Addendum 7 to AOC Work Plan
AST Sludge Removal Action Work Plan (DRAFT)

Introduction

The US Oil Recovery (USOR) Superfund Site consists of two separate parcels, USOR and MCC Recycling (MCC), located at 400 and 200 N. Richey Street, respectively, in Pasadena, Harris County, Texas. The USOR parcel contained a centralized wastewater treatment plant (WWTP) that received and treated oily waste, sludge and organic chemical-bearing wastes. The former owner and operator of the site was US Oil Recovery LP (USOR LP). It operated on the 400 N. Richey property (the "Site") from approximately 2004 to 2010. The Site has a tank farm area containing 32 Above Ground Storage Tanks (ASTs) and six sumps just north of the warehouse and process areas (Figure 1). The removal of liquids and sampling of the sludge from the all the ASTs and sumps was performed under Addendum 4 to the AOC Work Plan. Thirty (30) of the ASTs and three sumps contain sludge (Table 1). This document provides a scope of work for the removal and proper disposal of approximately 113 cubic yards (CY) of non-hazardous sludge wastes contained within seven of the ASTs and two sumps and approximately 1,067 CY of hazardous sludge wastes contained within 23 ASTs and one sump. Sludge levels were measured and sludge in each individual AST and sump were sampled by Effective Environmental, Inc. (E^2) in accordance with the procedures specified in the EPA-approved Quality Assurance Sampling Plan (QASP) Addendum 1 dated July 2014 and were classified as hazardous and non-hazardous waste based on the analytical results obtained from the sampling events (Table 2). This AOC Work Plan Addendum has been prepared to address the sludge wastes contained in the 30 ASTs and three sumps specified herein, the demolition of the ASTs and associated ancillary equipment (pumps, piping, etc.) and the pressure washing of tank farm areas (containment systems, sumps, etc.) (Figure 1). Upon completion of this project the tank farm areas will be free of all tanks and equipment, will have been pressure washed and containment walls will be breached such that future rain water will drain from the area.

The waste characterization, profiling and removal activities as well as the tanks/equipment pressure washing and demolition described herein will be performed by Clean Harbors Environmental Services Inc. (CHES) with oversight on behalf of the US Oil Recovery Site PRP Group (PRP Group) from EHS Support LLC (EHS) and Pastor, Behling & Wheeler, LLC (PBW). PBW will have personnel on-site full time who will be responsible for oversight of CHES, compliance with the Work Plan Addendum and Site Health and Safety Plan (HASP), tracking the removal of wastes, and documenting site activities. Although not contracted directly with CHES, PBW's on-site personnel will be acting as the PRP Group's on-site representative and will have the PRP Group's full authority to stop work and re-direct CHES compliance with approved Work Plan Addendum and HASP for this removal action. Deliverables and tracking documents will be provided to Environmental Protection Agency (EPA) by PBW through established PRP Group communications and/or reporting methods.

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Sludge Waste Characterization

During December, 2014, and January, 2015 Effective Environmental, Inc. (E^2) measured, sampled and analyzed sludge in the 30 ASTs and three sumps that contained sludge. Laboratory analyses were performed consistent with the EPA-approved Site Monitoring and Stabilization Quality Assurance Project Plan (QAPP) dated May 30, 2012. The purpose of this effort was to facilitate waste classification and potential disposal facility identification. The associated analytical laboratory reports and Level II data validation report are included as Appendix 1 to this addendum. A summary of the analytical data for the sludge samples is provided in Table 2.

With the USOR PRP Group desire to remove all tank contents, tanks and ancillary equipment, and following a review of the analytical data provided in Table 2, it was determined that the most timely and effective plan for removal and disposal of AST wastes, removal of ASTs/equipment and pressure washing of the tank farm area would be via the following steps:

1. Remove liquids (rain water) from the containment areas per the EPA-approved AOC Work Plan dated May 2012.
2. Remove sludge waste materials from ASTs 1 through 30 and Sumps 44, 46 and 47, including:
   - 113 cubic yards (estimated approximate volume) of non-hazardous material;
   - 1039 cubic yards (estimated approximate volume) of hazardous material with TCLP-benzene concentrations >0.5 mg/L and 28 cubic yards (estimated approximate volume) of hazardous material with a pH>12.5.
3. Remove, consolidate, sample, classify and dispose of residual sludge from the North Tank Farm (NTF) and South Tank Farm (STF) containments and Sumps 34, 35 and 36
4. Wash AST interiors in preparation for demolition, complete demolition with metal materials sold for scrap.
5. Wash all ancillary equipment (e.g., piping, pumps, etc.) within the sumps and North Tank Farm (NTF) and South Tank Farm (STF) containments. Remove the pressure washed ancillary equipment and sell for scrap.
6. Wash the sumps, truck bays, and NTF and STF containment areas such that future rainfall in these areas need not be contained but can be discharged directly to the ground surface.
7. Breach the containment areas and sump walls to minimize the potential for future rainfall accumulation in the above areas that are above grade.
8. Remove all used personal protective equipment (PPE) and other equipment, and CHES demobilize from the Site.

With regard to the first step in this process, the liquids in the NTF and STF will be sent to the Intergulf Waste Water Treatment Plant (WWTP) in Pasadena, Texas per the EPA-approved AOC Work Plan dated May 2012.

With regard to Step Two in this process:

- CHES will prepare and obtain approval of a waste profile for shipment of the non-hazardous sludge waste to: (1) the Seabreeze Environmental Landfill in Angleton, Texas; (2) the Waste Management Coastal Plains Landfill in Alvin, TX; and/or (3) the Waste Management Conroe Landfill in Conroe, TX.

- CHES will run a bucket test of the hazardous waste (see detailed description below) for waste compatibility/reactivity, transfer the sludge to vacuum boxes and sample the vacuum boxes for disposal facility acceptance testing. Upon facility acceptance, the hazardous waste will be shipped to: (1) the Systech Environmental Corporation Facility in Fredonia, KS (to be blended

into a hazardous waste derived fuel for energy recovery at another site); (2) the Clean Harbors Deer Park Incinerator in Deer Park, TX; and/or (3) the Clean Harbors LaPorte, TX site (with subsequent shipment under Clean Harbors manifest to the Clean Harbors Thermal Desorption Unit in Lambton, Ontario, Canada). Upon facility acceptance and confirmation of EPA approval of these disposal facilities, waste shipment will be performed as described below.

With regard to Step Three in this process CHES will pump free liquids to vacuum trucks and place solid materials in roll-off boxes. The vacuum trucks will be sent to the Intergulf WWTP in Pasadena, TX and the roll-off boxes will be sent to one of the facilities identified for Step Two above.

With regard to Steps Four, Five and Six in this process, the wash liquids will be collected in vacuum trailers that will be sent to the Intergulf WWTP in Pasadena, TX.

Waste Removal and Disposal

Following receipt of the aforementioned approvals:

1. Non-hazardous sludge contained in the seven ASTs and two sumps will be pumped into vacuum boxes for shipment to the Seabreeze, Coastal Plains and/or Conroe facility. EPA will be notified if the waste profile is not approved by and individual shipments accepted by one of these facilities, in which case, approval of an alternative facility will be sought and obtained prior to use.
2. Hazardous sludge contained in the 23 ASTs and one sump will be pumped into vacuum boxes for shipment to the Systech Fredonia facility, the Clean Harbors Deer Park Incinerator or the Clean Harbors LaPorte site. EPA will be notified if the waste profile is not approved by and individual shipments accepted by one of these facilities, in which case, approval of an alternative facility will be sought and obtained prior to use.

<u>Non-Hazardous Waste Removal and Disposal</u>

The sludge within the following ASTs were deemed to be non-hazardous via the aforementioned sampling by E^2 and analysis by ALS Environmental (as summarized in Table 2):

- ASTs 3, 5 and 6
- ASTs 26 and 27
- ASTs 29 and 30
- Sumps 46 and 47

The non-hazardous sludge from these seven ASTs will be accessed from existing openings and 6" sample ports in the tops of the vessels, liquefied using an automated 3D nozzle and 10,000 psig high pressure water blaster, pumped to vacuum boxes with the sludge in Sumps 46 and 47 for shipment to the Seabreeze, Coastal Plains, and/or Conroe Landfills.

Any sludge that is not removed by the method above will be accessed through the tank manways by personnel wearing OSHA Level C PPE and following confined space entry procedures. PPE will be upgraded to OSHA Level B if pre-entry 4-gas meter and hydrogren sulfide meter sampling of vapor within an AST indicates a need. The sludge will be broken up as needed using a >3,000 psig pressure washer and lance and then pumped to vacuum boxes. Some materials may be moved by shovel and placed into the vacuum boxes or roll-offs.

Hazardous Waste Removal and Disposal

The sludge within the following ASTs were deemed to be hazardous via the aforementioned sampling by E^2 and analysis by ALS Environmental (as summarized in Table 2):

- ASTs 1 and 2
- AST 4
- ASTs 7-25
- AST 28
- Sump 44

The sludge from these 23 ASTs will be accessed from existing openings and 6" sample ports in the tops of the vessels using the same methods as the non-hazardous sludge described above. Prior to combining materials from two or more ASTs into a vacuum box, a "bucket test" will be performed to check if undesirable reactions occur. For this test, CHES will add a small sample of each AST planned to be mixed in a vacuum box, in the order it is to be added to the vacuum box, into a metal pail. The bucket sample will be inspected for signs of reaction prior to materials represented by the samples being loaded into the vacuum box. If the bucket test does not indicate any potential compatibility issues, the sludge will be pumped to a vacuum box, sampled and sent to the proposed disposal facility for acceptance testing. Upon acceptance by the disposal facility, the vacuum boxes will shipped for disposal. If the bucket test shows signs of reactivity, non-compatible materials will not be bulked in the vacuum box with the incompatible materials from the other ASTs. Alternate plans will be developed for the transport of the individual AST non-compatible materials and reviewed with EPA prior to implementation.

The hazardous sludge from these 23 ASTs will be accessed from existing openings and 6" sample ports in the tops of the vessels, liquefied using an automated 3D nozzle and 10,000 psig high pressure water blaster, pumped to vacuum boxes with the sludge in Sumps 46 and 47 and sampled for acceptance by the disposal facility.

Any sludge that is not removed by the method above will be accessed through the tank manways using personnel wearing OSHA Level C PPE and following confined space entry procedures. PPE will be upgraded to OSHA Level B if pre-entry 4-gas meter and hydrogren sulfide meter sampling of vapor within an AST indicates a need. The sludge will be broken up as needed using a >3,000 psig pressure washer and lance and then pumped to vacuum boxes. Some materials may be moved by shovel and placed into the vacuum boxes or roll-offs.

Upon acceptance by the disposal facility the sludge in vacuum boxes and roll-offs will be shipped to the Systech Fredonia facility, the Clean Harbors Deer Park Incinerator and/or the Clean Harbors LaPorte site.

Equipment and Area Pressure Washing and Equipment Removal

Following the removal of sludge from the ASTs and sumps, CHES will pressure wash the ASTs and equipment (pumps, pipe, etc.) and remove them for sale to a metals recycler. CHES will then pressure wash all the areas within the highlighted confines of Figure 1 and breach containment systems such that future rain water will freely flow out.

The ASTs will be accessed from existing openings and 6" sample ports in the tops of the vessels and washed using at least two passes of an automated 3D nozzle and 10,000 psig high pressure water blaster. The associated ancillary equipment (piping, pumps, etc.) will be pressure washed using a >3,000 psig pressure washer and lance. Personnel performing the washing will wear OSHA Class C PPE. If needed based on 4-gas meter or personal hydrogen sulfide monitor readings, PPE will be upgraded to OSHA Class B. The wash water from these operations will be pumped to a vacuum truck and sent to the Intergulf WWTP in Pasadena, TX or one of the waste disposal facilities identified above.

Washing of the containment areas, sumps, shed east of the NTF and Truck Bays 45 and 48 (Figure 1) will be performed in the following steps:

1. Free water will be pumped to a vacuum truck.
2. Solid materials (plastic piping, wood debris, sludge, etc.) will be placed in a roll-off box and sludge (if present) will be placed into vacuum boxes, drums or totes. . The containers will be sampled and profiled for acceptance to the Seabreeze, Coastal Plains and/or Conroe Environmental Landfills and upon acceptance will be shipped for disposal.
3. All areas will be pressure washed with at least two passes using a >3,000 psig pressure washer. Personnel performing the washing will wear OSHA Class C PPE. If needed based on 4-gas meter or personal hydrogen sulfide monitor readings, PPE will be upgraded to OSHA Class B. The wash water from these cleaning operations will be pumped to a vacuum truck.
4. Vacuum trucks will be sent to the Intergulf WWTP in Pasadena, TX or one of the waste disposal facilities identified above.

The insulation of the ASTs (AST 3, AST 25) and piping within the NTF has been tested for asbestos containing materials (ACMs) by EFI Global, Inc. and found to be free of ACMs (Appendix 2). Insulation materials will be removed and placed into roll off boxes for shipment to the Seabreeze, Coastal Plains and/or Conroe Landfills.

The washed metal components of the ASTs, piping, pumps, etc. will be shipped to a metals recycling company as scrap metal.

Any non-metal components within the project area identified by Figure 1 and used PPE generated by the project will be collected into roll-off boxes for shipment to the Seabreeze, Coastal Plains and/or Conroe Landfills.

The washed above ground containment areas (NTF, STF and Sumps 34, 35, 38, 40, 44, 46 and 47) will be breached in various areas to reduce the potential for future rainwater accumulation. Debris created will be placed in a roll-off(s) for shipment to the Seabreeze, Coastal Plains and/or Conroe Landfills.

Site and Activity-Specific Health and Safety Plan

CHES will operate under the Site HASP and will prepare a HASP specific to the materials handling of this project including appropriate personal protective equipment (PPE) for the anticipated hazards. All site workers shall be trained to the appropriate level according to 29 CFR 1910.120 that prepares them for their job functions and responsibilities.

At a minimum, the PPE should include Level D PPE protection (i.e., hardhat, safety glasses, steel toe shoes, earplugs, and long sleeve shirt/pants) and activities associated with waste handling and sampling will be performed using Level C PPE protection. Personnel handling the materials (liquids or sludges) in or in the vicinity of the tank farms or the vacuum boxes SHALL have a functional personal hydrogen sulfide monitor on their person. Additional periodic air quality monitoring of the work area and continuous air monitoring of confined space entry areas will be performed using a 4-gas meter. PPE will be upgraded to OSHA Level B as needed based on readings from the 4-gas meters and hydrogen sulfide monitors.

Reporting

A single removal action report will be prepared upon completion of this project covering all of the tank farm tank/sump content removal activities. This will include the liquid removal activities described in AOC Work Plan Addendum 4 (liquid removal) and the sludge removal activities described in this AOC work plan addendum. The report will include:

- Summary of activities performed to remove the AST and sump contents;
- Summary of activities performed to pressure wash the ASTs, sumps and containment areas and remove ASTs and equipment;
- Photographs documenting removal activities; and
- Shipping/disposal records (manifests, etc.)

Sampling results will be included in the site monthly progress reports submitted in accordance with the Removal Action AOC.

Spill Containment Plan

All the ASTs are in areas with secondary containment walls with the exception of AST 26, AST 27, Sump 46 and Sump 47 which contain only non-hazardous sludge and AST 25 and Sump 44 which contains hazardous sludge (TCLP benzene >0.5 mg/l). AST 25 through AST 27 are located northeast of the North Tank Farm. Sumps 44, 46 and 47 are located just south of the tank farm.
The work area will have spill supplies as PPE, shovels, brooms, drums, buckets, and absorbents. A temporary secondary containment will be constructed using polyethylene sheeting around the access port handling area of AST 25 during the sludge removal.

At the beginning of each shift there will be a tail-gate meeting where the hazards for each task will be discussed with all team members. Included in the discussion will be procedures to deal with emergency situations including spill response and prevention. Numbers for on-site and off-site responders to different types of emergencies will be listed in the HASP and will be posted in the project office. As soon as any spill scenario is detected, it will be reported to the CHES Project Manager and the PRP Group's on-site representative. Spill response personnel will have training that prepares them for their job functions and responsibilities including 29 CFR 1910.120 (HAZWOPER) and DOT.

Figures, Tables and Appendices

Figure 1	**Tank Farm Map**
Table 1	**Tank Sludge Gauging and Analysis Summary**
Table 2	**USOR AST Sludge Sample Data**
Appendix 1	**Sampling Analysis Report with Data Validation Report**
Appendix 2	**EFI Global, Inc. Asbestos Potential Asbestos Containing Material Report**

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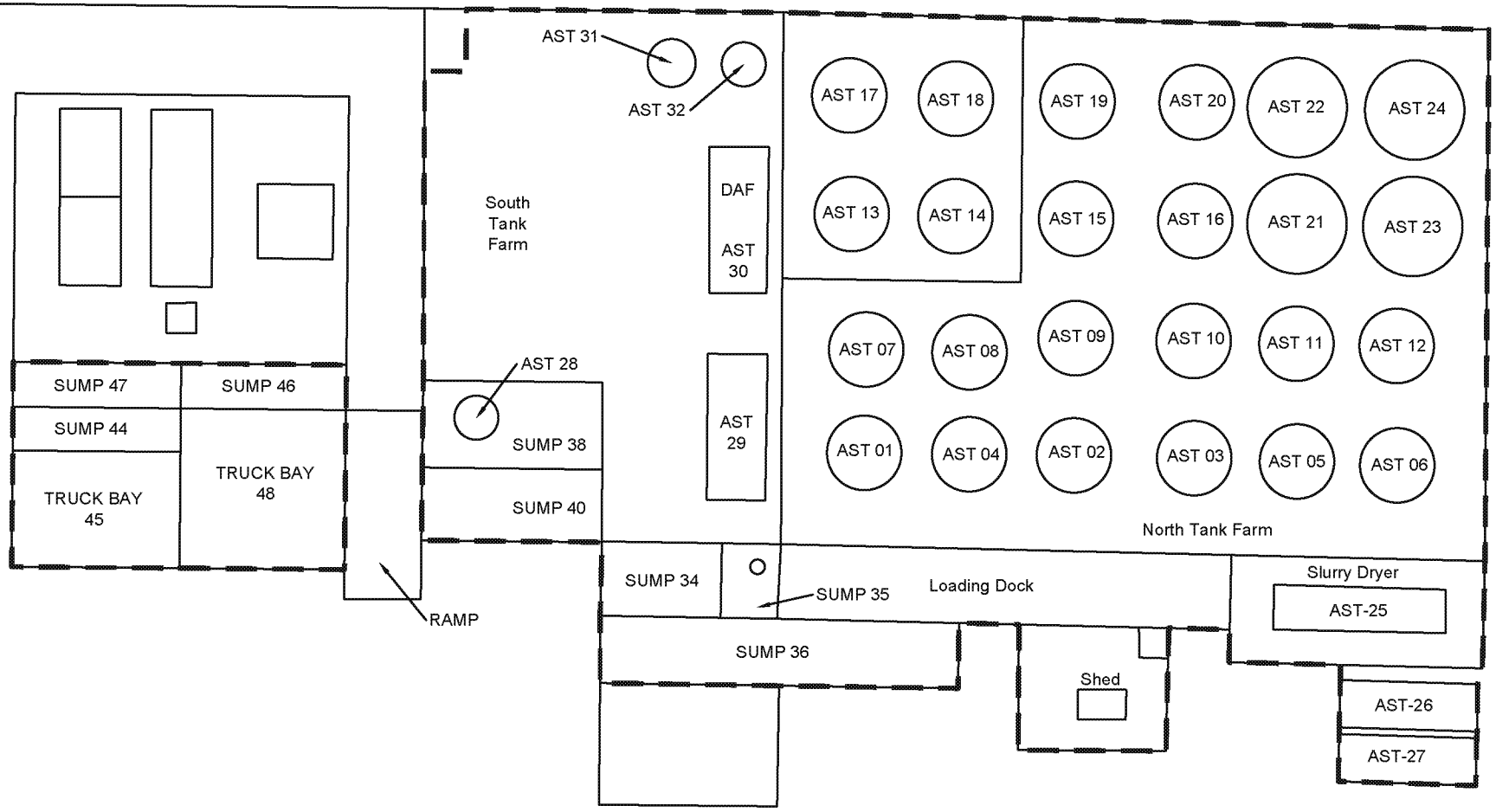

EXPLANATION

Removal Action Work Area

Not To Scale

US OIL RECOVERY SUPERFUND SITE
PASADENA, HARRIS COUNTY, TEXAS

Figure 1

TANK FARM MAP

PROJECT: 1737	BY: ADJ	REVISIONS
DATE: MAY, 2015	CHECKED: EFP	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

DRAFT

Table 1 - Waste Material Volume by AST/Sump

Vertical Tanks

Tank #	Diameter	Height	Depth of Sludge	Volume Sludge	Volume Sludge	Waste Characterization[1]
	Ft	Ft	Ft	C.Y.	Gal	
AST 01	12	20	5.83	24	4,933	**Hazardous - TCLP Benzene = 13.0 mg/l**
AST 02	12	20	8.00	33	6,766	**Hazardous - TCLP Benzene = 7.3 mg/l**
AST 03	12	20	1.00	4	846	**Non-Hazardous**
AST 04	11	13.75	7.00	25	4,974	**Hazardous - pH = 12.8**
AST 05	12	20	1.00	4	846	**Non-Hazardous**
AST 06	12	20	4.08	17	3,450	**Non-Hazardous**
AST 07	12	20	10.25	43	8,668	**Hazardous - TCLP Benzene = 4.0 mg/l**
AST 08	12	20	7.00	29	5,920	**Hazardous - TCLP Benzene = 2.2 mg/l**
AST 09	12	20	4.00	17	3,383	**Hazardous - TCLP Benzene = 1.7 mg/l**
AST 10	12	20	9.00	38	7,611	**Hazardous - TCLP Benzene = 1.3 mg/l**
AST 11	12	20	5.00	21	4,229	**Hazardous - TCLP Benzene = 0.93 mg/l**
AST 12	12	20	3.00	13	2,537	**Hazardous - TCLP Benzene = 3.9 mg/l**
AST 13	12	20	11.00	46	9,303	**Hazardous - TCLP Benzene = 1.1 mg/l**
AST 14	12	20	9.50	40	8,034	**Hazardous - TCLP Benzene = 0.92 mg/l**
AST 15	12	20	13.00	54	10,994	**Hazardous - TCLP Benzene = 5.5 mg/l**
AST 16	12	20	5.00	21	4,229	**Hazardous - TCLP Benzene = 1.1 mg/l**
AST 17	12	20	2.00	8	1,691	**Hazardous - TCLP Benzene = 1.2 mg/l**
AST 18	12	20	12.00	50	10,148	**Hazardous - TCLP Benzene = 1.6 mg/l**
AST 19	12	20	9.00	38	7,611	**Hazardous - TCLP Benzene = 2.3 mg/l**
AST 20	12	20	9.00	38	7,611	**Hazardous - TCLP Benzene = 4.3 mg/l**
AST 21	16	26	17.67	132	26,566	**Hazardous - TCLP Benzene = 1.4 mg/l**
AST 22	16	26	16.67	124	25,063	**Hazardous - TCLP Benzene = 1.9 mg/l**
AST 23	16	26	17.08	127	25,679	**Hazardous - TCLP Benzene = 2.5 mg/l**
AST 24	16	26	17.25	128	25,935	**Hazardous - TCLP Benzene = 2.0 mg/l**
AST 28	6	7	3	3	634	**Hazardous - pH = 13.1**
				1078	**217,664**	

Horizontal Tanks

Tank #	Diameter	Length				Waste Characterization[1]
			Sludge	Sludge	Sludge	
	Ft	Ft	Ft	C.Y.	Gal	
AST 25	8	22	1.5	5.32	1,075	**Hazardous - TCLP Benzene = 0.65 mg/l**
AST 26	8	16	1.0	2.15	434	**Non-Hazardous**
AST 27	8	16	1.0	2.15	434	**Non-Hazardous**
AST 29	8	16	5.0	19.58	3,955	**Non-Hazardous**
				29.20	**5,898**	

Rectangle Tank

Tank #	Length	Width	Depth	Depth of Sludge	Sludge Volume	Waste Characterization[1]
	Ft	Ft	Ft	Ft	C.y.	
AST 30	30	7.5	5.5	3.5	29.17	**Non-Hazardous**
Sump 44	20	6	6	2.0	8.89	**Hazardous - TCLP Benzene = 1.5 mg/l**
Sump 46	20	6	6	5.0	22.22	**Non-Hazardous**
Sump 47	20	6	6	2.0	8.89	**Non-Hazardous**
					69.17	

Total non hazardous sludge Volume	**113**	CY
Total hazardous sludge volume with TCLP benzene >0.5ppm	**1039**	CY
Total hazardous sludge volume with pH>12.5	**28**	CY

Footnotes:

1. Refer to Table 2 for characterization results.

Table 2 - USOR Sludge Analytical Data Summary (DRAFT)

Sample Location		TCLP Regulatory Levels	AST 1	AST 2	AST 3	AST 4	AST 5	AST 6	AST 6	AST 7	AST 7	AST 8	AST 9	AST 10	AST 10	AST 11	AST 12	AST 13
Sample ID	**Units**		**NTF-AST 1**	**NTF-AST 2**	**NTF-AST 3**	**NTF-AST 4**	**NTF-AST 5**	**NTF-AST 6**	**Field Duplicate #2**	**NTF-AST 7**	**Duplicate Sample #3**	**NTF-AST 8**	**NTF-AST 9**	**NTF-AST 10**	**Field Duplicate #1**	**NTF-AST 11**	**NTF-AST 12**	**NTF-AST 13**
Date Sampled			**12/15/2014**	**12/8/2014**	**12/9/2014**	**12/16/2014**	**12/16/2014**	**12/9/2014**	**12/9/2014**	**12/15/2014**	**12/15/2014**	**12/5/2014**	**12/9/2014**	**12/5/2014**	**12/5/2014**	**12/5/2014**	**12/15/2014**	**12/15/2014**
TCLP METALS																		
Antimony	mg/L	**1[a]**	**0.129**	**0.0784**	**0.0131 J**	<0.00800	**0.00947 J**	**0.0103 J**	**0.00852 J**	**0.0874**	**0.0549**	**0.172**	**0.0678**	**0.0668**	**0.0273 J**	**0.0519**	**0.0240 J**	**0.0178 J**
Arsenic	mg/L	**5**	**0.0168 J**	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	**0.0106 J**	<0.0100	<0.0100	<0.0100	<0.0100	**0.0100 J**	<0.0100
Barium	mg/L	**100**	**0.400**	**0.701**	**0.173 J**	0.0752 U	**0.203**	0.113 U	0.0795 U	**0.239**	**0.562**	0.230 U	**0.265**	**0.749**	0.460 U	0.424 U	**0.303**	**0.390**
Beryllium	mg/L	**0.08[a]**	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Cadmium	mg/L	**1**	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800
Chromium	mg/L	**5**	**0.0862**	<0.0100	<0.0100	<0.0100	**0.0110 J**	**0.0119 J**	<0.0100	<0.0100	**0.0252 J**	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	**0.0703**	<0.0100
Lead	mg/L	**5**	**0.0748**	<0.00700	<0.00700	<0.00700	**0.0215 J**	**0.0207 J**	**0.00913 J**	<0.00700	**0.0148 J**	**0.0124 J**	<0.00700	**0.00869 J**	**0.0101 J**	<0.00700	**0.0285 J**	<0.00700
Mercury	mg/L	**0.2**	**0.00109**	0.0000790 U	**0.000282**	<0.0000420	**0.00126**	**0.00142**	**0.000901**	<0.0000420 J	**0.000895 J**	**0.00174**	0.000191 U	**0.000133 J**	**0.000198 J**	**0.0000630 J**	**0.000900**	**0.000165 J**
Nickel	mg/L	**70[a]**	**0.671**	**0.275**	**0.151**	<0.0100	**0.0783**	**0.0983**	**0.0938**	**0.159**	**0.168**	**0.228**	**0.130**	**0.188**	**0.145**	**0.227**	**0.209**	**0.0653**
Selenium	mg/L	**1**	**0.0130 J**	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	**0.0150 J**	**0.0184 J**	0.0166 U	<0.0100	0.0110 U	0.0114 U	0.0122 U	**0.0135 J**	<0.0100
Silver	mg/L	**5**	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800
TCLP VOCs																		
1,1-Dichloroethene	mg/L	**0.7**	<0.010	<0.010 JL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,2-Dichloroethane	mg/L	**0.5**	<0.010	<0.010 JL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,4-Dichlorobenzene	mg/L	**7.5**	<0.012	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
2-Butanone	mg/L	**200**	**0.74**	**0.15 JL**	**0.44**	<0.020	**0.93**	**0.038 J**	**0.053 J**	**1.1**	**0.86**	**2.4**	**1.4**	**0.55**	**0.48**	**0.56**	**0.42**	**0.74**
Benzene	mg/L	**0.5**	**13**	**7.3 JL**	**0.081 J**	<0.012	**0.18**	**0.041 J**	**0.035 J**	**4.0**	**5.1**	**2.2**	**1.7**	**1.3**	**1.1**	**0.93**	**3.9**	**1.1**
Carbon tetrachloride	mg/L	**0.5**	<0.012	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Chlorobenzene	mg/L	**100**	<0.0080	<0.0080 JL	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
Chloroform	mg/L	**6**	<0.012	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Tetrachloroethene	mg/L	**0.7**	**0.081 J**	**0.062 JL**	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	**0.028 J**	**0.017 J**	**0.015 J**	**0.018 J**	**0.016 J**	**0.017 J**	**0.035 J**	<0.012
Trichloroethene	mg/L	**0.5**	**0.022 J**	**0.023 JL**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.045 J**	**0.030 J**	**0.023 J**	**0.015 J**	**0.025 J**	**0.025 J**	**0.018 J**	**0.045 J**	<0.010
Vinyl chloride	mg/L	**0.2**	<0.0080	<0.0080 JL	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
TCLP SVOCs																		
2,4,5-Trichlorophenol	mg/L	**400**	<0.045	<0.0090	<0.0090	<0.0090	<0.027 JL	<0.045	<0.045	<0.0090	<0.014	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.045	<0.0090
2,4,6-Trichlorophenol	mg/L	**2**	<0.070	<0.014	<0.014	<0.014	<0.042 JL	<0.070	<0.070	<0.014	<0.021	<0.014	<0.014	<0.014	<0.014	<0.014	<0.070	<0.014
2,4-Dinitrotoluene	mg/L	**0.13**	<0.050	<0.010	<0.010	<0.010	<0.030	<0.050	<0.050	<0.010	<0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Cresols, Total	mg/L	**200**	**1.2**	**0.88**	**0.65**	<0.020	**0.30 JL**	**1.6**	**0.87**	**0.80 J**	**0.27 J**	**0.47**	**0.31**	**1.3**	**1.2 JL**	**0.48**	**1.6**	**0.18**
Hexachlorobenzene	mg/L	**0.13**	<0.055	<0.011	<0.011	<0.011	<0.033	<0.055	<0.055	<0.011	<0.016	<0.011	<0.011	<0.011	<0.011	<0.011	<0.055	<0.011
Hexachlorobutadiene	mg/L	**0.5**	<0.055	<0.011	<0.011	<0.011	<0.033	<0.055	<0.055	<0.011	<0.016	<0.011	<0.011	<0.011	<0.011	<0.011	<0.055	<0.011
Hexachloroethane	mg/L	**3**	<0.050	<0.010	<0.010	<0.010	<0.030	<0.050	<0.050	<0.010	<0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Nitrobenzene	mg/L	**2**	<0.040	<0.0080	<0.0080	<0.0080	<0.024	<0.040	<0.040	<0.0080	<0.012	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.040	<0.0080
Pentachlorophenol	mg/L	**100**	<0.080	<0.016 JL	<0.016 JL	<0.016 JL	<0.048 JL	<0.080 JL	<0.080 JL	<0.016 JL	<0.024	<0.016	<0.016 JL	<0.016	<0.016	<0.016	<0.080	<0.016
Pyridine	mg/L	**5**	<0.10 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.060 JL	<0.10 JL	<0.10 JL	<0.020 JL	<0.030 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.10 JL	<0.020 JL
IGNITABILITY	°F	**<140**	---	---	>212	---	---	>212	>212	---	---	---	---	---	---	---	---	>212
IGNITABILITY, Solid	mm/sec	Burn rate	Negative	Negative	---	Negative	Negative	---	---	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	---
pH	pH units	**<2, >12.5**	5.59 J	6.67 J	5.75 J	**12.8 J**	6.38 J	6.04 J	6.20 J	9.81 J	5.73 J	9.21 J	9.81 J	7.15 J	7.11 J	7.42 J	6.90 J	7.22 J
REACTIVE CYANIDE	mg/Kg	Reactive	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
REACTIVE SULFIDE	mg/Kg	Reactive	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

Notes:

1) Samples collected by Effective Environmental.

2) < - Analyte reported as non-detect by laboratory at associated method detection limit (MDL)

3) Bolded values are concentrations detected above MDL

4) Shaded values in yellow denotes detections with exceedances of regulatory levels

5) J - Reported concentration is estimated

6) L - Bias potentially low

7) --- Not analyzed

[a] Texas Class 2 Regulatory Levels

Table 2 - USOR Sludge Analytical Data Summary (DRAFT)

Sample Location		TCLP Regulatory Levels	AST 14	AST 15	AST 16	AST 17	AST 18	AST 19	AST 20	AST 21	AST 22	AST 23	AST 24	AST 25	AST 26	AST 27	AST 28	AST 29
Sample ID	**Units**		**NTF-AST 14**	**NTF-AST 15**	**NTF-AST 16**	**NTF-AST 17**	**NTF-AST 18**	**NTF-AST 19**	**NTF-AST 20**	**NTF-AST 21**	**NTF-AST 22**	**NTF-AST 23**	**NTF-AST 24**	**NTF-AST 25**	**NTF-AST 26**	**NTF-AST 27**	**NTF-AST 28**	**NTF-AST 29**
Date Sampled			**12/15/2014**	**12/9/2014**	**12/9/2014**	**12/15/2014**	**12/8/2014**	**12/8/2014**	**12/15/2014**	**12/16/2014**	**12/16/2014**	**12/11/2014**	**12/11/2014**	**12/16/2014**	**12/16/2014**	**12/16/2014**	**12/16/2014**	**12/9/2014**
TCLP METALS																		
Antimony	mg/L	**1[a]**	**0.164**	**0.0958**	**0.103**	**0.252**	**0.110**	**0.0481 J**	**0.0366 J**	**0.117**	**0.0360 J**	**0.0849**	**0.0614**	**0.0232 J**	**0.0104 J**	**0.0291 J**	<0.00800	<0.00800
Arsenic	mg/L	**5**	<0.0100	<0.0100	**0.0113 J**	<0.0100	<0.0100	**0.0160 J**	<0.0100	**0.0104 J**	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Barium	mg/L	**100**	**0.415**	**0.455**	**0.453**	**0.913**	**0.650**	**0.286**	**0.355**	**0.448**	**0.663**	**0.994**	0.254 U	0.165 U	**1.23**	**0.608**	0.0606 U	**0.154 J**
Beryllium	mg/L	**0.08[a]**	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Cadmium	mg/L	**1**	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800
Chromium	mg/L	**5**	**0.0103 J**	<0.0100	**0.0408 J**	**0.0474 J**	<0.0100	<0.0100	**0.0102 J**	**0.0305 J**	**0.0132 J**	**0.0128 J**	<0.0100	<0.0100	<0.0100	**0.0128 J**	<0.0100	<0.0100
Lead	mg/L	**5**	**0.00742 J**	<0.00700	**0.0357 J**	**0.0343 J**	<0.00700	<0.00700	**0.00857 J**	**0.0232 J**	<0.00700	<0.00700	<0.00700	**0.0167 J**	**0.0425 J**	**0.0111 J**	**0.0108 J**	<0.00700
Mercury	mg/L	**0.2**	**0.000347**	0.000171 U	**0.00151**	**0.000579**	0.0000470 U	0.0000450 U	**0.000320**	**0.000962**	**0.000178 J**	**0.000445**	**0.0000560 J**	<0.0000420	**0.0000430 J**	**0.0000520 J**	**0.0000420 J**	<0.0000420
Nickel	mg/L	**70[a]**	**0.228**	**0.406**	**0.139**	**0.379**	**0.306**	**0.399**	**0.0794**	**0.125**	**0.139**	**0.269**	**0.337**	**0.232**	**0.215**	**0.135**	<0.0100	<0.0100
Selenium	mg/L	**1**	<0.0100	<0.0100	<0.0100	**0.0107 J**	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver	mg/L	**5**	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800	<0.00800
TCLP VOCs																		
1,1-Dichloroethene	mg/L	**0.7**	<0.010	<0.010	<0.010	<0.010	<0.010 JL	<0.010 JL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,2-Dichloroethane	mg/L	**0.5**	<0.010	<0.010	<0.010	<0.010	**0.14 JL**	<0.010 JL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,4-Dichlorobenzene	mg/L	**7.5**	<0.012	<0.012	<0.012	<0.012	<0.012 JL	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
2-Butanone	mg/L	**200**	**0.19 J**	**0.80**	**0.99**	**1.2**	**0.37 JL**	**0.69 JL**	**0.32**	**0.37**	**0.87**	**0.35**	**1.1**	**520**	**0.30**	**0.10 J**	<0.020	<0.020
Benzene	mg/L	**0.5**	**0.92**	**5.5**	**1.1**	**1.2**	**1.6 JL**	**2.3 JL**	**4.3**	**1.4**	**1.9**	**2.5**	**2.0**	**0.65**	**0.013 J**	**0.30**	<0.012	<0.012
Carbon tetrachloride	mg/L	**0.5**	<0.012	<0.012	<0.012	<0.012	<0.012 JL	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Chlorobenzene	mg/L	**100**	<0.0080	<0.0080	<0.0080	<0.0080	**0.032 JL**	<0.0080 JL	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
Chloroform	mg/L	**6**	<0.012	<0.012	<0.012	<0.012	<0.012 JL	<0.012 JL	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Tetrachloroethene	mg/L	**0.7**	<0.012	**0.030 J**	**0.023 J**	**0.048 J**	**0.020 JL**	**0.052 JL**	**0.037 J**	**0.013 J**	**0.014 J**	**0.017 J**	**0.043 J**	<0.012	<0.012	<0.012	<0.012	<0.012
Trichloroethene	mg/L	**0.5**	<0.010	**0.059 J**	**0.054 J**	<0.010	**0.20 JL**	**0.31 JL**	**0.021 J**	**0.035 J**	**0.049 J**	**0.039 J**	**0.024 J**	<0.010	<0.010	<0.010	<0.010	<0.010
Vinyl chloride	mg/L	**0.2**	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080 JL	<0.0080 JL	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
TCLP SVOCs																		
2,4,5-Trichlorophenol	mg/L	**400**	<0.014	<0.0090	<0.018	<0.045	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.014	<0.0090	<0.0090 JL
2,4,6-Trichlorophenol	mg/L	**2**	<0.021	<0.014	<0.028	<0.070	<0.014	<0.014	<0.014	<0.014 JL	<0.014 JL	<0.014	<0.014	<0.014 JL	<0.014 JL	<0.021 JL	<0.014	<0.014 JL
2,4-Dinitrotoluene	mg/L	**0.13**	<0.015	<0.010	<0.020	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.015	<0.010	<0.010
Cresols, Total	mg/L	**200**	**0.97**	**0.84**	**0.51**	**1.3**	**0.57**	**0.71**	**2.3**	**0.25**	**0.32**	**0.36**	**0.31**	**1.3**	**0.24**	**0.59**	**0.029 J**	<0.020 JL
Hexachlorobenzene	mg/L	**0.13**	<0.016	<0.011	<0.022	<0.055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.016	<0.011	<0.011
Hexachlorobutadiene	mg/L	**0.5**	<0.016	<0.011	<0.022	<0.055	<0.011	<0.011 JL	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.016	<0.011	<0.011
Hexachloroethane	mg/L	**3**	<0.015	<0.010	<0.020	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.015	<0.010	<0.010
Nitrobenzene	mg/L	**2**	<0.012	<0.0080	<0.016	<0.040	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.012	<0.0080	<0.0080
Pentachlorophenol	mg/L	**100**	<0.024	<0.016 JL	<0.032 JL	<0.080	<0.016 JL	<0.016 JL	<0.016	<0.016 JL	<0.016 JL	<0.016	<0.016	<0.016 JL	<0.016 JL	<0.024 JL	<0.016 JL	<0.016 JL
Pyridine	mg/L	**5**	<0.030 JL	<0.020 JL	<0.040 JL	<0.10 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.020 JL	<0.030 JL	<0.020 JL	<0.020 JL
IGNITABILITY	°F	**<140**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
IGNITABILITY, Solid	mm/sec	Burn rate	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
pH	pH units	**<2, >12.5**	7.15 J	8.00 J	6.19 J	7.06 J	6.93 J	6.83 J	6.57 J	8.02 J	7.58 J	7.87 J	8.82 J	7.02 J	5.48 J	7.20 J	**13.1 J**	12.2 J
REACTIVE CYANIDE	mg/Kg	Reactive	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
REACTIVE SULFIDE	mg/Kg	Reactive	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

Notes:

1) Samples collected by Effective Environmental.

2) < - Analyte reported as non-detect by laboratory at associated method detection limit (MDL)

3) Bolded values are concentrations detected above MDI

4) Shaded values in yellow denotes detections with exceedances of regulatory levels

5) J - Reported concentration is estimated

6) L - Bias potentially low

7) --- Not analyzed

[a] Texas Class 2 Regulatory Levels

Table 2 - USOR Sludge Analytical Data Summary (DRAFT)

Sample Location		TCLP Regulatory Levels	AST 30	SUMP 44	SUMP 46	SUMP 47
Sample ID	**Units**		**NTF-AST 30**	**SUMP 44**	**SUMP 46**	**SUMP 47**
Date Sampled			**12/9/2014**	**12/9/2014**	**12/16/2014**	**12/16/2014**
TCLP METALS						
Antimony	mg/L	**1[a]**	**0.0136 J**	**0.0557**	**0.00892 J**	**0.0204 J**
Arsenic	mg/L	**5**	<0.0100	**0.0132 J**	<0.0100	<0.0100
Barium	mg/L	**100**	**0.240**	**0.212**	**0.446**	**0.212**
Beryllium	mg/L	**0.08[a]**	<0.00700	<0.00700	<0.00700	<0.00700
Cadmium	mg/L	**1**	<0.00800	<0.00800	<0.00800	<0.00800
Chromium	mg/L	**5**	**0.0158 J**	**0.0159 J**	**0.0126 J**	**0.0970**
Lead	mg/L	**5**	<0.00700	**0.0302 J**	<0.00700	**0.0283 J**
Mercury	mg/L	**0.2**	**0.000246**	0.000166 U	**0.000949**	**0.00107**
Nickel	mg/L	**70[a]**	**0.254**	**0.567**	**0.0386 J**	**0.289**
Selenium	mg/L	**1**	<0.0100	<0.0100	<0.0100	<0.0100
Silver	mg/L	**5**	<0.00800	<0.00800	<0.00800	<0.00800
TCLP VOCs						
1,1-Dichloroethene	mg/L	**0.7**	<0.010	<0.010	<0.010	<0.010
1,2-Dichloroethane	mg/L	**0.5**	<0.010	**0.15**	<0.010	<0.010
1,4-Dichlorobenzene	mg/L	**7.5**	<0.012	<0.012	<0.012	<0.012
2-Butanone	mg/L	**200**	**0.063 J**	**0.28**	**0.62**	**0.11 J**
Benzene	mg/L	**0.5**	**0.024 J**	**1.5**	**0.16**	**0.43**
Carbon tetrachloride	mg/L	**0.5**	<0.012	<0.012	<0.012	<0.012
Chlorobenzene	mg/L	**100**	<0.0080	<0.0080	<0.0080	<0.0080
Chloroform	mg/L	**6**	<0.012	**0.029 J**	<0.012	<0.012
Tetrachloroethene	mg/L	**0.7**	**0.013 J**	**0.069 J**	<0.012	**0.17**
Trichloroethene	mg/L	**0.5**	<0.010	**0.051 J**	<0.010	**0.090 J**
Vinyl chloride	mg/L	**0.2**	<0.0080	<0.0080	<0.0080	<0.0080
TCLP SVOCs						
2,4,5-Trichlorophenol	mg/L	**400**	<0.0090	<0.0090	<0.0090	<0.045
2,4,6-Trichlorophenol	mg/L	**2**	<0.014	<0.014	<0.014 JL	<0.070 JL
2,4-Dinitrotoluene	mg/L	**0.13**	<0.010 JL	<0.010	<0.010 JL	<0.050
Cresols, Total	mg/L	**200**	**0.24**	**0.67**	**0.29**	<0.10
Hexachlorobenzene	mg/L	**0.13**	<0.011 JL	<0.011	<0.011 JL	<0.055
Hexachlorobutadiene	mg/L	**0.5**	<0.011 JL	<0.011	<0.011 JL	<0.055
Hexachloroethane	mg/L	**3**	<0.010 JL	<0.010	<0.010 JL	<0.050
Nitrobenzene	mg/L	**2**	<0.0080 JL	<0.0080	<0.0080 JL	<0.040
Pentachlorophenol	mg/L	**100**	<0.016 JL	<0.016 JL	<0.016 JL	<0.080 JL
Pyridine	mg/L	**5**	<0.020 JL	<0.020 JL	<0.020 JL	<0.10 JL
IGNITABILITY	°F	**<140**	---	---	---	---
IGNITABILITY, Solid	mm/sec	Burn rate	Negative	Negative	Negative	Negative
pH	pH units	**<2, >12.5**	6.96 J	4.18 J	7.08 J	8.28 J
REACTIVE CYANIDE	mg/Kg	Reactive	<100	<100	<100	<100
REACTIVE SULFIDE	mg/Kg	Reactive	<100	<100	<100	<100

Notes:

1) Samples collected by Effective Environmental.

2) < - Analyte reported as non-detect by laboratory at associated method detection limit (MDL)

3) Bolded values are concentrations detected above MDL

4) Shaded values in yellow denotes detections with exceedances of regulatory levels

5) J - Reported concentration is estimated

6) L - Bias potentially low

7) --- Not analyzed

[a] Texas Class 2 Regulatory Levels

ED_004012_00000048-00012

Table 2 - USOR Sludge Field Quality Control Analytical Data Summary

Sample ID	Units	Trip Blank 120314-28	Trip Blank 120314-32	Trip Blank 120314-33	Trip Blank 120314-36	Trip Blank 120314-37	Trip Blank 120314-38	Trip Blank 120314-40	Trip Blank 120314-68	Equipment Blank #1	Equipment Blank #2
Date Sampled		**12/8/2014**	**12/11/2014**	**12/16/2014**	**12/8/2014**	**12/15/2014**	**12/5/2014**	**12/8/2014**	**12/16/2014**	**12/5/2014**	**12/8/2014**
METALS											
Antimony	mg/L	---	---	---	---	---	---	---	---	<0.000800	<0.000800
Arsenic	mg/L	---	---	---	---	---	---	---	---	<0.00100	<0.00100
Barium	mg/L	---	---	---	---	---	---	---	---	**0.00674**	0.0391 U
Beryllium	mg/L	---	---	---	---	---	---	---	---	<0.000700	<0.000700
Cadmium	mg/L	---	---	---	---	---	---	---	---	<0.000800	<0.000800
Chromium	mg/L	---	---	---	---	---	---	---	---	<0.00100	**0.139**
Lead	mg/L	---	---	---	---	---	---	---	---	<0.000700	**0.00241 J**
Mercury	mg/L	---	---	---	---	---	---	---	---	**0.0000610 J**	0.0000500 U
Nickel	mg/L	---	---	---	---	---	---	---	---	<0.00100	**0.0228**
Selenium	mg/L	---	---	---	---	---	---	---	---	<0.00100	<0.00100
Silver	mg/L	---	---	---	---	---	---	---	---	<0.000800	<0.000800
VOCs											
1,1-Dichloroethene	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 JL
1,2-Dichloroethane	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 JL
1,4-Dichlorobenzene	mg/L	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040 JL
2-Butanone	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	**0.011**	<0.00050 JL
Benzene	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 JL
Carbon tetrachloride	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050 JL
Chlorobenzene	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030 JL
Chloroform	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	**0.0010**	<0.00020	<0.00020	<0.00020	<0.00020 JL
Tetrachloroethene	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030 JL
Trichloroethene	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 JL
Vinyl chloride	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 JL
SVOCs											
2,4,5-Trichlorophenol	mg/L	---	---	---	---	---	---	---	---	<0.000038 JL	<0.000038 JL
2,4,6-Trichlorophenol	mg/L	---	---	---	---	---	---	---	---	<0.000032 JL	<0.000032 JL
2,4-Dinitrotoluene	mg/L	---	---	---	---	---	---	---	---	<0.000039 JL	<0.000039 JL
Cresols, Total	mg/L	---	---	---	---	---	---	---	---	<0.000030 JL	<0.000030 JL
Hexachlorobenzene	mg/L	---	---	---	---	---	---	---	---	<0.000039 JL	<0.000039 JL
Hexachlorobutadiene	mg/L	---	---	---	---	---	---	---	---	<0.000032 JL	<0.000032 JL
Hexachloroethane	mg/L	---	---	---	---	---	---	---	---	<0.000044 JL	<0.000044 JL
Nitrobenzene	mg/L	---	---	---	---	---	---	---	---	<0.000033 JL	<0.000033 JL
Pentachlorophenol	mg/L	---	---	---	---	---	---	---	---	<0.000053 JL	<0.000053 JL
Pyridine	mg/L	---	---	---	---	---	---	---	---	<0.000040 JL	<0.000040 JL
IGNITABILITY	°F	---	---	---	---	---	---	---	---	>212	>212
PH	pH units	---	---	---	---	---	---	---	---	5.08 J	7.32 J
REACTIVE CYANIDE	mg/Kg	---	---	---	---	---	---	---	---	<100	<100
REACTIVE SULFIDE	mg/Kg	---	---	---	---	---	---	---	---	<100	<100

Notes:

1) Samples collected by Effective Environmental.
2) < - Analyte reported as non-detect by laboratory at associated method detection limit (MDL)
3) Bolded values are concentrations detected above the MDL
4) Shaded values in yellow denotes detections with exceedances of TCLP Regulatory Levels
5) J - Reported concentration is estimated
6) --- Not analyzed

Appendix 1 Sampling Analysis Report with Data Validation Report

PBW

Level II Data Validation Report

To:	Eric Pastor, P.E.	**Date:**	September 29, 2014
From:	Brenda Basile, Ph.D.	**File:**	USOR Tank Farm DUS.doc
RE:	Review of Tank Waste Characterization Samples Collected August 2014	**CC:**	

PBW reviewed four laboratory reports from ALS Environmental providing the analytical results for waste samples collected by Effective Environmental from August 20, 2014 to August 22, 2014 and September 5, 2014 at the U. S. Oil Recovery (USOR) Superfund site. The reports were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846), *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008), *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (January 2010), and the USOR Quality Assurance Project Plan (QAPP) for Site Monitoring and Stabilization (May 2012). The purpose of these sample events was to provide waste characterization data for the disposal of the contents of tanks located at the USOR site.

Waste samples were analyzed using the following methods:

- SM 4500H+ B – pH Value Electrometric Method
- SW-846 7.3.3.2 Reactive Cyanide
- SW-846 7.3.4.2 Reactive Sulfide
- SW-846 1010 - Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester
- SW 846 6020A – Inductively Coupled Plasma – Mass Spectrometry
- SW 846 7471B – Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)
- SW-846 8260 - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS)
- SW-846 8270 – Semivolatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS)
- SW-846 9040C – pH Electrometric Measurement
- SW-846 9045B – Soil and Waste pH

Quality control (QC) data were reviewed as described in the QAPP and the results of the review are discussed in this memorandum. ALS Environmental (Houston, Texas) is accredited under Texas certificate T104704231-14-13 for the matrices, methods, and analytes reported in this laboratory report. ALS Environmental (Holland, Michigan) is accredited under Texas certificate T104704494-14-4 for cyanide and sulfide.

Introduction

Waste and associated QC samples were leached using the toxicity characteristic leaching procedure (TCLP) (SW-846 1311) and analyzed for TCLP volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals using the methods listed above. In addition, samples were analyzed for reactivity (cyanide and sulfide), corrosivity, and ignitability (RCI) using the methods listed above. Table 1 lists the sample identifications cross-referenced to laboratory identifications and the analyses performed for each sample. Samples were analyzed for parameters as listed on the chain-of-custody (C-O-C). Data qualified due to exceedances of QC criteria are listed in Table 2.

QC Results

PRESERVATION AND HOLDING TIMES

Except NTF-AST 19, NTF-AST 7, and NTF-AST 18, samples were received at the laboratory at temperatures less than 6°C. The cooler containing NTF-AST 19, NTF-AST 7, and NTF-AST 18 was received out of temperature (9.9°C). The benzene concentration for NTF-AST 7 exceeded the hazardous characteristic concentration of 0.5 mg/L so the sample was not recollected. The VOC concentrations for NTF-AST 18 and NTF-AST 19 were less than the hazardous characteristic concentrations so samples were recollected for VOC analyses on September 5, 2014.

Samples for pH determination are to be "analyzed immediately". Samples were analyzed in the laboratory; all pH data is qualified as estimated due to holding time exceedances.

BLANKS

Analytes detected in field or laboratory quality control blanks are listed in Table 3. Data are qualified if concentrations are less than five times the blank concentration. Data are qualified as shown on Table 2.

SURROGATE RECOVERIES AND INTERNAL STANDARD AREAS

The laboratory flags data using statistically derived control limits as a reference. Surrogate recoveries analyses outside the QAPP acceptance criteria are listed in Table 4. No VOC surrogate recoveries were outside acceptance criteria. SVOC sample data are not qualified if recoveries exceed the QAPP limits and the analyte is not detected. SVOC sample data are qualified as estimated with a low bias (JL) if two or more acid or base-neutral surrogates were below the acceptance criteria. SVOC surrogate recoveries were 0% and above the acceptance criteria for NTF-AST 14, NTF-AST 18, and NTF-AST 19; these data are qualified as estimated with a low bias (JL). Data are not rejected due to the 0% recoveries because recoveries for other surrogates exceeded the acceptance criteria. The disparity in surrogate recoveries is an indication of sample matrix effects. Field sample data are qualified as shown in Tables 2 and 4.

The laboratory documented semivolatile internal standard area recoveries less than 50% for AST 26, AST 27, NTF-AST 14, NTF-AST 17, NTF-AST 19, NTF-AST 20, NTF-AST 21, NTF-AST 22, NTF-AST 23, NTF-AST 24, and Sump 47. TCLP SVOC data for these twelve samples are qualified as estimated

LABORATORY CONTROL SAMPLES

The laboratory flags data using statistically derived control limits as a reference. Laboratory control samples (LCS) recoveries (%R) outside the QAPP acceptance criteria are listed in Table 4. Field sample data are qualified as shown in Tables 2 and 4.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Batch or non-project sample data were not evaluated. The laboratory flags data using statistically derived control limits as a reference. Matrix spike/matrix spike duplicate (MS/MSD) recoveries (%R) outside the QAPP criteria are listed in Table 4. Sample data are not qualified if recoveries exceed the QAPP limits and the analyte is not detected. Field sample data are qualified as shown in Tables 2 and 4.

The MS recoveries for pentachlorophenol and pyridine in NTF-AST 9 were zero (0); data are not qualified as rejected since the samples were diluted by 10 prior to analysis.

FIELD PRECISION

Field duplicate precision is summarized in Table 5. Waste field duplicate precision is evaluated using 50 RPD or ± three times the MQL as the criteria. Field duplicate precision outside acceptance criteria are listed in Table 5. Data are qualified as shown on Table 2 and Table 5.

SUMMARY

Analytical data are usable for determining concentrations in waste samples collected from tank contents at the USOR Site.

