

**Environmental
Resources
Management**

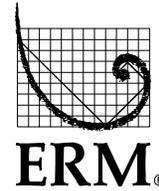
September 22, 2017

Ms. Raji Josiam
U. S. Environmental Protection Agency, Region 6
Superfund Enforcement Section
1445 Ross Avenue
Suite 1200, Mail Code: 6SF-RA
Dallas, Texas 75202-2733

Project No. 0392562

CityCentre Four
840 West Sam Houston
Parkway North, Suite 600
Houston, Texas 77024-3920
(281) 600-1000
(281) 520-4625 (fax)

Subject: Response to USEPA's Request
Immediate Request for Sampling at the French Limited
Superfund Site - Hurricane Harvey
French Limited Superfund Site
Crosby, Texas



Dear Ms. Josiam,

On behalf of FLTG, Inc., ERM is providing this report to the Environmental Protection Agency's (EPA) documenting the results of soil and ground water sampling that was requested by EPA at the French Limited Superfund Site in Crosby, Texas (the Site).

In an email dated September 7, 2017, the EPA requested FLTG, Inc. to conduct soil and ground water sampling at the Site following the floodwater inundation caused by Hurricane Harvey during the week of August 27, 2017. The purpose of the evaluation was to assess whether or not flooding impacts from Hurricane Harvey have resulted in an increase in constituents of concern (COC) in and around the Former Lagoon Area. A Sampling and Analysis Plan (SAP) was approved by the EPA in an email dated September 11, 2017 (see Attachment 1).

Field Activities

One soil and one ground water sample were deemed sufficient by the EPA to perform this assessment. At the instruction of EPA, a shallow composite soil sample was collected from the cap material over the Former Lagoon Area. A ground water sample from the S1 water-bearing zone was collected from a monitor well located outside the SPW and downgradient of the Former Lagoon Area (well S1-108A).

The soil and ground water sampling activities were performed on September 12, 2017 by Lauren Lande and Rob Jaros of ERM. ERM was joined at the Site by Mr. Stephen Pereira of EPA. As per the SAP, a total of one shallow (0-6 inches) composite soil sample and one ground water sample were collected and analyzed for the site-specific COCs. The soil sample was collected from the cap area over the Former Lagoon. The ground water sample was collected from a well completed in the S1 water-bearing zone located outside of the sheet pile wall (SPW) and down gradient of the Former Lagoon Area.

Following site orientation and health and safety discussions, the group mobilized to the Former Lagoon Area north of Gulf Pump Road (GPR) to commence soil sampling. A sampling grid with grid-center sample points was marked and flagged. The surface soil and ground water sampling locations are shown on the figure provided with the SAP (Attachment 1).

The five-point composite soil sample was collected using the 25-foot by 25-foot sampling grid. Each of the five aliquots consisted of a grab sample from the ground surface to six inches below grade. The five soil aliquots were homogenized in a new, re-sealable plastic bag and the appropriate laboratory-supplied jars were filled with the composite soil, and placed on ice. The process was repeated for the soil composite duplicate.

The ground water sample was collected at S1-108A using the sampling procedures utilized for the annual ground water monitoring events and as specified in Section 12.3.4.2 of the *Site Closure Plan*. A peristaltic pump was attached to the dedicated tubing at the well. The well was purged at approximately 200-300 mL/minute and sampled when measurements of pH, dissolved oxygen, and conductivity indicated that stability was generally achieved (less than 10 percent (%) difference between readings). A sample was collected at a flow rate of approximately 100 mL/minute.

The soil and ground water samples were placed in laboratory-supplied containers with the appropriate preservatives (as needed), stored on ice, and delivered to ALS Environmental, Inc. of Houston, Texas, for analysis. Decontamination water and purge water from sampling activities was transferred to the purge water sump located within the Former Lagoon Area.

The soil and ground water samples were analyzed under a 48-hour turnaround time for the COCs, including Volatile Organic Constituents (VOCs) using method SW-846 8260. Additionally, the ground water sample was analyzed for three metals (arsenic, chromium and lead) using Method SW-846 6010 under a 48-hour turnaround.

A photographic log of the sampling activities is provided in Attachment 2.

Evaluation of Results

Table 1 provides a summary of the reported results. As shown, the COCs were reported as *Not Detected* in the surface soil composite sample and the surface soil composite duplicate.

The ground water results reported estimated concentrations of chromium (0.000823 J mg/L) and lead (0.00123 J mg/L) in S1-108A. The duplicate sample of S1-108A reported acetone (0.0093 mg/L) and an estimated concentration of chromium (0.000752 J mg/L). Acetone was reported in the duplicate ground water sample and is considered to be a likely laboratory contaminant. The analytical laboratory report is provided in Attachment 3.

TABLE 1

Summary of Reported Surface Soil and Ground Water - Post-Hurricane Harvey Assessment
 French Limited Superfund Site
 Crosby, Texas

ANALYTE	CAS NUMBER	SOIL			GROUND WATER		
		Lagoon Comp. 1	Lagoon Comp. Dup	UNITS	SI-108A	DUP-09122017	UNITS
		HS17090558-01	HS17090558-02		HS17090558-03	HS17090558-04	
Method: SW6020 - ICP							
Arsenic	7440-38-2	NA	NA		<0.000400	<0.000400	mg/L
Chromium	7440-47-3	NA	NA		0.000823 J	0.000752 J	mg/L
Lead	7439-92-1	NA	NA		0.00123 J	<0.000600	mg/L
Method: SW8260							
1,1-Dichloroethane	75-34-3	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
1,1-Dichloroethene	75-35-4	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
1,2-Dichloroethane	107-06-2	<0.00071	<0.00069	µg/Kg	<0.00020	<0.00020	mg/L
Acetone	67-64-1	<0.0024	<0.0023	µg/Kg	<0.0020	0.0093	mg/L
Benzene	71-43-2	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
Carbon tetrachloride	56-23-5	<0.00071	<0.00069	µg/Kg	<0.00050	<0.00050	mg/L
Chloroethane	75-00-3	<0.00095	<0.00092	µg/Kg	<0.00030	<0.00030	mg/L
Chloroform	67-66-3	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
cis-1,2-Dichloroethene	156-59-2	<0.00095	<0.00092	µg/Kg	<0.00020	<0.00020	mg/L
Ethylbenzene	100-41-4	<0.00083	<0.00080	µg/Kg	<0.00030	<0.00030	mg/L
m,p-Xylene	179601-23-1	<0.0019	<0.0018	µg/Kg	<0.00050	<0.00050	mg/L
Methyl tert-butyl ether	1634-04-4	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
Methylene chloride	75-09-2	<0.0012	<0.0011	µg/Kg	<0.0010	<0.0010	mg/L
Naphthalene	91-20-3	<0.00095	<0.00092	µg/Kg	<0.00030	<0.00030	mg/L
o-Xylene	95-47-6	<0.0012	<0.0011	µg/Kg	<0.00030	<0.00030	mg/L
Tert-butyl alcohol	75-65-0	<0.059	<0.057	µg/Kg	<0.010	<0.010	mg/L
Tetrachloroethene	127-18-4	<0.00083	<0.00080	µg/Kg	<0.00030	<0.00030	mg/L
Toluene	108-88-3	<0.00071	<0.00069	µg/Kg	<0.00020	<0.00020	mg/L
trans-1,2-Dichloroethene	156-60-5	<0.00059	<0.00057	µg/Kg	<0.00020	<0.00020	mg/L
Trichloroethene	79-01-6	<0.00071	<0.00069	µg/Kg	<0.00020	<0.00020	mg/L
Vinyl chloride	75-01-4	<0.00095	<0.00092	µg/Kg	<0.00020	<0.00020	mg/L
Xylenes, Total	1330-20-7	<0.0012	<0.0011	µg/Kg	<0.00030	<0.00030	mg/L
Method: ASTM D2216 - MOISTURE							
Percent Moisture	MOIST	14.6	14.4	wt%			

Bolded results are shown for detected constituents of concern (COC)

<0.0012 – COC not detected at the listed reporting limit

J – estimated concentration

IP – Analysis in progress

NA – Not Applicable, not analyzed

Note: Acetone was reported in the duplicate ground water sample and is considered to be a likely laboratory contaminant.

September 22, 2017
Ms. Raji Josiam
U. S. Environmental Protection Agency
Page 4

**Environmental
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Closing

The sampling and analysis program was selected to offer the best overall approach to meet EPA's criteria and objectives for assessing possible releases from the Former Lagoon Area as a result of Hurricane Harvey flooding at the Site. No changes in the concentrations of COCs are apparent as the result of flood water inundation and the reported results are below the Remedial Action Objectives (RAOs) for the Site.

We trust this addresses the need of EPA to assess Site conditions after Hurricane Harvey. Please contact me if you have any further questions or comments at 832-786-5779, or Paul Taylor at 281-892-6598.

Sincerely,

Environmental Resources Management



Fay M. Bourgeois, P.G.
Senior Project Manager

cc: Marilyn C. Long, P.G., Texas Commission on Environmental Quality
Paul Taylor, P.G., BP America, Inc. (PDF copy only)
Stephanie Fiorenza, BP America, Inc. (PDF copy only)
Paul Stefan, P.G., Environmental Resources Management (w/o encl.)

**EPA's Request for Post-Hurricane Harvey Sampling and
Sampling and Analysis Plan**
Attachment 1

September 22, 2017
Project No. 0392562

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

Sandy Denman

From: Josiam, Raji <josiam.raji@epa.gov>
Sent: Monday, September 11, 2017 10:10 AM
To: Fay Bourgeois
Cc: Marilyn Long (marilyn.long@tceq.texas.gov); Paul Taylor (Paul.Taylor2@bp.com); Paul Stefan; Rob Jaros; Pereira, Stephen
Subject: RE: Immediate Request for Sampling at the French Limited Superfund Site - Hurricane Harvey

Fay

Thanks! Your sampling plan, as outlined below and in the attachments, meets EPA's objectives to determine any impact due to Hurricane Harvey. I agree that S1-108A meets the criteria and also the proposed location for the 25 ft x 25 ft soil sampling location.

