



Laboratory Results

Dave Reinsma
Trinity Source Group
119 Encinal Street
Santa Cruz, CA 95060

Subject : 5 Soil Samples
Project Name : Valero St. No .# 3823
Project Number : 224.001.001

Dear Mr. Reinsma,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy Turpen

Subject : 5 Soil Samples
Project Name : Valero St. No .# 3823
Project Number : 224.001.001

Case Narrative

All soil samples were reported on a total weight (wet weight) basis.

Recoveries for some Matrix Spike/ Matrix Spike Duplicate analytes were outside control limits. This may indicate a bias for the samples that were spiked.

LCS results for the analyte Ethanol were outside of control limits, indicating a possible high bias for this analyte. Since Ethanol was not detected above the Method Reporting Limit in the samples, no data are flagged.

A version of this report was previously issued on 09/26/2014. This revised version with additional results replaces that report.

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Sample : **SUMP-EFFPIPE@4'**

Matrix : Soil

Lab Number : 89241-01

Sample Date :09/25/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/14 15:39
Chromium	64	0.25	mg/Kg	EPA 6010B	09/26/14 15:39
Lead	7.6	0.50	mg/Kg	EPA 6010B	09/26/14 15:39
Nickel	83	0.25	mg/Kg	EPA 6010B	09/26/14 15:39
Zinc	62	1.0	mg/Kg	EPA 6010B	09/26/14 15:39
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/26/14 04:28
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/26/14 04:28
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/26/14 04:28
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 04:28
1,2-Dichloroethane-d4 (Surr)	110		% Recovery	EPA 8260B	09/26/14 04:28
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	09/26/14 04:28
TPH as Diesel	2.0	1.0	mg/Kg	M EPA 8015	09/26/14 13:24
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	09/26/14 13:24

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Sample : **SUMP-1-MID@9 1/2'**

Matrix : Soil

Lab Number : 89241-02

Sample Date :09/25/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/14 15:45
Chromium	58	0.25	mg/Kg	EPA 6010B	09/26/14 15:45
Lead	5.8	0.50	mg/Kg	EPA 6010B	09/26/14 15:45
Nickel	83	0.25	mg/Kg	EPA 6010B	09/26/14 15:45
Zinc	43	1.0	mg/Kg	EPA 6010B	09/26/14 15:45
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/26/14 05:05
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/26/14 05:05
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/26/14 05:05
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:05
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/26/14 05:05
Toluene - d8 (Surr)	96.7		% Recovery	EPA 8260B	09/26/14 05:05
TPH as Diesel	1.1	1.0	mg/Kg	M EPA 8015	09/26/14 13:59
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	09/26/14 13:59

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Sample : **SUMP-INFPIPE@3'**

Matrix : Soil

Lab Number : 89241-03

Sample Date :09/25/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/14 15:50
Chromium	50	0.25	mg/Kg	EPA 6010B	09/26/14 15:50
Lead	5.8	0.50	mg/Kg	EPA 6010B	09/26/14 15:50
Nickel	68	0.25	mg/Kg	EPA 6010B	09/26/14 15:50
Zinc	49	1.0	mg/Kg	EPA 6010B	09/26/14 15:50
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/26/14 05:43
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/26/14 05:43
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/26/14 05:43
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 05:43
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	09/26/14 05:43
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	09/26/14 05:43
TPH as Diesel (Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)	1.5	1.0	mg/Kg	M EPA 8015	09/26/14 12:50
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	09/26/14 12:50

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Sample : **STOCKPILE-4PT COMP**

Matrix : Soil

Lab Number : 89241-04

Sample Date :09/25/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/14 15:55
Chromium	39	0.25	mg/Kg	EPA 6010B	09/26/14 15:55
Lead	5.0	0.50	mg/Kg	EPA 6010B	09/26/14 15:55
Nickel	49	0.25	mg/Kg	EPA 6010B	09/26/14 15:55
Zinc	82	1.0	mg/Kg	EPA 6010B	09/26/14 15:55
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/26/14 03:11
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/26/14 03:11
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/26/14 03:11
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:11
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	09/26/14 03:11
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	09/26/14 03:11
TPH as Diesel	20	2.0	mg/Kg	M EPA 8015	09/26/14 15:43
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	09/26/14 15:43