Table 1 Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	VOCs	SVOCs	Metals	RCI	Comment
NTF-AST 1	HS14080706-01	X	X	X	X	SVOC MS
NTF-AST 2	HS14080706-02	X	X	X	X	
NTF-AST 3	HS14080706-03	X	X	X	X	pH duplicate
NTF-AST 5	HS14080706-04	X	X	X	X	
NTF-AST 12	HS14080706-05	X	X	X	X	
NTF-AST 11	HS14080706-06	X	X	X	X	
NTF-AST 10	HS14080706-07	X	X	X	X	
Field Duplicate #1	HS14080706-08	X	X	X	X	Field duplicate of NTF-AST 10
Equipment Blank #1	HS14080706-09	X	X	X	X	Equipment Blank; Cyanide MS/MSD; ignitability and pH duplicate
Trip Blank 081114-35	HS14080706-10	X				Trip Blank
Trip Blank 081114-43	HS14080706-11	X				Trip Blank
Trip Blank 081114-100	HS14080706-12	X				Trip Blank
Trip Blank 081114-37	HS14080706-13	X				Trip Blank
NTF-AST 9	HS14080761-01	X	X	X	X	SVOC MS; Ignitability duplicate
NTF-AST 8	HS14080761-02	X	X	X	X	
NTF-AST 7	HS14080761-03	X	X	X	X	
NTF-AST 14	HS14080761-04	X	X	X	X	
NTF-AST 17	HS14080761-05	X	X	X	X	
NTF-AST 20	HS14080761-06	X	X	X	X	
NTF-AST 19	HS14080761-07	X	X	X	X	
NTF-AST 18	HS14080761-08	X	X	X	X	
NTF-AST 13	HS14080761-09	X	X	X	X	
Field Duplicate #2	HS14080761-10	X	X	X	X	Field duplicate of NTF-AST 13
Equipment Blank #2	HS14080761-11	X	X	X	X	Equipment Blank; Metals MS/MSD; pH duplicate
Trip Blank - 081114-41	HS14080761-12	X				Trip Blank
Trip Blank - 081114-04	HS14080761-13	X				Trip Blank
Trip Blank - 081114-07	HS14080761-14	X				Trip Blank
Trip Blank - 081114-08	HS14080761-15	X				Trip Blank
Trip Blank - 081114-40	HS14080761-16	X				Trip Blank
Sump 44	HS14080809-01	X	X	X	X	
STF-AST 31	HS14080809-02	X	X	X	X	
STF-AST 32	HS14080809-03	X	X	X	X	Mercury MS/MSD
AST 27	HS14080809-04	X	X	X	X	
AST 26	HS14080809-05	X	X	X	X	Ignitability duplicate
NTF-AST 24	HS14080809-06	X	X	X	X	
NTF-AST 23	HS14080809-07	X	X	X	X	

Table 1 Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	VOCs	SVOCs	Metals	RCI	Comment
NTF-AST 22	HS14080809-08	X	X	X	X	
NTF-AST 21	HS14080809-09	X	X	X	X	
Equipment Blank #3	HS14080809-10	X	X	X	X	Equipment Blank; Reactive cyanide MS/MSD
Sump 47	HS14080809-11	X	X	X	X	
Field Duplicate #3	HS14080809-12	X	X	X	X	Field duplicate of Sump 47
Trip Blank - 081114-10	HS14080809-13	X				Trip Blank
Trip Blank - 081114-06	HS14080809-14	X				Trip Blank
Trip Blank - 081114-03	HS14080809-15	X				Trip Blank
Trip Blank - 080814-03	HS14080809-16	X				Trip Blank
Trip Blank - 081114-11	HS14080809-17	X				Trip Blank
Trip Blank - 081114-44	HS14080809-18	X				Trip Blank
NTF-AST 18	HS14090212-01	X				
NTF-AST 19	HS14090212-02	X				
Trip Blank	HS14090212-03	X				Trip Blank

VOCs –Volatile Organic Compounds
SVOCs – Semivolatile Organic Compounds
RCI – Reactivity, Corrosivity, Ignitability

Table 2 Qualified Data

Field Identification	Analyte	Qualification	Reason for Qualification
All	pH	J	Holding time exceeded
AST 26	Cresols, Total	JH	Surrogate recovery exceeds acceptance criteria
AST 26	SVOCs	J	Internal standard areas below acceptance criteria
AST 27	SVOCs	J	Internal standard areas below acceptance criteria
Field Duplicate #1	Barium	U	Analyte detected in quality control blank
Field Duplicate #1	Benzene	J	Field duplicate precision outside acceptance criteria
Field Duplicate #1	Cresols, Total	J	Field duplicate precision outside acceptance criteria
Field Duplicate #2	Barium	U	Analyte detected in quality control blank
Field Duplicate #3	Barium	U	Analyte detected in quality control blank
Field Duplicate #3	SVOCs	J	Internal standard areas below acceptance criteria
NFT-AST 13	Barium	U	Analyte detected in quality control blank
NTF-AST 1	Cresols, Total	JL	MS recovery outside acceptance criteria
NTF-AST 10	Barium	U	Analyte detected in quality control blank
NTF-AST 10	Benzene	J	Field duplicate precision outside acceptance criteria
NTF-AST 10	Cresols, Total	J	Field duplicate precision outside acceptance criteria
NTF-AST 11	Barium	U	Analyte detected in quality control blank
NTF-AST 14	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 17	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 17	SVOCs	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 18	Barium	U	Analyte detected in quality control blank
NTF-AST 18	SVOCs	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 19	2,4,5-Trichlorophenol	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 19	2,4,6-Trichlorophenol	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 19	Barium	U	Analyte detected in quality control blank
NTF-AST 19	Cresols, Total	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 19	Pentachlorophenol	JL	Surrogate recoveries outside acceptance criteria
NTF-AST 19	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 2	Barium	U	Analyte detected in quality control blank
NTF-AST 20	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 21	Barium	U	Analyte detected in quality control blank
NTF-AST 21	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 22	Barium	U	Analyte detected in quality control blank
NTF-AST 22	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 23	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 24	Barium	U	Analyte detected in quality control blank
NTF-AST 24	SVOCs	J	Internal standard areas below acceptance criteria
NTF-AST 3	Barium	U	Analyte detected in quality control blank
NTF-AST 5	Barium	U	Analyte detected in quality control blank
NTF-AST 8	Barium	U	Analyte detected in quality control blank
NTF-AST 9	Barium	U	Analyte detected in quality control blank
STF-AST 31	Barium	U	Analyte detected in quality control blank
STF-AST 32	Barium	U	Analyte detected in quality control blank

Table 2 Qualified Data

Field Identification	Analyte	Qualification	Reason for Qualification
Sump 44	Barium	U	Analyte detected in quality control blank
Sump 47	Barium	U	Analyte detected in quality control blank
Sump 47	SVOCs	J	Internal standard areas below acceptance criteria
Trip Blank 081114-35	VOCs	JL	Holding Time Exceeded
Trip Blank 081114-37	VOCs	JL	Holding Time Exceeded
Trip Blank 081114-43	VOCs	JL	Holding Time Exceeded

J – Data are estimated due to exceedances of one or more quality control criteria
L – Bias likely low
U – Analyte not detected at associated reported result

Table 3 Blank Detections

Identification	Analyte	Concentration	Qualified Concentration
Equipment Duplicate #1	Barium	0.0405 mg/L	0.20 mg/L
Equipment Blank #2	Barium	0.0359 mg/L	0.18 mg/L
Equipment Blank #3	Barium	0.0390 mg/L	0.20 mg/L

Table 4 Precision and Recovery Exceedances

Sample	Analyte	Spike Recovery	Spike Duplicate Recovery[a]	Precision	Qualification
x	2,4,6-Tribromophenol	139	NA	NA	JH detections
AST 26	Phenol-d6	197	NA	NA	JH detections
AST 27	Phenol-d6	615	NA	NA	None; only one high
LCS/ LCSD-85501	Hexachloroethane	57.1	74.3	26.2	None; analyte not detected in field samples
NTF-AST 1	Cresols, Total	163	NA	NA	JH
NTF-AST 1	Hexachloroethane	131	NA	NA	None; analyte not detected
NTF-AST 1	Nitrobenzene	225	NA	NA	None; analyte not detected
NTF-AST 14	2-Fluorobiphenyl	129	NA	NA	None; analytes not detected
NTF-AST 14	2-Fluorophenol	127	NA	NA	None; analytes not detected
NTF-AST 14	Nitrobenzene-d65	293	NA	NA	None; analytes not detected
NTF-AST 14	Phenol-d6	217	NA	NA	None; analytes not detected
NTF-AST 17	2,4,6-Tribromophenol	0	NA	NA	JL; sample diluted x10
NTF-AST 17	2-Fluorobiphenyl	0	NA	NA	JL; sample diluted x10
NTF-AST 17	2-Fluorophenol	0	NA	NA	JL; sample diluted x10
NTF-AST 17	4-Terphenyl-d14	0	NA	NA	JL; sample diluted x10
NTF-AST 17	Nitrobenzene-d5	235	NA	NA	None; Sample diluted x10
NTF-AST 17	Phenol-d6	316	NA	NA	None; Sample diluted x10
NTF-AST 18	2,4,6-Tribromophenol	0	NA	NA	JL; Sample diluted x10
NTF-AST 18	2-Fluorobiphenyl	0	NA	NA	JL; Sample diluted x10
NTF-AST 18	2-Fluorophenol	0	NA	NA	JL; Sample diluted x10
NTF-AST 18	4-Terphenyl-d14	0	NA	NA	JL; Sample diluted x10
NTF-AST 19	2,4,6-Tribromophenol	0	NA	NA	JL SVOC acids; Sample diluted x10
NTF-AST 19	2-Fluorobiphenyl	144	NA	NA	None; analytes not detected
NTF-AST 19	2-Fluorophenol	0	NA	NA	JL SVOC acids; Sample diluted x10
NTF-AST 19	Nitrobenzene-d5	138	NA	NA	None; analytes not detected
NTF-AST 19	Phenol-d6	129	NA	NA	None; analytes not detected
NTF-AST 23	2-Fluorobiphenyl	127	NA	NA	None; analytes not detected
NTF-AST 23	Nitrobenzene-d5	206	NA	NA	None; analytes not detected
NTF-AST 23	Phenol-d6	224	NA	NA	None; analytes not detected
NTF-AST 9	2,4,6-Tribromophenol	134	NA	NA	None; only one high
NTF-AST 9	Cresols, Total	-237	NA	NA	Sample concentration greater than four times sample concentration
NTF-AST 9	Hexachloroethane	247	NA	NA	None; analyte not detected
NTF-AST 9	Pentachlorophenol	0	NA	NA	None; sample diluted x10
NTF-AST 9	Pyridine	0	NA	NA	None; sample diluted x10
Sump 44	2,4,6-Tribromophenol	132	NA	NA	None; only one high
SVOC surrogates:2,4,6-tribromophenol, 2-fluorobiphenyl, 2-fluorophenol, 4-terphenyl-d14, phenol-d6					

Table 5 Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualification
NTF-AST 10 / Field Duplicate #1	2-Butanone	4.4	5.6	24	A
	Benzene	0.24	0.056	124	J
	Cresols, Total	1.6	2.9	58	J
	Barium	0.127 U	0.153 U	19	NA
	Mercury	0.000684	0.000484	34	A
	pH	7.29	7.23	0.83	A
NTF-AST 13 / Field Duplicate #2	2-Butanone	14	14	0	A
	Benzene	2.70	2.8	3.6	A
	Trichloroethene	0.018	0.019	5.4	A
	Cresols, Total	2.4	2.5	4.1	A
	Barium	0.164 U	0.147 U	11	NA
	Chromium	0.093	0.0819	13	A
	Mercury	0.000216	0.000192	12	A
	pH	7.17	7.35	2.5	A
Sump 47 / Field Duplicate #3	2-Butanone	0.13	0.14	7.4	A
	Benzene	0.051	0.045	13	A
	Tetrachloroethene	0.019	0.020	5.1	A
	Trichloroethene	0.015	< 0.010	NA	A
	Arsenic	0.18	0.2	11	A
	Barium	0.078 U	0.070 U	11	NA
	Chromium	0.470	0.4840	2.9	A
	Mercury	0.000054	0.000054	0	A
	pH	7.92	7.98	0.75	A
	Reactive Cyanide	103	117	13	A

RPD = ((SR - DR)*200)/ (SR + DR)
A – Acceptable
J - Estimated
NA – Not applicable

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

October 07, 2014

Hiren Shah
Effective Environmental Inc.
9950 Chemical Road
Pasadena, TX 77507

Work Order: **HS14080706**

Revision: **4**

Laboratory Results for: **USOR-Tank Farm Liquid Sampling**

Dear Hiren,

ALS Environmental received 13 sample(s) on Aug 20, 2014 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Kristin Brown

Generated By: Dane.Wacasey

Kristin M Brown
Project Manager

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080706

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14080706-01	NTF-AST 1	Water		19-Aug-2014 08:00	20-Aug-2014 10:24	☐
HS14080706-02	NTF-AST 2	Water		19-Aug-2014 08:30	20-Aug-2014 10:24	☐
HS14080706-03	NTF-AST 3	Water		19-Aug-2014 09:00	20-Aug-2014 10:24	☐
HS14080706-04	NTF-AST 5	Water		19-Aug-2014 09:30	20-Aug-2014 10:24	☐
HS14080706-05	NTF-AST 12	Water		19-Aug-2014 10:30	20-Aug-2014 10:24	☐
HS14080706-06	NTF-AST 11	Water		19-Aug-2014 14:00	20-Aug-2014 10:24	☐
HS14080706-07	NTF-AST 10	Water		19-Aug-2014 14:30	20-Aug-2014 10:24	☐
HS14080706-08	Field Duplicate #1	Water		19-Aug-2014 14:45	20-Aug-2014 10:24	☐
HS14080706-09	Equipment Blank #1	Water		20-Aug-2014 07:30	20-Aug-2014 10:24	☐
HS14080706-10	Trip Blank 081114-35	Water		19-Aug-2014 00:00	20-Aug-2014 10:24	☐
HS14080706-11	Trip Blank 081114-43	Water		19-Aug-2014 00:00	20-Aug-2014 10:24	☐
HS14080706-12	Trip Blank 081114-100	Water		19-Aug-2014 00:00	20-Aug-2014 10:24	☐
HS14080706-13	Trip Blank 081114-37	Water		19-Aug-2014 00:00	20-Aug-2014 10:24	☐

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
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CASE NARRATIVE

Work Order Comments

- Report was revised September 8, 2014 to add analysis for trip blanks inadvertantly not logged in.
- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.

  Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

  The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.
- This report (Rev04) was revised October 7, 2014 in order to correct sample name Equipment Blank #1 to match COC .
- This report was revised October 1, 2014 in order to report revised results for Cresols, Total in sample NTF-AST 1 and the batch Matrix Spike (MS).
- This report was revised September 26, 2014 in order to report results to the SDL and include TRRP nomenclature column headers.

GCMS Semivolatiles by Method SW1311/8270

Batch ID: 85501

Sample ID: **LCSD-85501**
- The RPD between the LCS and LCSD was outside of the control limit.

Sample ID: **NTF-AST 1 (HS14080706-01)**
Sample ID: **NTF-AST 10 (HS14080706-07)**
Sample ID: **NTF-AST 11 (HS14080706-06)**
Sample ID: **NTF-AST 12 (HS14080706-05)**
Sample ID: **NTF-AST 2 (HS14080706-02)**
Sample ID: **NTF-AST 3 (HS14080706-03)**
Sample ID: **NTF-AST 5 (HS14080706-04)**
- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Sample ID: **NTF-AST 1 (HS14080706-01MS)**
- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

GCMS Volatiles by Method SW1311/8260B

Batch ID: R239841,R239911

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260

Batch ID: R239674

Sample ID: **HS14080619-01**
- MS/MSD performed on an unrelated sample

Batch ID: R240374

Sample ID: **HS14080706-10**
Sample ID: **HS14080706-11**
Sample ID: **HS14080706-13**
- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered as estimated.

Metals by Method SW1311/6020

Batch ID: 85460

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080706

CASE NARRATIVE

Metals by Method SW7470

Batch ID: 85454

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW1010

Batch ID: R239891

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW9040

Batch ID: R239809,R240030

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 1 Lab ID:HS14080706-01
Collection Date: 19-Aug-2014 08:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 16:36
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 16:36
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 16:36
2-Butanone	**4.9**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 16:36
Benzene	**1.2**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 16:36
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 16:36
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 16:36
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 16:36
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 16:36
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 16:36
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 16:36
Surr: 1,2-Dichloroethane-d4	*96.9*			*70-125*	*%REC*	*20*	*25-Aug-2014 16:36*
Surr: 4-Bromofluorobenzene	*104*			*72-125*	*%REC*	*20*	*25-Aug-2014 16:36*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*20*	*25-Aug-2014 16:36*
Surr: Toluene-d8	*91.2*			*75-125*	*%REC*	*20*	*25-Aug-2014 16:36*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	26-Aug-2014 17:38
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	26-Aug-2014 17:38
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	26-Aug-2014 17:38
Cresols, Total	**0.21**	J	**0.040**	**0.30**	**mg/L**	10	26-Aug-2014 17:38
Hexachlorobenzene	U		0.022	0.10	mg/L	10	26-Aug-2014 17:38
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	26-Aug-2014 17:38
Hexachloroethane	U		0.020	0.10	mg/L	10	26-Aug-2014 17:38
Nitrobenzene	U		0.016	0.10	mg/L	10	26-Aug-2014 17:38
Pentachlorophenol	U		0.032	0.10	mg/L	10	26-Aug-2014 17:38
Pyridine	U		0.040	0.10	mg/L	10	26-Aug-2014 17:38
Surr: 2,4,6-Tribromophenol	*115*			*36-126*	*%REC*	*10*	*26-Aug-2014 17:38*
Surr: 2-Fluorobiphenyl	*101*			*43-125*	*%REC*	*10*	*26-Aug-2014 17:38*
Surr: 2-Fluorophenol	*96.4*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 17:38*
Surr: 4-Terphenyl-d14	*105*			*32-125*	*%REC*	*10*	*26-Aug-2014 17:38*
Surr: Nitrobenzene-d5	*98.3*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 17:38*
Surr: Phenol-d6	*78.3*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 17:38*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:11
Barium	**0.333**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:11
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:11
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:11
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:11
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:11
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:11

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 1 Lab ID:HS14080706-01
Collection Date: 19-Aug-2014 08:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.00102**		**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:12
PH BY SW9040C		**Method:SW9040**					Analyst: MYC
pH	**7.00**	H	**0.100**	**0.100**	**pH units**	1	25-Aug-2014 17:00
Temp Deg C @pH	**27.5**	H	**0**	**0**	**pH units**	1	25-Aug-2014 17:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 2 Lab ID:HS14080706-02
Collection Date: 19-Aug-2014 08:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 17:49
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 17:49
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 17:49
2-Butanone	**4.8**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 17:49
Benzene	**0.31**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 17:49
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 17:49
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 17:49
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 17:49
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 17:49
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 17:49
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 17:49
Surr: 1,2-Dichloroethane-d4	*97.0*			*70-125*	*%REC*	*20*	*25-Aug-2014 17:49*
Surr: 4-Bromofluorobenzene	*104*			*72-125*	*%REC*	*20*	*25-Aug-2014 17:49*
Surr: Dibromofluoromethane	*99.9*			*71-125*	*%REC*	*20*	*25-Aug-2014 17:49*
Surr: Toluene-d8	*91.0*			*75-125*	*%REC*	*20*	*25-Aug-2014 17:49*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 18:00
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 18:00
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 18:00
Cresols, Total	**1.5**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 18:00
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 18:00
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 18:00
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 18:00
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 18:00
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 18:00
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 18:00
Surr: 2,4,6-Tribromophenol	*91.8*			*36-126*	*%REC*	*10*	*26-Aug-2014 18:00*
Surr: 2-Fluorobiphenyl	*66.7*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 18:00*
Surr: 2-Fluorophenol	*75.8*			*37-125*	*%REC*	*10*	*26-Aug-2014 18:00*
Surr: 4-Terphenyl-d14	*91.9*			*32-125*	*%REC*	*10*	*26-Aug-2014 18:00*
Surr: Nitrobenzene-d5	*61.5*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 18:00*
Surr: Phenol-d6	*80.6*			*40-125*	*%REC*	*10*	*26-Aug-2014 18:00*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:14
Barium	**0.101**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:14
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:14
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:14
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:14
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:14
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:14

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 2 Lab ID:HS14080706-02
Collection Date: 19-Aug-2014 08:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000496**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:51
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**7.71**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**25.4**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

Revision:4

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080706
Sample ID:	NTF-AST 3	Lab ID:HS14080706-03
Collection Date:	19-Aug-2014 09:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 18:14
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 18:14
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 18:14
2-Butanone	**19**		**0.20**	**2.0**	**mg/L**	200	26-Aug-2014 17:00
Benzene	**0.13**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 18:14
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 18:14
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 18:14
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 18:14
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 18:14
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 18:14
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 18:14
Surr: 1,2-Dichloroethane-d4	*96.5*			*70-125*	*%REC*	*20*	*25-Aug-2014 18:14*
Surr: 1,2-Dichloroethane-d4	*93.9*			*70-125*	*%REC*	*200*	*26-Aug-2014 17:00*
Surr: 4-Bromofluorobenzene	*105*			*72-125*	*%REC*	*20*	*25-Aug-2014 18:14*
Surr: 4-Bromofluorobenzene	*97.4*			*72-125*	*%REC*	*200*	*26-Aug-2014 17:00*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*20*	*25-Aug-2014 18:14*
Surr: Dibromofluoromethane	*95.7*			*71-125*	*%REC*	*200*	*26-Aug-2014 17:00*
Surr: Toluene-d8	*91.6*			*75-125*	*%REC*	*20*	*25-Aug-2014 18:14*
Surr: Toluene-d8	*98.4*			*75-125*	*%REC*	*200*	*26-Aug-2014 17:00*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 14:59
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 14:59
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 14:59
Cresols, Total	**2.0**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 14:59
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 14:59
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 14:59
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 14:59
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 14:59
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 14:59
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 14:59
Surr: 2,4,6-Tribromophenol	*95.3*			*36-126*	*%REC*	*10*	*26-Aug-2014 14:59*
Surr: 2-Fluorobiphenyl	*68.2*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 14:59*
Surr: 2-Fluorophenol	*66.9*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 14:59*
Surr: 4-Terphenyl-d14	*76.2*			*32-125*	*%REC*	*10*	*26-Aug-2014 14:59*
Surr: Nitrobenzene-d5	*62.8*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 14:59*
Surr: Phenol-d6	*91.7*			*40-125*	*%REC*	*10*	*26-Aug-2014 14:59*

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: NTF-AST 3
Collection Date: 19-Aug-2014 09:00

ANALYTICAL REPORT
WorkOrder:HS14080706
Lab ID:HS14080706-03
Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A		**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014	Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:17
Barium	**0.159**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:17
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:17
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:17
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:17
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:17
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:17
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000576**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:53
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**6.67**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**24.4**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 5 Lab ID:HS14080706-04
Collection Date: 19-Aug-2014 09:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 20:15
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 20:15
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 20:15
2-Butanone	**4.2**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 20:15
Benzene	**0.038**	J	**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 20:15
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 20:15
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 20:15
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 20:15
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 20:15
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 20:15
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 20:15
Surr: 1,2-Dichloroethane-d4	*98.6*			*70-125*	*%REC*	*20*	*25-Aug-2014 20:15*
Surr: 4-Bromofluorobenzene	*105*			*72-125*	*%REC*	*20*	*25-Aug-2014 20:15*
Surr: Dibromofluoromethane	*102*			*71-125*	*%REC*	*20*	*25-Aug-2014 20:15*
Surr: Toluene-d8	*91.6*			*75-125*	*%REC*	*20*	*25-Aug-2014 20:15*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 15:22
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 15:22
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 15:22
Cresols, Total	**0.95**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 15:22
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 15:22
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 15:22
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 15:22
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 15:22
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 15:22
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 15:22
Surr: 2,4,6-Tribromophenol	*91.0*			*36-126*	*%REC*	*10*	*26-Aug-2014 15:22*
Surr: 2-Fluorobiphenyl	*64.7*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 15:22*
Surr: 2-Fluorophenol	*53.0*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 15:22*
Surr: 4-Terphenyl-d14	*58.8*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 15:22*
Surr: Nitrobenzene-d5	*53.2*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 15:22*
Surr: Phenol-d6	*69.8*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 15:22*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:19
Barium	**0.113**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:19
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:19
Chromium	**0.0678**	J	**0.0500**	**0.250**	**mg/L**	10	26-Aug-2014 16:19
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:19
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:19
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:19

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 5 Lab ID:HS14080706-04
Collection Date: 19-Aug-2014 09:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000244**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:55
PH BY SW9040C		**Method:SW9040**					Analyst: MYC
pH	**5.00**	H	**0.100**	**0.100**	**pH units**	1	25-Aug-2014 17:00
Temp Deg C @pH	**27.5**	H	**0**	**0**	**pH units**	1	25-Aug-2014 17:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 12 Lab ID:HS14080706-05
Collection Date: 19-Aug-2014 10:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 18:38
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 18:38
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 18:38
2-Butanone	**4.5**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 18:38
Benzene	**2.5**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 18:38
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 18:38
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 18:38
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 18:38
Tetrachloroethene	**0.016**	J	**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 18:38
Trichloroethene	**0.048**	J	**0.010**	**0.10**	**mg/L**	20	25-Aug-2014 18:38
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 18:38
Surr: 1,2-Dichloroethane-d4	*93.6*			*70-125*	*%REC*	*20*	*25-Aug-2014 18:38*
Surr: 4-Bromofluorobenzene	*103*			*72-125*	*%REC*	*20*	*25-Aug-2014 18:38*
Surr: Dibromofluoromethane	*99.7*			*71-125*	*%REC*	*20*	*25-Aug-2014 18:38*
Surr: Toluene-d8	*91.5*			*75-125*	*%REC*	*20*	*25-Aug-2014 18:38*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 15:45
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 15:45
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 15:45
Cresols, Total	**1.4**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 15:45
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 15:45
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 15:45
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 15:45
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 15:45
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 15:45
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 15:45
Surr: 2,4,6-Tribromophenol	*64.1*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 15:45*
Surr: 2-Fluorobiphenyl	*46.3*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 15:45*
Surr: 2-Fluorophenol	*83.4*			*37-125*	*%REC*	*10*	*26-Aug-2014 15:45*
Surr: 4-Terphenyl-d14	*91.0*			*32-125*	*%REC*	*10*	*26-Aug-2014 15:45*
Surr: Nitrobenzene-d5	*74.7*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 15:45*
Surr: Phenol-d6	*83.7*			*40-125*	*%REC*	*10*	*26-Aug-2014 15:45*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:27
Barium	**0.325**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:27
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:27
Chromium	**0.0569**	J	**0.0500**	**0.250**	**mg/L**	10	26-Aug-2014 16:27
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:27
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:27
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:27

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 12 Lab ID:HS14080706-05
Collection Date: 19-Aug-2014 10:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000184**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:56
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**7.41**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**24.4**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 11 Lab ID:HS14080706-06
Collection Date: 19-Aug-2014 14:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:02
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 19:02
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:02
2-Butanone	**5.2**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 19:02
Benzene	**0.49**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 19:02
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 19:02
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 19:02
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 19:02
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:02
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:02
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 19:02
Surr: 1,2-Dichloroethane-d4	*96.1*			*70-125*	*%REC*	*20*	*25-Aug-2014 19:02*
Surr: 4-Bromofluorobenzene	*102*			*72-125*	*%REC*	*20*	*25-Aug-2014 19:02*
Surr: Dibromofluoromethane	*99.8*			*71-125*	*%REC*	*20*	*25-Aug-2014 19:02*
Surr: Toluene-d8	*90.9*			*75-125*	*%REC*	*20*	*25-Aug-2014 19:02*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 16:07
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 16:07
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 16:07
Cresols, Total	**1.0**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 16:07
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 16:07
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 16:07
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 16:07
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 16:07
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 16:07
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 16:07
Surr: 2,4,6-Tribromophenol	*100*			*36-126*	*%REC*	*10*	*26-Aug-2014 16:07*
Surr: 2-Fluorobiphenyl	*75.2*			*43-125*	*%REC*	*10*	*26-Aug-2014 16:07*
Surr: 2-Fluorophenol	*76.2*			*37-125*	*%REC*	*10*	*26-Aug-2014 16:07*
Surr: 4-Terphenyl-d14	*94.5*			*32-125*	*%REC*	*10*	*26-Aug-2014 16:07*
Surr: Nitrobenzene-d5	*67.3*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 16:07*
Surr: Phenol-d6	*98.7*			*40-125*	*%REC*	*10*	*26-Aug-2014 16:07*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:30
Barium	**0.190**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:30
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:30
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:30
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:30
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:30
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:30

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 11 Lab ID:HS14080706-06
Collection Date: 19-Aug-2014 14:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000284**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 16:58
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**7.54**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**24.3**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 10 Lab ID:HS14080706-07
Collection Date: 19-Aug-2014 14:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:27
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 19:27
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:27
2-Butanone	**4.4**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 19:27
Benzene	**0.24**		**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 19:27
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 19:27
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 19:27
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 19:27
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:27
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:27
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 19:27
Surr: 1,2-Dichloroethane-d4	*93.6*			*70-125*	*%REC*	*20*	*25-Aug-2014 19:27*
Surr: 4-Bromofluorobenzene	*103*			*72-125*	*%REC*	*20*	*25-Aug-2014 19:27*
Surr: Dibromofluoromethane	*98.6*			*71-125*	*%REC*	*20*	*25-Aug-2014 19:27*
Surr: Toluene-d8	*91.1*			*75-125*	*%REC*	*20*	*25-Aug-2014 19:27*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	26-Aug-2014 16:30
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	26-Aug-2014 16:30
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	26-Aug-2014 16:30
Cresols, Total	**1.6**		**0.040**	**0.30**	**mg/L**	10	26-Aug-2014 16:30
Hexachlorobenzene	U		0.022	0.10	mg/L	10	26-Aug-2014 16:30
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	26-Aug-2014 16:30
Hexachloroethane	U		0.020	0.10	mg/L	10	26-Aug-2014 16:30
Nitrobenzene	U		0.016	0.10	mg/L	10	26-Aug-2014 16:30
Pentachlorophenol	U		0.032	0.10	mg/L	10	26-Aug-2014 16:30
Pyridine	U		0.040	0.10	mg/L	10	26-Aug-2014 16:30
Surr: 2,4,6-Tribromophenol	*66.1*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 16:30*
Surr: 2-Fluorobiphenyl	*46.4*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 16:30*
Surr: 2-Fluorophenol	*53.5*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 16:30*
Surr: 4-Terphenyl-d14	*57.4*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 16:30*
Surr: Nitrobenzene-d5	*50.9*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 16:30*
Surr: Phenol-d6	*102*			*40-125*	*%REC*	*10*	*26-Aug-2014 16:30*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:32
Barium	**0.127**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:32
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:32
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:32
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:32
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:32
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:32

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: NTF-AST 10 Lab ID:HS14080706-07
Collection Date: 19-Aug-2014 14:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000684**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 17:00
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**7.29**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**24.4**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Field Duplicate #1 Lab ID:HS14080706-08
Collection Date: 19-Aug-2014 14:45 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:51
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 19:51
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:51
2-Butanone	**5.6**		**0.020**	**0.20**	**mg/L**	20	25-Aug-2014 19:51
Benzene	**0.056**	J	**0.012**	**0.10**	**mg/L**	20	25-Aug-2014 19:51
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 19:51
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 19:51
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 19:51
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 19:51
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 19:51
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 19:51
Surr: 1,2-Dichloroethane-d4	*96.7*			*70-125*	*%REC*	*20*	*25-Aug-2014 19:51*
Surr: 4-Bromofluorobenzene	*104*			*72-125*	*%REC*	*20*	*25-Aug-2014 19:51*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*20*	*25-Aug-2014 19:51*
Surr: Toluene-d8	*91.7*			*75-125*	*%REC*	*20*	*25-Aug-2014 19:51*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	26-Aug-2014 16:52
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	26-Aug-2014 16:52
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	26-Aug-2014 16:52
Cresols, Total	**2.9**		**0.040**	**0.30**	**mg/L**	10	26-Aug-2014 16:52
Hexachlorobenzene	U		0.022	0.10	mg/L	10	26-Aug-2014 16:52
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	26-Aug-2014 16:52
Hexachloroethane	U		0.020	0.10	mg/L	10	26-Aug-2014 16:52
Nitrobenzene	U		0.016	0.10	mg/L	10	26-Aug-2014 16:52
Pentachlorophenol	U		0.032	0.10	mg/L	10	26-Aug-2014 16:52
Pyridine	U		0.040	0.10	mg/L	10	26-Aug-2014 16:52
Surr: 2,4,6-Tribromophenol	*94.5*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 16:52*
Surr: 2-Fluorobiphenyl	*59.6*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 16:52*
Surr: 2-Fluorophenol	*76.9*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 16:52*
Surr: 4-Terphenyl-d14	*86.8*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 16:52*
Surr: Nitrobenzene-d5	*71.5*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 16:52*
Surr: Phenol-d6	*72.4*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 16:52*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:35
Barium	**0.153**	J	**0.0450**	**1.00**	**mg/L**	10	26-Aug-2014 16:35
Cadmium	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:35
Chromium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:35
Lead	U		0.0350	0.250	mg/L	10	26-Aug-2014 16:35
Selenium	U		0.0500	0.250	mg/L	10	26-Aug-2014 16:35
Silver	U		0.0400	0.250	mg/L	10	26-Aug-2014 16:35

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Field Duplicate #1 Lab ID:HS14080706-08
Collection Date: 19-Aug-2014 14:45 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	**0.000484**	J	**0.000168**	**0.000800**	**mg/L**	1	25-Aug-2014 17:01
PH BY SW9040C		**Method:SW9040**					Analyst: MJC
pH	**7.23**	H	**0.100**	**0.100**	**pH units**	1	26-Aug-2014 16:16
Temp Deg C @pH	**24.4**	H	**0**	**0**	**pH units**	1	26-Aug-2014 16:16
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Equipment Blank #1 Lab ID:HS14080706-09
Collection Date: 20-Aug-2014 07:30 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 23-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 17:25
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	25-Aug-2014 17:25
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	25-Aug-2014 17:25
2-Butanone	U		0.020	0.20	mg/L	20	25-Aug-2014 17:25
Benzene	U		0.012	0.10	mg/L	20	25-Aug-2014 17:25
Carbon tetrachloride	U		0.012	0.10	mg/L	20	25-Aug-2014 17:25
Chlorobenzene	U		0.0080	0.10	mg/L	20	25-Aug-2014 17:25
Chloroform	U		0.012	0.10	mg/L	20	25-Aug-2014 17:25
Tetrachloroethene	U		0.012	0.10	mg/L	20	25-Aug-2014 17:25
Trichloroethene	U		0.010	0.10	mg/L	20	25-Aug-2014 17:25
Vinyl chloride	U		0.0080	0.040	mg/L	20	25-Aug-2014 17:25
Surr: 1,2-Dichloroethane-d4	*96.2*			*70-125*	*%REC*	*20*	*25-Aug-2014 17:25*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*20*	*25-Aug-2014 17:25*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*20*	*25-Aug-2014 17:25*
Surr: Toluene-d8	*89.3*			*75-125*	*%REC*	*20*	*25-Aug-2014 17:25*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.00090	0.0050	mg/L	1	26-Aug-2014 13:51
2,4,6-Trichlorophenol	U		0.0014	0.0050	mg/L	1	26-Aug-2014 13:51
2,4-Dinitrotoluene	U		0.0010	0.0050	mg/L	1	26-Aug-2014 13:51
Cresols, Total	U		0.0020	0.015	mg/L	1	26-Aug-2014 13:51
Hexachlorobenzene	U		0.0011	0.0050	mg/L	1	26-Aug-2014 13:51
Hexachlorobutadiene	U		0.0011	0.0050	mg/L	1	26-Aug-2014 13:51
Hexachloroethane	U		0.0010	0.0050	mg/L	1	26-Aug-2014 13:51
Nitrobenzene	U		0.00080	0.0050	mg/L	1	26-Aug-2014 13:51
Pentachlorophenol	U		0.0016	0.0050	mg/L	1	26-Aug-2014 13:51
Pyridine	U		0.0020	0.0050	mg/L	1	26-Aug-2014 13:51
Surr: 2,4,6-Tribromophenol	*96.4*			*36-126*	*%REC*	*1*	*26-Aug-2014 13:51*
Surr: 2-Fluorobiphenyl	*75.1*			*43-125*	*%REC*	*1*	*26-Aug-2014 13:51*
Surr: 2-Fluorophenol	*65.3*			*37-125*	*%REC*	*1*	*26-Aug-2014 13:51*
Surr: 4-Terphenyl-d14	*94.9*			*32-125*	*%REC*	*1*	*26-Aug-2014 13:51*
Surr: Nitrobenzene-d5	*65.2*			*37-125*	*%REC*	*1*	*26-Aug-2014 13:51*
Surr: Phenol-d6	*63.8*			*40-125*	*%REC*	*1*	*26-Aug-2014 13:51*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 26-Aug-2014		Prep:SW3010A / 25-Aug-2014		Analyst: RPM
Arsenic	U		0.0100	0.0500	mg/L	10	26-Aug-2014 16:37
Barium	**0.0405**	J	**0.00900**	**0.200**	**mg/L**	10	26-Aug-2014 16:37
Cadmium	U		0.00800	0.0500	mg/L	10	26-Aug-2014 16:37
Chromium	U		0.0100	0.0500	mg/L	10	26-Aug-2014 16:37
Lead	U		0.00700	0.0500	mg/L	10	26-Aug-2014 16:37
Selenium	U		0.0100	0.0500	mg/L	10	26-Aug-2014 16:37
Silver	U		0.00800	0.0500	mg/L	10	26-Aug-2014 16:37

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: Equipment Blank #1
Collection Date: 20-Aug-2014 07:30

ANALYTICAL REPORT
WorkOrder:HS14080706
Lab ID:HS14080706-09
Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	26-Aug-2014 18:45
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 23-Aug-2014	Prep:SW7470 / 25-Aug-2014		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	25-Aug-2014 17:03
PH BY SW9040C		**Method:SW9040**					Analyst: MYC
pH	**6.33**	H	**0.100**	**0.100**	**pH units**	1	25-Aug-2014 17:00
Temp Deg C @pH	**22.1**	H	**0**	**0**	**pH units**	1	25-Aug-2014 17:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 15:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 15:00

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-35 Lab ID:HS14080706-10
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,1,2,2-Tetrachloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,1,2-Trichlor-1,2,2-trifluoroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,1,2-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,1-Dichloroethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:00
1,1-Dichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,2,4-Trichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
1,2-Dibromo-3-chloropropane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,2-Dibromoethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:00
1,2-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
1,2-Dichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,2-Dichloropropane	U	H	0.70	5.0	ug/L	1	04-Sep-2014 17:00
1,3-Dichlorobenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
1,4-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
2-Butanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:00
2-Hexanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:00
4-Methyl-2-pentanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:00
Acetone	U	H	2.0	10	ug/L	1	04-Sep-2014 17:00
Benzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Bromodichloromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Bromoform	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Bromomethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Carbon disulfide	U	H	0.90	10	ug/L	1	04-Sep-2014 17:00
Carbon tetrachloride	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Chlorobenzene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:00
Chloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Chloroform	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Chloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
cis-1,2-Dichloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
cis-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Cyclohexane	U	Hn	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Dibromochloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Dichlorodifluoromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Dichloromethane	U	H	0.50	10	ug/L	1	04-Sep-2014 17:00
Ethylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Isopropylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
m,p-Xylene	U	H	0.60	10	ug/L	1	04-Sep-2014 17:00
Methyl acetate	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Methyl tert-butyl ether	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Methylcyclohexane	U	H	1.0	5.0	ug/L	1	04-Sep-2014 17:00
o-Xylene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Styrene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-35 Lab ID:HS14080706-10
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Toluene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
trans-1,2-Dichloroethene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:00
trans-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Trichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:00
Trichlorofluoromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:00
Vinyl chloride	U	H	0.40	2.0	ug/L	1	04-Sep-2014 17:00
Xylenes, Total	U	H	1.5	15	ug/L	1	04-Sep-2014 17:00
Surr: 1,2-Dichloroethane-d4	*92.5*			*70-125*	*%REC*	*1*	*04-Sep-2014 17:00*
Surr: 4-Bromofluorobenzene	*98.6*			*72-125*	*%REC*	*1*	*04-Sep-2014 17:00*
Surr: Dibromofluoromethane	*97.4*			*71-125*	*%REC*	*1*	*04-Sep-2014 17:00*
Surr: Toluene-d8	*95.4*			*75-125*	*%REC*	*1*	*04-Sep-2014 17:00*

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-43 Lab ID:HS14080706-11
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,1,2,2-Tetrachloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,1,2-Trichlor-1,2,2-trifluoroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,1,2-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,1-Dichloroethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:30
1,1-Dichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,2,4-Trichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
1,2-Dibromo-3-chloropropane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,2-Dibromoethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:30
1,2-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
1,2-Dichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,2-Dichloropropane	U	H	0.70	5.0	ug/L	1	04-Sep-2014 17:30
1,3-Dichlorobenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
1,4-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
2-Butanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:30
2-Hexanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:30
4-Methyl-2-pentanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:30
Acetone	U	H	2.0	10	ug/L	1	04-Sep-2014 17:30
Benzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Bromodichloromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Bromoform	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Bromomethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Carbon disulfide	U	H	0.90	10	ug/L	1	04-Sep-2014 17:30
Carbon tetrachloride	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Chlorobenzene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:30
Chloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Chloroform	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Chloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
cis-1,2-Dichloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
cis-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Cyclohexane	U	Hn	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Dibromochloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Dichlorodifluoromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Dichloromethane	U	H	0.50	10	ug/L	1	04-Sep-2014 17:30
Ethylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Isopropylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
m,p-Xylene	U	H	0.60	10	ug/L	1	04-Sep-2014 17:30
Methyl acetate	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Methyl tert-butyl ether	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Methylcyclohexane	U	H	1.0	5.0	ug/L	1	04-Sep-2014 17:30
o-Xylene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Styrene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-43 Lab ID:HS14080706-11
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Toluene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
trans-1,2-Dichloroethene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:30
trans-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Trichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:30
Trichlorofluoromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:30
Vinyl chloride	U	H	0.40	2.0	ug/L	1	04-Sep-2014 17:30
Xylenes, Total	U	H	1.5	15	ug/L	1	04-Sep-2014 17:30
Surr: 1,2-Dichloroethane-d4	*98.5*			*70-125*	*%REC*	*1*	*04-Sep-2014 17:30*
Surr: 4-Bromofluorobenzene	*95.7*			*72-125*	*%REC*	*1*	*04-Sep-2014 17:30*
Surr: Dibromofluoromethane	*95.0*			*71-125*	*%REC*	*1*	*04-Sep-2014 17:30*
Surr: Toluene-d8	*97.1*			*75-125*	*%REC*	*1*	*04-Sep-2014 17:30*

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-100 Lab ID:HS14080706-12
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	21-Aug-2014 21:01
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	21-Aug-2014 21:01
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	21-Aug-2014 21:01
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
2-Butanone	U		1.0	10	ug/L	1	21-Aug-2014 21:01
2-Hexanone	U		1.0	10	ug/L	1	21-Aug-2014 21:01
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	21-Aug-2014 21:01
Acetone	U		2.0	10	ug/L	1	21-Aug-2014 21:01
Benzene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Bromodichloromethane	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Bromoform	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Bromomethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Carbon disulfide	U		0.90	10	ug/L	1	21-Aug-2014 21:01
Carbon tetrachloride	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Chlorobenzene	U		0.40	5.0	ug/L	1	21-Aug-2014 21:01
Chloroethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Chloroform	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Chloromethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Cyclohexane	U	n	0.60	5.0	ug/L	1	21-Aug-2014 21:01
Dibromochloromethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Dichloromethane	U		0.50	10	ug/L	1	21-Aug-2014 21:01
Ethylbenzene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Isopropylbenzene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
m,p-Xylene	U		0.60	10	ug/L	1	21-Aug-2014 21:01
Methyl acetate	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Methylcyclohexane	U		1.0	5.0	ug/L	1	21-Aug-2014 21:01
o-Xylene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Styrene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-100 Lab ID:HS14080706-12
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Toluene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	21-Aug-2014 21:01
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Trichloroethene	U		0.50	5.0	ug/L	1	21-Aug-2014 21:01
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	21-Aug-2014 21:01
Vinyl chloride	U		0.40	2.0	ug/L	1	21-Aug-2014 21:01
Xylenes, Total	U		1.5	15	ug/L	1	21-Aug-2014 21:01
Surr: 1,2-Dichloroethane-d4	*94.9*			*70-125*	*%REC*	*1*	*21-Aug-2014 21:01*
Surr: 4-Bromofluorobenzene	*97.9*			*72-125*	*%REC*	*1*	*21-Aug-2014 21:01*
Surr: Dibromofluoromethane	*97.6*			*71-125*	*%REC*	*1*	*21-Aug-2014 21:01*
Surr: Toluene-d8	*90.4*			*75-125*	*%REC*	*1*	*21-Aug-2014 21:01*

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

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ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-37 Lab ID:HS14080706-13
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,1,2,2-Tetrachloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,1,2-Trichlor-1,2,2-trifluoroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,1,2-Trichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,1-Dichloroethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:59
1,1-Dichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,2,4-Trichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
1,2-Dibromo-3-chloropropane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,2-Dibromoethane	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:59
1,2-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
1,2-Dichloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,2-Dichloropropane	U	H	0.70	5.0	ug/L	1	04-Sep-2014 17:59
1,3-Dichlorobenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
1,4-Dichlorobenzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
2-Butanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:59
2-Hexanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:59
4-Methyl-2-pentanone	U	H	1.0	10	ug/L	1	04-Sep-2014 17:59
Acetone	U	H	2.0	10	ug/L	1	04-Sep-2014 17:59
Benzene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Bromodichloromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Bromoform	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Bromomethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Carbon disulfide	U	H	0.90	10	ug/L	1	04-Sep-2014 17:59
Carbon tetrachloride	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Chlorobenzene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:59
Chloroethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Chloroform	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Chloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
cis-1,2-Dichloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
cis-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Cyclohexane	U	Hn	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Dibromochloromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Dichlorodifluoromethane	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Dichloromethane	U	H	0.50	10	ug/L	1	04-Sep-2014 17:59
Ethylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Isopropylbenzene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
m,p-Xylene	U	H	0.60	10	ug/L	1	04-Sep-2014 17:59
Methyl acetate	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Methyl tert-butyl ether	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Methylcyclohexane	U	H	1.0	5.0	ug/L	1	04-Sep-2014 17:59
o-Xylene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Styrene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59

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

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080706
Sample ID: Trip Blank 081114-37 Lab ID:HS14080706-13
Collection Date: 19-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Toluene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
trans-1,2-Dichloroethene	U	H	0.40	5.0	ug/L	1	04-Sep-2014 17:59
trans-1,3-Dichloropropene	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Trichloroethene	U	H	0.50	5.0	ug/L	1	04-Sep-2014 17:59
Trichlorofluoromethane	U	H	0.60	5.0	ug/L	1	04-Sep-2014 17:59
Vinyl chloride	U	H	0.40	2.0	ug/L	1	04-Sep-2014 17:59
Xylenes, Total	U	H	1.5	15	ug/L	1	04-Sep-2014 17:59
Surr: 1,2-Dichloroethane-d4	*100*			*70-125*	*%REC*	*1*	*04-Sep-2014 17:59*
Surr: 4-Bromofluorobenzene	*103*			*72-125*	*%REC*	*1*	*04-Sep-2014 17:59*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*1*	*04-Sep-2014 17:59*
Surr: Toluene-d8	*95.9*			*75-125*	*%REC*	*1*	*04-Sep-2014 17:59*

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

Revision:4

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080706

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 85454	**Test Name :** TCLP MERCURY BY SW7470A			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:12	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:51	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:53	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:55	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:56	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 16:58	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 17:00	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 17:01	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30	23 Aug 2014 16:10	25 Aug 2014 11:24	25 Aug 2014 17:03	1
Batch ID 85460	**Test Name :** TCLP METALS BY SW6020A			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:11	10
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:14	10
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:17	10
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:19	10
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:27	10
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:30	10
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:32	10
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:35	10
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30	23 Aug 2014 16:10	25 Aug 2014 10:45	26 Aug 2014 16:37	10
Batch ID 85501	**Test Name :** TCLP SEMIVOLATILES			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 17:38	10
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 18:00	10
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 14:59	10
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 15:22	10
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 15:45	10
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 16:07	10
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 16:30	10
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 16:52	10
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30	25 Aug 2014 07:03	26 Aug 2014 12:20	26 Aug 2014 13:51	1
Batch ID R239674	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14080706-12	Trip Blank 081114-100	19 Aug 2014 00:00			21 Aug 2014 21:01	1
Batch ID R239809	**Test Name :** PH BY SW9040C			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			25 Aug 2014 17:00	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			25 Aug 2014 17:00	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			25 Aug 2014 17:00	1

Revision:4

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080706

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R239841	**Test Name :** TCLP VOLATILES			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 16:36	20
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 17:49	20
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 18:14	20
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 20:15	20
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 18:38	20
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 19:02	20
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 19:27	20
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 19:51	20
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30	23 Aug 2014 16:10	25 Aug 2014 06:52	25 Aug 2014 17:25	20
Batch ID R239891	**Test Name :** IGNITABILITY			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			26 Aug 2014 18:45	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			26 Aug 2014 18:45	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			26 Aug 2014 18:45	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			26 Aug 2014 18:45	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			26 Aug 2014 18:45	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			26 Aug 2014 18:45	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			26 Aug 2014 18:45	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			26 Aug 2014 18:45	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			26 Aug 2014 18:45	1
Batch ID R239911	**Test Name :** TCLP VOLATILES			**Matrix:** Water		
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00	23 Aug 2014 16:10	25 Aug 2014 06:52	26 Aug 2014 17:00	200
Batch ID R240030	**Test Name :** PH BY SW9040C			**Matrix:** Water		
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			26 Aug 2014 16:16	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			26 Aug 2014 16:16	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			26 Aug 2014 16:16	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			26 Aug 2014 16:16	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			26 Aug 2014 16:16	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			26 Aug 2014 16:16	1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080706

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R240056	**Test Name :** REACTIVE CYANIDE			**Matrix:** Water		
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			24 Aug 2014 15:00	1
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			24 Aug 2014 15:00	1
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			24 Aug 2014 15:00	1
HS14080706-01	NTF-AST 1	19 Aug 2014 08:00			24 Aug 2014 15:00	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			24 Aug 2014 15:00	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			24 Aug 2014 15:00	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			24 Aug 2014 15:00	1
HS14080706-02	NTF-AST 2	19 Aug 2014 08:30			24 Aug 2014 15:00	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			24 Aug 2014 15:00	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			24 Aug 2014 15:00	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			24 Aug 2014 15:00	1
HS14080706-03	NTF-AST 3	19 Aug 2014 09:00			24 Aug 2014 15:00	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			24 Aug 2014 15:00	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			24 Aug 2014 15:00	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			24 Aug 2014 15:00	1
HS14080706-04	NTF-AST 5	19 Aug 2014 09:30			24 Aug 2014 15:00	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			24 Aug 2014 15:00	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			24 Aug 2014 15:00	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			24 Aug 2014 15:00	1
HS14080706-05	NTF-AST 12	19 Aug 2014 10:30			24 Aug 2014 15:00	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			24 Aug 2014 15:00	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			24 Aug 2014 15:00	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			24 Aug 2014 15:00	1
HS14080706-06	NTF-AST 11	19 Aug 2014 14:00			24 Aug 2014 15:00	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			24 Aug 2014 15:00	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			24 Aug 2014 15:00	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			24 Aug 2014 15:00	1
HS14080706-07	NTF-AST 10	19 Aug 2014 14:30			24 Aug 2014 15:00	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			24 Aug 2014 15:00	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			24 Aug 2014 15:00	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			24 Aug 2014 15:00	1
HS14080706-08	Field Duplicate #1	19 Aug 2014 14:45			24 Aug 2014 15:00	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			24 Aug 2014 15:00	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			24 Aug 2014 15:00	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			24 Aug 2014 15:00	1
HS14080706-09	Equipment Blank #1	20 Aug 2014 07:30			24 Aug 2014 15:00	1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080706

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R240374	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14080706-10	Trip Blank 081114-35	19 Aug 2014 00:00			04 Sep 2014 17:00	1
HS14080706-11	Trip Blank 081114-43	19 Aug 2014 00:00			04 Sep 2014 17:30	1
HS14080706-13	Trip Blank 081114-37	19 Aug 2014 00:00			04 Sep 2014 17:59	1

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85454 **Instrument: HG03** **Method: SW7470**

MBLK Sample ID: **GBLKW4-082514** Units: **mg/L** Analysis Date: **25-Aug-2014 15:56**
Client ID: Run ID: **HG03_239786** SeqNo: **2979414** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

MBLK Sample ID: **GBLKT1-082414** Units: **mg/L** Analysis Date: **25-Aug-2014 16:07**
Client ID: Run ID: **HG03_239786** SeqNo: **2979420** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

LCS Sample ID: **GLCSW4-082514** Units: **mg/L** Analysis Date: **25-Aug-2014 15:58**
Client ID: Run ID: **HG03_239786** SeqNo: **2979415** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00541	0.000200	0.005	0	108	80 - 120				

MS Sample ID: **HS14080736-02MS** Units: **mg/L** Analysis Date: **25-Aug-2014 16:03**
Client ID: Run ID: **HG03_239786** SeqNo: **2979418** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00482	0.000200	0.005	-0.000013	96.7	75 - 125				

MSD Sample ID: **HS14080736-02MSD** Units: **mg/L** Analysis Date: **25-Aug-2014 16:05**
Client ID: Run ID: **HG03_239786** SeqNo: **2979419** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00505	0.000200	0.005	-0.000013	101	75 - 125	0.00482	4.66	20	

DUP Sample ID: **HS14080736-02DUP** Units: **mg/L** Analysis Date: **25-Aug-2014 16:02**
Client ID: Run ID: **HG03_239786** SeqNo: **2979417** PrepDate: **25-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					-0.000013	0	20	

The following samples were anayzed in this batch:

HS14080706-01	HS14080706-02	HS14080706-03	HS14080706-04
HS14080706-05	HS14080706-06	HS14080706-07	HS14080706-08
HS14080706-09			

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85460 **Instrument: ICPMS05** **Method: SW1311/6020**

MBLK Sample ID: **MBLKT1-85460** Units: **mg/L** Analysis Date: **26-Aug-2014 15:58**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981378** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK Sample ID: **MBLK-85460** Units: **mg/L** Analysis Date: **26-Aug-2014 16:01**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981379** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

LCS Sample ID: **MLCS-85460** Units: **mg/L** Analysis Date: **26-Aug-2014 16:03**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981380** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4331	0.0500	0.5	0	86.6	80 - 120				
Barium	0.4402	0.200	0.5	0	88.0	80 - 120				
Cadmium	0.4195	0.0500	0.5	0	83.9	80 - 120				
Chromium	0.4525	0.0500	0.5	0	90.5	80 - 120				
Lead	0.4252	0.0500	0.5	0	85.0	80 - 120				
Selenium	0.4431	0.0500	0.5	0	88.6	80 - 120				
Silver	0.4344	0.0500	0.5	0	86.9	80 - 120				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85460 **Instrument: ICPMS05** **Method: SW1311/6020**

MS Sample ID: **HS14080736-01MS** Units: **mg/L** Analysis Date: **26-Aug-2014 17:01**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981402** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4309	0.0500	0.5	0.002939	85.6	75 - 125				
Barium	2.038	0.200	0.5	1.592	89.2	75 - 125				
Cadmium	0.4247	0.0500	0.5	0.001554	84.6	75 - 125				
Chromium	0.4394	0.0500	0.5	0.01223	85.4	75 - 125				
Lead	0.421	0.0500	0.5	0.002381	83.7	75 - 125				
Selenium	0.4455	0.0500	0.5	0.009153	87.3	75 - 125				
Silver	0.4174	0.0500	0.5	0.000084	83.5	75 - 125				

MSD Sample ID: **HS14080736-01MSD** Units: **mg/L** Analysis Date: **26-Aug-2014 17:04**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981403** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4424	0.0500	0.5	0.002939	87.9	75 - 125	0.4309	2.62	20	
Barium	2.082	0.200	0.5	1.592	98.0	75 - 125	2.038	2.12	20	
Cadmium	0.426	0.0500	0.5	0.001554	84.9	75 - 125	0.4247	0.323	20	
Chromium	0.4358	0.0500	0.5	0.01223	84.7	75 - 125	0.4394	0.815	20	
Lead	0.4261	0.0500	0.5	0.002381	84.7	75 - 125	0.421	1.19	20	
Selenium	0.4436	0.0500	0.5	0.009153	86.9	75 - 125	0.4455	0.428	20	
Silver	0.4195	0.0500	0.5	0.000084	83.9	75 - 125	0.4174	0.508	20	

DUP Sample ID: **HS14080736-01DUP** Units: **mg/L** Analysis Date: **26-Aug-2014 16:51**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981398** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.002939	0	25	
Barium	1.605	0.200					1.592	0.753	25	
Cadmium	U	0.0500					0.001554	0	25	
Chromium	0.01164	0.0500					0.01223	0	25	J
Lead	U	0.0500					0.002381	0	25	
Selenium	0.01003	0.0500					0.009153	0	25	J
Silver	U	0.0500					0.000084	0	25	

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85460 **Instrument: ICPMS05** **Method: SW1311/6020**

PDS Sample ID: **HS14080736-01BS** Units: **mg/L** Analysis Date: **26-Aug-2014 17:07**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981404** PrepDate: **25-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.9852	0.0500	1	0.002939	98.2	75 - 125				
Barium	2.508	0.200	1	1.592	91.5	75 - 125				
Cadmium	0.9868	0.0500	1	0.001554	98.5	75 - 125				
Chromium	0.9911	0.0500	1	0.01223	97.9	75 - 125				
Lead	0.9909	0.0500	1	0.002381	98.9	75 - 125				
Selenium	1	0.0500	1	0.009153	99.1	75 - 125				
Silver	0.9648	0.0500	1	0.000084	96.5	75 - 125				

SD Sample ID: **HS14080736-01 DIL SX** Units: **mg/L** Analysis Date: **26-Aug-2014 16:59**
Client ID: Run ID: **ICPMS05_239858** SeqNo: **2981401** PrepDate: **25-Aug-2014** DF: **50**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.002939	0	10	
Barium	1.538	1.00					1.592	3.42	10	
Cadmium	U	0.250					0.001554	0	10	
Chromium	U	0.250					0.01223	0	10	
Lead	U	0.250					0.002381	0	10	
Selenium	U	0.250					0.009153	0	10	
Silver	U	0.250					0.000084	0	10	

The following samples were anayzed in this batch: HS14080706-01 HS14080706-02 HS14080706-03 HS14080706-04 HS14080706-05 HS14080706-06 HS14080706-07 HS14080706-08 HS14080706-09

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85501 **Instrument: SV-5** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85501** Units: **ug/L** Analysis Date: **26-Aug-2014 14:14**
Client ID: Run ID: **SV-5_239923** SeqNo: **2982203** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*116.3*	*5.0*	*100*	*0*	*116*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*95.06*	*5.0*	*100*	*0*	*95.1*	*43 - 125*				
Surr: 2-Fluorophenol	*90.07*	*5.0*	*100*	*0*	*90.1*	*37 - 125*				
Surr: 4-Terphenyl-d14	*112.4*	*5.0*	*100*	*0*	*112*	*32 - 125*				
Surr: Nitrobenzene-d5	*83.59*	*5.0*	*100*	*0*	*83.6*	*37 - 125*				
Surr: Phenol-d6	*83.23*	*5.0*	*100*	*0*	*83.2*	*40 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85501 **Instrument: SV-5** **Method: SW1311/8270**

LCS Sample ID: **LCS-85501** Units: **ug/L** Analysis Date: **26-Aug-2014 12:44**
Client ID: Run ID: **SV-5_239923** SeqNo: **2982200** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	69.6	5.0	100	0	69.6	55 - 120				
2,4,6-Trichlorophenol	70.67	5.0	100	0	70.7	55 - 120				
2,4-Dinitrotoluene	31.73	5.0	50	0	63.5	55 - 125				
Cresols, Total	141.5	15	250	0	56.6	40 - 120				
Hexachlorobenzene	35.44	5.0	50	0	70.9	55 - 120				
Hexachlorobutadiene	34.67	5.0	50	0	69.3	55 - 120				
Hexachloroethane	28.56	5.0	50	0	57.1	55 - 120				
Nitrobenzene	28.53	5.0	50	0	57.1	55 - 120				
Pentachlorophenol	62.97	5.0	100	0	63.0	50 - 135				
Pyridine	21.25	5.0	50	0	42.5	30 - 120				
Surr: 2,4,6-Tribromophenol	*90.41*	*5.0*	*100*	*0*	*90.4*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.45*	*5.0*	*100*	*0*	*67.5*	*43 - 125*				
Surr: 2-Fluorophenol	*72.52*	*5.0*	*100*	*0*	*72.5*	*37 - 125*				
Surr: 4-Terphenyl-d14	*75.47*	*5.0*	*100*	*0*	*75.5*	*32 - 125*				
Surr: Nitrobenzene-d5	*61.88*	*5.0*	*100*	*0*	*61.9*	*37 - 125*				
Surr: Phenol-d6	*62.77*	*5.0*	*100*	*0*	*62.8*	*40 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85501 **Instrument: SV-5** **Method: SW1311/8270**

LCSD Sample ID: **LCSD-85501** Units: **ug/L** Analysis Date: **26-Aug-2014 13:06**
Client ID: Run ID: **SV-5_239923** SeqNo: **2982201** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	85.99	5.0	100	0	86.0	55 - 120	69.6	21.1	25	
2,4,6-Trichlorophenol	88.67	5.0	100	0	88.7	55 - 120	70.67	22.6	25	
2,4-Dinitrotoluene	40.39	5.0	50	0	80.8	55 - 125	31.73	24	25	
Cresols, Total	166.1	15	250	0	66.4	40 - 120	141.5	16	25	
Hexachlorobenzene	42.77	5.0	50	0	85.5	55 - 120	35.44	18.8	25	
Hexachlorobutadiene	44.67	5.0	50	0	89.3	55 - 120	34.67	25.2	25	R
Hexachloroethane	37.17	5.0	50	0	74.3	55 - 120	28.56	26.2	25	R
Nitrobenzene	35.37	5.0	50	0	70.7	55 - 120	28.53	21.4	25	
Pentachlorophenol	71.69	5.0	100	0	71.7	50 - 135	62.97	13	25	
Pyridine	26.96	5.0	50	0	53.9	30 - 120	21.25	23.7	25	
Surr: 2,4,6-Tribromophenol	*110.8*	*5.0*	*100*	*0*	*111*	*36 - 126*	*90.41*	*20.3*	*25*	
Surr: 2-Fluorobiphenyl	*87.01*	*5.0*	*100*	*0*	*87.0*	*43 - 125*	*67.45*	*25.3*	*25*	R
Surr: 2-Fluorophenol	*85.85*	*5.0*	*100*	*0*	*85.8*	*37 - 125*	*72.52*	*16.8*	*25*	
Surr: 4-Terphenyl-d14	*87.7*	*5.0*	*100*	*0*	*87.7*	*32 - 125*	*75.47*	*15*	*25*	
Surr: Nitrobenzene-d5	*74.77*	*5.0*	*100*	*0*	*74.8*	*37 - 125*	*61.88*	*18.9*	*25*	
Surr: Phenol-d6	*75.43*	*5.0*	*100*	*0*	*75.4*	*40 - 125*	*62.77*	*18.3*	*25*	

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85501 **Instrument: SV-5** **Method: SW1311/8270**

MS Sample ID: **HS14080706-01MS** Units: **ug/L** Analysis Date: **26-Aug-2014 17:15**
Client ID: **NTF-AST 1** Run ID: **SV-5_239923** SeqNo: **2982210** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	87.97	100	100	0	88.0	55 - 120				J
2,4,6-Trichlorophenol	90.02	100	100	0	90.0	55 - 120				J
2,4-Dinitrotoluene	40.16	100	50	0	80.3	55 - 125				J
Cresols, Total	617.8	300	250	210.1	163	40 - 120				S
Hexachlorobenzene	46.44	100	50	0	92.9	55 - 120				J
Hexachlorobutadiene	42.16	100	50	0	84.3	55 - 120				J
Hexachloroethane	65.53	100	50	0	131	55 - 120				JS
Nitrobenzene	112.6	100	50	0	225	55 - 120				S
Pentachlorophenol	74.61	100	100	0	74.6	50 - 135				J
Pyridine	U	100	50	0	0	30 - 120				S
Surr: 2,4,6-Tribromophenol	*129.5*	*100*	*100*	*0*	*129*	*36 - 126*				S
Surr: 2-Fluorobiphenyl	*93.27*	*100*	*100*	*0*	*93.3*	*43 - 125*				J
Surr: 2-Fluorophenol	*79.72*	*100*	*100*	*0*	*79.7*	*37 - 125*				J
Surr: 4-Terphenyl-d14	*102.6*	*100*	*100*	*0*	*103*	*32 - 125*				
Surr: Nitrobenzene-d5	*83.57*	*100*	*100*	*0*	*83.6*	*37 - 125*				J
Surr: Phenol-d6	*120*	*100*	*100*	*0*	*120*	*40 - 125*				

The following samples were anayzed in this batch: HS14080706-01 HS14080706-02 HS14080706-03 HS14080706-04 HS14080706-05 HS14080706-06 HS14080706-07 HS14080706-08 HS14080706-09

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-140821** Units: **ug/L** Analysis Date: **21-Aug-2014 11:43**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976177** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	5.0								
1,1,2,2-Tetrachloroethane	U	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	5.0								
1,1,2-Trichloroethane	U	5.0								
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2,4-Trichlorobenzene	U	5.0								
1,2-Dibromo-3-chloropropane	U	5.0								
1,2-Dibromoethane	U	5.0								
1,2-Dichlorobenzene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,2-Dichloropropane	U	5.0								
1,3-Dichlorobenzene	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
2-Hexanone	U	10								
4-Methyl-2-pentanone	U	10								
Acetone	U	10								
Benzene	U	5.0								
Bromodichloromethane	U	5.0								
Bromoform	U	5.0								
Bromomethane	U	5.0								
Carbon disulfide	U	10								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroethane	U	5.0								
Chloroform	U	5.0								
Chloromethane	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
cis-1,3-Dichloropropene	U	5.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	5.0								
Dichlorodifluoromethane	U	5.0								
Dichloromethane	U	10								

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-140821** Units: **ug/L** Analysis Date: **21-Aug-2014 11:43**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976177** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl acetate	U	5.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
o-Xylene	U	5.0								
Styrene	U	5.0								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
trans-1,3-Dichloropropene	U	5.0								
Trichloroethene	U	5.0								
Trichlorofluoromethane	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*48.74*	*5.0*	*50*	*0*	*97.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49*	*5.0*	*50*	*0*	*98.0*	*72 - 125*				
Surr: Dibromofluoromethane	*49.33*	*5.0*	*50*	*0*	*98.7*	*71 - 125*				
Surr: Toluene-d8	*45.42*	*5.0*	*50*	*0*	*90.8*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

