Aqueous: □VOA □VOAh □VOAna ₂ □125A	AGB □125A	GB h □125AGB p	□1AGB	□1AGB na ₂	
□500AGB □500AGJ □500AGJs □250A	GB □250C	GB □250CGBs	□1PB	□1PB na	□500PB
□250PB □250PBn □125PB □125PB znna	a □100PJ	□100PJ na ₂ □	· □	· [
Air: □Tedlar [®] □Canister Other: □ Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: E Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PC	Trip Blank Bottle Z: Ziploc/ D4 s: H2SO4 u: UI	Lot#: Reseatable Bag E: En tra-pure znna: ZnAc ₂ +Nat	Labeled	/Checked b Reviewed by Scanned b	y: <u>80 U</u> y: <u>80 U</u> y: <u>80 U</u>

APPENDIX C Laboratory Report and Chain-of-Custody Record - 2

🛟 eurofins

Calscience

Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-06-0704

The difference is service

ResultLink ▶

Email your PM >



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Freshwater Environmental Services Client Project Name: Jet Boat Property Attention: Stan Thiesen 78 Sunny Brae Center Arcata, CA 95521-6742

Approved for release on 06/26/2014 by: Don Burley Project Manager



Eurofins Calscience, 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.

7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830

🔅 eurofins

Calscience

Contents

Client Pro Work Ord	bject Name: Jet Boat Property der Number: 14-06-0704	
1	Work Order Narrative	3
2	Sample Summary	4
3	Client Sample Data. 3.1 S.1 EPA 7196A/3060A Chromium VI (Solid). 3.2 Chromium III (Solid). 3.3 EPA 6020 ICP/MS Metals (Solid). 3.4 EPA 7471A Mercury (Solid).	5 5 6 7 8
4	Quality Control Sample Data. 9 4.1 MS/MSD. 9 4.2 PDS/PDSD. 12 4.3 LCS/LCSD. 12	9 9 2 3
5	Sample Analysis Summary	6
6	Glossary of Terms and Qualifiers	7
7	Chain-of-Custody/Sample Receipt Form	8

Work Order: 14-06-0704

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/10/14. They were assigned to Work Order 14-06-0704.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Client:	Client: Freshwater Environmental Services		Work Order:		14-06-0704		
	78 Sunny Brae Center		Project Name:		Jet Boat Proper		
Arcata, CA 95521-6742			PO Number:				
			Date/Time Received:	06/10/14 11:00			
			Number of Containers:			66	
Attn: Stan Thiesen							
Sample Identification		Lab Number	Collection Date and Time	Number of Containers	Matrix		
Jet-Boat-Metals-(0.75')		14-06-0704-20	06/05/14 10:05	1	Solid		



Analytical Report

Freshwater Environmental Services	Date Re	eceived:	06/10/14					
78 Sunny Brae Center	Work O	rder:	14-06-0704					
Arcata, CA 95521-6742			Prepara	tion:	N/A			
			Method:	:		EPA 7196A		
			Units:			mg/kg		
Project: Jet Boat Property						Pa	ge 1 of 1	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-Metals-(0.75')	14-06-0704-20-A	06/05/14 10:05	Solid	UV 9	06/23/14	06/23/14 12:12	E0623CRL1	
Parameter		Result		RL	DF	Qua	lifiers	
Chromium, Hexavalent		ND		0.80	1.00			
Method Blank	099-05-001-5069	N/A	Solid	UV 9	06/23/14	06/23/14 12:12	E0623CRL1	
Parameter		Result		RL	DF	<u>Qualifiers</u>		
Chromium, Hexavalent ND				0.80	1.00			

Return to Contents



Freshwater Environmental Service	S		Date Rec	eived:		06/10/14			
78 Sunny Brae Center			Work Ord	14-06-0704					
Arcata, CA 95521-6742		Preparatio	N/A						
		Method:				Chromium (III) by Calc			
		Units:				mg/kg			
Project: Jet Boat Property					Page 1 of 1				
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
Jet-Boat-Metals-(0.75')	14-06-0704-20- AA/A	06/05/14 10:05	Solid	N/A	N/A	06/25/14 17:21			
Parameter		Result	E	<u>RL</u>	DF	Qua	lifiers		
Chromium (III)		16	2	2.0	2.00				

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Freshwater Environmental Services		Date Received: 06/					
78 Sunny Brae Center	Work Or	der:	14-06-0704				
Arcata, CA 95521-6742		Preparat	tion:			EPA 3050B	
			Method:				EPA 6020
			Units:				ma/ka
Project: Jet Boat Property					Pa	ge 1 of 1	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-Metals-(0.75')	14-06-0704-20-AA	06/05/14 10:05	Solid	ICP/MS 03	06/21/14	06/24/14 17:32	140621L02
Parameter		Result		RL	DF	Qualifiers	
Barium		94.3		1.00	1.00		
Beryllium		ND		1.00	1.00		
Cobalt		7.53		1.00	1.00		
Molybdenum		ND		1.00	1.00		
Vanadium		31.6		2.00	1.00		
Aluminum		17900		25.0	1.00		
Magnesium		7460		25.0	1.00		
Manganese		403		2.50	1.00		
Method Blank	099-15-621-523	N/A	Solid	ICP/MS 03	06/21/14	06/24/14 02:00	140621L02
Parameter		Result		RL	DF	Qua	lifiers
Barium		ND		1.00	1.00		
Beryllium		ND		1.00	1.00		
Cobalt		ND		1.00	1.00		
Molybdenum		ND		1.00	1.00		
Vanadium		ND		2.00	1.00		
Aluminum		ND		25.0	1.00		
Magnesium		ND		25.0	1.00		
Manganese		ND		2.50	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Freshwater Environmental Services	5		Date Re	ceived:	06/10/14			
78 Sunny Brae Center	Work Or	der:	14-06-0704					
Arcata, CA 95521-6742			Preparat	ion:	EPA 7471A Total			
			Method:			EPA 7471A		
			Units:			mg/kg		
Project: Jet Boat Property						Pa	ge 1 of 1	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
Jet-Boat-Metals-(0.75')	14-06-0704-20-B	06/05/14 10:05	Solid	Mercury 05	06/23/14	06/23/14 16:48	140623L04	
Parameter		Result	<u>RL</u> <u>DF</u>			Qualifiers		
Mercury		ND	0.0820		1.00			
Method Blank	099-16-272-329	N/A	Solid	Mercury 05	06/23/14	06/23/14 14:52	140623L04	
Parameter		Result	RL		DF	<u>Qualifiers</u>		
Mercury ND			0.0833 1.00					

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Quality Control - Spike/Spike Duplicate

Freshwater Environmental Se	Date F	Date Received:				06/10/14					
78 Sunny Brae Center					Work Order:			14-06-0704			
Arcata, CA 95521-6742					Preparation:			N/A			
				Metho	d:		EPA 7196A				
Project: Jet Boat Property Page 1 o								of 3			
Quality Control Sample ID Type		Matrix	Inst	rument	Date Prepared	Date Anal	yzed	MS/MSD Bate	ch Number		
Jet-Boat-Metals-(0.75')	Sample		Solid	UV	9	06/23/14	06/23/14 1	12:12	E0623CRS1		
Jet-Boat-Metals-(0.75') Matrix Spike			Solid	UV	9	06/23/14	06/23/14 1	12:12	E0623CRS1		
Jet-Boat-Metals-(0.75') Matrix Spike Duplicate			Solid	UV	9	06/23/14	06/23/14 1	12:12	E0623CRS1		
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> <u>Conc.</u>	<u>MS</u> <u>%Rec.</u>	<u>MSD</u> Conc.	MSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>	
Chromium, Hexavalent	ND	20.00	16.80	84	16.00	80	75-125	5	0-25		

Return to Contents


Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 3

Quality Control Sample ID	Туре		Matrix	Instr	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
14-06-1495-5	Sample		Solid	ICP/	MS 03	06/21/14	06/24/14	02:29	140621S02	
14-06-1495-5	Matrix Spike		Solid	ICP/	MS 03	06/21/14	06/24/14	02:17	140621S02	
14-06-1495-5	Matrix Spike	Duplicate	Solid	ICP/	MS 03	06/21/14	06/24/14	02:20	140621S02	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> <u>%Rec.</u>	<u>MSD</u> Conc.	<u>MSD</u> <u>%Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Barium	126.3	25.00	149.6	4X	145.3	4X	50-152	4X	0-41	Q
Beryllium	ND	25.00	28.75	115	28.43	114	61-121	1	0-13	
Cobalt	6.356	25.00	35.84	118	31.60	101	40-166	13	0-14	
Molybdenum	2.643	25.00	27.57	100	27.05	98	69-123	2	0-13	
Vanadium	49.40	25.00	68.80	78	73.01	94	28-178	6	0-28	
Aluminum	11980	25.00	11470	4X	12270	4X	80-120	4X	0-20	Q
Magnesium	6567	25.00	6492	4X	6400	4X	80-120	4X	0-20	Q
Manganese	262.5	25.00	379.7	4X	305.0	4X	80-120	4X	0-20	Q

Return to Contents



Quality Control - Spike/Spike Duplicate

Freshwater Environmental Se	ervices			Date	Received:					06/10/14
78 Sunny Brae Center				Work	Order:				14	4-06-0704
Arcata, CA 95521-6742			Prep	Preparation:				EPA 7471A Total		
				Meth	od:				Е	PA 7471A
Project: Jet Boat Property									Page 3	of 3
Quality Control Sample ID	Туре		Matrix	In	strument	Date Prepared	Date Ana	lyzed	MS/MSD Ba	tch Number
14-06-1393-2	Sample		Solid	М	ercury 05	06/23/14	06/23/14	16:10	140623S04	
14-06-1393-2	Matrix Spike		Solid	м	ercury 05	06/23/14	06/23/14	16:12	140623S04	
14-06-1393-2	Matrix Spike	Duplicate	Solid	М	ercury 05	06/23/14	06/23/14	16:14	140623S04	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	MSD Conc.	<u>MSD</u> %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	Qualifiers
Mercury	ND	0.8350	1.032	124	1.055	126	71-137	2	0-14	



Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 1 of 1

Project: Jet Boat Property

Quality Control Sample ID	Туре	М	atrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-06-1495-5	Sample	S	olid	ICP/MS 03	06/21/14 00:00	06/24/14 02:29	140621S02
14-06-1495-5	PDS	S	olid	ICP/MS 03	06/21/14 00:00	06/24/14 02:23	140621S02
Parameter		Sample Conc.	Spike Addeo	PDS Conc	. <u>PDS %R</u> e	<u>. %Rec. C</u>	L Qualifiers
Barium		126.3	25.00	149.5	4X	75-125	Q
Beryllium		ND	25.00	28.15	113	75-125	
Cobalt		6.356	25.00	29.88	94	75-125	
Molybdenum		2.643	25.00	29.02	106	75-125	
Vanadium		49.40	25.00	73.51	96	75-125	
Aluminum		11980	25.00	11960	4X	75-125	Q
Magnesium		6567	25.00	6533	4X	75-125	Q
Manganese		262.5	25.00	282.1	4X	75-125	Q