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Sample : **SUMP-SAND-4PT COMP**

Matrix : Soil

Lab Number : 89241-05

Sample Date :09/25/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/14 16:00
Chromium	45	0.25	mg/Kg	EPA 6010B	09/26/14 16:00
Lead	4.3	0.50	mg/Kg	EPA 6010B	09/26/14 16:00
Nickel	46	0.25	mg/Kg	EPA 6010B	09/26/14 16:00
Zinc	36	1.0	mg/Kg	EPA 6010B	09/26/14 16:00
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/26/14 03:50
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/26/14 03:50
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/26/14 03:50
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/26/14 03:50
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	09/26/14 03:50
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	09/26/14 03:50
TPH as Diesel (Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)	53	5.0	mg/Kg	M EPA 8015	09/26/14 16:17
Octacosane (Diesel Surrogate)	98.6		% Recovery	M EPA 8015	09/26/14 16:17

Report Number : 89241
 Date : 09/29/2014

QC Report : Method Blank Data
Project Name : Valero St. No. # 3823
Project Number : 224.001.001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Cadmium	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/2014						
Chromium	< 0.25	0.25	mg/Kg	EPA 6010B	09/26/2014						
Lead	< 0.50	0.50	mg/Kg	EPA 6010B	09/26/2014						
Nickel	< 0.25	0.25	mg/Kg	EPA 6010B	09/26/2014						
Zinc	< 1.0	1.0	mg/Kg	EPA 6010B	09/26/2014						
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/26/2014						
Octacosane (Diesel Surrogate)	94.9		%	M EPA 8015	09/26/2014						
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Ethanol	< 0.050	0.050	mg/Kg	EPA 8260B	09/25/2014						
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	09/25/2014						
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
Tert-aryl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/25/2014						
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/25/2014						
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	09/25/2014						
Toluene - d8 (Surr)	99.2		%	EPA 8260B	09/25/2014						

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dibromoethane															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0290	0.0276	mg/Kg	EPA 8260B	9/26/14	74.4	71.7	3.76	70.0-130	25
1,2-Dichloroethane															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0347	0.0358	mg/Kg	EPA 8260B	9/26/14	89.2	93.0	4.13	70.0-130	25
Benzene															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0319	0.0336	mg/Kg	EPA 8260B	9/26/14	82.1	87.3	6.22	70.0-130	25
Diisopropyl ether															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0318	0.0383	mg/Kg	EPA 8260B	9/26/14	81.8	99.3	19.3	70.0-130	25
Ethanol															
	89219-01	<0.050	0.0973	0.0973	0.0963	0.129	0.167	mg/Kg	EPA 8260B	9/26/14	133	173	26.2	25.0-180	25
Ethyl-tert-butyl ether															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0320	0.0354	mg/Kg	EPA 8260B	9/26/14	82.3	92.0	11.2	65.0-130	25
Ethylbenzene															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0254	0.0300	mg/Kg	EPA 8260B	9/26/14	65.2	77.9	17.8	70.0-130	25
Methanol															
	89219-01	<0.20	0.973	0.973	0.963	1.21	1.36	mg/Kg	EPA 8260B	9/26/14	124	141	12.7	35.0-150	25
Methyl-t-butyl ether															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0332	0.0353	mg/Kg	EPA 8260B	9/26/14	85.4	91.6	7.00	60.0-130	25
P + M Xylene															
	89219-01	<0.0050	0.0389	0.0389	0.0385	0.0241	0.0287	mg/Kg	EPA 8260B	9/26/14	61.8	74.4	18.5	70.0-130	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	89219-01	<0.0050	0.194	0.193	0.170	0.178	mg/Kg	EPA 8260B	9/26/14	87.6	92.5	5.41	70.0-130	25
Tert-amyl-methyl ether	89219-01	<0.0050	0.0389	0.0385	0.0328	0.0349	mg/Kg	EPA 8260B	9/26/14	84.3	90.6	7.25	70.0-130	25
Toluene	89219-01	<0.0050	0.0389	0.0385	0.0296	0.0315	mg/Kg	EPA 8260B	9/26/14	76.2	81.8	7.13	70.0-130	25
Cadmium	89219-01	< 0.50	47.6	47.6	49.1	49.4	mg/Kg	EPA 6010B	9/26/14	102	103	0.770	75-125	20
Chromium	89219-01	24	47.6	47.6	67.7	70.8	mg/Kg	EPA 6010B	9/26/14	92.3	98.9	4.50	75-125	20
Lead	89219-01	35	47.6	47.6	71.2	73.0	mg/Kg	EPA 6010B	9/26/14	76.5	80.2	2.43	75-125	20
Nickel	89219-01	23	47.6	47.6	66.4	68.2	mg/Kg	EPA 6010B	9/26/14	91.6	95.4	2.68	75-125	20
Zinc	89219-01	100	47.6	47.6	162	168	mg/Kg	EPA 6010B	9/26/14	124	137	3.72	75-125	20
TPH as Diesel	89241-02	1.1	19.6	19.6	20.0	19.2	mg/Kg	M EPA 8015	9/26/14	96.6	92.5	4.41	60-140	25