LCS Sample ID: **VLCSW-140821** Units: **ug/L** Analysis Date: **21-Aug-2014 10:30**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976176** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	48.85	5.0	50	0	97.7	80 - 120				
1,1,2,2-Tetrachloroethane	41.63	5.0	50	0	83.3	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	49.99	5.0	50	0	100.0	73 - 123				
1,1,2-Trichloroethane	44.29	5.0	50	0	88.6	80 - 120				
1,1-Dichloroethane	45.14	5.0	50	0	90.3	76 - 120				
1,1-Dichloroethene	49.46	5.0	50	0	98.9	73 - 124				
1,2,4-Trichlorobenzene	44.66	5.0	50	0	89.3	75 - 130				
1,2-Dibromo-3-chloropropane	50.61	5.0	50	0	101	65 - 125				
1,2-Dibromoethane	46.01	5.0	50	0	92.0	80 - 120				
1,2-Dichlorobenzene	44.25	5.0	50	0	88.5	80 - 120				
1,2-Dichloroethane	45.7	5.0	50	0	91.4	78 - 120				
1,2-Dichloropropane	48.73	5.0	50	0	97.5	80 - 120				
1,3-Dichlorobenzene	44.5	5.0	50	0	89.0	80 - 120				
1,4-Dichlorobenzene	43.63	5.0	50	0	87.3	80 - 120				
2-Butanone	97.73	10	100	0	97.7	58 - 132				
2-Hexanone	90.38	10	100	0	90.4	61 - 130				
4-Methyl-2-pentanone	87.77	10	100	0	87.8	65 - 127				
Acetone	99.68	10	100	0	99.7	59 - 137				
Benzene	45.77	5.0	50	0	91.5	73 - 121				
Bromodichloromethane	48.56	5.0	50	0	97.1	75 - 125				
Bromoform	48.91	5.0	50	0	97.8	70 - 130				
Bromomethane	46.26	5.0	50	0	92.5	60 - 145				
Carbon disulfide	94.38	10	100	0	94.4	68 - 141				
Carbon tetrachloride	49.15	5.0	50	0	98.3	75 - 125				
Chlorobenzene	44.44	5.0	50	0	88.9	80 - 120				
Chloroethane	45.91	5.0	50	0	91.8	70 - 130				
Chloroform	47.12	5.0	50	0	94.2	70 - 130				
Chloromethane	43.99	5.0	50	0	88.0	67 - 123				
cis-1,2-Dichloroethene	48.92	5.0	50	0	97.8	78 - 120				
cis-1,3-Dichloropropene	49.42	5.0	50	0	98.8	80 - 120				
Cyclohexane	48.46	5.0	50	0	96.9	66 - 125				
Dibromochloromethane	47.84	5.0	50	0	95.7	80 - 120				
Dichlorodifluoromethane	42.21	5.0	50	0	84.4	63 - 125				
Dichloromethane	45.18	10	50	0	90.4	65 - 133				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

LCS Sample ID: **VLCSW-140821** Units: **ug/L** Analysis Date: **21-Aug-2014 10:30**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976176** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	45.61	5.0	50	0	91.2	80 - 120				
Isopropylbenzene	46.46	5.0	50	0	92.9	75 - 130				
m,p-Xylene	90.74	10	100	0	90.7	78 - 121				
Methyl acetate	46.5	5.0	50	0	93.0	60 - 130				
Methyl tert-butyl ether	44.74	5.0	50	0	89.5	70 - 125				
Methylcyclohexane	49.1	5.0	50	0	98.2	70 - 122				
o-Xylene	45.57	5.0	50	0	91.1	80 - 120				
Styrene	46.76	5.0	50	0	93.5	80 - 120				
Tetrachloroethene	48.67	5.0	50	0	97.3	74 - 125				
Toluene	43.22	5.0	50	0	86.4	80 - 120				
trans-1,2-Dichloroethene	49.54	5.0	50	0	99.1	78 - 120				
trans-1,3-Dichloropropene	51.8	5.0	50	0	104	80 - 120				
Trichloroethene	50.77	5.0	50	0	102	80 - 120				
Trichlorofluoromethane	48.45	5.0	50	0	96.9	72 - 130				
Vinyl chloride	45.72	2.0	50	0	91.4	70 - 127				
Xylenes, Total	136.3	15	150	0	90.9	80 - 120				
Surr: 1,2-Dichloroethane-d4	*47.35*	*5.0*	*50*	*0*	*94.7*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.22*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*49.47*	*5.0*	*50*	*0*	*98.9*	*71 - 125*				
Surr: Toluene-d8	*47.23*	*5.0*	*50*	*0*	*94.5*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MS Sample ID: **HS14080619-01MS** Units: **ug/L** Analysis Date: **21-Aug-2014 15:20**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976179** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	45.45	5.0	50	0	90.9	80 - 120				
1,1,2,2-Tetrachloroethane	42.45	5.0	50	0	84.9	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	40.11	5.0	50	0	80.2	73 - 123				
1,1,2-Trichloroethane	46.95	5.0	50	0	93.9	80 - 120				
1,1-Dichloroethane	45.61	5.0	50	0	91.2	76 - 120				
1,1-Dichloroethene	45.74	5.0	50	0	91.5	73 - 124				
1,2,4-Trichlorobenzene	40.11	5.0	50	0	80.2	75 - 130				
1,2-Dibromo-3-chloropropane	50.27	5.0	50	0	101	65 - 125				
1,2-Dibromoethane	48.06	5.0	50	0	96.1	80 - 120				
1,2-Dichlorobenzene	42.82	5.0	50	0	85.6	80 - 120				
1,2-Dichloroethane	48.24	5.0	50	0	96.5	78 - 120				
1,2-Dichloropropane	49.34	5.0	50	0	98.7	80 - 120				
1,3-Dichlorobenzene	42.32	5.0	50	0	84.6	80 - 120				
1,4-Dichlorobenzene	41.54	5.0	50	0	83.1	80 - 120				
2-Butanone	107.1	10	100	0	107	58 - 132				
2-Hexanone	99.75	10	100	0	99.8	61 - 130				
4-Methyl-2-pentanone	96.82	10	100	0	96.8	65 - 127				
Acetone	114.3	10	100	8.656	106	59 - 137				
Benzene	46.11	5.0	50	0	92.2	73 - 121				
Bromodichloromethane	51.8	5.0	50	0	104	75 - 125				
Bromoform	59.11	5.0	50	7.063	104	70 - 130				
Bromomethane	46.85	5.0	50	0	93.7	60 - 145				
Carbon disulfide	87.82	10	100	0	87.8	68 - 141				
Carbon tetrachloride	43.97	5.0	50	0	87.9	75 - 125				
Chlorobenzene	44.62	5.0	50	0	89.2	80 - 120				
Chloroethane	40.24	5.0	50	0	80.5	70 - 130				
Chloroform	71.57	5.0	50	26.54	90.1	70 - 130				
Chloromethane	35.78	5.0	50	0	71.6	67 - 123				
cis-1,2-Dichloroethene	50.55	5.0	50	0	101	78 - 120				
cis-1,3-Dichloropropene	51.13	5.0	50	0	102	80 - 120				
Cyclohexane	37.72	5.0	50	0	75.4	66 - 125				
Dibromochloromethane	50.02	5.0	50	0	100	80 - 120				
Dichlorodifluoromethane	25.94	5.0	50	0	51.9	63 - 125				S
Dichloromethane	48.59	10	50	0	97.2	65 - 133				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MS Sample ID: **HS14080619-01MS** Units: **ug/L** Analysis Date: **21-Aug-2014 15:20**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976179** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	43.56	5.0	50	0	87.1	80 - 120				
Isopropylbenzene	42.63	5.0	50	0	85.3	75 - 130				
m,p-Xylene	86.52	10	100	0	86.5	78 - 121				
Methyl acetate	48.09	5.0	50	0	96.2	60 - 130				
Methyl tert-butyl ether	52.05	5.0	50	0	104	70 - 125				
Methylcyclohexane	48.7	5.0	50	0	97.4	70 - 122				
o-Xylene	44.45	5.0	50	0	88.9	80 - 120				
Styrene	45.54	5.0	50	0	91.1	80 - 120				
Tetrachloroethene	44.3	5.0	50	0	88.6	74 - 125				
Toluene	42.56	5.0	50	0	85.1	80 - 120				
trans-1,2-Dichloroethene	48.98	5.0	50	0	98.0	78 - 120				
trans-1,3-Dichloropropene	52.91	5.0	50	0	106	80 - 120				
Trichloroethene	49.64	5.0	50	0	99.3	80 - 120				
Trichlorofluoromethane	41.47	5.0	50	0	82.9	72 - 130				
Vinyl chloride	37.65	2.0	50	0	75.3	70 - 127				
Xylenes, Total	131	15	150	0	87.3	80 - 120				
Surr: 1,2-Dichloroethane-d4	*46.46*	*5.0*	*50*	*0*	*92.9*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.4*	*5.0*	*50*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*49.55*	*5.0*	*50*	*0*	*99.1*	*71 - 125*				
Surr: Toluene-d8	*47.52*	*5.0*	*50*	*0*	*95.0*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14080619-01MSD** Units: **ug/L** Analysis Date: **21-Aug-2014 15:44**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976180** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	50.28	5.0	50	0	101	80 - 120	45.45	10.1	20	
1,1,2,2-Tetrachloroethane	44.1	5.0	50	0	88.2	72 - 120	42.45	3.82	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	46.54	5.0	50	0	93.1	73 - 123	40.11	14.8	20	
1,1,2-Trichloroethane	48.36	5.0	50	0	96.7	80 - 120	46.95	2.96	20	
1,1-Dichloroethane	48.65	5.0	50	0	97.3	76 - 120	45.61	6.46	20	
1,1-Dichloroethene	49.9	5.0	50	0	99.8	73 - 124	45.74	8.71	20	
1,2,4-Trichlorobenzene	45.02	5.0	50	0	90.0	75 - 130	40.11	11.5	20	
1,2-Dibromo-3-chloropropane	56.35	5.0	50	0	113	65 - 125	50.27	11.4	20	
1,2-Dibromoethane	50.54	5.0	50	0	101	80 - 120	48.06	5.03	20	
1,2-Dichlorobenzene	46.28	5.0	50	0	92.6	80 - 120	42.82	7.78	20	
1,2-Dichloroethane	49.32	5.0	50	0	98.6	78 - 120	48.24	2.23	20	
1,2-Dichloropropane	51.16	5.0	50	0	102	80 - 120	49.34	3.61	20	
1,3-Dichlorobenzene	46.07	5.0	50	0	92.1	80 - 120	42.32	8.49	20	
1,4-Dichlorobenzene	45.65	5.0	50	0	91.3	80 - 120	41.54	9.43	20	
2-Butanone	111.9	10	100	0	112	58 - 132	107.1	4.35	20	
2-Hexanone	105.1	10	100	0	105	61 - 130	99.75	5.2	20	
4-Methyl-2-pentanone	101.6	10	100	0	102	65 - 127	96.82	4.82	20	
Acetone	120.3	10	100	8.656	112	59 - 137	114.3	5.14	20	
Benzene	47.63	5.0	50	0	95.3	73 - 121	46.11	3.22	20	
Bromodichloromethane	52.65	5.0	50	0	105	75 - 125	51.8	1.64	20	
Bromoform	59.27	5.0	50	7.063	104	70 - 130	59.11	0.269	20	
Bromomethane	47.64	5.0	50	0	95.3	60 - 145	46.85	1.66	20	
Carbon disulfide	97.29	10	100	0	97.3	68 - 141	87.82	10.2	20	
Carbon tetrachloride	48.01	5.0	50	0	96.0	75 - 125	43.97	8.8	20	
Chlorobenzene	46.8	5.0	50	0	93.6	80 - 120	44.62	4.79	20	
Chloroethane	42.55	5.0	50	0	85.1	76 - 121	40.24	5.58	20	
Chloroform	74.52	5.0	50	26.54	96.0	70 - 130	71.57	4.03	20	
Chloromethane	38.94	5.0	50	0	77.9	67 - 123	35.78	8.47	20	
cis-1,2-Dichloroethene	51.72	5.0	50	0	103	78 - 120	50.55	2.28	20	
cis-1,3-Dichloropropene	51.84	5.0	50	0	104	80 - 120	51.13	1.37	20	
Cyclohexane	43.58	5.0	50	0	87.2	66 - 125	37.72	14.4	20	
Dibromochloromethane	50.43	5.0	50	0	101	80 - 120	50.02	0.807	20	
Dichlorodifluoromethane	29.12	5.0	50	0	58.2	63 - 125	25.94	11.5	20	S
Dichloromethane	50.92	10	50	0	102	65 - 133	48.59	4.68	20	

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239674 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14080619-01MSD** Units: **ug/L** Analysis Date: **21-Aug-2014 15:44**
Client ID: Run ID: **VOA6_239674** SeqNo: **2976180** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	46.62	5.0	50	0	93.2	80 - 120	43.56	6.79	20	
Isopropylbenzene	47.09	5.0	50	0	94.2	75 - 130	42.63	9.94	20	
m,p-Xylene	93.07	10	100	0	93.1	78 - 121	86.52	7.29	20	
Methyl acetate	50.5	5.0	50	0	101	60 - 130	48.09	4.88	20	
Methyl tert-butyl ether	52.49	5.0	50	0	105	70 - 125	52.05	0.833	20	
Methylcyclohexane	48.03	5.0	50	0	96.1	70 - 122	48.7	1.38	20	
o-Xylene	47.79	5.0	50	0	95.6	80 - 120	44.45	7.25	20	
Styrene	49.27	5.0	50	0	98.5	80 - 120	45.54	7.88	20	
Tetrachloroethene	49.58	5.0	50	0	99.2	74 - 125	44.3	11.2	20	
Toluene	44.95	5.0	50	0	89.9	80 - 120	42.56	5.46	20	
trans-1,2-Dichloroethene	51.42	5.0	50	0	103	78 - 120	48.98	4.87	20	
trans-1,3-Dichloropropene	55.28	5.0	50	0	111	80 - 120	52.91	4.4	20	
Trichloroethene	53.61	5.0	50	0	107	80 - 120	49.64	7.68	20	
Trichlorofluoromethane	46.38	5.0	50	0	92.8	72 - 130	41.47	11.2	20	
Vinyl chloride	40.81	2.0	50	0	81.6	70 - 127	37.65	8.07	20	
Xylenes, Total	140.9	15	150	0	93.9	78 - 121	131	7.28	20	
Surr: 1,2-Dichloroethane-d4	*47.34*	*5.0*	*50*	*0*	*94.7*	*70 - 125*	*46.46*	*1.87*	*20*	
Surr: 4-Bromofluorobenzene	*50.6*	*5.0*	*50*	*0*	*101*	*72 - 125*	*50.4*	*0.389*	*20*	
Surr: Dibromofluoromethane	*49.12*	*5.0*	*50*	*0*	*98.2*	*71 - 125*	*49.55*	*0.879*	*20*	
Surr: Toluene-d8	*47.23*	*5.0*	*50*	*0*	*94.5*	*75 - 125*	*47.52*	*0.613*	*20*	

The following samples were anayzed in this batch: HS14080706-12

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239841 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140825** Units: **ug/L** Analysis Date: **25-Aug-2014 12:08**
Client ID: Run ID: **VOA6_239841** SeqNo: **2980351** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Surr: 1,2-Dichloroethane-d4	*46.81*	*5.0*	*50*	*0*	*93.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*48.09*	*5.0*	*50*	*0*	*96.2*	*72.4 - 125*				
Surr: Dibromofluoromethane	*49.29*	*5.0*	*50*	*0*	*98.6*	*71.2 - 125*				
Surr: Toluene-d8	*45.8*	*5.0*	*50*	*0*	*91.6*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239841 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **MBLKV1-140822** Units: **ug/L** Analysis Date: **25-Aug-2014 16:11**
Client ID: Run ID: **VOA6_239841** SeqNo: **2980355** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
Surr: 1,2-Dichloroethane-d4	*949.6*	*100*	*1000*	*0*	*95.0*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*984.5*	*100*	*1000*	*0*	*98.4*	*72.4 - 125*				
Surr: Dibromofluoromethane	*995.8*	*100*	*1000*	*0*	*99.6*	*71.2 - 125*				
Surr: Toluene-d8	*881.9*	*100*	*1000*	*0*	*88.2*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239841 **Instrument: VOA6** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140825** Units: **ug/L** Analysis Date: **25-Aug-2014 10:46**
Client ID: Run ID: **VOA6_239841** SeqNo: **2980350** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	48.28	5.0	50	0	96.6	73 - 124				
1,2-Dichloroethane	44.18	5.0	50	0	88.4	76 - 120				
1,4-Dichlorobenzene	41.92	5.0	50	0	83.8	70 - 130				
2-Butanone	93.55	10	100	0	93.5	70 - 130				
Benzene	45.31	5.0	50	0	90.6	70 - 128				
Carbon tetrachloride	48.6	5.0	50	0	97.2	70 - 130				
Chlorobenzene	43.49	5.0	50	0	87.0	72 - 127				
Chloroform	46.94	5.0	50	0	93.9	70 - 130				
Tetrachloroethene	47.35	5.0	50	0	94.7	70 - 130				
Trichloroethene	50.66	5.0	50	0	101	72 - 129				
Vinyl chloride	42.5	2.0	50	0	85.0	70 - 130				
Surr: 1,2-Dichloroethane-d4	*47.1*	*5.0*	*50*	*0*	*94.2*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.83*	*5.0*	*50*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*49.21*	*5.0*	*50*	*0*	*98.4*	*71 - 125*				
Surr: Toluene-d8	*45.88*	*5.0*	*50*	*0*	*91.8*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239841 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080816-01MS** Units: **ug/L** Analysis Date: **25-Aug-2014 14:10**
Client ID: Run ID: **VOA6_239841** SeqNo: **2980353** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.91	5.0	50	0	102	73 - 124				
1,2-Dichloroethane	48.79	5.0	50	0	97.6	76 - 120				
1,4-Dichlorobenzene	43.11	5.0	50	0	86.2	70 - 130				
2-Butanone	101.6	10	100	0	102	70 - 130				
Benzene	48.57	5.0	50	0	97.1	70 - 128				
Carbon tetrachloride	49.5	5.0	50	0	99.0	70 - 130				
Chlorobenzene	46.18	5.0	50	0	92.4	72 - 127				
Chloroform	50.97	5.0	50	0	102	70 - 130				
Tetrachloroethene	48.28	5.0	50	0	96.6	70 - 130				
Trichloroethene	54.13	5.0	50	0	108	72 - 129				
Vinyl chloride	37.8	2.0	50	0	75.6	70 - 130				
Surr: 1,2-Dichloroethane-d4	*45.82*	*5.0*	*50*	*0*	*91.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.01*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*49.41*	*5.0*	*50*	*0*	*98.8*	*71 - 125*				
Surr: Toluene-d8	*46.09*	*5.0*	*50*	*0*	*92.2*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239841 **Instrument: VOA6** **Method: SW1311/8260B**

MSD Sample ID: **HS14080816-01MSD** Units: **ug/L** Analysis Date: **25-Aug-2014 14:34**
Client ID: Run ID: **VOA6_239841** SeqNo: **2980354** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.58	5.0	50	0	101	73 - 124	50.91	0.647	20	
1,2-Dichloroethane	48.95	5.0	50	0	97.9	76 - 120	48.79	0.326	20	
1,4-Dichlorobenzene	42.44	5.0	50	0	84.9	70 - 130	43.11	1.58	20	
2-Butanone	102.7	10	100	0	103	70 - 130	101.6	1.08	20	
Benzene	47.98	5.0	50	0	96.0	70 - 128	48.57	1.21	20	
Carbon tetrachloride	48.65	5.0	50	0	97.3	70 - 130	49.5	1.73	20	
Chlorobenzene	45.83	5.0	50	0	91.7	72 - 127	46.18	0.747	20	
Chloroform	49.22	5.0	50	0	98.4	70 - 130	50.97	3.49	20	
Tetrachloroethene	47.24	5.0	50	0	94.5	70 - 130	48.28	2.17	20	
Trichloroethene	52.99	5.0	50	0	106	72 - 129	54.13	2.12	20	
Vinyl chloride	38.46	2.0	50	0	76.9	70 - 130	37.8	1.75	20	
Surr: 1,2-Dichloroethane-d4	*45.66*	*5.0*	*50*	*0*	*91.3*	*70 - 125*	*45.82*	*0.349*	*20*	
Surr: 4-Bromofluorobenzene	*50.82*	*5.0*	*50*	*0*	*102*	*72 - 125*	*51.01*	*0.373*	*20*	
Surr: Dibromofluoromethane	*49.63*	*5.0*	*50*	*0*	*99.3*	*71 - 125*	*49.41*	*0.445*	*20*	
Surr: Toluene-d8	*45.88*	*5.0*	*50*	*0*	*91.8*	*75 - 125*	*46.09*	*0.452*	*20*	

The following samples were anayzed in this batch: HS14080706-01 HS14080706-02 HS14080706-03 HS14080706-04 HS14080706-05 HS14080706-06 HS14080706-07 HS14080706-08 HS14080706-09

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 11:40**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981974** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	U	10								
Surr: 1,2-Dichloroethane-d4	*47.23*	*5.0*	*50*	*0*	*94.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.44*	*5.0*	*50*	*0*	*98.9*	*72.4 - 125*				
Surr: Dibromofluoromethane	*48.8*	*5.0*	*50*	*0*	*97.6*	*71.2 - 125*				
Surr: Toluene-d8	*44.26*	*5.0*	*50*	*0*	*88.5*	*75 - 125*				

MBLK Sample ID: **MBLKV1-140825** Units: **ug/L** Analysis Date: **26-Aug-2014 12:08**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981975** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	U	200								
Surr: 1,2-Dichloroethane-d4	*944.3*	*100*	*1000*	*0*	*94.4*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*987.3*	*100*	*1000*	*0*	*98.7*	*72.4 - 125*				
Surr: Dibromofluoromethane	*973.5*	*100*	*1000*	*0*	*97.4*	*71.2 - 125*				
Surr: Toluene-d8	*880*	*100*	*1000*	*0*	*88.0*	*75 - 125*				

LCS Sample ID: **VLCSW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 10:52**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981973** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	95.07	10	100	0	95.1	70 - 130				
Surr: 1,2-Dichloroethane-d4	*46.77*	*5.0*	*50*	*0*	*93.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.14*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*49.56*	*5.0*	*50*	*0*	*99.1*	*71 - 125*				
Surr: Toluene-d8	*44.81*	*5.0*	*50*	*0*	*89.6*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080841-13MS** Units: **ug/L** Analysis Date: **26-Aug-2014 14:34**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981981** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	2162	200	2000	0	108	70 - 130				
Surr: 1,2-Dichloroethane-d4	*920.2*	*100*	*1000*	*0*	*92.0*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1020*	*100*	*1000*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*989.9*	*100*	*1000*	*0*	*99.0*	*71 - 125*				
Surr: Toluene-d8	*911.9*	*100*	*1000*	*0*	*91.2*	*75 - 125*				

MSD Sample ID: **HS14080841-13MSD** Units: **ug/L** Analysis Date: **26-Aug-2014 14:59**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981982** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	1953	200	2000	0	97.7	70 - 130	2162	10.1	20	
Surr: 1,2-Dichloroethane-d4	*914.3*	*100*	*1000*	*0*	*91.4*	*70 - 125*	*920.2*	*0.645*	*20*	
Surr: 4-Bromofluorobenzene	*1022*	*100*	*1000*	*0*	*102*	*72 - 125*	*1020*	*0.205*	*20*	
Surr: Dibromofluoromethane	*980.9*	*100*	*1000*	*0*	*98.1*	*71 - 125*	*989.9*	*0.914*	*20*	
Surr: Toluene-d8	*909.4*	*100*	*1000*	*0*	*90.9*	*75 - 125*	*911.9*	*0.28*	*20*	

The following samples were anayzed in this batch: HS14080706-03

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140904** Units: **ug/L** Analysis Date: **04-Sep-2014 13:14**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992095** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	5.0								
1,1,2,2-Tetrachloroethane	U	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	5.0								
1,1,2-Trichloroethane	U	5.0								
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2,4-Trichlorobenzene	U	5.0								
1,2-Dibromo-3-chloropropane	U	5.0								
1,2-Dibromoethane	U	5.0								
1,2-Dichlorobenzene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,2-Dichloropropane	U	5.0								
1,3-Dichlorobenzene	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
2-Hexanone	U	10								
4-Methyl-2-pentanone	U	10								
Acetone	U	10								
Benzene	U	5.0								
Bromodichloromethane	U	5.0								
Bromoform	U	5.0								
Bromomethane	U	5.0								
Carbon disulfide	U	10								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroethane	U	5.0								
Chloroform	U	5.0								
Chloromethane	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
cis-1,3-Dichloropropene	U	5.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	5.0								
Dichlorodifluoromethane	U	5.0								
Dichloromethane	U	10								

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140904** Units: **ug/L** Analysis Date: **04-Sep-2014 13:14**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992095** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl acetate	U	5.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
o-Xylene	U	5.0								
Styrene	U	5.0								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
trans-1,3-Dichloropropene	U	5.0								
Trichloroethene	U	5.0								
Trichlorofluoromethane	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*45.89*	*5.0*	*50*	*0*	*91.8*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.75*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*47.85*	*5.0*	*50*	*0*	*95.7*	*71 - 125*				
Surr: Toluene-d8	*50.28*	*5.0*	*50*	*0*	*101*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140904** Units: **ug/L** Analysis Date: **04-Sep-2014 12:18**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992094** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	47.87	5.0	50	0	95.7	80 - 120				
1,1,2,2-Tetrachloroethane	56.87	5.0	50	0	114	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	54.55	5.0	50	0	109	73 - 123				
1,1,2-Trichloroethane	46.93	5.0	50	0	93.9	80 - 120				
1,1-Dichloroethane	45.35	5.0	50	0	90.7	76 - 120				
1,1-Dichloroethene	51.39	5.0	50	0	103	73 - 124				
1,2,4-Trichlorobenzene	50.37	5.0	50	0	101	75 - 130				
1,2-Dibromo-3-chloropropane	56.04	5.0	50	0	112	65 - 125				
1,2-Dibromoethane	48.74	5.0	50	0	97.5	80 - 120				
1,2-Dichlorobenzene	47.31	5.0	50	0	94.6	80 - 120				
1,2-Dichloroethane	45.45	5.0	50	0	90.9	78 - 120				
1,2-Dichloropropane	54.58	5.0	50	0	109	80 - 120				
1,3-Dichlorobenzene	48.08	5.0	50	0	96.2	80 - 120				
1,4-Dichlorobenzene	46.76	5.0	50	0	93.5	80 - 120				
2-Butanone	87.26	10	100	0	87.3	58 - 132				
2-Hexanone	93.43	10	100	0	93.4	61 - 130				
4-Methyl-2-pentanone	91.95	10	100	0	91.9	65 - 127				
Acetone	109.8	10	100	0	110	59 - 137				
Benzene	45.65	5.0	50	0	91.3	73 - 121				
Bromodichloromethane	49.01	5.0	50	0	98.0	75 - 125				
Bromoform	51.89	5.0	50	0	104	70 - 130				
Bromomethane	44.81	5.0	50	0	89.6	60 - 145				
Carbon disulfide	111.6	10	100	0	112	68 - 141				
Carbon tetrachloride	48.72	5.0	50	0	97.4	75 - 125				
Chlorobenzene	48.19	5.0	50	0	96.4	80 - 120				
Chloroethane	49.44	5.0	50	0	98.9	70 - 130				
Chloroform	47.84	5.0	50	0	95.7	70 - 130				
Chloromethane	41.65	5.0	50	0	83.3	67 - 123				
cis-1,2-Dichloroethene	48.38	5.0	50	0	96.8	78 - 120				
cis-1,3-Dichloropropene	48.35	5.0	50	0	96.7	80 - 120				
Cyclohexane	51.48	5.0	50	0	103	66 - 125				
Dibromochloromethane	49.92	5.0	50	0	99.8	80 - 120				
Dichlorodifluoromethane	43.73	5.0	50	0	87.5	63 - 125				
Dichloromethane	53.34	10	50	0	107	65 - 133				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140904** Units: **ug/L** Analysis Date: **04-Sep-2014 12:18**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992094** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	47.42	5.0	50	0	94.8	80 - 120				
Isopropylbenzene	47.89	5.0	50	0	95.8	75 - 130				
m,p-Xylene	97.18	10	100	0	97.2	78 - 121				
Methyl acetate	46	5.0	50	0	92.0	60 - 130				
Methyl tert-butyl ether	50.93	5.0	50	0	102	70 - 125				
Methylcyclohexane	50.68	5.0	50	0	101	70 - 122				
o-Xylene	46.81	5.0	50	0	93.6	80 - 120				
Styrene	49.74	5.0	50	0	99.5	80 - 120				
Tetrachloroethene	50.1	5.0	50	0	100	74 - 125				
Toluene	46.48	5.0	50	0	93.0	80 - 120				
trans-1,2-Dichloroethene	48.1	5.0	50	0	96.2	78 - 120				
trans-1,3-Dichloropropene	51.88	5.0	50	0	104	80 - 120				
Trichloroethene	50.86	5.0	50	0	102	80 - 120				
Trichlorofluoromethane	50.14	5.0	50	0	100	72 - 130				
Vinyl chloride	42.44	2.0	50	0	84.9	70 - 127				
Xylenes, Total	144	15	150	0	96.0	80 - 120				
Surr: 1,2-Dichloroethane-d4	*45.28*	*5.0*	*50*	*0*	*90.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.66*	*5.0*	*50*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*48.13*	*5.0*	*50*	*0*	*96.3*	*71 - 125*				
Surr: Toluene-d8	*47.16*	*5.0*	*50*	*0*	*94.3*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090109-01MS** Units: **ug/L** Analysis Date: **04-Sep-2014 15:34**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992100** PrepDate: DF: **100**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	4303	500	5000	0	86.1	80 - 120				
1,1,2,2-Tetrachloroethane	4465	500	5000	0	89.3	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	4152	500	5000	0	83.0	73 - 123				
1,1,2-Trichloroethane	4288	500	5000	0	85.8	80 - 120				
1,1-Dichloroethane	4398	500	5000	0	88.0	76 - 120				
1,1-Dichloroethene	4266	500	5000	0	85.3	73 - 124				
1,2,4-Trichlorobenzene	4137	500	5000	0	82.7	75 - 130				
1,2-Dibromo-3-chloropropane	5376	500	5000	0	108	65 - 125				
1,2-Dibromoethane	4441	500	5000	0	88.8	80 - 120				
1,2-Dichlorobenzene	4271	500	5000	0	85.4	80 - 120				
1,2-Dichloroethane	4257	500	5000	0	85.1	78 - 120				
1,2-Dichloropropane	5139	500	5000	0	103	80 - 120				
1,3-Dichlorobenzene	4152	500	5000	0	83.0	80 - 120				
1,4-Dichlorobenzene	4151	500	5000	0	83.0	80 - 120				
2-Butanone	8484	1000	10000	0	84.8	58 - 132				
2-Hexanone	8351	1000	10000	0	83.5	61 - 130				
4-Methyl-2-pentanone	8334	1000	10000	0	83.3	65 - 127				
Acetone	9283	1000	10000	0	92.8	59 - 137				
Benzene	4271	500	5000	0	85.4	73 - 121				
Bromodichloromethane	4766	500	5000	0	95.3	75 - 125				
Bromoform	4757	500	5000	0	95.1	70 - 130				
Bromomethane	2520	500	5000	0	50.4	60 - 145				S
Carbon disulfide	6534	1000	10000	0	65.3	68 - 141				S
Carbon tetrachloride	4155	500	5000	0	83.1	75 - 125				
Chlorobenzene	4326	500	5000	114.4	84.2	80 - 120				
Chloroethane	4340	500	5000	0	86.8	70 - 130				
Chloroform	10010	500	5000	5386	92.4	70 - 130				
Chloromethane	3186	500	5000	0	63.7	67 - 123				S
cis-1,2-Dichloroethene	4629	500	5000	0	92.6	78 - 120				
cis-1,3-Dichloropropene	4307	500	5000	0	86.1	80 - 120				
Cyclohexane	4385	500	5000	0	87.7	66 - 125				
Dibromochloromethane	4498	500	5000	0	90.0	80 - 120				
Dichlorodifluoromethane	1967	500	5000	0	39.3	63 - 125				S
Dichloromethane	5353	1000	5000	0	107	65 - 133				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090109-01MS** Units: **ug/L** Analysis Date: **04-Sep-2014 15:34**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992100** PrepDate: DF: **100**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	4182	500	5000	0	83.6	80 - 120				
Isopropylbenzene	4081	500	5000	0	81.6	75 - 130				
m,p-Xylene	8538	1000	10000	0	85.4	78 - 121				
Methyl acetate	4401	500	5000	0	88.0	60 - 130				
Methyl tert-butyl ether	4775	500	5000	0	95.5	70 - 125				
Methylcyclohexane	3909	500	5000	0	78.2	70 - 122				
o-Xylene	4067	500	5000	0	81.3	80 - 120				
Styrene	560	500	5000	0	11.2	80 - 120				S
Tetrachloroethene	8430	500	5000	0	169	74 - 125				S
Toluene	4101	500	5000	0	82.0	80 - 120				
trans-1,2-Dichloroethene	4347	500	5000	0	86.9	78 - 120				
trans-1,3-Dichloropropene	4851	500	5000	0	97.0	80 - 120				
Trichloroethene	4895	500	5000	0	97.9	80 - 120				
Trichlorofluoromethane	3712	500	5000	0	74.2	72 - 130				
Vinyl chloride	3177	200	5000	0	63.5	70 - 127				S
Xylenes, Total	12600	1500	15000	0	84.0	80 - 120				
Surr: 1,2-Dichloroethane-d4	*4791*	*500*	*5000*	*0*	*95.8*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*4926*	*500*	*5000*	*0*	*98.5*	*72 - 125*				
Surr: Dibromofluoromethane	*4993*	*500*	*5000*	*0*	*99.9*	*71 - 125*				
Surr: Toluene-d8	*4778*	*500*	*5000*	*0*	*95.6*	*75 - 125*				

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090109-01MSD** Units: **ug/L** Analysis Date: **04-Sep-2014 16:03**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992101** PrepDate: DF: **100**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	4130	500	5000	0	82.6	80 - 120	4303	4.11	20	
1,1,2,2-Tetrachloroethane	4595	500	5000	0	91.9	72 - 120	4465	2.86	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	3885	500	5000	0	77.7	73 - 123	4152	6.64	20	
1,1,2-Trichloroethane	4331	500	5000	0	86.6	80 - 120	4288	1.01	20	
1,1-Dichloroethane	4160	500	5000	0	83.2	76 - 120	4398	5.56	20	
1,1-Dichloroethene	4225	500	5000	0	84.5	73 - 124	4266	0.954	20	
1,2,4-Trichlorobenzene	4231	500	5000	0	84.6	75 - 130	4137	2.25	20	
1,2-Dibromo-3-chloropropane	5275	500	5000	0	106	65 - 125	5376	1.89	20	
1,2-Dibromoethane	4402	500	5000	0	88.0	80 - 120	4441	0.88	20	
1,2-Dichlorobenzene	4364	500	5000	0	87.3	80 - 120	4271	2.16	20	
1,2-Dichloroethane	4248	500	5000	0	85.0	78 - 120	4257	0.208	20	
1,2-Dichloropropane	5390	500	5000	0	108	80 - 120	5139	4.78	20	
1,3-Dichlorobenzene	4310	500	5000	0	86.2	80 - 120	4152	3.73	20	
1,4-Dichlorobenzene	4245	500	5000	0	84.9	80 - 120	4151	2.24	20	
2-Butanone	8750	1000	10000	0	87.5	58 - 132	8484	3.08	20	
2-Hexanone	8714	1000	10000	0	87.1	61 - 130	8351	4.25	20	
4-Methyl-2-pentanone	7975	1000	10000	0	79.7	65 - 127	8334	4.41	20	
Acetone	9397	1000	10000	0	94.0	59 - 137	9283	1.21	20	
Benzene	4592	500	5000	0	91.8	73 - 121	4271	7.26	20	
Bromodichloromethane	4689	500	5000	0	93.8	75 - 125	4766	1.63	20	
Bromoform	4774	500	5000	0	95.5	70 - 130	4757	0.366	20	
Bromomethane	4107	500	5000	0	82.1	60 - 145	2520	47.9	20	R
Carbon disulfide	5736	1000	10000	0	57.4	68 - 141	6534	13	20	S
Carbon tetrachloride	4160	500	5000	0	83.2	75 - 125	4155	0.118	20	
Chlorobenzene	4320	500	5000	114.4	84.1	80 - 120	4326	0.142	20	
Chloroethane	3945	500	5000	0	78.9	76 - 121	4340	9.54	20	
Chloroform	9793	500	5000	5386	88.1	70 - 130	10010	2.17	20	
Chloromethane	3026	500	5000	0	60.5	67 - 123	3186	5.16	20	S
cis-1,2-Dichloroethene	4672	500	5000	0	93.4	78 - 120	4629	0.935	20	
cis-1,3-Dichloropropene	4457	500	5000	0	89.1	80 - 120	4307	3.44	20	
Cyclohexane	3908	500	5000	0	78.2	66 - 125	4385	11.5	20	
Dibromochloromethane	4651	500	5000	0	93.0	80 - 120	4498	3.35	20	
Dichlorodifluoromethane	1893	500	5000	0	37.9	63 - 125	1967	3.8	20	S
Dichloromethane	5083	1000	5000	0	102	65 - 133	5353	5.18	20	

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

Revision: 4

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240374 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090109-01MSD** Units: **ug/L** Analysis Date: **04-Sep-2014 16:03**
Client ID: Run ID: **VOA1_240374** SeqNo: **2992101** PrepDate: DF: **100**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	4260	500	5000	0	85.2	80 - 120	4182	1.86	20	
Isopropylbenzene	4109	500	5000	0	82.2	75 - 130	4081	0.683	20	
m,p-Xylene	8531	1000	10000	0	85.3	78 - 121	8538	0.0774	20	
Methyl acetate	4068	500	5000	0	81.4	60 - 130	4401	7.86	20	
Methyl tert-butyl ether	4635	500	5000	0	92.7	70 - 125	4775	2.97	20	
Methylcyclohexane	4077	500	5000	0	81.5	70 - 122	3909	4.21	20	
o-Xylene	4174	500	5000	0	83.5	80 - 120	4067	2.61	20	
Styrene	3629	500	5000	0	72.6	80 - 120	560	147	20	SR
Tetrachloroethene	8913	500	5000	0	178	74 - 125	8430	5.56	20	S
Toluene	4127	500	5000	0	82.5	80 - 120	4101	0.643	20	
trans-1,2-Dichloroethene	4572	500	5000	0	91.4	78 - 120	4347	5.03	20	
trans-1,3-Dichloropropene	5028	500	5000	0	101	80 - 120	4851	3.59	20	
Trichloroethene	5134	500	5000	0	103	80 - 120	4895	4.77	20	
Trichlorofluoromethane	3591	500	5000	0	71.8	72 - 130	3712	3.32	20	S
Vinyl chloride	2964	200	5000	0	59.3	70 - 127	3177	6.96	20	S
Xylenes, Total	12710	1500	15000	0	84.7	78 - 121	12600	0.799	20	
Surr: 1,2-Dichloroethane-d4	*4539*	*500*	*5000*	*0*	*90.8*	*70 - 125*	*4791*	*5.39*	*20*	
Surr: 4-Bromofluorobenzene	*4879*	*500*	*5000*	*0*	*97.6*	*72 - 125*	*4926*	*0.963*	*20*	
Surr: Dibromofluoromethane	*4880*	*500*	*5000*	*0*	*97.6*	*71 - 125*	*4993*	*2.3*	*20*	
Surr: Toluene-d8	*4562*	*500*	*5000*	*0*	*91.2*	*75 - 125*	*4778*	*4.62*	*20*	

The following samples were anayzed in this batch: HS14080706-10 HS14080706-11 HS14080706-13

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

Revision: 4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239809 **Instrument: WetChem_HS** **Method: SW9040**

LCS Sample ID: **LCS-239809** Units: **pH units** Analysis Date: **25-Aug-2014 17:00**
Client ID: Run ID: **WetChem_HS_239809** SeqNo: **2979489** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.01	0.100	6	0	100	98 - 102				

DUP Sample ID: **HS14080706-09DUP** Units: **pH units** Analysis Date: **25-Aug-2014 17:00**
Client ID: **Equipment Blank #1** Run ID: **WetChem_HS_239809** SeqNo: **2979490** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.32	0.100					6.33	0.158	10	
Temp Deg C @pH	21.5	0					22.1	2.75		

The following samples were anayzed in this batch: HS14080706-01 HS14080706-04 HS14080706-09

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

Revision: 4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239891 **Instrument: WetChem_HS** **Method: SW1010**

LCS Sample ID: **LCS-239891** Units: **°F** Analysis Date: **26-Aug-2014 18:45**
Client ID: Run ID: **WetChem_HS_239891** SeqNo: **2981311** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	85	50.0	84	0	101	95 - 105				

DUP Sample ID: **HS14080706-09DUP** Units: **°F** Analysis Date: **26-Aug-2014 18:45**
Client ID: **Equipment Blank #1** Run ID: **WetChem_HS_239891** SeqNo: **2981312** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	> 212	50.0					0	0	25	

The following samples were anayzed in this batch:

HS14080706-01	HS14080706-02	HS14080706-03	HS14080706-04
HS14080706-05	HS14080706-06	HS14080706-07	HS14080706-08
HS14080706-09			

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

Revision: 4

ALS Group USA, Corp Date: 07-Oct-14

Client: Effective Environmental Inc.
WorkOrder: HS14080706
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240030 **Instrument: WetChem_HS** **Method: SW9040**

LCS Sample ID: **LCS-240030** Units: **pH units** Analysis Date: **26-Aug-2014 16:16**
Client ID: Run ID: **WetChem_HS_240030** SeqNo: **2984766** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.98	0.100	6	0	99.7	98 - 102				

DUP Sample ID: **HS14080706-03DUP** Units: **pH units** Analysis Date: **26-Aug-2014 16:16**
Client ID: **NTF-AST 3** Run ID: **WetChem_HS_240030** SeqNo: **2984767** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.87	0.100					6.67	2.95	10	
Temp Deg C @pH	23.1	0					24.4	5.47		

The following samples were anayzed in this batch: HS14080706-02 HS14080706-03 HS14080706-05 HS14080706-06 HS14080706-07 HS14080706-08

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

Revision: 4

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: **HS14080706**

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 Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
°F	Farenheit degrees
µg/L	Micrograms per Liter
Date	
mg/L	Milligrams per Liter
pH units	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	31-Oct-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	TX104704231-14-13	30-Apr-2015

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080706

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14080706-01	NTF-AST 1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-01	NTF-AST 1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-01	NTF-AST 1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-01	NTF-AST 1	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-02	NTF-AST 2	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-02	NTF-AST 2	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-02	NTF-AST 2	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-02	NTF-AST 2	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-03	NTF-AST 3	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-03	NTF-AST 3	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-03	NTF-AST 3	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-03	NTF-AST 3	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-04	NTF-AST 5	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-04	NTF-AST 5	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-04	NTF-AST 5	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-04	NTF-AST 5	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-05	NTF-AST 12	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-05	NTF-AST 12	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-05	NTF-AST 12	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-05	NTF-AST 12	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-06	NTF-AST 11	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-06	NTF-AST 11	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-06	NTF-AST 11	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-06	NTF-AST 11	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-07	NTF-AST 10	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-07	NTF-AST 10	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-07	NTF-AST 10	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-07	NTF-AST 10	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-08	Field Duplicate #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-08	Field Duplicate #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-08	Field Duplicate #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-08	Field Duplicate #1	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-09	Equipment Blank #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-09	Equipment Blank #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-09	Equipment Blank #1	Login	8/20/2014 4:41:51 PM	MES	20E
HS14080706-09	Equipment Blank #1	Login	8/20/2014 4:41:51 PM	MES	Sub
HS14080706-10	Trip Blank 081114-35	Login	8/20/2014 4:41:51 PM	MES	VW-3
HS14080706-11	Trip Blank 081114-43	Login	9/3/2014 4:32:50 PM	MES	VW-3
HS14080706-12	Trip Blank 081114-100	Login	9/3/2014 4:32:50 PM	MES	VW-3
HS14080706-13	Trip Blank 081114-37	Login	9/3/2014 4:32:50 PM	MES	VW-3

Revision:4

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080706

SAMPLE TRACKING

Revision:4

ALS Group USA, Corp Date: 07-Oct-14

Sample Receipt Checklist

Client Name: Effective Env-HOU
Work Order: HS14080706

Date/Time Received: **20-Aug-2014 10:24**
Received by: **LOT**

Checklist completed by: *Michael E. Schepcoff* (eSignature) 20-Aug-2014 (Date)

Reviewed by: *Kristin M Brown* (eSignature) 27-Aug-2014 (Date)

Matrices: **Water**

Carrier name: **ALS Courier**

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

Temperature(s)/Thermometer(s):	0.7c/0.7c 0.5c/0.5c 2.0c/2.0c 2.5c/2.5c C/U	3
Cooler(s)/Kit(s):	7146 23495 5760 2640	
Date/Time sample(s) sent to storage:	8/20/2014 18:00	

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

pH adjusted by:

Login Notes: Matched samples to chain using date and time on bottles.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

☑ ALS Laboratory Group
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Forr

Page 1 of 1

HS14080706

Effective Environmental Inc.

USOR0-Tank Farm Liquid Sampling

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	2016-14-1	Project Name	USOR-Tank Farm Liquid Sampling	A	TCLP - VOCs
Work Order	2016-14-1	Project Number	RC4-2016-14	B	TCLP - SVOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C	TCLP RCRA 8 Metals
Send Report To	Hiren Shah	Invoice Attn.	Hiren Shah	D	RCI
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E	Total VOC
				F	
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	G	
Phone	281-842-0804	Phone	972-329-1200	H	
Fax	281-474-2580	Fax	972-329-1206	I	
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	NTF-AST 1	08/19/14	8:00 a.m.	Liquid		6	X	X	X	X							
2	NTF-AST 2	08/19/14	8:30 a.m.	Liquid		6	X	X	X	X							
3	NTF-AST 3	08/19/14	9:00:00 a.m.	Liquid		6	X	X	X	X							
4	NTF-AST 5	08/19/14	9:30 a.m.	Liquid		6	X	X	X	X							
6	NTF-AST 12	08/19/14	10:30 a.m.	Liquid		6	X	X	X	X							
7	NTF-AST 11	08/19/14	2:00 p.m.	Liquid		6	X	X	X	X							
	NTF-AST 10	08/19/14	2:30 p.m.	Liquid		6	X	X	X	X							
8	Field Duplicate #1	08/19/14	2:45 p.m.	Liquid		6	X	X	X	X							
9	Equipment Blank #1	8/20/14 ~~08/19/14~~	7:30 p.m.	Liquid		6	X	X	X	X							
10	Trip Blank (4 samples)					4	—	—	—	—	X	(1 Trip Blank/Cooler)					
11	Temp. Blank (4 samples) — 1 temp. Blank/Cooler																
12																	

Sampler(s): Please Print & Sign: Joe Carillo

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
Joe Carillo	8/20/14	16:24	8/20/14	16:24
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Relinquished by:	Date:	Time:	Received by:	

Cooler Temp.: 1.1 2.2 3.7 3.6 2.6

QC Package: (Check Box Below)

	Level II: Standard QC	TRRP-Checklist
	Level III: Std QC + Raw Data	TRRP Level IV
	Level IV: SW846 CLP-Like	
	Other: _____	

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

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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25-Aug-2014

Kristin Brown
ALS Environmental
10450 Stancliff Rd
Suite 210
Houston, TX 77099

Re: **HS14080706** Work Order: **14081085**

Dear Kristin,

ALS Environmental received 9 samples on 21-Aug-2014 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 16.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 532786

ALS Group USA, Corp

Date: 25-Aug-14

Client: ALS Environmental
Project: HS14080706
Work Order: **14081085**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14081085-01	HS14080706-01	Water	NTF-AST 1	8/19/2014 08:00	8/21/2014 09:30	☐
14081085-02	HS14080706-02	Water	NTF-AST 2	8/19/2014 08:30	8/21/2014 09:30	☐
14081085-03	HS14080706-03	Water	NTF-AST 3	8/19/2014 09:00	8/21/2014 09:30	☐
14081085-04	HS14080706-04	Water	NTF-AST 5	8/19/2014 09:30	8/21/2014 09:30	☐
14081085-05	HS14080706-05	Water	NTF-AST 12	8/19/2014 10:30	8/21/2014 09:30	☐
14081085-06	HS14080706-06	Water	NTF-AST 11	8/19/2014 14:00	8/21/2014 09:30	☐
14081085-07	HS14080706-07	Water	NTF-AST 10	8/19/2014 14:30	8/21/2014 09:30	☐
14081085-08	HS14080706-08	Water	Field Duplicate #1	8/19/2014 14:45	8/21/2014 09:30	☐
14081085-09	HS14080706-09	Water	Equipment Duplicate #1	8/20/2014 07:30	8/21/2014 09:30	☐

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Project: HS14080706
WorkOrder: **14081085**

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 is present at an estimated concentration between the MDL and Report Limit
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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
mg/Kg	Milligrams per Kilogram

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-01
Collection Date: 8/19/2014 08:00 AM

Work Order: 14081085
Lab ID: 14081085-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00100

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-02
Collection Date: 8/19/2014 08:30 AM

Work Order: 14081085
Lab ID: 14081085-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00101

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-03
Collection Date: 8/19/2014 09:00 AM

Work Order: 14081085
Lab ID: 14081085-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00102

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-04
Collection Date: 8/19/2014 09:30 AM

Work Order: 14081085
Lab ID: 14081085-04
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00103

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-05
Collection Date: 8/19/2014 10:30 AM

Work Order: 14081085
Lab ID: 14081085-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-06
Collection Date: 8/19/2014 02:00 PM

Work Order: 14081085
Lab ID: 14081085-06
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00105

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-07
Collection Date: 8/19/2014 02:30 PM

Work Order: 14081085
Lab ID: 14081085-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00106

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-08
Collection Date: 8/19/2014 02:45 PM

Work Order: 14081085
Lab ID: 14081085-08
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00107

ALS Group USA, Corp

Date: *25-Aug-14*

Client: ALS Environmental
Project: HS14080706
Sample ID: HS14080706-09
Collection Date: 8/20/2014 07:30 AM

Work Order: 14081085
Lab ID: 14081085-09
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 03:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00108

ALS Group USA, Corp

Client: ALS Environmental
Work Order: 14081085
Project: HS14080706

Date: 25-Aug-14

QC BATCH REPORT

Batch ID: **R146868** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

MBLK Sample ID: **WBLKW1-082414-R146868** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: Run ID: **WETCHEM_140824D** SeqNo: **2901059** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082414-R146868** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: Run ID: **WETCHEM_140824D** SeqNo: **2901060** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	1656	100	2149	0	77.1	60-120		0		

The following samples were analyzed in this batch:

14081085-01A	14081085-02A	14081085-03A
14081085-04A	14081085-05A	14081085-06A
14081085-07A	14081085-08A	14081085-09A

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

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Work Order: 14081085
Project: HS14080706

QC BATCH REPORT

Batch ID: **R146871** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK Sample ID: **WBLKW1-082414-R146871** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: Run ID: **WETCHEM_140824F** SeqNo: **2901123** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082414-R146871** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: Run ID: **WETCHEM_140824F** SeqNo: **2901124** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	124.8	100	125	0	99.8	75-125	0			

MS Sample ID: **14081085-09A MS** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: **HS14080706-09** Run ID: **WETCHEM_140824F** SeqNo: **2901134** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	100	250	0	94	50-150	0			

MSD Sample ID: **14081085-09A MSD** Units: **mg/Kg** Analysis Date: **8/24/2014 03:00 PM**

Client ID: **HS14080706-09** Run ID: **WETCHEM_140824F** SeqNo: **2901135** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	249.6	100	250	0	99.8	50-150	234.9	6.06	35	

The following samples were analyzed in this batch:

14081085-01A	14081085-02A	14081085-03A
14081085-04A	14081085-05A	14081085-06A
14081085-07A	14081085-08A	14081085-09A

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

RIGHT SOLUTIONS | RIGHT PARTNER

14081085

CHAIN OF CUSTODY RECORD

ALS Environmental

Date	20 Aug 2014
COC ID	1106
Due date	27 AUG 14

Subcontractor

ALS Laboratory Group	Phone
3352 128th Ave.	6163996070
Holland, MI 494249263	Fax
	6163996185

Customer Information		Project Information	
PO		Project Name	HS14080706

Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Stancliff Rd, Ste 210	Address	10450 Stancliff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5656	Phone	281-530-5656
Email1	kristin.brown@alsglobal.com	Email2	

Lab ID	Client Samp ID	Collection Date	Matrix	Analysis Requested
HS14080706-01	NTF-AST 1	19-Aug-14 08:00 am	Water	RCN_W
				RS_W
HS14080706-02	NTF-AST 2	19-Aug-14 08:30 am		RCN_W
				RS_W
HS14080706-03	NTF-AST 3	19-Aug-14 09:00 am		RCN_W
				RS_W
HS14080706-04	NTF-AST 5	19-Aug-14 09:30 am		RCN_W
				RS_W
HS14080706-05	NTF-AST 12	19-Aug-14 10:30 am		RCN_W
				RS_W
HS14080706-06	NTF-AST 11	19-Aug-14 02:00 pm		RCN_W
				RS_W
HS14080706-07	NTF-AST 10	19-Aug-14 02:30 pm		RCN_W
				RS_W
HS14080706-08	Field Duplicate #1	19-Aug-14 02:45 pm		RCN_W
				RS_W
HS14080706-09	Equipment Duplicate #1	20-Aug-14 07:30 am		RCN_W
				RS_W

Comments Please analyze for the above. Send report to kristin.brown@alsglobal.com and CC results to Jumoke.Lawal@alsglobal.com

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
	8/20/14 1800		8/21/14 0930		

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ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **ALS - HOUSTON** Date/Time Received: **21-Aug-14 09:30**

Work Order: **14081085** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 21-Aug-14 (Date) Reviewed by: Chad Whelton (eSignature) 21-Aug-14 (Date)

Matrices: Water
Carrier name: FedEx

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 ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.0 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/21/2014 1:53:29 PM		
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:

CorrectiveAction:

SRC Page 1 of 1

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10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

September 26, 2014

Hiren Shah
Effective Environmental Inc.
9950 Chemical Road
Pasadena, TX 77507

Work Order: **HS14080761**

Revision: **1**

Laboratory Results for: **USOR-Tank Farm Liquid Sampling**

Dear Hiren,

ALS Environmental received 16 sample(s) on Aug 21, 2014 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Kristin Brown

Generated By: Dane.Wacasey

Kristin M Brown
Project Manager

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080761

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14080761-01	NTF-AST 9	Liquid		20-Aug-2014 08:00	21-Aug-2014 11:30	☐
HS14080761-02	NTF-AST 8	Liquid		20-Aug-2014 08:45	21-Aug-2014 11:30	☐
HS14080761-03	NTF-AST 7	Liquid		20-Aug-2014 09:30	21-Aug-2014 11:30	☐
HS14080761-04	NTF-AST 14	Liquid		20-Aug-2014 10:15	21-Aug-2014 11:30	☐
HS14080761-05	NTF-AST 17	Liquid		20-Aug-2014 11:00	21-Aug-2014 11:30	☐
HS14080761-06	NTF-AST 20	Liquid		20-Aug-2014 11:45	21-Aug-2014 11:30	☐
HS14080761-07	NTF-AST 19	Liquid		20-Aug-2014 12:45	21-Aug-2014 11:30	☐
HS14080761-08	NTF-AST 18	Liquid		20-Aug-2014 13:30	21-Aug-2014 11:30	☐
HS14080761-09	NTF-AST 13	Liquid		20-Aug-2014 14:15	21-Aug-2014 11:30	☐
HS14080761-10	Field Duplicate #2	Liquid		20-Aug-2014 14:45	21-Aug-2014 11:30	☐
HS14080761-11	Equipment Blank #2	Liquid		20-Aug-2014 16:00	21-Aug-2014 11:30	☐
HS14080761-12	Trip Blank - 081114-41	Water		20-Aug-2014 00:00	21-Aug-2014 11:30	☐
HS14080761-13	Trip Blank - 081114-04	Water		20-Aug-2014 00:00	21-Aug-2014 11:30	☐
HS14080761-14	Trip Blank - 081114-07	Water		20-Aug-2014 00:00	21-Aug-2014 11:30	☐
HS14080761-15	Trip Blank - 081114-08	Water		20-Aug-2014 00:00	21-Aug-2014 11:30	☐
HS14080761-16	Trip Blank - 081114-40	Water		20-Aug-2014 00:00	21-Aug-2014 11:30	☐

Revision: 1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080761

CASE NARRATIVE

Work Order Comments

- This report was revised September 26, 2014 in order to report results to the SDL and include TRRP nomenclature column headers.
- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.
- Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

  The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

GCMS Semivolatiles by Method SW1311/8270

Batch ID: 85502

Sample ID: **NTF-AST 9 (HS14080761-01)**
Sample ID: **NTF-AST 18 (HS14080761-08)**
- One or more of the method 8270 surrogates were recovered outside of the control limits. This was due to a dilution required for sample analysis.

Sample ID: **NTF-AST 9 (HS14080761-01MS)**
- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Batch ID: 85567

Sample ID: **NTF-AST 14 (HS14080761-04)**
Sample ID: **NTF-AST 17 (HS14080761-05)**
Sample ID: **NTF-AST 19 (HS14080761-07)**
- One or more of the method 8270 surrogates were recovered outside of the control limits. This was due to a dilution required for sample analysis.

Sample ID: **NTF-AST 14 (HS14080761-04)**
Sample ID: **NTF-AST 17 (HS14080761-05)**
Sample ID: **NTF-AST 20 (HS14080761-06)**
Sample ID: **NTF-AST 19 (HS14080761-07)**
- One or more of the GCMS semi-volatile internal standards were recovered at <50%. The sample was reanalyzed with similar results indicating a sample matrix interference.

Sample ID: **NTF-AST 14 (HS14080761-04)**
Sample ID: **NTF-AST 17 (HS14080761-05)**
Sample ID: **NTF-AST 19 (HS14080761-07)**
- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

GCMS Volatiles by Method SW8260

Batch ID: R240113

Sample ID: **hs14080845-11**
- MS/MSD is for an unrelated sample.

GCMS Volatiles by Method SW1311/8260B

Batch ID: R239911

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R239985

Sample ID: **HS14080736-01**
- MS/MSD is for an unrelated sample.