When do you plan to sample tomorrow? Stephen Pereira, who is a fellow RPM, is our Sampling Lead for the Site and will be there at the Site during the sampling or at least part of it. He has to be at two other Sites (one in Houston and one in Liberty as well). So trying to coordinate.

Also who would be a good contact for Stephen to contact to coordinate with? Stephen's cell number is 214-755-8616.

*Raji Josiam
Remedial Project Manager
US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202*

*Email: josiam.raji@epa.gov
Direct: 214-665-8529
Fax: 214-665-6660
Superfund: 1-800-533-3508*



From: Fay Bourgeois [mailto:Fay.Bourgeois@erm.com]
Sent: Monday, September 11, 2017 8:43 AM
To: Josiam, Raji <josiam.raji@epa.gov>
Cc: Marilyn Long (marilyn.long@tceq.texas.gov) <marilyn.long@tceq.texas.gov>; Paul Taylor (Paul.Taylor2@bp.com) <Paul.Taylor2@bp.com>; Paul Stefan <Paul.Stefan@erm.com>; Rob Jaros <Rob.Jaros@erm.com>
Subject: FW: Immediate Request for Sampling at the French Limited Superfund Site - Hurricane Harvey
Importance: High

Dear Raji,

FLTG has prepared this Sampling and Analysis plan in response to the EPA's email request for post-Hurricane Harvey soil and ground water sampling at the French Limited Superfund Site (the Site). ERM is prepared to perform the sampling on Tuesday, September 12, 2017 with the written concurrence of EPA on the scope of work.

Purpose:

ERM will collect one composite surface soil sample and one ground water sample from the S1 zone at the Site as per the EPA's request in the email dated September 7, 2017. The purpose of the evaluation is to assess whether or not flooding impacts from Hurricane Harvey have resulted in the release of constituents of concern (COC) from the Former Lagoon Area that could pose a risk to human health and the environment.

Sample Locations:

For ground water, ERM evaluated the EPA's four suggested S1 well locations (S1-031, S1-033, S-135, and S1-118) and other S1 wells locations using EPA's criteria of:

- The well should be downgradient of the sheet pile wall (SPW); and
- The reported COCs should be reported as Not Detected (ND) in previous ground water samples.

In addition, ERM has added a third criterion of being located in an area that is currently protective of the health and safety of our ERM's employees during the sampling event.

ERM reviewed the ground water concentrations for the previous past five years (2013 – 2017) at target well locations and the overall ground water flow direction. With the exception of the reported J-value of TBA in 2015, S1-108A meets the criteria listed above and was deemed to be the best overall location to meet EPA's objectives. The J-value is a laboratory estimated value that is two orders of magnitude lower than the RAO of 2.2 mg/L and TBA was reported as ND for the other four years reviewed. Based upon this evaluation, ERM proposes that one ground water sample will be collected at S1-108 A.

For soil, ERM proposes that one composite surface soil sample be collected within the SPW from the cap in the Former Lagoon Area. The soil and ground water sample locations are shown on Figure 1 (attached).

Sample Collection and Analysis Procedures:

As directed by the EPA, the surface soil sample will be collected at a depth of 0-6 inches and include a four to five point composite grab sample from within 25 ft by 25 ft grid. The ground water sample collection will be performed consistent with the sampling procedures utilized for the annual ground water monitoring events and as specified in Section 12.3.4.2 of the *Site Closure Plan*, as follows:

A peristaltic pump will be attached to the dedicated tubing at the well. The well will be purged at approximately 200-300 mL/minute and sampled when measurements of pH, dissolved oxygen, and conductivity indicate that stability is generally achieved (less than 10 percent (%) difference between readings). Samples will be collected at a flow rate of approximately 100 mL/minute.

The soil and ground water samples will be placed in laboratory-supplied containers with the appropriate preservatives (as needed), stored on ice, and shipped to ALS Environmental, Inc. of Houston, Texas, for analysis. Decontamination water and purge water from sampling activities was collected in five-gallon buckets and transferred to the purge water sump located within the former lagoon area.

The soil and ground water samples will be analyzed under a 48-hour turnaround time for the COCs, including Volatile Organic Constituents (VOCs) using method SW-846 8260. Additionally, the ground water sample will be analyzed for three metals (arsenic, chromium and lead) using Method SW-846 6010 under a 48-hour turnaround.

Data Reporting:

As requested, the electronic analytical data report provided by the laboratory will be submitted to the EPA as soon as ERM receives it and data validation will occur at a later date. ERM will prepare a brief summary report including a summary table of findings and a comparison of the reported concentrations to the appropriate regulatory standards.

Kind regards,

Fay

Fay Bourgeois, P.G.
ERM

CityCentre Four | 840 West Sam Houston Parkway North | Suite 600 Houston, Texas | 77024

Main 281 600 1000 | Direct 832 786 5779 | Cell 713 828 1022 | Fax 281 520 4625
fay.bourgeois@erm.com | www.erm.com



The world's leading sustainability consultancy

From: Josiam, Raji [<mailto:josiam.raji@epa.gov>]

Sent: Thursday, September 07, 2017 12:22 PM

To: Rob Jaros; Fay Bourgeois

Cc: 'Marilyn Long (marilyn.long@tceq.texas.gov)'; 'Paul Taylor (Paul.Taylor2@bp.com)'; Paul Stefan

Subject: Immediate Request for Sampling at the French Limited Superfund Site - Hurricane Harvey

Importance: High

Fay

I left you a voice mail message. Please call me to discuss. I am ccing others so someone can get back to me.

EPA/TCEQ conducted Superfund site inspections over this weekend and I just spoke to the EPA RPM who went to the French Limited Superfund Site and said everything looked fine – fence looked fine and no visual impacts from the flooding. They could not go to the Sikes Site as there was still water in in the gravel road leading to the Site.

Our management requested us today to take samples at our Superfund Sites in Houston area which includes French Limited. They would like us to take upto 4 samples which includes a combination of soil and ground water to see if there is any impact from Hurricane Harvey. **Please let me know today if you will be able to take the samples as specified below in the next few days.** If this timeframe does not work out for you, EPA and its's contractors will sample the site in the next few days.

I recommend taking 1 soil sample and 1 groundwater sample at the site as follows:

Soil Sample - 1: Surface samples (0-6 inches); 4 to 5 point composite grab sample within 25 ft by 25 ft grid – this can be taken on the former French Lagoon capped area.

Groundwater sample – 1: A well that is downgradient that currently does not have hits – possible wells outside the sheet pile wall without hits – S1-031, S1-033, S1-135, S1-118

Please let me know if this doesn't make sense.

The samples need to be sampled for the Site's COCs. The samples need a 48 hr turnaround from the lab. Also please send the lab electronic data package to me as soon as your receive it. You can send the validated results later.

Please let me know if you have questions and we'll discuss. Thanks.

Raji Josiam
Remedial Project Manager

US EPA Region 6
1445 Ross Ave, Suite 1200, 6SF-RA
Dallas, TX 75202

Email: josiam.raji@epa.gov

Direct: 214-665-8529

Fax: 214-665-6660

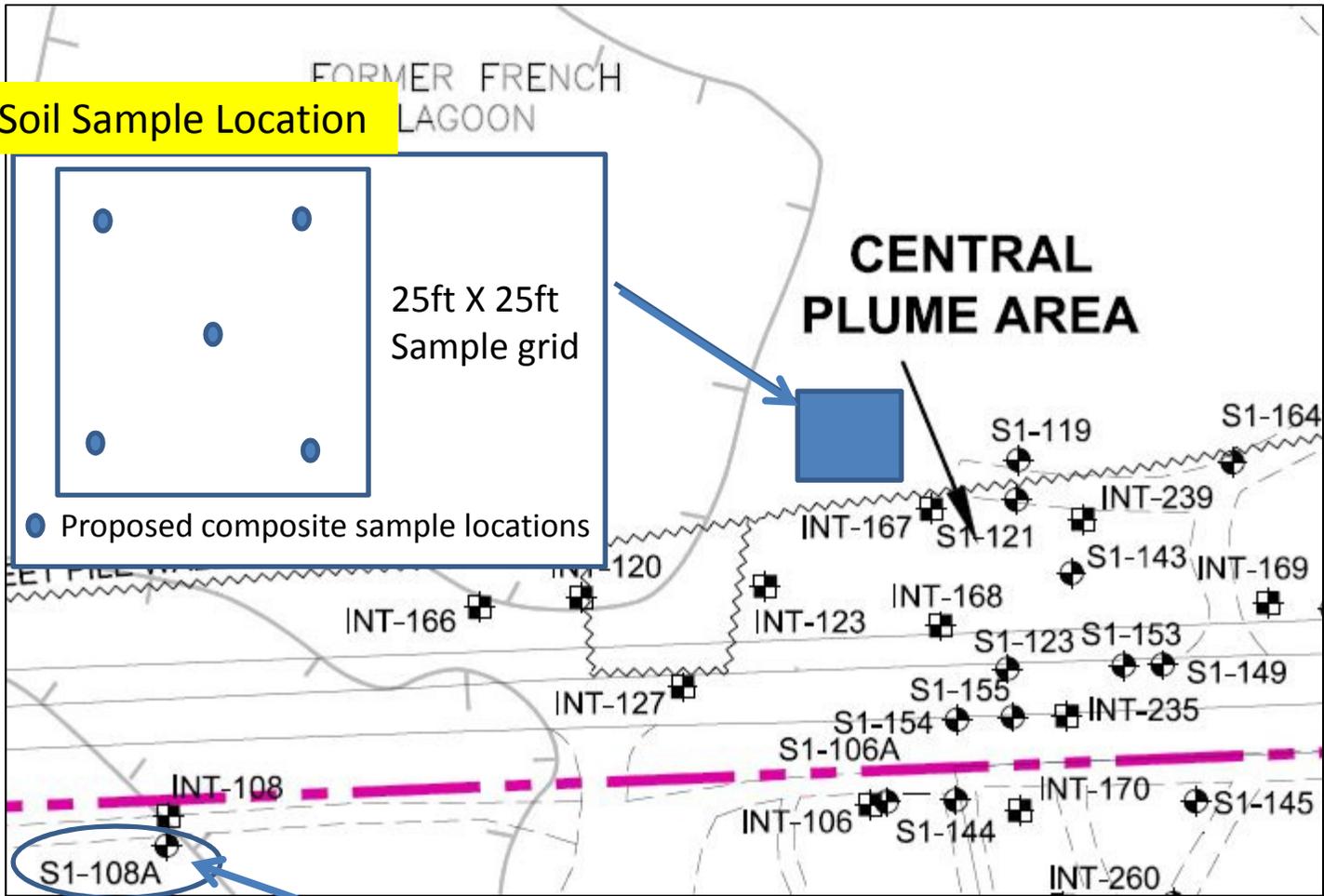
Superfund: 1-800-533-3508



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Please visit ERM's web site: <http://www.erm.com>