QC Report : Laboratory Control Sample (LCS)

Project Name : **Valero St. No .# 3823**

Project Number : **224.001.001**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Cadmium	50.0	mg/Kg	EPA 6010B	9/26/14	104	85-115
Chromium	50.0	mg/Kg	EPA 6010B	9/26/14	97.9	85-115
Lead	50.0	mg/Kg	EPA 6010B	9/26/14	96.7	85-115
Nickel	50.0	mg/Kg	EPA 6010B	9/26/14	98.0	85-115
Zinc	50.0	mg/Kg	EPA 6010B	9/26/14	102	85-115
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/26/14	89.5	70-130
1,2-Dibromoethane	0.0400	mg/Kg	EPA 8260B	9/26/14	75.9	70.0-130
1,2-Dichloroethane	0.0400	mg/Kg	EPA 8260B	9/26/14	93.2	70.0-130
Benzene	0.0400	mg/Kg	EPA 8260B	9/26/14	91.8	70.0-130
Diisopropyl ether	0.0400	mg/Kg	EPA 8260B	9/26/14	109	70.0-130
Ethanol	0.100	mg/Kg	EPA 8260B	9/26/14	184	25.0-180
Ethyl-tert-butyl ether	0.0400	mg/Kg	EPA 8260B	9/26/14	92.9	65.0-130
Ethylbenzene	0.0400	mg/Kg	EPA 8260B	9/26/14	97.8	70.0-130
Methanol	1.00	mg/Kg	EPA 8260B	9/26/14	131	35.0-150
Methyl-t-butyl ether	0.0400	mg/Kg	EPA 8260B	9/26/14	89.8	60.0-130
P + M Xylene	0.0400	mg/Kg	EPA 8260B	9/26/14	93.0	70.0-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	9/26/14	92.5	70.0-130
Tert-amyl-methyl ether	0.0400	mg/Kg	EPA 8260B	9/26/14	92.6	70.0-130
Toluene	0.0400	mg/Kg	EPA 8260B	9/26/14	92.8	70.0-130



2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No.

891241

Page 1 of 1

Send Report To: David Reinsma
 Email Address: lab@trinitysource.com
 Company: Trinity Source Group
 Address: 119 General St., Santa Clara
 Phone Number: (831) 426-5602
 Project #: 224-W1-W1

Electronic Data Deliverable (EDD):
 CA EDF CA WriteOn WA EIM
 Excel EQUS (format) Other

Global ID (for CA EDF use):
 EDD Deliverable To (Email Address):
 Sampling Company: TSWA
 Sampler Signature: *[Signature]*

Project Name: VALUO ST. HO # 3813
 Project Address: 2001 Hugwood Rd Pleasanton, CA

Invoice To: TRINITY SOURCE GROUP, INC.
 40 ml VOA: X
 Sleeve: X
 Poly: X
 Glass: X
 Tedlar: X
 HCl: X
 HNO3: X
 None: X

Sample Identification	Date	Time	Matrix	# of Containers	# Preserved	Received by (signature/affiliation):	Date & Time
SUMP-EFFPIECE 1	9/25/11	1010	Air				
SUMP-1-MIDPIPE	10/03		Soil				
SUMP-1-NFPIECE	10/15		Water				
SAMPLE-4PT CAMP	10/25						
SUMP-SAND-4PT CAMP	10/20						