Metals by Method SW7470

Batch ID: 85572

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080761

CASE NARRATIVE

Metals by Method SW7470

Batch ID: 85572

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW1311/6020

Batch ID: 85500,85557A

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW1010

Batch ID: R240127,R240152

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 9 Lab ID:HS14080761-01
Collection Date: 20-Aug-2014 08:00 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 14:10
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 14:10
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 14:10
2-Butanone	**3.8**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 14:10
Benzene	**0.48**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 14:10
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 14:10
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 14:10
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 14:10
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 14:10
Trichloroethene	**0.017**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 14:10
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 14:10
Surr: 1,2-Dichloroethane-d4	*95.5*			*70-125*	*%REC*	*20*	*26-Aug-2014 14:10*
Surr: 4-Bromofluorobenzene	*104*			*72-125*	*%REC*	*20*	*26-Aug-2014 14:10*
Surr: Dibromofluoromethane	*99.8*			*71-125*	*%REC*	*20*	*26-Aug-2014 14:10*
Surr: Toluene-d8	*89.8*			*75-125*	*%REC*	*20*	*26-Aug-2014 14:10*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	26-Aug-2014 18:46
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	26-Aug-2014 18:46
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	26-Aug-2014 18:46
Cresols, Total	**2.3**		**0.040**	**0.30**	**mg/L**	10	26-Aug-2014 18:46
Hexachlorobenzene	U		0.022	0.10	mg/L	10	26-Aug-2014 18:46
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	26-Aug-2014 18:46
Hexachloroethane	U		0.020	0.10	mg/L	10	26-Aug-2014 18:46
Nitrobenzene	U		0.016	0.10	mg/L	10	26-Aug-2014 18:46
Pentachlorophenol	U		0.032	0.10	mg/L	10	26-Aug-2014 18:46
Pyridine	U		0.040	0.10	mg/L	10	26-Aug-2014 18:46
Surr: 2,4,6-Tribromophenol	*134*	*S*		*36-126*	*%REC*	*10*	*26-Aug-2014 18:46*
Surr: 2-Fluorobiphenyl	*89.5*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 18:46*
Surr: 2-Fluorophenol	*100*			*37-125*	*%REC*	*10*	*26-Aug-2014 18:46*
Surr: 4-Terphenyl-d14	*114*			*32-125*	*%REC*	*10*	*26-Aug-2014 18:46*
Surr: Nitrobenzene-d5	*84.2*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 18:46*
Surr: Phenol-d6	*79.3*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 18:46*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW1311 / 25-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:46
Barium	**0.148**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 15:46
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:46
Chromium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:46
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 15:46
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:46
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:46
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: NTF-AST 9
Collection Date: 20-Aug-2014 08:00

ANALYTICAL REPORT
WorkOrder:HS14080761
Lab ID:HS14080761-01
Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000600**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:38
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.02**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.1**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 8 Lab ID:HS14080761-02
Collection Date: 20-Aug-2014 08:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 17:25
1,2-Dichloroethane	**0.012**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 17:25
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 17:25
2-Butanone	**24**		**0.20**	**2.0**	**mg/L**	200	28-Aug-2014 00:21
Benzene	**0.34**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 17:25
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 17:25
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 17:25
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 17:25
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 17:25
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 17:25
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 17:25
Surr: 1,2-Dichloroethane-d4	*95.9*			*70-125*	*%REC*	*20*	*26-Aug-2014 17:25*
Surr: 1,2-Dichloroethane-d4	*102*			*70-125*	*%REC*	*200*	*28-Aug-2014 00:21*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*26-Aug-2014 17:25*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*200*	*28-Aug-2014 00:21*
Surr: Dibromofluoromethane	*96.3*			*71-125*	*%REC*	*20*	*26-Aug-2014 17:25*
Surr: Dibromofluoromethane	*99.7*			*71-125*	*%REC*	*200*	*28-Aug-2014 00:21*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*20*	*26-Aug-2014 17:25*
Surr: Toluene-d8	*99.9*			*75-125*	*%REC*	*200*	*28-Aug-2014 00:21*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	26-Aug-2014 19:08
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	26-Aug-2014 19:08
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	26-Aug-2014 19:08
Cresols, Total	**1.5**		**0.030**	**0.22**	**mg/L**	10	26-Aug-2014 19:08
Hexachlorobenzene	U		0.016	0.075	mg/L	10	26-Aug-2014 19:08
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	26-Aug-2014 19:08
Hexachloroethane	U		0.015	0.075	mg/L	10	26-Aug-2014 19:08
Nitrobenzene	U		0.012	0.075	mg/L	10	26-Aug-2014 19:08
Pentachlorophenol	U		0.024	0.075	mg/L	10	26-Aug-2014 19:08
Pyridine	U		0.030	0.075	mg/L	10	26-Aug-2014 19:08
Surr: 2,4,6-Tribromophenol	*121*			*36-126*	*%REC*	*10*	*26-Aug-2014 19:08*
Surr: 2-Fluorobiphenyl	*84.1*			*43-125*	*%REC*	*10*	*26-Aug-2014 19:08*
Surr: 2-Fluorophenol	*89.1*			*37-125*	*%REC*	*10*	*26-Aug-2014 19:08*
Surr: 4-Terphenyl-d14	*95.3*			*32-125*	*%REC*	*10*	*26-Aug-2014 19:08*
Surr: Nitrobenzene-d5	*75.1*			*37-125*	*%REC*	*10*	*26-Aug-2014 19:08*
Surr: Phenol-d6	*83.3*			*40-125*	*%REC*	*10*	*26-Aug-2014 19:08*

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 8 Lab ID:HS14080761-02
Collection Date: 20-Aug-2014 08:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A		**Method:SW1311/6020**		Leache:SW1311/6020 / 27-Aug-2014	Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:49
Barium	**0.0506**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 15:49
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:49
Chromium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:49
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 15:49
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:49
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:49
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.000168	0.000800	mg/L	1	28-Aug-2014 13:39
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.51**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**23.9**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 7 Lab ID:HS14080761-03
Collection Date: 20-Aug-2014 09:30 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 20:15
1,2-Dichloroethane	**0.014**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 20:15
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 20:15
2-Butanone	**3.3**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 20:15
Benzene	**0.79**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 20:15
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 20:15
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 20:15
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 20:15
Tetrachloroethene	**0.017**	J	**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 20:15
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 20:15
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 20:15
Surr: 1,2-Dichloroethane-d4	*94.5*			*70-125*	*%REC*	*20*	*26-Aug-2014 20:15*
Surr: 4-Bromofluorobenzene	*98.2*			*72-125*	*%REC*	*20*	*26-Aug-2014 20:15*
Surr: Dibromofluoromethane	*95.2*			*71-125*	*%REC*	*20*	*26-Aug-2014 20:15*
Surr: Toluene-d8	*98.3*			*75-125*	*%REC*	*20*	*26-Aug-2014 20:15*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.049	0.27	mg/L	10	26-Aug-2014 19:31
2,4,6-Trichlorophenol	U		0.076	0.27	mg/L	10	26-Aug-2014 19:31
2,4-Dinitrotoluene	U		0.055	0.27	mg/L	10	26-Aug-2014 19:31
Cresols, Total	**1.5**		**0.11**	**0.82**	**mg/L**	10	26-Aug-2014 19:31
Hexachlorobenzene	U		0.060	0.27	mg/L	10	26-Aug-2014 19:31
Hexachlorobutadiene	U		0.060	0.27	mg/L	10	26-Aug-2014 19:31
Hexachloroethane	U		0.055	0.27	mg/L	10	26-Aug-2014 19:31
Nitrobenzene	U		0.044	0.27	mg/L	10	26-Aug-2014 19:31
Pentachlorophenol	U		0.087	0.27	mg/L	10	26-Aug-2014 19:31
Pyridine	U		0.11	0.27	mg/L	10	26-Aug-2014 19:31
Surr: 2,4,6-Tribromophenol	*105*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 19:31*
Surr: 2-Fluorobiphenyl	*83.0*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 19:31*
Surr: 2-Fluorophenol	*88.2*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 19:31*
Surr: 4-Terphenyl-d14	*101*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 19:31*
Surr: Nitrobenzene-d5	*74.1*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 19:31*
Surr: Phenol-d6	*84.8*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 19:31*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:51
Barium	**0.267**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 15:51
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:51
Chromium	**0.0662**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 15:51
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 15:51
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:51
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:51
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 7 Lab ID:HS14080761-03
Collection Date: 20-Aug-2014 09:30 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000520**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:41
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**6.92**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**25.1**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 14 Lab ID:HS14080761-04
Collection Date: 20-Aug-2014 10:15 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 01:58
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 01:58
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 01:58
2-Butanone	**0.17**	J	**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 01:58
Benzene	**0.70**		**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 01:58
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 01:58
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 01:58
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 01:58
Tetrachloroethene	U		0.012	0.10	mg/L	20	28-Aug-2014 01:58
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 01:58
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 01:58
Surr: 1,2-Dichloroethane-d4	*102*			*70-125*	*%REC*	*20*	*28-Aug-2014 01:58*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*28-Aug-2014 01:58*
Surr: Dibromofluoromethane	*96.9*			*71-125*	*%REC*	*20*	*28-Aug-2014 01:58*
Surr: Toluene-d8	*99.9*			*75-125*	*%REC*	*20*	*28-Aug-2014 01:58*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.11	0.60	mg/L	10	29-Aug-2014 03:34
2,4,6-Trichlorophenol	U		0.17	0.60	mg/L	10	29-Aug-2014 03:34
2,4-Dinitrotoluene	U		0.12	0.60	mg/L	10	29-Aug-2014 03:34
Cresols, Total	U		0.24	1.8	mg/L	10	29-Aug-2014 03:34
Hexachlorobenzene	U		0.13	0.60	mg/L	10	29-Aug-2014 03:34
Hexachlorobutadiene	U		0.13	0.60	mg/L	10	29-Aug-2014 03:34
Hexachloroethane	U		0.12	0.60	mg/L	10	29-Aug-2014 03:34
Nitrobenzene	U		0.096	0.60	mg/L	10	29-Aug-2014 03:34
Pentachlorophenol	U		0.19	0.60	mg/L	10	29-Aug-2014 03:34
Pyridine	U		0.24	0.60	mg/L	10	29-Aug-2014 03:34
Surr: 2,4,6-Tribromophenol	*68.4*	*J*		*36-126*	*%REC*	*10*	*29-Aug-2014 03:34*
Surr: 2-Fluorobiphenyl	*129*	*JS*		*43-125*	*%REC*	*10*	*29-Aug-2014 03:34*
Surr: 2-Fluorophenol	*127*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 03:34*
Surr: 4-Terphenyl-d14	*95.8*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 03:34*
Surr: Nitrobenzene-d5	*293*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 03:34*
Surr: Phenol-d6	*217*	*JS*		*40-125*	*%REC*	*10*	*29-Aug-2014 03:34*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:33
Barium	**2.93**		**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:33
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:33
Chromium	**0.145**	J	**0.0500**	**0.250**	**mg/L**	10	28-Aug-2014 19:33
Lead	**0.226**	J	**0.0350**	**0.250**	**mg/L**	10	28-Aug-2014 19:33
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:33
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:33
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080761
Sample ID:	NTF-AST 14	Lab ID:HS14080761-04
Collection Date:	20-Aug-2014 10:15	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 26-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.0212**		**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:43
PH SOIL BY SW9045D		**Method:SW9045B**					Analyst: MJC
pH	**7.01**	H	**0.100**	**0.100**	**pH Units**	1	02-Sep-2014 15:42
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 17 Lab ID:HS14080761-05
Collection Date: 20-Aug-2014 11:00 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 04:47
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 04:47
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 04:47
2-Butanone	**0.72**		**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 04:47
Benzene	**0.88**		**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 04:47
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 04:47
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 04:47
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 04:47
Tetrachloroethene	**0.074**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 04:47
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 04:47
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 04:47
Surr: 1,2-Dichloroethane-d4	*101*			*70-125*	*%REC*	*20*	*28-Aug-2014 04:47*
Surr: 4-Bromofluorobenzene	*96.9*			*72-125*	*%REC*	*20*	*28-Aug-2014 04:47*
Surr: Dibromofluoromethane	*99.0*			*71-125*	*%REC*	*20*	*28-Aug-2014 04:47*
Surr: Toluene-d8	*99.8*			*75-125*	*%REC*	*20*	*28-Aug-2014 04:47*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.18	1.0	mg/L	10	29-Aug-2014 03:57
2,4,6-Trichlorophenol	U		0.28	1.0	mg/L	10	29-Aug-2014 03:57
2,4-Dinitrotoluene	U		0.20	1.0	mg/L	10	29-Aug-2014 03:57
Cresols, Total	U		0.40	3.0	mg/L	10	29-Aug-2014 03:57
Hexachlorobenzene	U		0.22	1.0	mg/L	10	29-Aug-2014 03:57
Hexachlorobutadiene	U		0.22	1.0	mg/L	10	29-Aug-2014 03:57
Hexachloroethane	U		0.20	1.0	mg/L	10	29-Aug-2014 03:57
Nitrobenzene	U		0.16	1.0	mg/L	10	29-Aug-2014 03:57
Pentachlorophenol	U		0.32	1.0	mg/L	10	29-Aug-2014 03:57
Pyridine	U		0.40	1.0	mg/L	10	29-Aug-2014 03:57
Surr: 2,4,6-Tribromophenol	*0*	*JS*		*36-126*	*%REC*	*10*	*29-Aug-2014 03:57*
Surr: 2-Fluorobiphenyl	*0*	*JS*		*43-125*	*%REC*	*10*	*29-Aug-2014 03:57*
Surr: 2-Fluorophenol	*0*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 03:57*
Surr: 4-Terphenyl-d14	*0*	*JS*		*32-125*	*%REC*	*10*	*29-Aug-2014 03:57*
Surr: Nitrobenzene-d5	*235*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 03:57*
Surr: Phenol-d6	*316*	*JS*		*40-125*	*%REC*	*10*	*29-Aug-2014 03:57*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:36
Barium	**6.64**		**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:36
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:36
Chromium	**0.237**	J	**0.0500**	**0.250**	**mg/L**	10	28-Aug-2014 19:36
Lead	**0.342**		**0.0350**	**0.250**	**mg/L**	10	28-Aug-2014 19:36
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:36
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:36
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client:	Effective Environmental Inc.		**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:	HS14080761
Sample ID:	NTF-AST 17	Lab ID:	HS14080761-05
Collection Date:	20-Aug-2014 11:00	Matrix:	Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 26-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.0108**		**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:45
PH SOIL BY SW9045D		**Method:SW9045B**					Analyst: MJC
pH	**7.19**	H	**0.100**	**0.100**	**pH Units**	1	02-Sep-2014 15:42
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 20 Lab ID:HS14080761-06
Collection Date: 20-Aug-2014 11:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 02:22
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 02:22
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 02:22
2-Butanone	**0.29**		**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 02:22
Benzene	**1.1**		**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 02:22
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 02:22
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 02:22
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 02:22
Tetrachloroethene	U		0.012	0.10	mg/L	20	28-Aug-2014 02:22
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 02:22
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 02:22
Surr: 1,2-Dichloroethane-d4	*101*			*70-125*	*%REC*	*20*	*28-Aug-2014 02:22*
Surr: 4-Bromofluorobenzene	*99.4*			*72-125*	*%REC*	*20*	*28-Aug-2014 02:22*
Surr: Dibromofluoromethane	*99.0*			*71-125*	*%REC*	*20*	*28-Aug-2014 02:22*
Surr: Toluene-d8	*99.3*			*75-125*	*%REC*	*20*	*28-Aug-2014 02:22*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.045	0.25	mg/L	10	29-Aug-2014 04:19
2,4,6-Trichlorophenol	U		0.070	0.25	mg/L	10	29-Aug-2014 04:19
2,4-Dinitrotoluene	U		0.050	0.25	mg/L	10	29-Aug-2014 04:19
Cresols, Total	**1.3**		**0.10**	**0.75**	**mg/L**	10	29-Aug-2014 04:19
Hexachlorobenzene	U		0.055	0.25	mg/L	10	29-Aug-2014 04:19
Hexachlorobutadiene	U		0.055	0.25	mg/L	10	29-Aug-2014 04:19
Hexachloroethane	U		0.050	0.25	mg/L	10	29-Aug-2014 04:19
Nitrobenzene	U		0.040	0.25	mg/L	10	29-Aug-2014 04:19
Pentachlorophenol	U		0.080	0.25	mg/L	10	29-Aug-2014 04:19
Pyridine	U		0.10	0.25	mg/L	10	29-Aug-2014 04:19
Surr: 2,4,6-Tribromophenol	*113*	*J*		*36-126*	*%REC*	*10*	*29-Aug-2014 04:19*
Surr: 2-Fluorobiphenyl	*90.9*	*J*		*43-125*	*%REC*	*10*	*29-Aug-2014 04:19*
Surr: 2-Fluorophenol	*57.7*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 04:19*
Surr: 4-Terphenyl-d14	*92.3*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 04:19*
Surr: Nitrobenzene-d5	*78.5*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 04:19*
Surr: Phenol-d6	*79.8*	*J*		*40-125*	*%REC*	*10*	*29-Aug-2014 04:19*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:38
Barium	**0.309**	J	**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:38
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:38
Chromium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:38
Lead	U		0.0350	0.250	mg/L	10	28-Aug-2014 19:38
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:38
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:38
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: NTF-AST 20
Collection Date: 20-Aug-2014 11:45

ANALYTICAL REPORT
WorkOrder:HS14080761
Lab ID:HS14080761-06
Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW7470 / 28-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.00264**		**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:46
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.33**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.3**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 19 Lab ID:HS14080761-07
Collection Date: 20-Aug-2014 12:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 02:46
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 02:46
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 02:46
2-Butanone	**0.23**		**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 02:46
Benzene	**0.043**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 02:46
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 02:46
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 02:46
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 02:46
Tetrachloroethene	U		0.012	0.10	mg/L	20	28-Aug-2014 02:46
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 02:46
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 02:46
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*20*	*28-Aug-2014 02:46*
Surr: 4-Bromofluorobenzene	*103*			*72-125*	*%REC*	*20*	*28-Aug-2014 02:46*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*20*	*28-Aug-2014 02:46*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*20*	*28-Aug-2014 02:46*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.11	0.60	mg/L	10	29-Aug-2014 04:42
2,4,6-Trichlorophenol	U		0.17	0.60	mg/L	10	29-Aug-2014 04:42
2,4-Dinitrotoluene	U		0.12	0.60	mg/L	10	29-Aug-2014 04:42
Cresols, Total	**0.74**	J	**0.24**	**1.8**	**mg/L**	10	29-Aug-2014 04:42
Hexachlorobenzene	U		0.13	0.60	mg/L	10	29-Aug-2014 04:42
Hexachlorobutadiene	U		0.13	0.60	mg/L	10	29-Aug-2014 04:42
Hexachloroethane	U		0.12	0.60	mg/L	10	29-Aug-2014 04:42
Nitrobenzene	U		0.096	0.60	mg/L	10	29-Aug-2014 04:42
Pentachlorophenol	U		0.19	0.60	mg/L	10	29-Aug-2014 04:42
Pyridine	U		0.24	0.60	mg/L	10	29-Aug-2014 04:42
Surr: 2,4,6-Tribromophenol	*0*	*JS*		*36-126*	*%REC*	*10*	*29-Aug-2014 04:42*
Surr: 2-Fluorobiphenyl	*144*	*JS*		*43-125*	*%REC*	*10*	*29-Aug-2014 04:42*
Surr: 2-Fluorophenol	*0*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 04:42*
Surr: 4-Terphenyl-d14	*131*	*JS*		*32-125*	*%REC*	*10*	*29-Aug-2014 04:42*
Surr: Nitrobenzene-d5	*138*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 04:42*
Surr: Phenol-d6	*129*	*JS*		*40-125*	*%REC*	*10*	*29-Aug-2014 04:42*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:41
Barium	**0.140**	J	**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:41
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:41
Chromium	**0.129**	J	**0.0500**	**0.250**	**mg/L**	10	28-Aug-2014 19:41
Lead	U		0.0350	0.250	mg/L	10	28-Aug-2014 19:41
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:41
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:41
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	29-Aug-2014 18:09

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: NTF-AST 19
Collection Date: 20-Aug-2014 12:45

ANALYTICAL REPORT
WorkOrder:HS14080761
Lab ID:HS14080761-07
Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW7470 / 28-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.00214**		**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:48
PH SOIL BY SW9045D		**Method:SW9045B**					Analyst: MJC
pH	**6.50**	H	**0.100**	**0.100**	**pH Units**	1	02-Sep-2014 15:42
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 18 Lab ID:HS14080761-08
Collection Date: 20-Aug-2014 13:30 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 21:04
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 21:04
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 21:04
2-Butanone	**4.8**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 21:04
Benzene	**0.36**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 21:04
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 21:04
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 21:04
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 21:04
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 21:04
Trichloroethene	**0.033**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 21:04
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 21:04
Surr: 1,2-Dichloroethane-d4	*94.0*			*70-125*	*%REC*	*20*	*26-Aug-2014 21:04*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*20*	*26-Aug-2014 21:04*
Surr: Dibromofluoromethane	*95.6*			*71-125*	*%REC*	*20*	*26-Aug-2014 21:04*
Surr: Toluene-d8	*99.2*			*75-125*	*%REC*	*20*	*26-Aug-2014 21:04*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.090	0.50	mg/L	10	26-Aug-2014 19:53
2,4,6-Trichlorophenol	U		0.14	0.50	mg/L	10	26-Aug-2014 19:53
2,4-Dinitrotoluene	U		0.10	0.50	mg/L	10	26-Aug-2014 19:53
Cresols, Total	**1.5**		**0.20**	**1.5**	**mg/L**	10	26-Aug-2014 19:53
Hexachlorobenzene	U		0.11	0.50	mg/L	10	26-Aug-2014 19:53
Hexachlorobutadiene	U		0.11	0.50	mg/L	10	26-Aug-2014 19:53
Hexachloroethane	U		0.10	0.50	mg/L	10	26-Aug-2014 19:53
Nitrobenzene	U		0.080	0.50	mg/L	10	26-Aug-2014 19:53
Pentachlorophenol	U		0.16	0.50	mg/L	10	26-Aug-2014 19:53
Pyridine	U		0.20	0.50	mg/L	10	26-Aug-2014 19:53
Surr: 2,4,6-Tribromophenol	*0*	*JS*		*36-126*	*%REC*	*10*	*26-Aug-2014 19:53*
Surr: 2-Fluorobiphenyl	*0*	*JS*		*43-125*	*%REC*	*10*	*26-Aug-2014 19:53*
Surr: 2-Fluorophenol	*0*	*JS*		*37-125*	*%REC*	*10*	*26-Aug-2014 19:53*
Surr: 4-Terphenyl-d14	*0*	*JS*		*32-125*	*%REC*	*10*	*26-Aug-2014 19:53*
Surr: Nitrobenzene-d5	*102*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 19:53*
Surr: Phenol-d6	*314*	*JS*		*40-125*	*%REC*	*10*	*26-Aug-2014 19:53*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:54
Barium	**0.122**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 15:54
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:54
Chromium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:54
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 15:54
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 15:54
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 15:54
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 18 Lab ID:HS14080761-08
Collection Date: 20-Aug-2014 13:30 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW3010A / 26-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000620**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:50
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.16**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.3**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 13 Lab ID:HS14080761-09
Collection Date: 20-Aug-2014 14:15 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 20:40
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 20:40
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 20:40
2-Butanone	**14**		**0.10**	**1.0**	**mg/L**	100	28-Aug-2014 00:45
Benzene	**2.7**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 20:40
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 20:40
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 20:40
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 20:40
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 20:40
Trichloroethene	**0.018**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 20:40
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 20:40
Surr: 1,2-Dichloroethane-d4	*94.6*			*70-125*	*%REC*	*20*	*26-Aug-2014 20:40*
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*100*	*28-Aug-2014 00:45*
Surr: 4-Bromofluorobenzene	*98.4*			*72-125*	*%REC*	*20*	*26-Aug-2014 20:40*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*100*	*28-Aug-2014 00:45*
Surr: Dibromofluoromethane	*94.8*			*71-125*	*%REC*	*20*	*26-Aug-2014 20:40*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*100*	*28-Aug-2014 00:45*
Surr: Toluene-d8	*99.0*			*75-125*	*%REC*	*20*	*26-Aug-2014 20:40*
Surr: Toluene-d8	*99.9*			*75-125*	*%REC*	*100*	*28-Aug-2014 00:45*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.027	0.15	mg/L	10	26-Aug-2014 20:16
2,4,6-Trichlorophenol	U		0.042	0.15	mg/L	10	26-Aug-2014 20:16
2,4-Dinitrotoluene	U		0.030	0.15	mg/L	10	26-Aug-2014 20:16
Cresols, Total	**2.4**		**0.060**	**0.45**	**mg/L**	10	26-Aug-2014 20:16
Hexachlorobenzene	U		0.033	0.15	mg/L	10	26-Aug-2014 20:16
Hexachlorobutadiene	U		0.033	0.15	mg/L	10	26-Aug-2014 20:16
Hexachloroethane	U		0.030	0.15	mg/L	10	26-Aug-2014 20:16
Nitrobenzene	U		0.024	0.15	mg/L	10	26-Aug-2014 20:16
Pentachlorophenol	U		0.048	0.15	mg/L	10	26-Aug-2014 20:16
Pyridine	U		0.060	0.15	mg/L	10	26-Aug-2014 20:16
Surr: 2,4,6-Tribromophenol	*118*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 20:16*
Surr: 2-Fluorobiphenyl	*90.6*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 20:16*
Surr: 2-Fluorophenol	*106*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 20:16*
Surr: 4-Terphenyl-d14	*102*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 20:16*
Surr: Nitrobenzene-d5	*76.0*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 20:16*
Surr: Phenol-d6	*57.5*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 20:16*

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: NTF-AST 13 Lab ID:HS14080761-09
Collection Date: 20-Aug-2014 14:15 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A		**Method:SW1311/6020**		Leache:SW3010A / 26-Aug-2014	Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:02
Barium	**0.164**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:02
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:02
Chromium	**0.0934**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:02
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:02
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:02
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:02
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000216**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:51
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.17**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.7**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Field Duplicate #2 Lab ID:HS14080761-10
Collection Date: 20-Aug-2014 14:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 17:49
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 17:49
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 17:49
2-Butanone	**14**		**0.10**	**1.0**	**mg/L**	100	28-Aug-2014 01:10
Benzene	**2.8**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 17:49
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 17:49
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 17:49
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 17:49
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 17:49
Trichloroethene	**0.019**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 17:49
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 17:49
Surr: 1,2-Dichloroethane-d4	*95.6*			*70-125*	*%REC*	*20*	*26-Aug-2014 17:49*
Surr: 1,2-Dichloroethane-d4	*101*			*70-125*	*%REC*	*100*	*28-Aug-2014 01:10*
Surr: 4-Bromofluorobenzene	*99.6*			*72-125*	*%REC*	*20*	*26-Aug-2014 17:49*
Surr: 4-Bromofluorobenzene	*97.8*			*72-125*	*%REC*	*100*	*28-Aug-2014 01:10*
Surr: Dibromofluoromethane	*95.1*			*71-125*	*%REC*	*20*	*26-Aug-2014 17:49*
Surr: Dibromofluoromethane	*99.1*			*71-125*	*%REC*	*100*	*28-Aug-2014 01:10*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*20*	*26-Aug-2014 17:49*
Surr: Toluene-d8	*97.8*			*75-125*	*%REC*	*100*	*28-Aug-2014 01:10*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.027	0.15	mg/L	10	26-Aug-2014 20:38
2,4,6-Trichlorophenol	U		0.042	0.15	mg/L	10	26-Aug-2014 20:38
2,4-Dinitrotoluene	U		0.030	0.15	mg/L	10	26-Aug-2014 20:38
Cresols, Total	**2.5**		**0.060**	**0.45**	**mg/L**	10	26-Aug-2014 20:38
Hexachlorobenzene	U		0.033	0.15	mg/L	10	26-Aug-2014 20:38
Hexachlorobutadiene	U		0.033	0.15	mg/L	10	26-Aug-2014 20:38
Hexachloroethane	U		0.030	0.15	mg/L	10	26-Aug-2014 20:38
Nitrobenzene	U		0.024	0.15	mg/L	10	26-Aug-2014 20:38
Pentachlorophenol	U		0.048	0.15	mg/L	10	26-Aug-2014 20:38
Pyridine	U		0.060	0.15	mg/L	10	26-Aug-2014 20:38
Surr: 2,4,6-Tribromophenol	*118*	*J*		*36-126*	*%REC*	*10*	*26-Aug-2014 20:38*
Surr: 2-Fluorobiphenyl	*97.1*	*J*		*43-125*	*%REC*	*10*	*26-Aug-2014 20:38*
Surr: 2-Fluorophenol	*98.0*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 20:38*
Surr: 4-Terphenyl-d14	*95.3*	*J*		*32-125*	*%REC*	*10*	*26-Aug-2014 20:38*
Surr: Nitrobenzene-d5	*74.9*	*J*		*37-125*	*%REC*	*10*	*26-Aug-2014 20:38*
Surr: Phenol-d6	*45.4*	*J*		*40-125*	*%REC*	*10*	*26-Aug-2014 20:38*

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Field Duplicate #2 Lab ID:HS14080761-10
Collection Date: 20-Aug-2014 14:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A		**Method:SW1311/6020**		Leache:SW3010A / 26-Aug-2014	Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:05
Barium	**0.147**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:05
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:05
Chromium	**0.0819**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:05
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:05
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:05
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:05
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311/6020 / 27-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000192**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 13:53
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.35**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**25.0**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Equipment Blank #2 Lab ID:HS14080761-11
Collection Date: 20-Aug-2014 16:00 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 16:36
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 16:36
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 16:36
2-Butanone	U		0.020	0.20	mg/L	20	26-Aug-2014 16:36
Benzene	U		0.012	0.10	mg/L	20	26-Aug-2014 16:36
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 16:36
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 16:36
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 16:36
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 16:36
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 16:36
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 16:36
Surr: 1,2-Dichloroethane-d4	*93.2*			*70-125*	*%REC*	*20*	*26-Aug-2014 16:36*
Surr: 4-Bromofluorobenzene	*96.7*			*72-125*	*%REC*	*20*	*26-Aug-2014 16:36*
Surr: Dibromofluoromethane	*98.1*			*71-125*	*%REC*	*20*	*26-Aug-2014 16:36*
Surr: Toluene-d8	*97.5*			*75-125*	*%REC*	*20*	*26-Aug-2014 16:36*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.00090	0.0050	mg/L	1	26-Aug-2014 21:01
2,4,6-Trichlorophenol	U		0.0014	0.0050	mg/L	1	26-Aug-2014 21:01
2,4-Dinitrotoluene	U		0.0010	0.0050	mg/L	1	26-Aug-2014 21:01
Cresols, Total	U		0.0020	0.015	mg/L	1	26-Aug-2014 21:01
Hexachlorobenzene	U		0.0011	0.0050	mg/L	1	26-Aug-2014 21:01
Hexachlorobutadiene	U		0.0011	0.0050	mg/L	1	26-Aug-2014 21:01
Hexachloroethane	U		0.0010	0.0050	mg/L	1	26-Aug-2014 21:01
Nitrobenzene	U		0.00080	0.0050	mg/L	1	26-Aug-2014 21:01
Pentachlorophenol	U		0.0016	0.0050	mg/L	1	26-Aug-2014 21:01
Pyridine	U		0.0020	0.0050	mg/L	1	26-Aug-2014 21:01
Surr: 2,4,6-Tribromophenol	*102*			*36-126*	*%REC*	*1*	*26-Aug-2014 21:01*
Surr: 2-Fluorobiphenyl	*67.9*			*43-125*	*%REC*	*1*	*26-Aug-2014 21:01*
Surr: 2-Fluorophenol	*65.5*			*37-125*	*%REC*	*1*	*26-Aug-2014 21:01*
Surr: 4-Terphenyl-d14	*105*			*32-125*	*%REC*	*1*	*26-Aug-2014 21:01*
Surr: Nitrobenzene-d5	*53.1*			*37-125*	*%REC*	*1*	*26-Aug-2014 21:01*
Surr: Phenol-d6	*63.3*			*40-125*	*%REC*	*1*	*26-Aug-2014 21:01*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:07
Barium	**0.0359**	J	**0.00900**	**0.200**	**mg/L**	10	27-Aug-2014 16:07
Cadmium	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:07
Chromium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:07
Lead	U		0.00700	0.0500	mg/L	10	27-Aug-2014 16:07
Selenium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:07
Silver	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:07
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: Equipment Blank #2
Collection Date: 20-Aug-2014 16:00

ANALYTICAL REPORT
WorkOrder:HS14080761
Lab ID:HS14080761-11
Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311/6020 / 27-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	28-Aug-2014 13:58
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**6.87**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**23.1**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	24-Aug-2014 16:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	24-Aug-2014 16:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-41 Lab ID:HS14080761-12
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 18:32
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 18:32
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 18:32
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 18:32
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 18:32
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 18:32
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 18:32
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 18:32
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 18:32
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 18:32
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 18:32
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 18:32
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 18:32
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client:	Effective Environmental Inc.		**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:	HS14080761
Sample ID:	Trip Blank - 081114-41	Lab ID:	HS14080761-12
Collection Date:	20-Aug-2014 00:00	Matrix:	Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 18:32
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 18:32
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 18:32
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 18:32
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 18:32
Surr: 1,2-Dichloroethane-d4	*100*			*70-125*	*%REC*	*1*	*29-Aug-2014 18:32*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*1*	*29-Aug-2014 18:32*
Surr: Dibromofluoromethane	*98.7*			*71-125*	*%REC*	*1*	*29-Aug-2014 18:32*
Surr: Toluene-d8	*106*			*75-125*	*%REC*	*1*	*29-Aug-2014 18:32*

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-04 Lab ID:HS14080761-13
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:00
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:00
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 19:00
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 19:00
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 19:00
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 19:00
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 19:00
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 19:00
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:00
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 19:00
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 19:00
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 19:00
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 19:00
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-04 Lab ID:HS14080761-13
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:00
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:00
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:00
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 19:00
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 19:00
Surr: 1,2-Dichloroethane-d4	*99.6*			*70-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: Dibromofluoromethane	*99.8*			*71-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: Toluene-d8	*107*			*75-125*	*%REC*	*1*	*29-Aug-2014 19:00*

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-07 Lab ID:HS14080761-14
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:27
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:27
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 19:27
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 19:27
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 19:27
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 19:27
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 19:27
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 19:27
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:27
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 19:27
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 19:27
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 19:27
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 19:27
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27

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

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ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-07 Lab ID:HS14080761-14
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:27
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:27
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:27
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 19:27
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 19:27
Surr: 1,2-Dichloroethane-d4	*98.7*			*70-125*	*%REC*	*1*	*29-Aug-2014 19:27*
Surr: 4-Bromofluorobenzene	*95.6*			*72-125*	*%REC*	*1*	*29-Aug-2014 19:27*
Surr: Dibromofluoromethane	*99.4*			*71-125*	*%REC*	*1*	*29-Aug-2014 19:27*
Surr: Toluene-d8	*97.1*			*75-125*	*%REC*	*1*	*29-Aug-2014 19:27*

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

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ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-08 Lab ID:HS14080761-15
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:54
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 19:54
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 19:54
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 19:54
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 19:54
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 19:54
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 19:54
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 19:54
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:54
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 19:54
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 19:54
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 19:54
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 19:54
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54

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

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ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-08 Lab ID:HS14080761-15
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 19:54
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 19:54
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 19:54
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 19:54
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 19:54
Surr: 1,2-Dichloroethane-d4	*100*			*70-125*	*%REC*	*1*	*29-Aug-2014 19:54*
Surr: 4-Bromofluorobenzene	*97.5*			*72-125*	*%REC*	*1*	*29-Aug-2014 19:54*
Surr: Dibromofluoromethane	*95.7*			*71-125*	*%REC*	*1*	*29-Aug-2014 19:54*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*29-Aug-2014 19:54*

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

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ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-40 Lab ID:HS14080761-16
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 20:22
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 20:22
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 20:22
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 20:22
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 20:22
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 20:22
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 20:22
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 20:22
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 20:22
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 20:22
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 20:22
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 20:22
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 20:22
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22

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

Revision:1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080761
Sample ID: Trip Blank - 081114-40 Lab ID:HS14080761-16
Collection Date: 20-Aug-2014 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 20:22
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:22
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 20:22
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 20:22
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 20:22
Surr: 1,2-Dichloroethane-d4	*99.4*			*70-125*	*%REC*	*1*	*29-Aug-2014 20:22*
Surr: 4-Bromofluorobenzene	*99.2*			*72-125*	*%REC*	*1*	*29-Aug-2014 20:22*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*1*	*29-Aug-2014 20:22*
Surr: Toluene-d8	*108*			*75-125*	*%REC*	*1*	*29-Aug-2014 20:22*

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

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080761

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 85500	**Test Name :** TCLP METALS BY SW6020A			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 15:46	10
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 15:49	10
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 15:51	10
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 15:54	10
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:02	10
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:05	10
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:07	10
Batch ID 85502	**Test Name :** TCLP SEMIVOLATILES			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 18:46	10
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 19:08	10
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 19:31	10
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 19:53	10
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 20:16	10
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 20:38	10
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00	25 Aug 2014 12:30	26 Aug 2014 12:27	26 Aug 2014 21:01	1
Batch ID 85557A	**Test Name :** TCLP METALS BY SW6020A			**Matrix:** Liquid		
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:33	10
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:36	10
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:38	10
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:41	10
Batch ID 85567	**Test Name :** TCLP SEMIVOLATILES			**Matrix:** Liquid		
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 03:34	10
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 03:57	10
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 04:19	10
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 04:42	10

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080761

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 85572	**Test Name :** TCLP MERCURY BY SW7470A			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:38	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:39	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:41	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 13:43	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 13:45	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 13:46	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 13:48	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:50	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:51	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:53	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:58	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080761

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R239813	**Test Name :** REACTIVE SULFIDE			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			24 Aug 2014 16:00	1
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			24 Aug 2014 16:00	1
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			24 Aug 2014 16:00	1
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			24 Aug 2014 16:00	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			24 Aug 2014 16:00	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			24 Aug 2014 16:00	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			24 Aug 2014 16:00	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			24 Aug 2014 16:00	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			24 Aug 2014 16:00	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			24 Aug 2014 16:00	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			24 Aug 2014 16:00	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			24 Aug 2014 16:00	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			24 Aug 2014 16:00	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			24 Aug 2014 16:00	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			24 Aug 2014 16:00	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			24 Aug 2014 16:00	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			24 Aug 2014 16:00	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			24 Aug 2014 16:00	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			24 Aug 2014 16:00	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			24 Aug 2014 16:00	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			24 Aug 2014 16:00	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			24 Aug 2014 16:00	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			24 Aug 2014 16:00	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			24 Aug 2014 16:00	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			24 Aug 2014 16:00	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			24 Aug 2014 16:00	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			24 Aug 2014 16:00	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			24 Aug 2014 16:00	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			24 Aug 2014 16:00	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			24 Aug 2014 16:00	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			24 Aug 2014 16:00	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			24 Aug 2014 16:00	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			24 Aug 2014 16:00	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			24 Aug 2014 16:00	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			24 Aug 2014 16:00	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			24 Aug 2014 16:00	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			24 Aug 2014 16:00	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			24 Aug 2014 16:00	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			24 Aug 2014 16:00	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			24 Aug 2014 16:00	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080761

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			24 Aug 2014 16:00	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			24 Aug 2014 16:00	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			24 Aug 2014 16:00	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			24 Aug 2014 16:00	1
Batch ID R239911	**Test Name :** TCLP VOLATILES			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 14:10	20
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 17:25	20
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 20:15	20
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 21:04	20
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 20:40	20
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 17:49	20
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 16:36	20
Batch ID R239985	**Test Name :** TCLP VOLATILES			**Matrix:** Liquid		
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 00:21	200
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 01:58	20
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 04:47	20
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 02:22	20
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 02:46	20
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 00:45	100
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 01:10	100
Batch ID R240046	**Test Name :** PH BY SM4500H+ B			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			28 Aug 2014 16:00	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			28 Aug 2014 16:00	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			28 Aug 2014 16:00	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			28 Aug 2014 16:00	1
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			28 Aug 2014 16:00	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			28 Aug 2014 16:00	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			28 Aug 2014 16:00	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			28 Aug 2014 16:00	1
Batch ID R240113	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14080761-12	Trip Blank - 081114-41	20 Aug 2014 00:00			29 Aug 2014 18:32	1
HS14080761-13	Trip Blank - 081114-04	20 Aug 2014 00:00			29 Aug 2014 19:00	1
HS14080761-14	Trip Blank - 081114-07	20 Aug 2014 00:00			29 Aug 2014 19:27	1
HS14080761-15	Trip Blank - 081114-08	20 Aug 2014 00:00			29 Aug 2014 19:54	1
HS14080761-16	Trip Blank - 081114-40	20 Aug 2014 00:00			29 Aug 2014 20:22	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080761

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R240127	**Test Name :** IGNITABILITY			**Matrix:** Liquid		
HS14080761-01	NTF-AST 9	20 Aug 2014 08:00			29 Aug 2014 18:09	1
HS14080761-02	NTF-AST 8	20 Aug 2014 08:45			29 Aug 2014 18:09	1
HS14080761-03	NTF-AST 7	20 Aug 2014 09:30			29 Aug 2014 18:09	1
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			29 Aug 2014 18:09	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			29 Aug 2014 18:09	1
HS14080761-06	NTF-AST 20	20 Aug 2014 11:45			29 Aug 2014 18:09	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			29 Aug 2014 18:09	1
Batch ID R240152	**Test Name :** IGNITABILITY			**Matrix:** Liquid		
HS14080761-08	NTF-AST 18	20 Aug 2014 13:30			30 Aug 2014 17:29	1
HS14080761-09	NTF-AST 13	20 Aug 2014 14:15			30 Aug 2014 17:29	1
HS14080761-10	Field Duplicate #2	20 Aug 2014 14:45			30 Aug 2014 17:29	1
HS14080761-11	Equipment Blank #2	20 Aug 2014 16:00			30 Aug 2014 17:29	1
Batch ID R240196	**Test Name :** PH SOIL BY SW9045D			**Matrix:** Liquid		
HS14080761-04	NTF-AST 14	20 Aug 2014 10:15			02 Sep 2014 15:42	1
HS14080761-05	NTF-AST 17	20 Aug 2014 11:00			02 Sep 2014 15:42	1
HS14080761-07	NTF-AST 19	20 Aug 2014 12:45			02 Sep 2014 15:42	1

Revision:1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

MBLK Sample ID: **MBLKT1-85500** Units: **mg/L** Analysis Date: **27-Aug-2014 15:38**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983532** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK Sample ID: **MBLK-85500** Units: **mg/L** Analysis Date: **27-Aug-2014 15:41**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983533** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

LCS Sample ID: **MLCS-85500** Units: **mg/L** Analysis Date: **28-Aug-2014 15:06**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2984513** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4639	0.0500	0.5	0	92.8	80 - 120				
Barium	0.5089	0.200	0.5	0	102	80 - 120				
Cadmium	0.4955	0.0500	0.5	0	99.1	80 - 120				
Chromium	0.4877	0.0500	0.5	0	97.5	80 - 120				
Lead	0.4723	0.0500	0.5	0	94.5	80 - 120				
Selenium	0.5083	0.0500	0.5	0	102	80 - 120				
Silver	0.4856	0.0500	0.5	0	97.1	80 - 120				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

MS Sample ID: **HS14080761-11MS** Units: **mg/L** Analysis Date: **27-Aug-2014 16:15**
Client ID: **Equipment Blank #2** Run ID: **ICPMS05_239931** SeqNo: **2983546** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4315	0.0500	0.5	0.001952	85.9	75 - 125				
Barium	0.4347	0.200	0.5	0.03594	79.8	75 - 125				
Cadmium	0.4118	0.0500	0.5	0.000008	82.3	75 - 125				
Chromium	0.418	0.0500	0.5	-0.002296	84.1	75 - 125				
Lead	0.4028	0.0500	0.5	-0.001166	80.8	75 - 125				
Selenium	0.4246	0.0500	0.5	0.003443	84.2	75 - 125				
Silver	0.4381	0.0500	0.5	0.000106	87.6	75 - 125				

MSD Sample ID: **HS14080761-11MSD** Units: **mg/L** Analysis Date: **27-Aug-2014 16:17**
Client ID: **Equipment Blank #2** Run ID: **ICPMS05_239931** SeqNo: **2983547** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4232	0.0500	0.5	0.001952	84.2	75 - 125	0.4315	1.96	20	
Barium	0.4407	0.200	0.5	0.03594	81.0	75 - 125	0.4347	1.37	20	
Cadmium	0.4022	0.0500	0.5	0.000008	80.4	75 - 125	0.4118	2.34	20	
Chromium	0.4211	0.0500	0.5	-0.002296	84.7	75 - 125	0.418	0.752	20	
Lead	0.4021	0.0500	0.5	-0.001166	80.7	75 - 125	0.4028	0.168	20	
Selenium	0.4326	0.0500	0.5	0.003443	85.8	75 - 125	0.4246	1.87	20	
Silver	0.4289	0.0500	0.5	0.000106	85.8	75 - 125	0.4381	2.11	20	

DUP Sample ID: **HS14080761-11DUP** Units: **mg/L** Analysis Date: **27-Aug-2014 16:10**
Client ID: **Equipment Blank #2** Run ID: **ICPMS05_239931** SeqNo: **2983544** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.001952	0	25	
Barium	0.0407	0.200					0.03594	0	25	J
Cadmium	U	0.0500					0.000008	0	25	
Chromium	U	0.0500					-0.002296	0	25	
Lead	U	0.0500					-0.001166	0	25	
Selenium	U	0.0500					0.003443	0	25	
Silver	U	0.0500					0.000106	0	25	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

PDS Sample ID: **HS14080761-11BS** Units: **mg/L** Analysis Date: **27-Aug-2014 16:20**
Client ID: **Equipment Blank #2** Run ID: **ICPMS05_239931** SeqNo: **2983548** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.002	0.0500	1	0.001952	100	75 - 125				
Barium	0.9857	0.200	1	0.03594	95.0	75 - 125				
Cadmium	0.9588	0.0500	1	0.000008	95.9	75 - 125				
Chromium	0.9811	0.0500	1	-0.002296	98.3	75 - 125				
Lead	0.9426	0.0500	1	-0.001166	94.4	75 - 125				
Selenium	1.017	0.0500	1	0.003443	101	75 - 125				
Silver	0.9878	0.0500	1	0.000106	98.8	75 - 125				

SD Sample ID: **HS14080761-11 DIL SX** Units: **mg/L** Analysis Date: **27-Aug-2014 16:12**
Client ID: **Equipment Blank #2** Run ID: **ICPMS05_239931** SeqNo: **2983545** PrepDate: **26-Aug-2014** DF: **50**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.001952	0	10	
Barium	U	1.00					0.03594	0	10	
Cadmium	U	0.250					0.000008	0	10	
Chromium	U	0.250					-0.002296	0	10	
Lead	U	0.250					-0.001166	0	10	
Selenium	U	0.250					0.003443	0	10	
Silver	U	0.250					0.000106	0	10	

The following samples were anayzed in this batch: HS14080761-01 HS14080761-02 HS14080761-03 HS14080761-08 HS14080761-09 HS14080761-10 HS14080761-11

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

MBLK Sample ID: **MBLKT1-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:23**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985550** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK Sample ID: **MBLK-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:25**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985551** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

LCS Sample ID: **MLCS-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:20**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985549** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4595	0.0500	0.5	0	91.9	80 - 120				
Barium	0.4452	0.200	0.5	0	89.0	80 - 120				
Cadmium	0.4645	0.0500	0.5	0	92.9	80 - 120				
Chromium	0.4627	0.0500	0.5	0	92.5	80 - 120				
Lead	0.4404	0.0500	0.5	0	88.1	80 - 120				
Selenium	0.4676	0.0500	0.5	0	93.5	80 - 120				
Silver	0.4306	0.0500	0.5	0	86.1	80 - 120				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

MS Sample ID: **HS14080841-12MS** Units: **mg/L** Analysis Date: **28-Aug-2014 20:16**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985570** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4734	0.0500	0.5	0.001686	94.3	75 - 125				
Barium	1.504	0.200	0.5	0.9885	103	75 - 125				
Cadmium	0.4768	0.0500	0.5	0.000958	95.2	75 - 125				
Chromium	0.4701	0.0500	0.5	0.01836	90.4	75 - 125				
Lead	0.4471	0.0500	0.5	0.001401	89.1	75 - 125				
Selenium	0.4921	0.0500	0.5	0.001282	98.2	75 - 125				
Silver	0.4318	0.0500	0.5	0.000242	86.3	75 - 125				

MSD Sample ID: **HS14080841-12MSD** Units: **mg/L** Analysis Date: **28-Aug-2014 20:18**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985573** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4559	0.0500	0.5	0.001686	90.8	75 - 125	0.4734	3.77	20	
Barium	1.399	0.200	0.5	0.9885	82.1	75 - 125	1.504	7.25	20	
Cadmium	0.448	0.0500	0.5	0.000958	89.4	75 - 125	0.4768	6.22	20	
Chromium	0.4698	0.0500	0.5	0.01836	90.3	75 - 125	0.4701	0.0823	20	
Lead	0.4268	0.0500	0.5	0.001401	85.1	75 - 125	0.4471	4.64	20	
Selenium	0.4644	0.0500	0.5	0.001282	92.6	75 - 125	0.4921	5.8	20	
Silver	0.4121	0.0500	0.5	0.000242	82.4	75 - 125	0.4318	4.67	20	

DUP Sample ID: **HS14080841-12DUP** Units: **mg/L** Analysis Date: **28-Aug-2014 20:10**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985568** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.001686	0	25	
Barium	0.9968	0.200					0.9885	0.834	25	
Cadmium	U	0.0500					0.000958	0	25	
Chromium	0.01745	0.0500					0.01836	0	25	J
Lead	U	0.0500					0.001401	0	25	
Selenium	U	0.0500					0.001282	0	25	
Silver	U	0.0500					0.000242	0	25	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

PDS Sample ID: **HS14080841-12BS** Units: **mg/L** Analysis Date: **28-Aug-2014 20:21**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985574** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.001	0.0500	1	0.001686	100.0	75 - 125				
Barium	1.928	0.200	1	0.9885	93.9	75 - 125				
Cadmium	0.984	0.0500	1	0.000958	98.3	75 - 125				
Chromium	1.003	0.0500	1	0.01836	98.5	75 - 125				
Lead	0.9521	0.0500	1	0.001401	95.1	75 - 125				
Selenium	0.9955	0.0500	1	0.001282	99.4	75 - 125				
Silver	0.8696	0.0500	1	0.000242	86.9	75 - 125				

SD Sample ID: **HS14080841-12 DIL SX** Units: **mg/L** Analysis Date: **28-Aug-2014 20:13**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985569** PrepDate: **28-Aug-2014** DF: **50**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.001686	0	10	
Barium	0.9653	1.00					0.9885	0	10	J
Cadmium	U	0.250					0.000958	0	10	
Chromium	U	0.250					0.01836	0	10	
Lead	U	0.250					0.001401	0	10	
Selenium	U	0.250					0.001282	0	10	
Silver	U	0.250					0.000242	0	10	

The following samples were anayzed in this batch: HS14080761-04 HS14080761-05 HS14080761-06 HS14080761-07

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85572 **Instrument: HG03** **Method: SW7470**

MBLK Sample ID: **GBLKW2-082814** Units: **mg/L** Analysis Date: **28-Aug-2014 13:22**
Client ID: Run ID: **HG03_240027** SeqNo: **2984620** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

MBLK Sample ID: **GBLKT1-082714** Units: **mg/L** Analysis Date: **28-Aug-2014 13:33**
Client ID: Run ID: **HG03_240027** SeqNo: **2984626** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

LCS Sample ID: **GLCSW2-082814** Units: **mg/L** Analysis Date: **28-Aug-2014 13:24**
Client ID: Run ID: **HG03_240027** SeqNo: **2984621** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00518	0.000200	0.005	0	104	80 - 120				

MS Sample ID: **HS14080809-03MS** Units: **mg/L** Analysis Date: **28-Aug-2014 13:29**
Client ID: Run ID: **HG03_240027** SeqNo: **2984624** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00508	0.000200	0.005	0.00001	101	75 - 125				

MSD Sample ID: **HS14080809-03MSD** Units: **mg/L** Analysis Date: **28-Aug-2014 13:31**
Client ID: Run ID: **HG03_240027** SeqNo: **2984625** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0051	0.000200	0.005	0.00001	102	75 - 125	0.00508	0.393	20	

DUP Sample ID: **HS14080809-03DUP** Units: **mg/L** Analysis Date: **28-Aug-2014 13:27**
Client ID: Run ID: **HG03_240027** SeqNo: **2984623** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					0.00001	0	20	

The following samples were anayzed in this batch:

HS14080761-01	HS14080761-02	HS14080761-03	HS14080761-04
HS14080761-05	HS14080761-06	HS14080761-07	HS14080761-08
HS14080761-09	HS14080761-10	HS14080761-11	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85502** Units: **ug/L** Analysis Date: **28-Aug-2014 18:30**
Client ID: Run ID: **SV-5_239977** SeqNo: **2985756** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*59.9*	*5.0*	*100*	*0*	*59.9*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*58.52*	*5.0*	*100*	*0*	*58.5*	*43 - 125*				
Surr: 2-Fluorophenol	*45.57*	*5.0*	*100*	*0*	*45.6*	*37 - 125*				
Surr: 4-Terphenyl-d14	*60.88*	*5.0*	*100*	*0*	*60.9*	*32 - 125*				
Surr: Nitrobenzene-d5	*56.76*	*5.0*	*100*	*0*	*56.8*	*37 - 125*				
Surr: Phenol-d6	*48.29*	*5.0*	*100*	*0*	*48.3*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

LCS Sample ID: **LCS-85502** Units: **ug/L** Analysis Date: **28-Aug-2014 18:53**
Client ID: Run ID: **SV-5_239977** SeqNo: **2985757** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	64.42	5.0	100	0	64.4	55 - 120				
2,4,6-Trichlorophenol	73.81	5.0	100	0	73.8	55 - 120				
2,4-Dinitrotoluene	35.7	5.0	50	0	71.4	55 - 125				
Cresols, Total	153.5	15	250	0	61.4	40 - 120				
Hexachlorobenzene	40.56	5.0	50	0	81.1	55 - 120				
Hexachlorobutadiene	35.77	5.0	50	0	71.5	55 - 120				
Hexachloroethane	33.66	5.0	50	0	67.3	55 - 120				
Nitrobenzene	35.81	5.0	50	0	71.6	55 - 120				
Pentachlorophenol	85.39	5.0	100	0	85.4	50 - 135				
Pyridine	29.97	5.0	50	0	59.9	30 - 120				
Surr: 2,4,6-Tribromophenol	*73.11*	*5.0*	*100*	*0*	*73.1*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.54*	*5.0*	*100*	*0*	*67.5*	*43 - 125*				
Surr: 2-Fluorophenol	*63.27*	*5.0*	*100*	*0*	*63.3*	*37 - 125*				
Surr: 4-Terphenyl-d14	*69.49*	*5.0*	*100*	*0*	*69.5*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.03*	*5.0*	*100*	*0*	*69.0*	*37 - 125*				
Surr: Phenol-d6	*59.99*	*5.0*	*100*	*0*	*60.0*	*40 - 125*				

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

MS Sample ID: **HS14080761-01MS** Units: **ug/L** Analysis Date: **26-Aug-2014 21:24**
Client ID: **NTF-AST 9** Run ID: **SV-5_239977** SeqNo: **2983734** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	71.69	100	100	0	71.7	55 - 120				J
2,4,6-Trichlorophenol	87.43	100	100	0	87.4	55 - 120				J
2,4-Dinitrotoluene	57.86	100	50	0	116	55 - 125				J
Cresols, Total	1737	300	250	2330	-237	40 - 120				SO
Hexachlorobenzene	45.15	100	50	0	90.3	55 - 120				J
Hexachlorobutadiene	35.37	100	50	0	70.7	55 - 120				J
Hexachloroethane	123.4	100	50	0	247	55 - 120				S
Nitrobenzene	29.26	100	50	0	58.5	55 - 120				J
Pentachlorophenol	U	100	100	0	0	50 - 135				S
Pyridine	U	100	50	0	0	30 - 120				S
Surr: 2,4,6-Tribromophenol	*106.8*	*100*	*100*	*0*	*107*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*78.16*	*100*	*100*	*0*	*78.2*	*43 - 125*				J
Surr: 2-Fluorophenol	*77*	*100*	*100*	*0*	*77.0*	*37 - 125*				J
Surr: 4-Terphenyl-d14	*101.7*	*100*	*100*	*0*	*102*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.5*	*100*	*100*	*0*	*69.5*	*37 - 125*				J
Surr: Phenol-d6	*76.1*	*100*	*100*	*0*	*76.1*	*40 - 125*				J

The following samples were anayzed in this batch: HS14080761-01 HS14080761-02 HS14080761-03 HS14080761-08 HS14080761-09 HS14080761-10 HS14080761-11

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 19:38**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986597** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*71.29*	*5.0*	*100*	*0*	*71.3*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*68.31*	*5.0*	*100*	*0*	*68.3*	*43 - 125*				
Surr: 2-Fluorophenol	*55.24*	*5.0*	*100*	*0*	*55.2*	*37 - 125*				
Surr: 4-Terphenyl-d14	*68.41*	*5.0*	*100*	*0*	*68.4*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.4*	*5.0*	*100*	*0*	*69.4*	*37 - 125*				
Surr: Phenol-d6	*59.36*	*5.0*	*100*	*0*	*59.4*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 19:38**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985764** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*71.29*	*5.0*	*100*	*0*	*71.3*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*68.31*	*5.0*	*100*	*0*	*68.3*	*43 - 125*				
Surr: 2-Fluorophenol	*55.24*	*5.0*	*100*	*0*	*55.2*	*37 - 125*				
Surr: 4-Terphenyl-d14	*68.41*	*5.0*	*100*	*0*	*68.4*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.4*	*5.0*	*100*	*0*	*69.4*	*37 - 125*				
Surr: Phenol-d6	*59.36*	*5.0*	*100*	*0*	*59.4*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCS Sample ID: **LCS-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:01**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986598** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	63.86	5.0	100	0	63.9	55 - 120				
2,4,6-Trichlorophenol	67.45	5.0	100	0	67.4	55 - 120				
2,4-Dinitrotoluene	38.1	5.0	50	0	76.2	55 - 125				
Cresols, Total	174.6	15	250	0	69.8	40 - 120				
Hexachlorobenzene	43.74	5.0	50	0	87.5	55 - 120				
Hexachlorobutadiene	37.03	5.0	50	0	74.1	55 - 120				
Hexachloroethane	35.45	5.0	50	0	70.9	55 - 120				
Nitrobenzene	38.05	5.0	50	0	76.1	55 - 120				
Pentachlorophenol	87.36	5.0	100	0	87.4	50 - 135				
Pyridine	31.52	5.0	50	0	63.0	30 - 120				
Surr: 2,4,6-Tribromophenol	*77.18*	*5.0*	*100*	*0*	*77.2*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.37*	*5.0*	*100*	*0*	*67.4*	*43 - 125*				
Surr: 2-Fluorophenol	*67.39*	*5.0*	*100*	*0*	*67.4*	*37 - 125*				
Surr: 4-Terphenyl-d14	*71.2*	*5.0*	*100*	*0*	*71.2*	*32 - 125*				
Surr: Nitrobenzene-d5	*71.06*	*5.0*	*100*	*0*	*71.1*	*37 - 125*				
Surr: Phenol-d6	*65.69*	*5.0*	*100*	*0*	*65.7*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCS Sample ID: **LCS-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:01**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985765** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	63.86	5.0	100	0	63.9	55 - 120				
2,4,6-Trichlorophenol	67.45	5.0	100	0	67.4	55 - 120				
2,4-Dinitrotoluene	38.1	5.0	50	0	76.2	55 - 125				
Cresols, Total	174.6	15	250	0	69.8	40 - 120				
Hexachlorobenzene	43.74	5.0	50	0	87.5	55 - 120				
Hexachlorobutadiene	37.03	5.0	50	0	74.1	55 - 120				
Hexachloroethane	35.45	5.0	50	0	70.9	55 - 120				
Nitrobenzene	38.05	5.0	50	0	76.1	55 - 120				
Pentachlorophenol	87.36	5.0	100	0	87.4	50 - 135				
Pyridine	31.52	5.0	50	0	63.0	30 - 120				
Surr: 2,4,6-Tribromophenol	*77.18*	*5.0*	*100*	*0*	*77.2*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.37*	*5.0*	*100*	*0*	*67.4*	*43 - 125*				
Surr: 2-Fluorophenol	*67.39*	*5.0*	*100*	*0*	*67.4*	*37 - 125*				
Surr: 4-Terphenyl-d14	*71.2*	*5.0*	*100*	*0*	*71.2*	*32 - 125*				
Surr: Nitrobenzene-d5	*71.06*	*5.0*	*100*	*0*	*71.1*	*37 - 125*				
Surr: Phenol-d6	*65.69*	*5.0*	*100*	*0*	*65.7*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCSD Sample ID: **LCSD-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:24**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986599** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	69.49	5.0	100	0	69.5	55 - 120	63.86	8.44	25	
2,4,6-Trichlorophenol	71.85	5.0	100	0	71.9	55 - 120	67.45	6.32	25	
2,4-Dinitrotoluene	38.95	5.0	50	0	77.9	55 - 125	38.1	2.21	25	
Cresols, Total	168.5	15	250	0	67.4	40 - 120	174.6	3.57	25	
Hexachlorobenzene	45	5.0	50	0	90.0	55 - 120	43.74	2.84	25	
Hexachlorobutadiene	38.7	5.0	50	0	77.4	55 - 120	37.03	4.39	25	
Hexachloroethane	37.06	5.0	50	0	74.1	55 - 120	35.45	4.44	25	
Nitrobenzene	38.93	5.0	50	0	77.9	55 - 120	38.05	2.28	25	
Pentachlorophenol	91.53	5.0	100	0	91.5	50 - 135	87.36	4.66	25	
Pyridine	32.86	5.0	50	0	65.7	30 - 120	31.52	4.16	25	
Surr: 2,4,6-Tribromophenol	*77.6*	*5.0*	*100*	*0*	*77.6*	*36 - 126*	*77.18*	*0.54*	*25*	
Surr: 2-Fluorobiphenyl	*70.14*	*5.0*	*100*	*0*	*70.1*	*43 - 125*	*67.37*	*4.02*	*25*	
Surr: 2-Fluorophenol	*66.45*	*5.0*	*100*	*0*	*66.4*	*37 - 125*	*67.39*	*1.41*	*25*	
Surr: 4-Terphenyl-d14	*70.77*	*5.0*	*100*	*0*	*70.8*	*32 - 125*	*71.2*	*0.609*	*25*	
Surr: Nitrobenzene-d5	*71.57*	*5.0*	*100*	*0*	*71.6*	*37 - 125*	*71.06*	*0.715*	*25*	
Surr: Phenol-d6	*63.16*	*5.0*	*100*	*0*	*63.2*	*40 - 125*	*65.69*	*3.92*	*25*	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCSD Sample ID: **LCSD-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:24**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985766** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	69.49	5.0	100	0	69.5	55 - 120	63.86	8.44	25	
2,4,6-Trichlorophenol	71.85	5.0	100	0	71.9	55 - 120	67.45	6.32	25	
2,4-Dinitrotoluene	38.95	5.0	50	0	77.9	55 - 125	38.1	2.21	25	
Cresols, Total	168.5	15	250	0	67.4	40 - 120	174.6	3.57	25	
Hexachlorobenzene	45	5.0	50	0	90.0	55 - 120	43.74	2.84	25	
Hexachlorobutadiene	38.7	5.0	50	0	77.4	55 - 120	37.03	4.39	25	
Hexachloroethane	37.06	5.0	50	0	74.1	55 - 120	35.45	4.44	25	
Nitrobenzene	38.93	5.0	50	0	77.9	55 - 120	38.05	2.28	25	
Pentachlorophenol	91.53	5.0	100	0	91.5	50 - 135	87.36	4.66	25	
Pyridine	32.86	5.0	50	0	65.7	30 - 120	31.52	4.16	25	
Surr: 2,4,6-Tribromophenol	*77.6*	*5.0*	*100*	*0*	*77.6*	*36 - 126*	*77.18*	*0.54*	*25*	
Surr: 2-Fluorobiphenyl	*70.14*	*5.0*	*100*	*0*	*70.1*	*43 - 125*	*67.37*	*4.02*	*25*	
Surr: 2-Fluorophenol	*66.45*	*5.0*	*100*	*0*	*66.4*	*37 - 125*	*67.39*	*1.41*	*25*	
Surr: 4-Terphenyl-d14	*70.77*	*5.0*	*100*	*0*	*70.8*	*32 - 125*	*71.2*	*0.609*	*25*	
Surr: Nitrobenzene-d5	*71.57*	*5.0*	*100*	*0*	*71.6*	*37 - 125*	*71.06*	*0.715*	*25*	
Surr: Phenol-d6	*63.16*	*5.0*	*100*	*0*	*63.2*	*40 - 125*	*65.69*	*3.92*	*25*	

