



March 2, 2015

Mr. Ross Steenson
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Subject: Stormwater Discharge Exceedance Report (December 11, 2014), Suisun Bay Reserve Fleet, Benicia, California

Dear Mr. Steenson:

On behalf of the United States Department of Transportation Maritime Administration (MARAD), Sustainable Group - Terraphase JV, LLC (SGTJV) has prepared this Exceedance Report for the Suisun Bay Reserve Fleet (SBRF) located in Benicia, California. This letter report was prepared in accordance with the requirements of the SBRF Stormwater Pollution Prevention Plan (SWPPP) dated March 30, 2012 and the State Water Resources Control Board Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 (General Permit) Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities ("Industrial Stormwater General Permit").

This report summarizes the analytical results from the third storm event (December 11, 2014) of the 2014 – 2015 reporting period that exceeded the target concentrations identified in the SWPPP, which were developed previously by the San Francisco Regional Water Quality Control Board (RWQCB) and MARAD. Final analytical results were received on December 31, 2014. This report includes the following:

- Summary of the sampling event on December 11, 2014;
- The analytical results from the sampling event on December 11, 2014 for total petroleum hydrocarbons (TPH) as motor oil (TPHmo) that exceeded their target concentrations;
- The historical analytical data for the vessels including the constituents that exceeded the target concentrations;
- The best management practices (BMPs) implemented prior to the December 11, 2014 sampling event and an evaluation of the effectiveness of the BMPs for reducing runoff concentrations for pollutants of concern; and
- Follow-up activities to address the exceedances.

Sampling Event Summary

Precipitation was recorded at 0.01 inches on December 8th, 0.01 inches on December 9th, and 0.02 inches on December 10th and there was an insufficient amount of surface flow to fill sample containers within the first three hours of the storm event on these days. The total rainfall on December 11th was reported to be 2.78 inches¹ and trained MARAD SBRF sampling personnel collected stormwater runoff samples from seven sampling locations: three retention vessels, three non-retention vessels, and the parking lot. MARAD SBRF personnel collected the first sample at 0800 and the last sample at 0840. The grab samples from the vessels were collected during the first three hours of the storm event (first flush samples were collected) in accordance with the procedure documented in the SWPPP.

MARAD SBRF personnel collected stormwater samples from the vessels' scupper drains after the runoff was routed through the structural treatment measures. The structural treatment measures consisted of metal filter screens, walnut wattles, cocoa mats, perlite wattles, and newly implemented scupper inserts as described in the Best Management Practices section. MARAD SBRF personnel wore disposable, powder-free gloves and changed them at each sampling location. Stormwater runoff was collected into clean five-gallon plastic buckets and then transferred into the appropriate sample containers for analysis. Samples were transported to an analytical laboratory the same day they were collected.

The retention vessel samples were analyzed for the following constituents at a certified analytical laboratory, in accordance with the requirements of the SWPPP:

- pH;
- Specific conductivity;
- Total suspended solids (TSS);
- Total oil and grease;
- Low-level mercury;
- TPHd and TPHmo; and
- CAM 17 metals, total concentrations.

All non-retention vessels and the parking lot were sampled in the first two storm events this wet season. Therefore, samples were only collected from the non-retention vessels and parking lot sample locations that exceeded target levels in the previous storm event. The collected samples were intended to be analyzed for constituents that exceeded target concentrations in the last storm event (i.e., TPHmo). However, the samples were analyzed for oil & grease instead of TPHmo and there was not sufficient sample size remaining to test the samples for TPHmo. The oil & grease results were all non-detect. The non-retention vessels exceeding TPHmo target levels in the previous storm event (11/21/2014) will be sampled during the next storm event. The remainder of this report will only discuss the retention vessels sample results and exceedances.

There were no quality assurance/quality control issues noted by the laboratory that would affect the quality of the data or how the data may be used to make decisions.

¹ The weather station in Benicia, California listed on www.wunderground.com was used to determine the rainfall amount (<http://www.wunderground.com/personal-weather-station/dashboard?ID=KCABENIC8>).

Exceedances Summary

The only constituent detected above the respective target concentration in one or more sampling locations was TPHmo. The three sampling locations, constituents detected above target concentration, the respective analytical results in micrograms per liter (µg/L), and target concentrations are presented in the table below. The results which exceed the applicable target concentrations are highlighted.

Analytical Results – December 11, 2014

Sample Location	Copper (ug/L)	Lead (ug/L)	Nickel (ug/L)	Zinc (ug/L)	TPHd (ug/L)	TPHmo (ug/L)
Cape Bover	40	34	9.3	590	410Y	1,400
Cape Fear	30	17	<5.0	390	270Y	660
Green Mountain State	14	<5.0	<5.0	100	170Y	410
Target Levels	210	290	31	3500	1000	540

Notes and Abbreviations:

Results are presented in micrograms per liter (µg/L).
 Results which exceed the applicable target concentrations are highlighted.
 TPHd = total petroleum hydrocarbons, diesel
 TPHmo = total petroleum hydrocarbons, motor oil

The TPHmo results from the *Cape Bover* (1,400 µg/L) and the *Cape Fear* (660 µg/L), represent exceedances of the TPHmo target concentration (540 µg/L). The exceedances of the TPHmo on the vessels may be from leaking hydraulic oil sources on the vessels, including the winches or cranes. After each rain event MARAD SBRF personnel inspect the vessels, sources, and stormwater to search for leaking equipment in order to secure the leak, drain the oil if the system is not needed again, or place oil-adsorbent mats and/or booms around the source. Any leaking sources are noted in the Corrective Action Log to ensure follow-up on these issues from identification through verification and closure.

Among the December 11, 2014 results, there were no exceedances of the copper, lead, nickel, zinc, or TPHd target concentrations.

Historical Data

The TPHmo concentration in the sample collected from the *Cape Bover* increased from 660 µg/L to 1,400 µg/L relative to March 13, 2012. The TPHmo concentration in the sample collected from the *Cape Fear* increased from <300 µg/L to 660 µg/L relative to April 10, 2012, but decreased from 2,300 µg/L to 660 µg/L relative to January 23, 2012. The TPHmo concentration in the sample from the *Green Mountain State* in December of 2014 was below the contaminant target level.

Historical concentrations of stormwater sample data for the vessels sampled on December 11, 2014 are displayed in the table below.

