UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory
Environmental Services Branch
10625 Fallstone Road, Houston, TX 77099
Phone: (281)983-2100 Fax: (281)983-2248

Final Analytical Report

Site Name ----------CES Environmental Svcs, Inc.

Sample Collection Date(s)-- 11/21/14

Contact---------- Gary Moore, (6SF-PR)

Report Date---------- 12/11/14

Project #---------- 15SF022

Work Order(s)---------- 1411015

Analyses included in this report:

ABN TCLP 1311/8270	Metals pH 9040
Metals TCLP ICP 1311/6010B (Cr)	P/P TCLP 1311/8081 (Chlordane)
TCLP 1311 ABN/Pest Prep	TCLP 1311 Metals Prep

Report Narrative

Methods 1311/8081 (Chlordane):

Batch B4K2602: Chlordane recovery fails marginally low in MSD1 using advisory limits of 70-130% . The low recovery in MSD1 is believed to be matrix related; the BS is acceptable. Even though Chlordane recovered low in MSD1, the non-detect in source sample 1411015-04 is substantiated because calibration includes points down to 25% of the RL. The non-detect was also substantiated by performing overlays of chromatograms below the hazard limit. Chlordane was not detected.

Methods 1311/8270 (2,4-Dinitrotoluene, Hexachlorobutadiene, and Hexachlorobenzene):

Batch B4K2601:

MS1/MSD1: 2,4-Dinitrotoluene (2,4-DNT), Hexachlorobutadiene (HCBD), and Hexachlorobenzene (HCB) were spiked into MS1/MSD1 at mid-level concentrations (2500 ug/L) using sample 1411015-04 as the source. All recoveries are acceptable.

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Report Narrative (cont'd)

Low level matrix spikes MS2 and MS3:

MS2 and MS3 are low level matrix spikes performed to ensure these analytes could be recovered below the hazard limit. Low level matrix spikes were not performed for the four samples analyzed for Hexachlorobenzene only. This analyte is readily identifiable in difficult matrices due to unique ions and showed acceptable performance in other low level matrix spikes. The additional QC was not believed to be necessary.

MS2: 2,4-DNT and HCB were spiked into MS2 at concentrations below the hazard limit of 130 ug/L using source sample 1411015-03. HCB failed marginally low but should not affect the data. 2,4-DNT is qualified as estimated because the value reported is below the calibration range. The identification of both analytes is acceptable.

MS3: 2,4-DNT, HCBD, and HCB were spiked into MS3 at concentrations below the lowest hazard limit of 130 ug/L using source sample 1411015-04. 2,4-Dinitrotoluene fails high in MS3 due to interferences from the matrix. The spectrum for 2,4-DNT also could not be confirmed due to coelutions. The extracts for 1411015-04 and MS3 were re-analyzed using GC-QQQ in multiple reaction monitoring mode for confirmation purposes. The GC-QQQ analysis confirmed the absence of 2,4-DNT in sample 1411015-04 and confirmed the presence of 2,4-DNT in MS3. This confirms the non-detect reported for 2,4-DNT in sample 1411015-04 below the hazard limit. HCBD and HCB recoveries and identifications were acceptable.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

Report Approvals:

Richard McMillin
Region 6 Laboratory Deputy Branch Chief

12/11/14
David W. McQuiddy
Acting Region 6 Laboratory Branch Chief