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MS Sample ID: **HS14080841-10MS** Units: **ug/L** Analysis Date: **02-Sep-2014 19:39**
Client ID: Run ID: **SV-3_240068** SeqNo: **2989332** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	102.2	5.0	100	0	102	55 - 120				
2,4,6-Trichlorophenol	101.6	5.0	100	0	102	55 - 120				
2,4-Dinitrotoluene	47.1	5.0	50	0	94.2	55 - 125				
Cresols, Total	203	15	250	0	81.2	40 - 120				
Hexachlorobenzene	47.57	5.0	50	0	95.1	55 - 120				
Hexachlorobutadiene	44.57	5.0	50	0	89.1	55 - 120				
Hexachloroethane	40.06	5.0	50	0	80.1	55 - 120				
Nitrobenzene	39.26	5.0	50	0	78.5	55 - 120				
Pentachlorophenol	111.9	5.0	100	0	112	50 - 135				
Pyridine	32.47	5.0	50	0	64.9	30 - 120				
Surr: 2,4,6-Tribromophenol	*105.7*	*5.0*	*100*	*0*	*106*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*102.2*	*5.0*	*100*	*0*	*102*	*43 - 125*				
Surr: 2-Fluorophenol	*80.79*	*5.0*	*100*	*0*	*80.8*	*37 - 125*				
Surr: 4-Terphenyl-d14	*113*	*5.0*	*100*	*0*	*113*	*32 - 125*				
Surr: Nitrobenzene-d5	*84.04*	*5.0*	*100*	*0*	*84.0*	*37 - 125*				
Surr: Phenol-d6	*92.69*	*5.0*	*100*	*0*	*92.7*	*40 - 125*				

The following samples were anayzed in this batch: HS14080761-04 HS14080761-05 HS14080761-06 HS14080761-07

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 11:40**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981974** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Surr: 1,2-Dichloroethane-d4	*47.23*	*5.0*	*50*	*0*	*94.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.44*	*5.0*	*50*	*0*	*98.9*	*72.4 - 125*				
Surr: Dibromofluoromethane	*48.8*	*5.0*	*50*	*0*	*97.6*	*71.2 - 125*				
Surr: Toluene-d8	*44.26*	*5.0*	*50*	*0*	*88.5*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **MBLKV1-140825** Units: **ug/L** Analysis Date: **26-Aug-2014 12:08**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981975** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
Surr: 1,2-Dichloroethane-d4	*944.3*	*100*	*1000*	*0*	*94.4*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*987.3*	*100*	*1000*	*0*	*98.7*	*72.4 - 125*				
Surr: Dibromofluoromethane	*973.5*	*100*	*1000*	*0*	*97.4*	*71.2 - 125*				
Surr: Toluene-d8	*880*	*100*	*1000*	*0*	*88.0*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 10:52**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981973** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	52.41	5.0	50	0	105	73 - 124				
1,2-Dichloroethane	46.69	5.0	50	0	93.4	76 - 120				
1,4-Dichlorobenzene	43.53	5.0	50	0	87.1	70 - 130				
2-Butanone	95.07	10	100	0	95.1	70 - 130				
Benzene	47.42	5.0	50	0	94.8	70 - 128				
Carbon tetrachloride	49.61	5.0	50	0	99.2	70 - 130				
Chlorobenzene	44.52	5.0	50	0	89.0	72 - 127				
Chloroform	48.89	5.0	50	0	97.8	70 - 130				
Tetrachloroethene	49.12	5.0	50	0	98.2	70 - 130				
Trichloroethene	53.02	5.0	50	0	106	72 - 129				
Vinyl chloride	46.95	2.0	50	0	93.9	70 - 130				
Surr: 1,2-Dichloroethane-d4	*46.77*	*5.0*	*50*	*0*	*93.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.14*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*49.56*	*5.0*	*50*	*0*	*99.1*	*71 - 125*				
Surr: Toluene-d8	*44.81*	*5.0*	*50*	*0*	*89.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080841-13MS** Units: **ug/L** Analysis Date: **26-Aug-2014 14:34**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981981** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	1036	100	1000	0	104	73 - 124				
1,2-Dichloroethane	1023	100	1000	0	102	76 - 120				
1,4-Dichlorobenzene	875.8	100	1000	0	87.6	70 - 130				
2-Butanone	2162	200	2000	0	108	70 - 130				
Benzene	1000	100	1000	0	100	70 - 128				
Carbon tetrachloride	1033	100	1000	0	103	70 - 130				
Chlorobenzene	921.9	100	1000	0	92.2	72 - 127				
Chloroform	1038	100	1000	0	104	70 - 130				
Tetrachloroethene	963.2	100	1000	0	96.3	70 - 130				
Trichloroethene	1115	100	1000	0	111	72 - 129				
Vinyl chloride	809.6	40	1000	0	81.0	70 - 130				
Surr: 1,2-Dichloroethane-d4	*920.2*	*100*	*1000*	*0*	*92.0*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1020*	*100*	*1000*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*989.9*	*100*	*1000*	*0*	*99.0*	*71 - 125*				
Surr: Toluene-d8	*911.9*	*100*	*1000*	*0*	*91.2*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MSD Sample ID: **HS14080841-13MSD** Units: **ug/L** Analysis Date: **26-Aug-2014 14:59**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981982** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	945.1	100	1000	0	94.5	73 - 124	1036	9.15	20	
1,2-Dichloroethane	922.7	100	1000	0	92.3	76 - 120	1023	10.3	20	
1,4-Dichlorobenzene	818.7	100	1000	0	81.9	70 - 130	875.8	6.74	20	
2-Butanone	1953	200	2000	0	97.7	70 - 130	2162	10.1	20	
Benzene	913.6	100	1000	0	91.4	70 - 128	1000	9.05	20	
Carbon tetrachloride	935	100	1000	0	93.5	70 - 130	1033	9.96	20	
Chlorobenzene	878.4	100	1000	0	87.8	72 - 127	921.9	4.83	20	
Chloroform	958.9	100	1000	0	95.9	70 - 130	1038	7.91	20	
Tetrachloroethene	906	100	1000	0	90.6	70 - 130	963.2	6.13	20	
Trichloroethene	1012	100	1000	0	101	72 - 129	1115	9.65	20	
Vinyl chloride	736.5	40	1000	0	73.7	70 - 130	809.6	9.45	20	
Surr: 1,2-Dichloroethane-d4	*914.3*	*100*	*1000*	*0*	*91.4*	*70 - 125*	*920.2*	*0.645*	*20*	
Surr: 4-Bromofluorobenzene	*1022*	*100*	*1000*	*0*	*102*	*72 - 125*	*1020*	*0.205*	*20*	
Surr: Dibromofluoromethane	*980.9*	*100*	*1000*	*0*	*98.1*	*71 - 125*	*989.9*	*0.914*	*20*	
Surr: Toluene-d8	*909.4*	*100*	*1000*	*0*	*90.9*	*75 - 125*	*911.9*	*0.28*	*20*	

The following samples were anayzed in this batch: HS14080761-01 HS14080761-02 HS14080761-03 HS14080761-08 HS14080761-09 HS14080761-10 HS14080761-11

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140827** Units: **ug/L** Analysis Date: **27-Aug-2014 19:06**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983820** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Surr: 1,2-Dichloroethane-d4	*52.62*	*5.0*	*50*	*0*	*105*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*48.92*	*5.0*	*50*	*0*	*97.8*	*72.4 - 125*				
Surr: Dibromofluoromethane	*50.15*	*5.0*	*50*	*0*	*100*	*71.2 - 125*				
Surr: Toluene-d8	*49.31*	*5.0*	*50*	*0*	*98.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **MBLKV1-140826** Units: **ug/L** Analysis Date: **27-Aug-2014 19:30**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983821** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
Surr: 1,2-Dichloroethane-d4	*1024*	*100*	*1000*	*0*	*102*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*973.2*	*100*	*1000*	*0*	*97.3*	*72.4 - 125*				
Surr: Dibromofluoromethane	*982.8*	*100*	*1000*	*0*	*98.3*	*71.2 - 125*				
Surr: Toluene-d8	*981.1*	*100*	*1000*	*0*	*98.1*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140827** Units: **ug/L** Analysis Date: **27-Aug-2014 17:53**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983819** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	47.21	5.0	50	0	94.4	73 - 124				
1,2-Dichloroethane	44.57	5.0	50	0	89.1	76 - 120				
1,4-Dichlorobenzene	45.97	5.0	50	0	91.9	70 - 130				
2-Butanone	100	10	100	0	100	70 - 130				
Benzene	45.26	5.0	50	0	90.5	70 - 128				
Carbon tetrachloride	46.41	5.0	50	0	92.8	70 - 130				
Chlorobenzene	46.59	5.0	50	0	93.2	72 - 127				
Chloroform	44.95	5.0	50	0	89.9	70 - 130				
Tetrachloroethene	46.91	5.0	50	0	93.8	70 - 130				
Trichloroethene	46.97	5.0	50	0	93.9	72 - 129				
Vinyl chloride	45.35	2.0	50	0	90.7	70 - 130				
Surr: 1,2-Dichloroethane-d4	*49.61*	*5.0*	*50*	*0*	*99.2*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.99*	*5.0*	*50*	*0*	*100.0*	*72 - 125*				
Surr: Dibromofluoromethane	*48.93*	*5.0*	*50*	*0*	*97.9*	*71 - 125*				
Surr: Toluene-d8	*50.13*	*5.0*	*50*	*0*	*100*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080736-01MS** Units: **ug/L** Analysis Date: **27-Aug-2014 21:32**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983823** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	848	100	1000	0	84.8	73 - 124				
1,2-Dichloroethane	912.6	100	1000	0	91.3	76 - 120				
1,4-Dichlorobenzene	843.7	100	1000	0	84.4	70 - 130				
2-Butanone	1853	200	2000	0	92.7	70 - 130				
Benzene	881.3	100	1000	0	88.1	70 - 128				
Carbon tetrachloride	842.6	100	1000	0	84.3	70 - 130				
Chlorobenzene	881.7	100	1000	0	88.2	72 - 127				
Chloroform	883.8	100	1000	0	88.4	70 - 130				
Tetrachloroethene	832.2	100	1000	0	83.2	70 - 130				
Trichloroethene	866.4	100	1000	0	86.6	72 - 129				
Vinyl chloride	688.9	40	1000	0	68.9	70 - 130				S
Surr: 1,2-Dichloroethane-d4	*1005*	*100*	*1000*	*0*	*100*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1012*	*100*	*1000*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*997*	*100*	*1000*	*0*	*99.7*	*71 - 125*				
Surr: Toluene-d8	*1008*	*100*	*1000*	*0*	*101*	*75 - 125*				

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MSD Sample ID: **HS14080736-01MSD** Units: **ug/L** Analysis Date: **27-Aug-2014 21:56**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983824** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	834.9	100	1000	0	83.5	73 - 124	848	1.55	20	
1,2-Dichloroethane	858.1	100	1000	0	85.8	76 - 120	912.6	6.15	20	
1,4-Dichlorobenzene	859.4	100	1000	0	85.9	70 - 130	843.7	1.85	20	
2-Butanone	1805	200	2000	0	90.2	70 - 130	1853	2.65	20	
Benzene	861.6	100	1000	0	86.2	70 - 128	881.3	2.26	20	
Carbon tetrachloride	837.9	100	1000	0	83.8	70 - 130	842.6	0.558	20	
Chlorobenzene	885.8	100	1000	0	88.6	72 - 127	881.7	0.454	20	
Chloroform	876.2	100	1000	0	87.6	70 - 130	883.8	0.864	20	
Tetrachloroethene	848.4	100	1000	0	84.8	70 - 130	832.2	1.92	20	
Trichloroethene	866.8	100	1000	0	86.7	72 - 129	866.4	0.0448	20	
Vinyl chloride	675.3	40	1000	0	67.5	70 - 130	688.9	1.99	20	S
Surr: 1,2-Dichloroethane-d4	*998.6*	*100*	*1000*	*0*	*99.9*	*70 - 125*	*1005*	*0.619*	*20*	
Surr: 4-Bromofluorobenzene	*991.5*	*100*	*1000*	*0*	*99.1*	*72 - 125*	*1012*	*2.08*	*20*	
Surr: Dibromofluoromethane	*985.5*	*100*	*1000*	*0*	*98.6*	*71 - 125*	*997*	*1.16*	*20*	
Surr: Toluene-d8	*1005*	*100*	*1000*	*0*	*100*	*75 - 125*	*1008*	*0.338*	*20*	

The following samples were anayzed in this batch: HS14080761-02 HS14080761-04 HS14080761-05 HS14080761-06 HS14080761-07 HS14080761-09 HS14080761-10

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 12:05**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986545** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	5.0								
1,1,2,2-Tetrachloroethane	U	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	5.0								
1,1,2-Trichloroethane	U	5.0								
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2,4-Trichlorobenzene	U	5.0								
1,2-Dibromo-3-chloropropane	U	5.0								
1,2-Dibromoethane	U	5.0								
1,2-Dichlorobenzene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,2-Dichloropropane	U	5.0								
1,3-Dichlorobenzene	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
2-Hexanone	U	10								
4-Methyl-2-pentanone	U	10								
Acetone	U	10								
Benzene	U	5.0								
Bromodichloromethane	U	5.0								
Bromoform	U	5.0								
Bromomethane	U	5.0								
Carbon disulfide	U	10								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroethane	U	5.0								
Chloroform	U	5.0								
Chloromethane	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
cis-1,3-Dichloropropene	U	5.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	5.0								
Dichlorodifluoromethane	U	5.0								
Dichloromethane	U	10								

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 12:05**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986545** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl acetate	U	5.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
o-Xylene	U	5.0								
Styrene	U	5.0								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
trans-1,3-Dichloropropene	U	5.0								
Trichloroethene	U	5.0								
Trichlorofluoromethane	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*48.46*	*5.0*	*50*	*0*	*96.9*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.92*	*5.0*	*50*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*48.18*	*5.0*	*50*	*0*	*96.4*	*71 - 125*				
Surr: Toluene-d8	*52.74*	*5.0*	*50*	*0*	*105*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 11:09**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986544** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	44.73	5.0	50	0	89.5	80 - 120				
1,1,2,2-Tetrachloroethane	51.25	5.0	50	0	103	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	50.56	5.0	50	0	101	73 - 123				
1,1,2-Trichloroethane	46.29	5.0	50	0	92.6	80 - 120				
1,1-Dichloroethane	43.98	5.0	50	0	88.0	76 - 120				
1,1-Dichloroethene	48.37	5.0	50	0	96.7	73 - 124				
1,2,4-Trichlorobenzene	51.48	5.0	50	0	103	75 - 130				
1,2-Dibromo-3-chloropropane	51.09	5.0	50	0	102	65 - 125				
1,2-Dibromoethane	45.21	5.0	50	0	90.4	80 - 120				
1,2-Dichlorobenzene	49.11	5.0	50	0	98.2	80 - 120				
1,2-Dichloroethane	43.56	5.0	50	0	87.1	78 - 120				
1,2-Dichloropropane	55.44	5.0	50	0	111	80 - 120				
1,3-Dichlorobenzene	48.84	5.0	50	0	97.7	80 - 120				
1,4-Dichlorobenzene	49.57	5.0	50	0	99.1	80 - 120				
2-Butanone	82	10	100	0	82.0	58 - 132				
2-Hexanone	87.39	10	100	0	87.4	61 - 130				
4-Methyl-2-pentanone	85.32	10	100	0	85.3	65 - 127				
Acetone	94.11	10	100	0	94.1	59 - 137				
Benzene	46.02	5.0	50	0	92.0	73 - 121				
Bromodichloromethane	45.04	5.0	50	0	90.1	75 - 125				
Bromoform	49.77	5.0	50	0	99.5	70 - 130				
Bromomethane	43.15	5.0	50	0	86.3	60 - 145				
Carbon disulfide	114.5	10	100	0	114	68 - 141				
Carbon tetrachloride	48.25	5.0	50	0	96.5	75 - 125				
Chlorobenzene	47.79	5.0	50	0	95.6	80 - 120				
Chloroethane	47.6	5.0	50	0	95.2	70 - 130				
Chloroform	44.34	5.0	50	0	88.7	70 - 130				
Chloromethane	40.94	5.0	50	0	81.9	67 - 123				
cis-1,2-Dichloroethene	47.59	5.0	50	0	95.2	78 - 120				
cis-1,3-Dichloropropene	48.86	5.0	50	0	97.7	80 - 120				
Cyclohexane	51.15	5.0	50	0	102	66 - 125				
Dibromochloromethane	49.68	5.0	50	0	99.4	80 - 120				
Dichlorodifluoromethane	43.36	5.0	50	0	86.7	63 - 125				
Dichloromethane	49.27	10	50	0	98.5	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 11:09**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986544** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	49.62	5.0	50	0	99.2	80 - 120				
Isopropylbenzene	49.07	5.0	50	0	98.1	75 - 130				
m,p-Xylene	98.28	10	100	0	98.3	78 - 121				
Methyl acetate	41.76	5.0	50	0	83.5	60 - 130				
Methyl tert-butyl ether	49.42	5.0	50	0	98.8	70 - 125				
Methylcyclohexane	49.57	5.0	50	0	99.1	70 - 122				
o-Xylene	47.7	5.0	50	0	95.4	80 - 120				
Styrene	50.21	5.0	50	0	100	80 - 120				
Tetrachloroethene	50.92	5.0	50	0	102	74 - 125				
Toluene	47.64	5.0	50	0	95.3	80 - 120				
trans-1,2-Dichloroethene	45.82	5.0	50	0	91.6	78 - 120				
trans-1,3-Dichloropropene	51.89	5.0	50	0	104	80 - 120				
Trichloroethene	48.48	5.0	50	0	97.0	80 - 120				
Trichlorofluoromethane	47.65	5.0	50	0	95.3	72 - 130				
Vinyl chloride	44.06	2.0	50	0	88.1	70 - 127				
Xylenes, Total	146	15	150	0	97.3	80 - 120				
Surr: 1,2-Dichloroethane-d4	*44.69*	*5.0*	*50*	*0*	*89.4*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.67*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*44.97*	*5.0*	*50*	*0*	*89.9*	*71 - 125*				
Surr: Toluene-d8	*48.78*	*5.0*	*50*	*0*	*97.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14080845-11MS** Units: **ug/L** Analysis Date: **29-Aug-2014 15:47**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986550** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	45.66	5.0	50	0	91.3	80 - 120				
1,1,2,2-Tetrachloroethane	56.27	5.0	50	0	113	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	51.21	5.0	50	0	102	73 - 123				
1,1,2-Trichloroethane	46.53	5.0	50	0	93.1	80 - 120				
1,1-Dichloroethane	44.08	5.0	50	0	88.2	76 - 120				
1,1-Dichloroethene	50.06	5.0	50	0	100	73 - 124				
1,2,4-Trichlorobenzene	50.69	5.0	50	0	101	75 - 130				
1,2-Dibromo-3-chloropropane	55.43	5.0	50	0	111	65 - 125				
1,2-Dibromoethane	47.81	5.0	50	0	95.6	80 - 120				
1,2-Dichlorobenzene	47.65	5.0	50	0	95.3	80 - 120				
1,2-Dichloroethane	48.1	5.0	50	0	96.2	78 - 120				
1,2-Dichloropropane	59.88	5.0	50	0	120	80 - 120				
1,3-Dichlorobenzene	47.77	5.0	50	0	95.5	80 - 120				
1,4-Dichlorobenzene	47.27	5.0	50	0	94.5	80 - 120				
2-Butanone	84.83	10	100	0	84.8	58 - 132				
2-Hexanone	93.66	10	100	0	93.7	61 - 130				
4-Methyl-2-pentanone	92.41	10	100	0	92.4	65 - 127				
Acetone	91.76	10	100	0	91.8	59 - 137				
Benzene	47.2	5.0	50	0	94.4	73 - 121				
Bromodichloromethane	49.86	5.0	50	0	99.7	75 - 125				
Bromoform	52.47	5.0	50	0	105	70 - 130				
Bromomethane	47.88	5.0	50	0	95.8	60 - 145				
Carbon disulfide	103.8	10	100	0	104	68 - 141				
Carbon tetrachloride	49.79	5.0	50	0	99.6	75 - 125				
Chlorobenzene	46.17	5.0	50	0	92.3	80 - 120				
Chloroethane	41.22	5.0	50	0	82.4	70 - 130				
Chloroform	46.18	5.0	50	0	92.4	70 - 130				
Chloromethane	29.19	5.0	50	0	58.4	67 - 123				S
cis-1,2-Dichloroethene	48.38	5.0	50	0	96.8	78 - 120				
cis-1,3-Dichloropropene	49.89	5.0	50	0	99.8	80 - 120				
Cyclohexane	50.44	5.0	50	0	101	66 - 125				
Dibromochloromethane	49.82	5.0	50	0	99.6	80 - 120				
Dichlorodifluoromethane	25.48	5.0	50	0	51.0	63 - 125				S
Dichloromethane	53.48	10	50	0	107	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14080845-11MS** Units: **ug/L** Analysis Date: **29-Aug-2014 15:47**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986550** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	49.07	5.0	50	0	98.1	80 - 120				
Isopropylbenzene	46.94	5.0	50	0	93.9	75 - 130				
m,p-Xylene	98.55	10	100	0	98.6	78 - 121				
Methyl acetate	44.73	5.0	50	0	89.5	60 - 130				
Methyl tert-butyl ether	50.99	5.0	50	0	102	70 - 125				
Methylcyclohexane	39.85	5.0	50	5.303	69.1	70 - 122				S
o-Xylene	47.48	5.0	50	0	95.0	80 - 120				
Styrene	49.86	5.0	50	0	99.7	80 - 120				
Tetrachloroethene	49.35	5.0	50	0	98.7	74 - 125				
Toluene	45.56	5.0	50	0	91.1	80 - 120				
trans-1,2-Dichloroethene	47.42	5.0	50	0	94.8	78 - 120				
trans-1,3-Dichloropropene	53.19	5.0	50	0	106	80 - 120				
Trichloroethene	52.35	5.0	50	0	105	80 - 120				
Trichlorofluoromethane	42.44	5.0	50	0	84.9	72 - 130				
Vinyl chloride	33.79	2.0	50	0	67.6	70 - 127				S
Xylenes, Total	146	15	150	0	97.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*47.13*	*5.0*	*50*	*0*	*94.3*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.82*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*47.49*	*5.0*	*50*	*0*	*95.0*	*71 - 125*				
Surr: Toluene-d8	*49.25*	*5.0*	*50*	*0*	*98.5*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14080845-11MSD** Units: **ug/L** Analysis Date: **29-Aug-2014 16:14**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986551** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	47.14	5.0	50	0	94.3	80 - 120	45.66	3.19	20	
1,1,2,2-Tetrachloroethane	57.55	5.0	50	0	115	72 - 120	56.27	2.25	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	52.82	5.0	50	0	106	73 - 123	51.21	3.09	20	
1,1,2-Trichloroethane	48.92	5.0	50	0	97.8	80 - 120	46.53	5.01	20	
1,1-Dichloroethane	45.12	5.0	50	0	90.2	76 - 120	44.08	2.31	20	
1,1-Dichloroethene	48.7	5.0	50	0	97.4	73 - 124	50.06	2.75	20	
1,2,4-Trichlorobenzene	52.27	5.0	50	0	105	75 - 130	50.69	3.07	20	
1,2-Dibromo-3-chloropropane	59.81	5.0	50	0	120	65 - 125	55.43	7.59	20	
1,2-Dibromoethane	52.81	5.0	50	0	106	80 - 120	47.81	9.94	20	
1,2-Dichlorobenzene	49.32	5.0	50	0	98.6	80 - 120	47.65	3.44	20	
1,2-Dichloroethane	45.14	5.0	50	0	90.3	78 - 120	48.1	6.34	20	
1,2-Dichloropropane	55.9	5.0	50	0	112	80 - 120	59.88	6.88	20	
1,3-Dichlorobenzene	50.36	5.0	50	0	101	80 - 120	47.77	5.28	20	
1,4-Dichlorobenzene	48.81	5.0	50	0	97.6	80 - 120	47.27	3.21	20	
2-Butanone	87.46	10	100	0	87.5	58 - 132	84.83	3.06	20	
2-Hexanone	96.34	10	100	0	96.3	61 - 130	93.66	2.82	20	
4-Methyl-2-pentanone	92.93	10	100	0	92.9	65 - 127	92.41	0.558	20	
Acetone	92.7	10	100	0	92.7	59 - 137	91.76	1.02	20	
Benzene	44.82	5.0	50	0	89.6	73 - 121	47.2	5.19	20	
Bromodichloromethane	47.69	5.0	50	0	95.4	75 - 125	49.86	4.45	20	
Bromoform	52.35	5.0	50	0	105	70 - 130	52.47	0.246	20	
Bromomethane	42	5.0	50	0	84.0	60 - 145	47.88	13.1	20	
Carbon disulfide	112.3	10	100	0	112	68 - 141	103.8	7.81	20	
Carbon tetrachloride	48.2	5.0	50	0	96.4	75 - 125	49.79	3.24	20	
Chlorobenzene	49.36	5.0	50	0	98.7	80 - 120	46.17	6.68	20	
Chloroethane	48.15	5.0	50	0	96.3	76 - 121	41.22	15.5	20	
Chloroform	44.54	5.0	50	0	89.1	70 - 130	46.18	3.61	20	
Chloromethane	29.11	5.0	50	0	58.2	67 - 123	29.19	0.273	20	S
cis-1,2-Dichloroethene	50.02	5.0	50	0	100	78 - 120	48.38	3.33	20	
cis-1,3-Dichloropropene	49	5.0	50	0	98.0	80 - 120	49.89	1.81	20	
Cyclohexane	49.43	5.0	50	0	98.9	66 - 125	50.44	2.02	20	
Dibromochloromethane	52.91	5.0	50	0	106	80 - 120	49.82	6.02	20	
Dichlorodifluoromethane	25.3	5.0	50	0	50.6	63 - 125	25.48	0.719	20	S
Dichloromethane	55.5	10	50	0	111	65 - 133	53.48	3.7	20	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14080845-11MSD** Units: **ug/L** Analysis Date: **29-Aug-2014 16:14**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986551** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	50.53	5.0	50	0	101	80 - 120	49.07	2.92	20	
Isopropylbenzene	49.65	5.0	50	0	99.3	75 - 130	46.94	5.62	20	
m,p-Xylene	100.9	10	100	0	101	78 - 121	98.55	2.33	20	
Methyl acetate	45.8	5.0	50	0	91.6	60 - 130	44.73	2.37	20	
Methyl tert-butyl ether	53.36	5.0	50	0	107	70 - 125	50.99	4.54	20	
Methylcyclohexane	50.66	5.0	50	5.303	90.7	70 - 122	39.85	23.9	20	R
o-Xylene	47.47	5.0	50	0	94.9	80 - 120	47.48	0.0307	20	
Styrene	52.45	5.0	50	0	105	80 - 120	49.86	5.06	20	
Tetrachloroethene	51.58	5.0	50	0	103	74 - 125	49.35	4.42	20	
Toluene	49.21	5.0	50	0	98.4	80 - 120	45.56	7.7	20	
trans-1,2-Dichloroethene	48.84	5.0	50	0	97.7	78 - 120	47.42	2.95	20	
trans-1,3-Dichloropropene	51.46	5.0	50	0	103	80 - 120	53.19	3.3	20	
Trichloroethene	50.01	5.0	50	0	100	80 - 120	52.35	4.56	20	
Trichlorofluoromethane	44.84	5.0	50	0	89.7	72 - 130	42.44	5.5	20	
Vinyl chloride	34.58	2.0	50	0	69.2	70 - 127	33.79	2.32	20	S
Xylenes, Total	148.3	15	150	0	98.9	78 - 121	146	1.57	20	
Surr: 1,2-Dichloroethane-d4	*46.12*	*5.0*	*50*	*0*	*92.2*	*70 - 125*	*47.13*	*2.16*	*20*	
Surr: 4-Bromofluorobenzene	*52.1*	*5.0*	*50*	*0*	*104*	*72 - 125*	*50.82*	*2.49*	*20*	
Surr: Dibromofluoromethane	*47.35*	*5.0*	*50*	*0*	*94.7*	*71 - 125*	*47.49*	*0.304*	*20*	
Surr: Toluene-d8	*50.6*	*5.0*	*50*	*0*	*101*	*75 - 125*	*49.25*	*2.7*	*20*	

The following samples were anayzed in this batch: HS14080761-12 HS14080761-13 HS14080761-14 HS14080761-15 HS14080761-16

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240046 **Instrument: WetChem_HS** **Method: SM4500H+ B**

LCS Sample ID: **LCS-240046** Units: **pH Units** Analysis Date: **28-Aug-2014 16:00**
Client ID: Run ID: **WetChem_HS_240046** SeqNo: **2984977** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.97	0.100	6	0	99.5	98 - 102				

DUP Sample ID: **HS14080761-11DUP** Units: **pH Units** Analysis Date: **28-Aug-2014 16:00**
Client ID: **Equipment Blank #2** Run ID: **WetChem_HS_240046** SeqNo: **2984990** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.85	0.100					6.87	0.292	10	
Temp Deg C @pH	22.1	0					23.1	4.42		

The following samples were anayzed in this batch: HS14080761-01 HS14080761-02 HS14080761-03 HS14080761-06 HS14080761-08 HS14080761-09 HS14080761-10 HS14080761-11

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240127 **Instrument: WetChem_HS** **Method: SW1010**

LCS Sample ID: **LCS-240127** Units: **°F** Analysis Date: **29-Aug-2014 18:09**
Client ID: Run ID: **WetChem_HS_240127** SeqNo: **2986793** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	84	50.0	84	0	100	95 - 105				

DUP Sample ID: **HS14080761-01DUP** Units: **°F** Analysis Date: **29-Aug-2014 18:09**
Client ID: **NTF-AST 9** Run ID: **WetChem_HS_240127** SeqNo: **2986794** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	> 212	50.0					0	0	25	

The following samples were anayzed in this batch: HS14080761-01 HS14080761-02 HS14080761-03 HS14080761-04 HS14080761-05 HS14080761-06 HS14080761-07

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240152 **Instrument: WetChem_HS** **Method: SW1010**

LCS Sample ID: **LCS-240152** Units: **°F** Analysis Date: **30-Aug-2014 17:29**
Client ID: Run ID: **WetChem_HS_240152** SeqNo: **2987402** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	84	50.0	84	0	100	95 - 105				

DUP Sample ID: **HS14080809-05DUP** Units: **°F** Analysis Date: **30-Aug-2014 17:29**
Client ID: Run ID: **WetChem_HS_240152** SeqNo: **2989160** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	> 212	50.0					0	0	25	

The following samples were anayzed in this batch: HS14080761-08 HS14080761-09 HS14080761-10 HS14080761-11

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

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Client: Effective Environmental Inc.
WorkOrder: HS14080761
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240196 **Instrument: WetChem_HS** **Method: SW9045B**

LCS Sample ID: **LCS-240196** Units: **pH Units** Analysis Date: **02-Sep-2014 15:42**
Client ID: Run ID: **WetChem_HS_240196** SeqNo: **2988402** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.99	0.100	6	0	99.8	98 - 102				

DUP Sample ID: **HS14081142-01DUP** Units: **pH Units** Analysis Date: **02-Sep-2014 15:42**
Client ID: Run ID: **WetChem_HS_240196** SeqNo: **2988403** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.34	0.100					7.35	0.136	10	

The following samples were anayzed in this batch: HS14080761-04 HS14080761-05 HS14080761-07

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

Revision: 1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: **HS14080761**

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 Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
°F	Farenheit degrees
µg/L	Micrograms per Liter
Date	
mg/L	Milligrams per Liter
pH Units	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	01-Oct-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	TX104704231-14-13	30-Apr-2015

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080761

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14080761-01	NTF-AST 9	Login	8/21/2014 4:07:17 PM	PMG	21A
HS14080761-01	NTF-AST 9	Login	8/21/2014 4:07:17 PM	PMG	21A
HS14080761-01	NTF-AST 9	Login	8/21/2014 4:07:17 PM	PMG	21A
HS14080761-01	NTF-AST 9	Login	8/21/2014 4:07:17 PM	PMG	21A
HS14080761-01	NTF-AST 9	Login	8/21/2014 4:07:17 PM	PMG	Sub
HS14080761-02	NTF-AST 8	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-02	NTF-AST 8	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-02	NTF-AST 8	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-02	NTF-AST 8	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-02	NTF-AST 8	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-03	NTF-AST 7	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-03	NTF-AST 7	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-03	NTF-AST 7	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-03	NTF-AST 7	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-03	NTF-AST 7	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-04	NTF-AST 14	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-04	NTF-AST 14	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-04	NTF-AST 14	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-04	NTF-AST 14	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-04	NTF-AST 14	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-05	NTF-AST 17	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-05	NTF-AST 17	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-05	NTF-AST 17	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-05	NTF-AST 17	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-05	NTF-AST 17	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-06	NTF-AST 20	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-06	NTF-AST 20	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-06	NTF-AST 20	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-06	NTF-AST 20	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-06	NTF-AST 20	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-07	NTF-AST 19	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-07	NTF-AST 19	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-07	NTF-AST 19	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-07	NTF-AST 19	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-07	NTF-AST 19	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-08	NTF-AST 18	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-08	NTF-AST 18	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-08	NTF-AST 18	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-08	NTF-AST 18	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-08	NTF-AST 18	Login	8/21/2014 4:23:14 PM	PMG	Sub

Revision: 1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080761

SAMPLE TRACKING

HS14080761-09	NTF-AST 13	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-09	NTF-AST 13	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-09	NTF-AST 13	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-09	NTF-AST 13	Login	8/21/2014 4:23:14 PM	PMG	21A
HS14080761-09	NTF-AST 13	Login	8/21/2014 4:23:14 PM	PMG	Sub
HS14080761-10	Field Duplicate #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-10	Field Duplicate #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-10	Field Duplicate #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-10	Field Duplicate #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-10	Field Duplicate #2	Login	8/21/2014 4:23:15 PM	PMG	Sub
HS14080761-11	Equipment Blank #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-11	Equipment Blank #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-11	Equipment Blank #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-11	Equipment Blank #2	Login	8/21/2014 4:23:15 PM	PMG	21A
HS14080761-11	Equipment Blank #2	Login	8/21/2014 4:23:15 PM	PMG	Sub
HS14080761-12	Trip Blank - 081114-41	Login	8/21/2014 4:24:02 PM	PMG	VW-3
HS14080761-13	Trip Blank - 081114-04	Login	8/21/2014 4:26:17 PM	PMG	VW-3
HS14080761-14	Trip Blank - 081114-07	Login	8/21/2014 4:26:17 PM	PMG	VW-3
HS14080761-15	Trip Blank - 081114-08	Login	8/21/2014 4:26:17 PM	PMG	VW-3
HS14080761-16	Trip Blank - 081114-40	Login	8/21/2014 4:26:17 PM	PMG	VW-3

ALS Group USA, Corp Date: 26-Sep-14

Sample Receipt Checklist

Client Name: Effective Env-HOU
Work Order: HS14080761

Date/Time Received: **21-Aug-2014 11:30**
Received by: **LOT**

Checklist completed by: *Paresh M. Giga* (eSignature) 21-Aug-2014 (Date)

Reviewed by: *Kristin M Brown* (eSignature) 27-Aug-2014 (Date)

Matrices: **Liquid/Water**

Carrier name: **ALS Courier**

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

Temperature(s)/Thermometer(s): 0.3c/0.3c,1.6c/1.6c,0.7c/0.7c,9.9c/9.9c,0.1c/0.1c C/U | IR1

Cooler(s)/Kit(s): 23629,5599,3093,4298,4145

Date/Time sample(s) sent to storage: 08/21/2014 16:45

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

pH adjusted by:

Login Notes: Cooler 4298 rec out of temp. Sample ID does not match for Euipment Blank #2 - Containers - Tank 13 - Times match - Logged in per chain

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Laboratory Group
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

HS14080761

Effective Environmental Inc.

USOR-Tank Farm Liquid Sampling

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	2016-14-1	Project Name	USOR-Tank Farm Liquid Sampling	A	TCLP - VOCs
Work Order	2016-14-1	Project Number	RC4-2016-14	B	TCLP - SVOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C	TCLP RCRA 8 Metals
Send Report To	Hiren Shah	Invoice Attn:	Hiren Shah	D	RCI
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E	Total VOCs
				F	
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	G	
Phone	281-842-0804	Phone	972-329-1200	H	
Fax	281-474-2580	Fax	972-329-1206	I	
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	NTF-AST 9	08/20/14	8:00 a.m.	Liquid		6	X	X	X	X							
2	NTF-AST 8	08/20/14	8:45 a.m.	Liquid		6	X	X	X	X							
3	NTF-AST 7	08/20/14	9:30 a.m	Liquid		6	X	X	X	X							
4	NTF-AST 14	08/20/14	10:15 a.m	Liquid		6	X	X	X	X							
5	NTF-AST 17	08/20/14	11:00 a.m	Liquid		6	X	X	X	X							
6	NTF-AST 20	08/20/14	11:45 a.m	Liquid		6	X	X	X	X							
7	NTF-AST 19	08/20/14	12:45 p.m	Liquid		6	X	X	X	X							
8	NTF-AST 18	08/20/14	1:30 p.m	Liquid		6	X	X	X	X							
9	NTF-AST 13	08/20/14	2:15p.m	Liquid		6	X	X	X	X							
10	Field Duplicate #2	08/20/14	2:45 p.m	Liquid		6	X	X	X	X							
11	Equipment Blank #2	08/20/14	4:00 p.m	Liquid		6	X	X	X	X							
12	Trip Blank (5 samples) - 1 sample/Cooler	08/20/14				5					X						
13	Temperature Blank (5 samples) - 1 sample/Cooler																
14																	

Sampler(s): Please Print & Sign
Joe Carillo [signature]

Shipment Method:

Required Turnaround Time: ☐ Other ____ ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[signature]	8/21/14	10:35	[signature] 8/21/14 10:35	
[signature]	8/21/14	11:30	Received by (Laboratory):	Cooler Temp. 4.4 / 3.6 / 2.3 / 5.5 / 4.2 / 8

QC Package: (Check Box Below)

	Level II: Standard QC		TRRP-Checklist
	Level III: Std QC + Raw Data		TRRP Level IV
	Level IV: SW846 CLP-Like		
	Other: ____		

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

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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26-Aug-2014

Kristin Brown
ALS Environmental
10450 Stancliff Rd
Suite 210
Houston, TX 77099

Re: **HS14080761** Work Order: **14081174**

Dear Kristin,

ALS Environmental received 11 samples on 22-Aug-2014 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 19.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 532786

Client: ALS Environmental
Project: HS14080761
Work Order: **14081174**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14081174-01	HS14080761-01	Liquid	NTF-AST 9	8/20/2014 08:00	8/22/2014 09:30	☐
14081174-02	HS14080761-02	Liquid	NTF-AST 8	8/20/2014 08:45	8/22/2014 09:30	☐
14081174-03	HS14080761-03	Liquid	NTF-AST 7	8/20/2014 09:30	8/22/2014 09:30	☐
14081174-04	HS14080761-04	Liquid	NTF-AST 14	8/20/2014 10:15	8/22/2014 09:30	☐
14081174-05	HS14080761-05	Liquid	NTF-AST 17	8/20/2014 11:00	8/22/2014 09:30	☐
14081174-06	HS14080761-06	Liquid	NTF-AST 20	8/20/2014 11:45	8/22/2014 09:30	☐
14081174-07	HS14080761-07	Liquid	NTF-AST 19	8/20/2014 12:45	8/22/2014 09:30	☐
14081174-08	HS14080761-08	Liquid	NTF-AST 18	8/20/2014 13:30	8/22/2014 09:30	☐
14081174-09	HS14080761-09	Liquid	NTF-AST 13	8/20/2014 14:15	8/22/2014 09:30	☐
14081174-10	HS14080761-10	Liquid	Field Duplicate #2	8/20/2014 14:45	8/22/2014 09:30	☐
14081174-11	HS14080761-11	Liquid	Equipment Blank #2	8/20/2014 16:00	8/22/2014 09:30	☐

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Project: HS14080761
WorkOrder: **14081174**

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 is present at an estimated concentration between the MDL and Report Limit
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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
mg/Kg	Milligrams per Kilogram

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-01
Collection Date: 8/20/2014 08:00 AM

Work Order: 14081174
Lab ID: 14081174-01
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00202

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-02
Collection Date: 8/20/2014 08:45 AM

Work Order: 14081174
Lab ID: 14081174-02
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00203

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-03
Collection Date: 8/20/2014 09:30 AM

Work Order: 14081174
Lab ID: 14081174-03
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00204

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-04
Collection Date: 8/20/2014 10:15 AM

Work Order: 14081174
Lab ID: 14081174-04
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00205

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-05
Collection Date: 8/20/2014 11:00 AM

Work Order: 14081174
Lab ID: 14081174-05
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00206

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-06
Collection Date: 8/20/2014 11:45 AM

Work Order: 14081174
Lab ID: 14081174-06
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00207

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-07
Collection Date: 8/20/2014 12:45 PM

Work Order: 14081174
Lab ID: 14081174-07
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00208

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-08
Collection Date: 8/20/2014 01:30 PM

Work Order: 14081174
Lab ID: 14081174-08
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00209

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-09
Collection Date: 8/20/2014 02:15 PM

Work Order: 14081174
Lab ID: 14081174-09
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00210

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-10
Collection Date: 8/20/2014 02:45 PM

Work Order: 14081174
Lab ID: 14081174-10
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00211

ALS Group USA, Corp

Date: *26-Aug-14*

Client: ALS Environmental
Project: HS14080761
Sample ID: HS14080761-11
Collection Date: 8/20/2014 04:00 PM

Work Order: 14081174
Lab ID: 14081174-11
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **JI**
Cyanide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **JI**
Sulfide, Reactive	ND		100	mg/Kg	1	8/24/2014 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00212

ALS Group USA, Corp

Client: ALS Environmental
Work Order: 14081174
Project: HS14080761

Date: 26-Aug-14

QC BATCH REPORT

Batch ID: **R146870** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

MBLK Sample ID: **WBLKW1-082414-R146870** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**

Client ID: Run ID: **WETCHEM_140824E** SeqNo: **2901090** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082414-R146870** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**

Client ID: Run ID: **WETCHEM_140824E** SeqNo: **2901091** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	1656	100	2149	0	77.1	60-120		0		

The following samples were analyzed in this batch:

14081174-01A	14081174-02A	14081174-03A
14081174-04A	14081174-05A	14081174-06A
14081174-07A	14081174-08A	14081174-09A
14081174-10A	14081174-11A	

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

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Client: ALS Environmental
Work Order: 14081174
Project: HS14080761

QC BATCH REPORT

Batch ID: **R146872** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK Sample ID: **WBLKW1-082414-R146872** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140824G** SeqNo: **2901137** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082414-R146872** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140824G** SeqNo: **2901138** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	117.4	100	125	0	94	75-125		0		

MS Sample ID: **14081179-02A MS** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140824G** SeqNo: **2901152** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	100	250	0	94	50-150		0		

MSD Sample ID: **14081179-02A MSD** Units: **mg/Kg** Analysis Date: **8/24/2014 04:00 PM**
Client ID: Run ID: **WETCHEM_140824G** SeqNo: **2901153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	100	250	0	94	50-150	234.9	0	35	

The following samples were analyzed in this batch:

14081174-01A	14081174-02A	14081174-03A
14081174-04A	14081174-05A	14081174-06A
14081174-07A	14081174-08A	14081174-09A
14081174-10A	14081174-11A	

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

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14081174

CHAIN OF CUSTODY RECORD

ALS Environmental

Date	21 Aug 2014
COC ID	1116
Due date	28 AUG 14

Subcontractor

ALS Laboratory Group	Phone
3352 128th Ave.	6163996070
Holland, MI 494249283	Fax
	6163996185

Customer Information		Project Information	
PO		Project Name	HS14080761

Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Stancliff Rd, Ste 210	Address	10450 Stancliff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5656	Phone	281-530-5656
Email1	kristin.brown@alsglobal.com	Email2	

Lab ID	Client Samp ID	Collection Date	Matrix	Analysis Requested
HS14080761-01	NTF-AST 9	20-Aug-14 08:00 am	Liquid	RCN_W
				RS_W
HS14080761-02	NTF-AST 8	20-Aug-14 08:45 am		RCN_W
				RS_W
HS14080761-03	NTF-AST 7	20-Aug-14 09:30 am		RCN_W
				RS_W
HS14080761-04	NTF-AST 14	20-Aug-14 10:15 am		RCN_W
				RS_W
HS14080761-05	NTF-AST 17	20-Aug-14 11:00 am		RCN_W
				RS_W
HS14080761-06	NTF-AST 20	20-Aug-14 11:45 am		RCN_W
				RS_W
HS14080761-07	NTF-AST 19	20-Aug-14 12:45 pm		RCN_W
				RS_W
HS14080761-08	NTF-AST 18	20-Aug-14 01:30 pm		RCN_W
				RS_W
HS14080761-09	NTF-AST 13	20-Aug-14 02:15 pm		RCN_W
				RS_W
HS14080761-10	Field Duplicate #2	20-Aug-14 02:45 pm		RCN_W
				RS_W
HS14080761-11	Equipment Blank #2	20-Aug-14 04:00 pm		RCN_W
				RS_W

Comments

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Please analyze for the above. Send report to kristin.brown@alsglobal.com & cc : results to jumoke.lawal@alsglobal.com

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
FEDEX	8/21/14 1800				
			8/22/14 0930		

4.4°c

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ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **ALS - HOUSTON** Date/Time Received: **22-Aug-14 09:30**

Work Order: **14081174** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 22-Aug-14 (Date) Reviewed by: Chad Whelton (eSignature) 24-Aug-14 (Date)

Matrices: Liquid
Carrier name: FedEx

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☑	☐	☐
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☑	☐	

Temperature(s)/Thermometer(s): 4.4 c

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 8/22/2014 2:08:48 PM

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

pH adjusted by: -

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

SRC Page 1 of 1

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10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

September 26, 2014

Hiren Shah
Effective Environmental Inc.
9950 Chemical Road
Pasadena, TX 77507

Work Order: **HS14080809**

Revision: **1**

Laboratory Results for: **USOR-Tank Farm Liquid Sampling**

Dear Hiren,

ALS Environmental received 18 sample(s) on Aug 22, 2014 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Kristin Brown

Generated By: Dane.Wacasey

Kristin M Brown
Project Manager

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080809

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14080809-01	Sump 44	Liquid		21-Aug-2014 09:00	22-Aug-2014 13:25	☐
HS14080809-02	STF-AST 31	Liquid		21-Aug-2014 09:30	22-Aug-2014 13:25	☐
HS14080809-03	STF-AST 32	Liquid		21-Aug-2014 10:00	22-Aug-2014 13:25	☐
HS14080809-04	AST 27	Liquid		21-Aug-2014 10:45	22-Aug-2014 13:25	☐
HS14080809-05	AST 26	Liquid		21-Aug-2014 11:30	22-Aug-2014 13:25	☐
HS14080809-06	NTF-AST 24	Liquid		21-Aug-2014 12:30	22-Aug-2014 13:25	☐
HS14080809-07	NTF-AST 23	Liquid		21-Aug-2014 13:15	22-Aug-2014 13:25	☐
HS14080809-08	NTF-AST 22	Liquid		21-Aug-2014 13:45	22-Aug-2014 13:25	☐
HS14080809-09	NTF-AST 21	Liquid		21-Aug-2014 14:15	22-Aug-2014 13:25	☐
HS14080809-10	Equipment Blank #3	Liquid		21-Aug-2014 17:30	22-Aug-2014 13:25	☐
HS14080809-11	Sump 47	Liquid		21-Aug-2014 09:40	22-Aug-2014 13:25	☐
HS14080809-12	Field Duplicate #3	Liquid		22-Aug-2014 10:00	22-Aug-2014 13:25	☐
HS14080809-13	Trip Blank - 081114-10	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐
HS14080809-14	Trip Blank - 081114-06	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐
HS14080809-15	Trip Blank - 081114-03	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐
HS14080809-16	Trip Blank - 080814-03	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐
HS14080809-17	Trip Blank - 081114-11	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐
HS14080809-18	Trip Blank - 081114-44	Water		21-Aug-2014 00:00	22-Aug-2014 13:25	☐

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080809

CASE NARRATIVE

Work Order Comments

- This report was revised September 26, 2014 in order to report results to the SDL and include TRRP nomenclature column headers.

- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.

  Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

  The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

GCMS Semivolatiles by Method SW1311/8270

Batch ID: 85567

Sample ID: **NTF-AST 23 (HS14080809-07)**
Sample ID: **NTF-AST 24 (HS14080809-06)**
- One or more of the GCMS semi-volatile internal standards were recovered at <50%. The sample was reanalyzed with similar results indicating a sample matrix interference.

Sample ID: **NTF-AST 23 (HS14080809-07)**
- One or more of the method 8270 surrogates were recovered outside of the control limits. This was due to a dilution required for sample analysis.

Sample ID: **NTF-AST 23 (HS14080809-07)**
Sample ID: **NTF-AST 24 (HS14080809-06)**
- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Batch ID: 85502

Sample ID: **AST 26 (HS14080809-05)**
Sample ID: **AST 27 (HS14080809-04)**
Sample ID: **Field Duplicate #3 (HS14080809-12)**
Sample ID: **NTF-AST 21 (HS14080809-09)**
Sample ID: **NTF-AST 22 (HS14080809-08)**
Sample ID: **Sump 47 (HS14080809-11)**
- One or more of the GCMS semi-volatile internal standards were recovered at <50%. The sample was reanalyzed with similar results indicating a sample matrix interference.

Sample ID: **AST 26 (HS14080809-05)**
Sample ID: **AST 27 (HS14080809-04)**
Sample ID: **Sump 44 (HS14080809-01)**
- One or more of the method 8270 surrogates were recovered outside of the control limits. This was due to a dilution required for sample analysis.

Sample ID: **AST 26 (HS14080809-05)**
Sample ID: **AST 27 (HS14080809-04)**
Sample ID: **Field Duplicate #3 (HS14080809-12)**
Sample ID: **NTF-AST 21 (HS14080809-09)**
Sample ID: **NTF-AST 22 (HS14080809-08)**
Sample ID: **Sump 44 (HS14080809-01)**
Sample ID: **Sump 47 (HS14080809-11)**
- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Sample ID: **HS14080761-01MS**
- MS was performed on an unrelated sample

Sample ID: **HS14080761-01**
- MS is for an unrelated sample.

GCMS Volatiles by Method SW8260

Batch ID: R240229

Sample ID: **HS14090013-01**
- MS/MSD is for an unrelated sample.

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080809

CASE NARRATIVE

GCMS Volatiles by Method SW8260

Batch ID: R240113

Sample ID: **HS14080845-11**
- MS/MSD/MSD RPD is for an unrelated sample.

GCMS Volatiles by Method SW1311/8260B

Batch ID: R239911

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R239985

Sample ID: **HS14080736-01**
- MS/MSD is for an unrelated sample.

Metals by Method SW7470

Batch ID: 85572,85654

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW1311/6020

Batch ID: 85500,85557A

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Subcontracted by Method SW-846

Batch ID: R240098

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW1010

Batch ID: R240152,R240283

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SM4500H+ B

Batch ID: R240009,R240046

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Sump 44	Lab ID:HS14080809-01
Collection Date:	21-Aug-2014 09:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 18:13
1,2-Dichloroethane	**0.018**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 18:13
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 18:13
2-Butanone	**4.4**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 18:13
Benzene	**0.062**	J	**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 18:13
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 18:13
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 18:13
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 18:13
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 18:13
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 18:13
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 18:13
Surr: 1,2-Dichloroethane-d4	*95.2*			*70-125*	*%REC*	*20*	*26-Aug-2014 18:13*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*20*	*26-Aug-2014 18:13*
Surr: Dibromofluoromethane	*94.8*			*71-125*	*%REC*	*20*	*26-Aug-2014 18:13*
Surr: Toluene-d8	*99.5*			*75-125*	*%REC*	*20*	*26-Aug-2014 18:13*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.0090	0.050	mg/L	10	29-Aug-2014 19:22
2,4,6-Trichlorophenol	U		0.014	0.050	mg/L	10	29-Aug-2014 19:22
2,4-Dinitrotoluene	U		0.010	0.050	mg/L	10	29-Aug-2014 19:22
Cresols, Total	**0.64**		**0.020**	**0.15**	**mg/L**	10	29-Aug-2014 19:22
Hexachlorobenzene	U		0.011	0.050	mg/L	10	29-Aug-2014 19:22
Hexachlorobutadiene	U		0.011	0.050	mg/L	10	29-Aug-2014 19:22
Hexachloroethane	U		0.010	0.050	mg/L	10	29-Aug-2014 19:22
Nitrobenzene	U		0.0080	0.050	mg/L	10	29-Aug-2014 19:22
Pentachlorophenol	U		0.016	0.050	mg/L	10	29-Aug-2014 19:22
Pyridine	U		0.020	0.050	mg/L	10	29-Aug-2014 19:22
Surr: 2,4,6-Tribromophenol	*132*	*S*		*36-126*	*%REC*	*10*	*29-Aug-2014 19:22*
Surr: 2-Fluorobiphenyl	*89.7*			*43-125*	*%REC*	*10*	*29-Aug-2014 19:22*
Surr: 2-Fluorophenol	*103*			*37-125*	*%REC*	*10*	*29-Aug-2014 19:22*
Surr: 4-Terphenyl-d14	*88.3*			*32-125*	*%REC*	*10*	*29-Aug-2014 19:22*
Surr: Nitrobenzene-d5	*81.3*			*37-125*	*%REC*	*10*	*29-Aug-2014 19:22*
Surr: Phenol-d6	*89.2*			*40-125*	*%REC*	*10*	*29-Aug-2014 19:22*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW1311/6020 / 27-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:23
Barium	**0.129**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:23
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:23
Chromium	**0.614**		**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:23
Lead	**0.0743**	J	**0.0350**	**0.250**	**mg/L**	10	27-Aug-2014 16:23
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:23
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:23

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Sump 44	Lab ID:HS14080809-01
Collection Date:	21-Aug-2014 09:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.000168	0.000800	mg/L	1	28-Aug-2014 14:00
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**3.97**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.6**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	STF-AST 31	Lab ID:HS14080809-02
Collection Date:	21-Aug-2014 09:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 12:57
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 12:57
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 12:57
2-Butanone	U		0.020	0.20	mg/L	20	26-Aug-2014 12:57
Benzene	U		0.012	0.10	mg/L	20	26-Aug-2014 12:57
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 12:57
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 12:57
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 12:57
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 12:57
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 12:57
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 12:57
Surr: 1,2-Dichloroethane-d4	*93.4*			*70-125*	*%REC*	*20*	*26-Aug-2014 12:57*
Surr: 4-Bromofluorobenzene	*99.0*			*72-125*	*%REC*	*20*	*26-Aug-2014 12:57*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*20*	*26-Aug-2014 12:57*
Surr: Toluene-d8	*87.7*			*75-125*	*%REC*	*20*	*26-Aug-2014 12:57*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.00090	0.0050	mg/L	1	28-Aug-2014 21:32
2,4,6-Trichlorophenol	U		0.0014	0.0050	mg/L	1	28-Aug-2014 21:32
2,4-Dinitrotoluene	U		0.0010	0.0050	mg/L	1	28-Aug-2014 21:32
Cresols, Total	U		0.0020	0.015	mg/L	1	28-Aug-2014 21:32
Hexachlorobenzene	U		0.0011	0.0050	mg/L	1	28-Aug-2014 21:32
Hexachlorobutadiene	U		0.0011	0.0050	mg/L	1	28-Aug-2014 21:32
Hexachloroethane	U		0.0010	0.0050	mg/L	1	28-Aug-2014 21:32
Nitrobenzene	U		0.00080	0.0050	mg/L	1	28-Aug-2014 21:32
Pentachlorophenol	U		0.0016	0.0050	mg/L	1	28-Aug-2014 21:32
Pyridine	U		0.0020	0.0050	mg/L	1	28-Aug-2014 21:32
Surr: 2,4,6-Tribromophenol	*82.4*			*36-126*	*%REC*	*1*	*28-Aug-2014 21:32*
Surr: 2-Fluorobiphenyl	*68.9*			*43-125*	*%REC*	*1*	*28-Aug-2014 21:32*
Surr: 2-Fluorophenol	*60.4*			*37-125*	*%REC*	*1*	*28-Aug-2014 21:32*
Surr: 4-Terphenyl-d14	*68.8*			*32-125*	*%REC*	*1*	*28-Aug-2014 21:32*
Surr: Nitrobenzene-d5	*64.8*			*37-125*	*%REC*	*1*	*28-Aug-2014 21:32*
Surr: Phenol-d6	*61.4*			*40-125*	*%REC*	*1*	*28-Aug-2014 21:32*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:25
Barium	**0.0310**	J	**0.00900**	**0.200**	**mg/L**	10	27-Aug-2014 16:25
Cadmium	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:25
Chromium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:25
Lead	U		0.00700	0.0500	mg/L	10	27-Aug-2014 16:25
Selenium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:25
Silver	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:25
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	STF-AST 31	Lab ID:HS14080809-02
Collection Date:	21-Aug-2014 09:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	28-Aug-2014 14:02
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.24**	H	**0.100**	**0.100**	**pH Units**	1	26-Aug-2014 15:53
Temp Deg C @pH	**24.4**	H	**0**	**0**	**°C**	1	26-Aug-2014 15:53
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	STF-AST 32	Lab ID:HS14080809-03
Collection Date:	21-Aug-2014 10:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 13:21
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 13:21
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:21
2-Butanone	U		0.020	0.20	mg/L	20	26-Aug-2014 13:21
Benzene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:21
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 13:21
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 13:21
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 13:21
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:21
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 13:21
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 13:21
Surr: 1,2-Dichloroethane-d4	*93.1*			*70-125*	*%REC*	*20*	*26-Aug-2014 13:21*
Surr: 4-Bromofluorobenzene	*99.8*			*72-125*	*%REC*	*20*	*26-Aug-2014 13:21*
Surr: Dibromofluoromethane	*95.9*			*71-125*	*%REC*	*20*	*26-Aug-2014 13:21*
Surr: Toluene-d8	*87.8*			*75-125*	*%REC*	*20*	*26-Aug-2014 13:21*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.00090	0.0050	mg/L	1	29-Aug-2014 19:00
2,4,6-Trichlorophenol	U		0.0014	0.0050	mg/L	1	29-Aug-2014 19:00
2,4-Dinitrotoluene	U		0.0010	0.0050	mg/L	1	29-Aug-2014 19:00
Cresols, Total	U		0.0020	0.015	mg/L	1	29-Aug-2014 19:00
Hexachlorobenzene	U		0.0011	0.0050	mg/L	1	29-Aug-2014 19:00
Hexachlorobutadiene	U		0.0011	0.0050	mg/L	1	29-Aug-2014 19:00
Hexachloroethane	U		0.0010	0.0050	mg/L	1	29-Aug-2014 19:00
Nitrobenzene	U		0.00080	0.0050	mg/L	1	29-Aug-2014 19:00
Pentachlorophenol	U		0.0016	0.0050	mg/L	1	29-Aug-2014 19:00
Pyridine	U		0.0020	0.0050	mg/L	1	29-Aug-2014 19:00
Surr: 2,4,6-Tribromophenol	*97.1*			*36-126*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: 2-Fluorobiphenyl	*82.3*			*43-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: 2-Fluorophenol	*80.4*			*37-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: 4-Terphenyl-d14	*104*			*32-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: Nitrobenzene-d5	*69.9*			*37-125*	*%REC*	*1*	*29-Aug-2014 19:00*
Surr: Phenol-d6	*73.8*			*40-125*	*%REC*	*1*	*29-Aug-2014 19:00*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW1311/6020 / 27-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:33
Barium	**0.0407**	J	**0.00900**	**0.200**	**mg/L**	10	27-Aug-2014 16:33
Cadmium	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:33
Chromium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:33
Lead	U		0.00700	0.0500	mg/L	10	27-Aug-2014 16:33
Selenium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:33
Silver	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:33