RPD: Relative Percent Difference. CL: Control Limits



Freshwater Environmental	Services		Date Receive	ed:		06/10/14
78 Sunny Brae Center			Work Order:			14-06-0704
Arcata, CA 95521-6742			Preparation:			N/A
			Method:			EPA 7196A
Project: Jet Boat Property						Page 1 of 3
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number

	туре	IVIALITX	Instrument	Date Flepaleu	Date Analyzeu	LUS Balch N	umber
099-05-001-5069	LCS	Solid	UV 9	06/23/14	06/23/14 12:12	E0623CRL1	
Parameter		Spike Added	Conc. Recover	red LCS %Re	<u>c. %Rec</u>	<u>. CL</u>	Qualifiers
Chromium, Hexavalent		20.00	16.40	82	80-120	0	

RPD: Relative Percent Difference. CL: Control Limits

🛟 eurofins

Freshwater Environmental Services	Date Received:	06/10/14
78 Sunny Brae Center	Work Order:	14-06-0704
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 3

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch N	lumber
099-15-621-523	LCS	Solid	ICP/MS 03	06/21/14	06/24/14 02:04	140621L02	
Parameter		Spike Added	Conc. Recove	red LCS %Re	ec. <u>%Rec</u>	<u>.CL</u>	Qualifiers
Barium		25.00	24.76	99	80-120)	
Beryllium		25.00	26.83	107	80-120)	
Cobalt		25.00	25.06	100	80-120)	
Molybdenum		25.00	25.24	101	80-120)	
Vanadium		25.00	25.17	101	80-120)	
Aluminum		25.00	22.29	89	80-120)	
Magnesium		25.00	23.90	96	80-120)	
Manganese		25.00	25.01	100	80-120)	



Freshwater Environmental	Services			Date Receiv	ved:					06/10/14
78 Sunny Brae Center				Work Order	:					14-06-0704
Arcata, CA 95521-6742				Preparation	:				EPA 7	471A Total
				Method:						EPA 7471A
Project: Jet Boat Property									Page	3 of 3
Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared	Date	Analyzed	LCS/LCSD B	atch Number
099-16-272-329	LCS	Soli	d	Mercury 05	06/23/14		06/23	/14 15:01	140623L04	
099-16-272-329	LCSD	Soli	d	Mercury 05	06/23/14		06/23	/14 15:03	140623L04	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	<u>%Rec</u>	<u>. CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Mercury	0.8350	0.9011	108	0.8989	108	85-12	1	0	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Page 1 of 1



Calscience

Work Order: 14-06-0704

Method	Extraction	Chemist ID	Instrument	Analytical Location
Chromium (III) by Calc	N/A	309	N/A	1
EPA 6020	EPA 3050B	598	ICP/MS 03	1
EPA 7196A	N/A	687	UV 9	1
EPA 7471A	EPA 7471A Total	776	Mercury 05	1



Location 1: 7440 Lincoln Way, Garden Grove, CA 92841



Calscience

Work Order: 14-06-0704

Glossary of Terms and Qualifiers

Vork Order:	: 14-06-0704	Page 1 of 1
<u>Qualifiers</u>	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 clarification.	was reported without further
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surro in control and, therefore, the sample data was reported without further clarification.	gate spike compound was
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspect associated LCS recovery was in control.	ed matrix interference. The
4	The MS/MSD RPD was out of control due to suspected matrix interference.	
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix	interference.
6	Surrogate recovery below the acceptance limit.	
7	Surrogate recovery above the acceptance limit.	
В	Analyte was present in the associated method blank.	
BU	Sample analyzed after holding time expired.	
BV	Sample received after holding time expired.	
Е	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 bu were also present (or detected).	t heavier hydrocarbons
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard bu also present (or detected).	t lighter hydrocarbons were
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limi estimated.	t. Reported value is
JA	Analyte positively identified but quantitation is an estimate.	
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).	
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 exc concentration by a factor of four or greater.	eeding the spike
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.	
Х	% 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 % mois reported on a wet weight basis.	ture. All QC results are
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being stated holding time unless received at the laboratory within 15 minutes of the collection time.	time of <= 15 minutes received outside of the

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Donald Burley

From:	Stan Thiesen <stan@freshwaterenvironmentalservices.com></stan@freshwaterenvironmentalservices.com>
Sent:	Friday, June 20, 2014 1:55 PM
То:	Donald Burley
Subject:	RE: Jet Boat Property / CEL 14-06-0704

Don,

I have reviewed the revised report and it looks fine except that I missed indicating on the COC that Jet-Boat-Metals-(0.75') be analyzed for Chromium (III), Chromium (VI), and mercury. Can you run this sample for these analytes?

Also to compare metals results from previous projects can you report concentrations of the following from Jet-Boat-Metals-(0.75'):

- aluminum
- barium
- beryllium
- cobalt
- magnesium
- manganese
- molybdenum
- vanadium

Thanks, Stan

Stan Thiesen, PG Geologist Cell: 707 498-0793 Freshwater Environmental Services

From: Donald Burley [mailto:DonaldBurley@eurofinsUS.com] Sent: Thursday, June 19, 2014 3:49 PM To: Stan Thiesen Subject: Jet Boat Property / CEL 14-06-0704

Stan,

Revised report attached. Thanks.

Don

Eurofins Calscience, Inc. 7440 Lincoln Way Garden Grove, CA 92841 USA Phone: +1 714 895 5494

Email: DonaldBurley@eurofinsUS.com

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you receive this in error, please contact the sender and delete the material from any computer. Email transmission cannot be guaranteed to be secure or error free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete. The sender therefore is in no way liable for any errors or omissions in the content of this message which may arise as a result of email transmission. If verification is required, please request a hard copy. We take reasonable precautions to ensure our emails are free from viruses. You need, however, to verify that this email and any attachments are free of viruses, as we can take no responsibility for any computer viruses, which might be transferred by way of this email. We may monitor all email communication through our networks. If you contact us by email, we may store your name and address to facilitate communication.

Ĉalscience Ēnvironm	ental	7440 LINCO GARDEN G	DLN WAY ROVE, CA 92	2841-1427					. wo	#/LAB	JSE ON	ILY		·····			ATE:	СН	IAIN	OF	: CU	STC 6/05/*)DY 14	' RE	ECO	RD
📕 aboral	tories, Inc.	TEL: (714) 8	895-5494 . FA	X: (714) 89	4-7501					14	IJ	JR		亅		P.	AGE:			1		OF			3	
LABORATORY CLIENT	Freshwate	r Environmer	ntal Service	es					CLIE	NT PRO	JECT N	IAME / N	IUMBEI	२:						P.O.	NO.:					
ADDRESS: 78 S	unny Brae Cer	nter			• • • • • • • • • • • • • • • • • • •				- Je	et Bo	at Pro	pert	У													
				STATE:	ZIP						UNIAC	1.								SAM	7 I): (PRIN	1) (
Arcata					CA	9552	21			ian I	niese	en)	Ţai	<u> </u>	hi	150	5	
707 498-0	793	E-MAIL: sta	n@freshwa	aterenviro	nmentals	ervice	es.cc	m							REC	UES	TEC) AN	ALY	′SΕξ	3					
TURNAROUND TIME:	——————————————————————————————————————								T	s				Se,					1		T					
	GLOBAL ID:	」48 HR 山	72 HR 🛛	5 DAYS	10 DA	YS LOG	CODE:		ද ක	VOC	ta ge	Q		sp'												
		NA					NA		ates/ 8260	ates/	h silic) (60:		o, Ni,		•										
Please Homoger Oxygenates inclu Ethyl tertiary butyl Scavengers inclu Dichlorobenzene,	ize TPH-Motor Oi ude: Methyl tert-bu ether (ETBE), Di-i ude: 1,2-Dichloroet 1,2-Dibromoethan	il and Metals pri ityl ether (MTBE) isopropyl ether (E thane, 1,3-Dichlo e (EDB), and Chl	or to Analysis , Tert-amyl me DIPE), and Ter robenzene, 1,2 orobenzene.	s. hthyl ether (T. t-butyl alcoho 2-Dichlorober	AME), bi (TBA). nzene, 1,4-	reserved	served	J Filtered	BTEX/MTBE/Oxy	BTEX/MTBE/Oxy(B)	Mator Oil (8015B	ls (Cd, Cr, Pb, Ni,	I Core Prep (5035	ls (As, Cd, Cr, Cu I, Zn) (6020)	mium VI (7196A)	ury (7471A)	mium VI (218.6)	ury (1631E)	/WSD							
USE SA	MPLE ID	DATE	TIME	MATRIX	OF	Dnp	Pres	Field	Gas/I Scave	Gas/ 8260	H d L	Meta	Terra	Meta \g, ⊤I	Chro	Merc	Chro	Merc	MS							
Jet-Boat-1	-(1.0')	6/5/2014	16:05	Soil	9	0	9	NA	x				x						X		┟╌╌┥					
2 Jet-Boat-1	-(2.0')	6/5/2014	16:10	Soil	3	0	3	NA	x				x													—
Jet-Boat-2	-(0.9')	6/5/2014	15:52	Soil	3	- 0	3	NA	x	1			x													\vdash
· 4 · Jet-Boat-2	-(1.5')	6/5/2014	15:54	Soil	3	0	3	NA	x				x													\vdash
Jet-Boat-3	(0.8')	6/5/2014	15:40	Soil	3	0	3	NA	x		+		x								+					\square
Jet-Boat-3	-(2.0')	6/5/2014	15:4 1	Soil	3	0	3	NA	x	1			x									┢╼╼┨			 	
· 7: Jet-Boat-4	(0.1')	6/5/2014	13:00	Soil	10	1	9	NA		x	x	x	x	╞╼┥					X		 					
Jet-Boat-4	(1.1')	6/5/2014	13:35	Soil	4	1	3	NA	\square	x	X	x	x	╞╼╍┨											 ·	
. 9. Jet-Boat-5	-(0.1')	6/5/2014	13:55	Soil	4	1	3	NA	\square	x	X	x	x					·····								
Jet-Boat-5	-(1.0')	6/5/2014	14:10	Soil	4	1	3	NA		x	X	X	x													
Relinquished by: (Sig	nature) Nature)	an Ihi	Éesi		Reco	eived by	y: (Sigr y: (Sigr	nature/.	Affiliatio Affiliatio	on)			L			I			Date: 6 - Date:	- 9-	-14		Time:	2;	15	
Relinquished by: (Sig	nature)			(Fed	ex) Rec	eived by	/: (Sigr	nature/	Affiliatio	on). (-						1Z	Œ		Date:	110	114		Time:	<u>ు</u> ం	>	