Chain-of-Custody Record and Analysis Request

TPH	8260B	524	Metals	SPECIAL	Other
<input checked="" type="checkbox"/> Other (specify) CHLORIDE <input checked="" type="checkbox"/> Gas (EPA 8210) <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil	MTBE 5 Oxygenates: MTBE DIPE ETBE TAME TBA 7 Oxygenates (5 Oxygenates plus): Ethanol Methanol Lead Scavengers: 1,2 DCA 1,2 EDB Halogenated Volatile Organic Compounds (former 8010 list) Volatile Organic Compounds Full List	Volatile Organics by EPA Method 524.2 Metals Group (Method: <input checked="" type="checkbox"/> CAM 1 <input checked="" type="checkbox"/> LUFT 5)	Individual Metals (list and enter method): (Cd) Cr, Ni, Pb Zn - 6010 Nitrate as N <input type="checkbox"/> Nitrite as N <input type="checkbox"/> Ferrous Iron <input type="checkbox"/> Nitrate as NO2 <input type="checkbox"/> Nitrite as NO2	Chromium VI by EPA 7199 FORMALDEHYDE - 8260 PAHs - 8270 PCBs - 8082	For Lab Use Only
			X		

Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):

* SUMP-SAND-4PT CAMP: Standard TAT

Turnaround Time (TAT - Check One):
 Standard 4 Day 3 Day 2 Day 1 Day
 Other: TAT in business days. Surcharge may apply. TAT for subcontracted work may vary.

Received by (signature/affiliation):
[Signature] 9/25/11 1220

Received by (signature/affiliation):
[Signature] 9/25/11 1220

Received by Kiff Analytical (signature):
 Michelle Spence 9/25/11
 1720



SAMPLE RECEIPT CHECKLIST

SRG #: 89241

Sample Receipt Initials/Date: MS 0254 Storage Time: 1625 Sample Login Initials/Date: TJB 092514

TAT: Standard Rush Split None
 Method of Receipt: Courier Over-the-counter Shipped

Temp °C 2.4 N/A Therm ID IRL1 Time 1622
 Coolant present Yes No Water Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time: _____ Custody Seals N/A Intact Broken

Chain-of-Custody:	Documented on	COC	Labels	Discrepancies:
Is COC present?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Is COC signed by relinquisher?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Is COC dated by relinquisher?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the sampler's name on the COC?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there analyses or hold for all samples?				<input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No

Samples:

Are sample custody seals intact?

Are sample containers intact?

Is preservation documented?

In-house Analysis:

Are preservatives acceptable?

Are samples within holding time?

Are sample container types correct?

Is there adequate sample volume?

Comments:

Receipt Details:

Matrix	Container Type	# of Containers
<u>So</u>	<u>Sleeve</u>	<u>5</u>

Proceed With Analysis: YES NO Init/Date: TJB 092614

Client Communication: _____

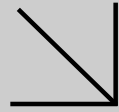
CS Required:



Subcontract Laboratory Report Attachments



Calscience



WORK ORDER NUMBER: 14-09-2116

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: VALERO St. No. #3823

Attention: Joel Kiff
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Amanda Porter

Approved for release on 09/29/2014 by:
Amanda Porter
Project Manager

ResultLink ▶

Email your PM ▶



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



Contents

Client Project Name: VALERO St. No. #3823
Work Order Number: 14-09-2116

1	Work Order Narrative.	3
2	Client Sample Data.	4
	2.1 EPA 1664A (M) HEM: Oil and Grease (Solid).	4
	2.2 EPA 8082 PCB Aroclors (Solid).	5
	2.3 EPA 8270C Polynuclear Aromatic Hydrocarbons (Solid).	8
3	Quality Control Sample Data.	14
	3.1 MS/MSD.	14
	3.2 LCS/LCSD.	16
4	Sample Analysis Summary.	19
5	Glossary of Terms and Qualifiers.	20
6	Chain-of-Custody/Sample Receipt Form.	21

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/26/14. They were assigned to Work Order 14-09-2116.