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	STF-AST 32	Lab ID:HS14080809-03
Collection Date:	21-Aug-2014 10:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311/6020 / 27-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	28-Aug-2014 13:26
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.44**	H	**0.100**	**0.100**	**pH Units**	1	26-Aug-2014 15:53
Temp Deg C @pH	**24.8**	H	**0**	**0**	**°C**	1	26-Aug-2014 15:53
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	AST 27	Lab ID:HS14080809-04
Collection Date:	21-Aug-2014 10:45	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 18:38
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 18:38
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 18:38
2-Butanone	**7.1**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 18:38
Benzene	**0.030**	J	**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 18:38
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 18:38
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 18:38
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 18:38
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 18:38
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 18:38
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 18:38
Surr: 1,2-Dichloroethane-d4	*95.8*			*70-125*	*%REC*	*20*	*26-Aug-2014 18:38*
Surr: 4-Bromofluorobenzene	*100.0*			*72-125*	*%REC*	*20*	*26-Aug-2014 18:38*
Surr: Dibromofluoromethane	*94.0*			*71-125*	*%REC*	*20*	*26-Aug-2014 18:38*
Surr: Toluene-d8	*98.9*			*75-125*	*%REC*	*20*	*26-Aug-2014 18:38*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.090	0.50	mg/L	10	29-Aug-2014 19:45
2,4,6-Trichlorophenol	U		0.14	0.50	mg/L	10	29-Aug-2014 19:45
2,4-Dinitrotoluene	U		0.10	0.50	mg/L	10	29-Aug-2014 19:45
Cresols, Total	**1.2**	J	**0.20**	**1.5**	**mg/L**	10	29-Aug-2014 19:45
Hexachlorobenzene	U		0.11	0.50	mg/L	10	29-Aug-2014 19:45
Hexachlorobutadiene	U		0.11	0.50	mg/L	10	29-Aug-2014 19:45
Hexachloroethane	U		0.10	0.50	mg/L	10	29-Aug-2014 19:45
Nitrobenzene	U		0.080	0.50	mg/L	10	29-Aug-2014 19:45
Pentachlorophenol	U		0.16	0.50	mg/L	10	29-Aug-2014 19:45
Pyridine	U		0.20	0.50	mg/L	10	29-Aug-2014 19:45
Surr: 2,4,6-Tribromophenol	*109*	*J*		*36-126*	*%REC*	*10*	*29-Aug-2014 19:45*
Surr: 2-Fluorobiphenyl	*106*	*J*		*43-125*	*%REC*	*10*	*29-Aug-2014 19:45*
Surr: 2-Fluorophenol	*116*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 19:45*
Surr: 4-Terphenyl-d14	*115*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 19:45*
Surr: Nitrobenzene-d5	*107*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 19:45*
Surr: Phenol-d6	*615*	*S*		*40-125*	*%REC*	*10*	*29-Aug-2014 19:45*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 27-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:36
Barium	**7.79**		**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:36
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:36
Chromium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:36
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:36
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:36
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:36

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	AST 27	Lab ID:HS14080809-04
Collection Date:	21-Aug-2014 10:45	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.000168	0.000800	mg/L	1	28-Aug-2014 14:03
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**5.55**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.4**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	AST 26	Lab ID:HS14080809-05
Collection Date:	21-Aug-2014 11:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 19:02
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 19:02
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:02
2-Butanone	**1.2**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 19:02
Benzene	**0.12**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 19:02
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 19:02
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 19:02
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 19:02
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:02
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 19:02
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 19:02
Surr: 1,2-Dichloroethane-d4	*95.3*			*70-125*	*%REC*	*20*	*26-Aug-2014 19:02*
Surr: 4-Bromofluorobenzene	*98.4*			*72-125*	*%REC*	*20*	*26-Aug-2014 19:02*
Surr: Dibromofluoromethane	*94.5*			*71-125*	*%REC*	*20*	*26-Aug-2014 19:02*
Surr: Toluene-d8	*98.0*			*75-125*	*%REC*	*20*	*26-Aug-2014 19:02*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.045	0.25	mg/L	10	29-Aug-2014 20:07
2,4,6-Trichlorophenol	U		0.070	0.25	mg/L	10	29-Aug-2014 20:07
2,4-Dinitrotoluene	U		0.050	0.25	mg/L	10	29-Aug-2014 20:07
Cresols, Total	**1.5**		**0.10**	**0.75**	**mg/L**	10	29-Aug-2014 20:07
Hexachlorobenzene	U		0.055	0.25	mg/L	10	29-Aug-2014 20:07
Hexachlorobutadiene	U		0.055	0.25	mg/L	10	29-Aug-2014 20:07
Hexachloroethane	U		0.050	0.25	mg/L	10	29-Aug-2014 20:07
Nitrobenzene	U		0.040	0.25	mg/L	10	29-Aug-2014 20:07
Pentachlorophenol	U		0.080	0.25	mg/L	10	29-Aug-2014 20:07
Pyridine	U		0.10	0.25	mg/L	10	29-Aug-2014 20:07
Surr: 2,4,6-Tribromophenol	*139*	*JS*		*36-126*	*%REC*	*10*	*29-Aug-2014 20:07*
Surr: 2-Fluorobiphenyl	*102*	*J*		*43-125*	*%REC*	*10*	*29-Aug-2014 20:07*
Surr: 2-Fluorophenol	*115*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 20:07*
Surr: 4-Terphenyl-d14	*112*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 20:07*
Surr: Nitrobenzene-d5	*95.0*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 20:07*
Surr: Phenol-d6	*197*	*JS*		*40-125*	*%REC*	*10*	*29-Aug-2014 20:07*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW1311 / 25-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:38
Barium	**0.230**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:38
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:38
Chromium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:38
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:38
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:38
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:38
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	30-Aug-2014 17:29

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	AST 26	Lab ID:HS14080809-05
Collection Date:	21-Aug-2014 11:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	U		0.000168	0.000800	mg/L	1	28-Aug-2014 14:05
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**6.44**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.5**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 24	Lab ID:HS14080809-06
Collection Date:	21-Aug-2014 12:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 03:11
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 03:11
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 03:11
2-Butanone	**0.028**	J	**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 03:11
Benzene	**0.087**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 03:11
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 03:11
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 03:11
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 03:11
Tetrachloroethene	U		0.012	0.10	mg/L	20	28-Aug-2014 03:11
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 03:11
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 03:11
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*20*	*28-Aug-2014 03:11*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*28-Aug-2014 03:11*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*20*	*28-Aug-2014 03:11*
Surr: Toluene-d8	*99.5*			*75-125*	*%REC*	*20*	*28-Aug-2014 03:11*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	29-Aug-2014 05:04
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	29-Aug-2014 05:04
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	29-Aug-2014 05:04
Cresols, Total	**0.13**	J	**0.040**	**0.30**	**mg/L**	10	29-Aug-2014 05:04
Hexachlorobenzene	U		0.022	0.10	mg/L	10	29-Aug-2014 05:04
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	29-Aug-2014 05:04
Hexachloroethane	U		0.020	0.10	mg/L	10	29-Aug-2014 05:04
Nitrobenzene	U		0.016	0.10	mg/L	10	29-Aug-2014 05:04
Pentachlorophenol	U		0.032	0.10	mg/L	10	29-Aug-2014 05:04
Pyridine	U		0.040	0.10	mg/L	10	29-Aug-2014 05:04
Surr: 2,4,6-Tribromophenol	*108*			*36-126*	*%REC*	*10*	*29-Aug-2014 05:04*
Surr: 2-Fluorobiphenyl	*102*			*43-125*	*%REC*	*10*	*29-Aug-2014 05:04*
Surr: 2-Fluorophenol	*66.9*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 05:04*
Surr: 4-Terphenyl-d14	*103*			*32-125*	*%REC*	*10*	*29-Aug-2014 05:04*
Surr: Nitrobenzene-d5	*83.0*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 05:04*
Surr: Phenol-d6	*91.6*	*J*		*40-125*	*%REC*	*10*	*29-Aug-2014 05:04*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:44
Barium	**0.162**	J	**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:44
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:44
Chromium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:44
Lead	U		0.0350	0.250	mg/L	10	28-Aug-2014 19:44
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:44
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:44

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 24	Lab ID:HS14080809-06
Collection Date:	21-Aug-2014 12:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW3010A / 28-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.00155**		**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 14:07
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.92**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**25.0**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 23	Lab ID:HS14080809-07
Collection Date:	21-Aug-2014 13:15	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 26-Aug-2014		Prep:SW1311 / 26-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 03:35
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 03:35
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 03:35
2-Butanone	**0.042**	J	**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 03:35
Benzene	**0.42**		**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 03:35
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 03:35
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 03:35
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 03:35
Tetrachloroethene	**0.014**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 03:35
Trichloroethene	**0.027**	J	**0.010**	**0.10**	**mg/L**	20	28-Aug-2014 03:35
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 03:35
Surr: 1,2-Dichloroethane-d4	*102*			*70-125*	*%REC*	*20*	*28-Aug-2014 03:35*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*28-Aug-2014 03:35*
Surr: Dibromofluoromethane	*97.5*			*71-125*	*%REC*	*20*	*28-Aug-2014 03:35*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*20*	*28-Aug-2014 03:35*
TCLP SEMIVOLATILES	**Method:SW1311/8270**		Leache:SW1311 / 27-Aug-2014		Prep:SW3510 / 28-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.090	0.50	mg/L	10	29-Aug-2014 05:27
2,4,6-Trichlorophenol	U		0.14	0.50	mg/L	10	29-Aug-2014 05:27
2,4-Dinitrotoluene	U		0.10	0.50	mg/L	10	29-Aug-2014 05:27
Cresols, Total	U		0.20	1.5	mg/L	10	29-Aug-2014 05:27
Hexachlorobenzene	U		0.11	0.50	mg/L	10	29-Aug-2014 05:27
Hexachlorobutadiene	U		0.11	0.50	mg/L	10	29-Aug-2014 05:27
Hexachloroethane	U		0.10	0.50	mg/L	10	29-Aug-2014 05:27
Nitrobenzene	U		0.080	0.50	mg/L	10	29-Aug-2014 05:27
Pentachlorophenol	U		0.16	0.50	mg/L	10	29-Aug-2014 05:27
Pyridine	U		0.20	0.50	mg/L	10	29-Aug-2014 05:27
Surr: 2,4,6-Tribromophenol	*123*	*J*		*36-126*	*%REC*	*10*	*29-Aug-2014 05:27*
Surr: 2-Fluorobiphenyl	*127*	*JS*		*43-125*	*%REC*	*10*	*29-Aug-2014 05:27*
Surr: 2-Fluorophenol	*116*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 05:27*
Surr: 4-Terphenyl-d14	*121*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 05:27*
Surr: Nitrobenzene-d5	*206*	*JS*		*37-125*	*%REC*	*10*	*29-Aug-2014 05:27*
Surr: Phenol-d6	*224*	*JS*		*40-125*	*%REC*	*10*	*29-Aug-2014 05:27*
TCLP METALS BY SW6020A	**Method:SW1311/6020**		Leache:SW1311/6020 / 28-Aug-2014				Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:46
Barium	**1.62**		**0.0450**	**1.00**	**mg/L**	10	28-Aug-2014 19:46
Cadmium	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:46
Chromium	**0.162**	J	**0.0500**	**0.250**	**mg/L**	10	28-Aug-2014 19:46
Lead	**0.170**	J	**0.0350**	**0.250**	**mg/L**	10	28-Aug-2014 19:46
Selenium	U		0.0500	0.250	mg/L	10	28-Aug-2014 19:46
Silver	U		0.0400	0.250	mg/L	10	28-Aug-2014 19:46

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 23	Lab ID:HS14080809-07
Collection Date:	21-Aug-2014 13:15	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 26-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.0992**		**0.00168**	**0.00800**	**mg/L**	10	28-Aug-2014 14:35
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**8.14**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.8**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client: Effective Environmental Inc. **ANALYTICAL REPORT**
Project: USOR-Tank Farm Liquid Sampling WorkOrder:HS14080809
Sample ID: NTF-AST 22 Lab ID:HS14080809-08
Collection Date: 21-Aug-2014 13:45 Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 19:26
1,2-Dichloroethane	**0.064**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 19:26
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:26
2-Butanone	**9.4**		**0.10**	**1.0**	**mg/L**	100	28-Aug-2014 01:34
Benzene	**0.60**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 19:26
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 19:26
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 19:26
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 19:26
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:26
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 19:26
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 19:26
Surr: 1,2-Dichloroethane-d4	*94.8*			*70-125*	*%REC*	*20*	*26-Aug-2014 19:26*
Surr: 1,2-Dichloroethane-d4	*104*			*70-125*	*%REC*	*100*	*28-Aug-2014 01:34*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*26-Aug-2014 19:26*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*100*	*28-Aug-2014 01:34*
Surr: Dibromofluoromethane	*96.3*			*71-125*	*%REC*	*20*	*26-Aug-2014 19:26*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*100*	*28-Aug-2014 01:34*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*20*	*26-Aug-2014 19:26*
Surr: Toluene-d8	*101*			*75-125*	*%REC*	*100*	*28-Aug-2014 01:34*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	29-Aug-2014 20:30
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	29-Aug-2014 20:30
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	29-Aug-2014 20:30
Cresols, Total	**0.53**		**0.030**	**0.22**	**mg/L**	10	29-Aug-2014 20:30
Hexachlorobenzene	U		0.016	0.075	mg/L	10	29-Aug-2014 20:30
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	29-Aug-2014 20:30
Hexachloroethane	U		0.015	0.075	mg/L	10	29-Aug-2014 20:30
Nitrobenzene	**0.19**		**0.012**	**0.075**	**mg/L**	10	29-Aug-2014 20:30
Pentachlorophenol	U		0.024	0.075	mg/L	10	29-Aug-2014 20:30
Pyridine	U		0.030	0.075	mg/L	10	29-Aug-2014 20:30
Surr: 2,4,6-Tribromophenol	*96.2*			*36-126*	*%REC*	*10*	*29-Aug-2014 20:30*
Surr: 2-Fluorobiphenyl	*108*			*43-125*	*%REC*	*10*	*29-Aug-2014 20:30*
Surr: 2-Fluorophenol	*100*			*37-125*	*%REC*	*10*	*29-Aug-2014 20:30*
Surr: 4-Terphenyl-d14	*111*			*32-125*	*%REC*	*10*	*29-Aug-2014 20:30*
Surr: Nitrobenzene-d5	*92.1*			*37-125*	*%REC*	*10*	*29-Aug-2014 20:30*
Surr: Phenol-d6	*114*			*40-125*	*%REC*	*10*	*29-Aug-2014 20:30*

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

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Sample ID: NTF-AST 22
Collection Date: 21-Aug-2014 13:45

ANALYTICAL REPORT
WorkOrder:HS14080809
Lab ID:HS14080809-08
Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A		**Method:SW1311/6020**		Leache:SW3010A / 26-Aug-2014	Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:41
Barium	**0.142**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:41
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:41
Chromium	**0.219**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:41
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:41
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:41
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:41
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW7470 / 28-Aug-2014	Prep:SW7470 / 28-Aug-2014		Analyst: OFO
Mercury	**0.000492**	J	**0.000168**	**0.000800**	**mg/L**	1	28-Aug-2014 14:11
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.37**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.4**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	25-Aug-2014 12:30
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	25-Aug-2014 12:30

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 21	Lab ID:HS14080809-09
Collection Date:	21-Aug-2014 14:15	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 19:51
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 19:51
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:51
2-Butanone	**2.5**		**0.020**	**0.20**	**mg/L**	20	26-Aug-2014 19:51
Benzene	**0.88**		**0.012**	**0.10**	**mg/L**	20	26-Aug-2014 19:51
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 19:51
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 19:51
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 19:51
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 19:51
Trichloroethene	**0.019**	J	**0.010**	**0.10**	**mg/L**	20	26-Aug-2014 19:51
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 19:51
Surr: 1,2-Dichloroethane-d4	*96.0*			*70-125*	*%REC*	*20*	*26-Aug-2014 19:51*
Surr: 4-Bromofluorobenzene	*98.8*			*72-125*	*%REC*	*20*	*26-Aug-2014 19:51*
Surr: Dibromofluoromethane	*94.8*			*71-125*	*%REC*	*20*	*26-Aug-2014 19:51*
Surr: Toluene-d8	*99.1*			*75-125*	*%REC*	*20*	*26-Aug-2014 19:51*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	29-Aug-2014 20:53
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	29-Aug-2014 20:53
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	29-Aug-2014 20:53
Cresols, Total	**0.98**		**0.040**	**0.30**	**mg/L**	10	29-Aug-2014 20:53
Hexachlorobenzene	U		0.022	0.10	mg/L	10	29-Aug-2014 20:53
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	29-Aug-2014 20:53
Hexachloroethane	U		0.020	0.10	mg/L	10	29-Aug-2014 20:53
Nitrobenzene	U		0.016	0.10	mg/L	10	29-Aug-2014 20:53
Pentachlorophenol	U		0.032	0.10	mg/L	10	29-Aug-2014 20:53
Pyridine	U		0.040	0.10	mg/L	10	29-Aug-2014 20:53
Surr: 2,4,6-Tribromophenol	*86.0*	*J*		*36-126*	*%REC*	*10*	*29-Aug-2014 20:53*
Surr: 2-Fluorobiphenyl	*75.1*	*J*		*43-125*	*%REC*	*10*	*29-Aug-2014 20:53*
Surr: 2-Fluorophenol	*88.4*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 20:53*
Surr: 4-Terphenyl-d14	*84.7*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 20:53*
Surr: Nitrobenzene-d5	*69.2*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 20:53*
Surr: Phenol-d6	*119*			*40-125*	*%REC*	*10*	*29-Aug-2014 20:53*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	**0.290**		**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:44
Barium	**0.194**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:44
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:44
Chromium	**1.14**		**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:44
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:44
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:44
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:44
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	NTF-AST 21	Lab ID:HS14080809-09
Collection Date:	21-Aug-2014 14:15	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311/6020 / 27-Aug-2014	Prep:SW7470 / 02-Sep-2014		Analyst: OFO
Mercury	**0.00338**		**0.000168**	**0.000800**	**mg/L**	1	02-Sep-2014 14:25
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.99**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**24.9**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	**246**	n	**24.7**	**100**	**mg/Kg**	1	28-Aug-2014 09:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	28-Aug-2014 09:00

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Equipment Blank #3	Lab ID:HS14080809-10
Collection Date:	21-Aug-2014 17:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 13:46
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	26-Aug-2014 13:46
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:46
2-Butanone	U		0.020	0.20	mg/L	20	26-Aug-2014 13:46
Benzene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:46
Carbon tetrachloride	U		0.012	0.10	mg/L	20	26-Aug-2014 13:46
Chlorobenzene	U		0.0080	0.10	mg/L	20	26-Aug-2014 13:46
Chloroform	U		0.012	0.10	mg/L	20	26-Aug-2014 13:46
Tetrachloroethene	U		0.012	0.10	mg/L	20	26-Aug-2014 13:46
Trichloroethene	U		0.010	0.10	mg/L	20	26-Aug-2014 13:46
Vinyl chloride	U		0.0080	0.040	mg/L	20	26-Aug-2014 13:46
Surr: 1,2-Dichloroethane-d4	*92.1*			*70-125*	*%REC*	*20*	*26-Aug-2014 13:46*
Surr: 4-Bromofluorobenzene	*98.9*			*72-125*	*%REC*	*20*	*26-Aug-2014 13:46*
Surr: Dibromofluoromethane	*98.9*			*71-125*	*%REC*	*20*	*26-Aug-2014 13:46*
Surr: Toluene-d8	*88.3*			*75-125*	*%REC*	*20*	*26-Aug-2014 13:46*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.00090	0.0050	mg/L	1	28-Aug-2014 22:17
2,4,6-Trichlorophenol	U		0.0014	0.0050	mg/L	1	28-Aug-2014 22:17
2,4-Dinitrotoluene	U		0.0010	0.0050	mg/L	1	28-Aug-2014 22:17
Cresols, Total	U		0.0020	0.015	mg/L	1	28-Aug-2014 22:17
Hexachlorobenzene	U		0.0011	0.0050	mg/L	1	28-Aug-2014 22:17
Hexachlorobutadiene	U		0.0011	0.0050	mg/L	1	28-Aug-2014 22:17
Hexachloroethane	U		0.0010	0.0050	mg/L	1	28-Aug-2014 22:17
Nitrobenzene	U		0.00080	0.0050	mg/L	1	28-Aug-2014 22:17
Pentachlorophenol	U		0.0016	0.0050	mg/L	1	28-Aug-2014 22:17
Pyridine	U		0.0020	0.0050	mg/L	1	28-Aug-2014 22:17
Surr: 2,4,6-Tribromophenol	*81.3*			*36-126*	*%REC*	*1*	*28-Aug-2014 22:17*
Surr: 2-Fluorobiphenyl	*72.0*			*43-125*	*%REC*	*1*	*28-Aug-2014 22:17*
Surr: 2-Fluorophenol	*56.0*			*37-125*	*%REC*	*1*	*28-Aug-2014 22:17*
Surr: 4-Terphenyl-d14	*79.4*			*32-125*	*%REC*	*1*	*28-Aug-2014 22:17*
Surr: Nitrobenzene-d5	*65.5*			*37-125*	*%REC*	*1*	*28-Aug-2014 22:17*
Surr: Phenol-d6	*65.8*			*40-125*	*%REC*	*1*	*28-Aug-2014 22:17*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:46
Barium	**0.0390**	J	**0.00900**	**0.200**	**mg/L**	10	27-Aug-2014 16:46
Cadmium	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:46
Chromium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:46
Lead	U		0.00700	0.0500	mg/L	10	27-Aug-2014 16:46
Selenium	U		0.0100	0.0500	mg/L	10	27-Aug-2014 16:46
Silver	U		0.00800	0.0500	mg/L	10	27-Aug-2014 16:46
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Equipment Blank #3	Lab ID:HS14080809-10
Collection Date:	21-Aug-2014 17:30	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 02-Sep-2014		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	02-Sep-2014 14:19
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**5.91**	H	**0.100**	**0.100**	**pH Units**	1	26-Aug-2014 15:53
Temp Deg C @pH	**24.8**	H	**0**	**0**	**°C**	1	26-Aug-2014 15:53
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	U	n	24.7	100	mg/Kg	1	28-Aug-2014 09:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	28-Aug-2014 09:00

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Sump 47	Lab ID:HS14080809-11
Collection Date:	21-Aug-2014 09:40	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 03:59
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 03:59
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 03:59
2-Butanone	**0.13**	J	**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 03:59
Benzene	**0.051**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 03:59
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 03:59
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 03:59
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 03:59
Tetrachloroethene	**0.019**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 03:59
Trichloroethene	**0.015**	J	**0.010**	**0.10**	**mg/L**	20	28-Aug-2014 03:59
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 03:59
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*20*	*28-Aug-2014 03:59*
Surr: 4-Bromofluorobenzene	*100.0*			*72-125*	*%REC*	*20*	*28-Aug-2014 03:59*
Surr: Dibromofluoromethane	*99.2*			*71-125*	*%REC*	*20*	*28-Aug-2014 03:59*
Surr: Toluene-d8	*101*			*75-125*	*%REC*	*20*	*28-Aug-2014 03:59*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	29-Aug-2014 21:15
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	29-Aug-2014 21:15
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	29-Aug-2014 21:15
Cresols, Total	U		0.040	0.30	mg/L	10	29-Aug-2014 21:15
Hexachlorobenzene	U		0.022	0.10	mg/L	10	29-Aug-2014 21:15
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	29-Aug-2014 21:15
Hexachloroethane	U		0.020	0.10	mg/L	10	29-Aug-2014 21:15
Nitrobenzene	U		0.016	0.10	mg/L	10	29-Aug-2014 21:15
Pentachlorophenol	U		0.032	0.10	mg/L	10	29-Aug-2014 21:15
Pyridine	U		0.040	0.10	mg/L	10	29-Aug-2014 21:15
Surr: 2,4,6-Tribromophenol	*120*			*36-126*	*%REC*	*10*	*29-Aug-2014 21:15*
Surr: 2-Fluorobiphenyl	*83.5*	*J*		*43-125*	*%REC*	*10*	*29-Aug-2014 21:15*
Surr: 2-Fluorophenol	*101*			*37-125*	*%REC*	*10*	*29-Aug-2014 21:15*
Surr: 4-Terphenyl-d14	*95.2*	*J*		*32-125*	*%REC*	*10*	*29-Aug-2014 21:15*
Surr: Nitrobenzene-d5	*74.3*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 21:15*
Surr: Phenol-d6	*86.6*	*J*		*40-125*	*%REC*	*10*	*29-Aug-2014 21:15*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	**0.180**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:49
Barium	**0.0781**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:49
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:49
Chromium	**0.470**		**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:49
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:49
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:49
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:49
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Sump 47	Lab ID:HS14080809-11
Collection Date:	21-Aug-2014 09:40	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW7470 / 02-Sep-2014	Prep:SW7470 / 02-Sep-2014		Analyst: OFO
Mercury	**0.0000540**	J	**0.0000420**	**0.000200**	**mg/L**	1	02-Sep-2014 14:21
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.92**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**25.0**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	**103**	n	**24.7**	**100**	**mg/Kg**	1	28-Aug-2014 09:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	28-Aug-2014 09:00

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Field Duplicate #3	Lab ID:HS14080809-12
Collection Date:	22-Aug-2014 10:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		**Method:SW1311/8260B**	Leache:SW1311 / 25-Aug-2014		Prep:SW1311 / 25-Aug-2014		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 04:23
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	28-Aug-2014 04:23
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	28-Aug-2014 04:23
2-Butanone	**0.14**	J	**0.020**	**0.20**	**mg/L**	20	28-Aug-2014 04:23
Benzene	**0.045**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 04:23
Carbon tetrachloride	U		0.012	0.10	mg/L	20	28-Aug-2014 04:23
Chlorobenzene	U		0.0080	0.10	mg/L	20	28-Aug-2014 04:23
Chloroform	U		0.012	0.10	mg/L	20	28-Aug-2014 04:23
Tetrachloroethene	**0.020**	J	**0.012**	**0.10**	**mg/L**	20	28-Aug-2014 04:23
Trichloroethene	U		0.010	0.10	mg/L	20	28-Aug-2014 04:23
Vinyl chloride	U		0.0080	0.040	mg/L	20	28-Aug-2014 04:23
Surr: 1,2-Dichloroethane-d4	*102*			*70-125*	*%REC*	*20*	*28-Aug-2014 04:23*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*20*	*28-Aug-2014 04:23*
Surr: Dibromofluoromethane	*97.6*			*71-125*	*%REC*	*20*	*28-Aug-2014 04:23*
Surr: Toluene-d8	*99.7*			*75-125*	*%REC*	*20*	*28-Aug-2014 04:23*
TCLP SEMIVOLATILES		**Method:SW1311/8270**	Leache:SW1311 / 25-Aug-2014		Prep:SW3510 / 26-Aug-2014		Analyst: GEY
2,4,5-Trichlorophenol	U		0.018	0.10	mg/L	10	29-Aug-2014 21:38
2,4,6-Trichlorophenol	U		0.028	0.10	mg/L	10	29-Aug-2014 21:38
2,4-Dinitrotoluene	U		0.020	0.10	mg/L	10	29-Aug-2014 21:38
Cresols, Total	U		0.040	0.30	mg/L	10	29-Aug-2014 21:38
Hexachlorobenzene	U		0.022	0.10	mg/L	10	29-Aug-2014 21:38
Hexachlorobutadiene	U		0.022	0.10	mg/L	10	29-Aug-2014 21:38
Hexachloroethane	U		0.020	0.10	mg/L	10	29-Aug-2014 21:38
Nitrobenzene	U		0.016	0.10	mg/L	10	29-Aug-2014 21:38
Pentachlorophenol	U		0.032	0.10	mg/L	10	29-Aug-2014 21:38
Pyridine	U		0.040	0.10	mg/L	10	29-Aug-2014 21:38
Surr: 2,4,6-Tribromophenol	*121*			*36-126*	*%REC*	*10*	*29-Aug-2014 21:38*
Surr: 2-Fluorobiphenyl	*109*			*43-125*	*%REC*	*10*	*29-Aug-2014 21:38*
Surr: 2-Fluorophenol	*118*			*37-125*	*%REC*	*10*	*29-Aug-2014 21:38*
Surr: 4-Terphenyl-d14	*119*			*32-125*	*%REC*	*10*	*29-Aug-2014 21:38*
Surr: Nitrobenzene-d5	*93.9*	*J*		*37-125*	*%REC*	*10*	*29-Aug-2014 21:38*
Surr: Phenol-d6	*97.8*	*J*		*40-125*	*%REC*	*10*	*29-Aug-2014 21:38*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW3010A / 26-Aug-2014		Prep:SW3010A / 26-Aug-2014		Analyst: RPM
Arsenic	**0.201**	J	**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:52
Barium	**0.0701**	J	**0.0450**	**1.00**	**mg/L**	10	27-Aug-2014 16:52
Cadmium	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:52
Chromium	**0.484**		**0.0500**	**0.250**	**mg/L**	10	27-Aug-2014 16:52
Lead	U		0.0350	0.250	mg/L	10	27-Aug-2014 16:52
Selenium	U		0.0500	0.250	mg/L	10	27-Aug-2014 16:52
Silver	U		0.0400	0.250	mg/L	10	27-Aug-2014 16:52
IGNITABILITY		**Method:SW1010**					Analyst: KHT
Ignitability	> 212		50.0	50.0	°F	1	03-Sep-2014 16:48

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

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Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Field Duplicate #3	Lab ID:HS14080809-12
Collection Date:	22-Aug-2014 10:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP MERCURY BY SW7470A		**Method:SW7470**		Leache:SW1311 / 25-Aug-2014	Prep:SW7470 / 02-Sep-2014		Analyst: OFO
Mercury	**0.0000540**	J	**0.0000420**	**0.000200**	**mg/L**	1	02-Sep-2014 14:23
PH BY SM4500H+ B		**Method:SM4500H+ B**					Analyst: MYC
pH	**7.98**	H	**0.100**	**0.100**	**pH Units**	1	28-Aug-2014 16:00
Temp Deg C @pH	**25.3**	H	**0**	**0**	**°C**	1	28-Aug-2014 16:00
REACTIVE CYANIDE		**Method:SW-846**					Analyst: JML
Reactive Cyanide	**117**	n	**24.7**	**100**	**mg/Kg**	1	28-Aug-2014 09:00
REACTIVE SULFIDE		**Method:SW-846**					Analyst: JML
Reactive Sulfide	U	n	52.1	100	mg/Kg	1	28-Aug-2014 09:00

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

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Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-10	Lab ID:HS14080809-13
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 20:49
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 20:49
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 20:49
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 20:49
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 20:49
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 20:49
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 20:49
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 20:49
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 20:49
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 20:49
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 20:49
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 20:49
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 20:49
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49

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

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Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-10	Lab ID:HS14080809-13
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 20:49
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 20:49
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 20:49
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 20:49
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 20:49
Surr: 1,2-Dichloroethane-d4	*99.1*			*70-125*	*%REC*	*1*	*29-Aug-2014 20:49*
Surr: 4-Bromofluorobenzene	*105*			*72-125*	*%REC*	*1*	*29-Aug-2014 20:49*
Surr: Dibromofluoromethane	*96.5*			*71-125*	*%REC*	*1*	*29-Aug-2014 20:49*
Surr: Toluene-d8	*107*			*75-125*	*%REC*	*1*	*29-Aug-2014 20:49*

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-06	Lab ID:HS14080809-14
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 21:16
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 21:16
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 21:16
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 21:16
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 21:16
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 21:16
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 21:16
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 21:16
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 21:16
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 21:16
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 21:16
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 21:16
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 21:16
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-06	Lab ID:HS14080809-14
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 21:16
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:16
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 21:16
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 21:16
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 21:16
Surr: 1,2-Dichloroethane-d4	*96.4*			*70-125*	*%REC*	*1*	*29-Aug-2014 21:16*
Surr: 4-Bromofluorobenzene	*99.2*			*72-125*	*%REC*	*1*	*29-Aug-2014 21:16*
Surr: Dibromofluoromethane	*97.7*			*71-125*	*%REC*	*1*	*29-Aug-2014 21:16*
Surr: Toluene-d8	*103*			*75-125*	*%REC*	*1*	*29-Aug-2014 21:16*

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-03	Lab ID:HS14080809-15
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 21:43
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 21:43
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 21:43
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 21:43
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 21:43
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 21:43
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 21:43
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 21:43
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 21:43
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 21:43
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 21:43
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 21:43
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 21:43
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-03	Lab ID:HS14080809-15
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 21:43
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 21:43
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 21:43
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 21:43
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 21:43
Surr: 1,2-Dichloroethane-d4	*100*			*70-125*	*%REC*	*1*	*29-Aug-2014 21:43*
Surr: 4-Bromofluorobenzene	*105*			*72-125*	*%REC*	*1*	*29-Aug-2014 21:43*
Surr: Dibromofluoromethane	*97.9*			*71-125*	*%REC*	*1*	*29-Aug-2014 21:43*
Surr: Toluene-d8	*109*			*75-125*	*%REC*	*1*	*29-Aug-2014 21:43*

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 080814-03	Lab ID:HS14080809-16
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	29-Aug-2014 22:10
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	29-Aug-2014 22:10
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	29-Aug-2014 22:10
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
2-Butanone	U		1.0	10	ug/L	1	29-Aug-2014 22:10
2-Hexanone	U		1.0	10	ug/L	1	29-Aug-2014 22:10
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	29-Aug-2014 22:10
Acetone	U		2.0	10	ug/L	1	29-Aug-2014 22:10
Benzene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Bromodichloromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Bromoform	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Bromomethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Carbon disulfide	U		0.90	10	ug/L	1	29-Aug-2014 22:10
Carbon tetrachloride	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Chlorobenzene	U		0.40	5.0	ug/L	1	29-Aug-2014 22:10
Chloroethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Chloroform	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Chloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Cyclohexane	U	n	0.60	5.0	ug/L	1	29-Aug-2014 22:10
Dibromochloromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Dichloromethane	U		0.50	10	ug/L	1	29-Aug-2014 22:10
Ethylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Isopropylbenzene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
m,p-Xylene	U		0.60	10	ug/L	1	29-Aug-2014 22:10
Methyl acetate	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Methylcyclohexane	U		1.0	5.0	ug/L	1	29-Aug-2014 22:10
o-Xylene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Styrene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10

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

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Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 080814-03	Lab ID:HS14080809-16
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Toluene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	29-Aug-2014 22:10
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Trichloroethene	U		0.50	5.0	ug/L	1	29-Aug-2014 22:10
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	29-Aug-2014 22:10
Vinyl chloride	U		0.40	2.0	ug/L	1	29-Aug-2014 22:10
Xylenes, Total	U		1.5	15	ug/L	1	29-Aug-2014 22:10
Surr: 1,2-Dichloroethane-d4	*96.9*			*70-125*	*%REC*	*1*	*29-Aug-2014 22:10*
Surr: 4-Bromofluorobenzene	*98.9*			*72-125*	*%REC*	*1*	*29-Aug-2014 22:10*
Surr: Dibromofluoromethane	*96.4*			*71-125*	*%REC*	*1*	*29-Aug-2014 22:10*
Surr: Toluene-d8	*101*			*75-125*	*%REC*	*1*	*29-Aug-2014 22:10*

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

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Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-11	Lab ID:HS14080809-17
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	02-Sep-2014 12:55
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	02-Sep-2014 12:55
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	02-Sep-2014 12:55
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
2-Butanone	U		1.0	10	ug/L	1	02-Sep-2014 12:55
2-Hexanone	U		1.0	10	ug/L	1	02-Sep-2014 12:55
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	02-Sep-2014 12:55
Acetone	U		2.0	10	ug/L	1	02-Sep-2014 12:55
Benzene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Bromodichloromethane	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Bromoform	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Bromomethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Carbon disulfide	U		0.90	10	ug/L	1	02-Sep-2014 12:55
Carbon tetrachloride	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Chlorobenzene	U		0.40	5.0	ug/L	1	02-Sep-2014 12:55
Chloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Chloroform	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Chloromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Cyclohexane	U	n	0.60	5.0	ug/L	1	02-Sep-2014 12:55
Dibromochloromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Dichloromethane	U		0.50	10	ug/L	1	02-Sep-2014 12:55
Ethylbenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Isopropylbenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
m,p-Xylene	U		0.60	10	ug/L	1	02-Sep-2014 12:55
Methyl acetate	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Methylcyclohexane	U		1.0	5.0	ug/L	1	02-Sep-2014 12:55
o-Xylene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Styrene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-11	Lab ID:HS14080809-17
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Toluene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	02-Sep-2014 12:55
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Trichloroethene	U		0.50	5.0	ug/L	1	02-Sep-2014 12:55
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	02-Sep-2014 12:55
Vinyl chloride	U		0.40	2.0	ug/L	1	02-Sep-2014 12:55
Xylenes, Total	U		1.5	15	ug/L	1	02-Sep-2014 12:55
Surr: 1,2-Dichloroethane-d4	*104*			*70-125*	*%REC*	*1*	*02-Sep-2014 12:55*
Surr: 4-Bromofluorobenzene	*96.4*			*72-125*	*%REC*	*1*	*02-Sep-2014 12:55*
Surr: Dibromofluoromethane	*104*			*71-125*	*%REC*	*1*	*02-Sep-2014 12:55*
Surr: Toluene-d8	*97.6*			*75-125*	*%REC*	*1*	*02-Sep-2014 12:55*

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-44	Lab ID:HS14080809-18
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
1,1,1-Trichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,1,2,2-Tetrachloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,1,2-Trichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,1-Dichloroethane	U		0.40	5.0	ug/L	1	02-Sep-2014 13:23
1,1-Dichloroethene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,2,4-Trichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
1,2-Dibromo-3-chloropropane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,2-Dibromoethane	U		0.40	5.0	ug/L	1	02-Sep-2014 13:23
1,2-Dichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
1,2-Dichloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,2-Dichloropropane	U		0.70	5.0	ug/L	1	02-Sep-2014 13:23
1,3-Dichlorobenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
1,4-Dichlorobenzene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
2-Butanone	U		1.0	10	ug/L	1	02-Sep-2014 13:23
2-Hexanone	U		1.0	10	ug/L	1	02-Sep-2014 13:23
4-Methyl-2-pentanone	U		1.0	10	ug/L	1	02-Sep-2014 13:23
Acetone	U		2.0	10	ug/L	1	02-Sep-2014 13:23
Benzene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Bromodichloromethane	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Bromoform	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Bromomethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Carbon disulfide	U		0.90	10	ug/L	1	02-Sep-2014 13:23
Carbon tetrachloride	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Chlorobenzene	U		0.40	5.0	ug/L	1	02-Sep-2014 13:23
Chloroethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Chloroform	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Chloromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
cis-1,2-Dichloroethene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
cis-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Cyclohexane	U	n	0.60	5.0	ug/L	1	02-Sep-2014 13:23
Dibromochloromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Dichlorodifluoromethane	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Dichloromethane	U		0.50	10	ug/L	1	02-Sep-2014 13:23
Ethylbenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Isopropylbenzene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
m,p-Xylene	U		0.60	10	ug/L	1	02-Sep-2014 13:23
Methyl acetate	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Methyl tert-butyl ether	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Methylcyclohexane	U		1.0	5.0	ug/L	1	02-Sep-2014 13:23
o-Xylene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Styrene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23

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

Revision:1

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR-Tank Farm Liquid Sampling	WorkOrder:HS14080809
Sample ID:	Trip Blank - 081114-44	Lab ID:HS14080809-18
Collection Date:	21-Aug-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Tetrachloroethene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Toluene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
trans-1,2-Dichloroethene	U		0.40	5.0	ug/L	1	02-Sep-2014 13:23
trans-1,3-Dichloropropene	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Trichloroethene	U		0.50	5.0	ug/L	1	02-Sep-2014 13:23
Trichlorofluoromethane	U		0.60	5.0	ug/L	1	02-Sep-2014 13:23
Vinyl chloride	U		0.40	2.0	ug/L	1	02-Sep-2014 13:23
Xylenes, Total	U		1.5	15	ug/L	1	02-Sep-2014 13:23
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*1*	*02-Sep-2014 13:23*
Surr: 4-Bromofluorobenzene	*96.4*			*72-125*	*%REC*	*1*	*02-Sep-2014 13:23*
Surr: Dibromofluoromethane	*103*			*71-125*	*%REC*	*1*	*02-Sep-2014 13:23*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*1*	*02-Sep-2014 13:23*

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

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080809

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 85500	**Test Name :** TCLP METALS BY SW6020A			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:23	10
HS14080809-02	STF-AST 31	21 Aug 2014 09:30	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:25	10
HS14080809-03	STF-AST 32	21 Aug 2014 10:00	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:33	10
HS14080809-04	AST 27	21 Aug 2014 10:45	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:36	10
HS14080809-05	AST 26	21 Aug 2014 11:30	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:38	10
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:41	10
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:44	10
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:46	10
HS14080809-11	Sump 47	21 Aug 2014 09:40	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:49	10
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00	25 Aug 2014 12:30	26 Aug 2014 12:00	27 Aug 2014 16:52	10
Batch ID 85502	**Test Name :** TCLP SEMIVOLATILES			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 19:22	10
HS14080809-02	STF-AST 31	21 Aug 2014 09:30	25 Aug 2014 12:30	26 Aug 2014 12:27	28 Aug 2014 21:32	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 19:00	1
HS14080809-04	AST 27	21 Aug 2014 10:45	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 19:45	10
HS14080809-05	AST 26	21 Aug 2014 11:30	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 20:07	10
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 20:30	10
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 20:53	10
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30	25 Aug 2014 12:30	26 Aug 2014 12:27	28 Aug 2014 22:17	1
HS14080809-11	Sump 47	21 Aug 2014 09:40	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 21:15	10
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00	25 Aug 2014 12:30	26 Aug 2014 12:27	29 Aug 2014 21:38	10
Batch ID 85557A	**Test Name :** TCLP METALS BY SW6020A			**Matrix:** Liquid		
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:44	10
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15	26 Aug 2014 21:00	28 Aug 2014 10:34	28 Aug 2014 19:46	10
Batch ID 85567	**Test Name :** TCLP SEMIVOLATILES			**Matrix:** Liquid		
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 05:04	10
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15	27 Aug 2014 08:37	28 Aug 2014 14:25	29 Aug 2014 05:27	10
Batch ID 85572	**Test Name :** TCLP MERCURY BY SW7470A			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 14:00	1
HS14080809-02	STF-AST 31	21 Aug 2014 09:30	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 14:02	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 13:26	1
HS14080809-04	AST 27	21 Aug 2014 10:45	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 14:03	1
HS14080809-05	AST 26	21 Aug 2014 11:30	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 14:05	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 14:07	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15	26 Aug 2014 21:00	28 Aug 2014 10:35	28 Aug 2014 14:35	10
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45	25 Aug 2014 12:30	28 Aug 2014 10:35	28 Aug 2014 14:11	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080809

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 85654	**Test Name :** TCLP MERCURY BY SW7470A			**Matrix:** Liquid		
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15	25 Aug 2014 12:30	02 Sep 2014 10:30	02 Sep 2014 14:25	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30	25 Aug 2014 12:30	02 Sep 2014 10:30	02 Sep 2014 14:19	1
HS14080809-11	Sump 47	21 Aug 2014 09:40	25 Aug 2014 12:30	02 Sep 2014 10:30	02 Sep 2014 14:21	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00	25 Aug 2014 12:30	02 Sep 2014 10:30	02 Sep 2014 14:23	1
Batch ID R239911	**Test Name :** TCLP VOLATILES			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 18:13	20
HS14080809-02	STF-AST 31	21 Aug 2014 09:30	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 12:57	20
HS14080809-03	STF-AST 32	21 Aug 2014 10:00	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 13:21	20
HS14080809-04	AST 27	21 Aug 2014 10:45	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 18:38	20
HS14080809-05	AST 26	21 Aug 2014 11:30	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 19:02	20
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 19:26	20
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 19:51	20
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30	25 Aug 2014 12:30	25 Aug 2014 12:38	26 Aug 2014 13:46	20
Batch ID R239985	**Test Name :** TCLP VOLATILES			**Matrix:** Liquid		
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 03:11	20
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15	26 Aug 2014 11:00	26 Aug 2014 11:00	28 Aug 2014 03:35	20
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 01:34	100
HS14080809-11	Sump 47	21 Aug 2014 09:40	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 03:59	20
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00	25 Aug 2014 12:30	25 Aug 2014 12:38	28 Aug 2014 04:23	20
Batch ID R240009	**Test Name :** PH BY SM4500H+ B			**Matrix:** Liquid		
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			26 Aug 2014 15:53	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			26 Aug 2014 15:53	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			26 Aug 2014 15:53	1
Batch ID R240046	**Test Name :** PH BY SM4500H+ B			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00			28 Aug 2014 16:00	1
HS14080809-04	AST 27	21 Aug 2014 10:45			28 Aug 2014 16:00	1
HS14080809-05	AST 26	21 Aug 2014 11:30			28 Aug 2014 16:00	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			28 Aug 2014 16:00	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			28 Aug 2014 16:00	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			28 Aug 2014 16:00	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			28 Aug 2014 16:00	1
HS14080809-11	Sump 47	21 Aug 2014 09:40			28 Aug 2014 16:00	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			28 Aug 2014 16:00	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080809

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R240098	**Test Name :** REACTIVE SULFIDE			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00			25 Aug 2014 12:30	1
HS14080809-01	Sump 44	21 Aug 2014 09:00			25 Aug 2014 12:30	1
HS14080809-01	Sump 44	21 Aug 2014 09:00			25 Aug 2014 12:30	1
HS14080809-01	Sump 44	21 Aug 2014 09:00			25 Aug 2014 12:30	1
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			25 Aug 2014 12:30	1
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			25 Aug 2014 12:30	1
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			25 Aug 2014 12:30	1
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			25 Aug 2014 12:30	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			25 Aug 2014 12:30	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			25 Aug 2014 12:30	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			25 Aug 2014 12:30	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			25 Aug 2014 12:30	1
HS14080809-04	AST 27	21 Aug 2014 10:45			25 Aug 2014 12:30	1
HS14080809-04	AST 27	21 Aug 2014 10:45			25 Aug 2014 12:30	1
HS14080809-04	AST 27	21 Aug 2014 10:45			25 Aug 2014 12:30	1
HS14080809-04	AST 27	21 Aug 2014 10:45			25 Aug 2014 12:30	1
HS14080809-05	AST 26	21 Aug 2014 11:30			25 Aug 2014 12:30	1
HS14080809-05	AST 26	21 Aug 2014 11:30			25 Aug 2014 12:30	1
HS14080809-05	AST 26	21 Aug 2014 11:30			25 Aug 2014 12:30	1
HS14080809-05	AST 26	21 Aug 2014 11:30			25 Aug 2014 12:30	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			25 Aug 2014 12:30	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			25 Aug 2014 12:30	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			25 Aug 2014 12:30	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			25 Aug 2014 12:30	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			25 Aug 2014 12:30	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			25 Aug 2014 12:30	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			25 Aug 2014 12:30	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			25 Aug 2014 12:30	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			25 Aug 2014 12:30	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			25 Aug 2014 12:30	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			25 Aug 2014 12:30	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			25 Aug 2014 12:30	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			28 Aug 2014 09:00	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			28 Aug 2014 09:00	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			28 Aug 2014 09:00	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			28 Aug 2014 09:00	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			28 Aug 2014 09:00	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			28 Aug 2014 09:00	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			28 Aug 2014 09:00	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			28 Aug 2014 09:00	1

Revision:1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: HS14080809

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
HS14080809-11	Sump 47	21 Aug 2014 09:40			28 Aug 2014 09:00	1
HS14080809-11	Sump 47	21 Aug 2014 09:40			28 Aug 2014 09:00	1
HS14080809-11	Sump 47	21 Aug 2014 09:40			28 Aug 2014 09:00	1
HS14080809-11	Sump 47	21 Aug 2014 09:40			28 Aug 2014 09:00	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			28 Aug 2014 09:00	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			28 Aug 2014 09:00	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			28 Aug 2014 09:00	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			28 Aug 2014 09:00	1
Batch ID R240113	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14080809-13	Trip Blank - 081114-10	21 Aug 2014 00:00			29 Aug 2014 20:49	1
HS14080809-14	Trip Blank - 081114-06	21 Aug 2014 00:00			29 Aug 2014 21:16	1
HS14080809-15	Trip Blank - 081114-03	21 Aug 2014 00:00			29 Aug 2014 21:43	1
HS14080809-16	Trip Blank - 080814-03	21 Aug 2014 00:00			29 Aug 2014 22:10	1
Batch ID R240152	**Test Name :** IGNITABILITY			**Matrix:** Liquid		
HS14080809-01	Sump 44	21 Aug 2014 09:00			30 Aug 2014 17:29	1
HS14080809-04	AST 27	21 Aug 2014 10:45			30 Aug 2014 17:29	1
HS14080809-05	AST 26	21 Aug 2014 11:30			30 Aug 2014 17:29	1
Batch ID R240229	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14080809-17	Trip Blank - 081114-11	21 Aug 2014 00:00			02 Sep 2014 12:55	1
HS14080809-18	Trip Blank - 081114-44	21 Aug 2014 00:00			02 Sep 2014 13:23	1
Batch ID R240283	**Test Name :** IGNITABILITY			**Matrix:** Liquid		
HS14080809-02	STF-AST 31	21 Aug 2014 09:30			03 Sep 2014 16:48	1
HS14080809-03	STF-AST 32	21 Aug 2014 10:00			03 Sep 2014 16:48	1
HS14080809-06	NTF-AST 24	21 Aug 2014 12:30			03 Sep 2014 16:48	1
HS14080809-07	NTF-AST 23	21 Aug 2014 13:15			03 Sep 2014 16:48	1
HS14080809-08	NTF-AST 22	21 Aug 2014 13:45			03 Sep 2014 16:48	1
HS14080809-09	NTF-AST 21	21 Aug 2014 14:15			03 Sep 2014 16:48	1
HS14080809-10	Equipment Blank #3	21 Aug 2014 17:30			03 Sep 2014 16:48	1
HS14080809-11	Sump 47	21 Aug 2014 09:40			03 Sep 2014 16:48	1
HS14080809-12	Field Duplicate #3	22 Aug 2014 10:00			03 Sep 2014 16:48	1

Revision:1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

MBLK Sample ID: **MBLKT1-85500** Units: **mg/L** Analysis Date: **27-Aug-2014 15:38**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983532** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK Sample ID: **MBLK-85500** Units: **mg/L** Analysis Date: **27-Aug-2014 15:41**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983533** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

LCS Sample ID: **MLCS-85500** Units: **mg/L** Analysis Date: **28-Aug-2014 15:06**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2984513** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4639	0.0500	0.5	0	92.8	80 - 120				
Barium	0.5089	0.200	0.5	0	102	80 - 120				
Cadmium	0.4955	0.0500	0.5	0	99.1	80 - 120				
Chromium	0.4877	0.0500	0.5	0	97.5	80 - 120				
Lead	0.4723	0.0500	0.5	0	94.5	80 - 120				
Selenium	0.5083	0.0500	0.5	0	102	80 - 120				
Silver	0.4856	0.0500	0.5	0	97.1	80 - 120				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

MS Sample ID: **HS14080761-11MS** Units: **mg/L** Analysis Date: **27-Aug-2014 16:15**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983546** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4315	0.0500	0.5	0.001952	85.9	75 - 125				
Barium	0.4347	0.200	0.5	0.03594	79.8	75 - 125				
Cadmium	0.4118	0.0500	0.5	0.000008	82.3	75 - 125				
Chromium	0.418	0.0500	0.5	-0.002296	84.1	75 - 125				
Lead	0.4028	0.0500	0.5	-0.001166	80.8	75 - 125				
Selenium	0.4246	0.0500	0.5	0.003443	84.2	75 - 125				
Silver	0.4381	0.0500	0.5	0.000106	87.6	75 - 125				

MSD Sample ID: **HS14080761-11MSD** Units: **mg/L** Analysis Date: **27-Aug-2014 16:17**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983547** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4232	0.0500	0.5	0.001952	84.2	75 - 125	0.4315	1.96	20	
Barium	0.4407	0.200	0.5	0.03594	81.0	75 - 125	0.4347	1.37	20	
Cadmium	0.4022	0.0500	0.5	0.000008	80.4	75 - 125	0.4118	2.34	20	
Chromium	0.4211	0.0500	0.5	-0.002296	84.7	75 - 125	0.418	0.752	20	
Lead	0.4021	0.0500	0.5	-0.001166	80.7	75 - 125	0.4028	0.168	20	
Selenium	0.4326	0.0500	0.5	0.003443	85.8	75 - 125	0.4246	1.87	20	
Silver	0.4289	0.0500	0.5	0.000106	85.8	75 - 125	0.4381	2.11	20	

DUP Sample ID: **HS14080761-11DUP** Units: **mg/L** Analysis Date: **27-Aug-2014 16:10**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983544** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.001952	0	25	
Barium	0.0407	0.200					0.03594	0	25	J
Cadmium	U	0.0500					0.000008	0	25	
Chromium	U	0.0500					-0.002296	0	25	
Lead	U	0.0500					-0.001166	0	25	
Selenium	U	0.0500					0.003443	0	25	
Silver	U	0.0500					0.000106	0	25	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85500 **Instrument: ICPMS05** **Method: SW1311/6020**

PDS Sample ID: **HS14080761-11BS** Units: **mg/L** Analysis Date: **27-Aug-2014 16:20**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983548** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.002	0.0500	1	0.001952	100	75 - 125				
Barium	0.9857	0.200	1	0.03594	95.0	75 - 125				
Cadmium	0.9588	0.0500	1	0.000008	95.9	75 - 125				
Chromium	0.9811	0.0500	1	-0.002296	98.3	75 - 125				
Lead	0.9426	0.0500	1	-0.001166	94.4	75 - 125				
Selenium	1.017	0.0500	1	0.003443	101	75 - 125				
Silver	0.9878	0.0500	1	0.000106	98.8	75 - 125				

SD Sample ID: **HS14080761-11 DIL SX** Units: **mg/L** Analysis Date: **27-Aug-2014 16:12**
Client ID: Run ID: **ICPMS05_239931** SeqNo: **2983545** PrepDate: **26-Aug-2014** DF: **50**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.001952	0	10	
Barium	U	1.00					0.03594	0	10	
Cadmium	U	0.250					0.000008	0	10	
Chromium	U	0.250					-0.002296	0	10	
Lead	U	0.250					-0.001166	0	10	
Selenium	U	0.250					0.003443	0	10	
Silver	U	0.250					0.000106	0	10	

The following samples were anayzed in this batch:

HS14080809-01	HS14080809-02	HS14080809-03	HS14080809-04
HS14080809-05	HS14080809-08	HS14080809-09	HS14080809-10
HS14080809-11	HS14080809-12		

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

MBLK Sample ID: **MBLKT1-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:23**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985550** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK Sample ID: **MBLK-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:25**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985551** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

LCS Sample ID: **MLCS-85557** Units: **mg/L** Analysis Date: **28-Aug-2014 19:20**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985549** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4595	0.0500	0.5	0	91.9	80 - 120				
Barium	0.4452	0.200	0.5	0	89.0	80 - 120				
Cadmium	0.4645	0.0500	0.5	0	92.9	80 - 120				
Chromium	0.4627	0.0500	0.5	0	92.5	80 - 120				
Lead	0.4404	0.0500	0.5	0	88.1	80 - 120				
Selenium	0.4676	0.0500	0.5	0	93.5	80 - 120				
Silver	0.4306	0.0500	0.5	0	86.1	80 - 120				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

MS Sample ID: **HS14080841-12MS** Units: **mg/L** Analysis Date: **28-Aug-2014 20:16**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985570** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4734	0.0500	0.5	0.001686	94.3	75 - 125				
Barium	1.504	0.200	0.5	0.9885	103	75 - 125				
Cadmium	0.4768	0.0500	0.5	0.000958	95.2	75 - 125				
Chromium	0.4701	0.0500	0.5	0.01836	90.4	75 - 125				
Lead	0.4471	0.0500	0.5	0.001401	89.1	75 - 125				
Selenium	0.4921	0.0500	0.5	0.001282	98.2	75 - 125				
Silver	0.4318	0.0500	0.5	0.000242	86.3	75 - 125				

MSD Sample ID: **HS14080841-12MSD** Units: **mg/L** Analysis Date: **28-Aug-2014 20:18**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985573** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4559	0.0500	0.5	0.001686	90.8	75 - 125	0.4734	3.77	20	
Barium	1.399	0.200	0.5	0.9885	82.1	75 - 125	1.504	7.25	20	
Cadmium	0.448	0.0500	0.5	0.000958	89.4	75 - 125	0.4768	6.22	20	
Chromium	0.4698	0.0500	0.5	0.01836	90.3	75 - 125	0.4701	0.0823	20	
Lead	0.4268	0.0500	0.5	0.001401	85.1	75 - 125	0.4471	4.64	20	
Selenium	0.4644	0.0500	0.5	0.001282	92.6	75 - 125	0.4921	5.8	20	
Silver	0.4121	0.0500	0.5	0.000242	82.4	75 - 125	0.4318	4.67	20	

DUP Sample ID: **HS14080841-12DUP** Units: **mg/L** Analysis Date: **28-Aug-2014 20:10**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985568** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.001686	0	25	
Barium	0.9968	0.200					0.9885	0.834	25	
Cadmium	U	0.0500					0.000958	0	25	
Chromium	0.01745	0.0500					0.01836	0	25	J
Lead	U	0.0500					0.001401	0	25	
Selenium	U	0.0500					0.001282	0	25	
Silver	U	0.0500					0.000242	0	25	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85557A **Instrument: ICPMS05** **Method: SW1311/6020**

PDS Sample ID: **HS14080841-12BS** Units: **mg/L** Analysis Date: **28-Aug-2014 20:21**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985574** PrepDate: **28-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.001	0.0500	1	0.001686	100.0	75 - 125				
Barium	1.928	0.200	1	0.9885	93.9	75 - 125				
Cadmium	0.984	0.0500	1	0.000958	98.3	75 - 125				
Chromium	1.003	0.0500	1	0.01836	98.5	75 - 125				
Lead	0.9521	0.0500	1	0.001401	95.1	75 - 125				
Selenium	0.9955	0.0500	1	0.001282	99.4	75 - 125				
Silver	0.8696	0.0500	1	0.000242	86.9	75 - 125				

SD Sample ID: **HS14080841-12 DIL SX** Units: **mg/L** Analysis Date: **28-Aug-2014 20:13**
Client ID: Run ID: **ICPMS05_240022** SeqNo: **2985569** PrepDate: **28-Aug-2014** DF: **50**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.001686	0	10	
Barium	0.9653	1.00					0.9885	0	10	J
Cadmium	U	0.250					0.000958	0	10	
Chromium	U	0.250					0.01836	0	10	
Lead	U	0.250					0.001401	0	10	
Selenium	U	0.250					0.001282	0	10	
Silver	U	0.250					0.000242	0	10	

The following samples were anayzed in this batch: HS14080809-06 HS14080809-07

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85572 **Instrument: HG03** **Method: SW7470**

MBLK Sample ID: **GBLKW2-082814** Units: **mg/L** Analysis Date: **28-Aug-2014 13:22**
Client ID: Run ID: **HG03_240027** SeqNo: **2984620** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

MBLK Sample ID: **GBLKT1-082714** Units: **mg/L** Analysis Date: **28-Aug-2014 13:33**
Client ID: Run ID: **HG03_240027** SeqNo: **2984626** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

LCS Sample ID: **GLCSW2-082814** Units: **mg/L** Analysis Date: **28-Aug-2014 13:24**
Client ID: Run ID: **HG03_240027** SeqNo: **2984621** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00518	0.000200	0.005	0	104	80 - 120				

MS Sample ID: **HS14080809-03MS** Units: **mg/L** Analysis Date: **28-Aug-2014 13:29**
Client ID: **STF-AST 32** Run ID: **HG03_240027** SeqNo: **2984624** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00508	0.000200	0.005	0.00001	101	75 - 125				

MSD Sample ID: **HS14080809-03MSD** Units: **mg/L** Analysis Date: **28-Aug-2014 13:31**
Client ID: **STF-AST 32** Run ID: **HG03_240027** SeqNo: **2984625** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0051	0.000200	0.005	0.00001	102	75 - 125	0.00508	0.393	20	

DUP Sample ID: **HS14080809-03DUP** Units: **mg/L** Analysis Date: **28-Aug-2014 13:27**
Client ID: **STF-AST 32** Run ID: **HG03_240027** SeqNo: **2984623** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					0.00001	0	20	

The following samples were anayzed in this batch:

HS14080809-01	HS14080809-02	HS14080809-03	HS14080809-04
HS14080809-05	HS14080809-06	HS14080809-07	HS14080809-08

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85654 **Instrument: HG03** **Method: SW7470**

MBLK Sample ID: **GBLKW2-090214** Units: **mg/L** Analysis Date: **02-Sep-2014 13:55**
Client ID: Run ID: **HG03_240182** SeqNo: **2988185** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

MBLK Sample ID: **GBLKT1-090114** Units: **mg/L** Analysis Date: **02-Sep-2014 14:06**
Client ID: Run ID: **HG03_240182** SeqNo: **2988191** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

LCS Sample ID: **GLCSW2-090214** Units: **mg/L** Analysis Date: **02-Sep-2014 13:57**
Client ID: Run ID: **HG03_240182** SeqNo: **2988186** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00509	0.000200	0.005	0	102	80 - 120				

MS Sample ID: **HS14080841-10MS** Units: **mg/L** Analysis Date: **02-Sep-2014 14:02**
Client ID: Run ID: **HG03_240182** SeqNo: **2988189** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00483	0.000200	0.005	-0.000001	96.6	75 - 125				

MSD Sample ID: **HS14080841-10MSD** Units: **mg/L** Analysis Date: **02-Sep-2014 14:04**
Client ID: Run ID: **HG03_240182** SeqNo: **2988190** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00483	0.000200	0.005	-0.000001	96.6	75 - 125	0.00483	0	20	