•

Return to Contents

C al	lscience	7440 LINCO	DLN WAY								10510							СН	AIN	OF	CU	STC	DY	RE	co	RD
	nvironmental	GARDEN G	ROVE, CA 92	841-1427					WO;	‡/LABI	JSE ON	LY	•			D	ATE:				06	3/05/1	4			
	aboratories, Inc.	TEL: (714) 8	395-5494 . FA	X: (714) 894	4-7501] []-[<u>0</u> [7		<u>.</u>	P	AGE:	-		2		OF		3		
LABOR	ATORY CLIENT:	r Environmer	ntal Service	20	<u></u>				CLIE	NT PRO	JECT N	AME / N	UMBER	२:						P.O.	NO.:					
ADDRE	SS								Je	t Boa	at Pro	perty	/													
100112	78 Sunny Brae Cer	nter							PRO	JECT CO	ONTAC	ſ:								SAM	PLER(S)	: (PRINT)			
CITY:	Arcata	·		STATE:	CA ZIP:	9552	21		St	an Tl	niese	n								5	ta	57	ſh;	ese	5	
TEL:	707 498-0793	E-MAIL: sta	n@freshwa	aterenviro	nmentals	ervice	es.co	m							REC	UES	TE) AN	ALY	SES	3					
TURNA	ROUND TIME:						h h		İ	<i>"</i>				, e									T	T	T	
] 48 HR 🛛	72 HR	5 DAYS	区 10 DA		CODE		ദ് ത	Ö Q	a gel	â		Sb, S												
	DELT EDF	NA					NA		ates/ 8260	ates/	1 silio	(602		, Ni												
Plea Oxyg Ethyl Scav Dichl	se Homogenize TPH-Motor Oi genates include: Methyl tert-bu I tertiary butyl ether (ETBE), Di-i vengers include: 1,2-Dichloroet lorobenzene, 1,2-Dibromoethane	il and Metals pri tyl ether (MTBE) isopropyl ether (I thane, 1,3-Dichlo e (EDB), and Chl	or to Analysis , Tert-amyl me DIPE), and Ten robenzene, 1,2 lorobenzene,	s. thyl ether (T <i>i</i> t-butyl alcoho 2-Dichlorober	AME), bi (TBA). nzene, 1,4-	eserved	erved	Filtered	TEX/MTBE/Oxyge ngers/Naphthalene	TEX/MTBE/Oxyge 3)	Aator Oil (8015B w	s (Cd, Cr, Pb, Ni, Z	Core Prep (5035)	s (As, Cd, Cr, Cu, Zn) (6020)	nium VI (7196A)	ıry (7471A)	nium VI (218.6)	iry (1631E)								
LAB USE ONLY	SAMPLE ID	SAMP DATE	LING	MATRIX	NO. OF	Unpre	Prese	Field	Gas/B Scavei	Gas/B (8260E	∿-Hd1	Metals	Terra	Metals Ag, TI,	Chron	Mercu	Chron	Mercu								
1/	Jet-Boat-6-(0.1'-0.2')	6/5/2014	10:40	Soil	1	1	0	ŇA			x	x														
	Jet-Boat-6-(1.0')	6/5/2014	10:52	Soil	1	1	0	NA			x	x													\neg	
13	Jet-Boat-7-(0.1'-0.2')	6/5/2014	11:10	Soil	1	1	0	NA			x	x														
<i>jų</i> :	Jet-Boat-7-(0.9')	6/5/2014	11:25	Soil	1	1	0	NA			x	x														
.15	Jet-Boat-8-(0.0'-0.3')	6/5/2014	11:40	Soil	1	1	0	NA	Ī		x	x														
16	Jet-Boat-8-(0.9'-1.0')	6/5/2014	11:50	Soil	1	1	0	NA			X	x														
17	Jet-Boat-9-(1.0')	6/5/2014	14:30	Soil	3	0	3	NA	X				x													
.18.	Jet-Boat-10-(0.1')	6/5/2014	12:30	Soil	4	1	3	NA		X	x	x	x													
19	Jet-Boat-11	6/5/2014	13:45	Water	6	2	4	NA		x	x	x														
20	Jet-Boat-Metais-(0.75')	6/5/2014	10:05	Soil	1	1	0	NA						x												
Relinq	uished by: (Signature) ST .	n Jk	Tera.		Rec	eived b	y: (Sigr	nature//	Affiliatio	n)									Date:	-9-	-14		Time:	2:1	5	
Relinq	uished by: (Signature)		- naver		Reci	eived b	y: (Sigr	nature//	Affiliatic	n)									Date	:		$\neg \uparrow$	Time:			(
Relinq	uished by: (Signature)			(Fede	ex) Reco	eived b	y: (Sigr	nature//	Affiliatio	in)	-					Þ	Ŧ	-	Date:	10	114		Time:	100	>	

06/01/10	Revision
----------	----------

Return to Contents

	Iscience	7440 LINCO	DLN WAY						•10/0 #	/PARI	ISP'ON	1			•••	I		СН	AIN	OF	: CU	STO	DDY	r RE	CO
	, nvironmental	GARDEN G	ROVE, CA 92	2841-1427									· · · · ·		<u> </u>	D	ATE:	******				3/05/	14		
4	aboratories, Inc.	TEL: (714)	895-5494 . FA	X: (714) 894	4-7501					6	<u> </u> ∹l	<u>0</u>]	H	Øť	1	P.	AGE:			3		OF	<u> </u>		<u>s</u>
LABO	RATORY CLIENT: Freshwate	r Environme	ntal Service	20					CLIE	NT PRO	JECT N	AME / N	UMBER	l:						P.O.	NO.:				
	ESS:			~					Je	t Boa	t Pro	operty	/												
	78 Sunny Brae Cer	nter							PRO.	JECT CC	ONTACI	ſ:							•	SAM	PLER(S)): (PRIN	T)		
XITY;	Arcata			STATE:	CA	955	21		St	an Th	niese	n								5	Tai	5 1	Thi	`e5+	?∽
EL:	707 498-0793	É-MAIL: sta	n@freshwa	aterenviro	nmentals	ervic	es.co	m							REQ	UES	STEC) AN	IALY	'SES	3				
URN		148 HR []	72 HR 🕅	5 DAYS	IXI 10 DA	YS				ട്	el)			Se,											
		NA		0 5.00		LOG	CODE:	- <u></u>	ss/Pb 60B)	OV/se	ilica g	3020)		di, Sb											
PEC	IAL INSTRUCTIONS:			·	·			1	enate 9 (82	enate	/ith s	ि इ		þ,											
Ple ad	ease hold this contai Ided. Use only if nee	ner as the ded.	re was ex	cess so		eserved	erved	Filtered	TEX/MTBE/Ox) ngers/Naphthals	stex/MTBE/Ox) 3)	Motor Oil (8015E	s (Cd, Cr, Pb, N	Core Prep (503:	s (As, Cd, Cr, C Zn) (6020)	nium Vi (7196A)	ıry (7471A)	nium VI (218.6)	ıry (1631E)	٦						
ÅB USE	SAMPLE ID	SAMP	PLING	MATRIX	NO. OF	npr	rese	ield	as/B avei	as/B 260E	ЪН-	etak	егга	etals	hron	ercu	hron	ercu	Ō						
NLY		DATE	TIME	0.7	CONT.				ი	<u>ල</u> හි	F	Σ	μ	ΣŶ	о О	Σ	<u> </u>	Σ	T						
<u>-1.</u>	Jet-Boat-4-(0.1)-(HOLD)	6/5/2014	13:00	501		0		NA		X									^		_	┣───┘			
· · ·	Temp-Blank-1			<u> </u>				ļ														ļ'	ļ!		
•:•	Temp-Blank-2																								
:::																									
											1										1	<u>├</u>			
					L																+	\vdash	──'		
· · ·	· · · · · · · · · · · · · · · · · · ·			1	· · · · · ·										1				1		1	1 1	1		
····																					+				
	· · ·																								
Relinc	uished by: (Signature)	ar 24	Réeser		Rec	eived b	y: (Sigr	nature/	Affiliatio	n)									Date		<u>}</u> -1 ∪	-1	Time	: 12',	. 15
telino	quished by: (Signature)	ar 21	Rieser		Rec	eived b	y: (Sign	nature/	Affiliatio	n)	· · · · · · · · · · · · · · · · · · ·								Date (2 Date		<u>}</u> -1 ∟	-1	Time	: : : :	.15
Relinc	quished by: (Signature)	ar 21	Rieser		Rec Rec Rec	eived b eived b	y: (Sigr y: (Sigr y: (Sigr	nature/	Affiliatio	n)		-							Date (Date		<u>}</u> }-1ℓ	-1	Time	12.	.15

Page 1 of 1



Caliscience WORK ORDER #. TH-OO-E SAMPLE RECEIPT FORM Cooler _/_ of CLIENT: $Freshwater Env'l., Services$ DATE:	2_ [
CLIENT: <u>Freshwater Env'1.</u> , <u>Services</u> DATE: <u>06/10/14</u> TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0° C = 6.0° C, not frozen except sediment/tissue) Temperature 2 7° C = 0.3° C (CE) = 2 4° C [Blank [] Sample	<u>~</u> 1
CLIENT: <u><i>Freshwater Envil</i></u> , <u>Jervi</u> ces DATE: <u>U0/70/14</u> TEMPERATURE: Thermometer ID: SC2 (Criteria: $0.0^{\circ}C - 6.0^{\circ}C$, not frozen except sediment/tissue) Temperature $2 \cdot 7 \cdot {}^{\circ}C = 0.3^{\circ}C$ (CE) = $2 \cdot 4 \cdot {}^{\circ}C$ [Blank [] Sample	<u>+</u>
TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue) Temperature $2 \cdot 7 \circ C = 0.3 \circ C$ (CE) = $2 \cdot 4 \circ C$ Blank \Box Sample	
Temperature $2 \cdot 7 \circ C \cdot 0.3 \circ C (CE) = 2 \cdot 4 \circ C \square Blank \square Sample$	
□ 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 Checked by: <u>8</u>	¥6
	26
□ Cooler □ □ No (Not Intact) □ Not Present □ N/A Checked by:	7
□ Sample □ □ No (Not Intact) □ Not Present Checked by: <u>b</u> @	<u> </u>
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	
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	
Aqueous samples received within 15-minute holding time	
□ pH □ Residual Chlorine □ Dissolved Sulfides □ Dissolved Oxygen □ □ □	
Proper preservation noted on COC or sample container	
Coloridatile analysis container(s) free of headspace	
Tedlar bag(s) free of condensation	
CONTAINER TYPE:	
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® ☑TerraCores® □	
Aqueous: 🗆 VOA 🗖 🗰 🏎 VOAna₂ 🗆 125AGB 🗆 125AGBh 🗆 125AGBp 🗆 1AGB 🗆 1AGBna₂ 🗆 1AG	Bs
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1PB □1PBna □500P	В
□250PB 250PBnu□125PB □125PBznna □100PJ □100PJna₂ □ □ □	
)
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#: Labeled/Checked by: 😿 🦉	