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

Holding Times:

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

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

Quality Control:

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

Additional Comments:

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

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

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

Subcontractor Information:

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: N/A
Method: EPA 1664A (M)
Units: mg/kg

Project: VALERO St. No. #3823

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-EFFPIPE@4'	14-09-2116-1-A	09/25/14 10:10	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		ND		10		1.00	
SUMP-1-MID@9 1/2'	14-09-2116-2-A	09/25/14 10:05	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		27		10		1.00	
SUMP-INFPIPE@3'	14-09-2116-3-A	09/25/14 10:15	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		ND		10		1.00	
STOCKPILE-4PT COMP	14-09-2116-4-A	09/25/14 10:55	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		13		10		1.00	
SUMP-SAND-4PT COMP	14-09-2116-5-A	09/25/14 10:40	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		92		10		1.00	
Method Blank	099-12-040-479	N/A	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
HEM: Oil and Grease		ND		10		1.00	

Return to Contents

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Project: VALERO St. No. #3823

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-EFFPIPE@4'	14-09-2116-1-A	09/25/14 10:10	Solid	GC 58	09/26/14	09/27/14 08:33	140926L06A

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-1-MID@9 1/2'	14-09-2116-2-A	09/25/14 10:05	Solid	GC 58	09/26/14	09/27/14 08:51	140926L06A

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	87	25-145	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Project: VALERO St. No. #3823

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-INFPIPE@3'	14-09-2116-3-A	09/25/14 10:15	Solid	GC 58	09/26/14	09/27/14 11:55	140926L06A

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	58	25-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
STOCKPILE-4PT COMP	14-09-2116-4-A	09/25/14 10:55	Solid	GC 58	09/26/14	09/27/14 12:13	140926L06A

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	24-168	
2,4,5,6-Tetrachloro-m-Xylene	90	25-145	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Project: VALERO St. No. #3823

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-SAND-4PT COMP	14-09-2116-5-A	09/25/14 10:40	Solid	GC 58	09/26/14	09/27/14 12:36	140926L06A

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	24-168	
2,4,5,6-Tetrachloro-m-Xylene	85	25-145	

Method Blank	099-12-535-2876	N/A	Solid	GC 58	09/26/14	09/26/14 17:24	140926L06A
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Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	24-168	
2,4,5,6-Tetrachloro-m-Xylene	102	25-145	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-EFFPIPE@4'	14-09-2116-1-A	09/25/14 10:10	Solid	GC/MS SS	09/26/14	09/27/14 17:18	140926L11

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
Phenanthrene	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	81	27-120	
2-Fluorophenol	90	25-120	
Nitrobenzene-d5	87	33-123	
p-Terphenyl-d14	83	27-159	
Phenol-d6	90	26-122	
2,4,6-Tribromophenol	86	18-138	

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

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-1-MID@9 1/2'	14-09-2116-2-A	09/25/14 10:05	Solid	GC/MS SS	09/26/14	09/27/14 17:37	140926L11

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.51	1.00	
Acenaphthylene	ND	0.51	1.00	
Anthracene	ND	0.51	1.00	
Benzo (a) Anthracene	ND	0.51	1.00	
Benzo (a) Pyrene	ND	0.51	1.00	
Benzo (b) Fluoranthene	ND	0.51	1.00	
Benzo (g,h,i) Perylene	ND	0.51	1.00	
Benzo (k) Fluoranthene	ND	0.51	1.00	
Chrysene	ND	0.51	1.00	
Dibenz (a,h) Anthracene	ND	0.51	1.00	
Fluoranthene	ND	0.51	1.00	
Fluorene	ND	0.51	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.51	1.00	
2-Methylnaphthalene	ND	0.51	1.00	
1-Methylnaphthalene	ND	0.51	1.00	
Naphthalene	ND	0.51	1.00	
Phenanthrene	ND	0.51	1.00	
Pyrene	ND	0.51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	72	27-120	
2-Fluorophenol	77	25-120	
Nitrobenzene-d5	74	33-123	
p-Terphenyl-d14	72	27-159	
Phenol-d6	77	26-122	
2,4,6-Tribromophenol	68	18-138	

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

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-INFPIPE@3'	14-09-2116-3-A	09/25/14 10:15	Solid	GC/MS SS	09/26/14	09/27/14 17:55	140926L11

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
Phenanthrene	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	65	27-120	
2-Fluorophenol	77	25-120	
Nitrobenzene-d5	80	33-123	
p-Terphenyl-d14	78	27-159	
Phenol-d6	82	26-122	
2,4,6-Tribromophenol	75	18-138	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
STOCKPILE-4PT COMP	14-09-2116-4-A	09/25/14 10:55	Solid	GC/MS SS	09/26/14	09/27/14 18:14	140926L11