DUP Sample ID: **HS14080841-10DUP** Units: **mg/L** Analysis Date: **02-Sep-2014 14:01**
Client ID: Run ID: **HG03_240182** SeqNo: **2988188** PrepDate: **02-Sep-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					-0.000001	0	20	

The following samples were anayzed in this batch: HS14080809-09 HS14080809-10 HS14080809-11 HS14080809-12

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85502** Units: **ug/L** Analysis Date: **28-Aug-2014 18:30**
Client ID: Run ID: **SV-5_239977** SeqNo: **2985756** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*59.9*	*5.0*	*100*	*0*	*59.9*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*58.52*	*5.0*	*100*	*0*	*58.5*	*43 - 125*				
Surr: 2-Fluorophenol	*45.57*	*5.0*	*100*	*0*	*45.6*	*37 - 125*				
Surr: 4-Terphenyl-d14	*60.88*	*5.0*	*100*	*0*	*60.9*	*32 - 125*				
Surr: Nitrobenzene-d5	*56.76*	*5.0*	*100*	*0*	*56.8*	*37 - 125*				
Surr: Phenol-d6	*48.29*	*5.0*	*100*	*0*	*48.3*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

LCS Sample ID: **LCS-85502** Units: **ug/L** Analysis Date: **28-Aug-2014 18:53**
Client ID: Run ID: **SV-5_239977** SeqNo: **2985757** PrepDate: **26-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	64.42	5.0	100	0	64.4	55 - 120				
2,4,6-Trichlorophenol	73.81	5.0	100	0	73.8	55 - 120				
2,4-Dinitrotoluene	35.7	5.0	50	0	71.4	55 - 125				
Cresols, Total	153.5	15	250	0	61.4	40 - 120				
Hexachlorobenzene	40.56	5.0	50	0	81.1	55 - 120				
Hexachlorobutadiene	35.77	5.0	50	0	71.5	55 - 120				
Hexachloroethane	33.66	5.0	50	0	67.3	55 - 120				
Nitrobenzene	35.81	5.0	50	0	71.6	55 - 120				
Pentachlorophenol	85.39	5.0	100	0	85.4	50 - 135				
Pyridine	29.97	5.0	50	0	59.9	30 - 120				
Surr: 2,4,6-Tribromophenol	*73.11*	*5.0*	*100*	*0*	*73.1*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.54*	*5.0*	*100*	*0*	*67.5*	*43 - 125*				
Surr: 2-Fluorophenol	*63.27*	*5.0*	*100*	*0*	*63.3*	*37 - 125*				
Surr: 4-Terphenyl-d14	*69.49*	*5.0*	*100*	*0*	*69.5*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.03*	*5.0*	*100*	*0*	*69.0*	*37 - 125*				
Surr: Phenol-d6	*59.99*	*5.0*	*100*	*0*	*60.0*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85502 **Instrument: SV-5** **Method: SW1311/8270**

MS Sample ID: **HS14080761-01MS** Units: **ug/L** Analysis Date: **26-Aug-2014 21:24**
Client ID: Run ID: **SV-5_239977** SeqNo: **2983734** PrepDate: **26-Aug-2014** DF: **10**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	71.69	100	100	0	71.7	55 - 120				J
2,4,6-Trichlorophenol	87.43	100	100	0	87.4	55 - 120				J
2,4-Dinitrotoluene	57.86	100	50	0	116	55 - 125				J
Cresols, Total	1737	300	250	2330	-237	40 - 120				SO
Hexachlorobenzene	45.15	100	50	0	90.3	55 - 120				J
Hexachlorobutadiene	35.37	100	50	0	70.7	55 - 120				J
Hexachloroethane	123.4	100	50	0	247	55 - 120				S
Nitrobenzene	29.26	100	50	0	58.5	55 - 120				J
Pentachlorophenol	U	100	100	0	0	50 - 135				S
Pyridine	U	100	50	0	0	30 - 120				S
Surr: 2,4,6-Tribromophenol	*106.8*	*100*	*100*	*0*	*107*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*78.16*	*100*	*100*	*0*	*78.2*	*43 - 125*				J
Surr: 2-Fluorophenol	*77*	*100*	*100*	*0*	*77.0*	*37 - 125*				J
Surr: 4-Terphenyl-d14	*101.7*	*100*	*100*	*0*	*102*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.5*	*100*	*100*	*0*	*69.5*	*37 - 125*				J
Surr: Phenol-d6	*76.1*	*100*	*100*	*0*	*76.1*	*40 - 125*				J

The following samples were anayzed in this batch:

HS14080809-01	HS14080809-02	HS14080809-03	HS14080809-04
HS14080809-05	HS14080809-08	HS14080809-09	HS14080809-10
HS14080809-11	HS14080809-12		

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 19:38**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986597** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*71.29*	*5.0*	*100*	*0*	*71.3*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*68.31*	*5.0*	*100*	*0*	*68.3*	*43 - 125*				
Surr: 2-Fluorophenol	*55.24*	*5.0*	*100*	*0*	*55.2*	*37 - 125*				
Surr: 4-Terphenyl-d14	*68.41*	*5.0*	*100*	*0*	*68.4*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.4*	*5.0*	*100*	*0*	*69.4*	*37 - 125*				
Surr: Phenol-d6	*59.36*	*5.0*	*100*	*0*	*59.4*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MBLK Sample ID: **MBLK-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 19:38**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985764** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	*71.29*	*5.0*	*100*	*0*	*71.3*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*68.31*	*5.0*	*100*	*0*	*68.3*	*43 - 125*				
Surr: 2-Fluorophenol	*55.24*	*5.0*	*100*	*0*	*55.2*	*37 - 125*				
Surr: 4-Terphenyl-d14	*68.41*	*5.0*	*100*	*0*	*68.4*	*32 - 125*				
Surr: Nitrobenzene-d5	*69.4*	*5.0*	*100*	*0*	*69.4*	*37 - 125*				
Surr: Phenol-d6	*59.36*	*5.0*	*100*	*0*	*59.4*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCS Sample ID: **LCS-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:01**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986598** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	63.86	5.0	100	0	63.9	55 - 120				
2,4,6-Trichlorophenol	67.45	5.0	100	0	67.4	55 - 120				
2,4-Dinitrotoluene	38.1	5.0	50	0	76.2	55 - 125				
Cresols, Total	174.6	15	250	0	69.8	40 - 120				
Hexachlorobenzene	43.74	5.0	50	0	87.5	55 - 120				
Hexachlorobutadiene	37.03	5.0	50	0	74.1	55 - 120				
Hexachloroethane	35.45	5.0	50	0	70.9	55 - 120				
Nitrobenzene	38.05	5.0	50	0	76.1	55 - 120				
Pentachlorophenol	87.36	5.0	100	0	87.4	50 - 135				
Pyridine	31.52	5.0	50	0	63.0	30 - 120				
Surr: 2,4,6-Tribromophenol	*77.18*	*5.0*	*100*	*0*	*77.2*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.37*	*5.0*	*100*	*0*	*67.4*	*43 - 125*				
Surr: 2-Fluorophenol	*67.39*	*5.0*	*100*	*0*	*67.4*	*37 - 125*				
Surr: 4-Terphenyl-d14	*71.2*	*5.0*	*100*	*0*	*71.2*	*32 - 125*				
Surr: Nitrobenzene-d5	*71.06*	*5.0*	*100*	*0*	*71.1*	*37 - 125*				
Surr: Phenol-d6	*65.69*	*5.0*	*100*	*0*	*65.7*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCS Sample ID: **LCS-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:01**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985765** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	63.86	5.0	100	0	63.9	55 - 120				
2,4,6-Trichlorophenol	67.45	5.0	100	0	67.4	55 - 120				
2,4-Dinitrotoluene	38.1	5.0	50	0	76.2	55 - 125				
Cresols, Total	174.6	15	250	0	69.8	40 - 120				
Hexachlorobenzene	43.74	5.0	50	0	87.5	55 - 120				
Hexachlorobutadiene	37.03	5.0	50	0	74.1	55 - 120				
Hexachloroethane	35.45	5.0	50	0	70.9	55 - 120				
Nitrobenzene	38.05	5.0	50	0	76.1	55 - 120				
Pentachlorophenol	87.36	5.0	100	0	87.4	50 - 135				
Pyridine	31.52	5.0	50	0	63.0	30 - 120				
Surr: 2,4,6-Tribromophenol	*77.18*	*5.0*	*100*	*0*	*77.2*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*67.37*	*5.0*	*100*	*0*	*67.4*	*43 - 125*				
Surr: 2-Fluorophenol	*67.39*	*5.0*	*100*	*0*	*67.4*	*37 - 125*				
Surr: 4-Terphenyl-d14	*71.2*	*5.0*	*100*	*0*	*71.2*	*32 - 125*				
Surr: Nitrobenzene-d5	*71.06*	*5.0*	*100*	*0*	*71.1*	*37 - 125*				
Surr: Phenol-d6	*65.69*	*5.0*	*100*	*0*	*65.7*	*40 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCSD Sample ID: **LCSD-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:24**
Client ID: Run ID: **SV-3_240115** SeqNo: **2986599** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	69.49	5.0	100	0	69.5	55 - 120	63.86	8.44	25	
2,4,6-Trichlorophenol	71.85	5.0	100	0	71.9	55 - 120	67.45	6.32	25	
2,4-Dinitrotoluene	38.95	5.0	50	0	77.9	55 - 125	38.1	2.21	25	
Cresols, Total	168.5	15	250	0	67.4	40 - 120	174.6	3.57	25	
Hexachlorobenzene	45	5.0	50	0	90.0	55 - 120	43.74	2.84	25	
Hexachlorobutadiene	38.7	5.0	50	0	77.4	55 - 120	37.03	4.39	25	
Hexachloroethane	37.06	5.0	50	0	74.1	55 - 120	35.45	4.44	25	
Nitrobenzene	38.93	5.0	50	0	77.9	55 - 120	38.05	2.28	25	
Pentachlorophenol	91.53	5.0	100	0	91.5	50 - 135	87.36	4.66	25	
Pyridine	32.86	5.0	50	0	65.7	30 - 120	31.52	4.16	25	
Surr: 2,4,6-Tribromophenol	*77.6*	*5.0*	*100*	*0*	*77.6*	*36 - 126*	*77.18*	*0.54*	*25*	
Surr: 2-Fluorobiphenyl	*70.14*	*5.0*	*100*	*0*	*70.1*	*43 - 125*	*67.37*	*4.02*	*25*	
Surr: 2-Fluorophenol	*66.45*	*5.0*	*100*	*0*	*66.4*	*37 - 125*	*67.39*	*1.41*	*25*	
Surr: 4-Terphenyl-d14	*70.77*	*5.0*	*100*	*0*	*70.8*	*32 - 125*	*71.2*	*0.609*	*25*	
Surr: Nitrobenzene-d5	*71.57*	*5.0*	*100*	*0*	*71.6*	*37 - 125*	*71.06*	*0.715*	*25*	
Surr: Phenol-d6	*63.16*	*5.0*	*100*	*0*	*63.2*	*40 - 125*	*65.69*	*3.92*	*25*	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

LCSD Sample ID: **LCSD-85567** Units: **ug/L** Analysis Date: **28-Aug-2014 20:24**
Client ID: Run ID: **SV-3_240068** SeqNo: **2985766** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	69.49	5.0	100	0	69.5	55 - 120	63.86	8.44	25	
2,4,6-Trichlorophenol	71.85	5.0	100	0	71.9	55 - 120	67.45	6.32	25	
2,4-Dinitrotoluene	38.95	5.0	50	0	77.9	55 - 125	38.1	2.21	25	
Cresols, Total	168.5	15	250	0	67.4	40 - 120	174.6	3.57	25	
Hexachlorobenzene	45	5.0	50	0	90.0	55 - 120	43.74	2.84	25	
Hexachlorobutadiene	38.7	5.0	50	0	77.4	55 - 120	37.03	4.39	25	
Hexachloroethane	37.06	5.0	50	0	74.1	55 - 120	35.45	4.44	25	
Nitrobenzene	38.93	5.0	50	0	77.9	55 - 120	38.05	2.28	25	
Pentachlorophenol	91.53	5.0	100	0	91.5	50 - 135	87.36	4.66	25	
Pyridine	32.86	5.0	50	0	65.7	30 - 120	31.52	4.16	25	
Surr: 2,4,6-Tribromophenol	*77.6*	*5.0*	*100*	*0*	*77.6*	*36 - 126*	*77.18*	*0.54*	*25*	
Surr: 2-Fluorobiphenyl	*70.14*	*5.0*	*100*	*0*	*70.1*	*43 - 125*	*67.37*	*4.02*	*25*	
Surr: 2-Fluorophenol	*66.45*	*5.0*	*100*	*0*	*66.4*	*37 - 125*	*67.39*	*1.41*	*25*	
Surr: 4-Terphenyl-d14	*70.77*	*5.0*	*100*	*0*	*70.8*	*32 - 125*	*71.2*	*0.609*	*25*	
Surr: Nitrobenzene-d5	*71.57*	*5.0*	*100*	*0*	*71.6*	*37 - 125*	*71.06*	*0.715*	*25*	
Surr: Phenol-d6	*63.16*	*5.0*	*100*	*0*	*63.2*	*40 - 125*	*65.69*	*3.92*	*25*	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: 85567 **Instrument: SV-3** **Method: SW1311/8270**

MS Sample ID: **HS14080841-10MS** Units: **ug/L** Analysis Date: **02-Sep-2014 19:39**
Client ID: Run ID: **SV-3_240068** SeqNo: **2989332** PrepDate: **28-Aug-2014** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	102.2	5.0	100	0	102	55 - 120				
2,4,6-Trichlorophenol	101.6	5.0	100	0	102	55 - 120				
2,4-Dinitrotoluene	47.1	5.0	50	0	94.2	55 - 125				
Cresols, Total	203	15	250	0	81.2	40 - 120				
Hexachlorobenzene	47.57	5.0	50	0	95.1	55 - 120				
Hexachlorobutadiene	44.57	5.0	50	0	89.1	55 - 120				
Hexachloroethane	40.06	5.0	50	0	80.1	55 - 120				
Nitrobenzene	39.26	5.0	50	0	78.5	55 - 120				
Pentachlorophenol	111.9	5.0	100	0	112	50 - 135				
Pyridine	32.47	5.0	50	0	64.9	30 - 120				
Surr: 2,4,6-Tribromophenol	*105.7*	*5.0*	*100*	*0*	*106*	*36 - 126*				
Surr: 2-Fluorobiphenyl	*102.2*	*5.0*	*100*	*0*	*102*	*43 - 125*				
Surr: 2-Fluorophenol	*80.79*	*5.0*	*100*	*0*	*80.8*	*37 - 125*				
Surr: 4-Terphenyl-d14	*113*	*5.0*	*100*	*0*	*113*	*32 - 125*				
Surr: Nitrobenzene-d5	*84.04*	*5.0*	*100*	*0*	*84.0*	*37 - 125*				
Surr: Phenol-d6	*92.69*	*5.0*	*100*	*0*	*92.7*	*40 - 125*				

The following samples were anayzed in this batch: HS14080809-06 HS14080809-07

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 11:40**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981974** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Surr: 1,2-Dichloroethane-d4	*47.23*	*5.0*	*50*	*0*	*94.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.44*	*5.0*	*50*	*0*	*98.9*	*72.4 - 125*				
Surr: Dibromofluoromethane	*48.8*	*5.0*	*50*	*0*	*97.6*	*71.2 - 125*				
Surr: Toluene-d8	*44.26*	*5.0*	*50*	*0*	*88.5*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **MBLKV1-140825** Units: **ug/L** Analysis Date: **26-Aug-2014 12:08**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981975** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
Surr: 1,2-Dichloroethane-d4	*944.3*	*100*	*1000*	*0*	*94.4*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*987.3*	*100*	*1000*	*0*	*98.7*	*72.4 - 125*				
Surr: Dibromofluoromethane	*973.5*	*100*	*1000*	*0*	*97.4*	*71.2 - 125*				
Surr: Toluene-d8	*880*	*100*	*1000*	*0*	*88.0*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140826** Units: **ug/L** Analysis Date: **26-Aug-2014 10:52**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981973** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	52.41	5.0	50	0	105	73 - 124				
1,2-Dichloroethane	46.69	5.0	50	0	93.4	76 - 120				
1,4-Dichlorobenzene	43.53	5.0	50	0	87.1	70 - 130				
2-Butanone	95.07	10	100	0	95.1	70 - 130				
Benzene	47.42	5.0	50	0	94.8	70 - 128				
Carbon tetrachloride	49.61	5.0	50	0	99.2	70 - 130				
Chlorobenzene	44.52	5.0	50	0	89.0	72 - 127				
Chloroform	48.89	5.0	50	0	97.8	70 - 130				
Tetrachloroethene	49.12	5.0	50	0	98.2	70 - 130				
Trichloroethene	53.02	5.0	50	0	106	72 - 129				
Vinyl chloride	46.95	2.0	50	0	93.9	70 - 130				
Surr: 1,2-Dichloroethane-d4	*46.77*	*5.0*	*50*	*0*	*93.5*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.14*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*49.56*	*5.0*	*50*	*0*	*99.1*	*71 - 125*				
Surr: Toluene-d8	*44.81*	*5.0*	*50*	*0*	*89.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080841-13MS** Units: **ug/L** Analysis Date: **26-Aug-2014 14:34**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981981** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	1036	100	1000	0	104	73 - 124				
1,2-Dichloroethane	1023	100	1000	0	102	76 - 120				
1,4-Dichlorobenzene	875.8	100	1000	0	87.6	70 - 130				
2-Butanone	2162	200	2000	0	108	70 - 130				
Benzene	1000	100	1000	0	100	70 - 128				
Carbon tetrachloride	1033	100	1000	0	103	70 - 130				
Chlorobenzene	921.9	100	1000	0	92.2	72 - 127				
Chloroform	1038	100	1000	0	104	70 - 130				
Tetrachloroethene	963.2	100	1000	0	96.3	70 - 130				
Trichloroethene	1115	100	1000	0	111	72 - 129				
Vinyl chloride	809.6	40	1000	0	81.0	70 - 130				
Surr: 1,2-Dichloroethane-d4	*920.2*	*100*	*1000*	*0*	*92.0*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1020*	*100*	*1000*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*989.9*	*100*	*1000*	*0*	*99.0*	*71 - 125*				
Surr: Toluene-d8	*911.9*	*100*	*1000*	*0*	*91.2*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239911 **Instrument: VOA6** **Method: SW1311/8260B**

MSD Sample ID: **HS14080841-13MSD** Units: **ug/L** Analysis Date: **26-Aug-2014 14:59**
Client ID: Run ID: **VOA6_239911** SeqNo: **2981982** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	945.1	100	1000	0	94.5	73 - 124	1036	9.15	20	
1,2-Dichloroethane	922.7	100	1000	0	92.3	76 - 120	1023	10.3	20	
1,4-Dichlorobenzene	818.7	100	1000	0	81.9	70 - 130	875.8	6.74	20	
2-Butanone	1953	200	2000	0	97.7	70 - 130	2162	10.1	20	
Benzene	913.6	100	1000	0	91.4	70 - 128	1000	9.05	20	
Carbon tetrachloride	935	100	1000	0	93.5	70 - 130	1033	9.96	20	
Chlorobenzene	878.4	100	1000	0	87.8	72 - 127	921.9	4.83	20	
Chloroform	958.9	100	1000	0	95.9	70 - 130	1038	7.91	20	
Tetrachloroethene	906	100	1000	0	90.6	70 - 130	963.2	6.13	20	
Trichloroethene	1012	100	1000	0	101	72 - 129	1115	9.65	20	
Vinyl chloride	736.5	40	1000	0	73.7	70 - 130	809.6	9.45	20	
Surr: 1,2-Dichloroethane-d4	*914.3*	*100*	*1000*	*0*	*91.4*	*70 - 125*	*920.2*	*0.645*	*20*	
Surr: 4-Bromofluorobenzene	*1022*	*100*	*1000*	*0*	*102*	*72 - 125*	*1020*	*0.205*	*20*	
Surr: Dibromofluoromethane	*980.9*	*100*	*1000*	*0*	*98.1*	*71 - 125*	*989.9*	*0.914*	*20*	
Surr: Toluene-d8	*909.4*	*100*	*1000*	*0*	*90.9*	*75 - 125*	*911.9*	*0.28*	*20*	

The following samples were anayzed in this batch: HS14080809-01 HS14080809-02 HS14080809-03 HS14080809-04 HS14080809-05 HS14080809-08 HS14080809-09 HS14080809-10

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140827** Units: **ug/L** Analysis Date: **27-Aug-2014 19:06**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983820** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
Surr: 1,2-Dichloroethane-d4	*52.62*	*5.0*	*50*	*0*	*105*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*48.92*	*5.0*	*50*	*0*	*97.8*	*72.4 - 125*				
Surr: Dibromofluoromethane	*50.15*	*5.0*	*50*	*0*	*100*	*71.2 - 125*				
Surr: Toluene-d8	*49.31*	*5.0*	*50*	*0*	*98.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MBLK Sample ID: **MBLKV1-140826** Units: **ug/L** Analysis Date: **27-Aug-2014 19:30**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983821** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
Surr: 1,2-Dichloroethane-d4	*1024*	*100*	*1000*	*0*	*102*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*973.2*	*100*	*1000*	*0*	*97.3*	*72.4 - 125*				
Surr: Dibromofluoromethane	*982.8*	*100*	*1000*	*0*	*98.3*	*71.2 - 125*				
Surr: Toluene-d8	*981.1*	*100*	*1000*	*0*	*98.1*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140827** Units: **ug/L** Analysis Date: **27-Aug-2014 17:53**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983819** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	47.21	5.0	50	0	94.4	73 - 124				
1,2-Dichloroethane	44.57	5.0	50	0	89.1	76 - 120				
1,4-Dichlorobenzene	45.97	5.0	50	0	91.9	70 - 130				
2-Butanone	100	10	100	0	100	70 - 130				
Benzene	45.26	5.0	50	0	90.5	70 - 128				
Carbon tetrachloride	46.41	5.0	50	0	92.8	70 - 130				
Chlorobenzene	46.59	5.0	50	0	93.2	72 - 127				
Chloroform	44.95	5.0	50	0	89.9	70 - 130				
Tetrachloroethene	46.91	5.0	50	0	93.8	70 - 130				
Trichloroethene	46.97	5.0	50	0	93.9	72 - 129				
Vinyl chloride	45.35	2.0	50	0	90.7	70 - 130				
Surr: 1,2-Dichloroethane-d4	*49.61*	*5.0*	*50*	*0*	*99.2*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.99*	*5.0*	*50*	*0*	*100.0*	*72 - 125*				
Surr: Dibromofluoromethane	*48.93*	*5.0*	*50*	*0*	*97.9*	*71 - 125*				
Surr: Toluene-d8	*50.13*	*5.0*	*50*	*0*	*100*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MS Sample ID: **HS14080736-01MS** Units: **ug/L** Analysis Date: **27-Aug-2014 21:32**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983823** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	848	100	1000	0	84.8	73 - 124				
1,2-Dichloroethane	912.6	100	1000	0	91.3	76 - 120				
1,4-Dichlorobenzene	843.7	100	1000	0	84.4	70 - 130				
2-Butanone	1853	200	2000	0	92.7	70 - 130				
Benzene	881.3	100	1000	0	88.1	70 - 128				
Carbon tetrachloride	842.6	100	1000	0	84.3	70 - 130				
Chlorobenzene	881.7	100	1000	0	88.2	72 - 127				
Chloroform	883.8	100	1000	0	88.4	70 - 130				
Tetrachloroethene	832.2	100	1000	0	83.2	70 - 130				
Trichloroethene	866.4	100	1000	0	86.6	72 - 129				
Vinyl chloride	688.9	40	1000	0	68.9	70 - 130				S
Surr: 1,2-Dichloroethane-d4	*1005*	*100*	*1000*	*0*	*100*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1012*	*100*	*1000*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*997*	*100*	*1000*	*0*	*99.7*	*71 - 125*				
Surr: Toluene-d8	*1008*	*100*	*1000*	*0*	*101*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R239985 **Instrument: VOA6** **Method: SW1311/8260B**

MSD Sample ID: **HS14080736-01MSD** Units: **ug/L** Analysis Date: **27-Aug-2014 21:56**
Client ID: Run ID: **VOA6_239985** SeqNo: **2983824** PrepDate: DF: **20**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	834.9	100	1000	0	83.5	73 - 124	848	1.55	20	
1,2-Dichloroethane	858.1	100	1000	0	85.8	76 - 120	912.6	6.15	20	
1,4-Dichlorobenzene	859.4	100	1000	0	85.9	70 - 130	843.7	1.85	20	
2-Butanone	1805	200	2000	0	90.2	70 - 130	1853	2.65	20	
Benzene	861.6	100	1000	0	86.2	70 - 128	881.3	2.26	20	
Carbon tetrachloride	837.9	100	1000	0	83.8	70 - 130	842.6	0.558	20	
Chlorobenzene	885.8	100	1000	0	88.6	72 - 127	881.7	0.454	20	
Chloroform	876.2	100	1000	0	87.6	70 - 130	883.8	0.864	20	
Tetrachloroethene	848.4	100	1000	0	84.8	70 - 130	832.2	1.92	20	
Trichloroethene	866.8	100	1000	0	86.7	72 - 129	866.4	0.0448	20	
Vinyl chloride	675.3	40	1000	0	67.5	70 - 130	688.9	1.99	20	S
Surr: 1,2-Dichloroethane-d4	*998.6*	*100*	*1000*	*0*	*99.9*	*70 - 125*	*1005*	*0.619*	*20*	
Surr: 4-Bromofluorobenzene	*991.5*	*100*	*1000*	*0*	*99.1*	*72 - 125*	*1012*	*2.08*	*20*	
Surr: Dibromofluoromethane	*985.5*	*100*	*1000*	*0*	*98.6*	*71 - 125*	*997*	*1.16*	*20*	
Surr: Toluene-d8	*1005*	*100*	*1000*	*0*	*100*	*75 - 125*	*1008*	*0.338*	*20*	

The following samples were anayzed in this batch: HS14080809-06 HS14080809-07 HS14080809-08 HS14080809-11 HS14080809-12

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 12:05**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986545** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	5.0								
1,1,2,2-Tetrachloroethane	U	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	5.0								
1,1,2-Trichloroethane	U	5.0								
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2,4-Trichlorobenzene	U	5.0								
1,2-Dibromo-3-chloropropane	U	5.0								
1,2-Dibromoethane	U	5.0								
1,2-Dichlorobenzene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,2-Dichloropropane	U	5.0								
1,3-Dichlorobenzene	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
2-Hexanone	U	10								
4-Methyl-2-pentanone	U	10								
Acetone	U	10								
Benzene	U	5.0								
Bromodichloromethane	U	5.0								
Bromoform	U	5.0								
Bromomethane	U	5.0								
Carbon disulfide	U	10								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroethane	U	5.0								
Chloroform	U	5.0								
Chloromethane	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
cis-1,3-Dichloropropene	U	5.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	5.0								
Dichlorodifluoromethane	U	5.0								
Dichloromethane	U	10								

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 12:05**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986545** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl acetate	U	5.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
o-Xylene	U	5.0								
Styrene	U	5.0								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
trans-1,3-Dichloropropene	U	5.0								
Trichloroethene	U	5.0								
Trichlorofluoromethane	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*48.46*	*5.0*	*50*	*0*	*96.9*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.92*	*5.0*	*50*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*48.18*	*5.0*	*50*	*0*	*96.4*	*71 - 125*				
Surr: Toluene-d8	*52.74*	*5.0*	*50*	*0*	*105*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 11:09**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986544** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	44.73	5.0	50	0	89.5	80 - 120				
1,1,2,2-Tetrachloroethane	51.25	5.0	50	0	103	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	50.56	5.0	50	0	101	73 - 123				
1,1,2-Trichloroethane	46.29	5.0	50	0	92.6	80 - 120				
1,1-Dichloroethane	43.98	5.0	50	0	88.0	76 - 120				
1,1-Dichloroethene	48.37	5.0	50	0	96.7	73 - 124				
1,2,4-Trichlorobenzene	51.48	5.0	50	0	103	75 - 130				
1,2-Dibromo-3-chloropropane	51.09	5.0	50	0	102	65 - 125				
1,2-Dibromoethane	45.21	5.0	50	0	90.4	80 - 120				
1,2-Dichlorobenzene	49.11	5.0	50	0	98.2	80 - 120				
1,2-Dichloroethane	43.56	5.0	50	0	87.1	78 - 120				
1,2-Dichloropropane	55.44	5.0	50	0	111	80 - 120				
1,3-Dichlorobenzene	48.84	5.0	50	0	97.7	80 - 120				
1,4-Dichlorobenzene	49.57	5.0	50	0	99.1	80 - 120				
2-Butanone	82	10	100	0	82.0	58 - 132				
2-Hexanone	87.39	10	100	0	87.4	61 - 130				
4-Methyl-2-pentanone	85.32	10	100	0	85.3	65 - 127				
Acetone	94.11	10	100	0	94.1	59 - 137				
Benzene	46.02	5.0	50	0	92.0	73 - 121				
Bromodichloromethane	45.04	5.0	50	0	90.1	75 - 125				
Bromoform	49.77	5.0	50	0	99.5	70 - 130				
Bromomethane	43.15	5.0	50	0	86.3	60 - 145				
Carbon disulfide	114.5	10	100	0	114	68 - 141				
Carbon tetrachloride	48.25	5.0	50	0	96.5	75 - 125				
Chlorobenzene	47.79	5.0	50	0	95.6	80 - 120				
Chloroethane	47.6	5.0	50	0	95.2	70 - 130				
Chloroform	44.34	5.0	50	0	88.7	70 - 130				
Chloromethane	40.94	5.0	50	0	81.9	67 - 123				
cis-1,2-Dichloroethene	47.59	5.0	50	0	95.2	78 - 120				
cis-1,3-Dichloropropene	48.86	5.0	50	0	97.7	80 - 120				
Cyclohexane	51.15	5.0	50	0	102	66 - 125				
Dibromochloromethane	49.68	5.0	50	0	99.4	80 - 120				
Dichlorodifluoromethane	43.36	5.0	50	0	86.7	63 - 125				
Dichloromethane	49.27	10	50	0	98.5	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140829** Units: **ug/L** Analysis Date: **29-Aug-2014 11:09**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986544** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	49.62	5.0	50	0	99.2	80 - 120				
Isopropylbenzene	49.07	5.0	50	0	98.1	75 - 130				
m,p-Xylene	98.28	10	100	0	98.3	78 - 121				
Methyl acetate	41.76	5.0	50	0	83.5	60 - 130				
Methyl tert-butyl ether	49.42	5.0	50	0	98.8	70 - 125				
Methylcyclohexane	49.57	5.0	50	0	99.1	70 - 122				
o-Xylene	47.7	5.0	50	0	95.4	80 - 120				
Styrene	50.21	5.0	50	0	100	80 - 120				
Tetrachloroethene	50.92	5.0	50	0	102	74 - 125				
Toluene	47.64	5.0	50	0	95.3	80 - 120				
trans-1,2-Dichloroethene	45.82	5.0	50	0	91.6	78 - 120				
trans-1,3-Dichloropropene	51.89	5.0	50	0	104	80 - 120				
Trichloroethene	48.48	5.0	50	0	97.0	80 - 120				
Trichlorofluoromethane	47.65	5.0	50	0	95.3	72 - 130				
Vinyl chloride	44.06	2.0	50	0	88.1	70 - 127				
Xylenes, Total	146	15	150	0	97.3	80 - 120				
Surr: 1,2-Dichloroethane-d4	*44.69*	*5.0*	*50*	*0*	*89.4*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.67*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*44.97*	*5.0*	*50*	*0*	*89.9*	*71 - 125*				
Surr: Toluene-d8	*48.78*	*5.0*	*50*	*0*	*97.6*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14080845-11MS** Units: **ug/L** Analysis Date: **29-Aug-2014 15:47**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986550** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	45.66	5.0	50	0	91.3	80 - 120				
1,1,2,2-Tetrachloroethane	56.27	5.0	50	0	113	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	51.21	5.0	50	0	102	73 - 123				
1,1,2-Trichloroethane	46.53	5.0	50	0	93.1	80 - 120				
1,1-Dichloroethane	44.08	5.0	50	0	88.2	76 - 120				
1,1-Dichloroethene	50.06	5.0	50	0	100	73 - 124				
1,2,4-Trichlorobenzene	50.69	5.0	50	0	101	75 - 130				
1,2-Dibromo-3-chloropropane	55.43	5.0	50	0	111	65 - 125				
1,2-Dibromoethane	47.81	5.0	50	0	95.6	80 - 120				
1,2-Dichlorobenzene	47.65	5.0	50	0	95.3	80 - 120				
1,2-Dichloroethane	48.1	5.0	50	0	96.2	78 - 120				
1,2-Dichloropropane	59.88	5.0	50	0	120	80 - 120				
1,3-Dichlorobenzene	47.77	5.0	50	0	95.5	80 - 120				
1,4-Dichlorobenzene	47.27	5.0	50	0	94.5	80 - 120				
2-Butanone	84.83	10	100	0	84.8	58 - 132				
2-Hexanone	93.66	10	100	0	93.7	61 - 130				
4-Methyl-2-pentanone	92.41	10	100	0	92.4	65 - 127				
Acetone	91.76	10	100	0	91.8	59 - 137				
Benzene	47.2	5.0	50	0	94.4	73 - 121				
Bromodichloromethane	49.86	5.0	50	0	99.7	75 - 125				
Bromoform	52.47	5.0	50	0	105	70 - 130				
Bromomethane	47.88	5.0	50	0	95.8	60 - 145				
Carbon disulfide	103.8	10	100	0	104	68 - 141				
Carbon tetrachloride	49.79	5.0	50	0	99.6	75 - 125				
Chlorobenzene	46.17	5.0	50	0	92.3	80 - 120				
Chloroethane	41.22	5.0	50	0	82.4	70 - 130				
Chloroform	46.18	5.0	50	0	92.4	70 - 130				
Chloromethane	29.19	5.0	50	0	58.4	67 - 123				S
cis-1,2-Dichloroethene	48.38	5.0	50	0	96.8	78 - 120				
cis-1,3-Dichloropropene	49.89	5.0	50	0	99.8	80 - 120				
Cyclohexane	50.44	5.0	50	0	101	66 - 125				
Dibromochloromethane	49.82	5.0	50	0	99.6	80 - 120				
Dichlorodifluoromethane	25.48	5.0	50	0	51.0	63 - 125				S
Dichloromethane	53.48	10	50	0	107	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14080845-11MS** Units: **ug/L** Analysis Date: **29-Aug-2014 15:47**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986550** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	49.07	5.0	50	0	98.1	80 - 120				
Isopropylbenzene	46.94	5.0	50	0	93.9	75 - 130				
m,p-Xylene	98.55	10	100	0	98.6	78 - 121				
Methyl acetate	44.73	5.0	50	0	89.5	60 - 130				
Methyl tert-butyl ether	50.99	5.0	50	0	102	70 - 125				
Methylcyclohexane	39.85	5.0	50	5.303	69.1	70 - 122				S
o-Xylene	47.48	5.0	50	0	95.0	80 - 120				
Styrene	49.86	5.0	50	0	99.7	80 - 120				
Tetrachloroethene	49.35	5.0	50	0	98.7	74 - 125				
Toluene	45.56	5.0	50	0	91.1	80 - 120				
trans-1,2-Dichloroethene	47.42	5.0	50	0	94.8	78 - 120				
trans-1,3-Dichloropropene	53.19	5.0	50	0	106	80 - 120				
Trichloroethene	52.35	5.0	50	0	105	80 - 120				
Trichlorofluoromethane	42.44	5.0	50	0	84.9	72 - 130				
Vinyl chloride	33.79	2.0	50	0	67.6	70 - 127				S
Xylenes, Total	146	15	150	0	97.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*47.13*	*5.0*	*50*	*0*	*94.3*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.82*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*47.49*	*5.0*	*50*	*0*	*95.0*	*71 - 125*				
Surr: Toluene-d8	*49.25*	*5.0*	*50*	*0*	*98.5*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14080845-11MSD** Units: **ug/L** Analysis Date: **29-Aug-2014 16:14**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986551** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	47.14	5.0	50	0	94.3	80 - 120	45.66	3.19	20	
1,1,2,2-Tetrachloroethane	57.55	5.0	50	0	115	72 - 120	56.27	2.25	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	52.82	5.0	50	0	106	73 - 123	51.21	3.09	20	
1,1,2-Trichloroethane	48.92	5.0	50	0	97.8	80 - 120	46.53	5.01	20	
1,1-Dichloroethane	45.12	5.0	50	0	90.2	76 - 120	44.08	2.31	20	
1,1-Dichloroethene	48.7	5.0	50	0	97.4	73 - 124	50.06	2.75	20	
1,2,4-Trichlorobenzene	52.27	5.0	50	0	105	75 - 130	50.69	3.07	20	
1,2-Dibromo-3-chloropropane	59.81	5.0	50	0	120	65 - 125	55.43	7.59	20	
1,2-Dibromoethane	52.81	5.0	50	0	106	80 - 120	47.81	9.94	20	
1,2-Dichlorobenzene	49.32	5.0	50	0	98.6	80 - 120	47.65	3.44	20	
1,2-Dichloroethane	45.14	5.0	50	0	90.3	78 - 120	48.1	6.34	20	
1,2-Dichloropropane	55.9	5.0	50	0	112	80 - 120	59.88	6.88	20	
1,3-Dichlorobenzene	50.36	5.0	50	0	101	80 - 120	47.77	5.28	20	
1,4-Dichlorobenzene	48.81	5.0	50	0	97.6	80 - 120	47.27	3.21	20	
2-Butanone	87.46	10	100	0	87.5	58 - 132	84.83	3.06	20	
2-Hexanone	96.34	10	100	0	96.3	61 - 130	93.66	2.82	20	
4-Methyl-2-pentanone	92.93	10	100	0	92.9	65 - 127	92.41	0.558	20	
Acetone	92.7	10	100	0	92.7	59 - 137	91.76	1.02	20	
Benzene	44.82	5.0	50	0	89.6	73 - 121	47.2	5.19	20	
Bromodichloromethane	47.69	5.0	50	0	95.4	75 - 125	49.86	4.45	20	
Bromoform	52.35	5.0	50	0	105	70 - 130	52.47	0.246	20	
Bromomethane	42	5.0	50	0	84.0	60 - 145	47.88	13.1	20	
Carbon disulfide	112.3	10	100	0	112	68 - 141	103.8	7.81	20	
Carbon tetrachloride	48.2	5.0	50	0	96.4	75 - 125	49.79	3.24	20	
Chlorobenzene	49.36	5.0	50	0	98.7	80 - 120	46.17	6.68	20	
Chloroethane	48.15	5.0	50	0	96.3	76 - 121	41.22	15.5	20	
Chloroform	44.54	5.0	50	0	89.1	70 - 130	46.18	3.61	20	
Chloromethane	29.11	5.0	50	0	58.2	67 - 123	29.19	0.273	20	S
cis-1,2-Dichloroethene	50.02	5.0	50	0	100	78 - 120	48.38	3.33	20	
cis-1,3-Dichloropropene	49	5.0	50	0	98.0	80 - 120	49.89	1.81	20	
Cyclohexane	49.43	5.0	50	0	98.9	66 - 125	50.44	2.02	20	
Dibromochloromethane	52.91	5.0	50	0	106	80 - 120	49.82	6.02	20	
Dichlorodifluoromethane	25.3	5.0	50	0	50.6	63 - 125	25.48	0.719	20	S
Dichloromethane	55.5	10	50	0	111	65 - 133	53.48	3.7	20	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240113 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14080845-11MSD** Units: **ug/L** Analysis Date: **29-Aug-2014 16:14**
Client ID: Run ID: **VOA1_240113** SeqNo: **2986551** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	50.53	5.0	50	0	101	80 - 120	49.07	2.92	20	
Isopropylbenzene	49.65	5.0	50	0	99.3	75 - 130	46.94	5.62	20	
m,p-Xylene	100.9	10	100	0	101	78 - 121	98.55	2.33	20	
Methyl acetate	45.8	5.0	50	0	91.6	60 - 130	44.73	2.37	20	
Methyl tert-butyl ether	53.36	5.0	50	0	107	70 - 125	50.99	4.54	20	
Methylcyclohexane	50.66	5.0	50	5.303	90.7	70 - 122	39.85	23.9	20	R
o-Xylene	47.47	5.0	50	0	94.9	80 - 120	47.48	0.0307	20	
Styrene	52.45	5.0	50	0	105	80 - 120	49.86	5.06	20	
Tetrachloroethene	51.58	5.0	50	0	103	74 - 125	49.35	4.42	20	
Toluene	49.21	5.0	50	0	98.4	80 - 120	45.56	7.7	20	
trans-1,2-Dichloroethene	48.84	5.0	50	0	97.7	78 - 120	47.42	2.95	20	
trans-1,3-Dichloropropene	51.46	5.0	50	0	103	80 - 120	53.19	3.3	20	
Trichloroethene	50.01	5.0	50	0	100	80 - 120	52.35	4.56	20	
Trichlorofluoromethane	44.84	5.0	50	0	89.7	72 - 130	42.44	5.5	20	
Vinyl chloride	34.58	2.0	50	0	69.2	70 - 127	33.79	2.32	20	S
Xylenes, Total	148.3	15	150	0	98.9	78 - 121	146	1.57	20	
Surr: 1,2-Dichloroethane-d4	*46.12*	*5.0*	*50*	*0*	*92.2*	*70 - 125*	*47.13*	*2.16*	*20*	
Surr: 4-Bromofluorobenzene	*52.1*	*5.0*	*50*	*0*	*104*	*72 - 125*	*50.82*	*2.49*	*20*	
Surr: Dibromofluoromethane	*47.35*	*5.0*	*50*	*0*	*94.7*	*71 - 125*	*47.49*	*0.304*	*20*	
Surr: Toluene-d8	*50.6*	*5.0*	*50*	*0*	*101*	*75 - 125*	*49.25*	*2.7*	*20*	

The following samples were anayzed in this batch: HS14080809-13 HS14080809-14 HS14080809-15 HS14080809-16

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140902** Units: **ug/L** Analysis Date: **02-Sep-2014 12:27**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989185** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	5.0								
1,1,2,2-Tetrachloroethane	U	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	5.0								
1,1,2-Trichloroethane	U	5.0								
1,1-Dichloroethane	U	5.0								
1,1-Dichloroethene	U	5.0								
1,2,4-Trichlorobenzene	U	5.0								
1,2-Dibromo-3-chloropropane	U	5.0								
1,2-Dibromoethane	U	5.0								
1,2-Dichlorobenzene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,2-Dichloropropane	U	5.0								
1,3-Dichlorobenzene	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
2-Hexanone	U	10								
4-Methyl-2-pentanone	U	10								
Acetone	U	10								
Benzene	U	5.0								
Bromodichloromethane	U	5.0								
Bromoform	U	5.0								
Bromomethane	U	5.0								
Carbon disulfide	U	10								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroethane	U	5.0								
Chloroform	U	5.0								
Chloromethane	U	5.0								
cis-1,2-Dichloroethene	U	5.0								
cis-1,3-Dichloropropene	U	5.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	5.0								
Dichlorodifluoromethane	U	5.0								
Dichloromethane	U	10								

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140902** Units: **ug/L** Analysis Date: **02-Sep-2014 12:27**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989185** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
Methyl acetate	U	5.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
o-Xylene	U	5.0								
Styrene	U	5.0								
Tetrachloroethene	U	5.0								
Toluene	U	5.0								
trans-1,2-Dichloroethene	U	5.0								
trans-1,3-Dichloropropene	U	5.0								
Trichloroethene	U	5.0								
Trichlorofluoromethane	U	5.0								
Vinyl chloride	U	2.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*51.15*	*5.0*	*50*	*0*	*102*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.99*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*50.93*	*5.0*	*50*	*0*	*102*	*71 - 125*				
Surr: Toluene-d8	*51.1*	*5.0*	*50*	*0*	*102*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140902** Units: **ug/L** Analysis Date: **02-Sep-2014 11:31**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989184** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	50.06	5.0	50	0	100	80 - 120				
1,1,2,2-Tetrachloroethane	57.92	5.0	50	0	116	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	52.05	5.0	50	0	104	73 - 123				
1,1,2-Trichloroethane	48.42	5.0	50	0	96.8	80 - 120				
1,1-Dichloroethane	43.95	5.0	50	0	87.9	76 - 120				
1,1-Dichloroethene	49.46	5.0	50	0	98.9	73 - 124				
1,2,4-Trichlorobenzene	52.49	5.0	50	0	105	75 - 130				
1,2-Dibromo-3-chloropropane	59.56	5.0	50	0	119	65 - 125				
1,2-Dibromoethane	49.25	5.0	50	0	98.5	80 - 120				
1,2-Dichlorobenzene	50.16	5.0	50	0	100	80 - 120				
1,2-Dichloroethane	45.58	5.0	50	0	91.2	78 - 120				
1,2-Dichloropropane	55.59	5.0	50	0	111	80 - 120				
1,3-Dichlorobenzene	50.9	5.0	50	0	102	80 - 120				
1,4-Dichlorobenzene	49.47	5.0	50	0	98.9	80 - 120				
2-Butanone	82.91	10	100	0	82.9	58 - 132				
2-Hexanone	93.07	10	100	0	93.1	61 - 130				
4-Methyl-2-pentanone	90.09	10	100	0	90.1	65 - 127				
Acetone	103	10	100	0	103	59 - 137				
Benzene	47.8	5.0	50	0	95.6	73 - 121				
Bromodichloromethane	47.89	5.0	50	0	95.8	75 - 125				
Bromoform	54.08	5.0	50	0	108	70 - 130				
Bromomethane	43.69	5.0	50	0	87.4	60 - 145				
Carbon disulfide	116.8	10	100	0	117	68 - 141				
Carbon tetrachloride	50.19	5.0	50	0	100	75 - 125				
Chlorobenzene	48.39	5.0	50	0	96.8	80 - 120				
Chloroethane	45.8	5.0	50	0	91.6	70 - 130				
Chloroform	46.32	5.0	50	0	92.6	70 - 130				
Chloromethane	39.6	5.0	50	0	79.2	67 - 123				
cis-1,2-Dichloroethene	49.84	5.0	50	0	99.7	78 - 120				
cis-1,3-Dichloropropene	49.63	5.0	50	0	99.3	80 - 120				
Cyclohexane	52.98	5.0	50	0	106	66 - 125				
Dibromochloromethane	53.59	5.0	50	0	107	80 - 120				
Dichlorodifluoromethane	45.43	5.0	50	0	90.9	63 - 125				
Dichloromethane	54.87	10	50	0	110	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140902** Units: **ug/L** Analysis Date: **02-Sep-2014 11:31**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989184** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	49.11	5.0	50	0	98.2	80 - 120				
Isopropylbenzene	51.06	5.0	50	0	102	75 - 130				
m,p-Xylene	94.57	10	100	0	94.6	78 - 121				
Methyl acetate	46.53	5.0	50	0	93.1	60 - 130				
Methyl tert-butyl ether	55.48	5.0	50	0	111	70 - 125				
Methylcyclohexane	53.82	5.0	50	0	108	70 - 122				
o-Xylene	48.26	5.0	50	0	96.5	80 - 120				
Styrene	50.27	5.0	50	0	101	80 - 120				
Tetrachloroethene	52.57	5.0	50	0	105	74 - 125				
Toluene	47.21	5.0	50	0	94.4	80 - 120				
trans-1,2-Dichloroethene	49.72	5.0	50	0	99.4	78 - 120				
trans-1,3-Dichloropropene	54.1	5.0	50	0	108	80 - 120				
Trichloroethene	54.83	5.0	50	0	110	80 - 120				
Trichlorofluoromethane	51.12	5.0	50	0	102	72 - 130				
Vinyl chloride	43.58	2.0	50	0	87.2	70 - 127				
Xylenes, Total	142.8	15	150	0	95.2	80 - 120				
Surr: 1,2-Dichloroethane-d4	*46.45*	*5.0*	*50*	*0*	*92.9*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*47.38*	*5.0*	*50*	*0*	*94.8*	*72 - 125*				
Surr: Dibromofluoromethane	*47.82*	*5.0*	*50*	*0*	*95.6*	*71 - 125*				
Surr: Toluene-d8	*49.15*	*5.0*	*50*	*0*	*98.3*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090013-01MS** Units: **ug/L** Analysis Date: **02-Sep-2014 16:45**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989192** PrepDate: DF: **25**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1265	120	1250	0	101	80 - 120				
1,1,2,2-Tetrachloroethane	1406	120	1250	0	112	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	1318	120	1250	0	105	73 - 123				
1,1,2-Trichloroethane	1157	120	1250	0	92.6	80 - 120				
1,1-Dichloroethane	1215	120	1250	0	97.2	76 - 120				
1,1-Dichloroethene	1275	120	1250	0	102	73 - 124				
1,2,4-Trichlorobenzene	1173	120	1250	0	93.8	75 - 130				
1,2-Dibromo-3-chloropropane	1526	120	1250	0	122	65 - 125				
1,2-Dibromoethane	1205	120	1250	0	96.4	80 - 120				
1,2-Dichlorobenzene	1148	120	1250	0	91.8	80 - 120				
1,2-Dichloroethane	1228	120	1250	0	98.2	78 - 120				
1,2-Dichloropropane	1415	120	1250	0	113	80 - 120				
1,3-Dichlorobenzene	1175	120	1250	0	94.0	80 - 120				
1,4-Dichlorobenzene	1140	120	1250	0	91.2	80 - 120				
2-Butanone	2623	250	2500	0	105	58 - 132				
2-Hexanone	2359	250	2500	0	94.4	61 - 130				
4-Methyl-2-pentanone	2343	250	2500	0	93.7	65 - 127				
Acetone	3107	250	2500	0	124	59 - 137				
Benzene	1178	120	1250	0	94.2	73 - 121				
Bromodichloromethane	1225	120	1250	0	98.0	75 - 125				
Bromoform	1344	120	1250	0	108	70 - 130				
Bromomethane	948.9	120	1250	0	75.9	60 - 145				
Carbon disulfide	2705	250	2500	0	108	68 - 141				
Carbon tetrachloride	1211	120	1250	0	96.9	75 - 125				
Chlorobenzene	1163	120	1250	14.55	91.9	80 - 120				
Chloroethane	1202	120	1250	0	96.2	70 - 130				
Chloroform	1771	120	1250	653.3	89.4	70 - 130				
Chloromethane	797.6	120	1250	0	63.8	67 - 123				S
cis-1,2-Dichloroethene	1277	120	1250	0	102	78 - 120				
cis-1,3-Dichloropropene	1218	120	1250	0	97.4	80 - 120				
Cyclohexane	1282	120	1250	0	103	66 - 125				
Dibromochloromethane	1261	120	1250	0	101	80 - 120				
Dichlorodifluoromethane	599.1	120	1250	0	47.9	63 - 125				S
Dichloromethane	1473	250	1250	0	118	65 - 133				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090013-01MS** Units: **ug/L** Analysis Date: **02-Sep-2014 16:45**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989192** PrepDate: DF: **25**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	1133	120	1250	0	90.7	80 - 120				
Isopropylbenzene	1083	120	1250	0	86.6	75 - 130				
m,p-Xylene	2259	250	2500	0	90.4	78 - 121				
Methyl acetate	1367	120	1250	0	109	60 - 130				
Methyl tert-butyl ether	1345	120	1250	0	108	70 - 125				
Methylcyclohexane	1085	120	1250	0	86.8	70 - 122				
o-Xylene	1131	120	1250	0	90.5	80 - 120				
Styrene	1234	120	1250	0	98.7	80 - 120				
Tetrachloroethene	1140	120	1250	0	91.2	74 - 125				
Toluene	1133	120	1250	0	90.7	80 - 120				
trans-1,2-Dichloroethene	1251	120	1250	0	100	78 - 120				
trans-1,3-Dichloropropene	1318	120	1250	0	105	80 - 120				
Trichloroethene	1242	120	1250	0	99.4	80 - 120				
Trichlorofluoromethane	1152	120	1250	0	92.2	72 - 130				
Vinyl chloride	896.7	50	1250	0	71.7	70 - 127				
Xylenes, Total	3391	380	3750	0	90.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*1321*	*120*	*1250*	*0*	*106*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1189*	*120*	*1250*	*0*	*95.1*	*72 - 125*				
Surr: Dibromofluoromethane	*1386*	*120*	*1250*	*0*	*111*	*71 - 125*				
Surr: Toluene-d8	*1193*	*120*	*1250*	*0*	*95.4*	*75 - 125*				

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090013-01MSD** Units: **ug/L** Analysis Date: **02-Sep-2014 17:15**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989193** PrepDate: DF: **25**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1093	120	1250	0	87.4	80 - 120	1265	14.6	20	
1,1,2,2-Tetrachloroethane	1319	120	1250	0	105	72 - 120	1406	6.43	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	1158	120	1250	0	92.7	73 - 123	1318	12.9	20	
1,1,2-Trichloroethane	1163	120	1250	0	93.1	80 - 120	1157	0.513	20	
1,1-Dichloroethane	1117	120	1250	0	89.3	76 - 120	1215	8.45	20	
1,1-Dichloroethene	1172	120	1250	0	93.8	73 - 124	1275	8.44	20	
1,2,4-Trichlorobenzene	1113	120	1250	0	89.0	75 - 130	1173	5.27	20	
1,2-Dibromo-3-chloropropane	1329	120	1250	0	106	65 - 125	1526	13.8	20	
1,2-Dibromoethane	1099	120	1250	0	87.9	80 - 120	1205	9.18	20	
1,2-Dichlorobenzene	1062	120	1250	0	85.0	80 - 120	1148	7.74	20	
1,2-Dichloroethane	1090	120	1250	0	87.2	78 - 120	1228	11.9	20	
1,2-Dichloropropane	1275	120	1250	0	102	80 - 120	1415	10.4	20	
1,3-Dichlorobenzene	1103	120	1250	0	88.2	80 - 120	1175	6.32	20	
1,4-Dichlorobenzene	1081	120	1250	0	86.5	80 - 120	1140	5.28	20	
2-Butanone	2401	250	2500	0	96.0	58 - 132	2623	8.86	20	
2-Hexanone	2258	250	2500	0	90.3	61 - 130	2359	4.4	20	
4-Methyl-2-pentanone	2142	250	2500	0	85.7	65 - 127	2343	8.95	20	
Acetone	2800	250	2500	0	112	59 - 137	3107	10.4	20	
Benzene	1019	120	1250	0	81.5	73 - 121	1178	14.4	20	
Bromodichloromethane	1196	120	1250	0	95.7	75 - 125	1225	2.37	20	
Bromoform	1220	120	1250	0	97.6	70 - 130	1344	9.72	20	
Bromomethane	934.7	120	1250	0	74.8	60 - 145	948.9	1.51	20	
Carbon disulfide	2603	250	2500	0	104	68 - 141	2705	3.85	20	
Carbon tetrachloride	1090	120	1250	0	87.2	75 - 125	1211	10.5	20	
Chlorobenzene	1085	120	1250	14.55	85.6	80 - 120	1163	6.91	20	
Chloroethane	1010	120	1250	0	80.8	76 - 121	1202	17.4	20	
Chloroform	1680	120	1250	653.3	82.1	70 - 130	1771	5.29	20	
Chloromethane	747.2	120	1250	0	59.8	67 - 123	797.6	6.54	20	S
cis-1,2-Dichloroethene	1308	120	1250	0	105	78 - 120	1277	2.35	20	
cis-1,3-Dichloropropene	1148	120	1250	0	91.8	80 - 120	1218	5.91	20	
Cyclohexane	1163	120	1250	0	93.0	66 - 125	1282	9.77	20	
Dibromochloromethane	1156	120	1250	0	92.5	80 - 120	1261	8.65	20	
Dichlorodifluoromethane	576.7	120	1250	0	46.1	63 - 125	599.1	3.82	20	S
Dichloromethane	1360	250	1250	0	109	65 - 133	1473	7.96	20	

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240229 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090013-01MSD** Units: **ug/L** Analysis Date: **02-Sep-2014 17:15**
Client ID: Run ID: **VOA1_240229** SeqNo: **2989193** PrepDate: DF: **25**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	1063	120	1250	0	85.0	80 - 120	1133	6.41	20	
Isopropylbenzene	1049	120	1250	0	83.9	75 - 130	1083	3.16	20	
m,p-Xylene	2143	250	2500	0	85.7	78 - 121	2259	5.28	20	
Methyl acetate	1211	120	1250	0	96.9	60 - 130	1367	12.1	20	
Methyl tert-butyl ether	1336	120	1250	0	107	70 - 125	1345	0.671	20	
Methylcyclohexane	1090	120	1250	0	87.2	70 - 122	1085	0.455	20	
o-Xylene	1015	120	1250	0	81.2	80 - 120	1131	10.8	20	
Styrene	1077	120	1250	0	86.1	80 - 120	1234	13.6	20	
Tetrachloroethene	1048	120	1250	0	83.8	74 - 125	1140	8.45	20	
Toluene	1033	120	1250	0	82.6	80 - 120	1133	9.26	20	
trans-1,2-Dichloroethene	1213	120	1250	0	97.0	78 - 120	1251	3.09	20	
trans-1,3-Dichloropropene	1240	120	1250	0	99.2	80 - 120	1318	6.07	20	
Trichloroethene	1155	120	1250	0	92.4	80 - 120	1242	7.23	20	
Trichlorofluoromethane	978	120	1250	0	78.2	72 - 130	1152	16.4	20	
Vinyl chloride	831.7	50	1250	0	66.5	70 - 127	896.7	7.52	20	S
Xylenes, Total	3158	380	3750	0	84.2	78 - 121	3391	7.11	20	
Surr: 1,2-Dichloroethane-d4	*1281*	*120*	*1250*	*0*	*102*	*70 - 125*	*1321*	*3.14*	*20*	
Surr: 4-Bromofluorobenzene	*1204*	*120*	*1250*	*0*	*96.3*	*72 - 125*	*1189*	*1.26*	*20*	
Surr: Dibromofluoromethane	*1337*	*120*	*1250*	*0*	*107*	*71 - 125*	*1386*	*3.61*	*20*	
Surr: Toluene-d8	*1224*	*120*	*1250*	*0*	*97.9*	*75 - 125*	*1193*	*2.56*	*20*	

The following samples were anayzed in this batch: HS14080809-17 HS14080809-18

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240009 **Instrument: WetChem_HS** **Method: SM4500H+ B**

LCS Sample ID: **LCS-240009** Units: **pH Units** Analysis Date: **26-Aug-2014 15:53**
Client ID: Run ID: **WetChem_HS_240009** SeqNo: **2984662** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.97	0.100	6	0	99.5	98 - 102				

DUP Sample ID: **HS14080983-01DUP** Units: **pH Units** Analysis Date: **26-Aug-2014 15:53**
Client ID: Run ID: **WetChem_HS_240009** SeqNo: **2984663** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.69	0.100					6.63	0.901	10	
Temp Deg C @pH	24	0					23.9	0.418		

The following samples were anayzed in this batch: HS14080809-02 HS14080809-03 HS14080809-10

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240046 **Instrument: WetChem_HS** **Method: SM4500H+ B**

LCS Sample ID: **LCS-240046** Units: **pH Units** Analysis Date: **28-Aug-2014 16:00**
Client ID: Run ID: **WetChem_HS_240046** SeqNo: **2984977** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.97	0.100	6	0	99.5	98 - 102				

DUP Sample ID: **HS14080761-11DUP** Units: **pH Units** Analysis Date: **28-Aug-2014 16:00**
Client ID: Run ID: **WetChem_HS_240046** SeqNo: **2984990** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.85	0.100					6.87	0.292	10	
Temp Deg C @pH	22.1	0					23.1	4.42		

The following samples were anayzed in this batch: HS14080809-01, HS14080809-04, HS14080809-05, HS14080809-06, HS14080809-07, HS14080809-08, HS14080809-09, HS14080809-11, HS14080809-12

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240152 **Instrument: WetChem_HS** **Method: SW1010**

LCS Sample ID: **LCS-240152** Units: **°F** Analysis Date: **30-Aug-2014 17:29**
Client ID: Run ID: **WetChem_HS_240152** SeqNo: **2987402** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	84	50.0	84	0	100	95 - 105				

DUP Sample ID: **HS14080809-05DUP** Units: **°F** Analysis Date: **30-Aug-2014 17:29**
Client ID: **AST 26** Run ID: **WetChem_HS_240152** SeqNo: **2989160** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	> 212	50.0					0	0	25	

The following samples were anayzed in this batch: HS14080809-01 HS14080809-04 HS14080809-05

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

Revision: 1

Client: Effective Environmental Inc.
WorkOrder: HS14080809
Project: USOR-Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240283 **Instrument: WetChem_HS** **Method: SW1010**

LCS Sample ID: **LCS-240283** Units: **°F** Analysis Date: **03-Sep-2014 16:48**
Client ID: Run ID: **WetChem_HS_240283** SeqNo: **2990230** PrepDate: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	85	50.0	84	0	101	95 - 105				

The following samples were anayzed in this batch: HS14080809-02, HS14080809-03, HS14080809-06, HS14080809-07, HS14080809-08, HS14080809-09, HS14080809-10, HS14080809-11, HS14080809-12

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

Revision: 1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
WorkOrder: **HS14080809**

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 Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
°F	Farenheit degrees
µg/L	Micrograms per Liter
Date	
mg/L	Milligrams per Liter
pH Units	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	01-Oct-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	TX104704231-14-13	30-Apr-2015