seurofins	ience W		#: 14- (Page 2	24 of 24
	SAMPLE REC	EIPT FOR	RM c	ooler 👻	cof -?
CLIENT: Fresh water	- Env'l., Service	х.	DATE:	06/12	/ 14
TEMPERATURE: Thermom	eter ID: SC2 (Criteria: 0.0 °C	– 6.0 °C, not frozer	n except se	diment/tiss	sue)
Temperature <u>Q. 9</u>	°C-0.3°C (CF) =	<u> 6 °C</u> Æ	Blank	🗌 Samı	ole .
Sample(s) outside tempera	ture criteria (PM/APM contact	ed by:)			
Sample(s) outside tempera	ture criteria but received on ic	e/chilled on same d	ay of sampl	ing.	
□ Received at ambient tem	perature, placed on ice fo	r transport by Co	ourier.		
Ambient Temperature: 🗆 A	r 🗆 Filter		-	Checked	by: <u>826</u>
	F -				
				Chackad	hu &u
		D Not Present		Checked	by: \mathcal{D}_{2}
		La Not Fresent		Checkeu	ыу. <u>ХФ С</u>
SAMPLE CONDITION:	· · ·		Yes	No	N/A
Chain-Of-Custody (COC) doc	ument(s) received with sam	ples	. 🗹		
COC document(s) received co	omplete		. 🗹		
□ Collection date/time, matrix, ar	id/or # of containers logged in ba	sed on sample labels.			
🗆 No analysis requested. 🛛 🗆 N	lot relinquished.	ne relinquished.	·,		
Sampler's name indicated on	COC				
Sample container label(s) con	sistent with COC		Ø,		
Sample container(s) intact and	d good condition	· · · · · · · · · · · · · · · · · · ·	Ø		
Proper containers and sufficie	nt volume for analyses requ	uested	Ø		
Analyses received within hold	ing time		<u>ل</u> م		
Aqueous samples received	I within 15-minute holding t	ime			
pH Residual Chlorine	□ Dissolved Sulfides □ Disso	lved Oxygen			Ø
Proper preservation noted on	COC or sample container		, p		
□ Unpreserved vials received	for Volatiles analysis		_	_	
Volatile analysis container(s)	iree of headspace	·····	. []		
CONTAINER TYPE:	ation		. 🗆)	Д
Solid: Ø4ozCGJ Ø8ozĆGJ	□16ozCGJ □Sleeve (_) □EnCore	s® ØTerra	Cores [®] []
Aqueous: VOA VOAh	VOA na₂ □125AGB □125A	AGBh □125AGBp	□1AGB〔	∃1AGB na	₂ □1AGB s
□500AGB □500AGJ □500	AGJ s □250AGB □2500	CGB □250CGBs	i □1PB	□1PB na	□500PB
□250PB □250PBn □125PB	3 □125PB znna □100PJ	□100PJ na₂ □	□	[]
Air: DTedlar [®] DCanister Ot Container: C: Clear A: Amber P: Plast Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S	h er: □ Trip Blank ic G: Glass J: Jar B: Bottle Z: Ziploc ₂O₃ na: NaOH p: H₃PO₄ s : H₂SO₄ u: L	K Lot#: KResealable Bag E: Er Iltra-pure znna: ZnAc ₂ +Na	Labeled ivelope F OH f : Filtered	/Checked b Reviewed b Scanned l	by: <u>802</u> by: <u>802</u> by: <u>602</u>

APPENDIX D Laboratory Report and Chain-of-Custody Record - 3

Page 1 of 19

eurofins

Calscience

WORK ORDER NUMBER: 14-08-0818

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Freshwater Environmental Services Client Project Name: Jet Boat Property Attention: Stan Thiesen 78 Sunny Brae Center Arcata, CA 95521-6742

Approved for release on 08/19/2014 by: Don Burley Project Manager



Eurofins Calscience, 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.

7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830

ResultLink >

Email your PM >

🔅 eurofins

Calscience

Contents

Client Pro Work Orc	ject Name: Jet Boat Property er Number: 14-08-0818	
1	Work Order Narrative	3
2	Sample Summary	4
3	Client Sample Data	5 5 7
4	Quality Control Sample Data.4.1 MS/MSD.4.2 PDS/PDSD.4.3 LCS/LCSD.	10 10 12 13
5	Sample Analysis Summary	15
6	Glossary of Terms and Qualifiers.	16
7	Chain-of-Custody/Sample Receipt Form	17

Work Order: 14-08-0818

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 08/12/14. They were assigned to Work Order 14-08-0818.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Client:	Freshwater Environmental Services	Work Order:	14-08-0818
	78 Sunny Brae Center	Project Name:	Jet Boat Property
	Arcata, CA 95521-6742	PO Number:	
		Date/Time Received:	08/12/14 10:15
		Number of Containers:	7
Attn:	Stan Thiesen		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Jet-Boat-12-(0.0'-0.25')	14-08-0818-1	08/08/14 10:20	1	Solid
Jet-Boat-12-(1.0')	14-08-0818-2	08/08/14 10:35	1	Solid
Jet-Boat-13-(0.0'-0.25)	14-08-0818-3	08/08/14 10:40	1	Solid
Jet-Boat-13-(1.0')	14-08-0818-4	08/08/14 10:55	1	Solid
Jet-Boat-14-(0.1-0.25')	14-08-0818-5	08/08/14 11:15	1	Solid
Jet-Boat-14-(1.0')	14-08-0818-6	08/08/14 11:30	1	Solid
Jet-Boat-15-(0.1'-0.25')	14-08-0818-7	08/08/14 11:00	1	Solid



Freshwater Environmental Services			Date Re	ceived:			08/12/14
78 Sunny Brae Center		,	Work Or	der:			14-08-0818
Arcata, CA 95521-6742			Prepara	tion:			EPA 3550B
			Method:			E	PA 8015B (M)
			Units:				mg/kg
Project: Jet Boat Property						Pa	ige 1 of 2
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-12-(0.0'-0.25')	14-08-0818-1-AA	08/08/14 10:20	Solid	GC 45	08/14/14	08/14/14 20:33	140814B02
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis					
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Motor Oil		160		25	1.00	SG,	HD
Surrogate		Rec (%)		Control Limits	Qualifiers		
n-Octacosane		<u>85</u>		61-145	<u>Quaimers</u>		
Jet-Boat-12-(1.0')	14-08-0818-2-AA	08/08/14 10:35	Solid	GC 45	08/14/14	08/14/14 20:50	140814B02
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis	•		·	·	
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		52		25	1.00	SG,	HD
Surrogate		<u>Rec. (%)</u>		Control Limits	Qualifiers		
n-Octacosane		89		61-145			
Jet-Boat-13-(0.0'-0.25)	14-08-0818-3-AA	08/08/14 10:40	Solid	GC 45	08/14/14	08/14/14 21:08	140814B02
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis					
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		170		25	1.00	SG,	HD
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		88		61-145			
Jet-Boat-13-(1.0')	14-08-0818-4-AA	08/08/14	Solid	GC 45	08/14/14	08/14/14	140814B02
		10:55				21:26	
Comment(s): - The sample was homoger	nized prior to prepara	ation / analysis	•		DE	~	1:6:
		Result					
IPH as Motor OII		35		25	1.00	SG,	HU
Surrogate		<u>Rec. (%)</u>		Control Limits	<u>Qualifiers</u>		
n-Octacosane		77		61-145			



Freshwater Environmental Services	i	I	Date Re	eceived:			08/12/14
78 Sunny Brae Center		١	Work O	rder:			14-08-0818
Arcata, CA 95521-6742		I	Prepara	tion:			EPA 3550B
		I	Method:			E	PA 8015B (M)
		I	Units:				mg/kg
Project: Jet Boat Property						Pa	ige 2 of 2
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-14-(0.1-0.25')	14-08-0818-5-AA	08/08/14 11:15	Solid	GC 45	08/14/14	08/14/14 22:02	140814B02
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		490		120	5.00	SG,	HD
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		<u>127</u>		61-145	Gaamoro		
Jet-Boat-14-(1.0')	14-08-0818-6-AA	08/08/14 11:30	Solid	GC 45	08/14/14	08/14/14 21:43	140814B02
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis.					
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		68		61-145			
Jet-Boat-15-(0.1'-0.25')	14-08-0818-7-AA	08/08/14 11:00	Solid	GC 45	08/14/14	08/14/14 22:19	140814B02
Comment(s): - The sample was homoge	nized prior to prepara	ation / analysis.	•	·			
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		1400		250	10.0	SG,	HD
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		108		61-145			
Method Blank	099-15-420-1031	N/A	Solid	GC 45	08/14/14	08/14/14 19:22	140814B02
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
TPH as Motor Oil		ND		25	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		85		61-145			