Historical Analytical Stormwater Data

Vessel Name	Cape Bover	Cape Fear	Green Mt. State	
Contaminant	TPHmo	TPHmo	TPHmo	
Criteria	540	540	540	
Sample Date	3/14/2011	--	<300	
	1/23/2012	--	2,300	
	3/13/2012	660	--	880
	4/10/2012	--	<300	--
	4/25/2014	--	--	<300
	11/21/2014	--	--	<300
	12/11/2014	1,400	660	410

Notes and Abbreviations:

Results are presented in micrograms per liter (µg/L)
 Resulting concentrations over the target levels are in bold and highlighted in grey
 TPHmo = total petroleum hydrocarbons, motor oil

Best Management Practices

During the stormwater monitoring over the last four years, protection of vessels' scupper drains with structural controls has been shown to reduce TPHmo concentrations in stormwater runoff. Structural controls include metal filter screens, cocoa mats, petroleum adsorbent mats, and walnut (for particulates) and perlite wattles (for petroleum hydrocarbons). Recently MARAD SBRF installed scupper drain inserts containing a filtration media blend of activated carbon and zeolites on all retention and non-retention vessels.

To address TPHmo and oil and grease concerns on the vessels, MARAD SBRF has also employed petroleum sorbent booms and pads on and around any leaking hydraulic oil sources (i.e. winches or cranes). The BMPs that are procedural controls employed for TPHmo and oil and grease include the inspection program of the vessels to check for spills and leaks of oil and the observations, notations, and maintenance as part of the corrective action process. Issues identified during inspections or informal vessel work activities that cannot be immediately mitigated are documented in the corrective action log and addressed during follow-up activities.

Other procedural controls or practices for TPHmo and oil and grease concerns include either securing leaking equipment or draining the oil from unnecessary systems; MARAD SBRF has evaluated covering the sources, but many of these sources such as cranes and winches are overhead and part of a larger structure that is not practical to attempt to cover or enclose. An impediment to draining the oil is that all of the oil cannot readily be drained due to the configuration of the reservoir or viscosity of the oil.

MARAD SBRF also conducts a vessel sweeping program to routinely sweep exfoliated and exfoliating paint and particulates off vessel surfaces.

Follow-Up Activities

MARAD SBRF personnel will continue with their vessel sweeping program to remove paint particulates from the decks of the vessels. In addition, the existing structural controls (wattle, cocoa mats, petroleum adsorbent mats, perlite and walnut wattle, and scupper filtration media) will be maintained and if necessary, new or additional wattle, mats, and filtration media will be installed. MARAD SBRF personnel will ensure that the structural controls are secure and stormwater runoff is not able to bypass them prior to entering the scupper drains.

Considering the exceedances of the TPHmo concentrations in stormwater for the *Cape Bover* and the *Cape Fear*, MARAD SBRF personnel will inspect any oil sources to determine which additional or improved controls need to be employed. MARAD will continue to employ the controls and improvements identified above in the BMP section, and will evaluate all sources of oil on the decks and upper surfaces of the vessels, secure/seal any discovered leaks if originating from a drain/bolt, and place absorbent material around the source.

The stormwater treatment vault in the parking lot was inspected in April 2014. In June 2014 a new structural BMP was inserted into the treatment vault to filter and remove debris from parking lot stormwater runoff before the runoff reaches the filtration media. Because parking lot samples have continued to exceed TPHmo target concentrations MARAD SBRF will service the system. Servicing will include cleaning the treatment system vault, the parking lot sump, and the retention trough as well as replacing the filtration media.

Additional stormwater samples will be collected, per the SWPPP, from the *Cape Bover*, the *Cape Fear*, the *Cape Blanco*, the *Cape Breton*, and the *Comet* during the next qualified storm event and submitted to an analytical laboratory for TPHmo analysis.

If you have questions regarding this report, please contact Andrea Brown by phone (707.499.7084) or email (andrea.brown@terrphase.com).

Sincerely,
For Sustainable Group – Terraphase JV, LLC



Andrea Brown, P.E. (C83327)
Project Engineer

Attachments:

Laboratory Analytical Report (December 11, 2014 Storm Event)



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 263274
ANALYTICAL REPORT

Suisun Bay Reserve Fleet
2595 Lake Herman Rd.
Benicia, CA 94510

Project : CLIN 0002
Location : Storm water
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
PARKING LOT	263274-001
CAPE FEAR	263274-002
GREEN MT	263274-003
BLANCO	263274-004
BORDA	263274-005
CAPE BOVER	263274-006
COMET	263274-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 12/31/2014

Will S Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 263274
Client: Suisun Bay Reserve Fleet
Project: CLIN 0002
Location: Storm water
Request Date: 12/11/14
Samples Received: 12/11/14

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 12/11/14. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):

Low recoveries were observed for mercury in the MS/MSD for batch 218637; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Conductivity (SM2510B):

No analytical problems were encountered.

Total Oil & Grease (HEM) (EPA 1664A):

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

Total Suspended Solids (TSS) (SM2540D):

High RPD was observed for total suspended solids in the MS/MSD for batch 218611; the parent sample was not a project sample, and the RPD was acceptable in the BS/BSD. No other analytical problems were encountered.

pH (EPA 9040C):

No analytical problems were encountered.

Low-level Mercury (EPA 1631):

Alpha Analytical Dublin in Dublin, CA performed the analysis (not NELAP certified). Please see the Alpha Analytical Dublin case narrative.

COOLER RECEIPT CHECKLIST



Login # 203274 Date Received 12/11/14 Number of coolers 2
Client SBRF Project SWPPP water sample

Date Opened 12/11 By (print) MC (sign) [signature]
Date Logged in [signature] By (print) I (sign) [signature]

- 1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info
2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)
Bubble Wrap Foam blocks Bags None
Cloth material Cardboard Styrofoam Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C
Type of ice used: Wet Blue/Gel None Temp(°C) 3.2/2.7
Samples Received on ice & cold without a temperature blank; temp. taken with IR gun
Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? YES (NO)
12. Are sample labels present, in good condition and complete? YES NO
13. Do the sample labels agree with custody papers? YES NO
14. Was sufficient amount of sample sent for tests requested? YES NO
15. Are the samples appropriately preserved? YES NO N/A
16. Did you check preservatives for all bottles for each sample? YES NO N/A
17. Did you document your preservative check? YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? YES NO (N/A)
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

#11) - OOG: (1631) Received container w/out double bags

Curtis & Tompkins Sample Preservation for 263274

Sample	pH: <2	>9	>12	Other
-001a	[]	[]	[]	_____
-002a	[]	[]	[]	_____
b	<input checked="" type="checkbox"/>	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
-003a	[]	[]	[]	_____
b	<input checked="" type="checkbox"/>	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
-004a	[]	[]	[]	_____
-005a	[]	[]	[]	_____
-006a	[]	[]	[]	_____
b	<input checked="" type="checkbox"/>	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
-007a	[]	[]	[]	_____

Analyst: MC
 Date: 12/17/14

Detections Summary for 263274

Results for any subcontracted analyses are not included in this summary.