Surface Soil Sample Location



Ground Water Sample Location

TABLE 1

Evaluation of S1 Ground Water Sample Location for EPA's Post-Harvey Site Evaluation

French Limited Superfund Site
Crosby, Texas

Well ID	Downgradient of SPW (1)	Four COCs Reported as <i>Not Detected</i> (ND) in Ground Water for Past Five Years (2)	Reasonably Accessible Under Current Site Conditions (3)	Well Location
S1-031	No	No, TBA and benzene reported in 2013 and 2014, ND since 2015	No	West Plume Area
S1-033	No	Yes	No	West Plume Area
S1-135	No	Yes	No	West Plume Area
S1-118	No	No, TBA reported in 2015, ND for other years	Yes	West Plume Area
S1-108A	Yes	No; J-value of 0.022 mg/L for TBA in 2015, ND for other years.	Yes - with some vegetative clearing	Central Plume Area

NOTES:

TBA = Tert-butyl Alcohol

COCs = Constituents of Concern (Four COCs selected to represent the full list of 23 compounds that have been monitored in ground water at the site, including 1,2-Dichloroethane, Benzene, Tert-butyl Alcohol, Vinyl Chloride)

J - value = approximate concentration; result is less than the lowest Laboratory calibration standard

1.) Gradient based upon February 2017 S1 Potentiometric Surface Map (2017 Annual Ground Monitoring Report, French Limited Superfund Site, May 8, 2017)

2.) Based upon the reported concentrations in ground water from the annual ground water sampling events for the past five years, 2012 through 2017.

3.) Areas that are currently not reasonably accessible include locations with excessive vegetative overgrowth and/or soggy/wet/slippery ground areas not supporting safe vehicle access.

Site Photographs
Attachment 2

September 22, 2017
Project No. 0392562

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

Photo Log
Post-Hurricane Harvey Sampling Event
French Limited Superfund Site
Crosby, Texas

Date Photos Taken: 09/12/2017



Photo #1: Soil sampling grid on Former lagoon cap looking North.

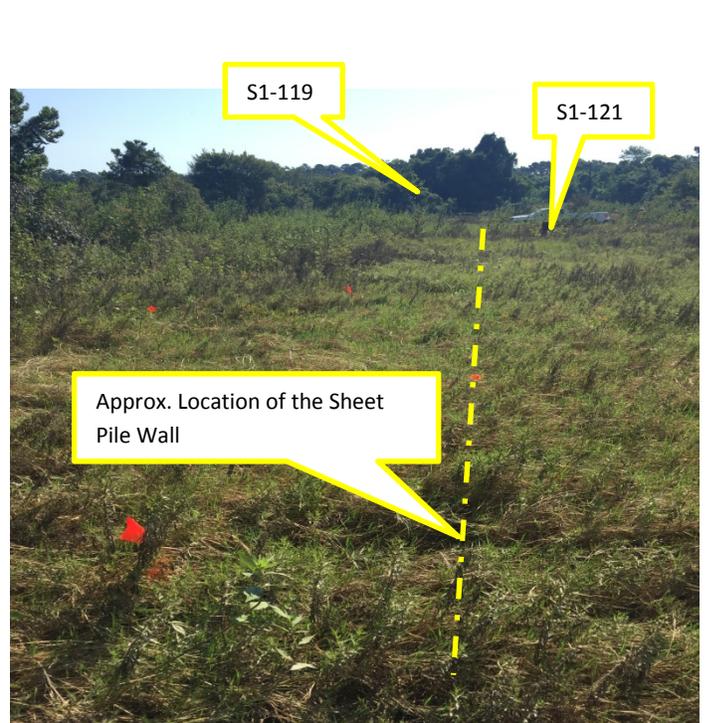


Photo #2: Soil sampling grid located inside sheet pile wall looking East.



Photo #3: S1-108A - Ground water sample location.



Photo #4: Ground water sample collection at S1-108A.

Laboratory Analytical Data
Attachment 3

September 22, 2017
Project No. 0392562

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
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10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
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September 18, 2017

Rob Jaros
Environmental Resources Management
CityCentre Four
840 W. Sam Houston Pkwy., Suite 600
Houston, TX 77024

Work Order: **HS17090558**

Laboratory Results for: **FLTG French Limited**

Dear Rob,

ALS Environmental received 4 sample(s) on Sep 12, 2017 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Jumoke.Lawal
Bernadette A. Fini
Project Manager

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by TCEQ or _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.



Bernadette A. Fini
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: ALS Laboratory Group			LRC Date: 09/18/2017				
Project Name: FLTG French Limited			Laboratory Job Number: HS17090558				
Reviewer Name: Bernadette Fini			Prep Batch Number(s): 119952,119994,R301456,R301473,R301526,R301638,R301688				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?		X			1
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?		X			3
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);

NA = Not Applicable;

NR = Not Reviewed;

R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked)

Laboratory Review Checklist: Supporting Data

Laboratory Name: ALS Laboratory Group		LRC Date: 09/18/2017					
Project Name: FLTG French Limited		Laboratory Job Number: HS17090558					
Reviewer Name: Bernadette Fini		Prep Batch Number(s): 119952,119994,R301456,R301473,R301526,R301638,R301688					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSS?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);

NA = Not Applicable;

NR = Not Reviewed;

R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Data

Laboratory Name: ALS Laboratory Group	LRC Date: 09/18/2017
Project Name: FLTG French Limited	Laboratory Job Number: HS17090558
Reviewer Name: Bernadette Fini	Prep Batch Number(s): 119952,119994,R301456,R301473,R301526,R301638,R301688

ER# ^s	Description
1	Bulk jars were received instead of 5035 Terracore vials.
2	Batch R301456, Volatile Organics Method SW8260, sample HS17090598-01, MS and MSD were performed on unrelated sample. Batch R301638, Volatile Organics Method SW8260, sample HS17090631-06, MSD was performed on unrelated sample.
3	Batch R301456, Volatile Organics Method SW8260, sample HS17090598-01, MS/MSD RPD was performed on unrelated sample. Batch R301638, Volatile Organics Method SW8260, sample HS17090631-06, MS/MSD RPD was performed on unrelated sample.

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
 O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
 NA = Not Applicable;
 NR = Not Reviewed;
 R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Client: Environmental Resources Management
Project: FLTG French Limited
Work Order: HS17090558

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS17090558-01	Lagoon Comp. 1	Soil		12-Sep-2017 10:50	12-Sep-2017 14:50	<input type="checkbox"/>
HS17090558-02	Lagoon Comp. Dup	Soil		12-Sep-2017 12:00	12-Sep-2017 14:50	<input type="checkbox"/>
HS17090558-03	SI-108A	Water		12-Sep-2017 12:30	12-Sep-2017 14:50	<input type="checkbox"/>
HS17090558-04	DUP-09122017	Water		12-Sep-2017 13:00	12-Sep-2017 14:50	<input type="checkbox"/>

Client: Environmental Resources Management
 Project: FLTG French Limited
 Sample ID: Lagoon Comp. 1
 Collection Date: 12-Sep-2017 10:50

ANALYTICAL REPORT
 WorkOrder:HS17090558
 Lab ID:HS17090558-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR			
1,1-Dichloroethane	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
1,1-Dichloroethene	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
1,2-Dichloroethane	U		0.00071	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Acetone	U		0.0024	0.024	mg/Kg-dry	1	13-Sep-2017 12:03
Benzene	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Carbon tetrachloride	U		0.00071	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Chloroethane	U		0.00095	0.012	mg/Kg-dry	1	13-Sep-2017 12:03
Chloroform	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
cis-1,2-Dichloroethene	U		0.00095	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Ethylbenzene	U		0.00083	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
m,p-Xylene	U		0.0019	0.012	mg/Kg-dry	1	13-Sep-2017 12:03
Methyl tert-butyl ether	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Methylene chloride	U		0.0012	0.012	mg/Kg-dry	1	13-Sep-2017 12:03
Naphthalene	U		0.00095	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
o-Xylene	U		0.0012	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Tert-butyl alcohol	U		0.059	0.12	mg/Kg-dry	1	13-Sep-2017 12:03
Tetrachloroethene	U		0.00083	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Toluene	U		0.00071	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
trans-1,2-Dichloroethene	U		0.00059	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Trichloroethene	U		0.00071	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
Vinyl chloride	U		0.00095	0.0024	mg/Kg-dry	1	13-Sep-2017 12:03
Xylenes, Total	U		0.0012	0.0059	mg/Kg-dry	1	13-Sep-2017 12:03
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>95.4</i>			<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 12:03</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>96.6</i>			<i>73-120</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 12:03</i>
<i>Surr: Dibromofluoromethane</i>	<i>99.4</i>			<i>70-130</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 12:03</i>
<i>Surr: Toluene-d8</i>	<i>96.3</i>			<i>82-121</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 12:03</i>
MOISTURE - ASTM D2216		Method:ASTM D2216		Analyst: DFF			
Percent Moisture	14.6		0.0100	0.0100	wt%	1	13-Sep-2017 12:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
 Project: FLTG French Limited
 Sample ID: Lagoon Comp. Dup
 Collection Date: 12-Sep-2017 12:00