Freshwater Environmental Services			Date Red	ceived:			08/12/14
78 Sunny Brae Center			Work Or	der:			14-08-0818
Arcata, CA 95521-6742			Preparat	ion:			EPA 3050B
			Method:				EPA 6020
			Units:				mg/kg
Project: Jet Boat Property						Pa	ge 1 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-12-(0.0'-0.25')	14-08-0818-1-AA	08/08/14 10:20	Solid	ICP/MS 03	08/13/14	08/14/14 21:25	140813L02
Comment(s): - The sample was homogen	nized prior to prepara	ation / analysis					
Parameter		<u>Result</u>		<u>RL</u>	DF	<u>Qua</u>	lifiers
Cadmium		ND		1.00	1.00		
Chromium		70.3		2.00	1.00		
Lead		10.8		1.00	1.00		
Nickel		78.4		1.00	1.00		
Zinc		73.4		5.00	1.00		
							4400401.00
Jet-Boat-12-(1.0')	14-08-0818-2-AA	08/08/14 10:35	Solid	ICP/MS 03	08/13/14	08/14/14 21:29	140813L02
Jet-Boat-12-(1.0') Comment(s): - The sample was homogened	14-08-0818-2-AA nized prior to prepara	08/08/14 10:35 ation / analysis	Solid	ICP/MS 03	08/13/14	08/14/14 21:29	140813L02
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u>	Solid	ICP/MS 03	08/13/14	08/14/14 21:29 Qua	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u> ND	Solid	ICP/MS 03 <u>RL</u> 1.00	08/13/14 <u>DF</u> 1.00	08/14/14 21:29 Qua	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00	08/13/14 DF 1.00 1.00	08/14/14 21:29 <u>Qua</u>	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00	08/14/14 21:29 Qua	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00	<u>DF</u> 1.00 1.00 1.00 1.00	08/14/14 21:29 Qua	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc	14-08-0818-2-AA	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00	08/14/14 21:29 Qua	lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25)	14-08-0818-2-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00 ICP/MS 03	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14	08/14/14 21:29 Qua 08/14/14 21:42	140813L02
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00 ICP/MS 03	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14	08/14/14 21:29 Qua 08/14/14 21:42	140813L02
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen Parameter	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis <u>Result</u>	Solid	ICP/MS 03 RL 1.00 2.00 1.00 5.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u>	08/14/14 21:29 Qua 08/14/14 21:42 Qua	140813L02 lifiers 140813L02
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen Parameter Cadmium	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis <u>Result</u> ND	Solid Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00 ICP/MS 03 <u>RL</u> 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00	08/14/14 21:29 Qua 08/14/14 21:42 Qua	140813L02 lifiers 140813L02 lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen Parameter Cadmium Chromium	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis <u>Result</u> ND 16.8	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00 ICP/MS 03 <u>RL</u> 1.00 2.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00 1.00	08/14/14 21:29 Qua 08/14/14 21:42 Qua	140813L02 lifiers 140813L02 lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis <u>Result</u> ND 16.8 6.73	Solid Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 5.00 ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00	08/14/14 21:29 Qua 08/14/14 21:42 Qua	140813L02 lifiers 140813L02 lifiers
Jet-Boat-12-(1.0') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-13-(0.0'-0.25) Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Nickel	14-08-0818-2-AA nized prior to prepara 14-08-0818-3-AA nized prior to prepara	08/08/14 10:35 ation / analysis <u>Result</u> ND 51.6 10.5 102 99.0 08/08/14 10:40 ation / analysis <u>Result</u> ND 16.8 6.73 26.1	Solid Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 5.00 ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 1.00 1.00 1.00	DE 1.00 1.00 1.00 1.00 1.00 00/1.00 08/13/14 DE 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	08/14/14 21:29 Qua 08/14/14 21:42 Qua	140813L02 lifiers 140813L02 lifiers



Freshwater Environmental Services			Date Re	ceived:			08/12/14
78 Sunny Brae Center			Work Or	der:			14-08-0818
Arcata, CA 95521-6742			Preparat	tion:			EPA 3050B
			Method:				EPA 6020
			Units:				ma/ka
Project: Jet Boat Property						Pa	ige 2 of 3
Client Comple Number	Lab Comple	Doto/Timo	Motrix	Instrument	Dete	Data/Tima	
	Number	Collected	Matrix	Instrument	Prepared	Analyzed	QC Batch ID
Jet-Boat-13-(1.0')	14-08-0818-4-AA	08/08/14 10:55	Solid	ICP/MS 03	08/13/14	08/14/14 21:45	140813L02
Comment(s): - The sample was homogen	nized prior to prepara	ation / analysis	i.				
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Cadmium		ND		1.00	1.00		
Chromium		37.4		2.00	1.00		
Lead		35.7		1.00	1.00		
Nickel		55.1		1.00	1.00		
Zinc		82.5		5.00	1.00		
Jet-Boat-14-(0.1-0.25')	14-08-0818-5-AA	08/08/14 11:15	Solid	ICP/MS 03	08/13/14	08/14/14 21:48	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen	14-08-0818-5-AA	08/08/14 11:15 ation / analysis	Solid	ICP/MS 03	08/13/14	08/14/14 21:48	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u>	Solid	ICP/MS 03	08/13/14	08/14/14 21:48 Qua	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND	Solid	ICP/MS 03 <u>RL</u> 1.00	08/13/14 DF 1.00	08/14/14 21:48 Qua	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homoger Parameter Cadmium Chromium	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4	Solid	ICP/MS 03 RL 1.00 2.00	08/13/14 DF 1.00 1.00	08/14/14 21:48 Qua	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00	08/14/14 21:48 Qua	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129	Solid	ICP/MS 03 RL 1.00 2.00 1.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00	08/14/14 21:48 <u>Qua</u>	140813L02 alifiers
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homoger Parameter Cadmium Chromium Lead Nickel Zinc	14-08-0818-5-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104	Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 5.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00	08/14/14 21:48 Qua	140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0')	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30	Solid Solid	ICP/MS 03 RL 1.00 2.00 1.00 1.00 5.00 ICP/MS 03	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14	08/14/14 21:48 Qua 08/14/14 21:51	140813L02 alifiers 140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogenergy Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogenergy	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis	Solid Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 5.00 ICP/MS 03	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14	08/14/14 21:48 Qua 08/14/14 21:51	140813L02 Alifiers 140813L02
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogen Parameter	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis <u>Result</u>	Solid Solid Solid	ICP/MS 03 RL 1.00 2.00 1.00 5.00 ICP/MS 03 RL	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u>	08/14/14 21:48 Qua 08/14/14 21:51 Qua	140813L02 alifiers 140813L02 alifiers
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogen Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogen Parameter Cadmium	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis <u>Result</u> ND	Solid Solid	ICP/MS 03 RL 1.00 2.00 1.00 1.00 5.00 ICP/MS 03 RL 1.00 1.00 1.00 ICP/MS 03 RL 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00	08/14/14 21:48 Qua 08/14/14 21:51 Qua	140813L02 alifiers 140813L02 alifiers
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogenergy Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogenergy Parameter Cadmium Chroment(s): - The sample was homogenergy Parameter Cadmium Chromium	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis <u>Result</u> ND 64.7	Solid Solid	ICP/MS 03 RL 1.00 2.00 1.00 5.00 ICP/MS 03 RL 1.00 2.00 ICP/MS 03 RL 1.00 2.00 RL 1.00 2.00 RL 1.00 RL 1.00 2.00 RL 1.00 RL 1.0	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00 1.00	08/14/14 21:48 Qua 08/14/14 21:51 Qua	140813L02 Alifiers 140813L02 Alifiers
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogenergy Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogenergy Parameter Cadmium Chromium Lead Lead	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis <u>Result</u> ND 64.7 6.15	Solid Solid	ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 5.00 ICP/MS 03 <u>RL</u> 1.00 2.00 1.00 1.00 1.00 <u>ICP/MS 03</u> <u>RL</u> 1.00 2.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00	08/14/14 21:48 Qua 08/14/14 21:51 Qua	140813L02 alifiers 140813L02 alifiers
Jet-Boat-14-(0.1-0.25') Comment(s): - The sample was homogener Parameter Cadmium Chromium Lead Nickel Zinc Jet-Boat-14-(1.0') Comment(s): - The sample was homogener Parameter Cadmium Chromium Lead Nickel Zinc	14-08-0818-5-AA nized prior to prepara 14-08-0818-6-AA nized prior to prepara	08/08/14 11:15 ation / analysis <u>Result</u> ND 62.4 13.0 129 104 08/08/14 11:30 ation / analysis <u>Result</u> ND 64.7 6.15 114	Solid Solid	ICP/MS 03 RL 1.00 2.00 1.00 5.00 ICP/MS 03 RL 1.00 2.00 ICP/MS 03 RL 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 08/13/14 <u>DF</u> 1.00 1.00 1.00 1.00 1.00 1.00	08/14/14 21:48 Qua 08/14/14 21:51 Qua	140813L02 alifiers 140813L02 alifiers

Return to Contents



Analytical Report

Freshwater Environmental Services			Date Re	ceived:			08/12/14
78 Sunny Brae Center			Work Or	der:			14-08-0818
Arcata, CA 95521-6742			Preparat	ion:			EPA 3050B
			Method:				EPA 6020
			Units:				mg/kg
Project: Jet Boat Property		Ра	Page 3 of 3				
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Jet-Boat-15-(0.1'-0.25')	14-08-0818-7-AA	08/08/14 11:00	Solid	ICP/MS 03	08/13/14	08/14/14 21:54	140813L02
Comment(s): - The sample was homogen	nized prior to prepara	ation / analysis	S.				
Parameter		<u>Result</u>		<u>RL</u>	DF	Qua	alifiers
Cadmium		ND		1.00	1.00		
Chromium		83.3		2.00	1.00		
Lead		16.4		1.00	1.00		
Nickel		208		1.00	1.00		
Zinc		106		5.00	1.00		
Method Blank	099-15-621-565	N/A	Solid	ICP/MS 03	08/13/14	08/14/14 19:53	140813L02
Parameter		Result		RL	DF	Qua	alifiers
Cadmium		ND		1.00	1.00		
Chromium		ND		2.00	1.00		
Lead		ND		1.00	1.00		
Nickel		ND		1.00	1.00		
Zinc		ND		5.00	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Quality Control - Spike/Spike Duplicate

Freshwater Environmental Se	ervices			Date	Received:					08/12/14
78 Sunny Brae Center				Wor	k Order:				14	4-08-0818
Arcata, CA 95521-6742				Prep	paration:				E	PA 3550B
				Meth	nod:				EPA 8	3015B (M)
Project: Jet Boat Property									Page 1	of 2
Quality Control Sample ID	Туре		Matrix	Ir	nstrument	Date Prepared	Date Anal	yzed	MS/MSD Bat	tch Number
Jet-Boat-12-(0.0'-0.25')	Sample		Solid	G	iC 45	08/14/14	08/14/14 2	20:33	140814S02	
Jet-Boat-12-(0.0'-0.25')	Matrix Spike		Solid	G	iC 45	08/14/14	08/14/14 1	19:57	140814S02	
Jet-Boat-12-(0.0'-0.25')	Matrix Spike	Duplicate	Solid	G	iC 45	08/14/14	08/14/14 2	20:14	140814S02	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> <u>Conc.</u>	<u>MS</u> <u>%Rec.</u>	MSD Conc.	MSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	161.7	400.0	446.6	71	467.1	76	64-130	5	0-15	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Lead

Zinc

Freshwater Environmental Services	Date Received:	08/12/14
78 Sunny Brae Center	Work Order:	14-08-0818
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 2

Quality Control Sample ID Туре Matrix Date Prepared Date Analyzed MS/MSD Batch Number Instrument Jet-Boat-12-(0.0'-0.25') Sample Solid ICP/MS 03 08/13/14 08/14/14 21:25 140813S02A Jet-Boat-12-(0.0'-0.25') Matrix Spike Solid ICP/MS 03 08/13/14 08/14/14 21:13 140813S02A Jet-Boat-12-(0.0'-0.25') Matrix Spike Duplicate Solid ICP/MS 03 08/13/14 08/14/14 21:16 140813S02A <u>MS</u> Conc. <u>MSD</u> <u>%Rec.</u> **Parameter** Sample Conc. <u>Spike</u> <u>Added</u> <u>MS</u> <u>%Rec.</u> <u>MSD</u> Conc. %Rec. CL RPD RPD CL Cadmium ND 25.00 28.19 113 28.40 114 85-121 1 0-12 Chromium 70.30 25.00 81.42 44 78.97 35 20-182 3 0-15 10.84 25.00 40.76 40.27 118 62-134 0-23 120 1 Nickel 78.45 25.00 102.9 98 101.4 92 46-154 1 0-15 73.37 25.00 118.7 114.3 164 23-173 0-18