Client : Suisun Bay Reserve Fleet
 Project : CLIN 0002
 Location : Storm water

Client Sample ID : PARKING LOT Laboratory Sample ID : 263274-001

No Detections

Client Sample ID : CAPE FEAR Laboratory Sample ID : 263274-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	270	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	660		300	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Barium	30		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Copper	30		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Lead	17		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Zinc	390		20	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Specific Conductance	27		1.0	umhos/cm	TOTAL	1.000	SM2510B	METHOD
pH	5.6		1.0	SU	TOTAL	1.000	EPA 9040C	METHOD
Total Suspended Solids	22		5	mg/L	TOTAL	1.000	SM2540D	METHOD

Client Sample ID : GREEN MT Laboratory Sample ID : 263274-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	170	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	410		300	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Barium	160		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Copper	14		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Zinc	100		20	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Specific Conductance	13		1.0	umhos/cm	TOTAL	1.000	SM2510B	METHOD
pH	5.6		1.0	SU	TOTAL	1.000	EPA 9040C	METHOD
Total Suspended Solids	12		5	mg/L	TOTAL	1.000	SM2540D	METHOD

Client Sample ID : BLANCO Laboratory Sample ID : 263274-004

No Detections

Client Sample ID : BORDA Laboratory Sample ID : 263274-005

No Detections

Client Sample ID : CAPE BOVER

Laboratory Sample ID :

263274-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	410	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	1,400		300	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Barium	860		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	7.3		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Copper	40		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Lead	34		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Molybdenum	6.7		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	9.3		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Vanadium	9.9		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Zinc	590		20	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Specific Conductance	25		1.0	umhos/cm	TOTAL	1.000	SM2510B	METHOD
pH	5.3		1.0	SU	TOTAL	1.000	EPA 9040C	METHOD
Total Suspended Solids	110		5	mg/L	TOTAL	1.000	SM2540D	METHOD

Client Sample ID : COMET

Laboratory Sample ID :

263274-007

No Detections

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Extractable Hydrocarbons			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	EPA 3520C
Project#:	CLIN 0002	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/11/14
Units:	ug/L	Received:	12/11/14
Diln Fac:	1.000	Prepared:	12/15/14
Batch#:	218506	Analyzed:	12/16/14

Field ID: CAPE FEAR Lab ID: 263274-002
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	270 Y	50
Motor Oil C24-C36	660	300

Surrogate	%REC	Limits
o-Terphenyl	102	66-129

Field ID: GREEN MT Lab ID: 263274-003
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	170 Y	50
Motor Oil C24-C36	410	300

Surrogate	%REC	Limits
o-Terphenyl	98	66-129

Field ID: CAPE BOVER Lab ID: 263274-006
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	410 Y	50
Motor Oil C24-C36	1,400	300

Surrogate	%REC	Limits
o-Terphenyl	98	66-129

Type: BLANK Lab ID: QC769808

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	66-129

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	EPA 3520C
Project#:	CLIN 0002	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	218506
Units:	ug/L	Prepared:	12/15/14
Diln Fac:	1.000	Analyzed:	12/16/14

Type: BS Lab ID: QC769809

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,505	100	61-120

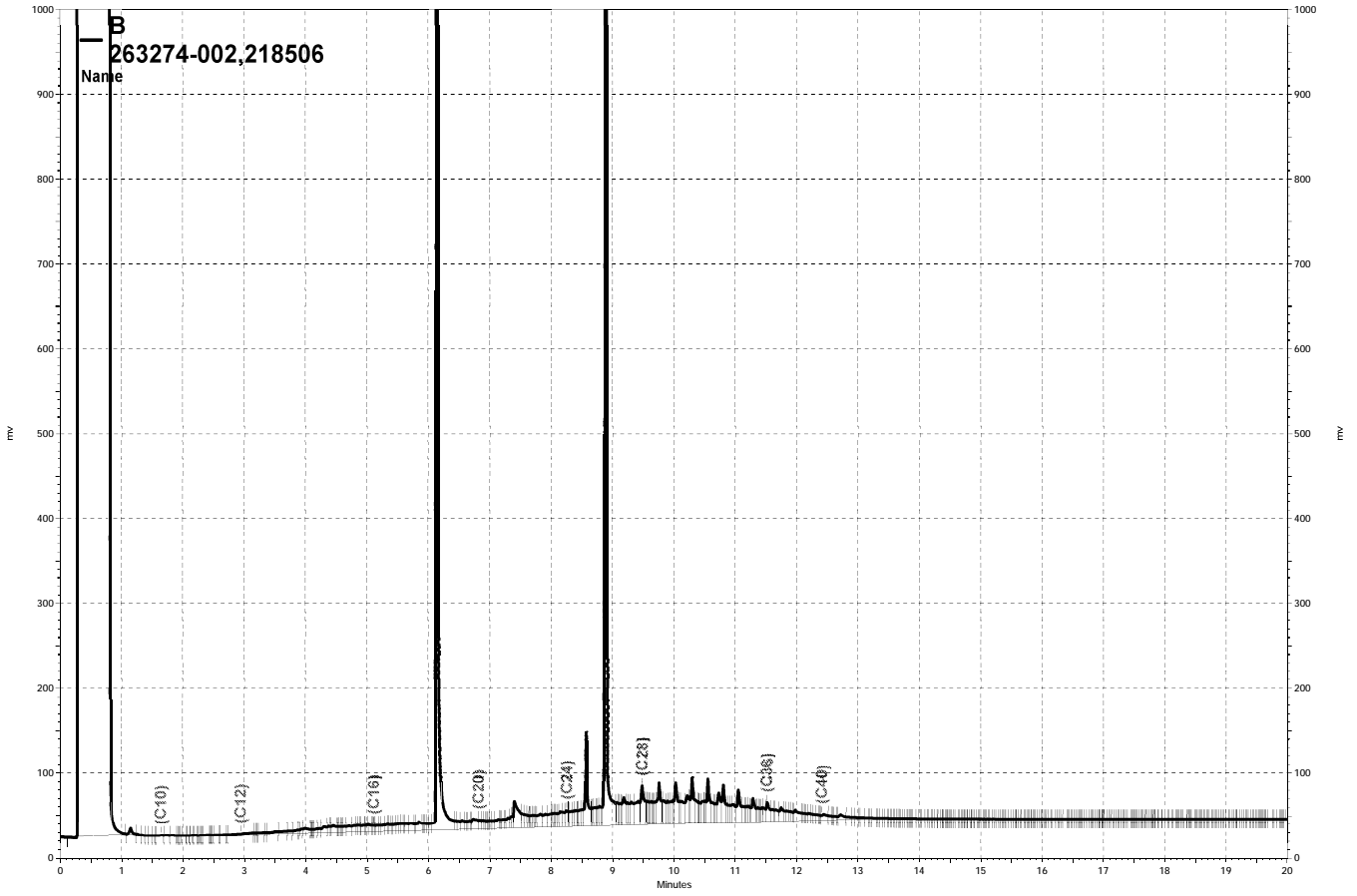
Surrogate	%REC	Limits
o-Terphenyl	102	66-129