ANALYTICAL REPORT
 WorkOrder:HS17090558
 Lab ID:HS17090558-02
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR			
1,1-Dichloroethane	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
1,1-Dichloroethene	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
1,2-Dichloroethane	U		0.00069	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Acetone	U		0.0023	0.023	mg/Kg-dry	1	15-Sep-2017 15:25
Benzene	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Carbon tetrachloride	U		0.00069	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Chloroethane	U		0.00092	0.011	mg/Kg-dry	1	15-Sep-2017 15:25
Chloroform	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
cis-1,2-Dichloroethene	U		0.00092	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Ethylbenzene	U		0.00080	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
m,p-Xylene	U		0.0018	0.011	mg/Kg-dry	1	15-Sep-2017 15:25
Methyl tert-butyl ether	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Methylene chloride	U		0.0011	0.011	mg/Kg-dry	1	15-Sep-2017 15:25
Naphthalene	U		0.00092	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
o-Xylene	U		0.0011	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Tert-butyl alcohol	U		0.057	0.11	mg/Kg-dry	1	15-Sep-2017 15:25
Tetrachloroethene	U		0.00080	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Toluene	U		0.00069	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
trans-1,2-Dichloroethene	U		0.00057	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Trichloroethene	U		0.00069	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
Vinyl chloride	U		0.00092	0.0023	mg/Kg-dry	1	15-Sep-2017 15:25
Xylenes, Total	U		0.0011	0.0057	mg/Kg-dry	1	15-Sep-2017 15:25
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>93.2</i>			<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>15-Sep-2017 15:25</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>95.5</i>			<i>73-120</i>	<i>%REC</i>	<i>1</i>	<i>15-Sep-2017 15:25</i>
<i>Surr: Dibromofluoromethane</i>	<i>97.3</i>			<i>70-130</i>	<i>%REC</i>	<i>1</i>	<i>15-Sep-2017 15:25</i>
<i>Surr: Toluene-d8</i>	<i>100</i>			<i>82-121</i>	<i>%REC</i>	<i>1</i>	<i>15-Sep-2017 15:25</i>
MOISTURE - ASTM D2216		Method:ASTM D2216		Analyst: DFF			
Percent Moisture	14.4		0.0100	0.0100	wt%	1	15-Sep-2017 11:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
 Project: FLTG French Limited
 Sample ID: SI-108A
 Collection Date: 12-Sep-2017 12:30

ANALYTICAL REPORT
 WorkOrder:HS17090558
 Lab ID:HS17090558-03
 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MLL	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP			
1,1-Dichloroethane	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Acetone	U		0.0020	0.0020	mg/L	1	13-Sep-2017 13:01
Benzene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	13-Sep-2017 13:01
Chloroethane	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
Chloroform	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
cis-1,2-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Ethylbenzene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
m,p-Xylene	U		0.00050	0.0020	mg/L	1	13-Sep-2017 13:01
Methyl tert-butyl ether	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Methylene chloride	U		0.0010	0.0020	mg/L	1	13-Sep-2017 13:01
Naphthalene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
o-Xylene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
Tert-butyl alcohol	U		0.010	0.010	mg/L	1	13-Sep-2017 13:01
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
Toluene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
trans-1,2-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Trichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Vinyl chloride	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:01
Xylenes, Total	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:01
Surr: 1,2-Dichloroethane-d4	97.0			70-126	%REC	1	13-Sep-2017 13:01
Surr: 4-Bromofluorobenzene	106			81-113	%REC	1	13-Sep-2017 13:01
Surr: Dibromofluoromethane	105			77-123	%REC	1	13-Sep-2017 13:01
Surr: Toluene-d8	105			82-127	%REC	1	13-Sep-2017 13:01
ICP-MS METALS BY SW6020A		Method:SW6020		Prep:SW3010A / 12-Sep-2017		Analyst: RPM	
Arsenic	U		0.000400	0.00200	mg/L	1	13-Sep-2017 12:28
Chromium	0.000823	J	0.000400	0.00400	mg/L	1	13-Sep-2017 12:28
Lead	0.00123	J	0.000600	0.00200	mg/L	1	13-Sep-2017 12:28

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
 Project: FLTG French Limited
 Sample ID: DUP-09122017
 Collection Date: 12-Sep-2017 13:00

ANALYTICAL REPORT
 WorkOrder:HS17090558
 Lab ID:HS17090558-04
 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP			
1,1-Dichloroethane	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Acetone	0.0093		0.0020	0.0020	mg/L	1	13-Sep-2017 13:25
Benzene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	13-Sep-2017 13:25
Chloroethane	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
Chloroform	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
cis-1,2-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Ethylbenzene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
m,p-Xylene	U		0.00050	0.0020	mg/L	1	13-Sep-2017 13:25
Methyl tert-butyl ether	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Methylene chloride	U		0.0010	0.0020	mg/L	1	13-Sep-2017 13:25
Naphthalene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
o-Xylene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
Tert-butyl alcohol	U		0.010	0.010	mg/L	1	13-Sep-2017 13:25
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
Toluene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
trans-1,2-Dichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Trichloroethene	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Vinyl chloride	U		0.00020	0.0010	mg/L	1	13-Sep-2017 13:25
Xylenes, Total	U		0.00030	0.0010	mg/L	1	13-Sep-2017 13:25
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>98.4</i>			<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 13:25</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>99.2</i>			<i>81-113</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 13:25</i>
<i>Surr: Dibromofluoromethane</i>	<i>103</i>			<i>77-123</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 13:25</i>
<i>Surr: Toluene-d8</i>	<i>98.6</i>			<i>82-127</i>	<i>%REC</i>	<i>1</i>	<i>13-Sep-2017 13:25</i>
ICP-MS METALS BY SW6020A		Method:SW6020		Prep:SW3010A / 13-Sep-2017		Analyst: RPM	
Arsenic	U		0.000400	0.00200	mg/L	1	14-Sep-2017 10:30
Chromium	0.000752	J	0.000400	0.00400	mg/L	1	14-Sep-2017 10:30
Lead	U		0.000600	0.00200	mg/L	1	14-Sep-2017 10:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

WEIGHT LOG

Client: Environmental Resources Management**Project:** FLTG French Limited**WorkOrder:** HS17090558**Batch ID:** 1915 **Method:** VOLATILES BY SW8260C

SamplID	Container	Sample Wt/Vol	Final Volume	Weight Factor	Container Type
HS17090558-01	1	4.932 (g)	5 (mL)	1.01	Bulk (5030B)
HS17090558-02	1	5.12 (g)	5 (mL)	0.98	Bulk (5030B)

Batch ID: 119952 **Method:** ICP-MS METALS BY SW6020A **Prep:** 3010A

SamplID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS17090558-03	1	10	10 (mL)	1

Batch ID: 119994 **Method:** ICP-MS METALS BY SW6020A **Prep:** 3010A

SamplID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS17090558-04	1	10	10 (mL)	1

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 119952	Test Name : ICP-MS METALS BY SW6020A		Matrix: Water			
HS17090558-03	SI-108A	12 Sep 2017 12:30		12 Sep 2017 16:16	13 Sep 2017 12:28	1
Batch ID 119994	Test Name : ICP-MS METALS BY SW6020A		Matrix: Water			
HS17090558-04	DUP-09122017	12 Sep 2017 13:00		13 Sep 2017 11:30	14 Sep 2017 10:30	1
Batch ID R301456	Test Name : VOLATILES BY SW8260C		Matrix: Soil			
HS17090558-01	Lagoon Comp. 1	12 Sep 2017 10:50			13 Sep 2017 12:03	1
Batch ID R301473	Test Name : LOW LEVEL VOLATILES BY SW8260C		Matrix: Water			
HS17090558-03	SI-108A	12 Sep 2017 12:30			13 Sep 2017 13:01	1
HS17090558-04	DUP-09122017	12 Sep 2017 13:00			13 Sep 2017 13:25	1
Batch ID R301526	Test Name : MOISTURE - ASTM D2216		Matrix: Soil			
HS17090558-01	Lagoon Comp. 1	12 Sep 2017 10:50			13 Sep 2017 12:51	1
Batch ID R301638	Test Name : VOLATILES BY SW8260C		Matrix: Soil			
HS17090558-02	Lagoon Comp. Dup	12 Sep 2017 12:00			15 Sep 2017 15:25	1
Batch ID R301688	Test Name : MOISTURE - ASTM D2216		Matrix: Soil			
HS17090558-02	Lagoon Comp. Dup	12 Sep 2017 12:00			15 Sep 2017 11:32	1

WorkOrder: HS17090558
 InstrumentID: ICPMS05
 Test Code: ICP_TW
 Test Number: SW6020
 Test Name: ICP-MS Metals by SW6020A

**METHOD DETECTION /
 REPORTING LIMITS**

Matrix: Aqueous

Units: mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00100	0.00111	0.000400	0.00200
A	Chromium	7440-47-3	0.00100	0.000978	0.000400	0.00400
A	Lead	7439-92-1	0.00100	0.00109	0.000600	0.00200

WorkOrder: HS17090558
 InstrumentID: VOA2
 Test Code: 8260_LL_W
 Test Number: SW8260
 Test Name: Low Level Volatiles by SW8260C