182

Qualifiers

3

4

RPD: Relative Percent Difference. **CL: Control Limits**



75-125

75-125

75-125

75-125

Freshwater Environmental	Services		Dat	te Received:			08/12/14
78 Sunny Brae Center			Wa	ork Order:			14-08-0818
Arcata, CA 95521-6742			Pre	eparation:			EPA 3050B
	Me	thod:			EPA 6020		
Project: Jet Boat Property							Page 1 of 1
Quality Control Sample ID	Туре	Ν	<i>l</i> atrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
Jet-Boat-12-(0.0'-0.25')	Sample	S	Solid	ICP/MS 03	08/13/14 00:00	08/14/14 21:25	140813S02A
Jet-Boat-12-(0.0'-0.25')	PDS	S	olid	ICP/MS 03	08/13/14 00:00	08/14/14 21:19	140813S02A
Parameter		Sample Conc.	Spike Added	PDS Conc.	PDS %Re	<u>%Rec. 0</u>	<u>CL</u> <u>Qualifiers</u>
Cadmium		ND	25.00	26.90	108	75-125	

95.66

37.24

102.8

100.3

101

106

108

98

25.00

25.00

25.00

25.00

 Chromium
 70.30

 Lead
 10.84

 Nickel
 78.45

 Zinc
 73.37

RPD: Relative Percent Difference. CL: Control Limits



Freshwater Environmental S	Services		Date Receive	ed:		08/12/14				
78 Sunny Brae Center			Work Order:			14-08-0818				
Arcata, CA 95521-6742			Preparation:			EPA 3550B				
			Method:			EPA 8015B (M)				
Project: Jet Boat Property						Page 1 of 2				
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number				

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-420-1031	LCS	Solid	GC 45	08/14/14	08/14/14 19:39	140814B02
Parameter		Spike Added	Conc. Recovered	ed LCS %Re	<u>ec. %Rec</u>	. CL Qualifiers
TPH as Motor Oil		400.0	366.4	92	75-123	3

RPD: Relative Percent Difference. CL: Control Limits

Return to Contents



Quality Control - LCS/LCSD

Freshwater Environmental Services	Date Received:	08/12/14
78 Sunny Brae Center	Work Order:	14-08-0818
Arcata, CA 95521-6742	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: Jet Boat Property		Page 2 of 2

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	e Analyzed	LCS/LCSD Ba	atch Number
099-15-621-565	LCS	Soli	d	ICP/MS 03	08/13/14	08/1	4/14 19:56	140813L02	
099-15-621-565	LCSD	Soli	d	ICP/MS 03	08/13/14	08/1	4/14 20:00	140813L02	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Cadmium	25.00	26.66	107	26.67	107	80-120	0	0-20	
Chromium	25.00	26.65	107	25.97	104	80-120	3	0-20	
Lead	25.00	26.34	105	26.74	107	80-120	2	0-20	
Nickel	25.00	26.57	106	26.71	107	80-120	1	0-20	
Zinc	25.00	28.43	114	27.64	111	80-120	3	0-20	



Calscience

Sample Analysis Summary Report

Work Order: 14-08-0818				Page 1 of 1
Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6020	EPA 3050B	598	ICP/MS 03	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1

Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Page 1 of 1



Calscience

Work Order: 14-08-0818

*

<

>

1

2

3

Δ

5 6

7

В

ΒU

ΒV

Е

FT

HD

Qualifiers Definition See applicable analysis comment. Less than the indicated value. Greater than the indicated value. Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification. 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. Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. Surrogate recovery below the acceptance limit. Surrogate recovery above the acceptance limit. Analyte was present in the associated method blank. Sample analyzed after holding time expired. Sample received after holding time expired. Concentration exceeds the calibration range. Sample was extracted past end of recommended max. holding time. The chromatographic pattern was inconsistent with the profile of the reference fuel standard.

Glossary of Terms and Qualifiers

- 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).
- Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated.
- JA Analyte positively identified but quantitation is an estimate.
- LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME
- 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.
- Х % Recovery and/or RPD out-of-range.
- Ζ 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.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Ĉa	Iscience	7440 LINCO	IN WAY									-				м		CH	AIN	OF	CU	ST(ЭDY	′ RE	CO	RD
Ē	_nvironmental	GARDEN GI	ROVE, CA 9	2841-1427					WO I	\$7LAB	JSE ON	ILY.				Ęε	DATE:				08	3/11/	14		-	
Å	aboratories, Inc.	TEL: (714) 8	395-5494 . FA	X: (714) 89	4-7501					117	1-1	18		81	8	P	AGE:			1	aamaanabahnin	OF	cionmeseosació	4		
LABOF	RATORY CLIENT:	r Environmor	tal Sania	20	nesaannesiskeningenegenstation				CLIE	NT PRC	JECT N	JAME / N	NUMBER	CO : 11 2:		L				P.O.	NO.:		000000000000000000000000000000000000000	100000000000000000000000000000000000000		l
AUDR		I ETIMIOTITIEI	Ital Selvice	75		-			Je	et Boa	at Pro	opert	у													
ADDIX	78 Sunny Brae Cer	nter						minocaucaanini	PRO.	JECT C	ONTAC	T:		3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			0.0003/05000000	angin na manangingi		SAM	PLER(S)): (PRIN	T)	should an an an an an an an an an an an an an	(hatepointinisoon)	
CITY:	Arcata			STATE:	CA	955	21		St	an T	hiese	ən								Or	rin P	loche	эr			
TEL:	707 498-0793	E-MAIL:	n@freshwa	aterenviro	nmentals	ervic	es.co	m							REC)UE	STEC) AN	ALY	'SES						nicitizzonezoixed
TURNAROUND TIME:											ľ	l	ſ	Π												
□s	AME DAY 24 HR D	コ48 HR ロコ	72 HR 🛛	5 DAYS	区 10 DA	YS	0005	7.0 Contractoria	a gel)	6																
ПC	OELT EDF	NA				LOG	NA		silice	(602																
SPEC	AL INSTRUCTIONS:	anana an an an an an an an an an an an a		94194999999999999999999999999999999999					with	(uZ			.													
Ple	ease Homogenize TP	H-Motor Oi	l/Metals p	orior to					115B	, Ni																
An	alysis.					0		0	ii (80	٦ بر	n															
						eve(eq	tere	or Oi	Q, C	20															
LAB	a kuko épiletén di akor P		LING	1002-00-055 1	I NO.	rese	serve		-Mot	als (C	N															
USE	SAMPLE ID	DATE	TIME	- MATRIX	OF CONT.	dun	D d	Lie Lie	HdT	Meta	NS															
1	Jet-Boat-12-(0.0'-0.25')	8/8/2014	10:20	Soil	1	1	Ì		X	x	X				Parenta Stormania an			ogenetisten ogenetisten ogenetisten ogenetisten og som som som som som som som som som som								
2	Jet-Boat-12-(1.0')	8/8/2014	10:35	Soil	1	1			X	X																
3	Jet-Boat-13-(0.0'-0.25')	8/8/2014	10:40	Soil	1	1			X	x																
4	Jet-Boat-13-(1.0')	8/8/2014	10:55	Soil	1	1			x	x		T														
5	Jet-Boat-14-(0.1'-0.25')	8/8/2014	11:15	Soil	1	1			x	X										Ī						
6	Jet-Boat-14-(1.0')	8/8/2014	11:30	Soil	1	1			X	X																
7	Jet-Boat-15-(0.1'-0.25')	8/8/2014	11:00	Soil	1	1			x	X																
Series in	TEMP-BLANK	÷.													[
				1		İ	1	;	Ì								ĺ	beitepridemoniskan							SCORPORT STATE	
			3494444003037555555555555555555555555555555		· · · · · · · · · · · · · · · · · · ·	t	1				†			<u> </u>	1			*****					<u> </u>			
Relino	uished by: (Signature)	1	· D/ /		Rec	eived b	y: (Sigr	nature//	N Affiliatio	u n)	Anna		4	1	l		J		Date	:	L	Lagranger	Time):	annionatana ana	
	ymila-	Orrin	. Yloche						A 601 - 41	-	nine in the second second second second second second second second second second second second second second s			****	and a state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the			and a state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	D-4-	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.				10500010000000000000000000000000000000	and the second second second second second second second second second second second second second second second	
Relind	quisned by: (Signature)				Kec	eived b	oy: (Sigi	nature//	Amilatic	pr1)									Date				lime	; ,		
Relin	quished by: (Signature)	***		from t	Rec	eived b	oy: (Sigr	nature//	Affiliatio	on)		nodotistiininen soose		***	alden mused at a stranger of a		etatoseanontetatoseana	na production de la construction de	Date		1		Time	1: 	çonursunurationes	
				(Jede		ĵŊ	L	Egy	/	1	er Herrenselsenser					E	:U		8	112	11	Ý		ovi		<u> </u>
				Maren .		J																		06/0	1/10 R	əvision 🤆

*

C 1.