Type: BSD Lab ID: QC769810

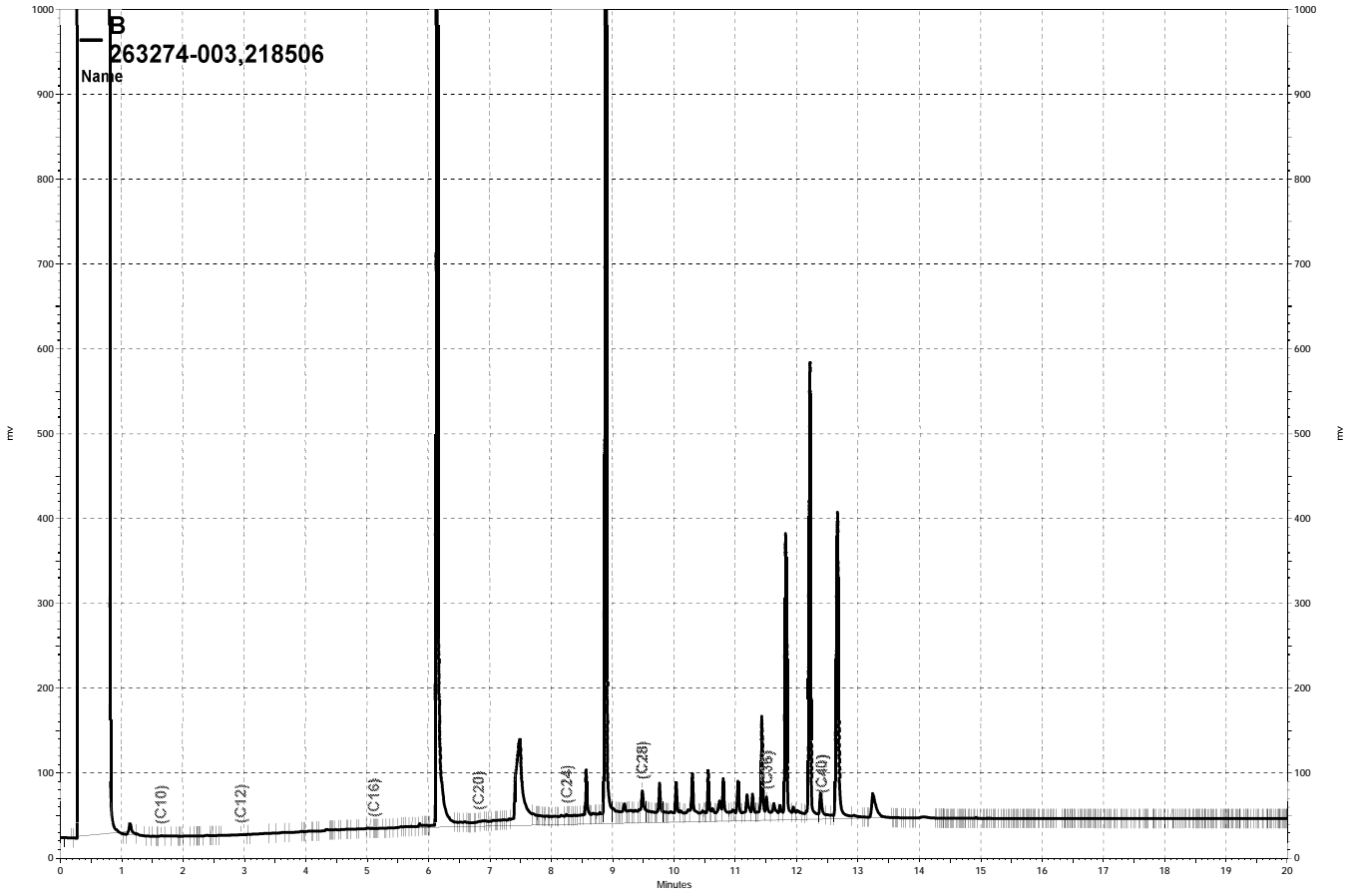
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,259	90	61-120	10	45