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080809

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14080809-01	Sump 44	Login	8/22/2014 3:20:06 PM	PMG	21E
HS14080809-01	Sump 44	Login	8/22/2014 3:20:06 PM	PMG	21E
HS14080809-01	Sump 44	Login	8/22/2014 3:20:06 PM	PMG	21E
HS14080809-01	Sump 44	Login	8/22/2014 3:20:06 PM	PMG	21E
HS14080809-01	Sump 44	Login	8/22/2014 3:20:06 PM	PMG	Sub
HS14080809-02	STF-AST 31	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-02	STF-AST 31	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-02	STF-AST 31	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-02	STF-AST 31	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-02	STF-AST 31	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-03	STF-AST 32	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-03	STF-AST 32	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-03	STF-AST 32	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-03	STF-AST 32	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-03	STF-AST 32	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-04	AST 27	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-04	AST 27	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-04	AST 27	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-04	AST 27	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-04	AST 27	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-05	AST 26	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-05	AST 26	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-05	AST 26	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-05	AST 26	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-05	AST 26	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-06	NTF-AST 24	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-06	NTF-AST 24	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-06	NTF-AST 24	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-06	NTF-AST 24	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-06	NTF-AST 24	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-07	NTF-AST 23	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-07	NTF-AST 23	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-07	NTF-AST 23	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-07	NTF-AST 23	Login	8/22/2014 3:29:44 PM	PMG	21E
HS14080809-07	NTF-AST 23	Login	8/22/2014 3:29:44 PM	PMG	Sub
HS14080809-08	NTF-AST 22	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-08	NTF-AST 22	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-08	NTF-AST 22	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-08	NTF-AST 22	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-08	NTF-AST 22	Login	8/22/2014 3:29:45 PM	PMG	Sub

Revision: 1

Client: Effective Environmental Inc.
Project: USOR-Tank Farm Liquid Sampling
Work Order: HS14080809

SAMPLE TRACKING

HS14080809-09	NTF-AST 21	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-09	NTF-AST 21	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-09	NTF-AST 21	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-09	NTF-AST 21	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-09	NTF-AST 21	Login	8/22/2014 3:29:45 PM	PMG	Sub
HS14080809-10	Equipment Blank #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-10	Equipment Blank #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-10	Equipment Blank #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-10	Equipment Blank #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-10	Equipment Blank #3	Login	8/22/2014 3:29:45 PM	PMG	Sub
HS14080809-11	Sump 47	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-11	Sump 47	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-11	Sump 47	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-11	Sump 47	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-11	Sump 47	Login	8/22/2014 3:29:45 PM	PMG	Sub
HS14080809-12	Field Duplicate #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-12	Field Duplicate #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-12	Field Duplicate #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-12	Field Duplicate #3	Login	8/22/2014 3:29:45 PM	PMG	21E
HS14080809-12	Field Duplicate #3	Login	8/22/2014 3:29:45 PM	PMG	Sub
HS14080809-13	Trip Blank - 081114-10	Login	8/22/2014 3:40:05 PM	PMG	VW-3
HS14080809-14	Trip Blank - 081114-06	Login	8/22/2014 3:43:39 PM	PMG	VW-3
HS14080809-15	Trip Blank - 081114-03	Login	8/22/2014 3:43:39 PM	PMG	VW-3
HS14080809-16	Trip Blank - 080814-03	Login	8/22/2014 3:43:39 PM	PMG	VW-3
HS14080809-17	Trip Blank - 081114-11	Login	8/22/2014 3:43:39 PM	PMG	VW-3
HS14080809-18	Trip Blank - 081114-44	Login	8/22/2014 3:43:39 PM	PMG	VW-3

Revision: 1

ALS Group USA, Corp Date: 26-Sep-14

Sample Receipt Checklist

Client Name: Effective Env-HOU
Work Order: HS14080809

Date/Time Received: **22-Aug-2014 13:25**
Received by: **LOT**

Checklist completed by: *Paresh M. Giga* (eSignature) 22-Aug-2014 (Date)
Reviewed by: *Kristin M Brown* (eSignature) 27-Aug-2014 (Date)

Matrices: **Liquid**
Carrier name: **ALS Courier**

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

Temperature(s)/Thermometer(s): 5.9c/5.9c,0.2c/0.2c,1.3c/1.3c,0.1c/0.1c,5.6c/5.6c,5.23c/5.2c C/U
Cooler(s)/Kit(s): 23521,23540,5659,2801,23631,23478
Date/Time sample(s) sent to storage: 08/22/2014 15:15

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

pH adjusted by:

Login Notes: Sx -Equip Blank #3 - No ID on bottles - times match -

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Laboratory Group
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

HS14080809

Effective Environmental Inc.
USOR-Tank Farm Liquid Sampling

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	2016-14-1	Project Name	USOR-Tank Farm Liquid Sampling	A	TCLP - VOCs
Work Order	2016-14-1	Project Number	RC4-2016-14	B	TCLP - SVOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C	TCLP RCRA 8 Metals
Send Report To	Hiren Shah	Invoice Attn.	Hiren Shah	D	RCI
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E	Total VOCs
				F	
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	G	
Phone	281-842-0804	Phone	972-329-1200	H	
Fax	281-474-2580	Fax	972-329-1206	I	
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Sump 44	08/21/14	9:00 a.m	Liquid		6	X	X	X	X							
2	STF-AST 31	08/21/14	9:30 a.m	Liquid		6	X	X	X	X							
3	STF-AST 32	08/21/14	10:00 a.m	Liquid		6	X	X	X	X							
4	AST 27	08/21/14	10:45 a.m	Liquid		6	X	X	X	X							
5	AST 26	08/21/14	11:30 a.m	Liquid		6	X	X	X	X							
6	NTF-AST 24	08/21/14	12:30 p.m	Liquid		6	X	X	X	X							
7	NTF-AST 23	08/21/14	1:15 p.m	Liquid		6	X	X	X	X							
8	NTF-AST 22	08/21/14	1:45 p.m	Liquid		6	X	X	X	X							
9	NTF-AST 21	08/21/14	2:15 p.m	Liquid		6	X	X	X	X							
10	Equipment Blank #3	08/21/14	5:30 p.m	Liquid		6	X	X	X	X							
11	Sump 47	08/22/14	9:40 a.m	Liquid		6	X	X	X	X							
12	Field Duplicate #3	08/22/14	10:00 a.m	Liquid		6	X	X	X	X							
13	Trip Blank (6 samples) - 1 sample/Cooler	08/21/14				6					X						
14	Temperature Blank (6 samples) - 1 sample/Cooler	08/21/14															
15																	

Sampler(s): Please Print & Sign
Joe Carillo

Shipment Method:

Required Turnaround Time: ☐ Other ____ ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
	8/22/14	12:33	8/22/14 12:33	23631; 2801; 5659; 23478; 23540; 23521
Relinquished by:	8/22/14	1:25	Received by (Laboratory):	Cooler Temp.
Relinquished by:	Date:	Time:	Received by:	

QC Package: (Check Box Below)

	Level II: Standard QC	TRRP-Checklist
	Level III: Std QC + Raw Data	TRRP Level IV
	Level IV: SW846 CLP-Like	
	Other: ____	

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

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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29-Aug-2014

Kristin Brown
ALS Environmental
10450 Stancliff Rd
Suite 210
Houston, TX 77099

Re: **HS14080809** Work Order: **14081257**

Dear Kristin,

ALS Environmental received 12 samples on 23-Aug-2014 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 23.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
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www.alsglobal.com
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RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: 29-Aug-14

Client: ALS Environmental
Project: HS14080809
Work Order: **14081257**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14081257-01	HS14080809-01	Liquid	Sump 44	8/21/2014 09:00	8/23/2014 10:00	☐
14081257-02	HS14080809-02	Liquid	STF-AST 31	8/21/2014 09:30	8/23/2014 10:00	☐
14081257-03	HS14080809-03	Liquid	STF-AST 32	8/21/2014 10:00	8/23/2014 10:00	☐
14081257-04	HS14080809-04	Liquid	AST 27	8/21/2014 10:45	8/23/2014 10:00	☐
14081257-05	HS14080809-05	Liquid	AST 26	8/21/2014 11:30	8/23/2014 10:00	☐
14081257-06	HS14080809-06	Liquid	NTF-AST 24	8/21/2014 12:30	8/23/2014 10:00	☐
14081257-07	HS14080809-07	Liquid	NTF-AST 23	8/21/2014 13:15	8/23/2014 10:00	☐
14081257-08	HS14080809-08	Liquid	NTF-AST 22	8/21/2014 13:45	8/23/2014 10:00	☐
14081257-09	HS14080809-09	Liquid	NTF-AST 21	8/21/2014 14:15	8/23/2014 10:00	☐
14081257-10	HS14080809-10	Liquid	Equipment Blank #3	8/21/2014 17:30	8/23/2014 10:00	☐
14081257-11	HS14080809-11	Liquid	SUMP 47	8/21/2014 09:40	8/23/2014 10:00	☐
14081257-12	HS14080809-12	Liquid	Field Duplicate #3	8/22/2014 10:00	8/23/2014 10:00	☐

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Project: HS14080809
WorkOrder: **14081257**

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 is present at an estimated concentration between the MDL and Report Limit
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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
mg/Kg	Milligrams per Kilogram

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-01
Collection Date: 8/21/2014 09:00 AM

Work Order: 14081257
Lab ID: 14081257-01
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-02
Collection Date: 8/21/2014 09:30 AM

Work Order: 14081257
Lab ID: 14081257-02
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00320

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-03
Collection Date: 8/21/2014 10:00 AM

Work Order: 14081257
Lab ID: 14081257-03
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00321

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-04
Collection Date: 8/21/2014 10:45 AM

Work Order: 14081257
Lab ID: 14081257-04
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00322

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-05
Collection Date: 8/21/2014 11:30 AM

Work Order: 14081257
Lab ID: 14081257-05
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00323

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-06
Collection Date: 8/21/2014 12:30 PM

Work Order: 14081257
Lab ID: 14081257-06
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00324

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-07
Collection Date: 8/21/2014 01:15 PM

Work Order: 14081257
Lab ID: 14081257-07
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00325

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-08
Collection Date: 8/21/2014 01:45 PM

Work Order: 14081257
Lab ID: 14081257-08
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/25/2014 12:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-09
Collection Date: 8/21/2014 02:15 PM

Work Order: 14081257
Lab ID: 14081257-09
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	**250**		**100**	**mg/Kg**	1	8/28/2014 09:00 AM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/28/2014 09:00 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00327

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-10
Collection Date: 8/21/2014 05:30 PM

Work Order: 14081257
Lab ID: 14081257-10
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	ND		100	mg/Kg	1	8/28/2014 09:00 AM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/28/2014 09:00 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00328

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-11
Collection Date: 8/21/2014 09:40 AM

Work Order: 14081257
Lab ID: 14081257-11
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	**100**		**100**	**mg/Kg**	1	8/28/2014 09:00 AM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/28/2014 09:00 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00329

ALS Group USA, Corp

Date: *29-Aug-14*

Client: ALS Environmental
Project: HS14080809
Sample ID: HS14080809-12
Collection Date: 8/22/2014 10:00 AM

Work Order: 14081257
Lab ID: 14081257-12
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CYANIDE, REACTIVE			**SW7.3.3.2**			Analyst: **EE**
Cyanide, Reactive	**120**		**100**	**mg/Kg**	1	8/28/2014 09:00 AM
SULFIDE, REACTIVE			**SW7.3.4.2**			Analyst: **EE**
Sulfide, Reactive	ND		100	mg/Kg	1	8/28/2014 09:00 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

RIGHT SOLUTIONS | RIGHT PARTNER

ED_004012_00000048-00330

ALS Group USA, Corp

Client: ALS Environmental
Work Order: 14081257
Project: HS14080809

Date: 29-Aug-14

QC BATCH REPORT

Batch ID: **R146923** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

MBLK Sample ID: **WBLKW1-082514-R146923** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**

Client ID: Run ID: **WETCHEM_140825J** SeqNo: **2902665** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082514-R146923** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**

Client ID: Run ID: **WETCHEM_140825J** SeqNo: **2902666** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	1608	100	2149	0	74.8	60-120	0			

The following samples were analyzed in this batch:

14081257-01A	14081257-02A	14081257-03A
14081257-04A	14081257-05A	14081257-06A
14081257-07A	14081257-08A	

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

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Work Order: 14081257
Project: HS14080809

QC BATCH REPORT

Batch ID: **R146924** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK Sample ID: **WBLKW1-082514-R146924** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**
Client ID: Run ID: **WETCHEM_140825K** SeqNo: **2902683** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082514-R146924** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**
Client ID: Run ID: **WETCHEM_140825K** SeqNo: **2902684** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	124.8	100	125	0	99.8	75-125	0			

MS Sample ID: **1408634-25D MS** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**
Client ID: Run ID: **WETCHEM_140825K** SeqNo: **2902690** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	249.6	100	250	0	99.8	50-150	0			

MSD Sample ID: **1408634-25D MSD** Units: **mg/Kg** Analysis Date: **8/25/2014 12:30 PM**
Client ID: Run ID: **WETCHEM_140825K** SeqNo: **2902691** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	100	250	0	94	50-150	249.6	6.06	35	

The following samples were analyzed in this batch:

14081257-01A	14081257-02A	14081257-03A
14081257-04A	14081257-05A	14081257-06A
14081257-07A	14081257-08A	

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

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Work Order: 14081257
Project: HS14080809

QC BATCH REPORT

Batch ID: **R147174** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK Sample ID: **WBLKW1-082814-R147174** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**
Client ID: Run ID: **WETCHEM_140828D** SeqNo: **2908527** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082814-R147174** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**
Client ID: Run ID: **WETCHEM_140828D** SeqNo: **2908528** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	124.8	100	125	0	99.8	75-125		0		

MS Sample ID: **14081257-10A MS** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**
Client ID: **HS14080809-10** Run ID: **WETCHEM_140828D** SeqNo: **2908531** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	247.1	100	250	0	98.8	50-150		0		

MSD Sample ID: **14081257-10A MSD** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**
Client ID: **HS14080809-10** Run ID: **WETCHEM_140828D** SeqNo: **2908532** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	247.1	100	250	0	98.8	50-150	247.1	0	35	

The following samples were analyzed in this batch:

14081257-09A	14081257-10A	14081257-11A
14081257-12A		

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

RIGHT SOLUTIONS | RIGHT PARTNER

Client: ALS Environmental
Work Order: 14081257
Project: HS14080809

QC BATCH REPORT

Batch ID: **R147175** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

MBLK Sample ID: **WBLKW1-082814-R147175** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**

Client ID: Run ID: **WETCHEM_140828E** SeqNo: **2908548** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	100								

LCS Sample ID: **WLCSW1-082814-R147175** Units: **mg/Kg** Analysis Date: **8/28/2014 09:00 AM**

Client ID: Run ID: **WETCHEM_140828E** SeqNo: **2908549** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	1608	100	2149	0	74.8	60-120		0		

The following samples were analyzed in this batch:

14081257-09A	14081257-10A	14081257-11A
14081257-12A		

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

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Environmental

CHAIN OF CUSTODY RECORD

Date	22 Aug 2014
COC ID	1127
Due date	29 AUG 14

Subcontractor

ALS Laboratory Group	Phone
3352 128th Ave.	6163996070
Holland, MI 494249263	Fax
	6163996185

Customer Information		Project Information	
PO		Project Name	HS14080809

Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Stancliff Rd, Ste 210	Address	10450 Stancliff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5856	Phone	281-530-5856
Email1	kristin.brown@alsglobal.com	Email2	

	Lab ID	Client Samp ID	Collection Date	Matrix	Analysis Requested
1	HS14080809-01	Sump 44	21-Aug-14 09:00 am	Liquid	RCN_W
					RS_W
2	HS14080809-02	STF-AST 31	21-Aug-14 09:30 am		RCN_W
					RS_W
3	HS14080809-03	STF-AST 32	21-Aug-14 10:00 am		RCN_W
					RS_W
4	HS14080809-04	AST 27	21-Aug-14 10:45 am		RCN_W
					RS_W
5	HS14080809-05	AST 26	21-Aug-14 11:30 am		RCN_W
					RS_W
6	HS14080809-06	NTF-AST 24	21-Aug-14 12:30 pm		RCN_W
					RS_W
7	HS14080809-07	NTF-AST 23	21-Aug-14 01:15 pm		RCN_W
					RS_W
8	HS14080809-08	NTF-AST 22	21-Aug-14 01:45 pm		RCN_W
					RS_W
9	HS14080809-09	NTF-AST 21	21-Aug-14 02:15 pm		RCN_W
					RS_W
10	HS14080809-10	Equipment Blank #3	21-Aug-14 05:30 pm		RCN_W
					RS_W
11	HS14080809-11	Sump 47	21-Aug-14 09:40 am		RCN_W
					RS_W
12	HS14080809-12	Field Duplicate #3	22-Aug-14 10:00 am		RCN_W
					RS_W

RIGHT SOLUTIONS | RIGHT PARTNER

Comments Please analyze for the above. Send report to kristin.brown@alsglobal.com & cc : rersults to jumoke.lawal@alsglobal.com

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
FEDEX	8/22/14 1800		8/23/14 1000		

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 8-22-14 Time: 1805
Name: [illegible]
Company: ALS

Seal Broken By:
Date:

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **ALS - HOUSTON** Date/Time Received: **23-Aug-14 10:00**

Work Order: **14081257** Received by: **KRW**

Checklist completed by Keith Wurenga (eSignature) 25-Aug-14 (Date) Reviewed by: Chad Whelton (eSignature) 25-Aug-14 (Date)

Matrices: Liquid
Carrier name: FedEx

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 ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.2 C		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	8/25/2014 9:36:01 AM		
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:

CorrectiveAction:

SRC Page 1 of 1

RIGHT SOLUTIONS | RIGHT PARTNER

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

September 12, 2014

Hiren Shah
Effective Environmental Inc.
9950 Chemical Road
Pasadena, TX 77507

Work Order: **HS14090212**

Laboratory Results for: **USOR - Tank Farm Liquid Sampling**

Dear Hiren,

ALS Environmental received 3 sample(s) on Sep 05, 2014 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: Dayna.Fisher
Dane J. Wacasey

Client: Effective Environmental Inc.
Project: USOR - Tank Farm Liquid Sampling
Work Order: HS14090212

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14090212-01	NTF-AST 18	Liquid		05-Sep-2014 09:08	05-Sep-2014 15:42	☐
HS14090212-02	NTF-AST 19	Liquid		05-Sep-2014 09:00	05-Sep-2014 15:42	☐
HS14090212-03	Trip Blank	Water		05-Sep-2014 00:00	05-Sep-2014 15:42	☐

Client: Effective Environmental Inc.
Project: USOR - Tank Farm Liquid Sampling
Work Order: HS14090212

CASE NARRATIVE

GCMS Volatiles by Method SW1311/8260B

Batch ID: R240738

Sample ID: **HS14090318-01**
- MS/MSD performed on an unrelated sample

GCMS Volatiles by Method SW8260

Batch ID: R240520

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR - Tank Farm Liquid Sampling	WorkOrder:HS14090212
Sample ID:	NTF-AST 18	Lab ID:HS14090212-01
Collection Date:	05-Sep-2014 09:08	Matrix:Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 09-Sep-2014	Prep:SW1311 / 09-Sep-2014		Analyst: PC
1,1-Dichloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:53
1,2-Dichloroethane	ND		0.10	mg/L	20	11-Sep-2014 16:53
1,4-Dichlorobenzene	ND		0.10	mg/L	20	11-Sep-2014 16:53
2-Butanone	ND		0.20	mg/L	20	11-Sep-2014 16:53
Benzene	ND		0.10	mg/L	20	11-Sep-2014 16:53
Carbon tetrachloride	ND		0.10	mg/L	20	11-Sep-2014 16:53
Chlorobenzene	ND		0.10	mg/L	20	11-Sep-2014 16:53
Chloroform	ND		0.10	mg/L	20	11-Sep-2014 16:53
Tetrachloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:53
Trichloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:53
Vinyl chloride	ND		0.040	mg/L	20	11-Sep-2014 16:53
Surr: 1,2-Dichloroethane-d4	*94.4*		*70-125*	*%REC*	*20*	*11-Sep-2014 16:53*
Surr: 4-Bromofluorobenzene	*105*		*72-125*	*%REC*	*20*	*11-Sep-2014 16:53*
Surr: Dibromofluoromethane	*94.6*		*71-125*	*%REC*	*20*	*11-Sep-2014 16:53*
Surr: Toluene-d8	*104*		*75-125*	*%REC*	*20*	*11-Sep-2014 16:53*

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

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR - Tank Farm Liquid Sampling	WorkOrder:HS14090212
Sample ID:	NTF-AST 19	Lab ID:HS14090212-02
Collection Date:	05-Sep-2014 09:00	Matrix:Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES	**Method:SW1311/8260B**		Leache:SW1311 / 09-Sep-2014	Prep:SW1311 / 09-Sep-2014		Analyst: PC
1,1-Dichloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:23
1,2-Dichloroethane	ND		0.10	mg/L	20	11-Sep-2014 16:23
1,4-Dichlorobenzene	ND		0.10	mg/L	20	11-Sep-2014 16:23
2-Butanone	ND		0.20	mg/L	20	11-Sep-2014 16:23
Benzene	**0.12**		**0.10**	**mg/L**	20	11-Sep-2014 16:23
Carbon tetrachloride	ND		0.10	mg/L	20	11-Sep-2014 16:23
Chlorobenzene	ND		0.10	mg/L	20	11-Sep-2014 16:23
Chloroform	ND		0.10	mg/L	20	11-Sep-2014 16:23
Tetrachloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:23
Trichloroethene	ND		0.10	mg/L	20	11-Sep-2014 16:23
Vinyl chloride	ND		0.040	mg/L	20	11-Sep-2014 16:23
Surr: 1,2-Dichloroethane-d4	*93.1*		*70-125*	*%REC*	*20*	*11-Sep-2014 16:23*
Surr: 4-Bromofluorobenzene	*106*		*72-125*	*%REC*	*20*	*11-Sep-2014 16:23*
Surr: Dibromofluoromethane	*94.2*		*71-125*	*%REC*	*20*	*11-Sep-2014 16:23*
Surr: Toluene-d8	*102*		*75-125*	*%REC*	*20*	*11-Sep-2014 16:23*

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

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR - Tank Farm Liquid Sampling	WorkOrder:HS14090212
Sample ID:	Trip Blank	Lab ID:HS14090212-03
Collection Date:	05-Sep-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**				Analyst: PC
1,1,1-Trichloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,1,2-Trichlor-1,2,2-trifluoroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,1,2-Trichloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,1-Dichloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,1-Dichloroethene	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2,4-Trichlorobenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2-Dibromo-3-chloropropane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2-Dibromoethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2-Dichlorobenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2-Dichloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,2-Dichloropropane	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,3-Dichlorobenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
1,4-Dichlorobenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
2-Butanone	ND		10	ug/L	1	08-Sep-2014 15:55
2-Hexanone	ND		10	ug/L	1	08-Sep-2014 15:55
4-Methyl-2-pentanone	ND		10	ug/L	1	08-Sep-2014 15:55
Acetone	ND		10	ug/L	1	08-Sep-2014 15:55
Benzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Bromodichloromethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Bromoform	ND		5.0	ug/L	1	08-Sep-2014 15:55
Bromomethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Carbon disulfide	ND		10	ug/L	1	08-Sep-2014 15:55
Carbon tetrachloride	ND		5.0	ug/L	1	08-Sep-2014 15:55
Chlorobenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Chloroethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Chloroform	ND		5.0	ug/L	1	08-Sep-2014 15:55
Chloromethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
cis-1,2-Dichloroethene	ND		5.0	ug/L	1	08-Sep-2014 15:55
cis-1,3-Dichloropropene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Cyclohexane	ND	n	5.0	ug/L	1	08-Sep-2014 15:55
Dibromochloromethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Dichlorodifluoromethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Dichloromethane	ND		10	ug/L	1	08-Sep-2014 15:55
Ethylbenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Isopropylbenzene	ND		5.0	ug/L	1	08-Sep-2014 15:55
m,p-Xylene	ND		10	ug/L	1	08-Sep-2014 15:55
Methyl acetate	ND		5.0	ug/L	1	08-Sep-2014 15:55
Methyl tert-butyl ether	ND		5.0	ug/L	1	08-Sep-2014 15:55
Methylcyclohexane	ND		5.0	ug/L	1	08-Sep-2014 15:55
o-Xylene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Styrene	ND		5.0	ug/L	1	08-Sep-2014 15:55

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

Client:	Effective Environmental Inc.	**ANALYTICAL REPORT**
Project:	USOR - Tank Farm Liquid Sampling	WorkOrder:HS14090212
Sample ID:	Trip Blank	Lab ID:HS14090212-03
Collection Date:	05-Sep-2014 00:00	Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCL VOLATILES - SW8260C		**Method:SW8260**				Analyst: PC
Tetrachloroethene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Toluene	ND		5.0	ug/L	1	08-Sep-2014 15:55
trans-1,2-Dichloroethene	ND		5.0	ug/L	1	08-Sep-2014 15:55
trans-1,3-Dichloropropene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Trichloroethene	ND		5.0	ug/L	1	08-Sep-2014 15:55
Trichlorofluoromethane	ND		5.0	ug/L	1	08-Sep-2014 15:55
Vinyl chloride	ND		2.0	ug/L	1	08-Sep-2014 15:55
Xylenes, Total	ND		15	ug/L	1	08-Sep-2014 15:55
Surr: 1,2-Dichloroethane-d4	*95.5*		*70-125*	*%REC*	*1*	*08-Sep-2014 15:55*
Surr: 4-Bromofluorobenzene	*98.9*		*72-125*	*%REC*	*1*	*08-Sep-2014 15:55*
Surr: Dibromofluoromethane	*103*		*71-125*	*%REC*	*1*	*08-Sep-2014 15:55*
Surr: Toluene-d8	*96.1*		*75-125*	*%REC*	*1*	*08-Sep-2014 15:55*

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

Client: Effective Environmental Inc.
Project: USOR - Tank Farm Liquid Sampling
WorkOrder: HS14090212

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R240520	**Test Name :** TCL VOLATILES - SW8260C			**Matrix:** Water		
HS14090212-03	Trip Blank	05 Sep 2014 00:00			08 Sep 2014 15:55	1
Batch ID R240738	**Test Name :** TCLP VOLATILES			**Matrix:** Liquid		
HS14090212-01	NTF-AST 18	05 Sep 2014 09:08	09 Sep 2014 16:30	09 Sep 2014 16:30	11 Sep 2014 16:53	20
HS14090212-02	NTF-AST 19	05 Sep 2014 09:00	09 Sep 2014 16:30	09 Sep 2014 16:30	11 Sep 2014 16:23	20

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140908** Units: **ug/L** Analysis Date: **08-Sep-2014 11:41**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995415** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	5.0								
1,1,2,2-Tetrachloroethane	ND	5.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	ND	5.0								
1,1,2-Trichloroethane	ND	5.0								
1,1-Dichloroethane	ND	5.0								
1,1-Dichloroethene	ND	5.0								
1,2,4-Trichlorobenzene	ND	5.0								
1,2-Dibromo-3-chloropropane	ND	5.0								
1,2-Dibromoethane	ND	5.0								
1,2-Dichlorobenzene	ND	5.0								
1,2-Dichloroethane	ND	5.0								
1,2-Dichloropropane	ND	5.0								
1,3-Dichlorobenzene	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
2-Butanone	ND	10								
2-Hexanone	ND	10								
4-Methyl-2-pentanone	ND	10								
Acetone	ND	10								
Benzene	ND	5.0								
Bromodichloromethane	ND	5.0								
Bromoform	ND	5.0								
Bromomethane	ND	5.0								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	5.0								
Chlorobenzene	ND	5.0								
Chloroethane	ND	5.0								
Chloroform	ND	5.0								
Chloromethane	ND	5.0								
cis-1,2-Dichloroethene	ND	5.0								
cis-1,3-Dichloropropene	ND	5.0								
Cyclohexane	ND	5.0								
Dibromochloromethane	ND	5.0								
Dichlorodifluoromethane	ND	5.0								
Dichloromethane	ND	10								

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-140908** Units: **ug/L** Analysis Date: **08-Sep-2014 11:41**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995415** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	ND	5.0								
Isopropylbenzene	ND	5.0								
m,p-Xylene	ND	10								
Methyl acetate	ND	5.0								
Methyl tert-butyl ether	ND	5.0								
Methylcyclohexane	ND	5.0								
o-Xylene	ND	5.0								
Styrene	ND	5.0								
Tetrachloroethene	ND	5.0								
Toluene	ND	5.0								
trans-1,2-Dichloroethene	ND	5.0								
trans-1,3-Dichloropropene	ND	5.0								
Trichloroethene	ND	5.0								
Trichlorofluoromethane	ND	5.0								
Vinyl chloride	ND	2.0								
Xylenes, Total	ND	15								
Surr: 1,2-Dichloroethane-d4	*47.32*	*5.0*	*50*	*0*	*94.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.11*	*5.0*	*50*	*0*	*98.2*	*72 - 125*				
Surr: Dibromofluoromethane	*49.46*	*5.0*	*50*	*0*	*98.9*	*71 - 125*				
Surr: Toluene-d8	*47.85*	*5.0*	*50*	*0*	*95.7*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140908** Units: **ug/L** Analysis Date: **08-Sep-2014 10:46**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995414** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	52.63	5.0	50	0	105	80 - 120				
1,1,2,2-Tetrachloroethane	57.75	5.0	50	0	116	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	57.35	5.0	50	0	115	73 - 123				
1,1,2-Trichloroethane	47.9	5.0	50	0	95.8	80 - 120				
1,1-Dichloroethane	46.06	5.0	50	0	92.1	76 - 120				
1,1-Dichloroethene	55.73	5.0	50	0	111	73 - 124				
1,2,4-Trichlorobenzene	54.71	5.0	50	0	109	75 - 130				
1,2-Dibromo-3-chloropropane	54.71	5.0	50	0	109	65 - 125				
1,2-Dibromoethane	49.74	5.0	50	0	99.5	80 - 120				
1,2-Dichlorobenzene	50.08	5.0	50	0	100	80 - 120				
1,2-Dichloroethane	49.81	5.0	50	0	99.6	78 - 120				
1,2-Dichloropropane	58.08	5.0	50	0	116	80 - 120				
1,3-Dichlorobenzene	52.17	5.0	50	0	104	80 - 120				
1,4-Dichlorobenzene	53.13	5.0	50	0	106	80 - 120				
2-Butanone	86.35	10	100	0	86.3	58 - 132				
2-Hexanone	86.47	10	100	0	86.5	61 - 130				
4-Methyl-2-pentanone	83.39	10	100	0	83.4	65 - 127				
Acetone	101.9	10	100	0	102	59 - 137				
Benzene	51.39	5.0	50	0	103	73 - 121				
Bromodichloromethane	52.66	5.0	50	0	105	75 - 125				
Bromoform	53.39	5.0	50	0	107	70 - 130				
Bromomethane	53.95	5.0	50	0	108	60 - 145				
Carbon disulfide	123.3	10	100	0	123	68 - 141				
Carbon tetrachloride	52.92	5.0	50	0	106	75 - 125				
Chlorobenzene	51.05	5.0	50	0	102	80 - 120				
Chloroethane	51.63	5.0	50	0	103	70 - 130				
Chloroform	50.31	5.0	50	0	101	70 - 130				
Chloromethane	44.19	5.0	50	0	88.4	67 - 123				
cis-1,2-Dichloroethene	51.86	5.0	50	0	104	78 - 120				
cis-1,3-Dichloropropene	55.36	5.0	50	0	111	80 - 120				
Cyclohexane	52.94	5.0	50	0	106	66 - 125				
Dibromochloromethane	54.74	5.0	50	0	109	80 - 120				
Dichlorodifluoromethane	44.43	5.0	50	0	88.9	63 - 125				
Dichloromethane	56.83	10	50	0	114	65 - 133				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

LCS Sample ID: **VLCSW-140908** Units: **ug/L** Analysis Date: **08-Sep-2014 10:46**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995414** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	51.65	5.0	50	0	103	80 - 120				
Isopropylbenzene	51.14	5.0	50	0	102	75 - 130				
m,p-Xylene	105.2	10	100	0	105	78 - 121				
Methyl acetate	45.58	5.0	50	0	91.2	60 - 130				
Methyl tert-butyl ether	51.7	5.0	50	0	103	70 - 125				
Methylcyclohexane	55.17	5.0	50	0	110	70 - 122				
o-Xylene	49.94	5.0	50	0	99.9	80 - 120				
Styrene	53.55	5.0	50	0	107	80 - 120				
Tetrachloroethene	52.84	5.0	50	0	106	74 - 125				
Toluene	50.15	5.0	50	0	100	80 - 120				
trans-1,2-Dichloroethene	53.61	5.0	50	0	107	78 - 120				
trans-1,3-Dichloropropene	59.48	5.0	50	0	119	80 - 120				
Trichloroethene	56.65	5.0	50	0	113	80 - 120				
Trichlorofluoromethane	51.36	5.0	50	0	103	72 - 130				
Vinyl chloride	43.27	2.0	50	0	86.5	70 - 127				
Xylenes, Total	155.2	15	150	0	103	80 - 120				
Surr: 1,2-Dichloroethane-d4	*42.01*	*5.0*	*50*	*0*	*84.0*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.51*	*5.0*	*50*	*0*	*99.0*	*72 - 125*				
Surr: Dibromofluoromethane	*47.76*	*5.0*	*50*	*0*	*95.5*	*71 - 125*				
Surr: Toluene-d8	*47.16*	*5.0*	*50*	*0*	*94.3*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090247-01MS** Units: **ug/L** Analysis Date: **08-Sep-2014 13:05**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995418** PrepDate: DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1151	120	1250	0	92.1	80 - 120				
1,1,2,2-Tetrachloroethane	1375	120	1250	0	110	72 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	1196	120	1250	0	95.7	73 - 123				
1,1,2-Trichloroethane	1234	120	1250	0	98.7	80 - 120				
1,1-Dichloroethane	1188	120	1250	0	95.0	76 - 120				
1,1-Dichloroethene	1260	120	1250	0	101	73 - 124				
1,2,4-Trichlorobenzene	1205	120	1250	0	96.4	75 - 130				
1,2-Dibromo-3-chloropropane	1355	120	1250	0	108	65 - 125				
1,2-Dibromoethane	1204	120	1250	0	96.3	80 - 120				
1,2-Dichlorobenzene	1127	120	1250	0	90.2	80 - 120				
1,2-Dichloroethane	1166	120	1250	0	93.3	78 - 120				
1,2-Dichloropropane	1369	120	1250	0	110	80 - 120				
1,3-Dichlorobenzene	1122	120	1250	0	89.8	80 - 120				
1,4-Dichlorobenzene	1136	120	1250	0	90.9	80 - 120				
2-Butanone	2469	250	2500	0	98.8	58 - 132				
2-Hexanone	2237	250	2500	0	89.5	61 - 130				
4-Methyl-2-pentanone	2105	250	2500	0	84.2	65 - 127				
Acetone	2621	250	2500	0	105	59 - 137				
Benzene	1157	120	1250	0	92.5	73 - 121				
Bromodichloromethane	1303	120	1250	37.32	101	75 - 125				
Bromoform	1357	120	1250	0	109	70 - 130				
Bromomethane	1307	120	1250	0	105	60 - 145				
Carbon disulfide	2778	250	2500	0	111	68 - 141				
Carbon tetrachloride	1129	120	1250	0	90.3	75 - 125				
Chlorobenzene	1136	120	1250	0	90.9	80 - 120				
Chloroethane	1193	120	1250	0	95.4	70 - 130				
Chloroform	1933	120	1250	707.2	98.1	70 - 130				
Chloromethane	1056	120	1250	0	84.4	67 - 123				
cis-1,2-Dichloroethene	1369	120	1250	0	110	78 - 120				
cis-1,3-Dichloropropene	1265	120	1250	0	101	80 - 120				
Cyclohexane	1088	120	1250	0	87.0	66 - 125				
Dibromochloromethane	1273	120	1250	0	102	80 - 120				
Dichlorodifluoromethane	930.1	120	1250	0	74.4	63 - 125				
Dichloromethane	1488	250	1250	0	119	65 - 133				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MS Sample ID: **HS14090247-01MS** Units: **ug/L** Analysis Date: **08-Sep-2014 13:05**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995418** PrepDate: DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	1148	120	1250	0	91.8	80 - 120				
Isopropylbenzene	1103	120	1250	0	88.2	75 - 130				
m,p-Xylene	2329	250	2500	0	93.1	78 - 121				
Methyl acetate	1247	120	1250	0	99.8	60 - 130				
Methyl tert-butyl ether	1309	120	1250	0	105	70 - 125				
Methylcyclohexane	1145	120	1250	0	91.6	70 - 122				
o-Xylene	1136	120	1250	0	90.9	80 - 120				
Styrene	1229	120	1250	0	98.4	80 - 120				
Tetrachloroethene	1120	120	1250	0	89.6	74 - 125				
Toluene	1104	120	1250	0	88.3	80 - 120				
trans-1,2-Dichloroethene	1229	120	1250	0	98.3	78 - 120				
trans-1,3-Dichloropropene	1394	120	1250	0	112	80 - 120				
Trichloroethene	1303	120	1250	0	104	80 - 120				
Trichlorofluoromethane	1175	120	1250	0	94.0	72 - 130				
Vinyl chloride	1007	50	1250	0	80.5	70 - 127				
Xylenes, Total	3465	380	3750	0	92.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*1190*	*120*	*1250*	*0*	*95.2*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*1261*	*120*	*1250*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*1255*	*120*	*1250*	*0*	*100*	*71 - 125*				
Surr: Toluene-d8	*1155*	*120*	*1250*	*0*	*92.4*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090247-01MSD** Units: **ug/L** Analysis Date: **08-Sep-2014 13:33**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995419** PrepDate: DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1169	120	1250	0	93.5	80 - 120	1151	1.56	20	
1,1,2,2-Tetrachloroethane	1325	120	1250	0	106	72 - 120	1375	3.72	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	1189	120	1250	0	95.1	73 - 123	1196	0.581	20	
1,1,2-Trichloroethane	1203	120	1250	0	96.2	80 - 120	1234	2.56	20	
1,1-Dichloroethane	1101	120	1250	0	88.0	76 - 120	1188	7.61	20	
1,1-Dichloroethene	1185	120	1250	0	94.8	73 - 124	1260	6.11	20	
1,2,4-Trichlorobenzene	1200	120	1250	0	96.0	75 - 130	1205	0.417	20	
1,2-Dibromo-3-chloropropane	1375	120	1250	0	110	65 - 125	1355	1.48	20	
1,2-Dibromoethane	1214	120	1250	0	97.1	80 - 120	1204	0.828	20	
1,2-Dichlorobenzene	1138	120	1250	0	91.0	80 - 120	1127	0.962	20	
1,2-Dichloroethane	1191	120	1250	0	95.2	78 - 120	1166	2.08	20	
1,2-Dichloropropane	1342	120	1250	0	107	80 - 120	1369	2.02	20	
1,3-Dichlorobenzene	1139	120	1250	0	91.1	80 - 120	1122	1.44	20	
1,4-Dichlorobenzene	1136	120	1250	0	90.9	80 - 120	1136	0.0181	20	
2-Butanone	2311	250	2500	0	92.5	58 - 132	2469	6.59	20	
2-Hexanone	2275	250	2500	0	91.0	61 - 130	2237	1.7	20	
4-Methyl-2-pentanone	2222	250	2500	0	88.9	65 - 127	2105	5.4	20	
Acetone	2425	250	2500	0	97.0	59 - 137	2621	7.74	20	
Benzene	1178	120	1250	0	94.3	73 - 121	1157	1.87	20	
Bromodichloromethane	1264	120	1250	37.32	98.2	75 - 125	1303	3.01	20	
Bromoform	1344	120	1250	0	108	70 - 130	1357	0.949	20	
Bromomethane	1191	120	1250	0	95.3	60 - 145	1307	9.34	20	
Carbon disulfide	2594	250	2500	0	104	68 - 141	2778	6.85	20	
Carbon tetrachloride	1186	120	1250	0	94.9	75 - 125	1129	4.96	20	
Chlorobenzene	1158	120	1250	0	92.6	80 - 120	1136	1.95	20	
Chloroethane	1168	120	1250	0	93.5	76 - 121	1193	2.07	20	
Chloroform	1801	120	1250	707.2	87.5	70 - 130	1933	7.08	20	
Chloromethane	911.4	120	1250	0	72.9	67 - 123	1056	14.7	20	
cis-1,2-Dichloroethene	1265	120	1250	0	101	78 - 120	1369	7.94	20	
cis-1,3-Dichloropropene	1268	120	1250	0	101	80 - 120	1265	0.225	20	
Cyclohexane	1159	120	1250	0	92.7	66 - 125	1088	6.37	20	
Dibromochloromethane	1276	120	1250	0	102	80 - 120	1273	0.283	20	
Dichlorodifluoromethane	916.7	120	1250	0	73.3	63 - 125	930.1	1.46	20	
Dichloromethane	1356	250	1250	0	108	65 - 133	1488	9.33	20	

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240520 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14090247-01MSD** Units: **ug/L** Analysis Date: **08-Sep-2014 13:33**
Client ID: Run ID: **VOA1_240520** SeqNo: **2995419** PrepDate: DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	1180	120	1250	0	94.4	80 - 120	1148	2.76	20	
Isopropylbenzene	1202	120	1250	0	96.1	75 - 130	1103	8.57	20	
m,p-Xylene	2375	250	2500	0	95.0	78 - 121	2329	1.98	20	
Methyl acetate	1144	120	1250	0	91.5	60 - 130	1247	8.63	20	
Methyl tert-butyl ether	1273	120	1250	0	102	70 - 125	1309	2.79	20	
Methylcyclohexane	1199	120	1250	0	95.9	70 - 122	1145	4.58	20	
o-Xylene	1206	120	1250	0	96.5	80 - 120	1136	5.98	20	
Styrene	1277	120	1250	0	102	80 - 120	1229	3.8	20	
Tetrachloroethene	1091	120	1250	0	87.3	74 - 125	1120	2.6	20	
Toluene	1150	120	1250	0	92.0	80 - 120	1104	4.09	20	
trans-1,2-Dichloroethene	1194	120	1250	0	95.5	78 - 120	1229	2.91	20	
trans-1,3-Dichloropropene	1462	120	1250	0	117	80 - 120	1394	4.72	20	
Trichloroethene	1319	120	1250	0	106	80 - 120	1303	1.26	20	
Trichlorofluoromethane	1164	120	1250	0	93.1	72 - 130	1175	0.896	20	
Vinyl chloride	951.1	50	1250	0	76.1	70 - 127	1007	5.66	20	
Xylenes, Total	3582	380	3750	0	95.5	78 - 121	3465	3.31	20	
Surr: 1,2-Dichloroethane-d4	*1095*	*120*	*1250*	*0*	*87.6*	*70 - 125*	*1190*	*8.38*	*20*	
Surr: 4-Bromofluorobenzene	*1323*	*120*	*1250*	*0*	*106*	*72 - 125*	*1261*	*4.85*	*20*	
Surr: Dibromofluoromethane	*1207*	*120*	*1250*	*0*	*96.5*	*71 - 125*	*1255*	*3.96*	*20*	
Surr: Toluene-d8	*1217*	*120*	*1250*	*0*	*97.3*	*75 - 125*	*1155*	*5.25*	*20*	

The following samples were anayzed in this batch: HS14090212-03

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240738 **Instrument: VOA1** **Method: SW1311/8260B**

MBLK Sample ID: **VBLKW-140911** Units: **ug/L** Analysis Date: **11-Sep-2014 12:32**
Client ID: Run ID: **VOA1_240738** SeqNo: **3000674** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	ND	5.0								
1,2-Dichloroethane	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
2-Butanone	ND	10								
Benzene	ND	5.0								
Carbon tetrachloride	ND	5.0								
Chlorobenzene	ND	5.0								
Chloroform	ND	5.0								
Tetrachloroethene	ND	5.0								
Trichloroethene	ND	5.0								
Vinyl chloride	ND	2.0								
Surr: 1,2-Dichloroethane-d4	*36.66*	*5.0*	*50*	*0*	*73.3*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*52.48*	*5.0*	*50*	*0*	*105*	*72.4 - 125*				
Surr: Dibromofluoromethane	*43.95*	*5.0*	*50*	*0*	*87.9*	*71.2 - 125*				
Surr: Toluene-d8	*44.17*	*5.0*	*50*	*0*	*88.3*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240738 **Instrument: VOA1** **Method: SW1311/8260B**

LCS Sample ID: **VLCSW-140911** Units: **ug/L** Analysis Date: **11-Sep-2014 11:28**
Client ID: Run ID: **VOA1_240738** SeqNo: **3000673** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.58	5.0	50	0	101	73 - 124				
1,2-Dichloroethane	43.57	5.0	50	0	87.1	76 - 120				
1,4-Dichlorobenzene	38.29	5.0	50	0	76.6	70 - 130				
2-Butanone	83.78	10	100	0	83.8	70 - 130				
Benzene	45.41	5.0	50	0	90.8	70 - 128				
Carbon tetrachloride	45.91	5.0	50	0	91.8	70 - 130				
Chlorobenzene	41.24	5.0	50	0	82.5	72 - 127				
Chloroform	45.81	5.0	50	0	91.6	70 - 130				
Tetrachloroethene	42.84	5.0	50	0	85.7	70 - 130				
Trichloroethene	50.78	5.0	50	0	102	72 - 129				
Vinyl chloride	40.3	2.0	50	0	80.6	70 - 130				
Surr: 1,2-Dichloroethane-d4	*38.85*	*5.0*	*50*	*0*	*77.7*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*53.74*	*5.0*	*50*	*0*	*107*	*72 - 125*				
Surr: Dibromofluoromethane	*46.55*	*5.0*	*50*	*0*	*93.1*	*71 - 125*				
Surr: Toluene-d8	*44.56*	*5.0*	*50*	*0*	*89.1*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240738 **Instrument: VOA1** **Method: SW1311/8260B**

MS Sample ID: **HS14090318-01MS** Units: **ug/L** Analysis Date: **11-Sep-2014 14:27**
Client ID: Run ID: **VOA1_240738** SeqNo: **3000676** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	33.79	5.0	50	0	67.6	73 - 124				S
1,2-Dichloroethane	36.09	5.0	50	0	72.2	76 - 120				S
1,4-Dichlorobenzene	30.85	5.0	50	0	61.7	70 - 130				S
2-Butanone	71.24	10	100	0	71.2	70 - 130				
Benzene	34.77	5.0	50	0	69.5	70 - 128				S
Carbon tetrachloride	42.86	5.0	50	9.774	66.2	70 - 130				S
Chlorobenzene	31.91	5.0	50	0	63.8	72 - 127				S
Chloroform	35.64	5.0	50	0	71.3	70 - 130				
Tetrachloroethene	31.49	5.0	50	0	63.0	70 - 130				S
Trichloroethene	36.99	5.0	50	0	74.0	72 - 129				
Vinyl chloride	29.44	2.0	50	0	58.9	70 - 130				S
Surr: 1,2-Dichloroethane-d4	*42.95*	*5.0*	*50*	*0*	*85.9*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.95*	*5.0*	*50*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*46.06*	*5.0*	*50*	*0*	*92.1*	*71 - 125*				
Surr: Toluene-d8	*44.16*	*5.0*	*50*	*0*	*88.3*	*75 - 125*				

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

Client: Effective Environmental Inc.
WorkOrder: HS14090212
Project: USOR - Tank Farm Liquid Sampling

QC BATCH REPORT

Batch ID: R240738 **Instrument: VOA1** **Method: SW1311/8260B**

MSD Sample ID: **HS14090318-01MSD** Units: **ug/L** Analysis Date: **11-Sep-2014 14:56**
Client ID: Run ID: **VOA1_240738** SeqNo: **3000677** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	35.1	5.0	50	0	70.2	73 - 124	33.79	3.8	20	S
1,2-Dichloroethane	36.39	5.0	50	0	72.8	76 - 120	36.09	0.822	20	S
1,4-Dichlorobenzene	31.46	5.0	50	0	62.9	70 - 130	30.85	1.97	20	S
2-Butanone	61.71	10	100	0	61.7	70 - 130	71.24	14.3	20	S
Benzene	35.76	5.0	50	0	71.5	70 - 128	34.77	2.81	20	
Carbon tetrachloride	42.14	5.0	50	9.774	64.7	70 - 130	42.86	1.69	20	S
Chlorobenzene	33.44	5.0	50	0	66.9	72 - 127	31.91	4.68	20	S
Chloroform	35.56	5.0	50	0	71.1	70 - 130	35.64	0.241	20	
Tetrachloroethene	31.1	5.0	50	0	62.2	70 - 130	31.49	1.24	20	S
Trichloroethene	37.59	5.0	50	0	75.2	72 - 129	36.99	1.61	20	
Vinyl chloride	27.3	2.0	50	0	54.6	70 - 130	29.44	7.53	20	S
Surr: 1,2-Dichloroethane-d4	*42.13*	*5.0*	*50*	*0*	*84.3*	*70 - 125*	*42.95*	*1.93*	*20*	
Surr: 4-Bromofluorobenzene	*53.82*	*5.0*	*50*	*0*	*108*	*72 - 125*	*51.95*	*3.54*	*20*	
Surr: Dibromofluoromethane	*45.42*	*5.0*	*50*	*0*	*90.8*	*71 - 125*	*46.06*	*1.41*	*20*	
Surr: Toluene-d8	*45.35*	*5.0*	*50*	*0*	*90.7*	*75 - 125*	*44.16*	*2.65*	*20*	

The following samples were anayzed in this batch: HS14090212-01 HS14090212-02

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

Client: Effective Environmental Inc.
Project: USOR - Tank Farm Liquid Sampling
WorkOrder: **HS14090212**

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 Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	01-Oct-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	TX104704231-14-13	30-Apr-2015

ED_004012_00000048-00360

Client: Effective Environmental Inc.
Project: USOR - Tank Farm Liquid Sampling
Work Order: HS14090212

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14090212-01	NTF-AST 18	Login	9/5/2014 5:18:03 PM	MES	24B
HS14090212-02	NTF-AST 19	Login	9/5/2014 5:18:03 PM	MES	24B
HS14090212-03	Trip Blank	Login	9/5/2014 5:18:03 PM	MES	VW-3

Sample Receipt Checklist

Client Name: Effective Env-HOU
Work Order: HS14090212

Date/Time Received: **05-Sep-2014 15:42**
Received by: **PS**

Checklist completed by: *Michael E. Schepcoff* (eSignature) 5-Sep-2014 (Date)

Reviewed by: *Kristin M Brown* (eSignature) 8-Sep-2014 (Date)

Matrices: **Water**

Carrier name: **ALS Courier**

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

Temperature(s)/Thermometer(s):	1.3c/1.3c C/U	2	
Cooler(s)/Kit(s):	2892		
Date/Time sample(s) sent to storage:	9/5/2014 18:00		

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

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Laboratory Group
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody For

Page 1 of 1

HS14090212

Effective Environmental Inc.

USOR - Tank Farm Liquid Sampling

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	2016-14-1	Project Name	USOR-Tank Farm Liquid Sampling	A	TCLP - VOCs
Work Order	2016-14-1	Project Number	RC4-2016-14	B	Total VOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C	
Send Report To	Hiren Shah	Invoice Attn.	Hiren Shah	D	
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E	
				F	
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	G	
Phone	281-842-0804	Phone	972-329-1200	H	
Fax	281-474-2580	Fax	972-329-1206	I	
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	NTF-AST 18	09/05/14	9:08 AM	Liquid		1	X										
2	NTF-AST19	09/05/201	9:00 a.m.	Liquid		1	X										
3	Trip Blank - 1 sample/Cooler							X									
4	Temperature Blank - 1 sample/Cooler																
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Sampler(s): Please Print & Sign
Joe Carillo

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Joe Carillo	9/5/14	1500	Valerie Adams
Valerie Adams	9-5-14	1512	Received by (Laboratory):
Relinquished by:	Date:	Time:	Received by:

Notes:

Cooler Temp.

QC Package: (Check Box Below)

	Level II: Standard QC	TRRP-Checklist
	Level III: Std QC + Raw Data	TRRP Level IV
	Level IV: SW846 CLP-Like	
	Other: _____	

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

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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Appendix 2 EFI Global, Inc. Asbestos Potential Asbestos Containing Material Report

EFI Global
Complex Issues • Solid Solutions

11000 Richmond Avenue
Suite 250
Houston, TX 77042
Tel: 832.518.5145
Tf: 866.464.2127
Fax: 832.518.5157

March 6, 2015

Mr. Eric Pastor
Pastor Behling and Wheeler, LLC
2201 Double Creek Drive, Suite 4004
Round Rock, Texas 78664

Via Email: eric.pastor@pbwllc.com

Subject: **TRANSMITTAL OF ANALYTICAL RESULTS**
US Oil Recovery Superfund Site – North Tank Farm Insulation Sampling
400 N. Richey Street
Pasadena, Texas
EFI PROJECT NO. 98410-19603

Dear Mr. Pastor:

EFI Global, Inc. (EFI) has completed analysis of sampling of suspect Asbestos Containing Building Materials (ACBM) conducted on February 26, 2015 at the US Oil Recovery Superfund Site located at 400 N. Richey Street in Pasadena, Texas. A total of 3 samples of suspect ACBM were collected from the piping insulation associated with the North Tank Farm and tank insulation from AST 3 & AST 25 by EFI and delivered to an independent laboratory for analysis. The survey was performed to collect, analyze and identified asbestos-containing materials that may have an impact on the proposed equipment debris clean-up at the subject site.

The samples were analyzed by our subcontract laboratory [J3 Resources, Inc. (J3) in Houston, Texas] using Polarized Light Microscopy (PLM) coupled with dispersion staining as detailed in the EPA's "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116). Percentages for the samples were determined by visual area estimation. J3 is accredited by the National Voluntary Laboratory Accreditation Program and licensed by the Texas Department of State Health Services (DSHS Asbestos Laboratory License No. 30-0273).

All of the insulation samples collected from the North Tank Farm was found to be non-asbestos containing.

The analysis of the samples obtained with respect to the presence and amount of asbestos, if any, is limited to that for the discrete area and quantity of material sampled at that particular location. Different analytical results may be obtained at adjacent areas due to variations in the material type and consistency. The material samples obtained during this work will be retained by our laboratory, without charge, for a period of 60 days from the date of this report. We will dispose of the samples, if we have not received your specific written instructions for the disposition of the samples by the 60th day.

We appreciate the opportunity to provide consulting services to Pastor Behling and Wheeler, LLC in this matter. If there are any questions, please contact us at (832) 518-5145.

Sincerely,

EFI Global, Inc.

Cuong Nguyen
Project Manager

Rick A. Anderson, P.E.
Principal Engineer

Attachments: Laboratory Results and Chain of Custody

CN (E:\Projects 2015/PastorBehling and Wheeler, LLC –USOR Superfund Site- 400 N. Richey./NonACM Trans Results Revision 1.doc)

Copies Submitted: (1)

ED_004012_00000048-00366

EFI Global

Compliance • Sound Solutions

ATTACHMENT

LABORATORY REPORTS WITH CHAIN OF CUSTODY

J3 Resources, Inc.
6110 W. 34th Street, Houston, Texas 77092
Phone: (713) 290-0221 - Fax: (713) 290-0248
J3Resources.com

Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)

EPA 600/M4-82-020; 600/R-93/116

Alex Nguyen
EFI Global
11000 Richmond Avenue Suite 250
Houston TX 77042

J3 Order #: JH1562997
Project #: 98410-19603
Date Received: 26-Feb-2015
Date Analyzed: 27-Feb-2015
Date Reported: 04-Mar-2015

400 N. Richey (REV)

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
31-1	Insulation, Brown/ Black, Homogeneous	None Detected	Fibrous Glass Cellulose Fiber Other Non-Fibrous Material	85% 5% 10%
31-2	Insulation, Off White, Homogeneous	None Detected	Synthetic Fiber Other Non-Fibrous Material	<1% 100%
31-3	LAYER 1 Paper/Foil Wrap, White/ Silver, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Other Non-Fibrous Material	60% 20% 20%
	LAYER 2 Insulation, Yellow, Homogeneous	None Detected	Fibrous Glass Other Non-Fibrous Material	98% 2%
~~33-1~~	~~Mud Insulation, Gray, Homogeneous~~	~~None Detected~~	~~Fibrous Glass~~ ~~Other Non-Fibrous Material~~	~~20%~~ ~~80%~~
~~34-1~~	~~Gasket, Black/Gray, Homogeneous~~	~~Chrysotile 75%~~	~~Other Non-Fibrous Material~~	~~25%~~
~~35-1~~	~~Caulk, Black, Homogeneous~~	~~None Detected~~	~~Other Non-Fibrous Material~~	~~100%~~
~~36-1~~	~~Insulation, White/ Pink/ Gray, Homogeneous~~	~~None Detected~~	~~Fibrous Glass~~ ~~Other Non-Fibrous Material~~	~~96%~~ ~~4%~~

Duane Salinas Analyst

Lee W. Poye Lab Director

This report relates only to the materials tested. This report is for the exclusive use of the addressed client and shall not be reproduced except in full, without written approval by J3 Resources, Inc. (J3). Samples are analyzed according to the methods listed above and are subject to the inherent limitations of PLM and interference of matrix components. Reporting limit for the above method is a function of the quantity of sample analyzed, matrix interference, sample preparation, fiber size, and distribution. Asbestos may be detected in concentrations of <1% by area if sufficient material is analyzed. J3 recommends TEM confirmation of soils, vermiculite and non-friable organically bound materials (NOB) reported as None Detected or < 1% Asbestos by PLM. All samples received in good condition unless otherwise noted. This report shall not be used to claim product approval, certification, or endorsement by NVLAP, NIST, or any agency of the federal government.

NVLAP Lab Code: 200525-0; AIHA Lab ID: 157714; TDSHS License: 30-0273

IH CHAIN OF CUSTODY

2997

J3 resources, inc.

Submitter Name:	Alex	Bill to:	EFI
Company:	EFI	Address:	11000 Richmond Av.
Address:			Ste. 250
		City/State:	Hou/Tx Zip: 77042
City/State:	Zip:	PO #:	

Project Information

Project Name:	400 N. Rickey	Project Manager:	CN
Project #:	98410 - 19603	Notification By:	Email: ☐ Verbal: ☐ Text: ☐
Email Report To:	Rick / Alex	Email Invoice To:	Rick / Alex / Linda

Special Instructions:

Turnaround Times – Please Select One

Emergency* ☐	1 Day ☐	2 Day ☐	3 Day ☑	5 Day ☐

ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
EPA 600/R-93/116 ○ Visual Estimation (<1%) ○ 400 Point Count 0.25% ○ 1,000 Point Count 0.1% ○ Gravimetric Reduction ○ Matrix Reduction (+/-) ○ NIOSH 9002 ○ OSHA ID-191	○ NIOSH 7400 ○ ASTM D7201 ○ ISO 8672 ○ OSHA ID-160	○ AHERA ○ NIOSH 7402 ○ ASTM D6281 ○ ISO 10312 ○ ISO 13794	○ Gravimetric Reduction (<1%) ○ Matrix Reduction (+/-) ○ Qualitative (+/-) ○ Drop Mount ○ Filtration	○ EPA 100.2 Drinking Water ○ >10 µm fibers ○ ≥05 µm fibers ○ EPA 100.2 Effluent / WW	○ ASTM D5755 Microvac ○ ASTM D6480 Wipe ○ 600/J-93/167 Carpet - EPA ○ Bulk Dust Qualitative	○ ASTM 7521-TEM (+/-) ○ ASTM 8721-TEM (<1%) ○ CARB 435-Modified ○ Soil – PLM Only (+/-) ○ Vermiculite - TEM (+/-) ○ Vermiculite-Cincinnati ○ Erionite ID

METALS

Flame AA	Graphite Furnace AA - LEAD	ICP
○ Lead in Paint – SW846 7420/3050B ○ Lead in Air – NIOSH 7082 ○ Lead in Wipes – SW846 7420/3050B ○ Lead in Soil – SW846 7420/3050B	○ Drinking Water – EPA 200.9 ○ Wastewater – SW846-7421 ○ Soil/Sludge – SW846-7421 ○ Air – NIOSH 7105	○ Elements in Air - NIOSH 7300 ○ Wipe/Soil – SW846-6010B ○ Effluent – SW846-6010B ○ Welding Fume - NIOSH 7300M ○ TCLP – SW846-6010B

PARTICULATES

Gravimetric
○ NIOSH 0500 – Total Particulates ○ NIOSH 0600 – Respirable Particulates

Total Number of Samples Submitted: 6

Positive Stop: ☑ YES ☐ NO

Signatures

Relinquished By:	[signature]	Date: 2/26/15	Time: 3:28pm
Received By:	[signature]	Date: 2-26-15	Time: 3:28pm
Relinquished By:		Date:	Time:
Received By:		Date:	Time:

*Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.
**TAT's are in Business Days rather than Hours (i.e.1 Day TAT = End of Next Business Day)

J3 Resources, Inc. • 6110 West 34th Street • Houston, Texas 77092 • tel: 713/290-0221 • fax: 713/290-0248

IH CHAIN OF CUSTODY

Project Name/Number 98410-19603

SAMPLE IDENTIFICATION

SAMPLE NUMBER	SAMPLE LOCATION / MATERIAL	VOLUME
31-1	Tank Insulation - AST 25	N/A
-2	- AST 3	
-3	Pipe Insulation From North Tank Farm	
~~32-1~~	Hot Water Pipe Insulation From Boiler	
~~-2~~		
~~-3~~		

Comments/Special Instructions:

J3 Resources, Inc. • 6110 West 34th Street • Houston, Texas 77092 • tel: 713/290-0221 • fax: 713/290-0248