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
Phenanthrene	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	68	27-120	
2-Fluorophenol	79	25-120	
Nitrobenzene-d5	75	33-123	
p-Terphenyl-d14	76	27-159	
Phenol-d6	80	26-122	
2,4,6-Tribromophenol	65	18-138	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SUMP-SAND-4PT COMP	14-09-2116-5-A	09/25/14 10:40	Solid	GC/MS SS	09/26/14	09/27/14 18:33	140926L11

Parameter	Result	RL	DF	Qualifiers
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
Phenanthrene	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	75	27-120	
2-Fluorophenol	79	25-120	
Nitrobenzene-d5	78	33-123	
p-Terphenyl-d14	76	27-159	
Phenol-d6	84	26-122	
2,4,6-Tribromophenol	70	18-138	

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



Calscience

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: VALERO St. No. #3823

Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-3076	N/A	Solid	GC/MS SS	09/26/14	09/27/14 13:14	140926L11

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.50	1.00	
Acenaphthylene	ND	0.50	1.00	
Anthracene	ND	0.50	1.00	
Benzo (a) Anthracene	ND	0.50	1.00	
Benzo (a) Pyrene	ND	0.50	1.00	
Benzo (b) Fluoranthene	ND	0.50	1.00	
Benzo (g,h,i) Perylene	ND	0.50	1.00	
Benzo (k) Fluoranthene	ND	0.50	1.00	
Chrysene	ND	0.50	1.00	
Dibenz (a,h) Anthracene	ND	0.50	1.00	
Fluoranthene	ND	0.50	1.00	
Fluorene	ND	0.50	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	1.00	
2-Methylnaphthalene	ND	0.50	1.00	
1-Methylnaphthalene	ND	0.50	1.00	
Naphthalene	ND	0.50	1.00	
Phenanthrene	ND	0.50	1.00	
Pyrene	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	94	27-120	
2-Fluorophenol	109	25-120	
Nitrobenzene-d5	98	33-123	
p-Terphenyl-d14	91	27-159	
Phenol-d6	109	26-122	
2,4,6-Tribromophenol	92	18-138	

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



Calscience

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8082

Project: VALERO St. No. #3823

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
14-09-2106-9	Sample	Solid	GC 58	09/26/14	09/26/14 19:11	140926S06				
14-09-2106-9	Matrix Spike	Solid	GC 58	09/26/14	09/26/14 17:41	140926S06				
14-09-2106-9	Matrix Spike Duplicate	Solid	GC 58	09/26/14	09/26/14 17:59	140926S06				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	90.59	91	89.58	90	50-135	1	0-20	
Aroclor-1260	ND	100.0	88.26	88	89.76	90	50-135	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C

Project: VALERO St. No. #3823

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
SUMP-1-MID@9 1/2'	Sample	Solid	GC/MS SS	09/26/14	09/27/14 17:37	140926S11				
SUMP-1-MID@9 1/2'	Matrix Spike	Solid	GC/MS SS	09/26/14	09/27/14 16:40	140926S11				
SUMP-1-MID@9 1/2'	Matrix Spike Duplicate	Solid	GC/MS SS	09/26/14	09/27/14 16:59	140926S11				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	7.594	76	7.450	74	34-148	2	0-20	
Acenaphthylene	ND	10.00	7.702	77	7.583	76	53-120	2	0-20	
Fluorene	ND	10.00	7.501	75	7.529	75	12-186	0	0-20	
Naphthalene	ND	10.00	7.672	77	7.640	76	20-140	0	0-20	
Pyrene	ND	10.00	7.328	73	7.305	73	31-169	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: N/A
Method: EPA 1664A (M)

Project: VALERO St. No. #3823

Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-040-479	LCS	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1
099-12-040-479	LCSD	Solid	N/A	09/29/14	09/29/14 17:00	E0929HEML1

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
HEM: Oil and Grease	40.00	43.30	108	40.00	100	78-114	8	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8082

Project: VALERO St. No. #3823

Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-535-2876	LCS	Solid	GC 58	09/26/14	09/26/14 17:06	140926L06A
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Aroclor-1016		100.0	109.1	109	50-135	
Aroclor-1260		100.0	100.2	100	50-135	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 09/26/14
Work Order: 14-09-2116
Preparation: EPA 3545
Method: EPA 8270C