Surrogate	%REC	Limits
o-Terphenyl	93	66-129

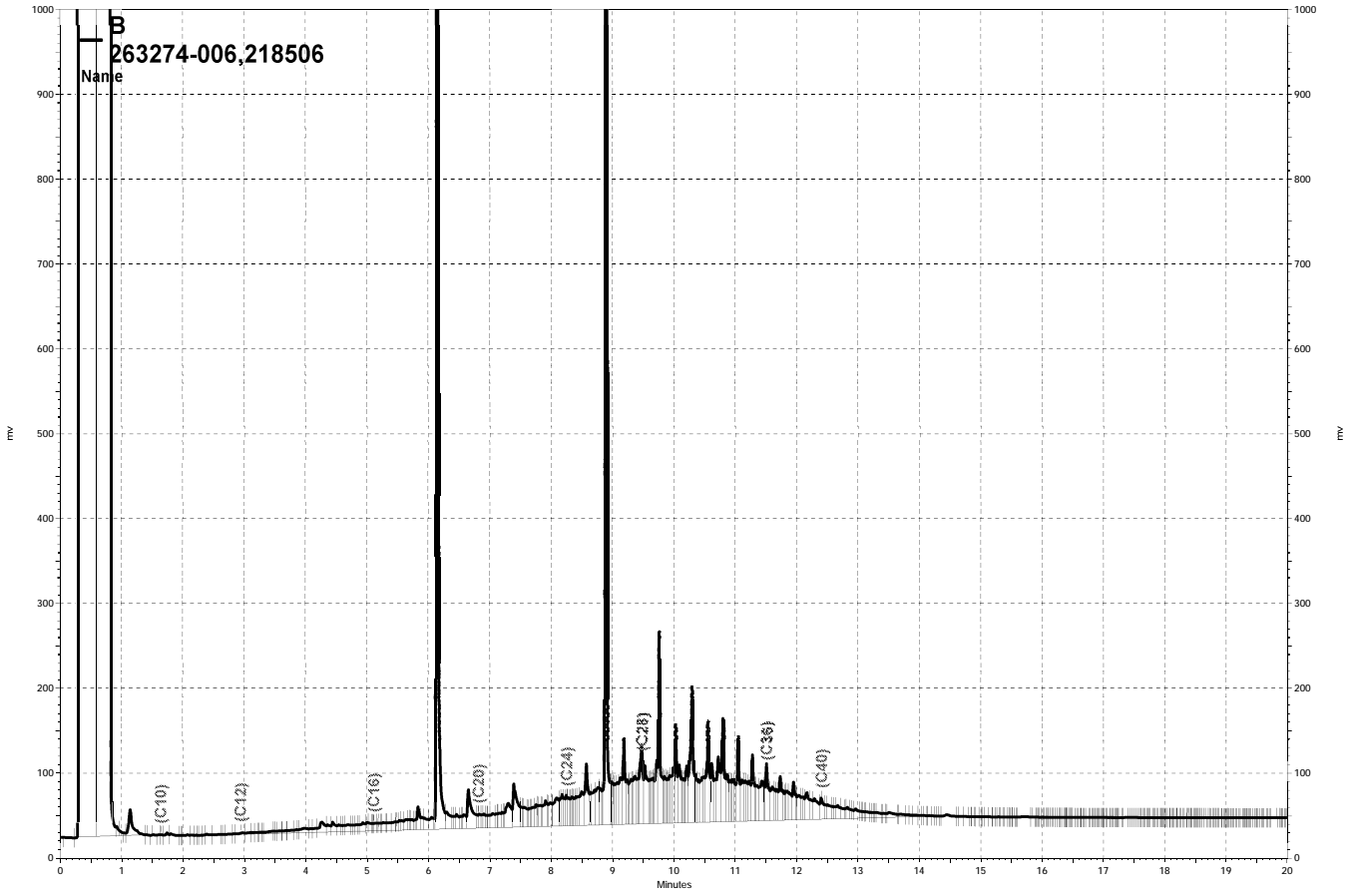
RPD= Relative Percent Difference



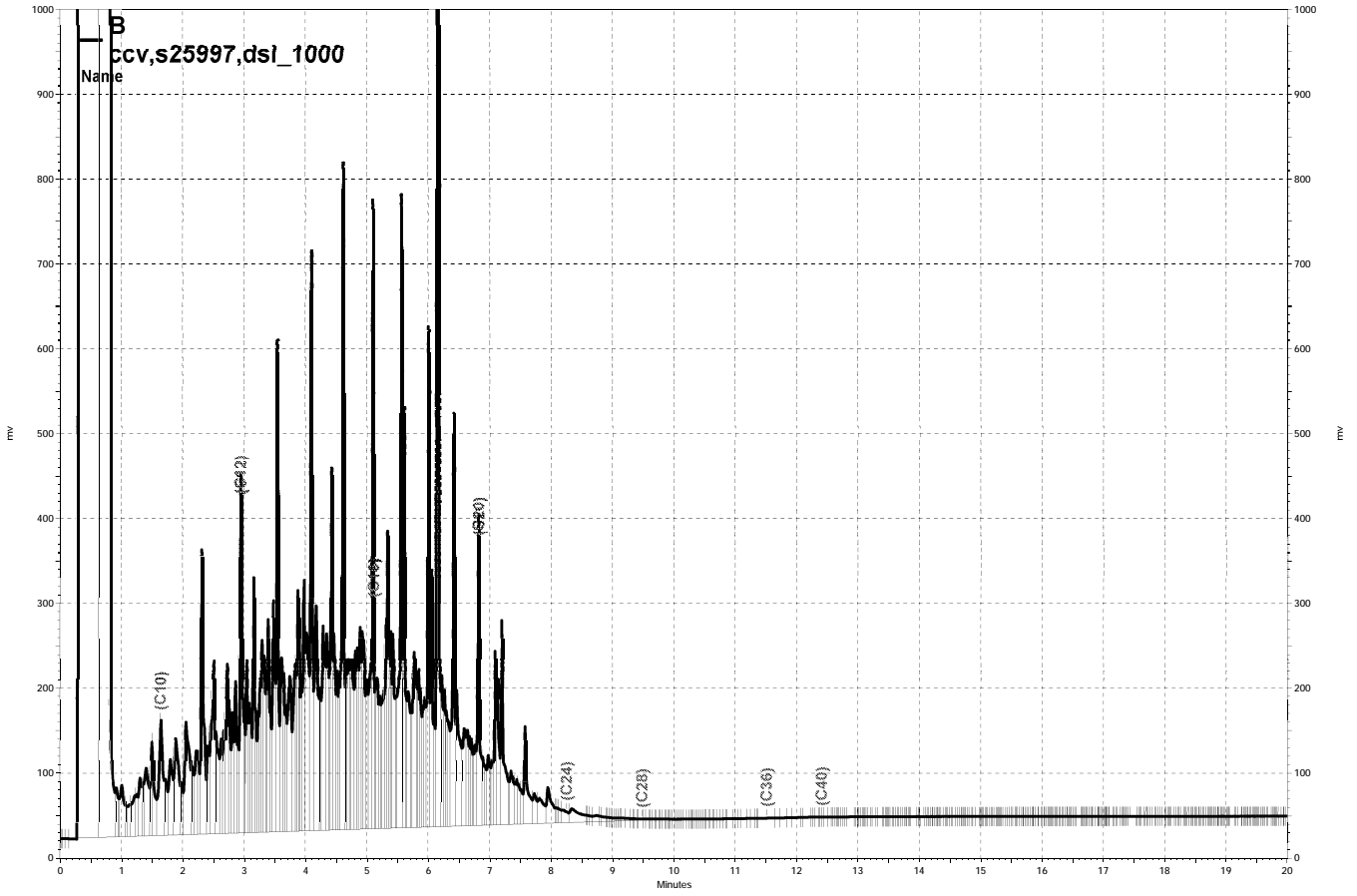
— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\350b015, B