**METHOD DETECTION /
 REPORTING LIMITS**

Matrix: Aqueous

Units: mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	1,1-Dichloroethane	75-34-3	0.00050	0.00060	0.00020	0.0010
A	1,1-Dichloroethene	75-35-4	0.00050	0.00046	0.00020	0.0010
A	1,2-Dichloroethane	107-06-2	0.00050	0.00075	0.00020	0.0010
A	Acetone	67-64-1	0.0010	0.0025	0.0020	0.0020
A	Benzene	71-43-2	0.00050	0.00061	0.00020	0.0010
A	Carbon tetrachloride	56-23-5	0.00050	0.00054	0.00050	0.0010
A	Chloroethane	75-00-3	0.00050	0.00055	0.00030	0.0010
A	Chloroform	67-66-3	0.00050	0.00059	0.00020	0.0010
A	cis-1,2-Dichloroethene	156-59-2	0.00050	0.00056	0.00020	0.0010
A	Ethylbenzene	100-41-4	0.00050	0.00060	0.00030	0.0010
A	m,p-Xylene	179601-23-1	0.0010	0.0014	0.00050	0.0020
A	Methyl tert-butyl ether	1634-04-4	0.00050	0.00057	0.00020	0.0010
A	Methylene chloride	75-09-2	0.00050	0.00062	0.0010	0.0020
A	Naphthalene	91-20-3	0.00050	0.00032	0.00030	0.0010
A	o-Xylene	95-47-6	0.00050	0.00065	0.00030	0.0010
A	Tert-butyl alcohol	75-65-0	0.010	0.014	0.010	0.010
A	Tetrachloroethene	127-18-4	0.00050	0.00071	0.00030	0.0010
A	Toluene	108-88-3	0.00050	0.00069	0.00020	0.0010
A	trans-1,2-Dichloroethene	156-60-5	0.00050	0.00055	0.00020	0.0010
A	Trichloroethene	79-01-6	0.00050	0.00061	0.00020	0.0010
A	Vinyl chloride	75-01-4	0.00050	0.00049	0.00020	0.0010
A	Xylenes, Total	1330-20-7	0.0015	0.0020	0.00030	0.0010
S	1,2-Dichloroethane-d4	17060-07-0	0	0	0	0.0010
S	4-Bromofluorobenzene	460-00-4	0	0	0	0.0010
S	Dibromofluoromethane	1868-53-7	0	0	0	0.0010
S	Toluene-d8	2037-26-5	0	0	0	0.0010

WorkOrder: HS17090558
 InstrumentID: VOA5
 Test Code: 8260_S
 Test Number: SW8260
 Test Name: Volatiles by SW8260C

**METHOD DETECTION /
 REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	1,1-Dichloroethane	75-34-3	0.0012	0.0018	0.00050	0.0050
A	1,1-Dichloroethene	75-35-4	0.0012	0.0017	0.00050	0.0050
A	1,2-Dichloroethane	107-06-2	0.0012	0.0018	0.00060	0.0050
A	Acetone	67-64-1	0.0025	0.0050	0.0020	0.020
A	Benzene	71-43-2	0.0012	0.0019	0.00050	0.0050
A	Carbon tetrachloride	56-23-5	0.0012	0.0017	0.00060	0.0050
A	Chloroethane	75-00-3	0.0012	0.0017	0.00080	0.010
A	Chloroform	67-66-3	0.0012	0.0018	0.00050	0.0050
A	cis-1,2-Dichloroethene	156-59-2	0.0012	0.0019	0.00080	0.0050
A	Ethylbenzene	100-41-4	0.0012	0.0018	0.00070	0.0050
A	m,p-Xylene	179601-23-1	0.0025	0.0037	0.0016	0.010
A	Methyl tert-butyl ether	1634-04-4	0.0012	0.0019	0.00050	0.0050
A	Methylene chloride	75-09-2	0.0012	0.0024	0.0010	0.010
A	Naphthalene	91-20-3	0.0012	0.0021	0.00080	0.0050
A	o-Xylene	95-47-6	0.0012	0.0018	0.0010	0.0050
A	Tert-butyl alcohol	75-65-0	0.050	0.072	0.050	0.10
A	Tetrachloroethene	127-18-4	0.0012	0.0017	0.00070	0.0050
A	Toluene	108-88-3	0.0012	0.0020	0.00060	0.0050
A	trans-1,2-Dichloroethene	156-60-5	0.0012	0.0020	0.00050	0.0050
A	Trichloroethene	79-01-6	0.0012	0.0018	0.00060	0.0050
A	Vinyl chloride	75-01-4	0.0012	0.0018	0.00080	0.0020
A	Xylenes, Total	1330-20-7	0.0038	0.0055	0.0010	0.0050
S	1,2-Dichloroethane-d4	17060-07-0	0	0	0	0
S	4-Bromofluorobenzene	460-00-4	0	0	0	0
S	Dibromofluoromethane	1868-53-7	0	0	0	0
S	Toluene-d8	2037-26-5	0	0	0	0

WorkOrder: HS17090558
 InstrumentID: Balance1
 Test Code: MOIST_ASTM
 Test Number: ASTM D2216
 Test Name: Moisture - ASTM D2216

**METHOD DETECTION /
 REPORTING LIMITS**

Matrix: Solid

Units: wt%

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Percent Moisture	MOIST	0.0100	0.0100	0.0100	0.0100

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: 119952	Instrument: ICPMS05	Method: SW6020
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MBLK	Sample ID: MBLK-119952	Units: mg/L	Analysis Date: 13-Sep-2017 12:00							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225512	PrepDate: 12-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	U	0.00200								
Chromium	U	0.00400								
Lead	U	0.00200								

LCS	Sample ID: LCS-119952	Units: mg/L	Analysis Date: 13-Sep-2017 12:02							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225513	PrepDate: 12-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	0.05223	0.00200	0.05	0	104	80 - 120				
Chromium	0.05225	0.00400	0.05	0	104	80 - 120				
Lead	0.05134	0.00200	0.05	0	103	80 - 120				

MS	Sample ID: HS17081230-11MS	Units: mg/L	Analysis Date: 13-Sep-2017 12:18							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225520	PrepDate: 12-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	0.05232	0.00200	0.05	0.000111	104	80 - 120				
Chromium	0.05104	0.00400	0.05	-0.000211	103	80 - 120				
Lead	0.0501	0.00200	0.05	0.000021	100	80 - 120				

MSD	Sample ID: HS17081230-11MSD	Units: mg/L	Analysis Date: 13-Sep-2017 12:20							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225521	PrepDate: 12-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	0.05063	0.00200	0.05	0.000111	101	80 - 120	0.05232	3.28	20	
Chromium	0.05083	0.00400	0.05	-0.000211	102	80 - 120	0.05104	0.43	20	
Lead	0.05518	0.00200	0.05	0.000021	110	80 - 120	0.0501	9.65	20	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: 119952	Instrument: ICPMS05	Method: SW6020
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PDS	Sample ID: HS17081230-11PDS	Units: mg/L	Analysis Date: 13-Sep-2017 12:22							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225522	PrepDate: 12-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	0.1131	0.00200	0.1	0.000111	113	75 - 125				
Chromium	0.1125	0.00400	0.1	-0.000211	113	75 - 125				
Lead	0.1102	0.00200	0.1	0.000021	110	75 - 125				

SD	Sample ID: HS17081230-11SD	Units: mg/L	Analysis Date: 13-Sep-2017 12:11							
Client ID:	Run ID: ICPMS05_301450	SeqNo: 4225517	PrepDate: 12-Sep-2017 DF: 5							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	RPD Limit	Qual
Arsenic	U	0.0100					0.000111	0	10	
Chromium	U	0.0200					-0.000211	0	10	
Lead	U	0.0100					0.000021	0	10	

The following samples were analyzed in this batch: HS17090558-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: 119994	Instrument: ICPMS05	Method: SW6020
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MBLK	Sample ID: MBLK-119994	Units: mg/L	Analysis Date: 14-Sep-2017 10:08						
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226815	PrepDate: 13-Sep-2017	DF: 1					
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	U	0.00200							
Chromium	U	0.00400							
Lead	U	0.00200							

LCS	Sample ID: LCS-119994	Units: mg/L	Analysis Date: 14-Sep-2017 10:10						
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226816	PrepDate: 13-Sep-2017	DF: 1					
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.04737	0.00200	0.05	0	94.7	80 - 120			
Chromium	0.04632	0.00400	0.05	0	92.6	80 - 120			
Lead	0.04601	0.00200	0.05	0	92.0	80 - 120			

MS	Sample ID: HS17090566-07MS	Units: mg/L	Analysis Date: 14-Sep-2017 10:24						
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226823	PrepDate: 13-Sep-2017	DF: 1					
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.05297	0.00200	0.05	0.00517	95.6	80 - 120			
Chromium	0.04621	0.00400	0.05	-0.000039	92.5	80 - 120			
Lead	0.04619	0.00200	0.05	0.000085	92.2	80 - 120			

MSD	Sample ID: HS17090566-07MSD	Units: mg/L	Analysis Date: 14-Sep-2017 10:26						
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226824	PrepDate: 13-Sep-2017	DF: 1					
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.05334	0.00200	0.05	0.00517	96.3	80 - 120	0.05297	0.7	20
Chromium	0.04791	0.00400	0.05	-0.000039	95.9	80 - 120	0.04621	3.6	20
Lead	0.04629	0.00200	0.05	0.000085	92.4	80 - 120	0.04619	0.212	20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: 119994	Instrument: ICPMS05	Method: SW6020
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PDS	Sample ID: HS17090566-07PDS	Units: mg/L	Analysis Date: 14-Sep-2017 10:28							
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226825	PrepDate: 13-Sep-2017 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Arsenic	0.1072	0.00200	0.1	0.00517	102	75 - 125				
Chromium	0.1009	0.00400	0.1	0	101	75 - 125				
Lead	0.1003	0.00200	0.1	0	100	75 - 125				

SD	Sample ID: HS17090566-07SD	Units: mg/L	Analysis Date: 14-Sep-2017 10:22							
Client ID:	Run ID: ICPMS05_301518	SeqNo: 4226822	PrepDate: 13-Sep-2017 DF: 5							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.005484	0.0100					0.00517	0	10	J
Chromium	U	0.0200					-0.000039	0	10	
Lead	U	0.0100					0.000085	0	10	