Project: VALERO St. No. #3823

Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-549-3076	LCS	Solid	GC/MS SS	09/26/14	09/27/14 12:55	140926L11
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Acenaphthene		10.00	8.511	85	51-123	
Acenaphthylene		10.00	8.632	86	52-120	
Fluorene		10.00	8.505	85	54-126	
Naphthalene		10.00	8.313	83	32-146	
Pyrene		10.00	8.303	83	47-143	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 14-09-2116

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1664A (M)	N/A	691	N/A	1
EPA 8082	EPA 3545	669	GC 58	1
EPA 8270C	EPA 3545	608	GC/MS SS	1

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

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

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

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



2795 Second Street, Suite 300
 Davis, CA 95618
 Lab: 530.297.4800
 Fax: 530.297.4808

14-09-2116

Calscience
 7440 Lincoln Way
 Garden Grove, CA 92841-1427
 714-895-5494

Page 1 of 1

COC No. 89241

Project Contact (Hardcopy or PDF to):

Scott Forbes

Company/Address:

Kiff Analytical

Phone No.:

530-297-4800

Project Number:

224.001.001

Project Name:

Valero St. No. # 3823

Project Address:

Sampling

Date

09/25/14

10:10

09/25/14

10:05

09/25/14

10:15

09/25/14

10:55

09/25/14

10:40

Sample

Designation

SUMP-EFFPIPE@4'

SUMP-1-MID@9 1/2'

SUMP-INFPIPE@3'

STOCKPILE-4PT COMP

SUMP-SAND-4PT COMP

8 Oz. Glass None

1

1

1

1

1

1

EDF Report?

NO

Recommended but not mandatory to complete this section:

Sampling Company Log Code:

Global ID:

FAX No.:

530-297-4800

P.O. No.:

89241

Deliverables to (Email Address):

inbox@kiffanalytical.com

Container / Preservative

Matrix

Soil

X

X

X

X

X

X

Hexane-Extractable Oil and Grease

X

PNAs by EPA 8270

X

Polychlorinated Biphenyls (PCBs)

X

X

X

X

X

X

Analysis Request

Due Dates:

September 29, 2014
 October 2, 2014
 For Lab Use Only

Remarks:

Time Received by:

Time

Date

09/25/14

17:00

Date

09/26/14

Time

09:10

Received by Laboratory:

On Trac

Received by Laboratory:

Time

Date

09/26/14

09:10

Received by Laboratory:

Accounts Payable

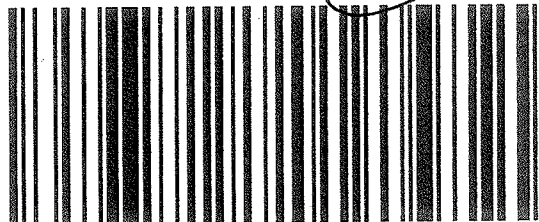
Bill to:

Accounts Payable

2116



800.334.5000
ontrac.com



D10010718323895

Date Printed 9/25/2014

Tracking#D10010718323895

Shipped From:
KIFF ANALYTICAL
2795 2ND STREET 300
DAVIS, CA 95618

Sent By: SAMPLE RECEIVINGX125
Phone#: (530)297-4800
wgt(lbs): 45
Reference: SUBS
Reference 2: 600

<p><i>Ship To Company:</i> CALSCIENCE ENVIRONMENTAL LABS 7440 LINCOLN WAY GARDEN GROVE, CA 92841 SAMPLE RECEIVING (714)895-5494</p>	<p><i>Service:</i> S <i>Sort Code:</i> ORG <i>Special Services:</i> Signature Required</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------

Return to Contents

Calscience

WORK ORDER #: 14-09-2116

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Kliff

DATE: 09/26/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3°C (CF) = 2.4 °C Blank Sample

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

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

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

Ambient Temperature: Air Filter Checked by: 836

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Checked by: 836

Sample _____ No (Not Intact) Not Present Checked by: 3W

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBz₂na 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** 3W

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 836

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z₂na: ZnAc₂+NaOH f: Filtered **Scanned by:** 3W

Return to Contents