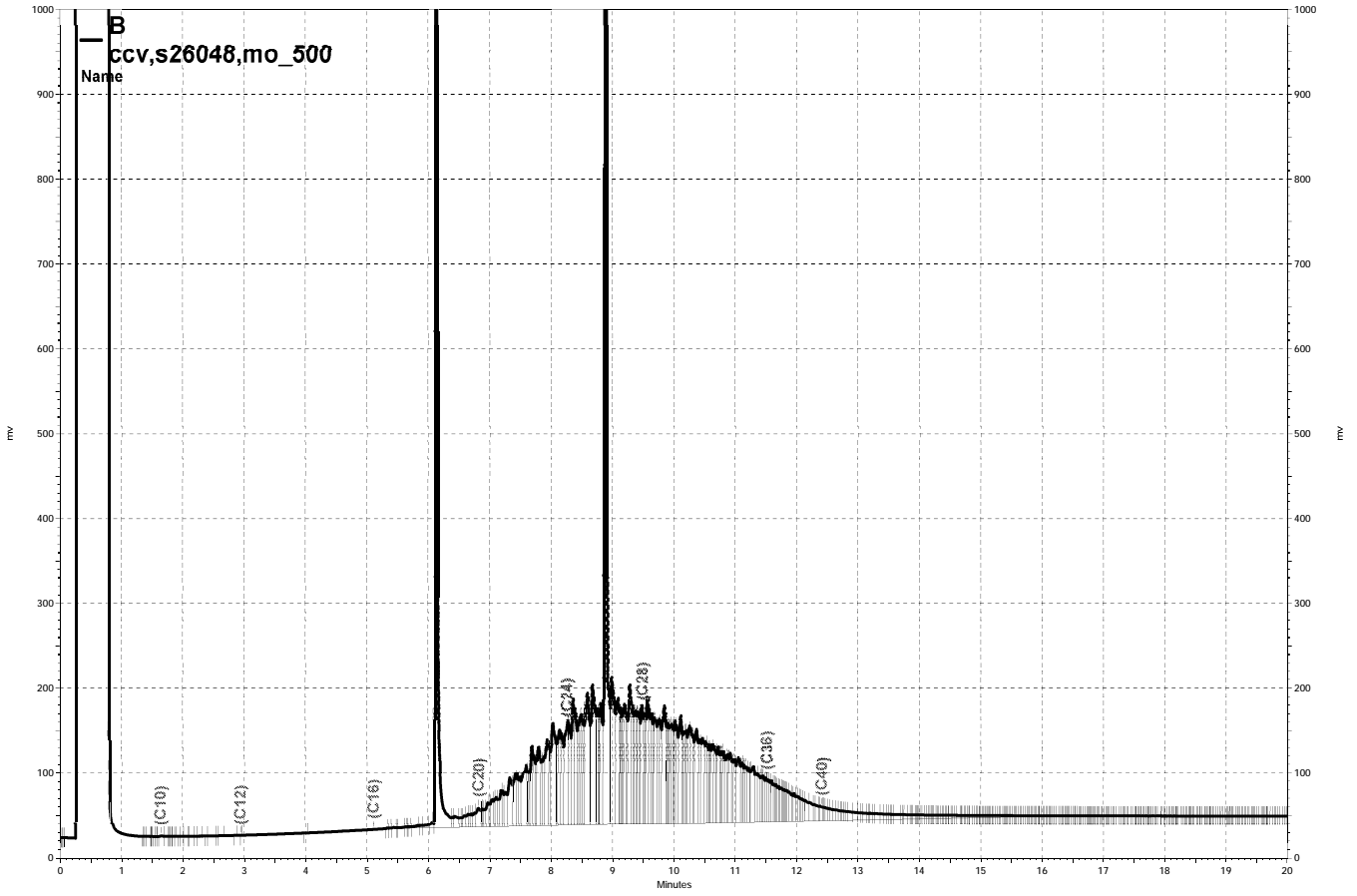
— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\350b016, B



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— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\350b004, B



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California Title 22 Metals

Lab #:	263274	Project#:	CLIN 0002
Client:	Suisun Bay Reserve Fleet	Location:	Storm water
Field ID:	CAPE FEAR	Diln Fac:	1.000
Lab ID:	263274-002	Sampled:	12/11/14
Matrix:	Water	Received:	12/11/14
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Barium	30	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Chromium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Copper	30	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Lead	17	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Mercury	ND	0.20	218637	12/18/14	12/18/14	METHOD	EPA 7470A
Molybdenum	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Nickel	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Selenium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Silver	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Thallium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Zinc	390	20	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	263274	Project#:	CLIN 0002
Client:	Suisun Bay Reserve Fleet	Location:	Storm water
Field ID:	GREEN MT	Diln Fac:	1.000
Lab ID:	263274-003	Sampled:	12/11/14
Matrix:	Water	Received:	12/11/14
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Barium	160	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Chromium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Copper	14	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Lead	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Mercury	ND	0.20	218637	12/18/14	12/18/14	METHOD	EPA 7470A
Molybdenum	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Nickel	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Selenium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Silver	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Thallium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Zinc	100	20	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	263274	Project#:	CLIN 0002
Client:	Suisun Bay Reserve Fleet	Location:	Storm water
Field ID:	CAPE BOVER	Diln Fac:	1.000
Lab ID:	263274-006	Sampled:	12/11/14
Matrix:	Water	Received:	12/11/14
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Barium	860	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Chromium	7.3	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Copper	40	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Lead	34	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Mercury	ND	0.20	218637	12/18/14	12/18/14	METHOD	EPA 7470A
Molybdenum	6.7	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Nickel	9.3	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Selenium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Silver	ND	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Thallium	ND	10	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Vanadium	9.9	5.0	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B
Zinc	590	20	218483	12/15/14	12/16/14	EPA 3010A	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	EPA 3010A
Project#:	CLIN 0002	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC769712	Batch#:	218483
Matrix:	Water	Prepared:	12/15/14
Units:	ug/L	Analyzed:	12/16/14

Analyte	Result	RL
Antimony	ND	10
Arsenic	ND	5.0
Barium	ND	5.0
Beryllium	ND	2.0
Cadmium	ND	5.0
Chromium	ND	5.0
Cobalt	ND	5.0
Copper	ND	5.0
Lead	ND	5.0
Molybdenum	ND	5.0
Nickel	ND	5.0
Selenium	ND	10
Silver	ND	5.0
Thallium	ND	10
Vanadium	ND	5.0
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	EPA 3010A
Project#:	CLIN 0002	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	218483
Units:	ug/L	Prepared:	12/15/14
Diln Fac:	1.000	Analyzed:	12/16/14

Type: BS Lab ID: QC769713

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	92.74	93	78-120
Arsenic	100.0	105.7	106	80-120
Barium	100.0	106.8	107	80-120
Beryllium	100.0	107.9	108	80-120
Cadmium	100.0	113.0	113	80-120
Chromium	100.0	103.7	104	80-120
Cobalt	100.0	101.2	101	80-120
Copper	100.0	99.77	100	79-120
Lead	100.0	105.0	105	80-120
Molybdenum	100.0	110.0	110	80-120
Nickel	100.0	104.3	104	80-120
Selenium	100.0	113.4	113	80-120
Silver	100.0	92.19	92	80-120
Thallium	50.00	56.90	114	80-120
Vanadium	100.0	109.0	109	80-120
Zinc	100.0	111.4	111	80-120