The following samples were analyzed in this batch: HS17090558-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301456		Instrument: VOA5		Method: SW8260						
MBLK	Sample ID: VBLKS1-091317	Units: ug/Kg			Analysis Date: 13-Sep-2017 10:30					
Client ID:	Run ID: VOA5_301456	SeqNo: 4225395	PrepDate:	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
Acetone	U	20								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chloroethane	U	10								
Chloroform	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
Ethylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl tert-butyl ether	U	5.0								
Methylene chloride	U	10								
Naphthalene	U	5.0								
o-Xylene	U	5.0								
Tert-butyl alcohol	U	100								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	5.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>48.43</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>96.9</i>	<i>76 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.13</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.3</i>	<i>83 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>50.67</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>80 - 119</i>				
<i>Surr: Toluene-d8</i>	<i>46.6</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>93.2</i>	<i>81 - 118</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301456		Instrument: VOA5			Method: SW8260					
LCS	Sample ID: VLCSS1-091317	Units: ug/Kg			Analysis Date: 13-Sep-2017 09:20					
Client ID:	Run ID: VOA5_301456	SeqNo: 4225394			PrepDate:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	55.46	5.0	50	0	111	76 - 128				
1,1-Dichloroethene	52.01	5.0	50	0	104	72 - 130				
1,2-Dichloroethane	52.28	5.0	50	0	105	77 - 120				
Acetone	96.74	20	100	0	96.7	70 - 130				
Benzene	55.41	5.0	50	0	111	75 - 124				
Carbon tetrachloride	58.04	5.0	50	0	116	72 - 128				
Chloroethane	48.13	10	50	0	96.3	70 - 130				
Chloroform	54.65	5.0	50	0	109	73 - 127				
cis-1,2-Dichloroethene	55.18	5.0	50	0	110	77 - 125				
Ethylbenzene	52.95	5.0	50	0	106	70 - 123				
m,p-Xylene	106	10	100	0	106	77 - 125				
Methyl tert-butyl ether	52.83	5.0	50	0	106	70 - 128				
Methylene chloride	52.47	10	50	0	105	71 - 125				
Naphthalene	61.72	5.0	50	0	123	73 - 128				
o-Xylene	51.58	5.0	50	0	103	78 - 122				
Tert-butyl alcohol	1029	100	1000	0	103	59 - 140				
Tetrachloroethene	48.52	5.0	50	0	97.0	70 - 130				
Toluene	49.67	5.0	50	0	99.3	76 - 122				
trans-1,2-Dichloroethene	55.03	5.0	50	0	110	75 - 128				
Trichloroethene	53.64	5.0	50	0	107	78 - 125				
Vinyl chloride	44.58	2.0	50	0	89.2	70 - 130				
Xylenes, Total	157.6	5.0	150	0	105	77 - 128				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.88</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>76 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.2</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>83 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.77</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>80 - 119</i>				
<i>Surr: Toluene-d8</i>	<i>46.03</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>92.1</i>	<i>81 - 118</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301456		Instrument: VOA5		Method: SW8260						
MS	Sample ID: HS17090598-01MS	Units: ug/Kg			Analysis Date: 13-Sep-2017 12:50					
Client ID:	Run ID: VOA5_301456	SeqNo: 4225573	PrepDate:	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	67	5.6	56.5	0	119	70 - 130				
1,1-Dichloroethene	61.5	5.6	56.5	0	109	70 - 130				
1,2-Dichloroethane	65.53	5.6	56.5	0	116	70 - 130				
Acetone	185.7	23	113	0	164	70 - 130				S
Benzene	68.62	5.6	56.5	0	121	70 - 130				
Carbon tetrachloride	66.33	5.6	56.5	0	117	70 - 130				
Chloroethane	64.91	11	56.5	0	115	70 - 130				
Chloroform	68.28	5.6	56.5	0	121	70 - 130				
cis-1,2-Dichloroethene	66.22	5.6	56.5	0	117	70 - 130				
Ethylbenzene	66.95	5.6	56.5	0	118	70 - 130				
m,p-Xylene	131.3	11	113	0	116	70 - 130				
Methyl tert-butyl ether	65.17	5.6	56.5	0	115	70 - 130				
Methylene chloride	64.61	11	56.5	0	114	70 - 130				
Naphthalene	53.19	5.6	56.5	0	94.1	70 - 130				
o-Xylene	63.54	5.6	56.5	0	112	70 - 130				
Tert-butyl alcohol	1266	110	1130	0	112	59 - 140				
Tetrachloroethene	65.67	5.6	56.5	0	116	70 - 130				
Toluene	63.25	5.6	56.5	0	112	70 - 130				
trans-1,2-Dichloroethene	67.04	5.6	56.5	0	119	70 - 130				
Trichloroethene	66.28	5.6	56.5	0	117	70 - 130				
Vinyl chloride	103.8	2.3	56.5	0	184	70 - 130				S
Xylenes, Total	194.9	5.6	169.5	0	115	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>56.16</i>	<i>0</i>	<i>56.5</i>	<i>0</i>	<i>99.4</i>	<i>70 - 126</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>52.85</i>	<i>0</i>	<i>56.5</i>	<i>0</i>	<i>93.5</i>	<i>72 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>56.92</i>	<i>0</i>	<i>56.5</i>	<i>0</i>	<i>101</i>	<i>70 - 130</i>				
<i>Surr: Toluene-d8</i>	<i>53.96</i>	<i>0</i>	<i>56.5</i>	<i>0</i>	<i>95.5</i>	<i>82 - 121</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301456		Instrument: VOA5		Method: SW8260						
MSD	Sample ID: HS17090598-01MSD	Units: ug/Kg			Analysis Date: 13-Sep-2017 13:13					
Client ID:	Run ID: VOA5_301456	SeqNo: 4225574		PrepDate:		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	67.55	5.8	58.5	0	115	70 - 130	67	0.813	30	
1,1-Dichloroethene	61.45	5.8	58.5	0	105	70 - 130	61.5	0.08	30	
1,2-Dichloroethane	66.64	5.8	58.5	0	114	70 - 130	65.53	1.68	30	
Acetone	293	23	117	0	250	70 - 130	185.7	44.8	30	SR
Benzene	69.44	5.8	58.5	0	119	70 - 130	68.62	1.18	30	
Carbon tetrachloride	68.94	5.8	58.5	0	118	70 - 130	66.33	3.86	30	
Chloroethane	59.43	12	58.5	0	102	70 - 130	64.91	8.82	30	
Chloroform	67.09	5.8	58.5	0	115	70 - 130	68.28	1.75	30	
cis-1,2-Dichloroethene	68.02	5.8	58.5	0	116	70 - 130	66.22	2.67	30	
Ethylbenzene	68.18	5.8	58.5	0	117	70 - 130	66.95	1.83	30	
m,p-Xylene	134.9	12	117	0	115	70 - 130	131.3	2.7	30	
Methyl tert-butyl ether	66.63	5.8	58.5	0	114	70 - 130	65.17	2.21	30	
Methylene chloride	64.11	12	58.5	0	110	70 - 130	64.61	0.77	30	
Naphthalene	47.84	5.8	58.5	0	81.8	70 - 130	53.19	10.6	30	
o-Xylene	66.51	5.8	58.5	0	114	70 - 130	63.54	4.57	30	
Tert-butyl alcohol	1475	120	1170	0	126	59 - 140	1266	15.2	30	
Tetrachloroethene	67.21	5.8	58.5	0	115	70 - 130	65.67	2.31	30	
Toluene	63.81	5.8	58.5	0	109	70 - 130	63.25	0.891	30	
trans-1,2-Dichloroethene	67.45	5.8	58.5	0	115	70 - 130	67.04	0.617	30	
Trichloroethene	66.66	5.8	58.5	0	114	70 - 130	66.28	0.565	30	
Vinyl chloride	81.79	2.3	58.5	0	140	70 - 130	103.8	23.7	30	S
Xylenes, Total	201.4	5.8	175.5	0	115	70 - 130	194.9	3.32	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	55.99	0	58.5	0	95.7	70 - 126	56.16	0.294	30	
<i>Surr: 4-Bromofluorobenzene</i>	54.27	0	58.5	0	92.8	72 - 120	52.85	2.66	30	
<i>Surr: Dibromofluoromethane</i>	57.54	0	58.5	0	98.4	70 - 130	56.92	1.08	30	
<i>Surr: Toluene-d8</i>	55.17	0	58.5	0	94.3	82 - 121	53.96	2.22	30	