Return to Contents



Page 1 of 1

Return to Contents

Ship Date: 11AUG14 ActWgt: 20.0 LB CAD: 4822189/INET3550 From: (707) 839-0091 Origin ID: EKAA ed 5xx Stan Thiesen Dims: 16 X 15 X 15 IN Freshwater Environmental 78 Sunny Brae Center Delivery Address Bar Code Arcata, CA 95521 J142014061900 SHIP TO: (714) 895-5494 BILL SENDER YTEP Jet-Boat Ref# Don Burley Invoice # Calscience Environmental Laboratory PO# Dept # 7440 Lincoln Way Garden Grove, CA 92841 TUE - 12 AUG 10:30A **PRIORITY OVERNIGHT** TRK# 0201 7708 0665 4002 DSR 92841 **92 APVA** CA-US SNA

:LIENT: Freshwater E	mv11., Services		DATE:	08/12 /	/14
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C - 6.0 °C, not frozen except sediment/tissue) Temperature 3 5 °C - 0.3 °C (CF) = 3 °C Image: Sample (S) Sample (S) outside temperature criteria (PM/APM contacted by:) Sample (S) outside temperature criteria but received on ice/chilled on same day of sampling. Sample (S) Sample (S)					
COOLER	□ No (Not Intact) □ No (Not Intact)	□ Not Present ∠ Not Present	□ N/A	Checked by Checked by	: <u>826</u> : <u>814</u>
SAMPLE CONDITION:			Yes	No	N/A
Chain-Of-Custody (COC) docume COC document(s) received comp	ent(s) received with sam lete # of containers logged in ba	iples sed on sample labels.			
□ No analysis requested. □ Not re	elinquished. 🖊 No date/tir	ne relinquished.			
Sampler's name indicated on CO	C	na an an an an an Anna. Tha an an Anna an Anna			
Sample container label(s) consist					
Sample container(s) intact and go					
Proper containers and sufficient v	olume for analyses req	uesied			
	time		11		
Analyses received within holding	time	imo	y		
Analyses received within holding a Aqueous samples received with	time hin 15-minute holding t	ime	ж		7
Analyses received within holding Aqueous samples received wit	time hin 15-minute holding t issolved Sulfides	ime ved Oxygen			Æ
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for N	time hin 15-minute holding t issolved Sulfides □ Disso C or sample container √olatiles analysis	ime ved Oxygen			Å Å
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free	time hin 15-minute holding t issolved Sulfides □ Disso C or sample container Volatiles analysis of headspace	ime Ived Oxygen			k k
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free Teclar bag(s) free of condensation	time hin 15-minute holding t issolved Sulfides	ime Ived Oxygen			d d d d d
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free Teclar bag(s) free of condensation CONTAINER TYPE:	time hin 15-minute holding t issolved Sulfides □ Disso C or sample container √olatiles analysis of headspace n	ime Ived Oxygen			\$ \$ \$
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free Teclar bag(s) free of condensation CONTAINER TYPE: Solid: Ø4ozCGJ Ø8ozCGJ	time hin 15-minute holding t issolved Sulfides	ime lved Oxygen	 ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠ ∠	□ □ □ Cores [®] □	
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free Teclar bag(s) free of condensation CONTAINER TYPE: <i>CI</i> Solid: 24ozCGJ 28ozCGJ 2 Aqueous: VOA VOAh VOA	time hin 15-minute holding t issolved Sulfides	ime lved Oxygen) □EnCores \GBh □125AGBp	 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	□ □ □ Cores [®] □]1AGBna₂ □	≠ ₽ ₽ ₽
Analyses received within holding Aqueous samples received wit pH Residual Chlorine Di Proper preservation noted on CO Unpreserved vials received for V Volatile analysis container(s) free Teclar bag(s) free of condensation CONTAINER TYPE: Solid: Ø4ozCGJ Ø8ozCGJ Ø Aqueous: VOA VOAh VOA 500AGB 500AGJ 500AGJ	time hin 15-minute holding t issolved Sulfides	ime lved Oxygen) □EnCores GBh □125AGBp CGB □250CGBs	 ✓ □ □ □ □ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ <lp>■ </lp> <lp>■ </lp>	□ □ □ Cores [®] □_ □1AGBna₂ □ □1PBna □!	A A A A A A A A A B S OOPB

APPENDIX E Approved Cultural Resources Management Permit




FOR OFFICIA Date Received Staff Received Copy Sent To:	L USE ONLY :Tribal He Tribal He Tribal Ar Permit A	eritage Prese merican Gra chaeologist opplicant	rvation Offic ves Protectic	er (THPO) on and Rep	patriation Act (I	NAGPRA) Coordinator	
Instructions: (documentatio completed be to complete a 1. Name of Ap	Complete and n to the Yurok fore the applic section and a plicant (Yurok	return this a Tribal Offic ation will be ttach. Fribal Departm	pplication for e in Klamath considered	orm and r n. All info l. Use sep	necessary sup rmation reque arate pages if	pporting sted must be f more space is needed	
Suzanne Fluha	rty, YTEP				5).	, or other Entry,	
2. Mailing Add PO Box 1027,	dress Klamath CA 95	5548			3. Tele 707-4	phone Number 460-3248 ext 1013	
4. Email Address sfluharty@yuroktribe.nsn.us				5. Fax Number 707-482-1722			
a. Descriptic possible).	Proposed Wo on of lands invo The Jet Boat	rk: Ived using th : Tours (APN	e best availa : 140-50-25)	ble locatio	n information (complete all boxes	
i. Latitude and Longitude	ii. UTM Coordinates ZONE 10	iii. PLSS (township, range, and section)	iv. APN (parcel) Number	v. al	Assignment/ lotment	vi. Physical Address	
lat 41.538744 long -124.049133	x: 412471.6 y: 4598868.5	T 13N; R 1E; sec 10	140-50	-25	NA	17635 Hwy 101 Klamath, CA 95548	
 b. Attach a work, def the project Work des U.S. Geo Documen engineer 	map and other ined as the Are ct, such as stag scribed below. L logical Survey of ntation that may drawings.	relevant supp a of Potentia ing, impleme ocation shou (USGS) Topo be attached	borting docur I Effect, whic entation, clea uld preferably ographic Qua could include	nentation h should in nup, or oth be mappe drangle m e photos, p	identifying the nclude all area nerwise include ed on a 1:24,00 ap. Additional parcel maps, s	location of proposed s proposed for use in ed in the Proposed 00, 7.5-Minute Series supporting ite plans, surveys, and	
a. Please ch	oposed Work: eck all that app	ly:					
trenching	road co	nstruction [boring	🔲 drill	ing [plowing	
excavation	road gra	ading [digging	🔲 tun	neling	topsoil stripping	
auguring	backfilli	ng E	blasting	🗌 lan	d leveling	install utility pole	
Contraction of the							





b. Please describe in detail the proposed work, particularly as related to ground-disturbing activities, including the depth and width of each activity as checked in 7a.

In order to complete a Phase II Environmental Site Assessment (ESA) of the current environmental conditions at The Jet Boat Tours property (APN: 140-50-25), YTEP would like to complete field exploration and soil sampling at three localized and identified areas:

- 1) The Above Ground Storage Tank and associated area for storage and delivery of boat fuel,
- 3 borings following fuel hose between storage shed and dock
- 2) The existing Smoke House and associated area, currently used for paint, oils, and chemical storage,
 - 2 borings inside Smoke House

3) The south end of the property, beyond the location of the new septic field where distressed and discolored vegetation is evident from possible used petroleum products being dumped.

• 3 borings by utility pole, approx. 10 feet north of but generally following south property line

In total, 8 borings- all made with 6 " hand auger & small hand trowel to a depth no greater than 5 ft.

8. Date of Proposed V	Work:	
	From: <u>04/01/2014</u> To: <u>09/31/2014</u> M D Y M D Y	
9. Time of Proposed V	Work:	
	10:00 AM to 5:00 PM	
10. Permit Applicant (Contact Information:	
a. Name: Suzanne F	Fluharty	
b. Title: Environmen	ntal Specialist	
c. Organization: Yur	rok Tribe Environmental Program (YTEP)	
d. Telephone numbe	ver(s): 707-482-1822 ext 1013	
e. Email Address: sf	fluharty@yuroktribe.nsn.us	
f. Mailing Address: F	POBox 1027, Klamath CA 95548	
10. Landowner(s) Con	ntact Information:	
a. Name(s): Yurok E	Economic Development Corporation/ Tonya Sangrey, Director	
b. Telephone numbe	er(s): 707.482.0657	
c. Email Address(es	s): TSangrey@yuroktribe.nsn.us	
d. Mailing Address(e	es): 144 Klamath Blvd, Klamath, CA 95548	





12. Project Manager:	
a. Name: Suzanne Fluharty	
b. Title: Environmental Specialist	
c. Organization: YTEP	
d. Telephone number(s): 707-482-1822 ext 1013	
e. Email Address: sfluharty@yuroktribe.nsn.us	
f. Mailing Address: PO Box 1027 Klamath CA 95548	
13. Project Contractor:	
a. Name: Stan Thiesen & Orrin Plocher	
b. Title: Geologist / Environmental Compliance Inspector	
c. Organization: Freshwater Environmental Services (FES)	
d. Telephone number(s): 707-839-0091	
e. Email Address: stan@freshwaterenvironmentalservices.com orrin@freshwaterenvironmentalservices.com	
f. Mailing Address: 78 Sunny Brae, Arcata, CA 95521	
4. Project Inspector: a. Name: Suzanne Fluharty	
b. Title: Environmental Specialist	
c. Organization: YTEP	
d. Telephone number(s): 707-482-1822 ext 1013	
e. Email Address: sfluharty@yuroktribe.nsn.us	
f. Mailing Address: PO Box 1027 Klamath CA 95548	
15. Project Subcontractor:	
b. Title:	
c Organization:	
d. Telephone number(a):	
e. Email Address:	
f. Mailing Address:	





could otherwise be Historic Preservation	e defined as an "undertaking" according to Section 301 (7) of the Nation Act of 1966 as amended through 2006?
Check applicable:	X Yes No
16 To your knowled	Ine is the proposed project in an area that likely contains cultural recourses
16. To your knowled Check applicable:	Ige, is the proposed project in an area that likely contains cultural resources

I, <u>MZANNE FLUHARTY</u> certify that I have read the Cultural Resources (Permit Applicant)

Certification

Protection Ordinance, understand work may not begin until the proposed project is permitted, and agree to the terms and conditions that may be applied to the permit, and have the full consent of all pertaining landowners to conduct the proposed work.

I certify and declare under penalty of perjury that I have read and understand all items on this application and have had the opportunity to consult legal counsel in regard to this Permit. I further declare under penalty of perjury that all information contained herein is true and correct to the best of my knowledge and belief and agree to submit to the jurisdiction of the Yurok Tribal Court for all actions arising out of, or related to, the project associated with this Permit.

(Initial)

Mussen Sliph 1.	7/26-22/11
Signature of Permit Applicant	Date Date

Please deliver this Application to the Yurok Tribal Office in Klamath, CA P.O. Box 1027 Klamath, CA 95548 (707) 482-1377 – Fax Attention: Yurok Tribal Heritage Preservation Officer

Page 4 of 5



Yurok Tribe Cultural Resources Management Permit Application



FOR OFFICIAL USE ONLY

Application Staff Review and Recommendations (Staff has 15 calendar days to review unless requiring input from Culture and/or NAGPRA Committees, then Staff has 15 calendar days from Committee decision date):

Application Reviewed (provide signature)	Reviewing Tribal Staff	Recommendations (attach additional sheets as necessary)		
Robert B. M. Cound, 2-28-14	Tribal Heritage Preservation Officer (THPO)	Monitor regaire	d-see concurrence lettel	
RMS 2-29-14	Native American Graves	Must follow I wal	duertant Discovery Polizy	
Atu MC 3/5/14	Repatriation Act (NAGPRA) Coordinator	10	U	
Adu M. Oly	Tribal Archaeologist	U	11	

If all reviewing Tribal staff determine that the proposed project will have no impact to cultural resources and provide no recommendations that suggest conditions and/or mitigation measures then the Tribal Chair may authorize the Permit Application without Council Consent.