Type: BSD Lab ID: QC769714

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	85.68	86	78-120	8	20
Arsenic	100.0	97.64	98	80-120	8	20
Barium	100.0	100.1	100	80-120	6	20
Beryllium	100.0	100.4	100	80-120	7	20
Cadmium	100.0	104.8	105	80-120	8	20
Chromium	100.0	96.34	96	80-120	7	20
Cobalt	100.0	93.87	94	80-120	8	20
Copper	100.0	93.08	93	79-120	7	20
Lead	100.0	97.15	97	80-120	8	20
Molybdenum	100.0	101.2	101	80-120	8	20
Nickel	100.0	97.14	97	80-120	7	20
Selenium	100.0	105.0	105	80-120	8	20
Silver	100.0	86.29	86	80-120	7	20
Thallium	50.00	52.49	105	80-120	8	20
Vanadium	100.0	100.9	101	80-120	8	20
Zinc	100.0	103.4	103	80-120	7	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	EPA 3010A
Project#:	CLIN 0002	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	218483
MSS Lab ID:	263156-001	Sampled:	12/08/14
Matrix:	Water	Received:	12/09/14
Units:	ug/L	Prepared:	12/15/14
Diln Fac:	1.000	Analyzed:	12/16/14

Type: MS Lab ID: QC769715

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.348	100.0	100.7	101	76-120
Arsenic	<1.028	100.0	109.5	109	79-126
Barium	10.90	100.0	113.6	103	74-120
Beryllium	<0.1463	100.0	108.6	109	80-122
Cadmium	<0.2822	100.0	108.8	109	76-122
Chromium	1.715	100.0	103.4	102	76-120
Cobalt	<0.8861	100.0	98.47	98	74-120
Copper	0.7448	100.0	102.3	102	74-122
Lead	<1.306	100.0	101.6	102	71-120
Molybdenum	1.936	100.0	114.5	113	78-120
Nickel	1.032	100.0	100.4	99	73-120
Selenium	7.290	100.0	123.5	116	71-127
Silver	2.012	100.0	97.40	95	58-128
Thallium	7.625	50.00	59.92	105	71-120
Vanadium	12.65	100.0	120.5	108	80-120
Zinc	<2.830	100.0	110.2	110	74-123

Type: MSD Lab ID: QC769716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	98.28	98	76-120	2	20
Arsenic	100.0	108.2	108	79-126	1	20
Barium	100.0	111.4	101	74-120	2	25
Beryllium	100.0	105.5	105	80-122	3	20
Cadmium	100.0	107.5	107	76-122	1	20
Chromium	100.0	101.7	100	76-120	2	20
Cobalt	100.0	95.31	95	74-120	3	20
Copper	100.0	101.1	100	74-122	1	21
Lead	100.0	97.65	98	71-120	4	20
Molybdenum	100.0	111.1	109	78-120	3	20
Nickel	100.0	99.90	99	73-120	0	20
Selenium	100.0	122.3	115	71-127	1	35
Silver	100.0	95.71	94	58-128	2	22
Thallium	50.00	58.77	102	71-120	2	20
Vanadium	100.0	118.5	106	80-120	2	20
Zinc	100.0	106.6	107	74-123	3	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	218637
Lab ID:	QC770317	Prepared:	12/18/14
Matrix:	Water	Analyzed:	12/18/14
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	218637
Matrix:	Water	Prepared:	12/18/14
Units:	ug/L	Analyzed:	12/18/14
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC770319	2.500	2.664	107	80-120		
BSD	QC770320	2.500	2.512	100	80-120	6	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	218637
Field ID:	ZZZZZZZZZZ	Sampled:	12/04/14
MSS Lab ID:	262992-001	Received:	12/04/14
Matrix:	Water	Prepared:	12/18/14
Units:	ug/L	Analyzed:	12/18/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC770321	<0.04000	2.500	1.284	51 *	57-127		
MSD	QC770322		2.500	1.251	50 *	57-127	3	42

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Total Oil & Grease (HEM)			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	218578
Matrix:	Water	Received:	12/11/14
Units:	mg/L	Analyzed:	12/17/14 10:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
PARKING LOT	SAMPLE	263274-001	ND	4.85	12/11/14 08:00
CAPE FEAR	SAMPLE	263274-002	ND	4.81	12/11/14 08:30
GREEN MT	SAMPLE	263274-003	ND	5.43	12/11/14 08:25
BLANCO	SAMPLE	263274-004	ND	4.81	12/11/14 08:33
BORDA	SAMPLE	263274-005	ND	5.00	12/11/14 08:20
CAPE BOVER	SAMPLE	263274-006	ND	5.00	12/11/14 08:30
COMET	SAMPLE	263274-007	ND	5.00	12/11/14 08:40
	BLANK	QC770102	ND	5.00	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	218578
Units:	mg/L	Analyzed:	12/17/14 10:00

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC770103	40.00	33.70	84	78-114		
BSD	QC770104	40.00	31.40	78	78-114	7	18

RPD= Relative Percent Difference

Conductivity			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	SM2510B
Analyte:	Specific Conductance	Batch#:	218764
Matrix:	Water	Received:	12/11/14
Units:	umhos/cm	Analyzed:	12/22/14 11:51
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
CAPE FEAR	SAMPLE	263274-002	27	1.0	12/11/14 08:30
GREEN MT	SAMPLE	263274-003	13	1.0	12/11/14 08:25
CAPE BOVER	SAMPLE	263274-006	25	1.0	12/11/14 08:30
	BLANK	QC770800	ND	1.0	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Conductivity			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	SM2510B
Analyte:	Specific Conductance	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	218764
MSS Lab ID:	263371-001	Sampled:	12/11/14 17:00
Matrix:	Water	Received:	12/16/14
Units:	umhos/cm	Analyzed:	12/22/14 11:51

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC770801		1,000	969.0		97	90-110		
SDUP	QC770802	51.00		51.50	1.000			1	20

RL= Reporting Limit

RPD= Relative Percent Difference

pH			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 9040C
Analyte:	pH	Batch#:	218393
Matrix:	Water	Received:	12/11/14
Units:	SU	Analyzed:	12/11/14 18:46
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
CAPE FEAR	263274-002	5.6	1.0	12/11/14 08:30
GREEN MT	263274-003	5.6	1.0	12/11/14 08:25
CAPE BOVER	263274-006	5.3	1.0	12/11/14 08:30

RL= Reporting Limit

Batch QC Report

pH			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	EPA 9040C
Analyte:	pH	Units:	SU
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	218393
MSS Lab ID:	263282-014	Sampled:	12/11/14 12:00
Lab ID:	QC769365	Received:	12/11/14
Matrix:	Water	Analyzed:	12/11/14 18:46