The following samples were analyzed in this batch: HS17090558-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301473		Instrument: VOA2		Method: SW8260						
MBLK	Sample ID: VBLKW-170913	Units: ug/L			Analysis Date: 13-Sep-2017 11:47					
Client ID:	Run ID: VOA2_301473	SeqNo: 4225753		PrepDate:		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
Acetone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
Ethylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl tert-butyl ether	U	1.0								
Methylene chloride	U	2.0								
Naphthalene	U	1.0								
o-Xylene	U	1.0								
Tert-butyl alcohol	U	10								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								
trans-1,2-Dichloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
Xylenes, Total	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>45.82</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>91.6</i>	<i>70 - 123</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>48.22</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.4</i>	<i>82 - 115</i>				
<i>Surr: Dibromofluoromethane</i>	<i>50.63</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>73 - 126</i>				
<i>Surr: Toluene-d8</i>	<i>50.33</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>81 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301473		Instrument: VOA2			Method: SW8260					
LCS	Sample ID: VLCSW-170913	Units: ug/L			Analysis Date: 13-Sep-2017 10:59					
Client ID:	Run ID: VOA2_301473	SeqNo: 4225751			PrepDate:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	46.54	1.0	50	0	93.1	71 - 122				
1,1-Dichloroethene	50.1	1.0	50	0	100	70 - 130				
1,2-Dichloroethane	41.84	1.0	50	0	83.7	70 - 124				
Acetone	93.66	2.0	100	0	93.7	70 - 130				
Benzene	46.67	1.0	50	0	93.3	74 - 120				
Carbon tetrachloride	49.43	1.0	50	0	98.9	71 - 125				
Chloroethane	46.12	1.0	50	0	92.2	70 - 130				
Chloroform	45.88	1.0	50	0	91.8	71 - 121				
cis-1,2-Dichloroethene	47.68	1.0	50	0	95.4	75 - 122				
Ethylbenzene	46.45	1.0	50	0	92.9	77 - 117				
m,p-Xylene	91.35	2.0	100	0	91.3	77 - 122				
Methyl tert-butyl ether	42.89	1.0	50	0	85.8	70 - 130				
Methylene chloride	52.73	2.0	50	0	105	70 - 127				
Naphthalene	51.23	1.0	50	0	102	70 - 130				
o-Xylene	45.86	1.0	50	0	91.7	75 - 119				
Tert-butyl alcohol	905.9	10	1000	0	90.6	70 - 130				
Tetrachloroethene	51.41	1.0	50	0	103	76 - 119				
Toluene	45.65	1.0	50	0	91.3	77 - 118				
trans-1,2-Dichloroethene	48.18	1.0	50	0	96.4	72 - 127				
Trichloroethene	46.16	1.0	50	0	92.3	77 - 121				
Vinyl chloride	49.77	1.0	50	0	99.5	70 - 130				
Xylenes, Total	137.2	1.0	150	0	91.5	75 - 122				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>47.9</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>95.8</i>	<i>70 - 130</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.29</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>82 - 115</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.99</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.0</i>	<i>73 - 126</i>				
<i>Surr: Toluene-d8</i>	<i>48.22</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.4</i>	<i>81 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301473		Instrument: VOA2		Method: SW8260						
MS	Sample ID: HS17090558-04MS	Units: ug/L			Analysis Date: 13-Sep-2017 13:49					
Client ID: DUP-09122017	Run ID: VOA2_301473	SeqNo: 4225758		PrepDate:		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	50.84	1.0	50	0	102	70 - 127				
1,1-Dichloroethene	50.41	1.0	50	0	101	70 - 130				
1,2-Dichloroethane	39.88	1.0	50	0	79.8	70 - 127				
Acetone	109.5	2.0	100	9.312	100	70 - 130				
Benzene	46.19	1.0	50	0	92.4	70 - 127				
Carbon tetrachloride	51.73	1.0	50	0	103	70 - 130				
Chloroethane	45.91	1.0	50	0	91.8	70 - 130				
Chloroform	47.83	1.0	50	0	95.7	70 - 125				
cis-1,2-Dichloroethene	49.7	1.0	50	0	99.4	70 - 128				
Ethylbenzene	45.6	1.0	50	0	91.2	70 - 124				
m,p-Xylene	88.89	2.0	100	0	88.9	70 - 130				
Methyl tert-butyl ether	44.4	1.0	50	0	88.8	70 - 130				
Methylene chloride	54.22	2.0	50	0	108	70 - 128				
Naphthalene	49.36	1.0	50	0	98.7	70 - 130				
o-Xylene	44	1.0	50	0	88.0	70 - 124				
Tert-butyl alcohol	977.6	10	1000	0	97.8	70 - 130				
Tetrachloroethene	50.79	1.0	50	0	102	70 - 130				
Toluene	45.69	1.0	50	0	91.4	70 - 123				
trans-1,2-Dichloroethene	50.07	1.0	50	0	100	70 - 130				
Trichloroethene	46.12	1.0	50	0	92.2	70 - 129				
Vinyl chloride	46.34	1.0	50	0	92.7	70 - 130				
Xylenes, Total	132.9	1.0	150	0	88.6	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.05</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.1</i>	<i>70 - 126</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.88</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>81 - 113</i>				
<i>Surr: Dibromofluoromethane</i>	<i>50</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>100.0</i>	<i>77 - 123</i>				
<i>Surr: Toluene-d8</i>	<i>49.41</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.8</i>	<i>82 - 127</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301473		Instrument: VOA2		Method: SW8260						
MSD		Sample ID: HS17090558-04MSD		Units: ug/L		Analysis Date: 13-Sep-2017 14:14				
Client ID: DUP-09122017		Run ID: VOA2_301473		SeqNo: 4225852		PrepDate:		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	49.2	1.0	50	0	98.4	70 - 127	50.84	3.27	20	
1,1-Dichloroethene	49.53	1.0	50	0	99.1	70 - 130	50.41	1.76	20	
1,2-Dichloroethane	41.19	1.0	50	0	82.4	70 - 127	39.88	3.23	20	
Acetone	112.8	2.0	100	9.312	104	70 - 130	109.5	3	20	
Benzene	46.3	1.0	50	0	92.6	70 - 127	46.19	0.238	20	
Carbon tetrachloride	47.32	1.0	50	0	94.6	70 - 130	51.73	8.92	20	
Chloroethane	43.43	1.0	50	0	86.9	70 - 130	45.91	5.57	20	
Chloroform	47.74	1.0	50	0	95.5	70 - 125	47.83	0.181	20	
cis-1,2-Dichloroethene	47.58	1.0	50	0	95.2	70 - 128	49.7	4.35	20	
Ethylbenzene	44.32	1.0	50	0	88.6	70 - 124	45.6	2.84	20	
m,p-Xylene	87.67	2.0	100	0	87.7	70 - 130	88.89	1.38	20	
Methyl tert-butyl ether	43.46	1.0	50	0	86.9	70 - 130	44.4	2.14	20	
Methylene chloride	53.34	2.0	50	0	107	70 - 128	54.22	1.64	20	
Naphthalene	50.02	1.0	50	0	100	70 - 130	49.36	1.31	20	
o-Xylene	43.17	1.0	50	0	86.3	70 - 124	44	1.9	20	
Tert-butyl alcohol	990.3	10	1000	0	99.0	70 - 130	977.6	1.29	20	
Tetrachloroethene	49.68	1.0	50	0	99.4	70 - 130	50.79	2.21	20	
Toluene	43.63	1.0	50	0	87.3	70 - 123	45.69	4.61	20	
trans-1,2-Dichloroethene	48.06	1.0	50	0	96.1	70 - 130	50.07	4.09	20	
Trichloroethene	44.23	1.0	50	0	88.5	70 - 129	46.12	4.17	20	
Vinyl chloride	44.23	1.0	50	0	88.5	70 - 130	46.34	4.65	20	
Xylenes, Total	130.8	1.0	150	0	87.2	70 - 130	132.9	1.55	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>51.15</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>70 - 126</i>	<i>49.05</i>	<i>4.19</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.22</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>81 - 113</i>	<i>50.88</i>	<i>1.3</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>48.16</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.3</i>	<i>77 - 123</i>	<i>50</i>	<i>3.74</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>48.38</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.8</i>	<i>82 - 127</i>	<i>49.41</i>	<i>2.09</i>	<i>20</i>	