Council Action (if applicable):

Permit Application	Council Agenda Number	Date of Council Session	With Conditions (if yes, explain below)
Approved			Yes
Denied			□ No

Permit Conditions: _____

1		
YAP. OR	311/14	
Signature of Tribal Chair	Date	

Requa USGS Quad Location of Jet Boat Tours Property APN: 140-50-25











YUROK TRIBE 190 Klamath Blvd. PO Box 1027 Klamath, CA. 95548 Phone: (707) 482-1350 Fax: (707) 482-1377

Feb. 26, 2014 To: Robert McConnell Yurok Tribal Heritage Preservation Officer PO Box 1027 Klamath, CA 95548

RE: Yurok Tribe Environmental Program Determination of No Adverse Effect Phase II Brownfields Testing at Jet Boat Tours Property

Legal Description of Project Area: Township 13 N, Range 1 E, Section 10 of the USGS 7.5' Requa, Del Norte, CA quadrangle.

Dear Mr. McConnell,

Please accept this letter as notification that Yurok Tribe Environmental Program, acting on behalf of US Environmental Protection Agency, determines that the proposed project, "*Phase II Brownfields Testing at the Jet Boat Tours Property*" will result in **No Adverse Effect** per 36CFR800 for the National Historic Preservation Act (NHPA). Due to the proximity to a known cultural site we will have an approved Cultural Resources Monitor on site during all ground disturbing activities.

The Yurok Tribe Environmental Program will be conducting site assessment activities on the property. The ground disturbing activities are limited to soil sampling. Soil samples will be obtained with the use of a hand auger at eight (8) locations total. Two (2) samples will be collected from within the footprint of the existing smokehouse. Three (3) samples will be collected from two (2) locations (each):

- 1. downslope of the fuel storage tank, and
- 2. along the south boundary of the property.

Depths of 0-1.5 feet below ground surface (bgs) and again at 3 to 4.5' bgs will be reached using a hand auger. The hand auger to be used has a 3.25" bucket. Borehole diameters are anticipated to be approximately six (6) inches. See attached project maps.

Please indicate your concurrence with the NHPA determination by signing below:

Mamell Concurrence: Kh Kert Date: 2-28-14

Please contact me if require additional information regarding this determination

Sincerely,

Suzanne Fluharty, Environmental Specialist Yurok Tribe Environmental Program

APPENDIX F

Best Management Practices for Small Docks and Vessel Fueling Operations (Provided by YTEP)

Small Dock and Vessel Fueling Operations

Best Management Practices (BMPs)

Diesel fuel, gasoline, oil, antifreeze and other vehicle fluids are toxic to the environment. It is much easier to prevent them from entering ground and surface waters and possibly impacting our fish than it is to remedy the aftereffects. Facilities should develop and implement a spill prevention and control plan. It must document the location of storage, types of containment, dangers associated with a major release of material from the tanks, types of emergency equipment available at each site, and procedures for notifying the appropriate regulatory and emergency agencies.

Fueling Areas

The applicable regulations are promulgated under the oil pollution prevention section of the Clean Water Act regulations (40 CFR 112), also referred to as the Spill Prevention, Control and Counter Measures or SPCC rule. This regulation does not apply to the Jet Boat Tours facilities because the associated AST has a holding capacity estimated at 500 gallons and the SPCC rule applies to facilities with aboveground oil storage capacity greater than 1,320 gallons. However it is prudent that any facility that could reasonably be expected to discharge oil to U.S. waters consider following the rule as guidance for their operating procedures.

Aboveground storage tanks (ASTs) can impact groundwater, but a more immediate threat is to surface water such as streams and rivers. As such, ASTs regulations focus on preventing, controlling and cleaning up accidental spills.

Structural precautions should stop runoff from passing through the fueling areas and prevent contaminants from entering the river system. Consider the following options for preventing pollution:

- Curbs or berms and sloped pavement constructed around the perimeter of the fueling area.
- A cover over the fueling area to help prevent runoff from washing away pollutants.
- Design the containment area to completely contain at least 110% of the tank's volume.
- Post signs instructing fuel pump operators
 - o Do not to overfill gas tanks,
 - o Do not leave vessel unattended while fueling.
 - o Do not top off your fuel tanks.
- Grease, oil, and gasoline spilled on land should be collected and put into the appropriate waste container. Uncollectible residues may be absorbed with "spill-dry" or a similar product and should be disposed of by a waste transporter permitted to handle such wastes.
- A floating containment boom large enough to enclose the area of surface water where a spill may reasonably occur should be kept at hand.

Fueling Procedures

Ship fueling presents special challenges because of the potential for immediate dangers of water pollution. Fueling must be use control measures and practices designed to minimize spills and ensure prompt containment and cleanup if they occur. Fuel spills damage the environment *as well as degrading dock flotation materials.* Train workers in the proper fueling procedures and how to respond

quickly to spills if they do happen so that with the proper equipment pollution can be minimized. Here are the basics for all vessel fueling operations:

- Make sure that dispensing hoses are equipped with automatic shutoff valves and that these valves work.
- Use 'fuel socks/collars' when fueling at the dock to catch drips, from the vent overflow and fuel intake. Petroleum absorbent socks or collars should be stored on docks and available for use anywhere fueling takes place.
- Do not overfill fuel tanks; know the capacity of the tanks before you begin fueling in order to prevent unintentionally overfilling the tank.
- Do not top off fuel tanks. Stop filling the fuel tank when the pump shuts off the first time. "Topping off" increases the chance of spills, especially on warm days when the fuel in the tank will expand and has the potential of overflowing. Besides the risk of fuel washing down into the river, the vapors contribute to air pollution.
- While fueling, examine the surrounding water for the presence of a visible sheen. If a visible sheen is observed, it must be cleaned up immediately.
- Make routine maintenance a part of the fueling procedure. Check for fluid leaks and immediately repair and clean up any leaks that are found.
- Small outboard motors can be removed to upland areas for refueling.

Engine Maintenance and Repair

These operations can be a cause of easily preventable spills.

- **Recycle used motor oil.** In California it is classified as a hazardous waste, so it must be kept from our rivers and streams. When selecting a container to hold used oil, avoid plastic bottles or containers once used for bleach, cleaners, or other automobile fluids such as antifreeze. Also avoid paint cans and other metal containers or containers used for gasoline as residues could contaminate the used oil. Also do not mix other lubricants such as brake fluid or transmission fluid with the used oil. The recycling center may not accept used oil if it is contaminated.
- Oil filters should be crushed or punctured and hot-drained by placing the filter in a funnel over an appropriate waste collection container to allow the excess petroleum product to drain into the container. Drained filters should be collected and recycled when possible. Only filters that have been crushed or hot-drained to remove all excess oil may be disposed of as solid waste.
- Conduct maintenance and repair operations over land, avoid repairs conducted over water.
- Use suction-style oil pumps to drain crankcase oil and use absorbent pads to remove oil from bilges.
- Prevent oil and grease from leaking onto the open ground. Waste engine oil, transmission fluid, hydraulic oil, and gear oil should be stored in a clearly marked non-leaking container on an impermeable surface, and covered in a manner that will prevent storm water from contacting the container until hauled from premises.
- Pressure or steam cleaning should be restricted to an area with an impermeable surface (such as sealed asphalt or sealed concrete) and with a berm which allows the waste water to be contained and collected. Waste water from pressure cleaning can generate industrial waste and if detergents or solvents are used are prohibited to be discharged to surface waters.

Spill Preparation and Procedures

Owners/operators of vessels must ensure that any crew responsible for conducting fueling operations are trained in methods for containment and clean up. If proper fueling procedures are followed, spills are unlikely to occur. However, a facility must be prepared for the unexpected. A well thought out spill

prevention and control plan prepared in accordance with good engineering practices can lessen environmental impacts. It must document the location of storage, types of containment, dangers associated with a major release of material from the tanks, types of emergency equipment available at each site, and procedures for notifying the appropriate regulatory and emergency agencies. The following procedures will minimize environmental damage from accidental spills:

- Develop an Emergency Response Contingency Plan and conduct periodic review sessions to keep your employees updated.
- Post summary of the Contingency Plan. The summary should include the name(s) of clean-up coordinators, the location of clean-up materials, and whom to contact in case of a spill.
- Keep supplies such as rubber mats, drain plugs or temporary berms in the fueling area so storm drains can be blocked immediately if a spill occurs. If plugs are used, train employees in advance on when and how to use them properly.
- Assign a person to periodically test the clean-up equipment and maintain its inventory.
- For small spills, cover the fuel with a chemical spill pillow or absorbent material that can be swept or picked up, such as vermiculite or activated charcoal. The absorbent materials used to clean up diesel fuel or solvents must be disposed of properly. **Do not place them in the dumpster.**
- Workers should clean up every spill, no matter how small, immediately and without exception. Instruct workers never to wash spilled materials down a storm drain or sanitary sewer, and never to allow spilled fuel to evaporate (since pollutants will remain on the ground and can be washed into the storm drain, and ultimately into local water courses, with the next rain).

Reporting Spills

Any person, company, or organization responsible for a release or spill to assure that any oil or hazardous substance spill is properly addressed in a manner that prevents further damage to the environment and human health. EPA has determined that the quantities of discharges that may be harmful to public health or the environment under regulation for oil spill reporting does not depend on the specific amount of oil spilled, but on the presence of a visible sheen created by the spilled oil.

Discharges of oil from a properly functioning vessel engine are not deemed to be harmful and, therefore, do not need to be reported, however, oil accumulated in a vessel's bilge is not exempt.

Any person in charge of vessels or facilities that discharge oil is required to report the spill to the federal government. Notify the federal National Response Center (NRC) (call **800-424-8802)** and CA Office of Emergency Response at **800-852-7550** if the amount:

- Violates applicable water quality standards / Clean Water Act (CWA) 40 CFR 110.6
- Causes a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines; or
- Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Small Dock Maintenance

Private docks occupy public waters and extend across lands where their impacts many alter and or harm the local ecology. There are increased costs with all of these options, but they may be offset by longer life expectancy for the dock.

Increase light transmission through the structure to promote native aquatic plant growth that helps maintain local aquatic life and the fish that depends on them. One effective approach is to insure planks are spaced between 1/2 inches and an inch.

Limit impacts from Painting and Seasonal Upkeep

- Minimize or avoid painting, staining, or use of solvents, or soaps when walkways and floats are over water or marshland. Painting or staining do not appear to add any life expectancy to these structures and cleaning with sea water is as effective as the use of soaps or solvents (Maine State Planning Office, 1997).
- Avoid the use of oil-based preservatives such as creosote or pentachlorophenols. Use of these treatments for docks is illegal in most states.
- Avoid the use of Chromated-Copper-Arsenate (CCA) treated materials in fresh water. The wood preservation industry no longer manufactures CCA-treated materials for use in freshwater situations and their use is not acceptable.