MSS Result	Result	RL	RPD	Lim
7.030	7.050	1.000	0	20

RL= Reporting Limit

RPD= Relative Percent Difference

Total Suspended Solids (TSS)			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Sampled:	12/11/14
Matrix:	Water	Received:	12/11/14
Units:	mg/L	Prepared:	12/17/14
Diln Fac:	1.000	Analyzed:	12/18/14
Batch#:	218611		

Field ID	Type	Lab ID	Result	RL
CAPE FEAR	SAMPLE	263274-002	22	5
GREEN MT	SAMPLE	263274-003	12	5
CAPE BOVER	SAMPLE	263274-006	110	5
	BLANK	QC770226	ND	5

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Suspended Solids (TSS)			
Lab #:	263274	Location:	Storm water
Client:	Suisun Bay Reserve Fleet	Prep:	METHOD
Project#:	CLIN 0002	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Batch#:	218611
Field ID:	ZZZZZZZZZZ	Sampled:	12/11/14
MSS Lab ID:	263275-002	Received:	12/11/14
Matrix:	Water	Prepared:	12/17/14
Units:	mg/L	Analyzed:	12/18/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC770227		50.00	51.00	102	80-120		
BSD	QC770228		50.00	49.00	98	80-120	4	5
MS	QC770229	<5.000	50.00	47.00	94	52-132		
MSD	QC770230		50.00	44.00	88	52-132	7 *	5

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Laboratory Job Number 263274

Subcontracted Products

Alpha Analytical Dublin



Alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Bay Area: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

31 December 2014

Curtis & Tompkins, LTD.

Attn: Will Rice

2323 Fifth Street

Berkeley, CA 94710

RE: Stormwater Sampling

Work Order: 14L1255

Enclosed are the results of analyses for samples received by the laboratory on 12/12/14 22:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



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CHEMICAL EXAMINATION REPORT

Page 1 of 4

Curtis & Tompkins, LTD.
2323 Fifth Street
Berkeley, CA 94710
Attn: Will Rice

Report Date: 12/31/14 15:45
Project No: 263274
Project ID: Stormwater Sampling

Order Number
14L1255

Receipt Date/Time
12/12/2014 22:10

Client Code
RP C&T

Client PO/Reference

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Cape Fear	14L1255-01	Water	12/11/14 08:30	12/12/14 22:10
Green Mt	14L1255-02	Water	12/11/14 08:25	12/12/14 22:10
Cape Bover	14L1255-03	Water	12/11/14 08:30	12/12/14 22:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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CHEMICAL EXAMINATION REPORT

Page 2 of 4

Curtis & Tompkins, LTD.
2323 Fifth Street
Berkeley, CA 94710
Attn: Will Rice

Report Date: 12/31/14 15:45
Project No: 263274
Project ID: Stormwater Sampling

Order Number 14L1255 Receipt Date/Time 12/12/2014 22:10 Client Code RP C&T Client PO/Reference

Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
Cape Fear (14L1255-01)	Sample Type: Water			Sampled: 12/11/14 08:30				
Metals by APHA/EPA Methods								
Mercury	EPA 1631E	AL41772	12/17/14 18:00	12/18/14 15:28	1	9.39 ng/l	0.500	
Green Mt (14L1255-02)	Sample Type: Water			Sampled: 12/11/14 08:25				
Metals by APHA/EPA Methods								
Mercury	EPA 1631E	AL41772	12/17/14 18:00	12/18/14 15:36	1	7.64 ng/l	0.500	
Cape Bover (14L1255-03)	Sample Type: Water			Sampled: 12/11/14 08:30				
Metals by APHA/EPA Methods								
Mercury	EPA 1631E	AL41772	12/17/14 18:00	12/18/14 15:45	1	21.7 ng/l	0.500	

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CHEMICAL EXAMINATION REPORT

Page 3 of 4

Curtis & Tompkins, LTD.
 2323 Fifth Street
 Berkeley, CA 94710
 Attn: Will Rice

Report Date: 12/31/14 15:45
 Project No: 263274
 Project ID: Stormwater Sampling

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
14L1255	12/12/2014 22:10	RP C&T	

Metals by APHA/EPA Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL41772 - EPA 1631										
Blank (AL41772-BLK1)				Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	ND	0.500	ng/l							
LCS (AL41772-BS1)				Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	4.72	0.500	ng/l	5.00		94.3	77-123			
Matrix Spike (AL41772-MS1)				Source: 14L0913-01 Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	23.5	0.500	ng/l	25.0	ND	92.7	71-125			
Matrix Spike (AL41772-MS2)				Source: 14L1043-02 Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	23.9	0.500	ng/l	25.0	0.822	92.2	71-125			
Matrix Spike Dup (AL41772-MSD1)				Source: 14L0913-01 Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	23.4	0.500	ng/l	25.0	ND	92.2	71-125	0.555	24	
Matrix Spike Dup (AL41772-MSD2)				Source: 14L1043-02 Prepared: 12/17/14 Analyzed: 12/18/14						
Mercury	23.7	0.500	ng/l	25.0	0.822	91.6	71-125	0.714	24	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Bay Area: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192

CHEMICAL EXAMINATION REPORT

Page 4 of 4

Curtis & Tompkins, LTD.
2323 Fifth Street
Berkeley, CA 94710
Attn: Will Rice

Report Date: 12/31/14 15:45
Project No: 263274
Project ID: Stormwater Sampling

Order Number
14L1255

Receipt Date/Time
12/12/2014 22:10

Client Code
RP C&T

Client PO/Reference

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
PQL Practical Quantitation Limit

Curtis & Tompkins, Ltd.
 Analytical Laboratories, Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510) 486-0900
 (510) 486-0532

14L1255

Project Number: 263274
 Site: Storm water

top 4⁹

Subcontract Laboratory:
 Alpha Analytical Dublin
 6398 Dougherty Rd. #35
 Dublin, CA 94568
 (925) 828-6226
 ATTN: Robbie Phillips

Results due: Report Level: II

Please send report to: Will S Rice (will.rice@ctberk.com)

*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
CAPE FEAR	12/11 08:30	Water	1631	263274-002	
GREEN MT	12/11 08:25	Water	1631	263274-003	
CAPE BOVER	12/11 08:30	Water	1631	263274-006	

Notes:	Relinquished By:	Received By:
	<i>[Signature]</i> Date/Time: 12/12/14 1720	<i>[Signature]</i> Date/Time: 12-12-14 1720
	<i>[Signature]</i> Date/Time: 12-12-14 2010	<i>[Signature]</i> Date/Time: 12-12-14 2110

Signature on this form constitutes a firm Purchase Order for the services requested above.