The following samples were analyzed in this batch: HS17090558-03 HS17090558-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301638		Instrument: VOA5		Method: SW8260						
MBLK	Sample ID: VBLKS1-091517	Units: ug/Kg			Analysis Date: 15-Sep-2017 14:38					
Client ID:	Run ID: VOA5_301638	SeqNo: 4228944		PrepDate:			DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
Acetone	U	20								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chloroethane	U	10								
Chloroform	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
Ethylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl tert-butyl ether	U	5.0								
Methylene chloride	U	10								
Naphthalene	U	5.0								
o-Xylene	U	5.0								
Tert-butyl alcohol	U	100								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	5.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>44.79</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>89.6</i>	<i>76 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.18</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.4</i>	<i>83 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.04</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>96.1</i>	<i>80 - 119</i>				
<i>Surr: Toluene-d8</i>	<i>50.29</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>81 - 118</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301638		Instrument: VOA5			Method: SW8260					
LCS	Sample ID: VLCSS1-091517	Units: ug/Kg			Analysis Date: 15-Sep-2017 13:04					
Client ID:	Run ID: VOA5_301638	SeqNo: 4228943			PrepDate:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	47.97	5.0	50	0	95.9	76 - 128				
1,1-Dichloroethene	49.18	5.0	50	0	98.4	72 - 130				
1,2-Dichloroethane	49.7	5.0	50	0	99.4	77 - 120				
Acetone	101.4	20	100	0	101	70 - 130				
Benzene	49.4	5.0	50	0	98.8	75 - 124				
Carbon tetrachloride	45.62	5.0	50	0	91.2	72 - 128				
Chloroethane	49.4	10	50	0	98.8	70 - 130				
Chloroform	49.13	5.0	50	0	98.3	73 - 127				
cis-1,2-Dichloroethene	48.99	5.0	50	0	98.0	77 - 125				
Ethylbenzene	48.55	5.0	50	0	97.1	70 - 123				
m,p-Xylene	97.84	10	100	0	97.8	77 - 125				
Methyl tert-butyl ether	50.37	5.0	50	0	101	70 - 128				
Methylene chloride	50.01	10	50	0	100	71 - 125				
Naphthalene	52.64	5.0	50	0	105	73 - 128				
o-Xylene	49.01	5.0	50	0	98.0	78 - 122				
Tert-butyl alcohol	1221	100	1000	0	122	59 - 140				
Tetrachloroethene	44.89	5.0	50	0	89.8	70 - 130				
Toluene	48.68	5.0	50	0	97.4	76 - 122				
trans-1,2-Dichloroethene	47.67	5.0	50	0	95.3	75 - 128				
Trichloroethene	49.03	5.0	50	0	98.1	78 - 125				
Vinyl chloride	48.69	2.0	50	0	97.4	70 - 130				
Xylenes, Total	146.9	5.0	150	0	97.9	77 - 128				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.28</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>76 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.49</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>99.0</i>	<i>83 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.29</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>80 - 119</i>				
<i>Surr: Toluene-d8</i>	<i>48.82</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>97.6</i>	<i>81 - 118</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301638		Instrument: VOA5			Method: SW8260					
MS	Sample ID: HS17090631-06MS	Units: ug/Kg			Analysis Date: 15-Sep-2017 15:48					
Client ID:	Run ID: VOA5_301638	SeqNo: 4229189			PrepDate:			DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	34.84	3.5	35	0	99.5	70 - 130				
1,1-Dichloroethene	33.16	3.5	35	0	94.7	70 - 130				
1,2-Dichloroethane	35.88	3.5	35	0	103	70 - 130				
Acetone	67.2	14	70	0	96.0	70 - 130				
Benzene	35.67	3.5	35	0	102	70 - 130				
Carbon tetrachloride	32.08	3.5	35	0	91.7	70 - 130				
Chloroethane	34.49	7.0	35	0	98.5	70 - 130				
Chloroform	35.44	3.5	35	0	101	70 - 130				
cis-1,2-Dichloroethene	35.19	3.5	35	0	101	70 - 130				
Ethylbenzene	36.64	3.5	35	0	105	70 - 130				
m,p-Xylene	72.2	7.0	70	0	103	70 - 130				
Methyl tert-butyl ether	36.41	3.5	35	0	104	70 - 130				
Methylene chloride	35.9	7.0	35	0	103	70 - 130				
Naphthalene	35.85	3.5	35	0	102	70 - 130				
o-Xylene	36.48	3.5	35	0	104	70 - 130				
Tert-butyl alcohol	817.3	70	700	0	117	59 - 140				
Tetrachloroethene	29.51	3.5	35	0	84.3	70 - 130				
Toluene	36.4	3.5	35	0	104	70 - 130				
trans-1,2-Dichloroethene	35.14	3.5	35	0	100	70 - 130				
Trichloroethene	35.79	3.5	35	0	102	70 - 130				
Vinyl chloride	34.41	1.4	35	0	98.3	70 - 130				
Xylenes, Total	108.7	3.5	105	0	104	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>33.46</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>95.6</i>	<i>70 - 126</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>34.53</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>98.7</i>	<i>72 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>33.56</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>95.9</i>	<i>70 - 130</i>				
<i>Surr: Toluene-d8</i>	<i>35.23</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>101</i>	<i>82 - 121</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301638		Instrument: VOA5		Method: SW8260							
MSD	Sample ID: HS17090631-06MSD	Units: ug/Kg			Analysis Date: 15-Sep-2017 16:12						
Client ID:	Run ID: VOA5_301638	SeqNo: 4229190		PrepDate:		DF: 1					
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1-Dichloroethane	24.29	3.4	34.5	0	70.4	70 - 130	34.84	35.7	30	R	
1,1-Dichloroethene	25.44	3.4	34.5	0	73.7	70 - 130	33.16	26.3	30		
1,2-Dichloroethane	24.14	3.4	34.5	0	70.0	70 - 130	35.88	39.1	30	SR	
Acetone	48.62	14	69	0	70.5	70 - 130	67.2	32.1	30	R	
Benzene	25.36	3.4	34.5	0	73.5	70 - 130	35.67	33.8	30	R	
Carbon tetrachloride	24.71	3.4	34.5	0	71.6	70 - 130	32.08	25.9	30		
Chloroethane	25.76	6.9	34.5	0	74.7	70 - 130	34.49	29	30		
Chloroform	24.3	3.4	34.5	0	70.4	70 - 130	35.44	37.3	30	R	
cis-1,2-Dichloroethene	24.31	3.4	34.5	0	70.5	70 - 130	35.19	36.6	30	R	
Ethylbenzene	24.85	3.4	34.5	0	72.0	70 - 130	36.64	38.3	30	R	
m,p-Xylene	50.04	6.9	69	0	72.5	70 - 130	72.2	36.3	30	R	
Methyl tert-butyl ether	22.98	3.4	34.5	0	66.6	70 - 130	36.41	45.2	30	SR	
Methylene chloride	24.11	6.9	34.5	0	69.9	70 - 130	35.9	39.3	30	SR	
Naphthalene	24.61	3.4	34.5	0	71.3	70 - 130	35.85	37.2	30	R	
o-Xylene	24.85	3.4	34.5	0	72.0	70 - 130	36.48	37.9	30	R	
Tert-butyl alcohol	533	69	690	0	77.2	59 - 140	817.3	42.1	30	R	
Tetrachloroethene	22.4	3.4	34.5	0	64.9	70 - 130	29.51	27.4	30	S	
Toluene	25.37	3.4	34.5	0	73.5	70 - 130	36.4	35.7	30	R	
trans-1,2-Dichloroethene	25.4	3.4	34.5	0	73.6	70 - 130	35.14	32.2	30	R	
Trichloroethene	25.15	3.4	34.5	0	72.9	70 - 130	35.79	34.9	30	R	
Vinyl chloride	26.25	1.4	34.5	0	76.1	70 - 130	34.41	26.9	30		
Xylenes, Total	74.89	3.4	103.5	0	72.4	70 - 130	108.7	36.8	30	R	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>35.1</i>	<i>0</i>	<i>34.5</i>	<i>0</i>	<i>102</i>	<i>70 - 126</i>	<i>33.46</i>	<i>4.79</i>	<i>30</i>		
<i>Surr: 4-Bromofluorobenzene</i>	<i>34.81</i>	<i>0</i>	<i>34.5</i>	<i>0</i>	<i>101</i>	<i>72 - 120</i>	<i>34.53</i>	<i>0.813</i>	<i>30</i>		
<i>Surr: Dibromofluoromethane</i>	<i>33.93</i>	<i>0</i>	<i>34.5</i>	<i>0</i>	<i>98.4</i>	<i>70 - 130</i>	<i>33.56</i>	<i>1.1</i>	<i>30</i>		
<i>Surr: Toluene-d8</i>	<i>34.56</i>	<i>0</i>	<i>34.5</i>	<i>0</i>	<i>100</i>	<i>82 - 121</i>	<i>35.23</i>	<i>1.94</i>	<i>30</i>		

The following samples were analyzed in this batch: HS17090558-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301526 **Instrument:** Balance1 **Method:** ASTM D2216

DUP	Sample ID: HS17090497-12DUP	Units: wt%	Analysis Date: 13-Sep-2017 12:51							
Client ID:	Run ID: Balance1_301526	SeqNo: 4226773	PrepDate: DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Percent Moisture	16.2	0.0100					13.3	19.7	20
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The following samples were analyzed in this batch: HS17090558-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

QC BATCH REPORT

Batch ID: R301688		Instrument: Balance1		Method: ASTM D2216					
DUP	Sample ID: HS17090497-30DUP	Units: wt%		Analysis Date: 15-Sep-2017 11:32					
Client ID:	Run ID: Balance1_301688	SeqNo: 4229732		PrepDate:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Percent Moisture	11.3	0.0100					10.1	11.2	20
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The following samples were analyzed in this batch: HS17090558-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Environmental Resources Management
Project: FLTG French Limited
WorkOrder: HS17090558

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	17-027-0	27-Mar-2018
California	2919 2016-2018	31-Jul-2018
Illinois	004112	09-May-2018
Kentucky	123043	30-Apr-2018
Louisiana	03087 2017-2017	30-Jun-2018
North Carolina	624-2017	31-Dec-2017
North Dakota	R193 2017-2017	30-Apr-2018
Oklahoma	2017-088	31-Aug-2018
Texas	T104704231-17-19	30-Apr-2018

Sample Receipt Checklist

Client Name: ERMSW-HOU
 Work Order: HS17090558

Date/Time Received: **12-Sep-2017 14:50**
 Received by: **JRM**

Checklist completed by: Cesar A. Lira 12-Sep-2017
 eSignature Date

Reviewed by: Bernadette A. Fini 13-Sep-2017
 eSignature Date

Matrices: **Water, soil**

Carrier name: **Client**

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- TX1005 solids received in hermetically sealed vials? Yes No N/A
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No

Temperature(s)/Thermometer(s): 1.2c/1.8c uc/c IR11
 Cooler(s)/Kit(s): 42989
 Date/Time sample(s) sent to storage: 9/12/2017 1535

- Water - VOA vials have zero headspace? Yes No No VOA vials submitted
- Water - pH acceptable upon receipt? Yes No N/A
- pH adjusted? Yes No N/A
- pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

HS17090558

wv

Page 1 of 1

COC ID: 156878

Environmental Resources Management
FLTG French Limited



ALS Project Manager:

Customer Information		Project Information		
Purchase Order	392562-A	Project Name	FLTG French Limited	A 3260_S (Special list)
Work Order		Project Number		B ICP_S_Low (As, Cr, Pb)
Company Name	Environmental Resources Manage	Bill To Company	Environmental Resources Manage	C MOIST_ASTM
Send Report To	Rob Jaros	Invoice Attn	emsoutherndivisionap@erm.com	D 3260_LL_W (Special List)
Address	CityCentre Four 840 W. Sam Houston Pkwy., Suit	Address	CityCentre Four 840 W. Sam Houston Pkwy., Suit	E ICP_TW (As, Cr, Pb)
				F
City/State/Zip	Houston, TX 77024	City/State/Zip	Houston TX 77024	G
Phone	(281) 600-1000	Phone	(281) 600-1000	H
Fax	(281) 600-1001	Fax	(281) 600-1001	I
e-Mail Address	rob.jaros@erm.com	e-Mail Address	emsoutherndivisionap@erm.com	J

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Lagoon Comp. 1	9/12/17	1050	SOIL	8	2	X		X								
2	Lagoon Comp. DUP	9/12/17	1200	SOIL	8	2	X		X								X
3	SI-108A	9/12/17	1230	WATER	1,2,8	4				X	X						
4	DUP - 09122017	9/12/17	1300	WATER	1,2,8	4				X	X						X
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Rob Jaros Shipment Method: Drop off Required Turnaround Time: (Check Box) Other 5-10 Wk Days 3 Wk Days 2 Wk Days 24 Hours Results Due Date: 9/14/17

Relinquished by: [Signature] Date: 9/12/17 Time: 1450 Received by: _____ Notes: _____

Relinquished by: _____ Date: 9/12/17 Time: 1450 Received by (Laboratory): S. [Signature]

Logged by (Laboratory): _____ Date: _____ Time: _____ Checked by (Laboratory): _____

Cooler ID: 22989 Cooler Temp.: 1.2 QC Package: (Check One Box Below) Level II Std GC TERP Checklist Level III Std GC/Run Date TERP Level IV Level IV GC/DIR/CLP Other

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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